MANAGEMENT AREAS

Introduction

Management areas provide the multiple-use direction for managing specific areas of land. Each management area is described in terms of (1) a goal statement which reflects the expected results for a Forest resource, activity, or land area; (2) a description and location where the management area direction will be applied; (3) a desired future condition statement; and (4) the direction emphasis for the Umatilla National Forest which supplements Forest Service manuals, handbooks, and the Regional Guide for the Pacific Northwest Region. Management areas respond to Forest issues, concerns and opportunities, appropriate laws, regulations, existing direction, land capabilities, and professional judgment.

Management areas together with the map of the Forest Plan identify activities and where each will take place during implementation of the Forest Plan. Table 4-23 displays the acres managed under each management area.

TABLE 4-23. MANAGEMENT AREAS

Umatilla National Forest

		M Acres
A I	NONMOTORIZED DISPERSED RECREATION	27.3
A2	OHV RECREATION	7.5
A3	VIEWSHED 1	43.7
A4	ViEWSHED 2	28.7
A5	ROADED NATURAL	4.7
A6	DEVELOPED RECREATION	4.4
A7	WILD AND SCENIC RIVERS	7.6
A8	SCENIC AREA	31.4
A9	SPECIAL INTEREST AREA	3.2
AI 0	WENAHA-TUCANNON SPECIAL MANAGEMENT AREAS	3.3
B1	WILDERNESS	304.4
C1	DEDICATED OLD GROWTH	41.2
C2	MANAGED OLD GROWTH	3.6
C3	BIG GAME WINTER RANGE	152.8
C3A	SENSITIVE BIG GAME WINTER RANGE	8.2
C4	WILDLIFE H4BITAT	258.9
C5	RIPARIAN AND WILDLIFE	27.2
C7	SPECIAL FISH MANAGEMENT AREA	105.3
C8	GRASS-TREE MOSAIC (GTM)	98.5
D2	RESEARCH NATURAL AREA	1.6
E I	TIMBER AND FORAGE	91.4
E2	TIMBER AND BIG GAME	199.5
F2	MILL CREEK MUNICIPAL WATERSHED - UNDEVELOPED	20.8
F3	HIGH RIDGE EVALUATION AREA	0.9
F4	WALLA WALLA RIVER WATERSHED	35.0

A1 NONMOTORIZED DISPERSED RECREATION

GOAL

PROVIDE NONMOTORIZED RECREATION OPPORTUNITIES IN AN AREA CHARACTERIZED BY A PREDOMINANTLY NATURAL OR NATURAL APPEARING ENVIRONMENT WITH MINIMUM SIGHTS AND SOUNDS OF HUMAN ACTIVITY.

DESCRIPTION

Applies to all or parts of roadless areas and/or other selected Forest areas [2,500 acres and larger] with essentially natural or natural appearing environments and meeting Semi-primitive Recreational Opportunity Spectrum (ROS) settings.

The following areas, or part of areas, are included in the management area:

- Hell's Half-acre (Cutsforth Park) Area (Heppner);
- Upper Tucannon Roadless Area west of Bear Creek (Pomeroy): and
- Wenatchee Creek Roadless Area and area south of Forest Road 4304 (Pomeroy).

DESIRED FUTURE CONDITION

Moderate to large natural or natural appearing areas remain undeveloped (unroaded and unlogged). Recreationists shall be able to enjoy the outdoor opportunities for closeness to nature, self-reliance, and tranquility. Opportunities to enjoy hiking, camping, hunting, and other recreational activities in relatively undisturbed, natural settings, will be made available. Interactions between users will be low, but there will be evidence of other users. Little or no evidence of motorized use, restrictions, and controls will exist. Existing wheel tracks and primitive roads will revert to natural conditions or be used as trails.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Manage recreation to a semi-primitive setting (ROS Users Guide, USDA Forest Service n.d.) within the area: Roaded Natural settings may occur along the boundaries. Areas will be managed to maintain opportunities for visitors to get away from others and achieve a feeling of remoteness from sights and sounds of humans.

Access will be mostly for remote walk-in or horseback activities in an area generally free of roads. Off-highway vehicle (OHV) use will not be permitted.

EXCEPTION: In the Cutsforth Park area on the Heppner District, provision will be made to allow a snowmobile access route to Kelly Prairie.

Trail and associated facility construction, reconstruction, and maintenance will be permitted. Trail system will be designed and maintained to disperse use and have varying but challenging difficulty levels to achieve the objectives of the area. Motorized equipment may be permitted in trail development and maintenance.

Recreation site modification and facility development should be level 2 or less (see Glossary). Facilities will be limited to meet safety and sanitary needs.

If needed, utilize limits of acceptable change criteria to implement limits on group size, number of animals, and other measures in order to meet social encounter criteria for semi-primitive recreation opportunities. Utilize a minimum of onsite controls and restrictions to protect resources and promote safe use of the area.

VISUAL

Retention is the visual equally objective provided within the area and along area boundaries.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE AND FISH

Habitat improvement projects are acceptable for wildlife and fish, provided they meet the Retention visual quality objective (VQO) and the goal for the Semi-primitive setting.

Provide habitat to support cavity excavators at 80 percent of potential population.

Identified old growth units within the management area will be retained as part of the dedicated old growth system.

RIPARIAN

Meet Forest-wide Standards and Guidelines.

RANGE

Moderate level of grazing is permitted. Improvement maintenance and development are permitted. Improvement development must not detract from the Semi-primitive setting. The full range of range management strategies (B to D) could apply.

TIMBER

Timber harvest will not be scheduled. Salvage may be allowed where the goal of providing a Semi-primitive Nonmotorized setting can be met.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Land Classification II (acquisition) will generally be used to meet public needs. Lands may be exchanged in cases of demonstrated positive net public benefit.

Meet Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

No roads will be developed. Existing wheel tracks will be closed to motor vehicle use and converted to trails.

FIRE

The appropriate wildfire suppression response should emphasize control and/or contain strategies for moderate to high intensity fires. Under appropriate fire prediction conditions, low intensity wildfires (0-2 foot flame length) may be permitted to play a natural role within the setting when resulting in a 1 to 2-year vegetative recovery.

Low impact wildfire suppression methods should be used; rehabilitation may be used to mitigate wildfire impacts in conflict with semi-primitive and visual quality objectives.

FUELS

Prescribed low intensity fire with a 1 to 2-year recovery period is acceptable. A less than I year recovery is most desirable If conditions are suitable.

PESTS

Use integrated pest management (IPM) principles and strategies in meeting management area objectives. Suppress pests when outbreaks threaten recreation objectives or resources in adjacent areas. Favor biological methods when available.

Prescribed fire may be used to help reduce stocking and conditions favorable for bark beetle and dwarf mistletoes. Control of defoliators may also be accomplished by spraying following approval of an environmental analysis. Use of salvage harvest is limited to catastrophic events.

A2 OHV RECREATION

PROVIDE MOTORIZED RECREATION IN A PREDOMINATELY NATURAL OR NATURAL APPEARING ENVIRONMENT WITH A MODERATE DEGREE OF ISOLATION FROM SIGHTS AND SOUNDS OF HUMAN ACTIVITY.

DESCRIPTION

Applies to all or parts of roadless areas and/or other selected Forest areas [2,500 acres and larger] with an essentially natural appearing environment and meeting Semi-primitive (ROS) settings.

The following areas, or parts of areas, are included in the management area:

- Spangler Roadless Area (Pomeroy): and
- Lookingglass Roadless Area (Walla Walla).

DESIRED FUTURE CONDITION

Moderate to large natural appearing areas will remain generally undeveloped (no logging but some constructed four-wheel drive ways). Recreationists will be able to enjoy a variety of challenging off-highway vehicle (OHV) opportunities on trails or drive ways, without standard developed roads and concentrations of people. Opportunities to enjoy hiking, camping, hunting, and other recreational activities in a natural setting will be available. Existing wheel tracks and primitive roads will become OHV trails.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Manage recreation to a Semi-primitive Motorized setting (ROS Users Guide, USDA Forest Service n.d) within the area; Roaded Natural settings may occur along the boundaries.

Manage the area to keep contacts between users low to moderate. If needed, implement appropriate measures to meet social encounter criteria for Semi-primitive Motorized opportunities, based on limits of acceptable change criteria. Utilize minimum onsite controls and restrictions to protect resources and promote safe use of the area.

Access will be mostly for remote motorcycle or ATV and some walk-in activities. Motorized use will be limited to designated trails and closed roads (not cross-county); snowmobile use will be acceptable on an area basis.

Trail and associated facility construction, reconstruction, and maintenance will be permitted, including trails for OHV use. Trail systems will be designed and maintained to disperse use, provide varying but challenging motorized difficulty levels, and protect soil and water resources. Trail maintenance activities will be determined by amount and type of use, trail type, difficulty level, and appropriate trail guide.

VISUAL

Retention is the Visual Quality Objective (VQO) within the area and along area boundaries.

CULTURAL

Meet Forest-wide Standards and Guidelines

WILDLIFE

Wildlife habitat improvement projects are acceptable provided the projects meet the Retention visual quality objective and the goal for the Semi-primitive Motorized setting.

Provide habitat to support cavity excavators at 80 percent of potential population level.

Identified old growth units within the management area will be retained as part of the dedicated old growth system.

FISH

Fish habitat improvement projects are acceptable and will meet the Retention visual quality objective.

RIPARIAN

Meet Forest-wide Standards and Guidelines.

RANGE

A moderate level of grazing is permitted. Improvement maintenance and development are permitted. Improvement development is not to detract from the Semi-primitive setting. The full range of management strategies (B to D) could apply.

TIMBER

Timber harvest will not be scheduled. Tree removal or cutting may be allowed where the goal of providing a Semi-primitive Motorized setting can be met

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Land Classification II (acquisition) will generally be used to meet public needs. Lands may be exchanged in cases of demonstrated positive net public benefit.

Meet Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

Four-wheel drive ways are acceptable; these routes will be designed and managed to 'discourage' highway vehicle use.

FIRE

The appropriate wildfire suppression response should emphasize control and/or contain strategies for moderate to high intensity fires. Under appropriate fire prediction conditions, low intensity wildfires (0-2 foot flame length) may be permitted to play a natural role within the setting when resulting in a 1 to 2-year vegetative recovery.

Low impact wildfire suppression methods should be used; rehabilitation may be used to mitigate wildfire impacts in conflict with semi-primitive and visual quality objectives.

FUELS

Prescribed low intensity fire with a 1 to 2-year recovery is acceptable. A less than 1 year recovery is most desirable if conditions are suitable.

PESTS

Use integrated pest management (IPM) principles and strategies in meeting management area objectives. Suppress pests when outbreaks threaten dispersed recreation objectives or resources in adjacent areas. Favor biological methods when available.

Prescribed fire may be used to help reduce stocking and conditions favorable for bark beetle and dwaif mistletoes. Control of defoliators may also be accomplished by spraying following approval of an environmental analysis. Use of salvage harvest is limited to catastrophic events.

A3 VIEWSHED 1

GOAL

MANAGE THE AREA SEEN FROM A PRIMARY TRAVEL ROUTE, USE AREA, OR WATER BODY, WHERE FOREST VISITORS HAVE A MAJOR CONCERN FOR THE SCENIC QUALITIES (SENSITIVITY LEVEL 1) AS A NATURAL APPEARING LANDSCAPE.

DESCRIPTION

The strategy applies to all or parts of the defined Sensitivity Level 1 travel routes, use areas, or water bodies. Sensitivity levels are defined in the Umatilla National Forest landscape management text, and viewshed boundaries are defined on the Forest Visual Quality Objective (VQO) maps.

The following defined viewsheds, or parts of viewsheds, are included in the management area:

1. Tucannon River Road 4712 and Tucannon river from Junction 4713 to Columbia/Garfield County line) (Pomeroy);
2. Touchet River Road 64 (Forest Boundary to Forest Road 6437) (Walla Walla);
3. Tiger Creek Road 65 (Forest Boundary to Forest Road 6411) (Walla Walla);
4. Forest Road 6403 (Forest Road 64 to Forest Road 6411) (Walla Walla);
5. Skyline Road 64 (Tollgate to Jubilee Lake) (Walla Walla);
6. State Highway 204 (Forest Boundary to Forest Boundary*) (Walla Walla);
7. Bull Prairie Lake Road 2039 (State Hwy. 207 to Forest Boundary*) (Heppner);
8. State Highway 244 (Forest Boundary to Forest Boundary) (North Fork John Day [NFJD]);
9. Ukiah-Granite Road 52 (Bridge Creek to Forest Road 73*) (NFJD);
10. Forest Road 73 (Forest Road 52 to Forest Boundary*) (NFJD);
11. North Fork John Day River Road 55 (Forest Boundary to Big Creek*) (NFJD);
12. State Highway 395 (Dale to Meadow Brook Summit [Forest Boundary]*) (NFJD); and
13. Forest Road 10 (Olive Lake east to Forest Boundary*) (NFJD).

*with enclave(s)

DESIRED FUTURE CONDITION

Viewsheds will be managed primarily to meet the visual quality objectives of retention and partial retention. An attractive, natural appearing landscape will be created or maintained. A maximum of three distance zones for each viewshed, including foreground, middle ground, and background radiating from the viewer position (and a visual quality objective for each zone), have been delineated according to the process defined in the Agriculture Handbook 462, *National Forest Landscape Management*; Vol. 2, Chap. 1, The Visual Management System (USDA Forest Service 1974).

Management activities will be done with the highest sensitivity to people's concern for scenic quality. Vegetative manipulation will be conducted so that Forest management activities are not usually noticeable in the foreground and remain visually subordinate in the middle ground viewing area. All viewsheds will have vegetative management plans. Timber harvest areas will be sized and shaped to be compatible with the natural surroundings, but harvest may be noticeable in the background. Forest stands will occasionally be logged in order to maintain

long-term health and vigor, and to encourage a park-like, natural appearance with big trees in the immediate foreground. Recreational opportunities will be mostly road oriented

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Manage dispersed recreation in the area to a Roaded Natural physical and social setting (ROS Users Guide, USDA Forest Service, n.d.).

Recreation facility development and maintenance and site modification level 1 or 2 are permitted (see Glossary). Recreation facility design, construction, and maintenance, including trails and trailheads, are to meet the visual quality objective assigned to the area and blend with the natural landscape.

Provide the opportunity for mostly road oriented activities.

Off-highway vehicle (OHV) use is allowed. OHV use may be limited to designated roads, trails, and areas.

VISUAL

Visual Quality Objective (VQO) will generally be Retention in the foreground and Partial Retention in the middle ground. Exceptions are defined through the process described in Agriculture Handbook 462. Activities within these viewsheds may only repeat form, line, color, and texture which are frequently found in the characteristic landscape. Changes of landscape should be of such size, amount, intensity, direction, and pattern that they continue to provide a natural appearance, except for short-term changes to meet long-term objectives.

Principles of visual management will be applied so that positive attributes of a managed forest can be enjoyed while negative visual aspects of activities will be minimized.

Landscapes containing negative visual elements will be rehabilitated. Landscapes will be enhanced by opening views to distant peaks, unique rock forms, unusual vegetation, or other features of interest

Viewshed corridor plans will be developed for all Sensitivity Level 1 viewsheds and will guide project activities when completed.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Dead and down tree habitat will be managed to provide or maintain 60 percent of the potential population level for all primary cavity excavators.

Wildlife habitat improvement and maintenance projects are permitted provided they meet the visual quality objective of the distance zone in which they occur.

RIPARIAN

For all Class I, II, and III streams and associated riparian areas within the management area, anadromous fish habitat will be managed to produce at least 90 percent of potential smolt habitat capability index (SCHI) by meeting standards (for fish) shown in Management Area C5.

FISH

Fish habitat improvement and maintenance are permitted as long as projects meet the appropriate VQO in the distance zone in which they occur.

RANGE

A moderate level of livestock grazing is permitted. Openings created by management of timber stands should be available for management as transitory range. Development and maintenance of range improvements are permitted. Range utilization standards, management practices, and improvements are to be designed and managed to meet visual quality objectives.

TIMBER

Timber will be managed on a scheduled basis. All timber management practices and intensities shall be permitted consistent with achieving the primary visual quality goals.

EXCEPTION: Timber harvest will not be scheduled (or permitted) in the following viewshed corridor: The Tucannon River Road 4712 and river from Junction 4713 to Columbia/Garfield County line.

Uneven-aged management is the preferred and most commonly used silvicultural system; even-aged management techniques may also be used to meet objectives.

Scheduling of treatments and timber harvest, logging systems, debris disposal, reforestation, and stand improvement practices will be designed and implemented to accomplish visual management objectives.

1. Timber stands which have remained unmanaged in the past because of their visual sensitivity will begin receiving treatment, when desirable, to meet viewshed objectives.
2. Manage the viewshed for an overall mix of size classes of trees. The mix of age classes to be achieved as the overall long-term objective of the viewshed are:

	Foreground Age Classes	
Percent	Retention	Partial Retention
20	0-50	0-36
20	51-100	37-72
20	101-150	73-108
20	151-200	109-145
20	201-250	146-181

3. Emphasis will be on viewing large diameter trees and multi-age stands; both vertical and horizontal diversity are also to be emphasized. The large tree component should be as dispersed as necessary to give the overall character of large trees to the area. The standards in Tables 4-24 and 4-25 will be used in achieving desired visual characteristics.
4. A created opening is defined as an opening developed through management activities where tree heights are less than 20 feet. Created openings will be shaped and blended with the natural terrain.
5. Exceptions to created opening size and maximum percentage in openings at one time are permitted under catastrophic circumstances such as blow down, insect and disease attacks, wildfire, and others. Landscapes will be rehabilitated under these conditions.
6. Thinnings and plantings in the foreground will leave irregularly spaced trees. Mixed conifer stand regeneration in foregrounds and middle grounds will be planned for at least two species with no more than 65 percent in a single species.

TIMBER (Cont.)

