

Resource Management Programs

Interdisciplinary Process

- 10-1 Consider all potentially impacted resources in project planning. To the fullest extent, use the ID Team Process to provide decision-making officials quality information from which they can make informed decisions. Follow the NEPA and FSM processes and analysis to determine whether a project may proceed under a categorical exclusion, or will require documentation in an EA or EIS.
- 10-2 Contact and consult with interested public and Forest Service groups and individuals. Meet periodically with interest groups to exchange information, ideas, and future plans and proposals. To the extent possible, new technology and information should be utilized during project implementation.
- 10-3 Staff-level Forest resource specialists shall provide the technical supervision, expertise and program guidance necessary to assure compliance with current laws and direction, maintain a consistent resource analysis, standard data interpretation, project implementation and monitoring methods.
- 10-4 As field analysis identifies the need to correct or update Forest-level resource inventories, the changes should be recorded in an environmental analysis. Changes should be approved by the Forest Supervisor.
- 10-5 Make Forest Plan changes, revisions, or amendments as needed.

Visual Resource Management

- 11-1 Visual Quality Objectives (VQOs) were developed using Agriculture Handbooks 462 and 559, which define Nationally established principles and methods of the Visual Resource Management System. The VQOs apply to site-specific projects visible from the Forest's inventoried Moderate and High Sensitivity Viewpoints (Level 1 & 2). The VQOs are minimum conditions to be achieved as soon as possible in all management areas and within 3 years for all VQOs except Preservation and Maximum Modification, which must be met immediately. Facilities and developments, such as roads, trails, campground facilities, structures, signs and interpretive stations, are not required to meet the Management Area VQOs when viewed in immediate foreground (300 feet). These developments will be crafted in materials and appearance to harmonize and compliment the natural character of their immediate settings. Maintain an inventory of High and Moderate Sensitivity Viewpoints on file in the Forest Supervisor's Office.
- 11-2 Conditions that may be used to fine-tune the adopted VQOs include (Landscape Management System Handbook, Volume 1, Chapter 2):
 - 1) Discrepancies in Landscape Variety classification,
 - 2) Changes in Visual Sensitivity Levels,
 - 3) Discrepancies in the seen area mapping (that is, the ability or inability to view an area from a designated road or trail).
- 11-3 Maintain the VQOs as designated. Where possible, and where compatible with other resource objectives, strive for higher visual quality standards. Visual objectives may be foregone in the short-term, following extreme natural events, in order to revegetate the area.
- 11-4 Perpetuate the ecologically established landscape character when implementing management activities. Manage activities in accordance with VQOs to reflect the form, line, color, and texture of natural occurrences.

- 11-5 Develop Visual Management Strategies for selected highway corridors, trails, water bodies, rivers, and areas of concentrated public use to achieve a desired scenic character, and to reduce the visual impacts of management activities. Develop management strategies for areas of concentrated use to rehabilitate landscapes that do not currently meet the adopted VQOs. The criteria to be used to prioritize rehabilitation efforts should include:
- 1) The relative scenic or recreational importance of the area and the amount of deviation from the adopted VQO.
 - 2) The length of time it would take natural processes to reduce the visual impacts so they meet the adopted VQO.
 - 3) The length of time it would take rehabilitation measures to meet the adopted VQO.
 - 4) The level of coordination and interaction with other resources that would be necessary to rehabilitate the project area.
 - 5) The economic cost of rehabilitation measures.
- 11-6 State Highways 3, 96, 97 and Interstate 5 are potential State Scenic Highways which will be managed to maintain their eligibility. Manage to meet a Retention VQO for foreground views in the viewshed, except for the BVNG, which will have a Partial Retention VQO for foreground views. Manage to meet a Partial Retention VQO for the middleground views in the viewshed.
- 11-7 In the case of recovery activities after extreme catastrophic events such as intense wildland fires, time periods to achieve the VQOs stated in Forest-wide and Management Area Standards and Guidelines may be extended. This would be necessary where previously unnoticed scenery alterations are exposed to view due to loss of vegetative screening, or during timber salvage activities where recovery of forest vegetation is determined to be of greater importance than achievement of VQOs within the time periods established.
- 11-8 Areas not visible from inventoried High or Moderate Sensitivity Viewpoints (Level 1 and 2) shall be managed to appear as little modified as possible consistent with management goals, and no more altered in appearance than Maximum Modification.

Recreation Management

- 12-1 Manage Forest resources to provide a broad range of recreational opportunities that meet changing recreational demands. Actively utilize the Forest's Meaningful Measures methodology for establishing recreation program standards, monitoring, and reporting accomplishments. Identify, develop, and conserve recreational opportunities within developed and dispersed settings. Eliminate or restrictively manage sites that receive minimal use; or, remove the facilities and manage them as dispersed spots. Develop a range of recreation opportunities within primitive, semi-primitive non-motorized, semi-primitive motorized, and roaded natural areas. As opportunities are identified for these areas, they should be managed to reflect the needs of a multi-cultural public. Provide a variety of sites to meet visitor preferences, needs and expectations to complement opportunities within the recreation emphasis area in which the site is located.
- 12-2 Opportunities to provide barrier-free access to mobility-impaired individuals should be actively explored when constructing new facilities and when modifying existing facilities. Assure all new construction and reconstruction is in accord with standards set forth in the Americans with Disabilities Act and other guidelines. Seek opportunities, both through facility design and working with cooperators, to provide non-traditional opportunities to disabled publics (horseback excursions, whitewater boating trips, backcountry fishing, etc.).
- 12-3 Public information is integral to the management of the recreation resource. Information on the needs of a multi-cultured public should be gathered and kept up-to-date. Facilities should be developed or modified to accommodate those needs. Emphasize providing interpretation and information to Forest visitors, using a full range of communication techniques, such as directional signing, on-site signing and information displays to enhance user enjoyment in dispersed areas and sites. The public should be informed on a continual basis about recreational opportunities that exist on the Forest. Utilize both off-site information and on-site

signing to direct visitors to river access spots. Information must be kept up-to-date, including trail conditions, developed site status, and maps.

- 12-4 The use of Forest lands for organized recreational events, developments or uses should be considered when there is potential to accommodate the use, and when the proposed uses are compatible with other resource objectives.
- 12-5 Update the Recreation Resource Inventory System annually to monitor the level and type of recreational uses and settings desired, and those currently experienced on the Forest.
- 12-6 Existing and future developed recreational sites should be designed to minimize annual maintenance and operating costs. Reconstruct or rehabilitate sites to better serve current user demand (for example, lengthening parking spurs for modern RVs, converting single-family sites to multi-family sites, etc.). The design should discourage vandalism to the extent possible. Recreation facilities should be developed only where private facilities do not fill the need for the recreational service or facility and where there is no opportunity or interest in the private sector to provide the recreational opportunity. Competition with private enterprise should be avoided. Recreational activities and projects on the Forest should be coordinated with management of adjacent private lands and adjoining National Forests.
- 12-7 Manage existing and future developed sites to prevent degradation of the surrounding areas. Programmed timber harvest shall not be scheduled from developed recreation sites, but opportunities to manage the vegetation to improve safety and aesthetics should be taken.
- 12-8 Base the administration, operation, and levels of maintenance for developed sites (recreation sites, campgrounds, picnic areas, trails, trailheads and dispersed sites) on the site's capacity, site sensitivity, and seasonal use demands. As a minimum, sites should be open for public use during the recreation season. The following standards should be met at each facility:
 - 1) *Heath and Cleanliness*: Recreation sites and facilities are clean, litter-free, pest-free, and odor free. There is no threat of disease or infection.
 - 2) *Safety and Security*: Recreation opportunities are free from the risk of crime, abusive activities, and safety hazards.
 - 3) *Condition of Facilities and Equipment*: The facilities and equipment look good, function correctly, are appropriate to the setting and activity and are well-maintained.
 - 4) *Responsiveness to Visitors*: Recreation opportunities meet or exceed visitor expectations, needs, and preferences.
 - 5) *Setting*: Site development, visual quality, resource maintenance and user density conforms to the appropriate Recreation Opportunity Spectrum (ROS) category.
- 12-9 Perform site maintenance and hazard reduction activities at dispersed use sites to provide for basic user satisfaction and safety. Where trees are to be cut for the construction or maintenance of authorized structures, fell them well away from trails or campsites to maintain public safety.
- 12-10 Discourage camping within 300 feet of critical wildlife and stock watering areas. During high recreational use periods, such as hunting season, camping facilities should be located away from water sources to allow wildlife and stock free access to the water.
- 12-11 Restrict off-highway vehicle (OHV) use to protect key resource values and meet management objectives.
- 12-12 Promote minimum impact use techniques (ie, "Tread Lightly" and no-trace) in all activities and public contacts (for example, written, through the media, face-to-face and signing).
- 12-13 Displacement of Forest system trails by new roads should be avoided whenever possible. Where displacement does occur and recreational use warrants, new trails and routes should be constructed to replace those sections lost to protect the integrity of the system and the recreational experience.
- 12-14 The Forest should manage the use of the existing trail system to serve the needs of recreationists in a condition that protects the resource and meets health and safety standards.

Trails should be managed to accommodate all kinds of use, such as mountain biking and hiking. These recreational uses may not always be compatible and may require separation or restrictions based on management objectives.

