

FOREST-WIDE STANDARDS

There is one established research natural area on the Forest. Canyon Creek Research Natural Area on the Bear Valley District covers approximately 661 acres within the Strawberry Mountain Wilderness.

The Research Natural Area Committee for the Pacific Northwest Region determined that Baldy Mountain, Dixie Butte, Dugout Creek, and Shaketable candidate Research Natural Areas represent the best examples of particular kinds of natural ecosystems in the Region and are needed to meet present and future demands. The 2,850 acre Baldy Mountain area is located within the Strawberry Mountain Wilderness and represents forested communities on serpentine soils. The Shaketable area (approximately 375 acres) is located on the Bear Valley District and represents various sagebrush communities. Alpine sedge communities are found in the Dixie Butte area (approximately 100 acres) on the Long Creek District. Dugout Creek, on Prairie City Ranger District is approximately 270 acres, and includes mixed conifer/pinegrass communities or moderate slopes with ash soils.

Manage these areas to preserve their integrity until an establishment report is prepared and approved by the Chief of the Forest Service. Upon approval of this report, manage the area under the direction established in the report.

There may be some future research natural area needs that can best be satisfied on the Malheur National Forest. When suitable new areas are identified, consider them for addition to the research natural area inventory.

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The following standards apply to National Forest land administered by the Malheur National Forest. In some cases standards represent a minimum or maximum permissible level of an output or activity and under some circumstances more restrictive standards may be applied, provided changes in outputs or effects on other resources do not occur. They are intended to supplement, but in some cases may take the place of, national and Regional policies, standards, and guidelines found in Forest Service manuals and handbooks and the Pacific Northwest Regional Guide.

General

1. Subsequent activities affecting the Forest, including budget proposals, shall be based on this Forest Plan. Proposed activity schedules may be changed to reflect differences between proposed annual budgets and appropriated funds. Such scheduled changes shall be considered an amendment to the Forest Plan but shall not be considered a significant amendment or require the preparation of an Environmental Impact Statement, unless the changes significantly alter the long-term relationship between levels of multiple use goods and services projected under planned budget proposals as compared with those projected under actual appropriations.
2. Plan, design, and implement all projects in an interdisciplinary manner to achieve integrated land management objectives.

3. If it is determined during project analysis that the best way to meet the management area goals of the Forest Plan conflicts with a Forest Plan standard, the Forest Supervisor may approve a nonsignificant amendment to that standard for that project; such exceptions and the rationale must be described in the project's documentation. These changes shall be considered an amendment to the Forest Plan and will be implemented only after appropriate public notification and satisfactory completion of all National Environmental Policy Act procedures (see Chapter V, Section D).
4. *Delineate riparian areas in project areas during environmental analysis of project activities and manage them as directed by the standards for Management Area 3.*
5. Provide for cost effective improvements and the enhancement of all renewable resources in sale area improvement plans.

Recreation

6. Develop a Forest Recreation Opportunity Guide and update annually.
7. Recognize undeveloped campsites, hunter camps, or areas where concentrated recreation use occurs as being significant in providing dispersed recreation opportunities in a roaded setting. Manage these areas for partial retention. Inventory, evaluate, and develop management objectives for these sites.
8. Update the inventory of recreation opportunities on the Forest by recreation opportunity spectrum (ROS) class every 5 years.
9. Emphasize public awareness of no trace recreation, especially pack-it-in, pack-it-out program.
10. Designate areas for off-road vehicle (ORV) use through the Forest Travel Plan and in conformance with ROS designations for specific areas. Manage ORV use to minimize resource damage and to promote public safety.
11. Construct, relocate, or protect designated system trails and facilities during *management activities*.
12. Limit regulation, constraint, and supervision of recreation use to the minimum necessary for resource protection and safety.

Cultural Resources

13. Continuously update the Forest cultural resource files with new data on the history, ethnography, and prehistory of the Forest, including known cultural resource sites.
14. Conduct a professionally supervised cultural resource survey on National Forest lands to identify cultural resource properties. Use sound survey strategies and the Malheur National Forest Cultural Resource Inventory Survey Design. Proposed "project" planning area lands will be given first inventory priority, but all "non-project" lands, such as wilderness and non-commercial timber lands, will also be surveyed.

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15. Consider the effects of all Forest Service undertakings on cultural resources. If a National Register and eligible property is affected, consideration shall include the formulation and analysis of alternatives, and the examination of interactions and impacts among cultural resources and other resource uses. Coordinate the formulation and evaluation of alternatives with the State cultural resource plan, State Historic Preservation Officer and State Archaeologist, other State and Federal agencies, and with traditional and religious leaders of Native American Indian groups and tribes with historic ties to the project planning area.
16. Document newly discovered cultural resource sites using USDA Forest Service, Region 6, cultural resource site report forms.
17. Maintain confidentiality of cultural resource site locations.
18. Conduct reentry surveys over all previously surveyed areas now planned for projects when the nature of the newly proposed undertakings or projects have the potential to have a direct or indirect impact on significant cultural resources. Reentry surveys will be sufficient to verify the validity of previous surveys and document previously identified sites to current documentation standards. Additional inventory in such areas will be designed to consider: (a) the types of newly proposed impacts; (b) changed conditions of site visibility; and (c) new information and knowledge concerning survey methods and techniques, and site distribution patterns and locations.
19. Evaluate the significance of sites by applying the criteria for eligibility to the National Register of Historic Places. Evaluate the National Register eligibility of resources that may be affected by project activities on a case-by-case basis. Develop a schedule to evaluate similar cultural resources properties.
20. Nominate cultural resources that meet the criteria of significance to the National Register of Historic Places. Schedule nominations incidentally until completion of the Forest-wide inventory.
21. Protect National Register and eligible properties from human impacts and natural destruction. Protection plans may include physical protection such as fences and barriers, scientific study and collection, monitoring and patrol, proper use or removal of signs, maintaining site anonymity and confidentiality of location, and gaining public understanding and support through education.
22. Synthesize the results of previous forest surveys, evaluate and refine the Forest survey design, and establish context and research directions through an updated overview document. Initiate data recovery projects on selected resources through data recovery plans approved by the State Historic Preservation Office.
23. "Management Strategy for Treatment of Lithic Scatter Sites", 1988, as published by the Pacific Northwest Regional Office, provides guidance for management of one type of prehistoric site.
24. Identify and initiate opportunities for interpretation of cultural resources for the education and enjoyment of the American public.