Even-aged Management
Visual Resource Standards

TABLE 4-24. EVEN-AGED MANAGEMENT VISUAL RESOURCE STANDARDS

Standards		Ponderosa Pine Working Group North & South Associated		Lodgepole Pine Working Group
Factor		Retention	Part. Retent.	Retention/Part. Ret.
Maximum % Harvest per Decade	Foreground Middleground	4 9	5 10	5 10
Maximum % of Area in Created Openings at One Time [1]	Foreground Middleground	8 15	10 20	10 20
Target Tree Diameter (inches DBH)		30	24	12
Number of Target Trees at Final Removal (Per Ac.)		3-5	3-5	10
Maximum Unit Size (Ac.)	Foreground >500 ft. Middleground	3 5	5 10	5 10

1 Applies to regeneration harvests. Not applicable to intermediate or overstory removal harvests except where an opening is created.

Uneven-aged Management
Visual Resource Standards

TABLE 4-25. UNEVEN-AGED MANAGEMENT VISUAL RESOURCE STANDARDS

Umatilla National Forest

Standards		Ponderosa Pine Working Group North & South Associated		Lodgepole Pine Working Group
Factor		Retention	Part. Retent.	Retention/Part. Ret.
Maximum % of Area in Created Openings at One Time [1]	Foreground Middleground	8 15	10 20	10 20
Target Stand Diameter (inches DBH)		24	20	12
Maximum Unit Size (Ac.)	Immediate Foreground Foreground >500 ft. Middleground	1 2 2	1.5 2 2	2 2 2

1 Applies to group selection harvests. Not applicable to single tree selection or intermediate harvests except where an opening is created

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet the visual quality objectives within the intent of the Forest-wide Standards and Guidelines for minerals and energy.

Utilize existing access routes to developments where possible.

Provide for reclamation on completion of all projects within the viewshed corridors.

LANDS

Special use sites will be permitted provided they can be designed and located to blend with the characteristic landscape.

Existing special use sites will be reviewed for meeting visual management requirements at established permit renewal dates. If a special use site fails to meet standards, it will be brought into compliance.

Land Classification II (acquisition) will generally be used to meet special public needs.

Lands may be exchanged in cases of demonstrated positive net public benefit.

Meet other Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

New roads and trails will be permitted and will be located, designed, and constructed to be mostly unnoticeable from the main travel route. Cut and fill slopes will be revegetated with species less palatable to livestock to minimize adverse visual effects.

Road maintenance activities will be permitted and conducted to minimize adverse visual impact by the retention of the maximum amount of existing vegetation, by encouraging the most rapid revegetation of disturbed areas outside of the surfaced roadway, and by reducing earthwork to a minimum.

Road closures in the foreground, such as gates and berms, should be designed and constructed to blend with the natural characteristics of the landscape while remaining consistent with safety requirements.

Gravel pits, borrow areas, etc., will meet the assigned visual quality objective.

Signs needed for traffic regulation and information should be few in number, be designed and located to meet aesthetic objectives, and be in accord with safety requirements.

FIRE

For moderate to high intensity wildfires, the appropriate suppression response will emphasize a control strategy.

Wildfire suppression efforts should utilize low impact methods. Use of heavy equipment may require restoration efforts to mitigate visual impacts.

FUELS

Prescribed low intensity fire with minimal scorch is acceptable. A 1 year or less recovery period is most desirable in the viewshed, if conditions are suitable.

Acceptable visual quality, including fuel loadings in the foreground, are depicted by the following photos from the Photo Series for Quantifying Forest Residues (Technical Reports PNW-52, PNW-51, PNW-105) (USDA Forest Service 1976a, 19760 1980):

	Ponderosa Pine	Lodgepole Pine	Associated Species
Natural Fuels	1 -PP4	1-LP3	3-PP and Assoc.3 1-PP and Assoc.4
Thinning Fuels	(No acceptable photos)		1-DF-1-TH
Clearcut	2-LP3-PC	2-LP3-PC	2-DF4-CC
Selection Harvest	I-PP4-PC	2-LP-3-PC	7-PP and Assoc.4-PC

Fuel treatments in foreground areas should be planned, timed, and implemented to avoid being highly visible and to minimize adverse visual effects. In the immediate foreground (within 200-300 feet of observers) handpiling, hauling material away, utilizing it for fuelwood, etc., are activities preferable to machine piling and crushing and should be completed prior to the next high human-use period.

In foreground areas, slash and damaged unmerchantable trees will be treated to a higher standard than in the middle ground and background. Fuel loadings meeting reforestation and wildlife standards in middle ground and background areas will normally be compatible with the visual objectives.

PESTS

Use integrated pest management (IPM) principles and strategies to manage insect and disease pests in meeting viewshed objectives. All treatment strategies may be utilized. Emphasize strategies that improve visual quality, aesthetics, and safety. Treatment of bark beetles and root rots is emphasized.

Suppress pests when outbreaks threaten users and/or managed resources. Use suppression methods that minimize site disturbance.

A4 VIEWSHED 2

GOAL

MANAGE THE AREA SEEN FROM A TRAVEL ROUTE, USE AREA, OR WATER BODY WHERE SOME FOREST VISITORS HAVE A MAJOR CONCERN FOR THE SCENIC QUALITIES (SENSITIVITY LEVEL 2) AS A NATURAL APPEARING TO SLIGHTLY ALTERED LANDSCAPE.

DESCRIPTION

The strategy applies to all or parts of the defined Sensitivity Level 2 travel routes, use areas, or water bodies. Sensitivity levels are defined in the Umatilla National Forest landscape management text, and viewshed boundaries are defined on the Forest Visual Quality Objective (VQO) maps.

The following defined viewsheds, or parts of viewsheds, are included in the management area:

1. Pomeroy-Grouse Road 40 (Forest Boundary to Forest Boundary*) (Pomeroy);
2. Forest Road 4608 (Godman Guard Station to Teepee Springs) (Pomeroy);
3. Forest Road 46 (Godman Guard Station to Skyline Road 64) (Pomeroy/Walla Walla);
4. Skyline Road 64 (Forest Road 46 to Forest Road 6415') (Walla Walla);
5. Forest Road 4600300 (Forest Road 64 to Twin Buttes) (Walla Walla);
6. Tiger Creek Road 65 (A4 terminus to with Forest Road 64) (Walla Walla);
7. Forest Road 6415 (Forest Road 64 to Forest Road 6413) (Walla Walla);
8. County Highway 900 (Umatilla Indian Reservation to Forest Boundary) (Walla Walla);
9. Thomas Creek Road 32 (Forest Boundary to Summit Road 31) (Walla Walla):
10. Summit Road 31 (State Highway 204 south to Forest Boundary 13 segments) (Walla Walla);
12. State Highway 207 (Forest Boundary to Forest Boundary) (Heppner);
13. Forest Road 21 (Forest Road 53 to Forest Road 2103*) (Heppner);
14. Forest Road 2103 (Forest Road 21 to Penland Lake*) (Heppner);
15. Forest Road 53 (Forest Road 21 east to Forest Boundary*) (Heppner);
16. Pearson Creek Road 54 (Forest Boundary to State Highway 244); and
17. Desolation Creek Road 10 (Dale to Olive Lake [4 segments]) (North Fork John Day).

* with enclaves

DESIRED FUTURE CONDITION

Viewsheds will be managed primarily to meet the visual quality objectives of partial retention and modification. An attractive, near natural landscape will be maintained or created. A maximum of three distance zones for each viewshed including foreground, middleground, and background radiating from the viewer position (and a visual quality objective for each zone) have been delineated according to the process defined in the Agriculture Handbook 462, 'National Forest Landscape Management;' Vol. 2, Chap. 1, The Visual Management System (USDA Forest Service 1974).

Management activities will be done with sensitivity to people's concern for scenic quality (Level 2), with vegetative manipulation conducted so that Forest management activities remain visually subordinate in foregrounds of selected travel routes and sites. All viewsheds will have approved

vegetative management plans. Management activities will be obvious in the middleground and background viewing area, but designed to compliment their surroundings. Forest stands will occasionally be logged in order to maintain long-term health and vigor, and to encourage a park-like, near natural appearance with big trees in the immediate foreground. Recreation opportunities will be mostly road oriented

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Manage dispersed recreation in the area for a range of physical and social settings from Roaded Natural to Roaded Modified (ROS Users Guide, USDA Forest Service, n.d.).

Recreation facility development and maintenance and site modification level 1 and 2 are permitted (see Glossary). Facilities (including trails and trailheads) designed, constructed, developed, and maintained in the area, are to blend with the natural landscape character and meet visual quality objectives.

Provide the opportunity for mostly road oriented activities.

Off-highway vehicle (OHV) use is allowed. OHV use may be limited to designated roads, trails, and areas.

VISUAL

Visual Quality Objective (VQO) will generally be Partial Retention in the foreground and Modification in the middleground. (Exceptions are defined through the process described in Agriculture Handbook 462.) Activities within these viewsheds may repeat or borrow from form, line, color, and texture which are frequently found in the characteristic landscape. Changes of landscape should be of such size, amount, intensity, direction, and pattern that they continue to provide a natural appearing or slightly altered appearance, except for short-term changes to meet long-term objectives.

Principles of visual management will be applied so that positive attributes of a managed forest can be enjoyed while negative visual aspects of activities will be minimized.

Landscapes containing negative visual elements will be rehabilitated. Landscapes will be enhanced by opening views to distant peaks, unique rock forms, unusual vegetation, or other features of interest.

Viewshed corridor plans will be prepared for all sensitivity level 2 viewsheds and will guide project activities when completed.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Dead and down tree habitat will be managed to provide or maintain 60 percent of the potential population level for primary cavity excavators.

Wildlife habitat improvement and maintenance projects are permitted provided they meet the visual quality objective of the distance zone in which they occur.

FISH

Fish habitat improvement and maintenance projects are permitted provided they meet the appropriate VQO in the distance zone in which they occur.

RIPARIAN

For all Class I, II, and III streams and associated riparian areas within the management area, anadromous fish habitat will be managed to produce at least 90 percent of potential smolt habitat capability index (SCHI) by meeting standards (for fish) shown in Management Area C5

RANGE

A moderate level of livestock grazing is permitted. Openings created by management of timber stands should be available for management as transitory range. Development and maintenance of range improvements are permitted. Range utilization standards, management practices, and improvements are to be designed and managed to meet visual quality objectives.

TIMBER

Timber will be managed on a scheduled basis. All timber management practices and intensities shall be permitted consistent with achieving the primary visual quality goals.

Timber harvest will not be scheduled in the following viewshed corridors:

	EXCEPTED PORTIONS
Road 40	Road 44 to Forest Boundary
Road 4600300	Road 64 Easterly to Road 4608
Road 4600301	Road 46 to End
Road 4608	Road 4600300 to End
Road 64	Between Road 46 and W-T Wilderness Boundary
Road 46	Road 65 to Road 46

Uneven-aged management is the preferred and most commonly used silvicultural systems in the foreground; even-aged management techniques may also be used to meet objectives. Both systems are available in the middle and background zones.

Scheduling of treatments and timber harvest, logging systems, debris disposal, reforestation, and stand improvement practices will be designed and implemented to accomplish visual management objectives.

1. Timber stands which have remained unmanaged in the past because of their visual sensitivity will begin receiving treatment, when desirable, to meet viewshed objectives.
2. Manage the viewshed for an overall mix of size classes of trees. The following mix of age classes should be achieved as the overall long-term objective of the viewshed.

	Foreground Age Classes
Percent	Partial Retention
20	0-36
20	37-72
20	73-108
20	109-1 45
20	146-181

3. Emphasis will be on viewing large diameter trees and multi-age stands; both vertical and horizontal diversity will also be emphasized. The large tree component should be dispersed as necessary to give the overall character of large trees to the area. The

standards in Tables 4-26 and 4-27 will be used in achieving desired visual characteristics.

Even-aged Management Visual Resource Standards

TABLE 4-26. EVEN-AGED MANAGEMENT VISUAL RESOURCE STANDARDS

Umatilla National Forest

Standards		Ponderosa Pine Working Group North & South Associated	Lodgepole Pine Working Group
Factor		Partial Retention	Partial Retention
Maximum % Harvest per Decade	Foreground Middleground[2]	5 10	5 10
Maximum % of Area in Created Openings at One Time [1]	Foreground Middleground[2]	10 20	10 20
Target Tree Diameter (inches DBH)		24	12
Number of Target Trees at Final Removal (Per Ac.)		3-5	10
Maximum Unit Size (Ac.)	Foreground >500 ft. Middleground[2]	5 10	5 10

1 Applies to regeneration harvests. Not applicable to intermediate or overstory removal harvests except where an opening is created.
2 Modification will be the general visual standard for middleground; where partial retention is assigned to the middleground, the above standards apply.

Uneven-aged Management Visual Resource

TABLE 4-27. UNEVEN-AGED MANAGEMENT VISUAL RESOURCE STANDARDS

Umatilla National Forest

Standards		Ponderosa Pine Working Group North & South Associated	Lodgepole Pine Working Group
Factor		Partial Retention	Partial Retention
Maximum % of Area in Created Openings at One Time [1]	Foreground Middleground[2]	10 20	10 20
Target Stand Diameter (inches DBH)		20	12
Maximum Unit Size (Ac.) [1]	Immediate foreground Foreground >500 ft. Middleground[2]	1.5 2 2	2 2 2

1 Applies to group selection harvests. Not applicable to single tree or intermediate harvests except where an opening is created.
2 Modification will be the general visual standard for middleground; where partial retention is assigned to the middleground, the above standards apply.

4. A created opening is defined as an opening developed through management activities where the tree heights are less than 20 feet. Created openings will be shaped and blended with the natural terrain.
5. Exceptions to created opening size and maximum percentage in created openings at one time are permitted under conditions of catastrophic occurrence such as blow down, insect and disease attacks, wildfire, and others. Landscapes will be rehabilitated under these conditions.
6. Thinnings and plantings in the foreground will leave irregularly spaced trees. Mixed conifer stand regeneration in foregrounds will be planned for at least two species with no more than 65 percent in a single species.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet the visual quality objectives within the intent of the Forest-wide Standards and Guidelines for minerals and energy.

Utilize existing access routes to developments where possible.

Provide for reclamation upon completion of all projects within the viewshed corridors.

LANDS

Special use sites will be permitted, provided they can be designed and located to blend with the characteristic landscape.

Existing special use sites will be reviewed for meeting visual management requirements at established permit renewal dates. If a special use fails to meet standards, it will be brought into compliance.

Land Classification II (acquisition) will generally be used. Lands may be exchanged in cases of demonstrated positive net public benefit.

Meet Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

New roads and trails will be permitted and will be designed and constructed to meet the partial retention and modification visual quality objectives. Cut and fill slopes within view will be revegetated species with less palatable to livestock to minimize adverse visual effects.

Road maintenance activities will be permitted and conducted to minimize adverse visual impact by the retention of the maximum amount of existing vegetation, by encouraging the most rapid revegetation of disturbed areas outside of the surfaced roadway, and by reducing earthwork to the minimum.

Road closures in the foreground, such as gates and berms, should be designed and constructed to blend with the natural characteristics of the landscape while remaining consistent with safety requirements.

Gravel pits, borrow areas, etc., will meet the assigned visual quality objective.

Signs needed for traffic regulation and information should be few in number, be designed and located to meet aesthetic objectives, and be in accord with safety requirements.

FIRE

For moderate to high intensity wildfires, the appropriate suppression response will emphasize control and/or contain strategies.

Wildfire suppression efforts should utilize low impact methods. Use of heavy equipment may require restoration efforts to mitigate visual impacts.

FUELS

Prescribed low intensity fire with minimal scorch is acceptable in the partial retention area. In the partial retention area a 1 year or less recovery period is most desirable, if conditions are suitable.

Acceptable visual quality, including fuel loadings in the foreground, are depicted by the following photos from the Photo Series for Quantifying Forest Residues (Technical Reports PNW-52, PNW-51, PNW-105) (USDA Forest Service 1976a, 1976b, 1980):

	Ponderosa Pine	Lodgepole Pine	Associated Species
Natural Fuels	1-PP-4	1-LP-3	3-PP and Assoc.3 1 -PP and Assoc.4
Thinning Fuels	(No acceptable photos)	(No acceptable photos)	1-DF-1-TH
Clear Cut	2-LP3-PC	2-LP-3-PC	2-DF-4-CC
Selection Harvest	1-PP-4-PC	2-LP-3-PC	7-PP and Assoc. 4-PC

Fuel treatments in foreground areas should be planned, timed, and implemented to avoid being highly visible and to minimize adverse visual effects. In the immediate foreground (within 200-300 feet of observers) handpiling, hauling material away, utilizing it for fuelwood, etc., are methods preferable to machine piling and crushing. Treatment should be completed prior to the next high human-use period.

In foreground areas, slash and damaged unmerchantable trees will be treated to a higher standard than in the middleground and background. Fuel loadings meeting reforestation and wildlife standards in middleground and background areas will normally be compatible with the visual objectives.

PESTS

Use integrated pest management (IPM) principles to manage insect and disease pests in meeting viewshed objectives. All treatment strategies may be utilized. Emphasize strategies that improve visual quality, aesthetics, and safety. Treatment of bark beetles and root rots is emphasized.

Suppress pests when outbreaks threaten users and/or managed resources. Use suppression methods that minimize site disturbance.

A5 ROADED NATURAL

GOAL

PROVIDE DISPERSED RECREATION OPPORTUNITIES IN AN ARE CHARACTERIZED BY A PREDOMINANTLY NATURAL TO NEAR NATURAL APPEARING ENVIRONMENT WITH MODERATE EVIDENCES OF THE SIGHTS AND SOUNDS OF MAN. SUCH EVIDENCES USUALLY HARMONIZE WITH THE NATURAL ENVIRONMENT.

DESCRIPTION

The strategy may be applied to all or portions of areas currently inventoried as Semi-primitive or Roaded Natural in the Umatilla National Forest ROS inventory. Areas currently inventoried as Roaded Modified may be allocated if they are identified as needed for this recreation opportunity.

The following areas are included in the management area:

- Relay Station Area (Spout Springs); and
- North Mt. Emily Roadless Area.