- 12-15 Develop trail management objectives for all trails on the Forest. All trails in the Forest system should be inspected regularly to identify trail maintenance needs.
- 12-16 Consider opportunities to relocate existing trails away from Sensitive plant populations or fragile habitats (that is, wet meadows or riparian areas).
- 12-17 Locate new trail segments so as to "lay gently" on the land. Take advantage of natural features that screen trails from distant viewpoints.
- 12-18 Actively seek out partners and cooperators, and facilitate their efforts in making recreational opportunities available to Forest users. Encourage and promote service partnerships with user groups, as a means of stimulating local economies and supporting community stability, to aid in such activities as trail maintenance, special clean-up projects, providing public information and education. Encourage and fully cooperate with private-sector in developing and maintaining lodges and resorts.
- 12-19 Divert water runoff from trails to reduce soil erosion. Techniques for diverting water from trails may include out-sloping of the tread and the use of waterbars and drain dips. The use of rip-rap should be considered where the above techniques are ineffective.
- 12-20 Consider the use of causeways (elevated trails) when trail excavation would have adverse environmental impacts or when relocation away from wet/boggy areas is not feasible.
- *12-21 Manage recreation areas to minimize disturbance to species, including those listed in Table 4.3. This standard and guideline applies throughout all land allocations.
- 12-22 Assure that traditional Native American values and concerns have been considered and accommodated as much as possible in all recreation management activities and operations.
- 12-23 Plan and implement actions to rehabilitate or enhance "flat spots" (for example, old log landings) for recreational uses and values.
- 12-24 In areas of intermingled ownerships, assure that sensitive property boundaries near river access sites are clearly marked and posted.
- 12-25 Be alert to the potential public benefits of on-site outfitter-guide or concessionaire services for horse liveries, snowmobile rentals, bicycle rentals, etc. Actively seek special use applications from proponents when market analyses indicate a viable business opportunity.
- 12-26 ROS classes identified for management areas emphasize general direction for recreation management. Specific ROS criteria and conditions are subject to adjustment in order to achieve desired conditions.

Wilderness Management

- 13-1 The Forest will continue to evaluate lands for wilderness potential. The evaluation of lands for wilderness values need not be completed in this round of planning.
- 13-2 Management activities in wilderness will be consistent with the 1964 Wilderness Act, the 1984 California Wilderness Act and Wilderness Management Area 2. Where other MAs overlap MA2, MA2 Wilderness standards and guidelines will take precedence.

Released Roadless Area Management

- 14-1 Released roadless areas will be managed according to the objectives of the management area in which they occur.

Wild and Scenic Rivers Management

- 15-1 The Forest will continue to evaluate potential rivers for inclusion into the WSR system. Manage areas proposed for WSR designation by the Forest using the standards and guidelines described in the Designated and Eligible Wild, Scenic, and Recreational River Management Areas Standards and Guidelines.
- 15-2 No irretrievable or irreversible commitment of resources that would preclude designation would be allowed for eligible rivers that are being recommended for inclusion into the National WSR System until Congress or the Secretary of Interior has signed the designation order for new inclusions recommended in this Plan.
- 15-3 In order to maintain continuity of management direction along WSR segments, management direction of tributary WSRs shall not take precedence over main stem WSR directions within their areas of confluence or viewsheds.
- 15-4 Land exchanges, qualifying under the provisions of the Small Tracts Act, may be pursued if the exchange will replace parcels of NFS land within the WSR corridor for parcels of private land within the corridor.

Specially Designated Areas Management

- 16-1 The Forest will continue to evaluate potential sites for SIA and RNA designation. Manage areas proposed for SIA or RNA designation by the Forest by the standards and guidelines described in the SIA and RNA Management Areas Standards and Guidelines, until a final decision is made by Regional Forester to accept or deny each recommendation.

Lands Program Management

Land Ownership Adjustment

- 17-1 Land ownership adjustment proposals should be accepted for study when preliminary analysis indicates that such an adjustment is clearly in the public interest, and advocacy for the action exists both at the Forest and affected unit level. The Forest may initiate land ownership adjustments in order to meet the ecosystem management or resource goals outlined in this Forest Plan.
- 17-2 Land ownership adjustments may include any of the available procedures, such as exchange, purchase, donation, and sale. The Regional Forester shall review any land exchanges that remove forested lands from Forest ownership. Condemnation procedures will be used only as a last resort.
- 17-3 Land adjustments typically fall into one of the following groups. Apply the following land ownership adjustment direction to each of the described situations:
 - 1) *Congressional Direction* - Lands where Congress has instructed the Forest Service to retain land in Federal ownership and acquire non-Federal lands for a designated purpose. These types of lands include such examples as wilderness areas, designated WSRs (see 6 below) and the BVNG.
 - 2) *Special Management Areas* - Lands recognized by the Forest as necessary to meet specific Forest resource objectives, such as RNAs, cultural management areas, SIAs, National Scenic Trails, TE&S species habitat, proposed WSRs, RRs, deer habitat, Retention visual quality areas and Partial Retention visual quality areas. Federal ownership of these lands should be retained and efforts to acquire private lands made as the opportunity and/or need occurs.
 - 3) *Areas with small private inholdings* - Included are areas of primarily NFS ownership where only a few private lands occur. NFS lands should be retained. Efforts should be made to acquire private lands only to promote special resource management goals or

prevent/mitigate incompatible land uses. Forest land consolidation is a side benefit of such actions.

- 4) *Areas with large amounts of private lands* - Included are areas of intermingled NFS and private lands that may or may not be in a "checkerboard" pattern. Efforts to consolidate land ownership should be driven by resource objectives. In these cases, if it is of benefit to the government, either acquisition or disposal may be appropriate.
- 5) *Scattered parcels of NFS land* - Included are lands of primarily private ownership with only isolated NFS inholdings. Due to the difficulties in managing isolated tracts, these parcels should be considered for exchange or disposal whenever they are not needed to accomplish resource objectives.
- 6) *Private lands not to be acquired* - Included are lands that are currently developed, or that would not be appropriate for Forest management, such as areas around permanent communities.
- 7) *NFS Lands suited to disposal* - Included are lands surrounding permanent communities where the land is needed and suited for its intended use. These lands may provide opportunities for the expansion of local communities through the Small Tracts Act, the Townsite Expansion Act and the land exchange program.
- 8) *Innocent encroachments* - Resolve innocent encroachment using the Small Tracts Act, where appropriate. The resolution of this encroachment may be to forego ownership of that parcel of land.

Property Boundary Location

- 17-4 Boundary location should be the focus of the Land Line location program. Establish, maintain, and protect property boundaries on lands administered by the Forest. Before project implementation, post boundaries of special management that have the potential to affect adjacent private parcels. The Forest Land Surveyor, within limitations of Forest Service policy, shall determine appropriate standards for various boundary lines.
- 17-5 Seek the cooperation of adjacent landowners when locating property boundaries.

Special Use Authorization

- 17-6 Limit special uses, including utility corridors and transportation rights-of-way, to those that cannot be reasonably located on private land and that do not conflict with management area objectives. If additional utility corridors and transportation rights-of-way are needed, they shall be designed to minimize the density of these corridors. Opportunities to participate in cost-sharing agreements with private landowners should be explored for transportation rights-of-way.
- 17-7 Review special use permits periodically to determine if they should be continued or cancelled.
- 17-8 Slater Butte, Herd Peak, Gunsight Peak, Eddy Gulch and Mahogany Point are designated electronic sites and will be managed according to site plans which will include consideration of biological, physical, social and electromagnetic factors. Other existing and proposed electronic sites will be analyzed. Electronic site plans will be developed where appropriate.

Withdrawals from Mineral Entry

- 17-9 Request the withdrawal of proposed and Congressionally designated Wild segments of WSRs from mineral entry under the provisions of the WSRs Act, subject to valid existing rights.
- 17-10 Recommendations for the withdrawal of administrative sites, developed recreational sites, and research natural areas from mineral entry shall be according to management area objectives. Make these recommendations to the Bureau of Land Management (BLM).
- 17-11 At least every 20 years, the Forest shall coordinate a review of mineral withdrawals with the

BLM. The review should determine if existing withdrawals should be continued or cancelled.

Acquired Lands

- 17-12 Administer acquired lands according to Forest-wide objectives, as well as the objectives of individual management areas. Unless a Forest Plan amendment is done, management areas for the newly acquired lands will generally be assigned from adjacent, similar lands. If any private lands are acquired adjacent to the Orr Lake Management Unit, this land will be incorporated into the Orr Lake Unit.

Utility Corridors

- 17-13 Cooperate with utilities representatives to develop strategies to minimize the potential for single or multiple line power outages that could result from destructive events such as wildfires.
- 17-14 Coordinate with Federal and private utility managers when managing Forest activities near utility corridors to ensure that Forest activities do not conflict with the intended permitted use and management of the utility corridor.
- 17-15 The approved transmission line associated with the Fourmile Geothermal Project is a Designated Utility Corridor.

Law Enforcement

- 18-1 Emphasize the prevention of law violations and regulations pertaining to the National Forests. The protection of Forest visitors, forest workers, and Forest employees shall be the first priority for the law enforcement organization. The second priority shall be the protection of the physical and biological resources, such as vegetation, wildlife, cultural sites, etc.
- 18-2 Implement public and employee awareness programs designed to help recognize vandalized sites, suspicious activities, and potential chemical hazards in the Forest. Encourage people to report them to law enforcement agencies.
- 18-3 Maintain a close working relationship with other Federal, State, and local law enforcement agencies to promote a safety-conscious and effective law enforcement program.
- 18-4 The law enforcement program should be integrated into functional programs, activities and decision-making processes to assure a safe environment for employees and Forest users, while providing for maximum resource protection.

Minerals Management

Minerals Administration

- 19-1 Administer all locatable, leasable, and saleable mineral resource activities according to the 36 CFR 228 Regulations and other applicable laws, regulations and orders. Require the submission of a notice of intent or plans of operation for all mineral-related activities where the potential for significant resource disturbance exists. Require surface resource protection and reclamation in all plans of operations.
- 19-2 Use the appropriate environmental analysis and documentation as a basis for approving mineral-related activities, for designing reasonable stipulations or mitigation needed to protect other resources and for establishing appropriate bonding.
- 19-3 Approval of plans of operation or notices of intent shall incorporate steps to minimize detrimental effects to TE&S species habitat.
- 19-4 Lands disturbed by mining activities should be reclaimed to subsequent productive uses consistent with management objectives for the area. An adequate reclamation bond or other surety should be required to assure reclamation compliance. Bonds shall be reviewed annually

and adjusted to reflect on-going reclamation efforts and expenses.