Visuals

- 25. The minimum visual quality objective for the Forest is maximum modification. This visual quality objective will apply unless otherwise specified. A record of the visual quality objective assigned to each acre of the Forest by this Plan will be contained in the Forest's Total Resource Information (TRI) data base. Modifications to the established visual quality objectives shall be considered an amendment to this Forest Plan (see Forest-wide Standard No. 3).

Forest Service Manual 2380 and Agricultural Handbooks 462, 434, 478, 484, 559, and 608 provide the details on how to meet specific visual quality objectives under various conditions and vegetative types.

- 26. Maintain a current inventory of visual conditions on the Forest
- 27. Rehabilitate landscapes containing negative visual elements.

Fish and Wildlife

Big Game
Summer Range

- 28. Manage elk and deer summer range to provide for 20% cover and an elk habitat effectiveness index (HEI) of 0.4.

The HEI model provides a means of balancing cover quality, cover spacing, and open road densities. If these minimums are not attainable due to natural conditions (e.g., extensive nonforest areas), insect and disease conditions or past management activities, then the highest possible cover percentage and index value will be maintained or created. Site-specific project analysis will address both short-term and long-term effects, particularly in the case of cover where short-term options to treat stands for insects and disease will improve forest health in the long-term. The Forest Supervisor will review and approve all recommendations to drop below cover and HEI standards as well as a strategy to reach standards within a reasonable length of time (see Forest-wide Standard No. 3).

Cover and habitat effectiveness determinations for site-specific projects will be calculated on a subwatershed basis. Calculations will include both forested and non-forested lands regardless of their suitability for timber production.

Habitat Effectiveness Index (HEI) Model

The model to be used to calculate elk habitat effectiveness on summer range is:

$$HEI = (HE_c \times HE_s \times HE_r)^{1/3}$$

where:

HE_c = habitat effectiveness derived from the quality of cover

HE_s = habitat effectiveness derived from the size and spacing of cover

HE_r = habitat effectiveness derived from the density of roads open to vehicular traffic

The elk cover and habitat effectiveness standard for summer range areas and minimum values for model variables are shown below:

Summer Range	HEI	Minimum ^{1/} Values For Variables			Minimum Amount ^{2/} of Area in Cover		
		HE _c	HE _s	HE _{r3/}	Satis.	Marginal	Total
Fox/Cottonwd	.4	.3	.3	.4	12%	5%	20%
MF John Day	.4	.3	.3	.4	12%	5%	20%
SF John Day	.4	.3	.3	.4	12%	5%	20%
NF Malheur	.4	.3	.3	.4	12%	5%	20%
Upper JD	.4	.3	.3	.4	12%	5%	20%
Malheur River	.4	.3	.3	.4	5%	5%	20%
Silvies	.4	.3	.3	.4	8%	5%	20%

^{1/}The interactions between cover stand size and spacing, road density, and cover quality are compensatory to a limited extent, that is, variables with low values tend to be compensated by those with high values. Because elk tend to respond primarily to habitat variables of relatively low value, minimum values have been established for each variable in the habitat effectiveness model. While it is desirable to meet or exceed the minimum value for each variable it may not be possible to do this in every case due to site condition or potential. However, if all the variables are met at only the minimum values, the minimum standard for HEI will not be met. Therefore, to meet the HEI standard, if one or more variables are at the minimum or below, other variables must be met at higher levels in order to achieve the HEI standard.

^{2/}For cover definitions, see Glossary. Where satisfactory cover is below the minimum standard, retain sufficient hiding cover to mitigate this shortage.

^{3/}A closed road is one where use is not physically evident, no greater than one trip/week.

29. Select satisfactory cover to meet elk habitat objectives in stands within 1/2 mile of Class I, II, and III streams in preference to cover that is farther away providing that other considerations such as elk security are met. Protect calving/fawning areas, migratory corridors and transition zones (areas of concentrated use in the late fall prior to arrival on winter range).
30. In the Malheur and Silvies watersheds, provide for satisfactory and marginal cover in blocks of at least 10 acres and a minimum of 600 foot wide to ensure effective use of cover by big game.
31. In all other watersheds, provide for satisfactory and marginal cover in blocks of at least 30 acres and a minimum of 600 feet wide to ensure effective use of the cover by big game. While it is desirable to meet or exceed the 30 acre cover size, it may not be possible to do this in every case due to site condition or potential. Where cover in 10-30 acre blocks is known to provide adequate habitat, site-specific analysis will recognize the value of these smaller cover areas and include these acres in HEI calculations.
32. Maintain or enhance significant communities of mountain shrubs. Timber harvest and road construction activities should avoid these areas.