DESIRED FUTURE CONDITION

An attractive natural to slightly altered appearing landscape will be created and/or maintained over a large area. Recreation opportunities of all types will be abundant and available throughout the area, with emphasis on motorized use and some trail and cross country opportunities in a natural appearing environment. The natural setting will have modifications which may be noticed within the area, but which will remain unnoticed or visually subordinate from selected travel routes and use areas. Activities will be done with average sensitivity to people's concern for scenic quality (Level 2). The forested area will appear as a mosaic of different sized trees with many small created openings throughout. Through special design efforts, structural improvements (including range), roads, trails, and created openings will blend with the natural environment. Discordant visual elements shall be rehabilitated. The Forest will be logged regularly so that long-term stand health and vigor can be maintained and growth of big trees be encouraged throughout the area.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Manage dispersed recreation in the area to a Roaded Natural physical and social setting as described in the ROS User's Guide (USDA Forest Service n.d.). Encourage dispersed activities that meet the goal.

Recreation site modification and facility development should be Level 2 or less (see Glossary), and will be designed to blend with the natural landscape character. Facilities will include those needed to meet safety and sanitary needs.

Emphasize interpretive services to enhance understanding and appreciation of the area and forest management.

Provide for mostly road oriented opportunities and for walk-in or horseback activities in a natural to slightly altered environment.

Trail and associated facility construction, reconstruction, and maintenance shall be permitted including trails for OHV use. The trail system will be designed and maintained to disperse use, provide varying but challenging difficulty levels, and to meet area objectives.

Trailhead facilities will be designed, constructed, and maintained to meet visual quality objectives.

Off-highway vehicle (OHV) use is permitted. Motorized use may be limited to trails and roads: snowmobile use is acceptable on an area-wide basis.

VISUAL

Activities in the area will meet the visual quality objective of Partial Retention as the standard. Activities may repeat or borrow from form, line, color, and texture which are frequently found in the characteristic landscape. Changes of landscape should be of such size, amount, intensity, direction, and pattern that they continue to provide a natural appearing or slightly altered appearance, except for short-term changes to meet long-term objectives.

Principles of visual management will be applied so that positive attributes of a managed forest can be enjoyed while negative visual aspects of activities will be minimized.

Landscapes containing negative visual elements will be rehabilitated. Landscapes will be enhanced by opening views to distant peaks, unique rock forms, unusual vegetation, or other features of interest.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE AND FISH

Dead and down tree habitat will be managed to provide or maintain 60 percent of the potential population level for all primary cavity excavators.

Habitat improvement projects for wildlife and fish are encouraged, provided they meet the foreground partial retention visual quality objective and the goal for the roaded natural setting.

RIPARIAN

For all Class I, II, and III streams and associated riparian areas within the management area, anadromous fish habitat will be managed to produce at least 90 percent of potential smolt habitat capability index (SCHI) by meeting standards (for fish) shown in Management Area C5.

RANGE

Livestock grazing is permitted; all range management strategies are available consistent with visual and recreation goals. Openings created by management of timber stands are available for management as transitory range.

The full range of development and maintenance of structural and nonstructural improvements is permitted while consistent with meeting visual goals. Seeding of forage species is permitted where tree establishment and growth are not restricted.

Permit increased domestic livestock and/or big game grazing to capture increases in transitory range. Utilize available forage at 80 percent or less.

TIMBER

Timber will be managed on a scheduled basis. All timber management practices and intensities shall be permitted consistent with achieving the primary visual quality goals.

Uneven-aged management is the preferred and most commonly used silvicultural system in the foreground; even-aged management techniques may also be used to meet objectives. Both systems are available in the middle and background zones.

Scheduling of treatments and timber harvest, logging systems, debris disposal, reforestation, and stand improvement practices will be designed and implemented to accomplish visual management objectives.

1. Manage the area for an overall mix of age classes of trees. The following mix of age class types should be achieved as the overall long-term objective of the area:

	Foreground Age Classes
Percent	Partial Retention
20	0-36
20	37-72
20	73-1 08
20	109-1 45
20	146-1 81

2. Emphasis will be on viewing large diameter trees and multi-age stands; both vertical and horizontal diversity will also be emphasized. The large tree component should be dispersed as necessary to give the overall character of large trees to the area.
3. The standards in Tables 4-28 and 4-29 will be used in achieving desired visual conditions.
4. A created opening is defined as an opening developed through management activities where the tree heights are less than 20 feet. Created openings will be shaped and blended with the natural terrain. Created openings will normally be limited as shown in the following tables and will be subordinate to the characteristic landscape.
5. Exceptions to created opening size and maximum percentage in openings at one time are permitted under catastrophic occurrences such as blow down, insect and disease attacks, wildfire, and others. Landscapes will be rehabilitated under these conditions.
6. Thinnings and plantings in the area will leave irregularly spaced trees. Mixed conifer stand regeneration will be planned for at least two species with no more than 65 percent in a single species.

Even-aged Management Visual Resource Standards

TABLE 4-28. EVEN-AGED MANAGEMENT VISUAL RESOURCE STANDARDS

Umatilla National Forest

Standards		Ponderosa Pine Working Group North & South Associated	Lodgepole Pine Working Group
Factor		Partial Retention	Partial Retention
Maximum % Harvest per Decade	Foreground Middleground[2]	5 10	5 10
Maximum % of Area in Created Openings at One Time [1]	Foreground Middleground[2]	10 20	10 20
Target Tree Diameter (inches DBH)		24	12
Number of Target Trees at Final Removal (Per Ac.)		3-5	10
Maximum Unit Size (Ac.) [1]	Foreground >500 ft. [3] Middleground[2]	5 10	5 10

1 Applies to regeneration harvests. Not applicable to intermediate or overstory removal harvests except where an opening is created.
2 Modification will be the visual standard for middleground; where partial retention is assigned to the middleground, the above standards apply.
3 Applies to key roads, trails, and use areas.

Uneven-aged Visual Management Resource Standards

TABLE 4-29. UNEVEN-AGED MANAGEMENT VISUAL RESOURCE STANDARDS

Umatilla National Forest

		Ponderosa Pine Working Group North & South Associated	Lodgepole Pine Working Group
Factor		Partial Retention	Partial Retention
Maximum % of Area in Created Openings at One Time [1]	Foreground	10	10
	Middleground[2]	20	20
Target Stand Diameter (inches DBH)		20	12
Maximum Unit Size (Ac.) [1]	Immediate foreground	1.5	2
	Foreground >500 ft. [3]	2	2
	Middleground[2]	2	2

1 Applies to group selection harvests. Not applicable to single tree or intermediate harvests except where an opening is created.
2 Modification will be the visual standard for middleground; where partial retention is assigned to the middleground, the above standards apply.
3 Applies to key roads, trails, and use areas.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet the visual quality objectives within the intent of the Forest-wide Standards and Guidelines for minerals and energy.

Utilize existing access routes to developments where possible.

Provide for reclamation upon completion of all projects within the area.

LANDS

Special use sites will be permitted in these areas, provided they can be designed and located to blend with the characteristic landscape.

Existing special use sites will be reviewed for meeting visual management requirements at established permit renewal dates. If a special use fails to meet standards. it will be brought into compliance.

Land Classification II (acquisition) will generally apply to meet special public needs.

Lands may be exchanged in cases of demonstrated positive net public benefit.

Meet Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

New roads shall be permitted and will be designed and constructed to blend with the natural characteristics of the landscape. Cut and fill slopes will be revegetated with species less palatable to livestock to minimize visual effects. Maintenance of roads shall be permitted.

Road maintenance activities will be conducted to minimize adverse visual impact by the retention of the maximum amount of existing vegetation, by encouraging the most rapid revegetation of disturbed areas outside of the surfaced roadway, and by reducing earthwork to the minimum.

Road closures in the foreground, such as gates and berms, should be designed and constructed to blend with the natural characteristics of the landscape. Gravel pits, borrow areas, etc., will meet the partial retention visual quality objective.

Signs needed for traffic regulation and information should be designed and located to meet aesthetic objectives and be in accord with safety regulations.

FIRE

For moderate to high intensity wildfires, the appropriate suppression response will emphasize control and/or contain strategies.

Wildfire suppression efforts should utilize low impact methods. Use of heavy equipment may require restoration efforts to mitigate visual impacts.

FUELS

Prescribed low intensity fire with minimal scorch is acceptable. A 1 year or less recovery period is most desirable, if conditions are suitable.

Acceptable visual quality, including fuel loadings, are depicted by the following photos from the Photo Series for Quantifying Forest Residues (Technical Report PNW-52) (USDA Forest Service 1976b):

	Ponderosa Pine	Lodgepole Pine	Associated Species
Natural Fuels	1 -PP4	1 -LP3	3-PP and Assoc.3 1-PP and Assoc.4
Thinning Fuels	(No acceptable photos)	(No acceptable photos)	I -DF-I -TH
Clearcut	2-LP-3-PC	2-LP-3-PC	1-DF-4-CC
Selection Harvest	I -PP4-PC	2-LP-3-PC	7-PP and Assoc. 4-PC

Fuel treatments should be planned, timed, and implemented to avoid being highly visible and to minimize adverse visual effects. Handpiling, hauling material away, utilizing It for fuelwood, etc., are methods preferable to machine piling and crushing. Treatments should be completed prior to the next high human-use period.

PESTS

Use integrated pest management (IPM) principles to manage insect and diseases in meeting management area objectives. All treatment strategies may be utilized. Emphasize strategies that improve visual quality, aesthetics, and safety. Treatment of bark beetles and root rots is emphasized.

Suppress pests when outbreaks threaten users and/or managed resources. Use suppression methods that minimize site disturbance.

A6 DEVELOPED RECREATION

GOAL

PROVIDE RECREATION OPPORTUNITIES THAT RE DEPENDENT ON THE DEVELOPMENT OF STRUCTURAL FACILITIES FOR USER CONVENIENCES WHERE INTERACTION BETWEEN USERS AND EVIDENCE OF OTHERS IS PREVALENT.

DESCRIPTION

Developed recreation opportunities occur on sites designated for development and concentrated use, e.g., campgrounds, picnic grounds, boating sites, ski areas, recreation residences, and organization camps. Only sites classified as development scale 3 or higher are considered in this strategy.

The following recreation sites are included in the management area:

Pomeroy Sites

Teal Spring
Wickiup
Tucannon
Big Springs
Godman
Alder Thicket
Rose Spring
Little Turkey
Slick Ear
Stentz Spring

Heppner Sites

Bull Prairie
Penland Lake
Fairview

Walla Walla Sites

Beaver Marsh
Buck Creek
Umatilla Forks
Jubilee Lake
Woodland
Woodward
Monet
Ski Bluewood
Spout Springs
Tollgate
Target Meadows

North Fork John Day Sites

Lane Creek
Bear Wallow Creek
Frazier
Pearson
Tollbridge
No. Fk. John Day

DESIRED FUTURE CONDITION

Readily accessible, appropriately designed recreation facilities shall provide for concentrated use by people seeking a variety and convenience of developed recreation opportunities and experiences. Recreationists will enjoy outdoor opportunities where social interactions are moderate to high. Controls and regulations will be noticeable to obvious.

Recreation facilities such as roads, buildings, ski lifts, loading/unloading ramps, boat docks, bulletin boards, picnic tables, campsites, and others shall be evident in moderate to heavily modified sites. However, facility design and construction will blend with the color, shapes, and lines of the surrounding natural environment. Created openings or tree removal shall exist to accommodate facilities, provide scenic views, or meet vegetative management goals within, and surrounding, the developed site. Partnerships with members of the hospitality industry will be strong.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Sites

1. Provide and manage developed recreation primarily to Roaded Natural settings with some Rural settings (ROS Users Guide, USDA Forest Service, n.d.).
2. Provide the opportunity for mostly road oriented or related activities.
3. Facilities will be provided mostly at recreation development scale 3 (Roaded Natural) with some development scale 4 (Rural). Development scale 5 (Urban) sites on National Forest lands will be provided by private or public developers.
4. Developed sites will be administered and maintained to provide visitor safety and sanitation, protect facility and site resources, and provide for visitor recreation needs and convenience.
5. Cleaning, policing, and minor maintenance will be performed regularly and consistently at each fee site to give the overall appearance of being clean and sanitary, free of litter, neat in appearance, and well kept. Other sites will be maintained to assure basic health and safety, appropriate resource effects, and protection of investments.
6. Developed recreation sites are to be appropriate to the forest environment and will be planned, constructed, and maintained to provide facilities only for forest recreation such as fishing, camping, picnicking, skiing, swimming, hiking, and riding.
7. The Forest will consider expansion of its existing high use sites before considering the development of any new sites; long-term desirability of the site for continued use, site suitability, and potential alternative sites will be evaluated prior to expansion.
8. The Jubilee Lake, Bull Prairie, Olive Lake, North Fork John Day River, and Tucannon sites will be modified to make them usable by the disabled. Where the need exists, facilities in other existing recreation sites will be modified to make them usable by the handicapped. Future developments will be planned and designed to make other facilities accessible to the handicapped.
9. The developed site may encompass an area larger than just the area on which developed facilities are located. These areas will be managed as a Roaded Natural setting in which trails may be developed to provide dispersed recreation opportunities. These areas will also provide a transition between the developed site and resource development areas.
10. All recreation sites at development scale 3 and above will be evaluated, and fees will be charged for the use of facilities when it is administratively and economically feasible to administer the fee system.
11. Periodically reevaluate sites to determine the need to eliminate or reduce the development scale of sites that are not cost-effective, not providing the appropriate resource setting, or not needed to meet recreation management objectives.

Special Uses

1. Where recreation services and facilities are determined to be needed, feasible, and appropriate in the forest environment, development, and operation using partnership agreements will be encouraged.
2. Developed sites may be operated on a charge basis by a concessionaire when it would result in better service to the public.
3. The Buck Creek Organization Camp will be kept for public use. Before or at the time of expiration or renewal of the authorization, a 'needs' assessment will be made in consultation with the operator to consider whether the activities, uses, and developments should be continued, expanded, or otherwise changed in order to best serve the public

interest. An operation and maintenance plan will be prepared to specify actions needed to meet health and safety standards, maintenance needs, upgrading and additional requirements, or other structural and operational modifications.

4. As termination dates for recreation residence authorization approach, an analysis of recreation residence continuance will be made for each tract. The uses will be allowed to continue unless a positive higher public use is determined.

Off-highway Vehicle (OHV)

OHV use will be restricted to the roads and trails within the developed sites and managed to minimize conflicts between users.

VISUAL

The Visual Quality Objective is Retention or Partial Retention, depending on the sensitivity level of the site.

Development and maintenance of sites will be accomplished within the standards established for each site. In the cases where this cannot be accomplished due to the size of a structure or facility, then blending into the natural setting by minimizing contrast with the natural form, line, color, and texture will suffice.

A vegetation management plan will be developed and implemented for each site at development scale 3 and above.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Wildlife habitats and habitat improvements may be developed, maintained, or enhanced to increase wildlife viewing opportunities, provided habitat and improvements don't conflict with the safety of developed site users, and are consistent with the management of the site.

FISH

Fish habitat improvements are encouraged.

RANGE

Domestic livestock grazing will ordinarily be excluded from developed sites. It will be allowed on certain sites at specified periods (i.e., sheep grazing on ski area slopes in summer) on a controlled basis to reduce the fire hazard, and to maintain or improve the vegetation.

Developed sites that have facilities for recreation pack-and-saddle stock will not provide pastures.

TIMBER

Trees will be managed on a nonscheduled basis to meet recreation objectives and to reduce the risk of public injury from hazardous trees or vegetation.

Logging and slash disposal practices will be selected that least impact the site.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Subject to analysis of public values, including mineral values, recreation sites may be recommended for withdrawal from mineral entry. Development of energy resource leases within recreation sites will be restricted.

LANDS

Developed sites will be retained in Federal ownership. Other Forest-wide Standards and Guidelines apply.

TRANSPORTATION

A wide spectrum of transportation facilities (ranging from high-standard, double-lane paved roads to low-standard, single-lane dirt roads and trails) to developed sites can be constructed, utilized, operated, and maintained.

Access roads should be managed to encourage passenger car traffic, normally at Traffic Service Level A.

Road maintenance activities will be conducted to minimize adverse visual impact by retaining the maximum amount of existing vegetation, encouraging the most rapid revegetation of disturbed areas outside of the surfaced roadway, and reducing earthwork to the minimum.

FIRE

For all wildfires, the appropriate suppression response is control.

Emphasis will be on protecting life and facilities.

Low impact wildfire suppression methods should be used except where high intensity fire situations may exist.

Fire prevention activities should be emphasized at developed sites. Public contract and a signing program are encouraged.

FUELS

Slash resulting from hazard tree removal will be made available for firewood to campground users.

PESTS

Utilize integrated pest management (IPM) principles and strategies to prevent or control unacceptable vegetative losses due to insects and diseases. Emphasize prevention and early detection measures. Prevent, control, or suppress pest outbreaks with a minimum of disturbance to protect users and/or developments. Favor biological and silvicultural treatments where possible.

Remove hazardous trees as identified in the Vegetative Management Plan. Bark beetles and root disease occurrences which impact safety will be aggressively treated. Control of defoliators is also emphasized to meet visual objectives.

A7 WILD AND SCENIC RIVERS

GOAL

MANAGE CLASSIFIED WILD AND SCENIC RIVER SEGMENTS TO APPROPRIATE STANDARDS AS WILD, SCENIC, OR RECREATIONAL RIVER AREAS, AS DEFINED BY THE WILD AND SCENIC RIVERS ACT, PUBLIC LAW 90-542, OCTOBER 2, 1968 (U.S. LAWS, STATUTES, ETC. 1968), AND EXPANDED BY THE OMNIBUS OREGON WILD AND SCENIC RIVERS ACT OF 1988 (PUBLIC LAWS 100-557).

DESCRIPTION

The following river segments were designated by the Omnibus Oregon Wild and Scenic Rivers Act of 1988 and are managed under this management area:

1. Grande Ronde River: Approximately 17.4 river miles and a one-quarter mile corridor[1] on each side. Total area amounts to 5,200 acres of National Forest System lands, 485 acres in private ownership, and 25 acres of BLM.