- 19-5 Limit surface occupancy, associated with residential use and indirect support for mining and energy mineral operations, to that reasonably necessary for development and production. Surface occupancy shall be authorized under an approved Forest Service permit or plan of operations.
- 19-6 A reasonable means of access, consistent with management objectives for the area, should be approved when it is determined to be incidental to the operation.
- 19-7 The approval of mineral-related activities should be limited to that period necessary to complete the planned work in a phased development process. Plans of operation greater than 1 year in duration should not be approved without a description of the long-term development plan.
- 19-8 Periodic compliance checks on approved mineral activities should be conducted to assure that they are in compliance with the lease, permit, or approved plans of operation.
- 19-9 Examine all oil, gas, and geothermal test holes to determine the availability of a water source. Attempts should be made to acquire ownership, use of or access to those wells found to be capable of being developed as a usable water source.
- 19-10 Maintain an inventory of the existing mineral material sources on the Forest.
- 19-11 Recreational panning, sluicing, dredging and rock hounding should be allowed throughout the Forest where such activities do not conflict with established management objectives, withdrawals or the rights of mining claimants. If future demand or conflict warrants, management plans providing specific direction on how and where these activities can occur should be developed and implemented.
- 19-12 If existing laws and regulations do not provide adequate protection of other public values or resources (such as RNAs, administrative sites, etc.), the area may be recommended for withdrawal from mineral entry. The mineral resources should be appropriately considered before any proposal for withdrawal is made to the BLM.

Transportation and Facilities Management

Transportation Planning

- 20-1 Transportation planning shall be an integral part of Ecosystem Analysis at the landscape/watershed level and of environmental analysis at the site level. Planning efforts should include a review of the existing Road Management Objectives (RMOs) and proposals for the development of new roads. Develop RMOs through an ID team. Place needed non-system roads in the Forest road system. Non-system roads shall be "put to bed." Direction for transportation planning is found in FSM 7710, Transportation Planning Handbook, Forest Service Handbook (FSH) 7709.55. The analysis should:
 - 1) Identify and evaluate alternative transportation systems and routes,
 - 2) Identify short- and long-term need and purpose for each road, and
 - 3) Document decisions relating to road location, design, operation, and maintenance standards for each road in a RMO.
 - 4) Evaluate the risk of spread of Port-Orford-cedar root disease through road upgrades, seasonal closures, permanent closures, maintenance and decommissioning or obliteration.

Construction and Reconstruction

- 20-2 All roads, including Forest system roads and those built by miners or permittees, should be constructed or reconstructed according to approved RMOs. Construct temporary roads only after analysis of potential resource impacts are evaluated and the options for mitigating measures disclosed and selected.

Operation and Maintenance

- 20-3 Operate and maintain roads as documented in the RMO. Coordinate road management objectives with private landowners within the Forest. Roads maintained for passenger car use should be maintained at Maintenance Levels 3, 4 or 5. Roads managed for administrative use should be maintained at Level 2. Maintenance activities taking place on a regular basis on Level 2 roads will be those that maintain drainage minimize resource damage and allow high clearance vehicle passage. Roads that have planned future use, but not for several years, will be maintained at Level 1. Maintenance work on these roads should include an annual inspection to assure that resource damage is not occurring.
- 20-4 Road closures may be used to meet wildlife needs, water quality and soils protection objectives, fire protection, other resource needs, to reduce road damage and maintenance costs and to reduce or eliminate conflicts between user groups.
- 20-5 All commercial use, as described in FSM 7730.5, shall require road use permits.

Administrative Sites

- 20-6 Conduct site development planning to determine facility needs. The construction of temporary facilities should depend on the cost-effectiveness of the facility and the potential resource impacts. Site planning should include an analysis that compares feasible alternatives, including leasing and Forest-owned facilities. Site selections should be made based on the maximum net public benefits with the least adverse impact to the environment. Direction for site planning is found in FSM 7300 and FSH 7309.11.

Construction and Reconstruction

- 20-7 No construction, reconstruction, or building removal shall occur without an approved site plan. Base design standards on site plans, environmental constraints, user safety, National and local building codes, traffic requirements and economics.
- 20-8 Facility construction priorities are included in the Forest Facility Master Plan.

Operation and Maintenance

- 20-9 Site closures may be implemented to meet health and safety needs, to reduce facility damage and to reduce maintenance costs.

Timber Management

Lands Contributing to a Scheduled, Sustained Timber Harvest

- 21-1 Forest lands identified in the Forest Plan as capable, available and suitable (CAS) for timber production shall be further reviewed and assessed during project planning to determine the costs and benefits of a range of management intensities for timber production (36 CFR 219.14).

Capable - Capable lands are currently forested, or have the potential to be forested, with a commercial species. These lands are capable of producing a minimum of 20 cubic feet of wood fiber per acre per year, on a non-declining, sustained basis (36 CFR 219.14).

Available - Available lands are currently forested, or have the potential to be forested, with a commercial species. They include parts of the Forest where Congress has not identified a higher resource value, such as wilderness areas or WSRs. The lands are available to be scheduled for a sustained timber harvest.

Suitable - Suitable lands are currently forested, or have the potential to be forested, with a commercial species. They include lands where a scheduled, sustained timber harvest would not adversely impact soil productivity. These lands have also been determined to be sufficiently stable (geologically stable) to support a scheduled, sustained timber harvest without irretrievable or irreversible resource impacts. These are lands where the scheduling of a sustained timber harvest may be suitable.

Lands Allocated to Maintain, or Provide Specific Resource Opportunities (No Scheduled Timber Harvest)

- 21-2 Manage Forest lands that are unsuitable for timber production (36 CFR 219.14) activities because of geological instability (refer to the glossary for definition of these lands) to maintain the inherent land stability, water quality and watershed values. The vegetative cover should be managed to promote slope stability and watershed values.
- 21-3 If "there is not reasonable assurance that lands can be adequately restocked as provided in 36 CFR 219.27 (c)(3)," or the area is not capable of producing 20 cubic feet of wood fiber per acre per year, the land shall not be available for scheduled timber harvest.
- 21-4 Schedule no timber harvest from lands Congressionally withdrawn or administratively withdrawn from timber production.
- 21-5 Within management areas where timber yields are compatible with the resource objectives of the area, there may be "intrusions" or "physical factors" which limit timber management opportunities. These intrusions have been recognized at a Forest level, and the anticipated timber output adjusted appropriately. These physical limitations may include lands that are not capable of supporting a sustained timber management program, or lands that are currently isolated from the Forest by the lack of reasonable access opportunities. In other cases where there are physical limitations, a less intensive or perhaps unregulated timber output may be scheduled for this planning period.
- 21-6 Use project-level information to review the Forest-wide designation of capable and available lands every 10 years. Where project analysis identifies the need for changes in the suitability classification, document the analysis and rationale for the change. A Forest ID Team shall review the field analysis of capable and suitable lands. Recommended adjustments should be made to the Forest database and updated during Forest Plan supplements or revisions.
- 21-7 Timber harvest may be appropriate on unsuitable lands if desirable to meet the objectives of the area. Implement harvest activities in a manner that emphasize the management objectives of the area. Timber production shall not be a priority in these areas. Examples of where timber harvest may be appropriate include:

- 1) To remove trees from selected suitable lands or for other management purposes.
 - 2) Construction or protection of capital improvements such as campgrounds, buildings, fuelbreaks, and dispersed recreation sites, or to accomplish projects designed to enhance resource values.
 - 3) Removal of hazards to human life and health.
 - 4) Removal of trees killed by catastrophic events, such as fire, windthrow, drought, insects or disease, (36 CFR 219.27 (c)(1)) may be appropriate to promote the long-term desired future condition of the Forest. Base the decision to salvage an area on an analysis of existing conditions following the disturbance and, at a minimum, shall include consideration of the economic, social and environmental consequences.
 - 5) Small inclusions of "unsuitable lands" may occur in harvest units where it will allow for the use of a more logical management option.
 - 6) As part of a research study to test the feasibility of silvicultural and harvesting practices that could be successful on these lands. This could provide useful information for the 10-year re-evaluation of these lands.
 - 7) Where a site-specific analysis shows timber management to be economically efficient and consistent with established goals and objectives. This recognizes the variability in this land class and provides the flexibility to take advantage of opportunities, such as overstory removal harvests, that require low investment.
- 21-8 Give high priority to silvicultural practices that maintain or achieve the management objectives of an area and result in a wood fiber output. These activities may be implemented on lands that are currently not scheduled to produce a sustained timber output. Silvicultural activities on these lands would not be implemented for the purpose of producing wood fiber; however, the activity may result in an unscheduled wood fiber output.

Management Activities

- 21-9 The following timber management practices may apply on all lands where it is appropriate to provide a scheduled, sustained wood fiber output.
- 1) Prepare each site for reforestation, including the treatment of residual logging slash, using appropriate methods.
 - 2) Use available animal damage control methods.
 - 3) Implement appropriate forest release methods as determined through project-level EAs.
 - 4) Thin Forest stands as appropriate.
 - 5) Intermediate treatments, such as commercial thinning, sanitation and salvage harvest methods, should be implemented where appropriate.
 - 6) Fertilize plantations and natural stands where appropriate.
 - 7) Fertilize plantations and natural stands where appropriate.

Silvicultural Systems

General

- 21-10 A silvicultural analysis for project planning should address both stand and landscape conditions. All silvicultural prescriptions shall include a statement on land management and resource objectives as well as the desired future condition of the stand.
- 21-11 Manage vegetation according to an approved silvicultural prescription. Silvicultural prescriptions should be completed in enough detail to reasonably assure that short- and long-term management objectives for the area can be met.
- 21-12 The silvicultural system selected shall meet the resource and vegetation management objectives of the area, including objectives for biological diversity, long-term site productivity,

and forest health. Both even-aged and uneven-aged systems shall be available for use.