- 33. To limit disturbance to big game, the open road density will be no greater than 3.2 mi/mi² by 1999. Where existing conditions do not meet this goal, project transportation system designs will be developed in order to move toward the goal in the shortest time frame possible. Densities will be monitored on a watershed basis (see Appendix I).
 - 34. Provide annual recommendations for the Access Management Plan to achieve wildlife management objectives. Monitor use of forest roads to identify any emerging conflicts with objectives.
 - 35. Utilize road and/or area closures to achieve the specific wildlife habitat management objectives of individual management areas.
 - 36. To prevent harassment in designated calving areas, restrict off-highway vehicles and other motorized traffic use to designated roads and trails from May 1 to June 31.
 - 37. Identify on a subwatershed basis (see Appendix N) areas that are of greater importance to mule deer than elk. Recommend these areas to the Forest Supervisor for review and approval. Such changes shall be considered an amendment to the Forest Plan and will be implemented only after appropriate public notification and satisfactory completion of all National Environmental Policy Act procedures (see Chapter V, Section D)
- Primary Excavators
- 38. Manage dead tree (snag) habitat to provide for at least 40% of the potential populations of primary excavator species throughout stand rotations (Wildlife Habitat in Managed Forests, 1979).

Snags Required Per 100 Acres

Potential Population Level	≥ 12" DBH	≥ 20" DBH	Total
20%	45	3	48
40%	90	5	95
60%	135	8	143
80%	180	11	191
100%	225	14	239

- 39. Maintain dead tree habitat capable of supporting at least 20% of the potential population level within land areas no greater than 40 acres and an additional 20% or greater within land areas no larger than the respective subwatershed
- 40. Where existing snag numbers are below the 20% of management requirements per 40 acre area, additional snags should be created to meet the desired population potential

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41. Utilize modeling techniques in conjunction with silvicultural practices. This will ensure desired population potential by providing adequate number of green replacement trees throughout the full stand rotation. If snags cannot be created, manage for higher snag levels and green tree replacements in adjacent areas and average them to achieve the required density.
42. On lands under even-aged management, provide snags and green replacement trees with emphasis on patchy distribution. Lands under uneven-aged management should emphasize a uniform distribution.
43. Only hard snags will be counted in meeting population potential goals; however, provide for retention of soft snags where feasible.
44. Marking guides for green replacement trees will be developed jointly by a silviculturist and wildlife biologist to minimize conflicts. Mistletoe and other disease and insect infected trees may be retained if they do not pose a significant hazard to the residual stand.
45. Select snags and green replacement trees using the descending order of preference as follows:
 - ponderosa pine
 - western larch
 - Douglas fir
 - White fir
 - subalpine fir
 - lodgepole pine
46. Locate snags and green replacement trees to minimize safety hazards, high risk areas to firewood cutting and windthrow. Snags and replacements will be at least one to two tree lengths from the edge of clearcut units to minimize hazards to a burn crew.
47. Maintain woody debris for wildlife habitat and long-term site productivity by providing at least 2 down sound logs per acre which are a minimum of 10 inches in diameter at the small end and 12 feet or more in length. Larger logs are preferred. At least 75% of these logs will be uncharred.
48. In the absence of down logs or marginal cover, leave unburned slash pile concentrations and additional wildlife trees to meet long-term site productivity and habitat needs.
49. Maintain feeding areas for pileated woodpeckers that contain an average of two hard snags or more per acre within 1/4 mile of old growth units. Each of these areas should total 300 acres in patches of at least 50 acres in size. Where possible, feeding areas will overlap with old growth replacement units.
50. Maintain grouse winter roost habitat. The preferred habitat is clumps of mistletoe infected Douglas-fir on tops or upper slopes of ridges.

Featured Species

- 51. Protect and enhance sagebrush habitats with documented use by sage grouse or high potential for use. Coordinate with other resource uses and the Oregon Department of Fish and Wildlife.
 - 52. Maintain the openness that is characteristic of antelope habitat by controlling the invasion of trees as identified through project level environmental analysis. Incorporate design modifications in all new construction and major reconstruction projects on fences to facilitate the movement of antelope where needed
 - 53. Protect and enhance occupied habitats of upland sandpipers that are critical to nesting and rearing of young Cooperate with other agencies and groups in determining habitat use areas.
 - 54. Maintain or create large nesting snags and green replacement trees for osprey within 1/2 mile of streams, lakes, or reservoirs that are currently used for feeding by osprey Preference will be given to large (30 inches or greater in diameter, 60 foot minimum height) ponderosa pine with broken tops and large limbs at a density of one per 1/4 mile of linear stream length or shoreline. Provide green tree replacements, which include a minimum of one tree 30 inches or greater in diameter and two trees 20 inches or greater in diameter, for each 1/4 mile of linear stream length or shoreline. All dead and green trees will be counted towards the minimum Forest-wide wildlife tree standards. Generally, snags and replacements should be located in areas of solitude.
 - 55. Maintain the openness that is characteristic of bighorn sheep habitat. Do not stock livestock allotment pastures within bighorn sheep range with domestic sheep. On all fence projects within bighorn range involving new construction or significant reconstruction, implement design changes to facilitate bighorn sheep movements where needed and practical Review all activities within prime habitat, including migration routes, to identify and mitigate human disturbance Cooperate with the Oregon Department of Fish and Wildlife in all bighorn releases.
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| Unique and Sensitive Habitats (Microhabitats) | 56. Maintain the integrity of unique habitats including meadows, rimrock, talus slopes, cliffs, animal dens, wallows, bogs, seeps and springs by incorporating cover buffers approximately 100 feet in width. Utilize additional mitigation/enhancement measures identified through project level analysis. |
| Elk Calving Habitat | 57. Maintain or enhance quaking aspen stands using clearcutting and prescribed fire as the principal means of regeneration where appropriate. Protect root sprouts where needed and practical |
| Old Growth Lodgepole | 58. Maintain the vegetative structure of confirmed calving habitats for elk by modification of management activities as appropriate on a site-specific basis. Mitigation measures will be developed through project level environmental analysis. |
| | 59. Identify potential or existing old growth lodgepole pine habitat for three-toed woodpeckers as required by management requirements in 75-acre units at the proper spacing for species viability |

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Raptors

60. Protect active raptor nest sites.
- (a) Hawks and owls - Maintain the nest trees of active raptor nests and habitat immediately surrounding, and mitigate potential adverse impacts from management activities during the nesting season. Mitigation measures will be developed based on site characteristics and biological needs of the species. Where possible, retain trees with inactive nests that may be important to secondary nesters (e.g., great gray owl).
 - (b) Bald and golden eagles - Refer to the Pacific Bald Eagle Recovery Plan for Protection of Bald and Golden Eagles for direction. Upon discovery of an active nest, suspend all management activities that could alter site characteristics or disturb the birds until the nest site is evaluated by a wildlife biologist.