   Entire Segment Designation - Wild

2. North Fork John Day River: Approximately 38.7 river miles and a one-quarter mile corridor[1] on each side. Total area amounts to 10,514 acres of National Forest System lands, 712 acres in private ownership and 77 acres of state lands.

Segment 1	Trail Creek to Big Creek. Designation – Wild
Segment 2	Big Creek to Texas Bar Creek. Designation – Scenic
Segment 3	Texas Bar Creek to Umatilla National Forest Boundary. Designation - Recreational

3. Wenaha River: Approximately 18.7 river miles and a one-quarter mile corridor[1] on each side. Total area amounts to 5,484 acres of National Forest System lands and 158 acres in private ownership.

Entire Segment	South Fork-North Fork junction to the Forest Boundary, Designation - Wild

DESIRED FUTURE CONDITION

Each component of the Wild and Scenic River System will be administered to protect and enhance the values for which the rivers were classified and to provide public use and enjoyment of those values. Emphasis will be given to protecting the outstandingly remarkable values for which the river was designated. Anadromous fisheries, wildlife, aesthetic, scenic, historic, archeologic, scientific and other features will be protected. Approved management plans will establish detailed corridor boundary and specify management activities, land acquisition, easements, and other information necessary to protect each segment of the rivers.

WILD RIVERS

Wild rivers or sections of rivers will be free of impoundments and continue to be accessible by trail and/or water, and inaccessible by road. The viewing area and shorelines will be essentially natural appearing. Signs of human activity, including structure or evidence of resource use, will be kept to a minimum or will be inconspicuous. Sectors within the wilderness will be managed as Wilderness. The opportunity to interact with a natural environment, with challenges and minimal sights and sounds of other people will be available. There will generally be no use of

[1] NOTE: The one-quarter mile corridor on each side of the river is an interim boundary. The final boundary will be established upon approval of the management plan for each river.

motorized vehicles. Where a need to regulate use exists, indirect methods will predominate. Outfitters will provide services to people to help then enjoy and interpret the environment.

SCENIC RIVERS

Scenic rivers or sections of rivers will be free of impoundments; shorelines and viewing areas will be largely natural appearing. Some recreation structures, evidence of timber harvest roads, and other evidence of human activity may be present, but will not detract from the near natural appearance and scenic qualities of the immediate environment. A variety of water related recreation opportunities will be available. The rivers will be accessed in places by road. Motorized use on a few trails within the corridor will occur. There will be very few restrictions on recreation use. Frequency of contact with others will be moderate. Ongoing activities such as timber harvest, fish habitat improvement, mining, and others may be permitted if scenic and recreation values are met or enhanced and adverse effects avoided.

RECREATIONAL RIVERS

The recreational sections will be free of impoundments and be readily accessible from roads. Some major public use facilities such as developed campgrounds, administrative buildings, bridges, private residences, and commercial businesses will remain within the corridor. Considerable development and timber harvest may have occurred and be evident near the river, but the area shall be managed to protect recreation and scenic values. A range of recreational opportunities will be available in settings in which interactions are relatively high and visitors are likely to share their recreational experience with other individuals or groups.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

GENERAL

For each designated Wild and Scenic River, development and management plans will be prepared and completed within 3 full fiscal years of designation.

The formal boundary of the designated rivers will be established concurrently with the development and management plans. The management area boundary will conform to the established Wild and Scenic River boundary.

Upon completion and approval of Wild and Scenic Rivers management plans, the Forest Plan will be amended to incorporate them.

INTERIM MANAGEMENT OF STUDY RIVERS

Management direction for each designated river corridors identified in the Omnibus Oregon Wild and Scenic Rivers Act and other rivers identified for study will provide protection in the following ways

1. To the extent the Forest Service is authorized under law to control stream impoundments and diversions, the free flowing characteristics of the identified river cannot be modified.
2. Outstandingly remarkable values of the identified river area must be protected and, to the extent practicable, enhanced.
3. Management and development of the identified river and its corridor cannot be modified to the degree that classification (or eligibility) would be affected (i.e., classification cannot be changed from wild to scenic or scenic to recreational).

Protection may be modified or discontinued for rivers identified in the forest planning process for study in the following cases:

1. For the entire river or segment(s) of the river that are determined to be ineligible for the Wild and Scenic Rivers System.

2. For the entire river, if determined to be unsuitable for the Wild and Scenic Rivers System, following the appropriate review process.
3. For unsuitable segment(s) of a river recommended for Wild and Scenic River designation after the Record of Decision is signed by the Secretary of Agriculture.
4. Following Congressional action for suitable segments of the river that are not included in the Wild and Scenic Rivers System.

WILDERNESS

River sectors located within wilderness will be managed under wilderness or Wild and Scenic River principles and standards and guidelines, whichever is most restrictive.

RECREATION

River-oriented recreation opportunities may be provided, consistent with maintaining and protecting Wild and Scenic River values.

River area recreation will be managed according to the following interim standards:

Wild Classification:

1. Manage areas for Primitive, Semi-primitive Nonmotorized (SPNM).
2. Access will be mostly for floating, walk-in, or horseback opportunities along wild segments.
3. No motorized use is permitted in the Grande Ronde, Wenaha, or the wild segment of the North Fork John Day rivers. Motorized watercraft will not be allowed on wild sections of the rivers.
4. Only rustic recreation facilities and settings may be permitted (development scale 1 or 2).

Scenic Classification:

1. Manage areas for Semi-primitive Nonmotorized (SPNM) to Semi-primitive Motorized (SPM) settings.
2. A mix of access types will be available in scenic section including open roads, roads closed to motorized use, and walk-in or horseback opportunities in a few remote areas.
3. Motorized vehicle, including off-highway vehicle, use may be permitted.
4. Recreation developments are permitted but will not exceed development scale 3.

Recreation Classification:

I. Manage areas for Roaded to Rural settings.
2. Road access will be provided to most areas along the recreation sectors.
3. Maintain accessibility for motorized vehicles; OHV use may be permitted on designated trails.
4. All recreation development scales may be permitted.

Trail and related facility construction, reconstruction, and maintenance are permitted in all classes.

Outfitter and guide services may be permitted under special use permit for all classifications.

VISUAL

Manage visual resources to meet standards for each classification as follows:

River Classification	Visual Quality Objective
Wild	Preservation is the normal
Scenic	Retention may be used for some limited recreation facilities Retention foreground
Recreation	Partial Retention middleground Partial Retention foreground Modification middleground

(See Glossary for description of terms.)

Activities within corridors may only repeat form, line, color, and texture which are frequently found in the characteristic landscape. Changes should be of such size, amount, intensity, direction, and pattern that they are not visually evident in the foreground distance zone and are visually subordinate to the characteristic landscape in the middleground distance zone.

Principles of visual management will be applied so that positive attributes of a managed forest can be enjoyed while negative visual aspects of activities will be minimized.

Landscapes containing negative visual elements will be rehabilitated. Landscapes may be enhanced by opening views to distant peaks, unique rock forms, unusual vegetation, or other features of interest.

River corridor viewshed management direction will be established as part of the river management plans. In the interim, direction will be guided by Forest visual quality mapping, associated visual quality standards, and direction in these standards and guidelines.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE AND FISH

Wildlife and fish habitat improvement, development, and maintenance projects are permitted, provided Wild and Scenic Rivers objectives are met.

Dead and down tree habitat will be managed to provide or maintain 80 percent of the potential population level for all primary cavity excavators.

RANGE

The existing domestic livestock grazing level and management intensity (prior to designation of rivers) is permitted consistent with recreation, visual, and other management objectives.

Development and maintenance of range improvements are permitted. Range utilization standards, management practices, and improvements will be designed and managed to meet wild and scenic and riparian objectives.

TIMBER

In the Wild sections, timber will be managed on a nonscheduled basis to meet Wild and Scenic River goals. Cutting of trees is only permitted where needed to meet primitive recreation, environmental or other Wild and Scenic River objectives.

In the Scenic and Recreation sections, timber harvest is permitted on a scheduled basis. Standard silvicultural practices and intensities consistent with meeting Scenic and Recreation river objectives are permitted.

Uneven-aged management is the preferred and most commonly used silvicultural system; even-aged management techniques may also be used to meet objectives. Scheduling of treatments, timber harvest, logging systems, debris disposal, reforestation, and stand improvement practices will be designed and implemented to accomplish river management objectives.

1. Where timber management is scheduled, manage the river corridors for an overall mix of size classes of trees. The following mix of age classes should be achieved as the overall long-term objective of the viewshed.

	Foreground Age Classes	
Percent	Retention	Partial Retention
20	0-50	0-36
20	51 -1 00	73-1 08
20	101-150	37-72
20	151-200	109-1 45
20	201 -250	146-181

2. Emphasis will be on viewing large diameter trees and multi-age stands, both vertical and horizontal diversity are also to be emphasized. The large tree component should be as dispersed as necessary to give the overall character of large trees to the area. The standards in Tables 4-30 and 4-31 will be used in achieving desired visual characteristics.
3. A created opening is defined as an opening developed through management activities where tree heights are less than 20 feet. Created openings will be shaped and blended with the natural terrain.
4. Exceptions to created opening size and maximum percentage in openings at one time are permitted under catastrophic circumstances such as blow down, insect and disease attacks, wildfire, and others. Landscapes will be rehabilitated under these conditions.
5. Thinnings and plantings in the foreground will leave irregularly spaced trees. Mixed conifer stand regeneration in foregrounds and middle grounds will be planned for at least two species with no more than 65 percent in a single species.

Even-aged Management Visual Resource Standards

TABLE 4-30. EVEN-AGED MANAGEMENT VISUAL RESOURCE STANDARDS

Standards		Ponderosa Pine Working Group North & South Associated		Lodgepole Pine Working Group
Factor		Retention	Part. Retention	Partial Retention
Maximum % Harvest per Decade	Foreground Middleground	4 9	5 10	5 10
Maximum % of Area in Created Openings at One Time [1]	Foreground Middleground	8 15	10 20	10 20
Target Tree Diameter (inches DBH)		30	24	12
Number of Target Trees at Final Removal (Per Ac.)		3-5	3-5	10
Maximum Unit Size (Ac.) [1]	Foreground >500 ft. Middleground	3 5	5 10	5 10

1 Applies to regeneration harvests. Not applicable to intermediate or overstory removal harvests except where an opening is created.

Uneven-aged Management Visual Resource Standards

TABLE 4-31. UNEVEN-AGED MANAGEMENT VISUAL RESOURCE STANDARDS

Standards		Ponderosa Pine Working Group North & South Associated		Lodgepole Pine Working Group
Factor		Retention	Part. Retention	Partial Retention
Maximum % of Area in Created Openings at One Time [1]	Foreground	8	10	10
	Middleground	15	20	20
Target Stand Diameter (inches DBH)		24	20	12
Maximum Unit Size (Ac.) [1]	Immediate foreground	1	1.5	2
	Foreground >500 ft.	2	2	2
	Middleground	2	2	2

1 Applies to group selection harvests. Not applicable to single tree or intermediate harvests except where an opening is created.

Fuelwood cutting may be permitted but will be limited to dead or down material.

WATER AND SOIL

All dams, diversions, levees, and hydroelectric power facilities are prohibited within the management area.

MINERALS AND ENERGY

Subject to valid existing rights, minerals that constitute the bed or bank or are situated within one-quarter mile of the bank of any river designated a Wild river are withdrawn from appropriation. On other river sections, through analysis and consideration of all public values, including minerals values, rivers may be recommended for withdrawal from mineral entry where appropriate and necessary.

Protect river and corridor from common materials mining. Common mineral materials will not be removed pending completion of the river management plans.

LANDS AND LAND USES

Where opportunities exist, private land within a formally designated Wild and Scenic River will be acquired. All Federal land will be retained in public ownership.

Wild sections are 'Exclusive Areas' for development of new utilities (transmission lines, gas lines, etc.). Scenic and Recreation areas are 'Avoidance Areas.' Where no reasonable alternative exists, additional or new facilities should be restricted to existing right-of-way.

Meet Lands and Land Uses Forest-wide Standards and Guidelines.

TRANSPORTATION

Existing roads and trails may be operated and maintained in keeping with overall management and river segment objectives. Reconstruction of roads and trails may be permitted upon approval of a project environmental assessment.

New roads and trails may be permitted, consistent with maintaining and protecting Wild and Scenic River values.

FACILITIES

Maintain existing facilities that support Wild and Scenic River management objectives. Fences, gauging stations, and other management facilities may be permitted if there is no major effect

on the character of the area. Addition of new facilities, including recreation facilities, may be permitted, consistent with maintaining and protecting Wild and Scenic River values.

FIRE

For moderate to high intensity wildfires, the appropriate suppression response will emphasize a control strategy. Emphasis should be on protecting life and facilities.

Wildfire suppression efforts should utilize low impact methods, as use of heavy equipment may require restoration efforts to mitigate visual impacts.

FUELS

Prescribed burning is permitted. Low intensity prescribed fires, producing minimal scorch and rapid recovery, are the most desirable.

PESTS

Use integrated pest management (IPM) principles and methods. Prescribed fire may be used to help reduce stocking and conditions favorable for bark beetle and other insects and diseases.

Suppress pests when outbreaks threaten users and/or managed resources. Use suppression methods that minimize site disturbance.

A8 SCENIC AREA

GOAL

PROTECT OR ENHANCE THE UNIQUE NATURAL CHARACTERISTICS OF DESCRIPTION LANDSCAPES NOTED FOR THEIR SCENIC BEAUTY.

DESCRIPTION

Scenic areas are areas of natural variety where unique physical characteristics give viewing pleasure and dispersed recreation opportunities to the forest user. The strategy applies to all or part of the current scenic areas and other identified selected forest areas with high scenic values.

The following defined areas are included in the management area:

- The Grande Ronde Roadless Area outside of the Wild River corridor (Walla Walla); and
- the Greenhorn Mountain Roadless Area plus Lost Lake, Olive Lake, and north of the Greenhorn Townsite and the Jumpoff Joe Roadless Area.

DESIRED FUTURE CONDITION

Areas of unique natural beauty and high scenic quality will remain mostly unmodified. Opportunities to experience the scenic values, feelings of vastness and isolation from sights and sounds of human activity, sense of independence, closeness to nature, and self-reliance shall be maintained and enhanced. Around the edges or through parts of the area, existing roads are to be retained so that motorized users will have an opportunity to experience the unique beauty and sense of vastness. Trail systems featuring nonmotorized recreation will be fully developed to encourage and disperse use. In a few cases, vegetative manipulation shall be used to enhance the scenic and other resources in the area.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Semi-primitive Nonmotorized settings (ROS) will be provided within the area, except for intrusions of Semi-primitive Motorized or Roaded Natural settings through edges or parts of the area or to vantage points. Areas will be managed to maintain opportunities for visitors to get away and achieve a feeling of remoteness from sights and sounds of others.

Recreation site modification and facility development should be level 2 or less (see Glossary), with facilities generally being limited to meeting safety and sanitary needs. A minimum of onsite controls and restrictions should be utilized to protect resources and promote safe use of the area.

Emphasize interpretive services to enhance understanding and appreciation of the area's special features In order to do this, use self-discovery, augmented by books, guides, and maps, and a few minimal onsite facilities.

Nonmotorized use will be favored. Access will be mostly for remote walk-in or horseback activities in an area generally absent of roads; designated existing roads will provide motorized opportunities. Snowmobile use may be permitted on designated routes or areas.

Trail and associated facility construction, reconstruction, and maintenance will be permitted. The trail system will be the primary travelway and designed to take advantage of scenic opportunities, encourage and disperse use, provide varying (mostly easy, but some challenging) opportunities, and meet area objectives. Motorized equipment may be permitted in trail development and maintenance. Rustic road and trail signs within the area may be provided with directions, destination distances, feature names, and interpretation.

Based on limits of acceptable change criteria, if needed, implement limits on group size, number of animals, or other measures to meet social encounter criteria for semi-primitive recreation.

VISUAL

Retention is the visual quality objective (VQO) for the area including intrusions of Semi-primitive Motorized (SPM) and Roaded Natural (RN) areas; activities will meet retention VQO standards. The short-term goal of rehabilitation is used to upgrade landscapes as necessary.

Landscapes may be enhanced by opening views to distant scenery, unique landforms, unusual vegetation, or other features of interest.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE AND FISH

Habitat improvement and maintenance projects for wildlife and fish are acceptable, provided they meet the Retention visual quality objective and goals for semi-primitive settings.

Wildlife habitat improvement projects are permitted in the Grande Ronde Scenic Area including Elbow, Bear, and Alder creeks and other drainages.

Dead and down tree habitat will be managed to provide or maintain 80 percent of the potential population level for all primary cavity excavators.

Identified old growth units within the management area will be retained as part of the dedicated old growth system.

RANGE

Light grazing is permitted with a B range management strategy. The emphasis for forage allocation is to wildlife.

Where range improvements are needed, design and implement improvements to be compatible with scenic area objectives.

TIMBER

Timber will be managed on a nonscheduled basis. Trees will only be cut to meet or enhance scenic area objectives (i.e., catastrophic occurrences, trails, vistas, rehabilitation of discordant views, etc.).

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines. Operating plans are to include reasonable, operationally feasible requirements to meet scenic area objectives.

Provide access to valid mining claims and private lands.

Access proposals will be analyzed for stage of operations, adequacy of existing routes, and feasibility and reasonableness of alternative routes, with an emphasis on use of existing routes. Roads to be constructed will be done to minimum standard needed for the proposed use, will meet scenic area objectives, and will be obliterated to the extent feasible following completion of activities.

LANDS

National Forest System lands within a designated scenic area will be maintained in public ownership.

Where the opportunity exists, private land within a designated scenic area will be acquired.

The area will be managed as an “Avoidance Area” for utility and transportation corridors.

Other lands and land uses Forest-wide Standards and Guidelines apply.

TRANSPORTATION

Existing roads that contribute to the viewing experience, or that serve as access to valid mining claims, will be retained and maintained. Parking areas within or adjacent to the area will be located and designed to prevent noise and visual disturbances to users.

New roads will not be constructed or roads reconstructed (see Minerals and Energy for exceptions).