Cutting Methods

- * 21-13 Retain at least 15% of the area associated with each regeneration cutting unit (stand). As a general guide, 70% of the total area to be retained should be aggregates of moderate to larger size (0.2 to 1 hectare or more) with the remainder as dispersed structures (individual trees, and possibly including smaller clumps less than 0.2 hectares). Larger aggregates may be particularly important where adjacent areas have little late-successional habitat. To the extent possible, patches and dispersed retention should include the largest, oldest live trees, decadent or leaning trees, and hard snags occurring in the unit. Patches should be retained indefinitely. This standard and guideline applies to regulated (matrix) land and only regulated (matrix) land counts toward the 15%.
- * 21-14 National forest timber sales already laid out at the time of the ROD for the FSEIS may use green tree retention requirements in the Draft SEIS if this eliminates the need to rework, redesign or recruise a sale. All sales laid out after the date of the ROD for the FSEIS will comply with green tree retention requirements in these standards and guidelines.
- 21-15 The Chief's directive (June 4, 1992) on ecosystem management limits "clearcutting" to areas where it is essential to meet Forest Plan objectives. Management actions may involve one or more of the following circumstances and may occur on unregulated (non-matrix) land only:
 - 1) To establish, enhance or maintain habitat for Endangered, Threatened, and Sensitive species.
 - 2) To enhance wildlife habitat or water yield values, or to provide for recreation, scenic vistas, utility lines, road corridors, facility sites, reservoirs or similar development.
 - 3) To rehabilitate lands adversely impacted by events, such as fires, windstorms or insect or disease infestations.
 - 4) To preclude or minimize the occurrence of potentially adverse impacts from insect or disease infestations, windthrow, logging damage or other factors affecting Forest health.
 - 5) To provide for the establishment and growth of desired trees or other vegetative species that are shade intolerant.
 - 6) To rehabilitate poorly stocked stands due to past management practices or natural events.
 - 7) To meet research needs.
- 21-16 Base the final selection of harvest and cutting methods on site-specific environmental analysis. Even-aged or uneven-aged management activities may be used to attain Forest goals.
- 21-17 Regional policy currently restricts the size of regeneration units to no larger than 40 acres for mixed conifer and 60 acres for Douglas-fir. These maximum size limitations should be changed when:
 - 1) The desired future condition of the area may best be achieved by larger or smaller units. Currently, Forest stand sizes are quite variable but are often quite large because of frequent fires (refer to the Biological Diversity Section in the Forest-wide Biological Environment Standards and Guidelines). Management activities should emulate existing Forest stands where possible to meet biological diversity objectives.
 - 2) Extreme situations, such as fires, windstorms, or insect and disease attacks, occur causing severe or extensive mortality.
- 21-18 Successive adjacent cutting units may be planned, up to the maximum opening size specified for regeneration units. Regeneration units shall be considered an opening until they became adequately stocked with trees that are at least 4 1/2 feet high. If units have less than 15% shared boundary, they shall be considered separate forest openings.
- 21-19 The distance between regenerated areas should be adequate to allow for a manageable unit between the previously harvested areas. Openings should be shaped or blended with the

natural terrain to achieve Forest goals.

- * 21-20 Modify site treatment practices, particularly the use of fire and pesticides and modify harvest methods to minimize soil and litter disturbance. Site treatments should be prescribed which will minimize intensive burning, unless appropriate for certain specific habitats, communities or stand conditions. Prescribed fires should be planned to minimize the consumption of litter and CWD. Minimize soil and litter disturbance that may occur as a result of yarding and operation of heavy equipment, and reduce the intensity and frequency of site treatments. Soil compaction, and removal or disturbance of humus layers and CWD, may impact populations of fungi and arthropods. These provisions apply to regulated (matrix) land and within the Adaptive Management Area.

Reforestation

- 21-21 Regeneration harvest shall be done in such a way that there is assurance that each area can be adequately restocked within 5 years after final harvest (36 CFR 219.27(c)(3)). Exceptions may be made for specific sites where environmental analysis and silvicultural prescription indicate a restocking period of more than 5 years would produce a more desirable combination of net public benefits.
- 21-22 Regenerate harvest units using the appropriate species combinations based on the silvicultural prescription prepare during the environmental analysis for the harvest area. The prescription should consider natural regeneration potential and advanced regeneration as part of the analysis. Consideration should be given to regenerating and maintaining minor species where appropriate for the site.
- 21-23 Capable lands currently not stocked with conifers or hardwoods should be reforested to meet management area goals.
- 21-24 Implement the Region 5 Base Level Genetics Program to assure the maintenance of genetic diversity and conservation within forest stands. Continue seed collection according to the Regional Seed Collection Guidelines. The use of genetically improved seedlings shall be encouraged consistent with the need to manage biological and genetic diversity.
- 21-25 Where possible, harvest prescriptions should consider leaving advanced regeneration to meet reforestation needs and stand objectives. Vegetation left from the previous stand should be managed as part of the future stand.
- 21-26 Conduct reforestation practices to meet or exceed timber growth and yield objectives for the management area. Reforestation of regenerated areas shall meet minimum stocking levels as described in Region 5 FSH 2409.26, as amended, unless a silvicultural prescription is developed. Where desired or acceptable stocking levels are less than those described in Region 5 FSH 2409.26, document the timber management objectives and stocking levels in the EA and on the stand record card.
- 21-27 Where heavy animal damage may prevent successful reforestation of timber harvest areas within 5 years, animal control or methods of protecting plantations from unacceptable damage should be used.
- 21-28 In cases of extreme natural events, reforestation of the area will be a high priority and may violate other management goals for short periods of time.

Stocking

- 21-29 Release and stocking control operations (precommercial and commercial thinning) should retain a diversity of forest species, based on the current mixture of species found on the site.
- 21-30 Recommended stocking is defined as that number of well-spaced growing stock able to produce an intermediate commercial thinning as early as the stand is considered merchantable. Recommended stocking levels are based on stands reaching 90% of normal basal area, with an average stand diameter of at least 13 inches at DBH.
- 21-31 Stands with minimum stocking levels should reach 90% of normal basal area 20 years later than those with recommended stocking. In these cases, defer the 2 commercial thinnings.

- 21-32 Minimum stocking levels may be adjusted based on other site-specific objectives, such as economics, desired product or resource objectives. The following table displays the typical and minimum stocking levels:

Table 4-6. Minimum and Recommended Stocking Levels by Forest Type and Site Class			
Forest Type	Region 5 Site Class	Minimum TPA*	Recommended TPA*
Ponderosa and Jeffrey Pine	I	150	200
	II	125	200
	III	100	150
	IV	75	125
Red and White Fir	All	200	300
Douglas-fir	All	125	225
Mixed Conifer	All	150	200
* TPA = trees per acre			

Timber Management Intensity

Allowable Sale Quantity (ASQ)

- 21-33 The ASQ (how much wood fiber that the Forest would produce over a 10-year period) for the Forest shall not exceed the total planned for the planning period, including salvage. Yearly quantity may exceed or be less than the average for the period.
- 21-34 Utilization of sub-merchantable material or non-commercial species has not been calculated as part of the ASQ. This should not be included in the ASQ accounting system. The ASQ objectives should reflect the amount of saw logs produced.
- 21-35 Base the ASQ on a standard for merchantability involving commercial species that are at least 13 inches DBH and 50 feet tall. The inventory and ASQ may be re-calculated to account for additional utilization.

Regulation Class

- 21-36 Lands, where a scheduled, sustained timber harvest is appropriate, have been allocated to one of 2 regulation classes according to the management area objectives and the compatibility of timber management with those objectives.

Regulation Class 2 (reduced timber yields) - Timber management objectives are co-emphasized with resource objectives while maintaining overall Forest objectives.

Regulation Class 3 (marginal timber yields) - Resource objectives, other than wood fiber outputs, are emphasized. Timber yields are incidental to achieving resource objectives and meeting overall Forest objectives.

Forest Growth/Rotation Age

- 21-37 Timber growth is expressed by a stand's annual increment (the growth measured for 1 year). The mean annual increment is the total production level of the stand, divided by the age of the stand. Timber stands shall not be scheduled for final harvest before stand growth has reached or surpassed 95% of the culmination of mean annual increment in cubic feet. Exceptions may be made where special resource considerations require earlier harvest. Exceptions also may be made where small inclusions of young stands in harvest units that otherwise meet this requirement will result in more logical management units allowing greater efficiency or less resource impacts.
- 21-38 Stands may be regenerated without having reached culmination of growth where salvage is prescribed after a fire or windthrow, where stands are in imminent danger from insect or disease attack or for cutting for experimental and research purposes.
- 21-39 The growth expectations for areas where silvicultural cutting methods, such as GTR and group

selection, are being implemented should anticipate longer rotations than what is displayed (10-20 years longer). Extended rotations should be anticipated to project time delays for seedling growth where there is competition with reserve trees.

- 21-40 Projections for the Forest indicate that stands may meet culmination of mean annual increment at the following ages:

Table 4-7. Rotation Age (with or without thinning) by Forest Type		
Forest Type	Approx. Rotation Age (without thinning)	Approx. Rotation Age (with thinning)
Westside Mixed Conifer	100	120
Eastside Mixed Conifer	90	110
Douglas-fir	60	80
Ponderosa Pine	90	110
Red Fir	90	100
Lodgepole Pine	90	100

Salvage

- 21-41 Salvage and sanitation harvesting shall be high priority in management areas where the harvest of timber is compatible with the area's management objectives. Areas not currently scheduled for timber harvest may be considered for salvage as well, assuming that harvest is compatible with the desired future condition proposed for that area. Salvage opportunities should be pursued aggressively. Priorities for salvage should be directed toward Regulation Class 2 lands first, Regulation Class 3 lands second and lastly, unregulated lands (no scheduled timber harvest).
- 21-42 Where catastrophic events cause extremely heavy tree losses, consider an appropriate range of management alternatives to meet varying levels of resource protection and commodity outputs. All salvage and sanitation operations shall maintain the required standing dead and CWD specified in the standards and guidelines, if available.
- 21-43 Encourage restocking of lands left understocked and nonstocked after wildland fires.

