MANAGEMENT AREA 21 (22,076 acres) - WILDLIFE EMPHASIS AREA (WITH NON-SCHEDULED TIMBER HARVEST)

1. Description

Management Area 21 consists of 4 geographical areas on the Forest that are in, or portions of, former roadless areas. These areas include the Jumpoff Joe area (4,006 acres); and portions of Baldy Mountain (5,380 acres); Dixie Butte (6,895 acres); and Nipple Butte (5,795 acres) A variety of physical and biological environments occur in these areas, both forested and nonforested, as determined by soil, slope, aspect, elevation, and climatic factors.

2. Goals

Manage to provide for high quality fish and wildlife habitat and water quality. Timber harvest will be on a non-scheduled basis and will be used only to meet a wildlife and/or fish habitat objective. Provide opportunities for high quality semiprimitive dispersed recreation. Although road construction is allowed, overall objectives are to manage the area in an unroaded condition.

3. Standards

RESOURCE ELEMENT	STANDARDS
	The Forest-wide management direction included in Chapter IV, Section E, of this Plan applies to this management area except where superseded by the following standards:
Recreation	1. Manage for semiprimitive motorized recreation on designated roads and trails. Manage for semiprimitive nonmotorized recreation on the remainder of the area.
Visuals	2. Meet visual quality objectives ranging from retention to modification depending on the visual quality objective of adjacent lands.
Fish and Wildlife	3. Provide necessary habitat to contribute to Forest-wide maintenance of viable populations of management indicator species and featured species Develop strategies to promote a variety of species including those dependent upon old growth, riparian, and solitude.
Big Game	4. Manage elk and mule deer habitat to provide for 40% cover and an elk habitat effectiveness index (HEI) of 0.7. The HEI model provides a means of balancing cover quality, cover spacing, forage 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).

Habitat effectiveness determinations for site-specific projects will be calculated on a subwatershed basis. Calculations will include both forested and nonforested 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 and winter range is:

$$HEI = (HE_c \times HE_s \times HE_r \times HE_f)^{1/4}$$

where:

HEc = habitat effectiveness derived from the quality of cover

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

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

HEf = habitat effectiveness derived from the quality and quantity of forage.

Below is displayed the cover and elk habitat effectiveness standards:

		Minimum1/ Values For Variables				Minimum Amount2/ of Area in Cover		
Forest Area	HEI	HEc	HEs	HE3/r	HEf	Satis.	Marginal	Total
MA 21	.7	.5	.6	.6	.5	20%	20%	40%

1/The interactions between stand cover size and spacing, road density, forage 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. Calculate HEf for winter range only.

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

1/A closed road is one where use is not physically evident, no greater than one trip/week.

5. Develop a long-range plan for achievement of wildlife objectives through use of non-scheduled timber harvest.

Primary Excavators

6. Maintain dead and defective tree habitat capable of supporting 60-100% of the potential population of management indicator species for primary excavators.

Range

7. Prioritize forage utilization to provide for big game species at levels derived in consultation with the Oregon Department of Fish and Wildlife.

8. Schedule cost-efficient range improvements to improve range condition when and where needed and consistent with management area objectives.

9. Design improvements to protect wildlife habitat and distribute livestock use.

Timber

10. Exclude scheduled timber harvest. Lands are classified as "unsuitable" for timber management. Harvest may occur to accomplish wildlife habitat or fish habitat objectives, as established in a project-level environmental analysis

Minerals

11. Stipulate in mineral leases the limitation of activity between December 1 through April 1 if necessary to provide for wintering needs of big game. Negotiate reasonable limitations in operating plans for locatable mineral development.

Facilities

Roads

12. Minimize road construction when determining access needs for timber management activities. Favor logging systems that require less road construction. Obliterate or close all newly constructed roads once project activities are completed unless road management objectives dictate otherwise. Road *management objectives, including design criteria, operation criteria, and* maintenance criteria, will be determined primarily by wildlife habitat needs (including security needs) An area transportation plan will be developed.

13. To limit disturbance to big game, the open road density will be no greater than 1.5 mi/mi² by 1999. Where existing conditions do not meet this goal, project transportation system designs will be developed in order to move toward this goal in the shortest time frame possible. Densities will be monitored on a watershed basis (see Appendix I).

14. All roads will be planned, designed and constructed to minimum level standards. No through roads.

15. Access management will be identified as an issue during any project level environmental analysis.

16. Restrict motorized off-highway vehicles, over-the-snow vehicles, and other motorized traffic use to designated roads and trails to protect wildlife habitat and minimize harassment of elk and deer.

Trails

17. Locate, design, construct and maintain trails that accommodate projected recreational use, ensure public safety, and meet management area objectives Schedule construction work to minimize disruption to wildlife.

Protection

Residue Management

18 Manage residue to maintain or enhance big game and forage production.

19. Use planned ignitions, when within prescription, to achieve resource management objectives. Prescribed fire from lightning ignitions may be used to allow fire to play its natural ecological role

4. Schedule of Management Practices

No management practices are scheduled for Management Area 21.