Close all roads except those needed as access to private lands, valid mining claims, or which are designated open to meet Scenic area and public use objectives.

FIRE

The appropriate wildfire suppression response will emphasize a control strategy for moderate to high intensity fires. Under appropriate fire prediction conditions, low intensity wildfires (0-2 foot flame length) may be permitted to play a natural role within the setting when resulting in a 1 to 2-year vegetative recovery.

Low impact wildfire suppression methods should be used; rehabilitation may be used to mitigate wildfire impacts in conflict with visual quality objectives.

FUELS

Prescribed fire may be used as a tool to manage ecosystems that are dependent on fire as part of their natural succession, or to enhance thrift and vigor of native vegetation.

Prescribed low intensity fire with a 1 to 2-year recovery period is acceptable. A less than 1 year recovery is most desirable if conditions are suitable.

PESTS

Use integrated pest management (IPM) principles to manage insects and diseases in meeting scenic area objectives. Suppress pests when outbreaks threaten scenic area objectives or resources in adjacent areas. Favor biological methods when available. Control of defoliators may be accomplished by spraying following approval of an environmental analysis. Use of salvage harvest is limited to catastrophic events.

A9 SPECIAL INTEREST AREA

GOAL

MANAGE, PRESERVE, AND INTERPRET AREAS OF SIGNIFICANT CULTURAL, HISTORICAL, GEOLOGICAL, BOTANICAL, OR OTHER SPECIAL CHARACTERISTICS FOR EDUCATIONAL, SCIENTIFIC, AND PUBLIC ENJOYMENT PURPOSES.

DESCRIPTION

Several unique areas (generally small in size) have been identified for their special features. The areas may be classified under 36 CFR 294.9, and managed to protect the special features in their natural condition, and to foster public use and enjoyment of those features. Special features which fall within this description are:

Cultural-Historical Areas - Lands possessing historical sites, buildings, or objects of National Register significance related to a theme group, or those having special cultural association to the Native American Community.

- Greenhorn (NFJD)
- Olive Lake - Fremont Powerhouse (NFJD)
- Target Meadows (Including Burnt Cabin Overlook)(Walla Walla)

Geological Areas - Lands having unique geological features or significance.

- Big Sink (Walla Walla)

Botanical Areas - Lands containing specimens, groups of plant colonies, or plant communities which are significant because of form, color occurrence, habitat location, life history, ecology, variety, or other features.

- Charley Creek (Pomeroy)
- Ruckel Junction (Walla Walla)
- Sheep Creek Falls (Pomeroy)
- Shimmiehorn Canyon (Walla Walla)
- Teal Spring (Pomeroy)
- Woodward Campground (Walla Walla)

Viewpoints - Sites affording opportunities for viewing forest activities and landscape settings.

- Bald Mountain (Overlooking Lookingglass Canyon)(Walla Walla)
- Big Creek Meadow (Overlooking the North Fork of the John Day River)(NFJD)
- Big Hole (Overlooking the Wenaha River)(Walla Walla)
- Bridge Creek (Overlooking Bridge Creek Wildlife Area and the confluence of Camas Creek with the North Fork of the John Day River)(NFJD)
- Gray Rock (Overlooking Mt. Emily and Elgin)(Walla Walla)
- Lookout Mountain (Overlooking Alder Creek and Bear Creek drainages of the Grande Ronde River)(Walla Walla)
- Potamus Point (Overlooking Potamus Creek)(NFJD)
- Table Rock (Overlooking Mill Creek and the Walla Walla River valley) (Walla Walla)

- Umatilla Breaks (Overlooking the North Fork Umatilla Wilderness)(Walla Walla)

Other Areas—Includes lands containing significant flora and fauna or fossils for zoological or paleontological interpretations.

DESIRED FUTURE CONDITION

The special attributes for which the areas are recognized shall provide a variety of unique recreation opportunities for public use and enjoyment. The areas and features will remain in a substantially undisturbed condition. Fences, signs, viewpoints, and other facilities may exist if needed to protect the features or to provide for public use and enjoyment. Evidence of management activities will be subordinate to these special points of interest. Various methods of interpretive services are to he provided to enhance understanding and appreciation of them.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

General

Management plans may be developed for individual areas and may supplement direction provided for the management area. Any such plans will be amended to the Forest Plan.

RECREATION

Manage the special interest features, sites, and areas to provide Semi-primitive or Roaded Natural ROS Settings.

Access will relate to features being managed: activities will be mostly road oriented with some access through walk-in or horseback opportunities in a few areas.

Visitor use and activities will be managed to prevent degradation and enhance features of the Special Interest Area. Onsite controls and restrictions may be used to protect resources and promote use and enjoyment of the area.

Interpretive services will be emphasized.

Site development and facilities will be designed and located to protect or enhance the special features. Facilities may be provided for visitor use, environmental interpretation, safety of visitors, and to protect or enhance resource values. Facilities may be included inside the area where not in conflict with the overall purpose of the special interest area.

Off-highway vehicle (OHV) use will be restricted to designated routes.

Trails may be developed and maintained to meet the objective of the Special Interest classification, especially for onsite interpretation.

VISUAL

Manage for Retention visual quality objective.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Wildlife habitat improvement and maintenance are permitted within the objective of the area. Emphasis IS on habitat improvement for viewing wildlife.

FISH

Meet Forest-wide Standards and Guidelines.

RANGE

Domestic livestock may be permitted to utilize existing forage without changing overall natural Characteristics or conflicting with the purpose of the area. Structural improvement,

development, and maintenance is permitted where livestock use is allowed; structural improvements may be used to exclude domestic livestock.

TIMBER

Timber harvest will not be scheduled or programmed. Tree cutting and vegetation management may be permitted in order to maintain or enhance the special features of the interest area, to provide for public safety (in areas of concentrated use), to construct or maintain improvements, or in a catastrophic situation. When tree cutting is employed, systems will be designed to protect the resource and meet SIA goals. Firewood cutting shall not be allowed.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS

Protection of SIA areas will be required during mineral exploration and development activities.

An area may be recommended from withdrawal for mineral entry in situations where mitigation measures do not adequately protect management area values, and all values (including minerals) have been evaluated.

Removal of common mineral material within the management area will not be permitted.

LANDS

Retain all Special Interest Areas in public ownership. Honor existing private access rights-of-way.

For historic-cultural and other resources, special use authorizations are acceptable, provided management objectives are met, area values are protected, and use is guided by, and conforms with, an approved management plan.

Forest-wide Standards and Guidelines apply to other lands and land uses.

TRANSPORTATION/FACILITIES

Roads are generally not permitted unless they exist prior to classification or they facilitate the recreation use, enjoyment, and interpretation of the area. Facilities may be developed and maintained to meet the objective of the special interest classification. Roads, walkways, gates, signs, and other facilities will meet the Secretary of Interior's Standards for Historic Preservation Projects in Cultural-Historical areas.

FIRE

The wildfire suppression response strategy of confine, contain, and control is consistent with area objectives. Wildfire suppression efforts will utilize low-impact control methods. Use of heavy equipment on cultural resource properties is prohibited.

FUELS

Fuel treatments should emphasize maintenance of the natural character of the area. For cultural/historical areas, fuel treatments will be planned and implemented to avoid negative impacts. Loadings should be reduced to minimize potential of high-intensity fires. Acceptable treatments on cultural-historical areas will include hand piling, hauling material away, etc. Prescribed fire may be used to manage other types of SIA's where it aids in maintenance and protection of the feature.

PESTS

Utilize integrated pest management (IPM) principles and strategies to prevent unacceptable vegetation losses due to pests. Emphasize prevention and early detection measures.

Suppress pest outbreaks with a minimum of disturbance to protect users and/or resources. Favor biological and silvicultural treatments where possible. Remove hazardous trees as identified in vegetative management plans.

A10 WENAHA-TUCANNON SPECIAL MANAGEMENT AREA

GOALS

MANAGE THE WENAHA-TUCANNON SPECIAL MANAGEMENT AREA FOR MULTIPLE-USE PURPOSES AS SET FORTH IN:

The Conference Report of the Endangered American Wilderness Act of 1978 (HA. Report No. 95-861) (US. Laws, Statutes, etc. 1978c) recognized both the Wilderness Act and special conditions in two areas. The report emphasized the traditional big game hunting use and the desire to maintain fish and wildlife populations and habitat.

DESCRIPTION

Two areas are originally identified. In the Forest Plan, the management area applies to that part of the Upper Tucannon Roadless Area east of Bear Creek (Pomeroy) and south of the Tucannon River.

DESIRED FUTURE CONDITION

Elk habitat management is to be emphasized in order to provide the opportunity for traditional hunting. The Forest will be seen as a variety of vegetative patterns creating a mosaic of forage and cover for big game. Although management activities such as timber harvest and road construction will be evident, clearcuts will be absent. Narrow roads that follow the contour of the land will allow access to the area, but shall be closed to motorized use at the conclusion of logging and reforestation activities. High quality water is to be produced from the areas. Dispersed recreation of all types shall be available but access will remain limited.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

A Roaded Modified social and physical setting may result from meeting the goal; Roaded Natural or Semi-primitive settings may occur along boundaries near wilderness. Most dispersed recreation activities are available and emphasized, but hunting and fishing will be featured.

Recreation site modification and facility development levels 1 and 2 (see Glossary) are permitted. Developed recreation is not permitted.

Access will be mostly for walk-in or horseback opportunities on roads and trails closed to motorized use.

Trail and associated facility construction, reconstruction, and maintenance are permitted. Protection and improvement of existing trails is emphasized.

Off-highway vehicle (OHV) use is not permitted.

VISUAL

Visual quality objective emphasis is middleground Partial Retention, but may include some Modification.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Manage habitat to maintain or enhance resident and migratory elk populations, as follows:

Elk habitat will be managed to achieve a habitat effectiveness index of no less than 60, including discounts for roads open to motorized vehicular traffic, as described in Wildlife Habitats in Managed Forests (Thomas and others 1979). Marginal cover, satisfactory cover,

and forage areas will be managed to meet size and spacing criteria as described in Habitat Effectiveness for Elk on Blue Mountain Winter Ranges (Thomas and others 1988).

The potential habitat effectiveness standard will be measured on a subwatershed (allocation zone) basis. Potential habitat effectiveness may fall below the 60 percent level on an individual project so long as the subwatershed (allocation zone) objective is met. In such cases, the project objective is long-term (20 years) improvement in cover.

Cover

A minimum range of 15 percent of the area will be managed as satisfactory cover (20 percent is desired). If this is not attainable because of low natural potential, the highest percentage of satisfactory cover potentially attainable will be created or maintained. A minimum of 30 percent of an area will be managed as total cover.

Stands managed for satisfactory cover will meet the following criteria:

- Be at least 40 feet in height, with a canopy closure of at least 70 percent in mixed conifer/lodgepole pine types, and no less than 50 percent in the ponderosa pine type,
- should be 1,200 to 1,850 feet in width (larger cover areas are preferable). Exceptions may be made by wildlife biologists based on an on-the-ground assessment of the stand(s) value for elk; and
- satisfactory cover should generally appear as a multi-layered timber stand.

Marginal cover will be no less than 10 feet in height with a canopy closure of at least 40 percent, and should be 600 to 1,200 feet wide. Exceptions may be made by wildlife biologists based on an on-the-ground assessment of the stand(s) value for elk.

All cover areas will be managed to provide sufficient vegetation to obscure 90 percent of a standing elk at a distance of 200 feet or less.

Forage

Available forage will be allocated to meet big game management objectives. Available excess forage may be allocated to domestic livestock.

Big game forage improvement projects such as seeding, browse planting, and fertilization may be used. Structural improvements may be used to protect these investments. Prescribed burning may be practiced in order to maintain a static or upward trend in fair or better range condition.

Other

Emphasis should be placed on retaining and protecting big game, key use areas, and habitats such as migrational corridors, calving/fawning areas, wallows, springs, seeps, and bogs.

Management activities will not create barriers to impede movement of big game animals.

Dead and down tree habitat will be managed to provide or maintain 80 percent of the potential population level for all primary cavity excavators and maintained for other cavity users

An average of one unburned slash pile for every 2 acres should be retained on even-aged regeneration harvest units for wildlife cover.

Manage to maintain or establish a high level of vegetative diversity at a minimum level of 15 percent in each of the following five seral stages:

Grass/Forb	Young Sawtimber
Shrub/Seedling	Mature/Overmature
Pole/Sapling	

FISH

Fish habitat improvement projects and their maintenance will be permitted.

RANGE

Domestic livestock grazing is permitted at Range Management Strategy B. All available range and livestock management practices consistent with the primary management goal of maintaining or enhancing habitat for big game and other wildlife species may be used. Range improvements may be permitted to the extent they are compatible with the management goal.

TIMBER

Permit timber harvest on a scheduled basis, and road construction and management within the following constraints:

1. The full range of silvicultural practices and intensities, except clearcutting, will be permitted. The selected silvicultural systems applied to timber stands within suitable forest lands will be based on a site-specific examination and analysis, and will be designed to achieve management goals. Harvest practices may include shelterwood, salvage, removal, and commercial thinnings, as well as group or individual tree selection. Other silvicultural practices may include natural and artificial regeneration, planting genetic stock when available, precommercial thinning, release, and insect, disease, and animal damage protection.
2. Logging and road building should be done with conventional practices.
3. Timber harvest activities are not to be permitted in these areas during the months of October and November, or during elk calving season.

WATER

Provide specified erosion control measures. Install the types and quantities of drainage structures associated with these roads, which will continue to function properly for several years without periodic maintenance.

Meet Forest-wide Standards and Guidelines.

SOIL

Special erosion protection measures will be undertaken to protect the resource.

Roads shall be treated during permanent road closure periods so as to minimize the danger of soil erosion. Erosion control measures to be taken may include, but are not limited to:

1. Revegetation of the roadbed with herbaceous species,
2. outsloping,
3. crossditching,
4. covering with logging slash, and
5. hand maintenance of drainage structures

MINERALS

Meet Forest-wide Standards and Guidelines while meeting the intent of the Conference Report (fish, wildlife, soil, and water protection measures).

LANDS

Retain all lands in Federal ownership. Meet Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

All roads built into these areas for the purpose of timber harvesting are to be designed, built, and maintained to minimize soil disturbance and meet objectives for, and minimize impacts on, fish and wildlife.

Roads shall be constructed and maintained at the minimum widths necessary to safely accommodate logging equipment and trucks. The basic running surface width of these roads shall not exceed 12 feet.

Maintain standards of alignment and grade that allow roads to follow, as nearly as possible, the contours of the land with a minimum of excavation and earth movement to accomplish the construction.

The roads built into timber harvest areas shall be closed to motorized vehicles at the conclusion of logging and reforestation activities. During the closure periods, measures (including steel gates with suitable locks with openings adequate for passage of people and horses) shall be taken to ensure that motorized vehicles cannot enter onto or travel upon these roads, unless needed in emergency situations for the protection of life or property. Suitable measures shall be taken to assure their revegetation.

FIRE

For all wildfires in the management area, all suppression strategies (appropriate responses) may be used. Suppression practices will be designed to protect investments in managed forests and to prevent large acreage losses to wildfire.

FUELS

Fuels should not exceed an average of 12 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches, as depicted in the Photo Series for Quantifying Forest Residues (Technical Report PNW 52, 1976) (USDA Forest Service 1976b):

Even-aged Management	3-PP-4-PC	4-PP-I-TH	I-PP&ASSOC-4-PC	2-LP-3-PC
Uneven-aged Management	2-PP-4-PC	12-LP-3-PC	4-PP-I-TH	5-PP&ASSOC-4-PC

All types of prescribed fire may be used to accomplish management objectives.

PESTS

Use integrated pest management principles and strategies in meeting management area objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments can be prescribed early.

Consistent with resource objectives, protect forest stands (habitat) by practicing prevention activities. Emphasis will be on the prevention of stand and fuels conditions that increase pest populations above epidemic levels. Suppress insects and disease using cost-efficient strategies when outbreaks threaten resource management objectives.

B1 WILDERNESS

GOAL

MANAGE TO PRESERVE, PROTECT, AND IMPROVE THE RESOURCES AND VALUES OF THE FOREST WILDERNESSES, AS DIRECTED BY THE WILDERNESS ACT OF 1964.

DESCRIPTION

The Umatilla National Forest has three designated wildernesses:

1. Wenaha-Tucannon located in the northern Blue Mountains of northeastern Oregon and southeastern Washington. A total of 177,465 acres lies within the wilderness, in three counties in Washington and one in Oregon.
2. North Fork Umatilla located in the northern Blue Mountains of northeastern Oregon. A total of 20,144 acres is included in the wilderness in two counties in Oregon.
3. North Fork John Day located in the central Blue Mountains of northeastern Oregon. There are 106,787 acres is in the wilderness in two counties in Oregon.

Specific management direction for the Wenaha-Tucannon, North Fork John Day, and North Fork Umatilla wildernesses is summarized in the Forest Plan, Appendix 6.

DESIRED FUTURE CONDITION

Each of the Forest wildernesses will appear to be affected primarily by the forces of nature, with the imprint of human activities substantially unnoticeable. Natural processes, including fires, will continue to be the primary forces affecting the condition of wildernesses. The Limits of Acceptable Change (LAC) process will be fully implemented to provide the framework for establishing acceptable and appropriate resource and social conditions (especially the amount and type of use) in wilderness settings. The areas will be managed so as not to have degraded the wilderness attributes for which they were designated. There will be some evidence of human influence due to the existence of valid mining claims and past use; however, mitigation techniques will be utilized which minimize the impact of these activities. The surrounding area will be managed so as not to adversely affect the wilderness resource. Access roads and trailheads will distribute use adequately. Most trails will provide an element of challenge and some risk.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

WILDERNESS

General:

Wildernesses will be managed as follows:

1. Provide opportunity for solitude, physical and mental challenge, primitive recreation experiences, education, and research.
2. Maintain the wilderness characteristics in such a manner that ecosystems are unaffected by human manipulation and influences, and plants and animals develop and respond to natural forces.
3. Natural ecological succession including natural fire will be allowed to occur without endangering adjacent lands.
4. Emphasis is on preserving, enhancing, and restoring wilderness character and public values. Protection of the wilderness resource will be the primary criterion used to resolve conflict between resource areas.