Other Forest Products

Products

- 21-44 All materials traditionally used by Native Americans will be developed in cooperation with Federally recognized tribes.
- 21-45 Make special forest products available, such as Prince's pine, mushrooms, acorns, florist materials, bitterbrush seed, and vegetation used for medicinal purposes. Integrate the use and availability of these forest products with historic forest products.
- 21-46 Market forest products, such as wood fiber (biomass), poles, boughs, Christmas trees, house-logs, etc., and make them available on an as-needed basis consistent with management area objectives.
- 21-47 Manage to increase the availability of products utilized by Native Americans including, but not limited to, beargrass, willow, salal and oaks. Protect stands and scattered Pacific yew trees for potential supply of taxol (cancer-fighting substance).

- 21-48 Make fuelwood available in areas accessible to the public. Firewood sales should be consistent with management objectives for the area. Encourage commercial fuelwood or biomass contracts for slash disposal, thinning, and site preparation.

Product Utilization

- 21-49 Emphasize the utilization of products created during timber harvesting and other management activities. Utilization of residue may be encouraged by the following:
- 1) The placement of non-merchantable material in piles at designated locations both on and off the Forest for woodcutters, chip manufacturers, energy conversion or other uses.
 - 2) The sale of products, such as commercial firewood contracts, chip logs, etc., and the issuance of firewood permits.
- 21-50 Encourage the use of small diameter and non-commercial tree species for fuel and fiber. Increase the utilization level of Forest residues where possible.
- 21-51 Where individual market areas or specific products present opportunities for utilizing a higher proportion of the tree, utilization standards should be changed to meet this market consistent with Forest goals and objectives.

Forest Health and Pest Management

Vegetation Management

- 21-52 Control competing vegetation where it is likely that desired stocking levels and stand growth will not meet resource objectives. Priority areas for treatment are lands managed for timber production. Priorities on these lands are as follows:
- 1) Where competing vegetation must be controlled to allow for reforestation of harvested units within 5 years of the final harvest.
 - 2) On lands managed for timber production where conifer stocking is predicted to fall below minimum stocking levels.
 - 3) Where competing vegetation must be controlled to allow for reforestation of non-stocked lands identified through an environmental analysis as needing reforestation. On lands managed for timber production where conifer stocking is predicted to fall below minimum stocking levels.
 - 4) On lands managed for timber production, where conifer growth is predicted to be below growth rates needed to meet stand growth objectives.
 - 5) Where conifer survival and/or growth does not meet other non-timber resource objectives.
- 21-53 All silvicultural practices shall consider how to best prevent introducing noxious or alien weeds, insects, and disease. Certify, by the County Agricultural Department, all straw, hay, and seeds used in mulching activities as free of noxious weeds.

Herbicides

- 21-54 Herbicides may be used where their use is essential to attain a desired future condition that otherwise could not be met. Use herbicides only after an evaluation of the treatment alternatives; including effectiveness, environmental effects, and benefits/costs; clearly demonstrates that herbicide use is essential to achieve project objectives.
- 21-55 Examples of where herbicides may be used include:
- 1) Reforestation efforts after extreme fire occurrences, extreme insect or disease outbreaks that would be cost-prohibitive or plantations that would fail without the use of herbicides.
 - 2) On existing plantations, where the use of herbicides is essential to achieve minimum survival and stocking levels.

Minor Conifer Species

- 21-56 Manage areas expected to provide a scheduled, sustained timber product in a manner to provide for species diversity. During reforestation efforts, use vegetative species and quantities of individual species to meet Forest goals and objectives. Commercial and precommercial thinning activities should retain a diversity of species based on the species present.
- 21-57 Maintain a healthy and resilient population of all species, including special interest species such as Pacific yew, Brewer spruce, Port-Orford-cedar, Pacific silver fir, Baker cypress and whitebark pine throughout their native range.
- 1) Projects with the potential to impact special interest species should be analyzed and the potential impacts documented through the environmental assessment process.
 - 2) Mitigation for impacts should include provisions for planting or increasing local populations where desirable.
 - 3) Where Pacific yew occurs within a harvest unit, select leave patches of yew that can be protected during site preparation. Where possible, plant local yew seed sources or cuttings to maintain Pacific yew in the ecosystem. The Interim Guide to the Conservation and Management of Pacific Yew shall be followed where Pacific yew is being harvested.

Insect and Disease

- 21-58 Design all Forest management practices to maintain Forest health, consistent with the objectives for the stand and landscape. Avoid conditions that promote the introduction and spread of disease, increase risks of insect attack, or promote unacceptable fire risk.
- 21-59 Consider and analyze a full range of pest management activities, including cultural, biological, mechanical, and chemical methods, on a site-specific, project-level basis. Select the treatment method(s) through the environmental analysis process. This process will consider the environmental effects, treatment efficiency, and cost-effectiveness of each alternative.
- 21-60 Integrated pest management will include detection, surveillance, prevention, suppression, monitoring, and evaluation.
- 21-61 Take measures that shall limit the spread of Port-Orford-cedar root rot, and increase populations of Port-Orford-cedar on the Forest. Prevent or reduce the risk of introducing the disease into uninfested areas. Strategies for reducing the risk to Port-Orford-cedar from infection by the root disease will be integrated into all levels of planning (NEPA documents, ecosystem analysis, LSR assessments, WSR management plans, transportation plans, recreation and other activities or strategies).
- In order to reduce the spread of Port-Orford-cedar root disease, a risk analysis will be completed for all projects in watersheds containing Port-Orford-cedar. Disease control strategies identified from experience and research will be applied on a site- or drainage-specific basis to reduce the spread and severity of the disease.
- 21-62 Take measures to maintain the viability of sugar pine throughout its native range. Identify major resistant trees and collect their seeds. Follow the Region 5 and the Forest's Sugar Pine Action Strategy. The strategy includes:
- 1) Provide reforestation of rust resistant sugar pine following harvest and wildfire.
 - 2) Meet the requirements of the Tree Improvement Master Plan for Region 5 by selecting sufficient major gene resistant sugar pine trees from each seed zone and 500 foot elevation.
- 21-63 During vegetative manipulation projects, consider the removal of overstory trees that have been infected by dwarf mistletoe. If it is necessary to leave the infested trees, favor non-host species in the understory if possible. Do not utilize silvicultural prescriptions that continue the spread of dwarf mistletoe. During thinning activities, discriminate against trees infected with dwarf mistletoe.

Fire Management

Fires

- 22-1 Restore fire to its natural role in the ecosystem, to the maximum extent, consistent with the safety of persons, property, and other resources.
- 22-2 Wildland fires shall receive the appropriate suppression response (see Table 4-8). Timeliness is essential but safety and cost efficiency, while considering the value of the threatened resource, shall guide the fire suppression response strategy. A range of response tactics may be appropriate. Carefully analyze the current and predicted wildland fire situation when determining the appropriate response.

Table 4-8. Fire Suppression Tactics and Dispatch Response

Management Area	Dispatch Level ¹	Initial Response Dispatch Intensity ²	Fire Suppression Tactics	
			Requiring Authorization ³	Authorizing Official
Research Natural Areas	LOW MODERATE HIGH	1 2 3	A, E, J, L	Forest Supervisor
Wilderness	LOW MODERATE HIGH	1 1 2	D, E, I, J A, F, G, L	Forest Supervisor Regional Forester District Ranger
Designated and Eligible Wild Rivers	LOW MODERATE HIGH	1 2 2	E, I, J, K, L	District Ranger
Butte Valley National Grassland	LOW MODERATE HIGH	1 1 2	None	None
Special Habitat	LOW MODERATE HIGH	1 2 3	A, D, E, H, J, L	District Ranger
Managed Wildlife Area	LOW MODERATE HIGH	1 2 3	A, E, H, J, L	District Ranger
Special Interest Areas	LOW MODERATE HIGH	1 2 3	E, J	Forest Supervisor
Cultural Areas	LOW MODERATE HIGH	1 2 3	E, J, L	District Ranger
Backcountry Areas	LOW MODERATE HIGH	1 1 2	E, J	District Ranger
Riparian Reserves	LOW MODERATE HIGH	1 2 2	A, E, I, J, L	District Ranger
Retention Visual Quality Objective	LOW MODERATE HIGH	1 2 2	None	None
Designated and Eligible Scenic Rivers	LOW MODERATE HIGH	1 2 2	E, J	District Ranger
Designated and Eligible Recreational Rivers	LOW MODERATE HIGH	1 2 2	E, J	District Ranger
Winter Range	LOW MODERATE HIGH	1 1 2	None	None
Partial Retention Visual Quality Objective	LOW MODERATE HIGH	1 2 2	None	None
Forage	LOW MODERATE HIGH	1 1 2	None	None
General Forest	LOW MODERATE HIGH	1 2 3	None	None
¹ Dispatch Level - Refers to the intensity and type of initial response to a wildfire. The correlation to fire danger is:				
LOW: Low fire danger. Typically, spring fall, and winter months. Included are the wet periods during summer. MODERATE: Moderate fire danger. Many of the summer months, except the driest. HIGH: High to extreme fire danger. Typically August and early September. (July and October during drought years).				
² Initial Response Dispatch Intensity Key: This refers to the type of resources and the quantity of resources that will respond to wildfires. Air resources are readily available during the summer months and during drought periods. The air attack and the ground Incident Commander will determine what additional resources should be sent or which should be released; dictated by the location of the incident and the exhibited or expected fire behavior.				
Level 1: Low level of response; at least an aerial surveillance aircraft and/or a few ground-based resources. Level 2: Moderate level of response; surveillance aircraft helicopter plus at least a handcrew or engine. Level 3: High response; surveillance plus a helicopter retardant aircraft engines and handcrews.				