Management Indicator Species

61. Provide habitat requirements for the following selected management indicator species.

Species	Reason for Selection and/or Habitat
Rocky Mountain elk	species commonly hunted
pileated woodpecker	old growth
pine marten	old growth
three-toed woodpecker	old growth
Lewis' woodpecker	primary cavity excavator; dead and defective habitat
yellow-bellied sapsucker	primary cavity excavator, dead and defective habitat
red-breasted sapsucker	primary cavity excavator, dead and defective habitat
Williamson's sapsucker	primary cavity excavator, dead and defective habitat
downy woodpecker	primary cavity excavator; dead and defective habitat
hairy woodpecker	primary cavity excavator, dead and defective habitat
white-headed woodpecker	primary cavity excavator, dead and defective habitat
three-toed woodpecker	primary cavity excavator, dead and defective habitat
black-backed woodpecker	primary cavity excavator; dead and defective habitat
northern flicker	primary cavity excavator; dead and defective habitat
pileated woodpecker	primary cavity excavator, dead and defective habitat
steelhead	anadromous riparian
bull trout	non-anadromous riparian
cutthroat trout	non-anadromous riparian
rainbow/redband trout	non-anadromous riparian

Threatened, Endangered and Sensitive Species

62. Meet all legal and biological requirements for the conservation of threatened, and endangered plants and animals. Assess all proposed projects that involve habitat changes or disturbance and have the potential to alter the habitat of threatened, endangered or sensitive plant and animal species.
63. Maintain and update lists of threatened, endangered and sensitive plants and animals periodically as new information is collected. Submit pertinent forest information to the Regional Office for updating the Regional Forester's sensitive species lists, and to the appropriate agency for inclusion in state wide data bases.

- 64. When threatened or endangered species or habitat are present, follow the required biological assessment process, according to the requirements of the Endangered Species Act (Public Law 93-205). Meet all consultation requirements with the USDI Fish and Wildlife Service and state agencies.
- 65. Specify all protection or mitigation requirements (36 CFR 219.27(a) (8)) before project implementation begins. Manage all habitat for existing Federally classified threatened and endangered species to help achieve recovery objectives.
- 66. Perform a biological (field) evaluation for use in planning of proposed projects when sensitive species are present or suspected. Conduct surveys in cooperation with other agencies and groups to document the locations of sensitive species populations and to provide more specific information on habitat requirements and relative management guidelines.
- 67. Determine the suitability of forest lands for nesting bald eagle territories as specified by the Pacific Bald Eagle Recovery Plan for the following areas:
 - (a) Management Zone 9 (Blue Mountains) - John Day River, 2 target recovery territories
 - (b) Management Zone 16 (Boise Valley) - Malheur River, 1 target recovery territory

If potential nesting sites are found, address through long-range planning to meet the recovery goals.

- 68. Cooperate with the Peregrine Fund, U.S. Fish and Wildlife Service and Oregon Department of Fish and Wildlife in the inventory and reintroduction of American peregrine falcons in support of the Pacific Coast Recovery Plan for the American Peregrine Falcon
- 69. Cooperate with the Oregon Department of Fish and Wildlife in studies of big game movements using tagging, radio collars, etc , as appropriate.
- 70. Develop habitat improvement projects for Challenge Cost-Share and volunteer cooperation.
- 71. Identify research and study needs that are essential to long-term attainment of wildlife and fish objectives. Promote opportunities to implement the necessary studies in cooperation with other agencies and groups.
- 72. Cooperate with the Oregon Department of Fish and Wildlife in the implementation of black bear or mountain lion research that is initiated by the Department. Coordinate with the Oregon Department of Fish and Wildlife and permittees in the identification and resolution of livestock predation by black bear or mountain lion.
- 73. Recognize fishing and hunting rights of the Confederated Tribes of the Warm Springs and the Confederated Tribes of the Umatilla, Paiute Tribe, and the Nez Perce Tribe through fish and wildlife management.

Coordination and Cooperation

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74. Coordinate with the Oregon Department of Agriculture, Oregon Department of Fish and Wildlife, and U.S. Fish and Wildlife Service as needed in all predator control activities with particular emphasis on those actions using toxic chemicals.

Miscellaneous

75. Evaluate proposals for introducing fish, wildlife, or plants (case-by-case) through the environmental analysis process.

76. Plan and implement structural and non-structural habitat improvement projects through the environmental analysis process. Give priority to habitat enhancement as follows: (a) threatened, endangered, and sensitive species; (b) riparian/instream habitat; (c) unique/special habitats; and (d) old growth.

77. Provide for a full array of habitat improvement opportunities for non-game species (e.g., water developments, slash piles, down logs, nest boxes, etc.).

Range

78. Manage big game and livestock numbers at a level which utilizes available forage while maintaining plant vigor, composition and density.

Range Management

79. Prepare, update, or revise allotment management plans (AMPs) according to Activity Schedule A-10 (see Appendix A) to address emerging resource management issues or concerns.

80. Inventory and analyze forage resource production, condition and trend.

81. Administer and manage the range resource to ensure permit compliance and resource protection.

82. Manage residues to facilitate the use of forage by domestic livestock.

Wild Horse Habitat

83. Conduct livestock management on the Murderers Creek Wild Horse Territory to ensure that resource conditions meet management goals and standards. Resolve conflicts between livestock, big game, and wild horses in accordance with the maintenance of a wild horse herd averaging 100 head.