5. Use of motors and mechanized equipment is prohibited. Exception can be permitted with Forest Supervisor's approval for emergencies involving life, health, and safety. The Regional Forester must approve all other use of motorized equipment.
6. Pacific Northwest Region objectives for wilderness areas will be used as Forest-wide Standards and Guidelines for management of wilderness areas and providing wilderness opportunities for the public.
7. Wildernesses will be managed to prevent degradation. Each wilderness will be kept essentially as wild as it was at the time of classification. Nondegradation will apply to all values of wilderness: social, physical, and biological values. If degradation occurs at specific sites or areas, an equal or greater area will be improved elsewhere to keep overall condition at least as good as it was prior to the new impact. Conditions will be improved in situations where natural processes are not operating freely, or where the values for which the wildernesses were created are impaired. Examples of this situation occur where core areas of the wildernesses do not meet at least Primitive Wilderness Resource Spectrum (WRS) conditions and where popular destination points near the edges of wildernesses (within influence of day-use activities), or heavily-used travel corridors within the core area, do not meet at least Semi-primitive WRS conditions. The impact of mining activities in the North Fork John Day Wilderness is another example of a condition that will be improved.

RECREATION

Use

1. Recreation is an appropriate use of the wildernesses to the extent that it does not degrade values established for wilderness.
2. Management action of limiting and/or distributing visitor use will be based on application of the Limits of Acceptable Change (LAC) process described by Stankey, et al., in The Limits of Acceptable Change (LAC) System for Wilderness Planning (General Technical Report INT-176) (USDA Forest Service 1985b). The lands within the wildernesses will be assigned to one of the wilderness resource spectrum (WRS) classes described for each wilderness. The management emphasis for each opportunity class is stated in the Managerial Setting portion of the description.
3. Manage the traditional hunting use to protect wilderness characteristics and resources
4. Visitor use will be managed at a level compatible with the wilderness resource to prevent loss of solitude or unacceptable depreciation of the wilderness qualities. The primary emphasis will be on maintaining wilderness conditions, according to specified indicators and standards, rather than a specified amount of use. Tentative capacities for the wildernesses are:

   Wenaha-Tucannon - 115,000 RVD/yr.
   North Fork Umatilla - 15,000 RVD/yr.
   North Fork John Day - 85,000 RVD/yr.
5. If indicators do not meet standards established for each wilderness, the following procedures will be used by priority:
   a. Inform/educate users and correct resource damage;
   b. Where there is physical site alteration, make the site less appealing or less acceptable, remove evidence of use, naturalize the site, and scatter debris:
   c. Restrict causative activity by regulations; e.g., party size, length of stay, type of equipment, or pack stock;

d. close site or area to use until it is rehabilitated or restored to wilderness conditions and suggest alternative areas for use; and

e. restrict number of visitors.

6. Information and education contacts will emphasize appropriate wilderness behavior, distribution of use, management goals and objectives, and visitor assistance. Programs will be designed to allow 60-80 percent of the users to read or hear the wilderness message prior to entering the area.

7. Encourage visitors to adopt a 'leave no trace' ethic:

   a. Use self-contained stoves,

   b. remove fire circles and scatter remaining charcoal,

   c. refrain from cutting green trees or limbs,

   d. practice a Pack-It-In, Pack-It-Out policy, and

   e. use biodegradable soap and dispose of human waste and waste water from cooking and washing at least 100 feet from streams and lakes.

Facilities:

1. Construction, installation, and maintenance of permanent improvements will generally be avoided. Rustic facilities (development level 1) may be added or maintained to preserve and/or protect the wilderness resource. Facilities will be designed and placed to minimize their intrusion upon the wilderness setting and will meet use requirements within limits of acceptable change for the WRS class.

Trails:

1. Provide a range of trail difficulty consistent with WROS classes. Trails will generally be managed to provide 'More' and 'Most' difficult opportunities.

2. Trails will be constructed, reconstructed, or maintained at standards appropriate to the WRS setting specified in the Trail Management Plan.

Activities:

1. Activities may be restricted or controlled as necessary to preserve the opportunity for solitude and primitive recreation experiences.

2. Contain permanent loss of ground cover to a maximum of 800 sq. ft. per acre in heavily used areas. Revegetation of impacted areas can occur.

Recreation Opportunity Spectrum:

The wilderness will be managed to provide the setting, activity, and experience in the Recreation Opportunity categories of Primitive and Semi-primitive Nonmotorized.

Core areas of the wildernesses will generally be managed to meet Primitive WRS conditions, except that heavily used travel corridors may meet Semi-primitive Nonmotorized (SPNM) conditions. Popular destination points near the edges of wildernesses (within influence of day use activities) will meet at least SPNM conditions.

Signs:

1. Provide for minimal signing at entrances and key trail intersections. Use standard oak signs for entrances and trail signs.

2. Where activities occur adjacent to the wilderness, the activity will be responsible to locate and post the boundary.

VISUAL

Preservation and retention visual quality objectives will meet the physical and biological goals for the areas. Preservation is the primary VQO for the wilderness. The retention VQO will apply to management activities (e.g., gas and mineral exploration, range improvements, trail construction).

CULTURAL

Meet Forest-wide Standards and Guidelines.

Cultural resource sites and structures will be protected until they are evaluated. Sites or structures not qualifying for the National Register of Historic Places will be removed or allowed to deteriorate naturally unless they are:

1. Necessary to support the values set forth in Section 4(b) of the Wilderness Act of 1964: or
2. Serving administrative purposes as necessary for protection of the wilderness resource (Wilderness Act of 1964 [Section 4(c)]) (U.S. Laws, Statutes, etc. 1964); or
3. Essential to cultural resource management as described in FSM 2323.82.

All structures shall be evaluated for their historical significance. Evaluation should include comparative analysis to determine a property's relative importance.

After evaluation, any decision to maintain, or abandon (but not remove) structures which meet the criteria for the National Register shall be preceded by the process outlined in 36 CFR 800 for comment by the Advisory Council on Historic Preservation. Abandoned structures should be allowed to deteriorate naturally after following procedures outlined in 36 CFR 800, including recording the site to appropriate standards and other mitigative measures described in the concluding Memorandum of Agreement. Any retained or maintained structure shall be managed to have a minimum impact on the wilderness resource.

If it is determined, after historical evaluation, that a structure is not of significance, it shall be removed by a practical method compatible with the goals of this Plan and the site shall be restored to as natural a condition as is practical.

Onsite interpretation will not be done. Interpretation may be done offsite with brochures and audio-visual programs.

WILDLIFE AND FISH

Wildlife viewing, hunting, and fishing are appropriate uses of wilderness.

Wildlife and fish habitat management will be permitted where they conform to the management of the wilderness resource.

Reestablishment of indigenous species is permitted, subject to environmental assessments and Regional Forester approval.

Coordinate with the state wildlife and game agencies to establish user densities that are compatible with the management of the wilderness.

RANGE

Grazing of domestic livestock is permitted at places and approximates levels established prior to the effective date of wilderness classification. A level 'B' or 'C' strategy for range can apply. Sustained livestock grazing may be reduced if damaging to the resource. Existing livestock management improvements may be maintained. Structural range improvements may be built only when necessary to protect the resource (not to increase capacity).

Permittees will be encouraged to install and replace range improvement facilities with native materials where practical.

All grazing areas within the wilderness will be designated as livestock grazing allotments. Objectives for the allotment management will be consistent with resource conditions in the assigned WRS. As a minimum, managers will:

1. Establish recommended grazing dates, based on range readiness checks,
2. Determine capacity, condition, and trend, and
3. Monitor actual use levels.

Use of supplemental feeds for recreation livestock will be encouraged over open grazing. Encourage use of feeds that are free of nonindigenous and noxious weed seed.

TIMBER/VEGETATION

Timber harvest is not permitted.

Natural ecological processes of plant succession will be encouraged to occur, including ecological systems dependent on the natural role of fire.

Live trees may be utilized for administrative purposes.

Fuelwood gathering is restricted to onsite use in conjunction with recreation and authorized activities.

Geological and mineral surveys may be performed by the US. Geologic Survey and Bureau of Mines.

WATER AND SOIL

Protect full natural flow of streams within the wildernesses, except for valid water rights existing at the time of classification.

Water developments may be authorized by the President where such developments are deemed necessary.

Meet Forest-wide Standards and Guidelines for Soil and Water.

MINERALS

The wilderness is closed to mineral entry and mineral leasing, subject to valid existing rights.

Occupancy, structures and use of motorized and mechanized equipment related to mining activities are permitted to the extent allowed by law and regulations. Every reasonable effort should be made through the Operating Plan to minimize their effect on the wilderness resource, compatible with rights of claimants and lessees.

LANDS

Acquisition of private parcels of land within the wilderness boundary is a high priority.

Wildernesses are an 'Exclusion Area' for utility corridors.

Rights-of-way and nonrecreational special uses will be managed in conformance with the Wilderness Act and capacity objectives.

Nonconforming uses established prior to wilderness designation will be administered so as to minimize their impacts. New nonconforming structures (temporary or permanent) and uses are not permitted

TRANSPORTATION

Roads are not permitted except for those with legally established rights.

AIR QUALITY

Forest activities outside the wilderness will be conducted to protect the clarity of the air to maintain visibility standards

Where manageable or negotiable, identify and mitigate outside influences adversely affecting air quality within wildernesses. The air quality related values will be identified when a Prevention of Significant Deterioration (PSD) action that may impact the wilderness is received.

FIRE

Fire will be considered an inherent part of the general wilderness ecosystem. All naturally-occurring ignitions within wilderness are prescribed fire until declared wildfire.

All wildfires will receive an appropriate suppression response. Suppression actions may include surveillance, confinement, containment, or control depending on fire location and burning conditions.

Low impact suppression measures will be applied. Some forms of mechanized equipment may be used if the result is to lessen the long-term physical and social impact on wilderness areas from suppression actions.

Prescribed fires may be used as a tool to manage ecosystems within the wilderness in accordance with management plans for each wilderness (FSM 2324).

PESTS

Monitor the levels and activities of pests normally associated with wilderness and old growth ecosystems. Most insect and disease agents do not normally pose threats to adjacent lands; effects of endemic levels will be accepted as naturally-occurring phenomena.

Suppression activities for insect and disease outbreaks may be permitted with Chief of the Forest Service approval to prevent loss within wilderness and/or unacceptable resource damage to resources in adjacent areas. Favor biological methods when available. Management of insects and diseases will follow direction in FSM 2324.1.

GENERAL PROCEDURES

EMERGENCIES

1. Motorized equipment and mechanical transport may be allowed when an emergency condition exists involving human health and safely (FSM 2326.1).
2. Removal of seriously ill injured, or deceased persons will be considered an emergency justifying landing of an aircraft. For emergency helicopter landings, natural openings will be utilized where possible rather than cutting new openings.
3. Responsibility for search and rescue of lost or injured visitors is held by the county of jurisdiction (County Sheriffs). The Forest Service will provide assistance within its capacity as requested. The Forest Service will provide for other considerations including limiting the impact of operations on wilderness values to a minimum.
4. Public communications from inside wilderness will be restricted to emergencies.

RESEARCH

Research may be conducted when:

1. Necessary to support values set forth in Section 4(b) of the Wilderness Act; or,
2. It cannot be accomplished outside the wilderness; and,
3. It is done in compliance with the protection of the wilderness values and wilderness experience of visitors.

C1 DEDICATED OLD GROWTH

GOAL

PROVIDE AND PROTECT SUFFICIENT SUITABLE HABITAT FOR WILDLIFE SPECIES DEPENDENT UPON MATURE AND/OR OVERMATURE FOREST STANDS, AND PROMOTE A DIVERSITY OF VEGETATIVE CONDITIONS FOR SUCH SPECIES.

DESCRIPTION

Designated mature and old growth forest stands will be located and retained to distribute suitable habitat throughout the Forest for wildlife species dependent upon this habitat type. Forest stands will meet ecological, biological, size and distribution criteria as suitable old growth for survival and reproduction of indicator species. The Forests management indicator species for this habitat group include the pileated woodpecker, pine marten, and northern three-toed woodpecker. Other important dependent species include northern goshawk, Vaux's swift, Townsend warbler, brown creeper, and a variety of cavity users. If an insufficient supply of mature and old growth forest stands is available, stands capable of meeting old growth criteria will be identified and retained as old growth.

The management area applies to the system of dedicated old growth habitat units distributed across the Forest to meet requirements for Forest indicator species. All Districts include a few additional dedicated units to improve overall old growth distribution. Locations of dedicated units are shown on management area and old growth resource maps.

DESIRED FUTURE CONDITION

Old growth areas will be characterized by stands of naturally appearing overmature trees. Stands of mature trees may be included in the old growth category to provide a better distribution of this habitat type throughout the Forest. Trees in these stands are relatively large (with many trees greater than 21 inches d.b.h.), past the point of rapid growth, and some have visible evidence of decay and decline including mycorrhizal fungi and other microorganisms. Other typical characteristics include a multi-layered, deep canopy with trees of two or more age classes and an abundance of both standing dead and down wood material. Stands will be dispersed in quantities and sizes which meet the needs of dependent wildlife species.

The mature and old growth stands will contribute towards the Forest diversity and aesthetic values. Management activities will normally be excluded within designated units except to enhance or perpetuate old growth forest habitat conditions. Management emphasis will be on supporting sustainability of old growth/mature tree habitat characteristics and components. Vehicle use is also normally restricted, but will occur on designated routes (roads and trails) to access other parts of the Forest.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Dispersed recreational opportunities and settings will range from Primitive to Roaded Natural (ROS Users Guide). Recreational opportunities will be consistent with the maintenance of old growth habitat characteristics.

No developed recreational facilities are permitted.

Access will be mostly for walk-in or horseback opportunities on roads closed to motorized use, with some open road opportunities.

Motorized vehicle use will be restricted to only those designated routes (roads and trails) necessary to cross the area and/or provide for activities occurring in adjacent management areas.

VISUAL

Management will result in a natural appearing (Retention) landscape. Visual quality will be subordinate to old growth habitat goals.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

In addition to size and distribution criteria described in the Forest-wide Standards and Guidelines, designated old growth habitat units will include the following items:

Twelve to fifteen live trees per acre greater than 21 inches d.b.h. (6 inches d.b.h in lodgepole pine stands).

A minimum average of 225 hard snags 12 inches d.b.h., per 100 acres, in mixed conifer and ponderosa pine stands (15 of these hard snags will be greater than 20 inches d.b.h.); and an average of 180 hard snags, greater than 10 inches d.b.h., per 100 acres, in lodgepole pine stands. Dead and down tree levels will include an appropriate number of the larger diameter classes (12-inch and 20-inch d.b.h. trees) to provide habitat at 100 percent of the potential population level. At least 50 percent of these snags will be 15 feet tall or taller, with the remainder at least 6 feet high.

A minimum of two to four down logs at various stages of decomposition per acre in muted confer and lodgepole pine stands, and at least one to two logs per acre in ponderosa pine stands. The logs should be at least 6 inches in diameter at the large end for lodgepole pine, 17 inches in diameter at the large end for ponderosa pine and mixed conifer, and 20 feet or more in length.

Two or more canopy levels. A single canopy level is acceptable in lodgepole pine stands.

At least 55 percent crown closure with emphasis on stands with 70 percent or more crown canopy closure.

Evidence of moderate to high levels of decadence.

A low level of human disturbance with few if any open roads within the stand.

Maintain snags to provide 100 percent of the potential population level within the designated old growth habitat areas. Maintain a minimum of two hard snags, greater than 10 inches d.b.h., per acre, on an additional 300 acres immediately adjacent to the designated old growth units as feeding habitat for pileated woodpeckers.

Snags and dead and down tree habitat will be created in designated old growth units and adjacent feeding areas that are deficient in these habitat components. Practices may include girdling, topping, or felling of live trees.

In the event of catastrophic loss of existing designated old growth habitats causing a drop below the minimum distribution requirements, replacement units in the most advanced successional stage available will be selected in close proximity to the original location.

Structural and nonstructural habitat improvements (including prescribed burning) and their maintenance may be utilized, but only to maintain or enhance old growth habitat characteristics.

FISH

All fish habitat improvement, development, and maintenance projects are permitted within the constraints of retaining or enhancing old growth habitat characteristics.

Use of mechanical equipment for fish habitat improvement projects is permitted although no roads or permanent trails may be constructed for access.

RANGE

Moderate levels of livestock grazing are permitted; however, forage in general will be limited to that which is normally present under densely forested canopies. Bedding by domestic sheep in dedicated old growth units will not normally be permitted.

Maintain existing range improvement structures. Additional structural improvements are generally not permitted.

TIMBER

Timber management and harvest activities will not be scheduled or permitted.

Fuelwood cutting, salvage harvest, or the removal of any dead or down material will not be permitted, unless the unit(s) is lost as a result of catastrophic conditions.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Exchange of land involving existing old growth may occur where the quality, size, and spacing requirements of dedicated old growth units are met.

Issuance of any permits or licenses that may adversely impact dedicated old growth units will be discouraged.

TRANSPORTATION

Roads and trails are permitted but will be limited to the number and miles necessary to meet surrounding area objectives, while minimizing impacts to wildlife in the old growth units. Activities may include construction and reconstruction of new roads and trails, and operation and maintenance of open roads and trails. Where feasible and practical, road construction within designated old growth units should be avoided.

Most roads (and areas) in dedicated old growth units should be closed; restrict motorized vehicle use to designated open roads and trails.

FIRE

For moderate to high intensity wildfires, the appropriate suppression response should emphasize control strategies.

Low impact suppression methods should be favored. Use of mechanical equipment to suppress wildfires is acceptable within the objective of minimizing the impact of the suppression effort on the old growth values.

FUELS

Natural fuel treatments are permitted to maintain or enhance old growth habitat characteristics or reduce the potential for a high number of and/or severely burned acres.