Table 4-8. Fire Suppression Tactics and Dispatch Response

³ Suppression Tactics Key:			
A. Aerial Retardant	F. Portable Pumps	I. Use of Motorized Vehicles	L. Base/Spike Camps
D. Helicopters	G. Chainsaws	J. Dozer Constructed Fireline	
E. Helispots	H. Snag Falling	K. Backfiring	

- 22-3 Apply the minimum impact suppression method to all lands. Control or manage the spread of fire. The suppression method shall be commensurate with the wildland fire's potential to spread or cause undesirable impacts. Firefighter and public safety shall be the highest priority. Select procedures, tools, and equipment that least impact the environment. Use hot spot detection devices whenever possible. These tactics apply to the mop-up of wildland fires also.
- 22-4 Wildland fire suppression actions (for example, firelines) constructed during suppression activities will be rehabilitated to their pre-fire state or blended in with the burned area.
- 22-5 On NFS lands with shared fire suppression responsibilities, cooperators should take the necessary steps to assure suppression activities are compatible with these standards and guidelines.
- 22-6 Design the Forest initial attack suppression organization around the capability to successfully prevent at least 90% of fire starts from becoming escaped fires. This level of organization is the "most efficient while considering land and resource values."
- 22-7 Identify, locate, and incorporate special resource concerns (for example, cultural sites, T&E species and RNAs) into the Automated Dispatch process.
- 22-8 Emphasize wildland fire prevention and early detection.
- 22-9 The appropriate line officer shall review the Escaped Fire Situation Analysis for wildland fires that have not exceeded the capabilities of the initial attack resources, but are expected to burn into the next burning period. A "maximum allowable Perimeter" should be determined during the initial phases of the preparation of the escaped Fire Situation analysis.

Fuel Management and Prescribed Fire

- 22-10 Prescribed fire (wildland fire managed for resource benefits or management–lighted prescribed fire) is a desirable tool to be used for managing the Forest resources. Consider the long-term role of fire during all project planning phases.
- * 22-11 Site treatments should be prescribed which will minimize intensive burning, unless appropriate for certain specific habitat, communities, or stand conditions. Prescribed fires should be planned to minimize the consumption of litter and CWD. These provisions apply to regulated (matrix) land and within the Adaptive Management Area.
- 22-12 Ranger districts, through the Ecosystem Analysis Process at the landscape/watershed level, shall evaluate the need for and prioritize the use of prescribed fire in managing natural fuel beds for the express purpose of reducing fire intensity or increasing fire suppression capabilities.
- 22-13 Do not allow management activities to result in fuel accumulations that increase the risk of high intensity fires that did not typically occur on the Forest before wildland fire suppression activities in the early 1900s began. Manage fuel loadings and the use of prescribed fire on the Forest to maintain ecological processes.
- 22-14 Using the "Wildfire Susceptibility" matrix (refer to Appendix B of the EIS), fuels created through management activities should be treated as follows:

Table 4-9. Treatment of Fuels Created Through Management Activities		
Fire Class	Description	Management Action
Class 4	Very high or quite likely that the stand will be lost to a wildfire.	Unacceptable; treat fuels to a Class 3 level.
Class 3	High likelihood that the stand will be lost to a wildfire.	Fuel buildups at this level may be permitted approximately 25% of the time, compatible with the natural fire role.
Class 2	Moderate likelihood that the stand will be lost to a wildfire.	Fuel buildups at this level will be permitted about 75% of the time.
Class 1	Low likelihood of the stand being lost to wildfire.	Permitted anytime.

- 22-15 All fuels management planning will analyze the impact of a project within the project's landscape. It also will analyze the cumulative effect of that project on the landscape with respect to wildfires' impact on future fires. The fire and fuels specialist will work with other ID Team members in analyzing the effect of fire on all resources.
- 22-16 Fuels analysis of a landscape should address the accumulations of fuels on a site over time (at least to year 40 from project initiation), including the fuels generated from management activities, such as thinning.
- 22-17 Project-level fuel planning needs to incorporate the areas immediately next to the project boundaries for consideration of fuels treatment.
- * 22-18 For areas in the matrix (regulated land) that are located in the rural interface, fire management activities should be coordinated with local governments, agencies, and landowners during watershed analysis to identify additional factors which may affect hazard reduction goals.
- 22-19 All landscape- or watershed-level fuels analyses should describe the hazard, risk, and consequences of a wildfire on a site. It also should describe how that fire will influence the site in the foreseeable future. The analysis also should include to potential effects on the site's fuel loading and the expected fire occurrence and behavior.

Smoke Management

- 22-20 Adhere to applicable State of California and State of Oregon air quality laws and regulations.
- 22-21 Incorporate a smoke management analysis in all prescribed burning plans. Coordinate these plans with local authorities with responsibilities for managing air quality. The best available predictive methods and models and the most cost-effective technology should be utilized to minimize the impact of prescribed burning on smoke-sensitive areas and designated Class I wilderness, such as the Marble Mountain Wilderness. Smoke from fires, either started from lightning-caused ignitions or prescribed fires based on the fuels management plan for the wilderness occurring inside wilderness, is considered a natural component of the ecosystem and does not constitute a violation of the Class I wilderness area ambient air quality standards.
- 22-22 The adherence to sound smoke management principles is the key element in mitigating the impacts of smoke on air quality and air-related values. Smoke management approaches the concept of maintaining air quality by avoiding unacceptable combinations of concentration, duration, and placement of smoke. Based on this approach, the levels of smoke in the air during the spring and fall will increase to accommodate prescribed fires, in order to lower the amount of smoke in the air during the summer months.
- 22-23 Public understanding of the prescribed fire program and smoke management will be important during implementation. Some measures that should be employed include:
- 1) Interact and exchange information with the public about the objectives of the

prescribed fire and smoke management programs. Emphasize what role prescribed fire plays in the ecology of the area. Discuss what has occurred historically.

- 2) Whenever possible, inform the local public about planned fires before their ignition.

22-24 Minimize impacts to communities and Class 1 wilderness from prescribed burns. Implement prescribed burns when prevailing winds and smoke mixing heights permit smoke to be dispersed away from mountain communities. Impacts to communities from a single burn may be present for a day or two.

Range Management

- 23-1 Determine the current ecological status of the Forest's rangelands. If rangelands are found in an unsatisfactory condition, use management strategies and activities necessary to achieve a satisfactory condition.
- 23-2 Lands supporting vegetation that can be used by both domestic and wild grazing animals without damage to wildlife, soil, or water resource values will be designated as "suitable for livestock grazing." The decision to "authorize" livestock grazing will be made at the project level.
- 23-3 Use livestock as a management tool to attain Forest Plan management goals and desired future conditions of rangeland vegetation.
- 23-4 Landscape/watershed-level ecosystem analysis, rangeland project analysis and decision documents, and Annual Operating Instructions (AOIs) shall be the primary tool for analyzing, establishing, and implementing the management actions necessary to meet Forest Plan objectives and desired future conditions for rangelands.

23-5 The following information and analysis should occur after completion of the Forest Plan:

Project documents, which are site-specific environmental analysis and decision-making documents pursuant to NEPA requirements, will be used for the following:

- 1) Establish site-specific objectives for allotments that are consistent with Forest Planning objectives.
- 2) Document the environmental impacts of a proposed management action and develop alternatives to that proposed action.
- 3) Develop and evaluate grazing use alternatives which include:
 - a) The number of livestock to be grazed, season of use and kind/class of livestock use.
 - b) The appropriate livestock stocking intensities to achieve a balanced ecological status, prevent over-utilization of any desirable vegetative types and maintain good livestock distribution.
 - c) The grazing system and strategy to be implemented that will meet management objectives.
 - d) The appropriate management actions needed to promote the achievement of Forest Plan goals and objectives.
 - e) An evaluation of the improvement projects that would be necessary to meet Forest Plan goals and objectives.
- 4) Conduct a cost-benefit analysis prior to construction of any range improvement.
- 5) Map allotment boundaries, land ownership, improvements (existing and proposed), and study area locations.

AOIs, yearly management instruction to the livestock permittees, will be used for the following:

- 1) Describe the implementation schedule of needed improvements to meet stated objectives.

- 2) Describe the rehabilitation schedule for all areas that do not currently meet the stated objectives.
 - 3) Define the maintenance schedule for all existing and proposed improvements.
 - 4) Schedule the collection of information on actual use, production/utilization levels, ecological status and trend, livestock forage value ratings and trend, resource value ratings for other resources, and compliance with Forest Plan standards and guidelines.
- 23-6 Project decisions that address authorized grazing use should be revised according to Washington Office direction. The schedule for revision or preparation of project decisions to bring them into conformance with Forest Plan objectives shall consider:
- 1) The rehabilitation or maintenance of TE&S species habitat.
 - 2) The rehabilitation or improvement of degraded resource conditions such as on-going soil, water, vegetation damage or change in vegetative type; the need for riparian ecosystem rehabilitation; ecological status trends away from stated objectives or the desired future condition.
 - 3) The schedules for ecosystem and site analysis for resources such as timber, wildlife, watershed, fisheries, and recreation.
 - 4) The expiration date of existing term grazing permits and availability of funds for grazing administration.

Based on existing resource conditions, a priority list is shown in Table 4-10.