Range Improvement

84. Schedule cost-efficient range improvements to improve range condition when and where needed.

85. Design improvements to protect tree regeneration areas and/or to distribute livestock use.

86. Grazing allotments with lands in unsatisfactory condition have been identified and will have their AMP updated according to the schedule shown in Appendix A (Activity Schedule A-10). Develop AMPs with specific objectives for these lands on a priority basis. In the development of objectives, define a desired future condition for an area based on existing and potential values for all resources. In the AMP, include: (a) a time schedule for improvement; (b) activities needed to meet forage objectives; and (c) an economic efficiency analysis.

- 87 Establish annual forage utilization requirements for each grazing allotment as a tool to achieve or maintain the desired condition. Use the forage utilization standards listed in Table IV-2 except: (a) in Management Areas 3A, 3B, 17, 18, and in specific portions of other management areas; and (b) where site-specific monitoring information has been collected and evaluated which supports a determination that a higher level of utilization will achieve the desired future condition without delaying the rate of improvement. As a minimum, the desired condition must be "satisfactory."

Employ all available methods to achieve the desired levels of utilization by permitted livestock and big game. Design the methods selected for controlled livestock use to fit the site-specific requirements for improving the riparian area to satisfactory condition. Any one or a combination of methods may be used to treat unsatisfactory riparian areas such as corridor fencing, herding, additional water developments, salting, nonuse for resource protection, early and/or late season use, shorter grazing seasons, reduced livestock numbers, control of degree of use, and/or creating additional pastures through fencing.

- 88 Design and implement structural and nonstructural range improvements to maintain productivity and range condition in addition to benefiting both wildlife and livestock. Locate range structural and nonstructural improvements to encourage livestock movement away from riparian areas.

TABLE IV-2
Allowable Utilization of Available Forage on Suitable Range
(Percent Allowable Use of Available Forage)^{1/}

Range Resource Management Level	Forest		Grasslands ^{1/}		Shrublands	
	S ^{2/}	U ^{3/}	S	U	S	U
STRATEGY B - Stewardship Management^{4/}	40	0-30	50	0-30	40	0-25
STRATEGY C - Extensive Management^{5/}	45	0-35	55	0-35	50	0-30

^{1/}Utilization based on percent removed by weight for grass, grasslike, and forbs

^{2/}S - Satisfactory condition - See glossary

^{3/}U - Unsatisfactory condition - See glossary

^{4/}Management controls livestock numbers so that livestock use is within present grazing capacity. Distribution is achieved through riding, herding, and/or salting. Improvements are minimal and constructed only to the extent needed to cost effectively maintain stewardship of the range in presence of grazing.

^{5/}Management seeks full utilization of forage available to livestock. Cost-effective management systems and techniques, including fencing and water development, are designed and applied to obtain relatively uniform livestock distribution and use of forage and to maintain plant vigor.

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Timber

- Harvest
89. A harvested area of commercial forest land will no longer be considered a created opening for silvicultural purposes when stocking surveys, carried out in accordance with Regional standards, indicate prescribed tree stocking is at least 4 1/2 feet high and free to grow. When other resource management considerations prevail, a created opening will no longer be considered an opening when the vegetation in it meets specific management area objectives.
90. Limit forest openings created by the application of even-aged harvest cutting systems to a maximum size of 40 acres. Exceptions are permitted for natural catastrophic events, such as fires, windstorms, or insect and disease attacks, or on an individual basis after a 60-day public notice period and review by the Regional Forester. In addition, the limits may be exceeded by up to 50% without necessitating review by the Regional Forester or 60 days public notice when exceeding the limit will produce a more desirable combination of net public benefits based on any of these four criteria:
- (a) When a larger opening will enable the use of an economically feasible logging system that will lessen the disturbance to soil, water, fish, riparian resources, or residual vegetation. Such lessening is to be achieved by reducing landing or road construction, by enabling such construction away from unstable soil, or by reducing soil and vegetation disturbance caused by dragging logs;
 - (b) When created openings cannot be centered around groups of trees infected with dwarf-mistletoe or root rot and, therefore, need to be expanded to include these trees in order to avoid infection of susceptible adjacent conifers;
 - (c) When visual quality objectives require openings to be shaped and blended to fit the landform; or
 - (d) When larger openings are needed to achieve regeneration objectives in harvest areas being cut by the shelterwood method and where destruction of the newly created stand would occur as a result of delayed removal of shelter trees. This exception applies only to existing shelterwood units and to shelterwood units under contract prior to approval of this Forest Plan.
91. Created openings contiguous to 30 acres or larger natural openings should normally not exceed one-third the size of the natural opening and not occupy more than one-third of the natural opening perimeter. Openings should not be created adjacent to any natural openings (regardless of size) unless adequate vegetation along the edge can be developed or retained in sufficient density to protect wildlife and visual management objectives. The determination of adequate vegetation will be made by an appropriate interdisciplinary team.
92. Created openings will be separated by blocks of land that are not classed as created openings and that contain one or more logical harvest units. These areas shall be large enough and contain a stand structure appropriate to meet resource requirements of this Forest Plan. Resource requirements may include wildlife habitat, watershed, landscape management, and others.