Natural fuels should not exceed an average of about 12 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches, as depicted in the Photo Series for Quantifying Natural Forest Residues (Technical Report PNW 105) (USDA Forest Service 1980):

2-PP&ASSOC-4 3-LP-3 2-MC-3 6-PP-4

Prescribed burning is the preferred method of fuel treatment.

PESTS

Monitor the levels and activities of pests normally associated with old growth ecosystems. Effects of endemic levels will be accepted as naturally occurring phenomena. No special management practices will be utilized to control losses from insects or diseases at endemic levels.

Suppress or control pests when outbreaks reach epidemic levels and threaten catastrophic loss of dedicated old growth resources or other resources on adjacent lands. Favor biological treatment methods or prescribed burning. IPM methods will not conflict with wildlife objectives.

C2 MANAGED OLD GROWTH

GOALS

PROVIDE AND PROTECT SUFFICIENT SUITABLE HABITAT FOR WILDLIFE SPECIES DEPENDENT UPON MATURE AND OVERMATURE LODGEPOLE PINE FOREST STANDS, AND PROMOTE A DIVERSITY OF VEGETATIVE CONDITIONS FOR SUCH SPECIES.

DESCRIPTION

Designated mature and old growth and replacement forest habitat within the delineated higher elevation lodgepole pine types will be located, distributed, and managed (using silvicultural techniques) for wildlife indicator species. Forest stands will meet ecological, biological, size, and distribution criteria as suitable old growth for survival and reproduction of indicator species. The Forest management indicator species for this habitat group is the northern three-toed woodpecker. Other important dependent species include northern goshawk, Vaux's swift, townsend warbler, brown creeper, and a variety of cavity users. Developing lodgepole pine old growth stands, in various stages of management, will meet size and distribution criteria. Locations of managed units are shown on management area and resource maps.

DESIRED FUTURE CONDITION

In managed old growth stands, activities will often be evident and directed towards development and maintenance of old growth lodgepole forest attributes. Stands will be dispersed in quantities and sizes which meet dependent wildlife species needs. Lodgepole stands managed for old growth will have two stand characteristics, each dependent on the extent of management activities such as timber harvest, planting, thinning, and others. The lodgepole pine units will consist of about equal acreage in two distinct age classes, 0 to 60 and 60 to 120. The areas with stands less than 60 years old will often appear as 'typically' managed forest stands influenced by timber management practices; and the stands over 60 years will display typical signs of old growth, with large diameter trees, abundant dead and down material, vertical diversity, evidence of some decadence, and fading evidence of past timber management practices. Dispersed recreation opportunities will be available in the younger stands but motorized opportunities will be limited in older stands. The mature and old growth stands will contribute towards the Forest diversity and aesthetic values.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Dispersed recreational opportunities will range from Roaded Natural to Roaded Modified (ROS Users Guide). Recreational opportunities will be consistent with the maintenance of old growth habitat characteristics.

No developed recreational opportunities or facilities are permitted.

Access will be mostly for walk-in or horseback opportunities on roads closed to motorized use, with some open road opportunities.

Motorized vehicle use will be restricted to the designated routes (roads and trails) necessary to cross the area (see Transportation) and/or to provide access for activities occurring in adjacent management areas.

VISUAL

Management activities will result in a natural appearing (Retention) to a modified (Maximum Modification) visual setting. Visual quality will be subordinate to old growth habitat goals.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

In addition to size and distribution criteria described in Forest-wide Standards and Guidelines, managed old growth habitat units will include the following items in the oldest age classes (60-120 years for lodgepole pine):

1. Twelve to fifteen live trees per acre, greater 6 inches d.b.h. in lodgepole pine stands.
2. an average of two hard snags, greater than 10 inches d.b.h., per acre, in lodgepole pine stands. At least 50 percent of these snags will be 15 feet tall or taller with the remainder at least 6 feet high;
3. a minimum of two to four down logs at various stages of decomposition per acre in lodgepole pine stands, and at least 6 inches in diameter at the large end;
4. although two or more canopy levels is preferred, a single canopy level is acceptable in lodgepole pine stands;
5. at least 55 percent crown closure with emphasis on stands having 70 percent or more crown canopy closure;
6. evidence of moderate to high levels of decadence; and
7. a low level of human disturbance with few, if any, open roads within the stand.

Maintain snags to provide 100 percent of the potential population level within the managed old growth habitat areas.

Snags and dead and down tree habitat will be created in all managed old growth units that are deficient in these habitat components. Practices may include girdling, topping, or felling of live trees.

In the event of catastrophic loss of any existing designated old growth habitats causing a drop below the minimum distribution requirements, replacement units in the most advanced successional stage available will be selected in close proximity to the original location.

Structural and nonstructural habitat improvements and their maintenance may be utilized to maintain or enhance old growth habitat characteristics

FISH

All fish habitat improvement, development, and maintenance projects are permitted within the constraints of retaining or enhancing old growth habitat characteristics.

Use of mechanical equipment for fish habitat improvement projects is permitted although no roads or permanent trails may be constructed for access.

RANGE

Moderate levels of livestock grazing is permitted; however, forage in general will be limited to that which is normally present under densely forested canopies. Bedding by domestic sheep in managed old growth units will not normally be permitted.

Maintain existing range improvement structures. Additional structural improvements are generally not permitted.

TIMBER

Timber harvest is permitted on a scheduled basis to enhance wildlife habitats as follows:

1. Maintain the distribution requirements for an equal number of 75-acre units in the lodgepole pine type in both of the 0 to 60 years and 60 to 120 years age classes, so that existing old growth units would be managed and move geographically through time.

The full range of silvicultural practices and intensities would apply to the 0 to 60-year age class in order to develop the large tree component as soon as possible. Emphasis will be on even-aged management techniques and practices.

2. When these stands assume the characteristics of old growth habitat, timber management activities (including fuelwood cutting, salvage harvest, or the removal of any dead or down material) will not normally be permitted, except for those practices that may be needed to maintain or enhance old growth characteristics.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Exchange or acquisition of land may occur where it will not adversely affect existing old growth quality, size, and spacing requirements.

Issuance of any permits or licenses that may adversely impact managed old growth units will be discouraged.

TRANSPORTATION

For areas in the 0 to 80-year category in mixed conifer, and 0 to 60 in lodgepole pine, roads and trails may be constructed, reconstructed, operated, and maintained.

For old growth areas older than 80 years in mixed conifer, and 60 years in lodgepole pine, roads and trails are permitted but will be limited to the number and miles necessary to meet surrounding area objectives and minimize impacts to wildlife in the old growth units. Where feasible and practical, old growth units should be avoided. Activities may include construction and reconstruction of new roads and trails, and operation and maintenance of open roads and trails.

Restrict motorized vehicle use within managed old growth units to open roads and trails in all age classes older than 80 years for the ponderosa pine and mixed conifer types, and older than 60 years for the lodgepole pine type. Most roads in these areas should be closed to motorized use.

FIRE

For moderate to high intensity wildfires, the appropriate suppression response should emphasize control strategies.

Low impact suppression methods should be favored. Use of mechanical equipment to suppress wildfires is acceptable within the objective of minimizing the impact of the suppression effort on the old growth values.

FUELS

Natural fuel treatments are permitted to maintain or enhance old growth habitat characteristics or reduce the potential for severely burning an old growth area.

Natural fuels should not exceed an average of about 12 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches, as depicted in the Photo Series for Quantifying Forest Residues (Technical Reports PNW 52) (USDA Forest Service 1976b):

Age Class	Lodgepole Pine	Ponderosa Pine/Mixed Conifer

0-60 0-80	2-LP-3-PC	 3-PP-4-PC 4-PP-1-TH 1-PP&ASSOC-4-PC
60-120 80-160 and 160-240	3-LP-3	 2-PP&ASSOC-4 2-MC-3 6-PP-4

Prescribed burning is the preferred method of fuel treatment.

PESTS

Use integrated pest management (IPM) principles to meet management area objectives. Emphasis will be on the prevention of stand and fuels conditions that increase pest populations above epidemic levels. Natural or endemic levels are acceptable, and no special management practices will be employed to control losses from insects or diseases at these levels.

Suppress or control pests when outbreaks threaten managed old growth resources, the ability of stands to become old growth, or other resources on adjacent lands. Favor biological methods when acceptable. IPM methods will not conflict with wildlife objectives.

C3 BIG GAME WINTER RANGE

GOAL

MANAGE BIG GAME WINTER RANGE TO PROVIDE HIGH LEVELS OF POTENTIAL HABITAT EFFECTIVENESS AND HIGH QUALITY FORAGE FOR BIG GAME SPECIES.

DESCRIPTION

The Big Game Winter Range strategy applies to all or parts of winter ranges delineated in coordination with the Oregon Department of Fish and Wildlife and the Washington Department of Wildlife. Big game winter ranges are generally located on the lower elevation, 'front' country, of the Forest. The designated winter range boundaries encompass areas that provide habitat for 90 percent or more of the wintering elk population during the winter use period 6 years out of 10. Each winter range is assigned a winter use period ranging from 4 to 4 1/2 months. A total of 21 winter range areas are identified on the Umatilla National Forest totaling 277,677 acres.

All or parts of the following defined big game winter ranges are included in the management area:

WINTER RANGE	NO.	STATE
Touchet	I	WA
Tucannon	2	WA
Asotin	3	WA
Wenaha	5	WA/OR
Wenatchee	6	WA
Phillips Creek	10	OR
McKay Creek	11	OR
Birch Creek	12	OR
Albee	13	OR
Cable Creek	14	OR
Bridge Creek	15	OR
Bone Point	16	OR
Desolation	17	OR
Heppner	18	OR
Kahler Basin	19	OR
Monument	20	OR
Mt. Emily	21	OR

DESIRED FUTURE CONDITION

Big game winter ranges will appear primarily as a mosaic of managed forests, brush patches, and large grasslands. Forested areas will contain a mix of harvested even-aged, uneven-aged, and natural stands, creating patterns of cover patches and forage areas for big game. Management activities may be locally apparent: created openings will range up to 25 acres in size. Where natural potential exists, cover areas will be developed and/or maintained to occur as groups of larger trees, 10 acres or more in size, with dense canopies. Use of prescribed fire will be apparent. Areas of early spring green-up and other forage changes due to prescribed fires and other means will occur in a mosaic pattern over the winter ranges; quality forage will be abundant because of management. Most roads and trails will be closed to vehicle traffic during the winter and there will be minimum human disturbance to big game during this period. Livestock use will compliment big game management. As a result of management, quality big game habitat will be achieved and assist in meeting state big game populations and productivity goals, and Forest recreation objectives. During an 'average' winter, most of the wintering big game will remain on public lands keeping impacts to private lands low.

RECREATION

A Roaded Modified social and physical setting Recreational Opportunity Spectrum (ROS), may result in meeting the goal. Dispersed recreation activities that meet the goal are permitted.

Recreation site modification and facility development levels 1 and 2 (see Glossary) are permitted.

Access will be mostly for walk-in or horseback opportunities on trails or closed roads, with some road-oriented activities.

Off-highway vehicle (OHV) use will be permitted on designated routes. OHV use will be curtailed by closures where this use is determined to be detrimental to wintering big game species.

Trail and associated facility construction, reconstruction, and/or maintenance shall be permitted. Trail activities and use will be curtailed by closures where and when determined to be detrimental to wintering big game species.

VISUAL

A range of visual quality objectives from Retention to Maximum Modification will apply.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Elk habitat will be managed on designated big game winter ranges to achieve a habitat effectiveness index of no less than 70, including discounts for roads open to motorized vehicular traffic as described in Wildlife Habitats in Managed Forests (Thomas and others 1979). The habitat effectiveness standard will be measured on an individual winter range basis.

Cover

Marginal and Satisfactory cover will be managed to the extent possible to meet optimum size and distribution criteria as described in 'Habitat Effectiveness Index for Elk on Blue Mountain Winter Ranges' (Thomas and others 1988).

Where possible, a minimum of 10 percent of each winter range will be maintained and managed as satisfactory cover (15-20 percent is desirable). If this is not attainable because of low natural potential, the highest possible percentage of satisfactory cover will be created or maintained. Where possible, a minimum of 30 percent of an area will be managed as total cover (satisfactory and marginal).

Stands managed for satisfactory cover will meet the following criteria:

- Provide stand width of 600-1,200 feet. Exceptions may be made according to Forest-wide Standards and Guidelines;
- be at least 40 ft. in height with a canopy closure of at least 70 percent in mixed conifer types and no less than 50 percent in the ponderosa pine types; and
- should be at least 10 acres in size. Larger cover areas are preferred.

The desired cover condition will generally appear as a multi-layered stand and meet elk 'hiding' criteria by obscuring 90 percent of a standing elk at a distance of 200 feet or less.

Marginal cover will include stands no less than 10 feet in height, with a canopy closure of at least 40 percent, and meet elk 'hiding' criteria.

Forest stand harvest and management may be permitted in cover areas to meet long-term, big game cover objectives as determined on each winter range. Forest stands that can only qualify as marginal cover due to site potential (generally ponderosa pine stands) may receive timber harvest and management (see Timber) as long as big game habitat management objectives are met.

Forage

Both the quantity and quality of forage for big game will be enhanced or maintained through improved livestock grazing systems, controlled seasonal use, an active prescribed burning program, and other measures.

Available forage will be allocated to meet big game management objectives. Available forage in excess to wildlife needs may be allocated to domestic livestock.

Big game forage and cover improvement projects such as prescribed burning, seeding and planting, browse planting, release, mechanical ground and vegetative disturbance, fertilization, and others may be employed. Structural improvements may be used to protect these investments.

Other

All management activities will be restricted, where necessary, during the big game winter use period of December 1 through March 30 or April 15.

Management activities will not create barriers to impede movement of big game animals.

Dead and down tree habitat will be managed to provide or maintain 60 percent of the potential population level for all primary cavity excavators as described in Wildlife Habitats in Managed Forests (Thomas and others 1979).

FISH

Fish habitat improvement projects and their maintenance will be permitted.

RANGE

Domestic livestock grazing is permitted at Range Management Strategy C. All available range and livestock management practices consistent with the primary management goal of maintaining or enhancing the big game winter ranges may be used.

Structural range improvements are permitted to the extent they are compatible with big game winter ranges. This may entail the use of let-down fences, etc.

TIMBER

Timber will be managed on a scheduled basis with the exceptions noted below. All timber management practices and intensities consistent with achieving the big game and other wildlife habitat goals will be permitted. The selected silvicultural systems applied to timber stands within suitable forest lands will be based on a site-specific examination and analysis and will be designed to achieve wildlife habitat management goals.

EXCEPTION: Designated big game winter range located between Skookum Creek and Potamus Creek on the Heppner District will have no scheduled timber harvest activity during the first 10 years following approval of this Plan.

Harvest practices will emphasize uneven-aged management including individual tree and group selection, but may also include even-aged management practices of clearcutting, shelterwood, and seed tree. Salvage of mortality is to be permitted, consistent with meeting objectives; commercial thinnings may also be utilized consistent with the need to maintain satisfactory cover. Other permitted cultural practices will include natural and artificial regeneration, planting

genetic stock when available, precommercial thinning, and animal damage control protection. Logging and road building should be done with conventional practices including helicopter.

Fuelwood cutting is permitted consistent with the established goals of enhancing big game habitat and maintaining prescribed levels of dead and down tree habitat.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Delineated winter range acres in Federal ownership will generally be retained.

Acquire inholdings within delineated winter range lines where opportunities exist.

Other Forest-wide Standards and Guidelines for lands and land uses apply.

TRANSPORTATION

Roads will be closed to motorized use as needed, and especially during the winter use period, to meet big game habitat effectiveness objectives, unless the roads are needed as through routes or to access private lands.

FIRE

For moderate to high intensity wildfires (average flame lengths over 2 ft.), all wildfire suppression strategies may be emphasized.

Under appropriate fire prediction conditions, wildfires may be permitted to play a natural role on the winter ranges to meet big game habitat objectives.

FUELS

Fuels should not exceed an average of 9 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches, as depicted in the Photo Series for Quantifying Forest Residues (Technical Report PNW 52) (USDA Forest Service 1976b):

Even-aged Management	3-PP-4-PC	4-PP-1 -TH	1 -PP&ASSOC-4-PC	2-LP-3-PC
Uneven-aged Management	2-PP4-PC	2-LP-3-PC	4-PP-1 -TH	5-PP&ASSOC4-PC

All types of prescribed fire may be used including broadcast burning, underburning, or range burning.

PESTS

Use integrated pest management (IPM) principles and strategies in managing insects and disease to meet management objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments consistent with resource objectives can be prescribed at the earliest opportunity.

Consistent with resource objectives, protect forest stands (habitats) by practicing prevention activities. Emphasis will be on the prevention of stand and fuels conditions that favor pests increases above epidemic levels. Aggressively suppress insects and disease using cost efficient strategies when outbreaks threaten resource objectives.

C3A SENSITIVE BIG GAME WINTER RANGE

GOAL

MANAGE SENSITIVE AREAS OF BIG GAME WINTER RANGE TO PROVIDE HIGH LEVELS OF POTENTIAL HABITAT EFFECTIVENESS (AT OR ABOVE THE CURRENT LEVELS).

DESCRIPTION

The strategy applies to parts of winter ranges delineated in coordination with the Washington Department of Wildlife (and Oregon Department of Fish and Wildlife). The sensitive portions of designated winter ranges are the areas used nearly every year by wintering elk populations because of topography, slope, and current quality of cover and forage. The areas are generally at lower elevations of the designated winter ranges and lie adjacent to private lands.

Parts of (extensions) the Asotin big game winter range (Pomeroy) are included in the management area.

DESIRED FUTURE CONDITION

The area will appear as a mosaic of plant communities, including grassland forage area, brush, and some stands of trees. Use of prescribed fire will be apparent and carried out to maintain or increase the quality and quantity of forage and amount of cover on the area. Areas of early spring forage green-up due to prescribed fire will occur in a mosaic pattern over the winter range. Increased forage and cover will help encourage big game use on public lands and discourage high levels of winter use on the adjacent private lands. Most roads and trails will be closed to vehicle traffic during the winter, and there will be minimum human disturbance to big game during this period.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

A Roaded Modified social and physical setting (ROS) may result in meeting the goal. Dispersed recreation activities that meet the goal are permitted.