Table 4-10. Priority List for Range Projects			
Priority	Allotment	Priority	Allotment
1	Cuddihy	20	Three Sisters
2	Dry Lake (Oak Knoll RD), Horse Creek	21	Colestine, Hornbrook, Hutton Creek
3	Carter Meadows, south Fork Saloon Creek, Granite Fox, Eagle Creek	22	East Red Rock
4	Mill Creek, Grouse Creek, East Fork	23	Shafter
5	Horsethief	24	Deer Mountain, McGavin Peak
6	Butte Valley National Grasslands	25	Lake Mountain, Middle Thomkins
7	Deadwood, Indian Creek, Scott Bar Mountain	26	Red Rock
8	Red Rock Valley, Marble Valley	27	Mount Hebron
9	Dry Lake (Goosenest RD)	28	Bray
10	Haight Mountain	29	Bear Creek
11	Little North Fork, Shelly Meadows	30	Garden Gulch
12	Kidder Creek, Shackelford	31	Big Ridge
13	East Beaver, Seiad/Johnny	32	South Klamath
14	Big Meadows	33	Seikel Meadow
15	Boulder Creek	34	Ash Creek
16	Etna Creek	35	Beswick
17	South Russian	36	Forks
18	Big Flat	37	Humbug
19	Ball Mountain, Panther Creek, Bogus	38	Sugar Creek

- 23-7 Develop or revise project decisions for each allotment on the Forest within the planning period.

- 23-8 Coordinate rangeland management activities with other agencies, institutions, organizations, and individuals having an interest in the management of the rangeland resource where it is appropriate. Use the Coordinated Resource Management Planning (CRMP) approach where appropriate to develop and implement the project decisions.

- * 23-9 This standard and guideline applies throughout all land allocations. Protect known and newly discovered sites of the following species from grazing by all practicable steps to ensure that the local populations of the species will not be impacted:

Mollusks: *Ancotrema voyanum*, *Monadenia fidelis klamathica*, *Monadenia fidelis ochromphalus*, *Pristiloma articum crateris*, *Fluminicola n. sp. 1*, *Fluminicola n. sp. 11*, *Fluminicola n. sp. 19*, *Fluminicola n. sp. 20*, *Fluminicola n. sp. 3*, *Fluminicola seminalis*.

Vascular Plants: *Pedicularis howellii*.

Permanent Range

- 23-10 Develop an integrated vegetative inventory. As data becomes available, the desired future condition of the rangeland resources should be modified and expressed in terms of a desired ecological status (FSM 2090.11). The desired ecological status should be developed on a site-by-site basis.
- 23-11 Where feasible, native species should be used to define the desired future condition of a community. In site-specific cases where non-native species are stabilizing watersheds and improving resource conditions and are not adversely impacting the desired biological diversity of the site, those non-native species may be used in the definition of the desired ecological status.
- 23-12 Determine and monitor the rangeland vegetation using ecological status, vegetative condition, and apparent trend on areas within existing allotments that are suitable for grazing.
- 23-13 Discourage the use of wet meadow communities by commercial pack stock, administrative stock, private stock, and permitted livestock until the range has been determined to be ready to sustain use, or prior to July 1 if such a determination has not been made.
- 23-14 Optimum domestic and recreational stock utilization levels shall be established at a level where there is sufficient vegetative residues to insure plant vigor, reproduction, and a favorable trend (refer to Table 4-11).
- 23-15 The following guidelines for utilization of key species by ecological condition and community type are suggested:

Table 4-11. Percent Allowable Utilization Levels by Ecological Condition

Ecological Condition	Upland	Wet Meadow	Riparian
Satisfactory	40-55%	45-60%* 3 to 4 inches**	40-50%* 3 to 4 inches**
Unsatisfactory	25-35%	25-40% 4 to 5 inches	20-30% 4 to 5 inches
Utilization levels of woody vegetation	45-55%	45-55%	35-50%
* This figure represents the percentage of the current year's growth that is acceptable to be removed during a single grazing year (utilization level).			
** This represents the approximate height of vegetation that will remain on the site after the end of the grazing season. This figure is an estimate, based on a general knowledge of the herbaceous species that occupy these types of sites within the Klamath Province. These figures must be refined based on species composition and growing conditions.			

- 23-16 Allowable utilization levels of annual grasslands shall be based on maintaining 500 to 1,000 pounds per acre of residual dry matter, depending on slope, location, etc.
- 23-17 Refine utilization guidelines for each ecological condition and each seral stage as data becomes available.

- 23-18 If the rangeland analysis determines a need to make minor forage allocation adjustments, those adjustments should be made during preparation of the project decision and in the AOI. Larger allocation adjustments should be made in a Forest Plan amendment.
- 23-19 Encourage permittee participation in the development of project analysis and decisions, AOIs, rangeland monitoring and evaluation, and in the development and maintenance of rangeland improvements.
- 23-20 Manage rangeland vegetation (herbaceous, shrubs and other woody vegetation) to maintain a diverse forage base. Develop a rangeland ecosystem classification for the Forest within a 10-year period. Site-specific objectives identified in the project decision shall provide forage to support wildlife populations. Big game objectives shall be developed in consultation with the CDFG.
- 23-21 Balance the development of forage areas with the need to provide the appropriate forage/cover ratios for populations of deer, elk and other rangeland-dependent species.
- 23-22 Non-structural improvements, such as vegetation rejuvenation (through burning, chaining or brush crushing), re-seeding and firewood cutting shall:
- 1) Be restricted to range sites that produce 250 pounds per acre or greater with suitable soil and precipitation.
 - 2) Be protected from grazing if vegetation establishment is necessary.
 - 3) Be used to maintain or improve forage conditions with diverse vigorous plants and age-classes. Priority should be given to areas of poor forage condition and decadent shrubs.
 - 4) Not be conducted from May 1 to July 1 in fawning, calving and kidding areas.
 - 5) Have irregular borders and contain cover islands to achieve a mosaic pattern.
 - 6) Contain a diverse seed mix, including forbs.
- 23-23 Use structural and non-structural improvements, when appropriate, to achieve desired vegetative management objectives. Design, construction and maintenance should be 1) in accordance with Region 5 Range Improvement guidelines, 2) in compliance with other resource needs and 3) cost-effective.
- 23-24 Design and construct fences to allow for wildlife movement.
- 23-25 Space water developments to allow for the distribution of wildlife, domestic stock, and wild horses. When constructing water developments, they should include floats and ramps to prevent the drowning of wildlife species. When developing seeps and springs, pipe water away from the water source to a trough. The immediate spring or seep area should be protected from domestic livestock use.
- 23-26 Manage critical big game habitat to assure that the appropriate forage is available to wildlife species during critical seasons. The availability of winter browse, forbs during the spring months, and forb availability during calving periods are examples of specific forage needs.

Transitory Range

- 23-27 Use the following guidelines on regulated land:
- 1) Even-aged timber management systems
 - a) In natural or artificial regeneration, restrict grazing until vegetation is adequate to meet the desired future conditions. Periods of restriction may vary with the site,

frequency of seed years, the treatment of slash, and the growth rate of tree seedlings.

- b) The construction of water developments or use of salt blocks should be allowed only if their use is consistent with the desired future condition of the area. Grazing tenure should be of sufficient duration to amortize range improvements.
- c) When grazing is permitted in the stand, develop management strategies on the utilization of associated herbaceous and shrubby vegetation, soil condition, and tree condition.
- d) Combined summer use by wildlife and livestock should not exceed the allowable use standards given.
- e) Utilization of grasses and forbs can be estimated by ocular weight estimates by plot on paced transects. Shrub use can be estimated by either weight estimate or percent of twigs used.
- f) Fencing or management techniques may be required to protect regenerating areas while the remainder of the area is grazed.

2) Intermediate Treatments

- a) Restrict grazing use within areas of timber harvest until the understory has responded to the silvicultural treatment. The length of the restriction will vary depending on objectives of cutting, upon the amount and kind of understory present before treatment, and amount of slash present.
- b) Base livestock management upon utilization of key forage species.

3) Fire

- a) New burns
 - 1. Defer grazing until tree reproduction is established and other management objectives would not be significantly affected.
 - 2. From then on, base management on utilization of the understory as on logged areas.
- b) Old burns already vegetated
 - 1. Summer use of key shrubs by livestock and game should not exceed 45% to 55%.
 - 2. Use of key grasses should not exceed 50% with season-long grazing, or 60% with any deferred rotation system.

23-28 Adjust the timing and amount of livestock grazing within plantations to allow conifer seedling protection during the establishment phase. Where conflicts occur, resolution will favor meeting timber management objectives. In some situations, livestock may be excluded from certain areas to allow for establishment of conifers.

Cultural Resources Management

24-1 The following standards comply with all applicable legal requirements for management of cultural resources, including the National Historic Preservation Act of 1966, NEPA, the American Indian Religious Freedom Act of 1978, and the Archaeological Resources Protection Act of 1979. Standards for each aspect of the cultural resources program are provided to assure that procedural requirements are satisfied. These procedures apply to all Federal and Federally funded undertakings and undertakings requiring Federal permits (refer to the relevant cultural resource laws).

Overview

- 24-2 Complete a cultural resources overview of the Forest within 2 years and maintain as needed. The overview shall summarize all previously recorded cultural resource information for the Forest and provide a framework for evaluating cultural resources identified through the inventory process. The overview also will develop a preliminary research design to guide future surveys, inventories, and scientific investigations and identify opportunities for interpretation of a range of cultural properties.

Identification

- 24-4 The Forest's cultural resource inventory strategy, the Sample Survey Design, shall guide the inventory of all NFS lands. Review the Sample Survey Design yearly and update as needed to reflect advances or changes in the site inventory data base, management objectives, legislation and Regional or Forest research designs. Conduct the cultural resource inventory program under the leadership of an archaeologist.

Evaluation and Assessment

- 24-5 Evaluate the significance of inventoried sites by applying the criteria for eligibility to the National Register of Historic Places. Develop a strategy to evaluate all other cultural resources through cost-effective means as the Forest-wide inventory nears completion.
- 24-6 Nominate cultural resources that meet the appropriate criteria for eligibility to the National Register of Historic Places. Nominations will be scheduled incidentally until completion of the Forest-wide inventory of cultural resources.
- 24-7 Consider the effects of all Forest Service undertakings on significant cultural resources. Develop measures to avoid or mitigate any adverse effects. Give priority to those properties that may be affected by project activities.