93. All harvest units (considered to be created openings) which corner or otherwise touch will be considered as a single opening. All requirements for size, exception procedures, and justification for created openings must be met.
94. Conduct silvicultural examination and prepare prescriptions before implementing any silvicultural treatment. Final determination of the silvicultural system will be based on an approved site-specific silvicultural prescription (see Appendix C)
95. *Stands scheduled for harvest using even-aged management will be managed on rotations which are equal to or greater than 95% of culmination of mean annual increment of growth based on cubic measure* Harvest of trees or stands before this is permitted for (1) sound silvicultural practices such as thinnings or other stand improvement measures, (2) salvage or sanitation harvesting of stands substantially damaged by fire, windthrow, or other catastrophes, or stand that are in imminent danger from insect or disease attack; (3) experimental and research purposes; and (4) removal of particular species of trees, after consideration of the multiple use objectives
96. Stands managed for timber production will be managed to produce a sawlog product using best management practices.
97. The utilization standards for all species will be seven inches diameter at breast height (dbh) to a minimum top diameter inside bark (dib) of four inches for all stands except existing mature stand not previously entered for management.
98. Maintain stand vigor through the uses of integrated pest management such as stocking level control and species composition in order to minimize losses due to insects and diseases.
99. Uneven-aged stands will be managed on cutting cycles where growth equals or exceeds the volume harvested for the cycle.
100. *Each entry in uneven-aged stands should eliminate excess stocking in all diameter classes as appropriate. Separate sanitation and salvage entries will not occur between cutting cycles except under catastrophic damage situations.*
101. Harvest timber from slopes which are less than 35% using ground skidding equipment and from slopes greater than 35% using cable or aerial systems. Approve exceptions through the environmental analysis process, which will include a logging feasibility analysis.
102. Based on site-specific silvicultural prescriptions, apply even-aged or uneven-aged management systems to forest timber stands Determine the applicable management system for any timber stand through the use of specific management area direction and project level environmental analysis

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103. Timber harvest is prohibited on lands classified as unsuitable for timber management except when necessary to accomplish multiple-use objectives other than timber production. Examples include, but are not limited to, timber removal for right-of-way clearings, research, public safety, improvement of administrative sites, wildlife needs, Christmas tree cutting, firewood cutting, control of insect and disease epidemics that threaten adjacent land suitable for timber management on non-National forest lands, or removal of volume lost through catastrophic mortality.

104. Restrict logging and post sale operations when necessary to protect roads, soil, water, deer and elk winter/summer range, and calving and fawning areas.

Reforestation

105. Before scheduling stands for regeneration harvest, ensure that the site has the capability to be adequately restocked within five years. A reforestation period of more than five years may be permitted to meet other resource management objectives.

106. While favoring high quality natural regeneration, consider the effectiveness of various regeneration methods and prescribe the best site-specific method. Satisfactory stocking of any regenerated stand will be expected to occur within 5 years after final harvest.

107. Collect seed from selected phenotypically superior trees. Plant stock grown from this seed within the seed and elevation zones of collection, except where a certified silviculturist certifies that another location is acceptable without loss of productivity.

108. Implement animal control when necessary to ensure adequate stocking and uninhibited growth of crop trees.

109. Coordinate livestock grazing on timber harvest units as necessary to protect tree regeneration.

110. Accomplish site preparation using a combination of chemical, mechanical, silvicultural, or physical methods.

111. Manage to maintain or re-establish ponderosa pine, at time of regeneration, on sites where ponderosa pine is subclimax.

Stand Improvement

112. Schedule and implement precommercial thinning to achieve desired stocking level based on a site-specific silvicultural examination and interdisciplinary prescription.

113. Delay or modify precommercial and commercial thinnings when needed to meet elk habitat objectives. Base this determination on a site-specific environmental analysis.

Other

114. Where timber management practices create firewood, secondary utilization (personal firewood use, commercial utilization) will be preferred to on-site disposal whenever such utilization meets management objectives. Give preference to public demand for firewood.

- Water, Soil, and Air**
115. Reevaluate land suitability during site-specific analysis to determine correct land type.
116. Prepare soil, water, and air resource inventories and plans to ensure that accurate and current information is available for forest and project level planning.
- Protection of Water Quality**
117. Comply with State requirements in accordance with the Clean Water Act for protection of waters of the State of Oregon (Oregon Administrative Rules, Chapter 340-41) through planning, application, and monitoring of best management practices (BMPs) in conformance with the Clean Water Act, regulations, and federal guidance issued thereto.
118. In cooperation with the State of Oregon, the Malheur National Forest will use the following process:
- (a) Select and design BMPs based on site-specific conditions.
 - (b) Implement and enforce BMPs.
 - (c) Monitor to ensure that practices are correctly applied as designed.
 - (d) Monitor to determine the effectiveness of practices in meeting design expectations and in attaining water quality standards.
 - (e) Evaluate monitoring results and mitigate where necessary to minimize impacts from activities where BMPs do not perform as expected.
 - (f) Adjust BMP design standards and application when beneficial uses are not being protected and water quality standards are not being achieved. Evaluate the appropriateness of water quality criteria for reasonably assuring protection of beneficial uses. Consider recommending adjustment of water quality standards.
119. Implement the State Water Quality Management Plan, described in Memoranda of Understanding between the Oregon Department of Environmental Quality and U.S. Department of Agriculture, Forest Service (February 2, 1979 and December 2, 1982), and "Attachments A and B" referred to in this Memoranda of Understanding (Implementation Plan for Water Quality Planning on National Forest Lands in the Pacific Northwest, December 1978, and Best Management Practices for Range and Grazing Activities on Federal Lands, respectively).
- Site-specific BMPs will be identified and documented during environmental analysis, along with evaluations of ability to implement and estimated effectiveness. BMPs are described in *General Water Quality Best Management Practices*, Pacific Northwest Region, November 1988.
120. Evaluate site-specific water quality effects as part of project planning. Design control measures to ensure that projects will meet Oregon water quality standards. Projects that will not meet Oregon water quality standards shall be redesigned, rescheduled, or dropped.

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121. Conduct a watershed cumulative effects analysis in watersheds where project scoping identifies cumulative effects of activities on water quality or stream channels as an issue. This will include land in all ownerships in the watershed. Disperse activities in time and space to the extent practicable, and at least to the extent necessary to meet management requirements. On intermingled ownerships, coordinate scheduling efforts to the extent practicable.

122. Rehabilitate disturbed areas that could contribute sediment to perennial streams.

Water Rights

123. Obtain required State permits for the permanent use of water when the reservation principal does not apply.

124. Permit only authorized diversions or impoundments which will maintain minimum instream flows and protect populations of anadromous fish and resident trout.

Soils

125. Evaluate the potential for soil displacement, compaction, puddling, mass wasting, and surface soil erosion for all ground-disturbing activities.

126. The total acreage of all detrimental soil conditions shall not exceed 20% of the total acreage within any activity area, including landings and system roads. Consider restoration treatments if detrimental conditions are present on 20% or more of the activity area. Detrimental soil conditions (see glossary) include compaction, puddling, displacement, and severely burned soil, and surface erosion.

127. Minimum percent effective ground cover levels following land management activities:

Erosion Hazard Class	Minimum Percent Effective Ground Cover	
	1st Year	2nd Year
Low	20-30	30-40
Medium	30-45	40-60
High	45-60	60-75
Very High	60-75	75-90

128. Seed all disturbed soil that occurs within 100-200 feet of a stream or areas further than 200 feet that could erode into a stream.

129. Seed all skid trails with slopes greater than 20%.

Air

130. Plan management activities to maintain air quality at a level adequate for the protection and use of the National Forest resources.

131. Coordinate and cooperate with appropriate air quality regulatory agencies.

- 132. Plan and conduct all prescribed burning in accordance with the State Smoke Management Plan and State Implementation Plan of the Clean Air Act, as amended in 1972.
- 133. Apply mitigating measures listed in the FEIS of the Pacific Northwest Regional Guide for reducing emissions from prescribed burning, where appropriate.
- 134. Use the best available technology to minimize the impact of prescribed burning on Class I airsheds and smoke sensitive areas.
- 135. Protect the forest air resource from pollution sources outside forest boundaries through application of the Prevention of the Significant Deteriorations regulations contained in the Clean Air Act. Give special protection to air quality related values found in Class I wilderness.

Minerals

- 136. Administer the appropriate laws and regulations relating to minerals in a reasonable and consistent manner. Coordinate with appropriate agencies.
- 137. Provide common variety minerals and materials if consistent with the management area direction. Authorize common variety mineral exploration and removal under terms and conditions to prevent, minimize, or mitigate adverse impacts on surface resources and uses. Return disturbed land to a condition suitable for planned uses through reclamation requirements.
- 138. As required by applicable mining laws, provide mining claimants reasonable access to their mining claims. Analyze alternatives for access to explore for and develop locatable mineral resources in the proposed operating plan. Determine reasonable access through the environmental analysis process. Applicable road construction specifications and standards shall be met.
- 139. Assist miners in developing operating and reclamation plans that provide for environmental protection and ultimate rehabilitation, while allowing exploration, development, and production to proceed in a reasonable and timely manner. Reclamation plans should clearly state final management objectives for specific mined areas and detail the procedure and time frames which will be followed to accomplish those objectives.
- 140. Analyze all sites to be utilized for Forest Service designated rock sources using the NEPA process. Initiate mineral withdrawals when necessary.
- 141. Notify mining claimants of impending Forest Service actions that may affect their claims. Reasonable effort should be made to protect claim corners and mine workings from disturbance as a result of Forest Service activities. Secure permission before entering claims with recognized surface rights.
- 142. Apply appropriate special stipulations to oil and gas leases when necessary to protect surface resources and/or achieve Forest-wide and management area goals, objectives, and standards.
- 143. Complete additional site-specific analysis of environmental effects before recommendations are made on any lease application. Document this analysis in either an environmental impact statement, environmental assessment, or categorical exclusion.

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144. Apply a "no surface occupancy" stipulation to leases when (a) surface occupancy would cause significant resource disturbance which cannot be mitigated by any other means; (b) where resource impacts would be irreversible or irretrievable; or (c) the activity is incompatible with the surface management objectives.
145. Reevaluate areas withdrawn from mineral entry every five years to determine if the withdrawal is still necessary.
146. Notify miners of applicable laws with which they must comply, including the Removal-Fill Law (Oregon Division of State Lands), the Mineral Land Reclamation Act (Oregon Department of Geology and Mineral Industries), the Waste Discharge Permit Program (Oregon Department of Environmental Quality) and the State Scenic Waterway Act.

Lands

147. Base approval of special-use applications for proposed uses of National Forest land on site-specific analyses and compatibility with management area objectives.
148. Evaluate designs, plans, and location for construction of facilities.
149. Grant and administer rights-of-way across National Forest lands in accordance with management area goals and standards.
150. Acquire rights-of-way on forest system roads and trails that cross private lands when needed to meet management area goals and standards.
151. Maintain land status records to acceptable standards and incorporate information into the TRI system.
152. Locate, mark, post, and maintain landlines and record the information in the TRI system according to the following priorities: (a) lines needed to meet planned activities, (b) lines needed to protect National Forest Systems lands from encroachment, and (c) other lines as financing allows.
153. Prohibit additional recreation residence lots.
154. Acquire, transfer, and/or dispose of lands as needed to meet Forest-wide and management area goals and standards (see Appendix M).
155. Plan, design, and manage projects to protect established boundaries of wildernesses, research natural areas, and other special interest areas.

Facilities

Roads and Trails

156. No more than 618 miles of new road will have been constructed in the decade. Road closure or obliteration and removal from the transportation system will have been identified on 2,688 miles of road.
157. Plan, design, construct and maintain roads and trails to the minimum level required to meet integrated land management objectives (i.e., the needs of all resources). Minimize tie-through roads.