Protection and Enhancement

- 24-8 Develop measures to protect significant sites from adverse effects, in consultation with the California State Historic Preservation Officer (SHPO), the State Historic Preservation Office of Oregon and, if necessary, the President's Advisory Council on Historic Preservation. Since a small part of the Forest is in Oregon, share appropriate cultural resource reports with the Oregon State Preservation Officer. Measures developed to protect specific values range from complete avoidance of the site and corresponding protection of its environmental setting to mitigation procedures that conserve the historic values of the resource. Examples of the latter include data recovery through excavation of subsurface cultural resources, photo documentation of surface features and standing structures and, in some cases, site stabilization or restoration.
- 24-9 Complete the evaluations of potentially eligible sites during the planning period. Nominate appropriate sites for inclusion on the National Register of Historic Places. Maintain eligible sites until listed in the National Register.
- 24-10 Those cultural resources determined eligible to the National Register of Historic Places should be monitored by a recurring inventory to determine whether their condition has been affected by vandalism or unauthorized use.
- 24-11 Protect Class I cultural resources evaluated as having National Register significance. Monitor these sites by a recurring inventory to assess whether their condition has been affected by environmental factors. Class II eligible cultural resources should be protected from degradation by natural deterioration, such as that caused by fire, flood, earthquake, precipitation, or wind.
- 24-12 Opportunities may be provided for scholarly/scientific use of designated prehistoric sites after coordinating selection of appropriate sites with relevant Native American groups. This could require "banking" of sites for future use and processing antiquities permits for testing and

excavation of sites by qualified professionals.

- 24-13 Develop a program designed to inform the public and Forest employees of their responsibilities toward cultural resources and their protection.

Maintenance of Historic Sites and Cultural Materials

- 24-14 Maintain significant and eligible historic sites and mitigate any adverse effects. Stabilization or rehabilitation may be carried out for significant sites that have been damaged. Decisions on the maintenance level for eligible historic structures should be based on an analysis of utility, interpretive values, public interest, existing site or area allocation, funding sources and levels, existing agreement, and other relevant considerations. Maintain any cultural materials removed from their Forest setting in a professional manner.

Interpretation

- 24-15 Suitable cultural resource properties may be interpreted for the recreational use and educational benefit of the public. The measure of suitability should be based on accessibility to the public, feasibility for protection, condition of the property, compatibility with other resource management activities within or next to the area, thematic representation and value to public groups. Interpretive services and facilities should be compatible with the nature, qualities, and integrity of the cultural sites selected for enhancement. Preferred methods include brochures, signs, displays, interpretive trails, tours, and video or slide programs.
- 24-16 Interpret significant cultural resources for visitor use, information, and enjoyment.

Mitigation

- 24-17 Monitor mitigation measures established during the environmental analysis of a given project to insure all stipulations are being met. Current records are necessary to indicate compliance with legal mandates. Tracking of the mitigation plan is necessary during and following ground-disturbing activities where cultural resource values are present.

Management

- 24-18 Coordinate the long-term management of cultural resources with SHPO and others as necessary. Assign cultural resources to appropriate management categories for present and future uses, such as interpretation, scientific investigation, adaptive uses, and preservation in place for developing future scientific needs. Develop a data redundancy category in the future when inventory and excavation data become sufficient to make such a judgment.
- 24-19 Design management activities to protect Class II cultural resources and to maintain, protect and/or interpret Class I cultural resources. Schedule Class II sites for evaluation. Once a site is on the National Register, it should be maintained in a stable condition.

- 24-20 The following are management priorities for the Heritage Resource Program:

- 1) Preservation in-place of cultural resources for future scientific study.
- 2) Controlled data recovery by professional excavation, mapping, photo documentation and reporting to answer questions about prehistoric/historic use and development.
- 3) Adaptive use of historic structures (for example, administrative sites, residences, interpretive centers, etc.).
- 4) Interpretive use, such as directing public attention to a site for educational/entertainment purposes.

Consultation

- 24-21 Coordinate management of traditional religious sites with Native American groups. Present

information about planned project activities to American Indian groups for coordination concerning effects on traditional religious sites.

- 24-22 Management practices may be modified or restricted to provide for protection of the spiritual and religious aspects of designated areas. Additional special actions may be taken at the time of ceremonies to permit their un-encumbered performance.
- 24-23 Identify opportunities for the Forest to coordinate resource activities compatible with interests of surrounding Native American tribes.
- 24-24 Provide for Native American needs for collection and/or use of traditional resources.
- 24-25 Protect traditional Native American cultural and religious uses and practices consistent with Public Law 95-341 (American Indian Religious Freedom Act of 1978).

Tribal Government Program

- 24-26 Follow Government-to-Government protocol as established by agreements.
- 24-27 Consult and coordinate on all projects that have the potential to affect Native American values.

Social and Economic Environment

Public Interaction And Involvement

General

- 25-1 Utilize and create opportunities to explain to Forest employees and the public why the Forest Service was established, what mission the Forest Service has been assigned by Congress and the role the Forest plays in the implementation of that mission. Structure these interactions so the information is presented in a clear and concise manner.
- 25-2 Develop and maintain a Forest information distribution network to keep Forest employees, community leaders, concerned citizens, and interested groups informed and involved in significant Agency and Forest issues. Whenever possible, distribute information before any activity begins.
- 25-3 When possible, contact community leaders, concerned and interested groups and potentially affected interests to promote the exchange of information and ideas on how to resolve common issues. The partnerships and working groups that arise from these contacts should be maintained whenever possible. The contacts should be made at a point in the process, or project, where the exchange of ideas could be useful in the project development and implementation. The meetings should be intended as an opportunity to discuss information and ideas on a common level.
- 25-4 Welcome opportunities to discuss or identify Forest-wide issues with the public. As the exchange of information and ideas occur, attempts should be made to respond to the public comment. Document the comment's content and assure that we have interpreted the comment appropriately. Information acquired from meetings with the public should be incorporated into project-level work whenever appropriate.

Project-level Public Involvement

- 25-5 Seek interactions and involvement from potentially affected groups or individuals who will be, or maybe, impacted by the implementation of a specific project. Allow other interested groups and individuals to become involved, as they are identified, consistent with Council on Environmental Quality (CEQ) implementing regulations for NEPA.
- 25-6 Contacts with the public should be made early in the project and at key points during the project. This public interaction should be structured to:
 - 1) Expand the information base on which project planning decisions are made. Everyone involved should be made aware of the decision-making process being used and the responsibility and authority limits of the decision maker.
 - 2) Assure that the decision maker understands the needs, concerns, and values of the public.
 - 3) Provide the interested public with an understanding of Forest programs and proposed actions.
 - 4) Clearly define the Forest Service objectives during project planning and how those objectives are integrated with the Forest Service mission. Where possible, make sure that the public is aware of their opportunities to interact meaningfully with the Forest about a specific project. This allows them to exchange ideas, information, and concerns how the project may affect their values.

- 25-7 Public interaction and involvement strategies should be prepared for projects or special management issues that may become, or continue to be, controversial. Interaction and involvement strategies also should be prepared for projects that may result in a significant impact to Forest resources (for example, highly controversial large scale projects of moderate to high intensity at either the local and regional scale). These strategies should:
- 1) Identify all potentially affected interests.
 - 2) Include public interaction and involvement goals for each project.
 - 3) Develop a list of public interaction and involvement techniques to be used systematically to accomplish the goals established for each project. The use of specific public involvement techniques should be based on the public involvement objectives to be accomplished during project implementation.
 - 4) Use all appropriate personnel to plan the public interaction and involvement strategy. Those responsible for implementing the strategy should be included in the initial planning efforts.
- 25-8 To the extent possible, maintain a representative for each project who is responsible for explaining the following to Forest employees and the public:
- 1) What opportunity or problem is the proposed project addressing.
 - 2) Why we are the most appropriate entity to address this problem.
 - 3) What approach or method is being used to accomplish the planning and project implementation.
 - 4) What opportunities are available for a group or individual to become involved in the project. The opportunities should focus on how can the public's knowledge, information and values best be conveyed and addressed in the project planning and implementation.
 - 5) How the project was implemented and the relative success of the project in meeting the established objectives.
- 25-9 Where mixed ownership exists, encourage the development of Coordinated Resource Management Plans or other cooperative agreements to achieve objectives.

Special Emphasis Programs

- 26-1 Enhance project implementation efforts by utilizing human resource program assets, such as the Job Corps, Youth Conservation Corps, Siskiyou Training and Employment Program, California Detention Crews and Northern California Indian Council. Where possible, provide training and education for these groups.

Rural Development

- 27-1 Assist rural, forest-dependent communities with efforts to enhance their economic stability and social vitality.
- 27-2 Recognize, and where feasible remove, barriers that impede the flow of financial and technical assistance and the transfer of technology to rural communities.
- 27-3 The Forest shall work with local community leaders and individuals to provide opportunities for the development of natural resource-based enterprises. Within the scope of existing laws and direction, the Forest may contribute current technology, equipment, technical skills, work force, natural resources or financial resources to work with and support efforts of the local communities to maintain economic and social viability.

- 27-4 The Forest shall develop and maintain partnerships with cooperating organizations and agencies in the development and implementation of resource-based programs and activities.
- 27-5 Where appropriate, the Forest should identify options to develop opportunities for non-traditional forest-based commodity production.
- 27-6 The Forest shall consider rural development options and opportunities in resource decisions that may assist rural communities in achieving long-term economic development, stability, and quality of life. Strive to avoid conditions that would create abrupt changes in Forest management objectives and result in undesirable social impacts.
- 27-7 Explore opportunities to increase local employment in Forest project implementation.
- 27-8 Actively seek cooperative funding to finance rural development opportunities from public and private sources.
- 27-9 Where possible, the Forest may integrate human resource programs into the implementation phase of natural resource programs. These programs would provide work, training, youth education and opportunities for under-employed, unemployed, elderly and other individuals with special needs.