- 158 Identify road construction and management as an issue for projects involving either new road construction or re-construction. Items to be considered shall include the existing and future road densities (both open and closed), design standards, etc. The analysis will discuss the need for, and cumulative effects of, additional roads on the area of analysis. A project alternative with additional roads will be approved only after consideration is given to obliterating roads that are no longer needed in the project area.
- 159. The access management plan will establish road management objectives for each road on the Forest. The existing road system will be reviewed to identify roads to be closed or obliterated because they no longer contributing to integrated land management objectives. The status of all roads will be determined by integrated land management analysis, incorporating objectives for timber harvest and removal, big-game habitat needs (including security needs), high quality recreation opportunities, and firewood cutting opportunities.
- 160 Complete an area transportation analysis before constructing roads in any released RARE II roadless area or previously unaccessed watershed. Minimize new road construction. When developing management strategies for these areas, assume that roads will be closed to vehicular use unless specific resource needs or public benefits are identified that warrant keeping roads open year-round or seasonally to meet management objectives.
- 161. Plan, design, and construct roads to ensure the re-establishment of vegetative cover on disturbed areas within 10 years after termination of a contract, lease, or permit, unless the road is a permanent addition to the Forest's transportation system.
- 162. Prepare and maintain road management objectives for all proposed and existing system roads through interdisciplinary analysis. Incorporate road management objectives into the Forest Travel Plan.
- 163. Mitigate or prevent any impacts of road construction on unique or fragile habitats.
- 164. Operate and maintain all roads according to maintenance levels established in road management objectives, and standards defined as follows:

Minimum Maintenance Level	Use
Obliterated	No current or future use (36 CFR 261.5)
1 (Closed)	No current use; planned future use
2	High clearance vehicles
3, 4, 5	Low clearance vehicles

- 165. Maintain trails to the level commensurate with use, user safety, and protection of the facility and resources.
- 166. Prepare and update the Forest travel map annually. Update and reprint the travel map as necessary.

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167. Maintain transportation system inventories.

168. Prepare, update, and implement the Forest sign plan.

Administrative Sites

169. Develop, administer, and maintain potable water and waste water systems and solid waste facilities where applicable.

170. Provide and manage administrative facilities to accomplish land and resource management and protection objectives of the Forest. Prepare forest facility master plan and site development plan for all administrative sites. Consider long-term development and maintenance costs in facilities planning.

Transportation and Utility Corridors

171. Accommodate new transportation/utility proposals within existing corridors to the maximum extent feasible. Designate additional corridors needed for major utilities or highways through an interagency environmental analysis. Objectives for utility corridors are specified for each management area where appropriate (see Chapter IV, Section F).

Electronic Communication Facility Sites

172. Comply with all laws, regulations, and policies when locating and developing communication facility sites.

173. Locate and develop all installations to meet the visual quality objective for the site on which it is located.

174. Survey all sites for cultural resources and threatened, endangered, and sensitive plant and animal species. If any are located, adhere to current laws, regulations, and policy.

175. Utilize all facilities fully before allowing additional facilities to be developed.

176. Facilitate other resources and uses through design, location, and construction of the electronic installation and associated improvements whenever possible.

177. Prepare an electronic site plan for each electronic site and address at least the following:

- (a) Consolidation of structures when practical
- (b) Safety and sanitation requirements
- (c) Landscaping and erosion control specifications
- (d) Coordination with other resources
- (e) Access routes and maintenance specifications
- (f) Existing facilities and improvements
- (g) Needs for protection of the facility such as fences and fire equipment
- (h) Any other appropriate items

Protection

Fire Management

178. Fire management direction in this Forest Plan shall guide the fire management analysis and resulting Fire Management Action Plan. The fire management action plan will give specific fire management direction for each management area and will be incorporated into this Forest Plan as an amendment (see Chapter V, Section D).

- 179. Apply an appropriate suppression response (see Glossary) to all wildfires. Implement responses cost efficiently and consistent with land and resource management objectives. Specific strategies for suppression will depend upon the fire location, expected fire behavior, and resource values at risk. Appropriate suppression criteria will be outlined in the fire management action plan.
 - 180. Utilize prescribed fire to meet land management objectives. Normally, plan human ignition sources for prescribed fire; however, when appropriate, utilize lightning ignition sources for prescribed fire.
- Residue Management
- 181. Manage residue profiles at a level that will minimize the potential of high intensity catastrophic wildfires and provide for other resource objectives in individual management areas.
 - 182. Utilize the Regional fuels analysis process as a guide to determine the most cost effective fuel profile for fire protection purposes. Finance treatment beyond the level needed for fire protection by the requesting or benefiting function.
 - 183. Use all methods of fuel treatment as prescribed by site-specific analysis to achieve resource management objectives. Encourage utilization of wood residue as a priority treatment, consistent with long-term site productivity and wildlife habitat needs.
 - 184. Integrate residue treatment with pest management practices.
- Law Enforcement
- 185. Prevent criminal activities as first priority. Discover and investigate violations of applicable laws and regulations. Continue investigations until responsibility has been established or reasonable leads have been exhausted. Initiate appropriate criminal and/or civil action where responsibility has been established.
- Insects and Disease
- 186. Apply integrated pest management principles to minimize the impacts of the mountain pine beetle, western spruce budworm, tussock moth, and other insect and disease infestations to the extent necessary to achieve the overall goals and objectives of this Forest Plan.
 - 187. Avoid the creation of vegetation conditions which could promote insect and disease infestations
- Noxious Weeds
- 188. Implement a weed control program to confine present infestations and prevent establishment of noxious weeds in new areas. Favor biological control for noxious weeds that have effective host insects. Where biological control is not effective, a combination of hand grubbing, spot application of herbicides, and aerial application of herbicides will be used. This program will be coordinated with county, State, and other Federal agencies. All National Environmental Policy Act requirements will be completed prior to using any herbicides.
- Administration
- 189. Coordinate with all appropriate agencies on rights-of-way, road maintenance, law enforcement, noxious weed control, and other activities to produce mutual benefits.