Recreation site modification and facility development levels 1 and 2 (see Glossary) are permitted.

Access will be mostly for walk-in or horseback opportunities on trails or closed roads, with some road-oriented activities.

Off-highway vehicle (OHV) use is permitted on designated routes. OHV use will be curtailed by closures where this use is determined to be detrimental to wintering big game species.

Trail and associated facility construction, reconstruction, and maintenance will be permitted. Trail activities and use will be curtailed by closures where and when determined to be detrimental to wintering big game species.

VISUAL

A range of visual quality objectives from Retention to Modification will apply.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Elk habitat will be managed on sensitive portions of designated big game winter ranges to achieve a habitat effectiveness index of no less than 70, including discounts for roads open to motorized vehicular traffic, as described in Wildlife Habitats in Managed Forests (Thomas and others 1979). The habitat effectiveness standard will be measured on an individual winter range basis.

Cover

Marginal and satisfactory cover will be managed to the extent possible to meet optimum size and distribution criteria, as described in 'Habitat Effectiveness Index for Elk on Blue Mountain Winter Ranges' (Thomas and others 1988).

Where possible, a minimum of 10 percent of each area will be maintained and managed as satisfactory cover (15-20 percent is desirable). If this is not attainable because of low natural potential, the highest percentage of satisfactory cover possible will be maintained. Where possible, a minimum of 30 percent of an area will be managed as total cover.

Stands managed for satisfactory cover will meet the following criteria:

- Provide stand width of 600-1,200 feet,
- be at least 40 ft. in height with a canopy closure of at least 70 percent in mixed conifer types and no less than 50 percent in the ponderosa pine types; and
- should be at least 10 acres in size. Larger cover areas are preferred.

The desired cover condition will generally appear as a multi-layered stand and meet elk 'hiding' criteria by obscuring 90 percent of a standing elk at a distance of 200 feet or less.

Marginal cover will include stands no less than 10 feet in height with a canopy closure of at least 40 percent and meet above elk 'hiding' criteria.

Forage

Both the quantity and quality of forage for big game will be enhanced or maintained through improved livestock grazing systems, controlled seasonal use, a prescribed burning program, and other measures.

Available forage will be allocated to meet big game management objectives. Available forage excess to wildlife needs may be allocated to domestic livestock.

Big game forage and cover improvement projects such as prescribed burning, seeding and planting, browse planting, release, tree removal, mechanical ground and vegetative disturbance, and fertilization may be employed. Structural improvements may be used to protect these investments.

Other

All management activities will be restricted where necessary during the big game winter use period of December 1 through March 30 or April 15.

Management activities will not create barriers to impede movement of big game animals.

Dead and down tree habitat will be managed to provide or maintain 80 percent of the potential population level for all primary cavity excavators, as described in Wildlife Habitats in Managed Forests (Thomas and others 1979).

FISH

Fish habitat improvement projects and their maintenance will be permitted.

RANGE

Domestic livestock grazing is permitted at Range Management Strategy C. All available range and livestock management practices consistent with the primary management goal of maintaining or enhancing the sensitive portions of big game winter range may be used.

Structural and nonstructural range improvements are permitted to the extent they are compatible with big game winter ranges management.

TIMBER

Timber harvest will not be scheduled. Activities such as harvest and reforestation may be used as management tools to maintain the highest possible cover class over time.

Under catastrophic conditions, timber may be salvaged and cover reestablished.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

All delineated winter range acres in Federal ownership will generally be retained.

Acquire inholdings within delineated winter range lines where opportunities exist.

Other Forest-wide Standards and Guidelines for lands and land uses apply.

TRANSPORTATION

During the winter use period, close to motorized use roads not needed as through routes or as access to private lands. Roads will be closed to motorized use, as needed, to meet big game habitat effectiveness objectives.

Road construction, reconstruction, and maintenance will be permitted to access other parts of the Forest, except during the winter and spring big game use period.

FIRE

For moderate to high intensity wildfires (average flame lengths over 2 ft.), all wildfire suppression strategies may be emphasized.

Under appropriate fire prediction conditions, wildfires may be permitted to play a natural role on the winter ranges to meet big game habitat objectives.

FUELS

Fuels should not exceed an average of 9 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches, as depicted in the Photo Series for Quantifying Forest Residues (Technical Report PNW 52) (USDA Forest Service 1976b):

3-PP-4-PC	4-PP-1 -TH	1 -PP&ASSOC-4-PC	2-LP-3-PC

All types of prescribed fire may be used including broadcast burning, underburning, or range burning.

PESTS

Use integrated pest management (IPM) principles and strategies in managing insects and disease to meet management objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments consistent with resource objectives can be prescribed at the earliest opportunity.

Consistent with resource objectives, protect forest stands (habitats) by practicing prevention activities. Emphasis will be on the prevention of stand and fuels conditions that favor pests increases above epidemic levels. Aggressively suppress insects and disease using cost efficient strategies when outbreaks threaten resource objectives.

C4 WILDLIFE HABITAT

GOAL

MANAGE FOREST LANDS TO PROVIDE HIGH LEVELS OF POTENTIAL HABITAT EFFECTIVENESS FOR BIG GAME AND OTHER WILDLIFE SPECIES WITH EMPHASIS ON SIZE AND DISTRIBUTION OF HABITAT COMPONENTS (FORAGE AND COVER AREAS FOR ELK, AND SNAGS AND DEAD AND DOWN MATERIALS FOR ALL CAVITY USERS) UNIQUE WILDLIFE HABITATS AND KEY USE AREAS WILL BE RETAINED OR PROTECTED.

DESCRIPTION

Applicable to all or parts of the forest acres classified as tentatively suitable for timber management and other included acres classified as suitable and transitory range (see Wildlife and Timber sections below for exceptions).

The management area applies to about 32 percent of the suitable lands across the Forest on all districts. Locations are shown on the management area maps.

DESIRED FUTURE CONDITION

The Forest will be a mosaic of even-aged and uneven-aged stands dispersed in a manner to create a pattern of forage, and marginal and satisfactory cover for big game. Management activities including timber harvest, prescribed fire, tree planting, and thinning will be readily apparent. Created openings will range from 1-2 acres up to 40 acres (generally 20 to 30 acres) in size. At least 15 percent of the area will be maintained as satisfactory cover, which will appear as stands of trees larger than 10 acres in size, with crown closures of 70 percent or more. An additional 15 to 25 percent of the area will be maintained as marginal cover with crown closures of 40 to 69 percent, and generally capable of obscuring 90 percent of a standing elk at a distance of 200 feet or less. Stands managed using uneven-aged practices will also be apparent. Through the use of both even-aged and uneven-aged silvicultural treatments, horizontal and vertical diversity of timber stands will be maintained, providing habitat for a wide variety of wildlife species.

A variety of native and seeded grasses, sedges, forbs, and shrubs will be available for big game, other wildlife, and domestic livestock. Range and timber management practices will result in improved range condition and increased amounts of available forage.

Emphasis will be apparent on managing roads, providing security for big game, protecting important calving and fawning areas, and providing for a quality hunting experience. Road closures and other management techniques will result in a noticeable amount of travel restrictions across the area. Dispersed recreation opportunities of all types will be available, but motorized access may be limited. As a result of management, quality big game and other wildlife habitat will assist in meeting state wildlife agency population and productivity goals and Forest recreation objectives.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

A Roaded Modified social and physical setting (ROS) may result from meeting the goal. Dispersed recreation activities that meet the goal are permitted.

Recreation site modifications and facility development levels 1 and 2 (see Glossary) are permitted.

Access should mostly be for walk-in or horseback opportunities on roads, trails, and areas will generally be closed to motorized use, with some motorized use opportunities on open roads and trails.

Trail and associated facility construction, reconstruction, and/or maintenance are permitted as long as consistent with overall objectives of wildlife management.

Off-highway vehicle use is permitted on designated roads and trails where compatible with big game and other wildlife species' habitat effectiveness, recreation, and other resource objectives.

VISUAL

Management activities will result in a range of visual settings from natural appearing to modified. Visual quality will be subordinate to the wildlife habitat goals.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Elk habitat will be managed to achieve a habitat effectiveness index of no less than 60, including discounts for roads open to motorized vehicular traffic, as described in Wildlife Habitats in Managed Forests (Thomas and others 1979). Marginal cover, satisfactory cover, and forage areas will be managed to meet size and spacing criteria as described in Habitat Effectiveness Index for Elk on Blue Mountain Winter Ranges (Thomas and others 1988). The habitat effectiveness standard will be measured on a subwatershed (allocation zone) basis.

EXCEPTION: The Rhea Creek watershed area (Allocation Zone HO2), lying to the north and west of the ridgeline running east-west between Madison Butte and Coalmine Hill on the Heppner District, will be managed to achieve a habitat effectiveness index of no less than 90.

Cover

A minimum of 15 percent of the area will be managed as satisfactory cover (20 percent is desirable). If this is not attainable because of low natural potential, the highest percentage of satisfactory cover potentially attainable will be created or maintained. A minimum of 30 percent of an area will be managed as total cover.

Stands managed for satisfactory cover will meet the following criteria:

- Be at least 40 feet in height, with a canopy closure of at least 70 percent in all forest types;
- should be 1,200 to 1,850 feet in width (larger cover areas are preferable) though exceptions may be made by wildlife biologists on an on-the-ground assessment of the stand(s) value for elk; and
- satisfactory cover should generally appear as a multi-layered timber stand.

Marginal cover will be no less than 10 feet in height with a canopy closure of at least 40 percent, and 600 to 1,200 feet wide. Exceptions may be made by wildlife biologists on an on-the-ground assessment of the stand(s) value for elk.

All cover areas will be managed to provide sufficient vegetation to obscure 90 percent of a standing elk at a distance of 200 feet or less.

EXCEPTIONS: Exceptions to the achievement of HEI and cover standards may be made on an individual project basis. Such cases would include situations where past harvesting, large scale insect and disease damage, and/or catastrophic fires have made the possibility of accomplishing the desired future condition (DFC) (long-term potential) marginal within a reasonable period (without applying additional silvicultural treatments such as regeneration harvest, tree planting, release, and other cultural operations).

Where these situations exist, activities may occur that reduce HEI and cover further in the near term only if they are consistent with the ultimate goal of the management area, and if the

activities will clearly result in achieving a higher HEI cover condition and desired future condition (DFC) in a shorter period of time than if the area was left untreated.

All such activities will be supported by a documented NEPA analysis and will include a cumulative effects analysis of big game habitat in the project area over time. The analysis will also describe the anticipated improved condition on a subwatershed or management area basis. All exceptions must be recommended by the District Ranger and approved by the Forest Supervisor for implementation.

Forage

Available forage will be allocated to meet big game management objectives. Available excess forage may be allocated to domestic livestock.

Big game forage improvement projects such as seeding, browse planting, and fertilization may be used. Structural improvements may be used to protect these investments. Prescribed burning may be practiced in order to maintain a static or upward trend in fair or better range condition.

Other

Emphasis should be placed on retaining and/or protecting big game key use areas and habitats such as migrational corridors, calving/fawning areas, wallows, springs, seeps, and bogs.

Management activities will not create barriers to impede movement of big game animals.

Dead and down tree habitat will be managed to provide OT maintain EO percent of the potential population level for all primary cavity excavators and maintained for other cavity users.

An average of one unburned slash pile for every 2 acres should be retained on even-aged regeneration harvest units for wildlife cover.

Manage to maintain or establish a high level of vegetative diversity at a minimum level of 15 percent in each of the following five seral stages:

Grass/Forb	Young Sawtimber
Shrub/Seedling	Mature/Overmature
Pole/Sapling	

FISH

Fish habitat improvement projects and their maintenance will be permitted.

RANGE

Domestic livestock grazing is permitted at Range Management Strategy C. All available range and livestock management practices may be used as long as consistent with the primary management goal of maintaining or enhancing the big game and all other wildlife species' habitat.

Structural range improvements are permitted to the extent they are compatible with the management goal. This may entail the use of let-down fences, etc.

TIMBER

Timber will be managed on a scheduled basis. All timber management practices and intensities consistent with achieving the primary wildlife habitat management goals will be permitted. The selected silvicultural systems applied to timber stands within suitable forest lands will be based on a site-specific examination and analysis, and will be designed to achieve management goals.

Harvest practices may include clearcutting, shelterwood, salvage, removal, and commercial thinnings, as well as group or individual tree selection. Other cultural practices may be used including natural and artificial regeneration, planting genetic stock when available, release,

precommercial thinning, and insect, disease, and animal damage protection. Logging and road building should be done with conventional practices, including helicopter.

Fuelwood cutting is permitted consistent with established goals to enhance big game habitat and to maintain or manage dead and down tree habitat at 80 percent of the potential population level.

EXCEPTION: The concept of a time limited or “sunset” strategy may be used on designated areas within C4 under conditions listed in the Forest-wide Standards and Guidelines. This concept applies to the Jaussaud Corral Roadless Area (about 4,000 acres). Timber harvest volumes will be scheduled for such areas. Areas will revert from C4 to an A2 or other agreed upon designation by the year 2000. Areas may remain in C4 status pending NEPA review and decision.

The area of application in Jaussaud Corral is west of Little Lookingglass Creek running north/south along east boundary of section 2 to Timothy Guard Station on the Walla Walla Ranger District. The designated area will remain in the scheduled cut until the year 2000, at which time, it will follow a 'sunset strategy' and revert to an A2 designation, without scheduled harvest. To remain in the C4 Management Area, the decision would be evaluated through the NEPA process in either a new Forest Plan, amendment, or separate review. In the interim, harvest will proceed via uneven-aged management, using small group selection. One identified stand of old growth, near Timothy Guard Station, will be removed from entry entirely.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Land Classification II (acquisition) will generally apply to meet public needs. Lands may be exchanged in cases of demonstrated positive net public benefit.

Meet Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

Road construction, reconstruction, and maintenance are permitted, consistent with the primary overall objective of wildlife habitat management.

Roads will be limited to minimum standards necessary for timber harvesting.

Roads will be closed to meet big game habitat and/or recreation objectives. Roads will be closed upon completion of harvest activities or when open timber sales are inactive. Exceptions may be made by the District Ranger based on a documented analysis and supporting rationale of the need to keep individual roads open.

FIRE

For all wildfires in the management area, all suppression strategies (appropriate responses) may be used. Suppression practices will be designed to protect investments in managed forests and to prevent large acreage losses to wildfire.

Wildfire prevention activities should be emphasized.

FUELS

Fuels should not exceed an average of 12 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches, as depicted in the Photo Series for Quantifying Forest Residues (Technical Report PNW 52) (USDA Forest Service 1976b):

Even-aged Management	3-PP-4-PC	4-PP-1 -TH	1 -PP&ASSOC-4-PC	2-LP-3-PC
Uneven-aged Management	2-PP4-PC	2-LP-3-PC	4-PP-1 -TH	5-PP&ASSOC4-PC

All types of prescribed fire may be used to accomplish management objectives.

PESTS

Use integrated pest management (IPM) principles and strategies in managing insects and disease to meet management objectives. Detection and monitoring of pest conditions and populations will be done so that corrective treatments, consistent with resource objectives can be prescribed at the earliest opportunity.

Within the wildlife habitat objectives, protect forest stands (habitats) by practicing prevention activities. Emphasis will be on the prevention of stand and fuels conditions that favor pests increases above epidemic levels. Aggressively suppress insects and disease using cast efficient strategies when outbreaks threaten resource objectives.

C5 RIPARIAN (FISH AND WILDLIFE)

GOAL

MAINTAIN OR ENHANCE WATER QUALITY, AND PRODUCE A HIGH LEVEL OF POTENTIAL HABITAT CAPABILITY FOR ALL SPECIES OF FISH AND WILDLIFE WITHIN THE DESIGNATED RIPARIAN HABITAT AREAS WHILE PROVIDING FOR A HIGH LEVEL OF HABITAT EFFECTIVENESS FOR BIG GAME.

DESCRIPTION

The management area is applicable to all designated riparian areas associated with Class I, II, and III streams, including adjacent floodplains and wetlands as shown on the management area maps.

DESIRED FUTURE CONDITION

A near natural setting will predominate adjacent to the stream, with a wide variety of plant communities of various species, sizes, and age classes. In forested riparian zones, a continuous high tree canopy layer will be present and the forest will appear denser than in the surrounding land. Upper and mid-level conifer and hardwood canopy structure and lower shrub level will provide desired levels of stream surface shading, streambank stability, and satisfactory cover for big game.

Evidence of uneven-aged timber harvest will be common, but there will be only minimal impact on riparian vegetation and visual quality. Some small openings may occur feathering outward away from the stream. The more common occurrence will be isolated stumps amidst an uneven-aged forest, resulting from single tree and small group selection practices.

Riparian vegetation will be dense and diverse, contributing shade for water temperature control, stable streambanks and controlled sediment, and complex fish habitat along the banks. Large diameter standing dead and live trees will provide a long-term supply of large woody material for instream fish habitat and channel stability. A variety of other habitats including dead and down tree habitat and satisfactory cover for big game will be found within the riparian area. Forest wildlife species will continue to use riparian habitat areas disproportionately more than any other habitat type. Evidence of streambank trampling from livestock will be less common. Dispersed recreation activities of all types will be abundant and available for a variety of users. Quality riparian management will assist in meeting anadromous and resident fish productivity goals.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

A variety of ROS social and physical settings ranging from Roaded Natural to Roaded Modified may occur. Dispersed recreation activities that meet the goal are permitted.

Recreation site modification and facility development levels 1 and 2 are permitted.

Provide for mostly road oriented recreation opportunities and for walk-in or horseback, with some OHV opportunities in isolated areas.

Off-highway vehicle (OHV) use is permitted but limited to designated routes.

Trail and related facility development and maintenance are permitted. Manage trails to protect wildlife and fish habitat, and water quality values. Apply Forest-wide Standards and Guidelines for OHV trail construction and management.

VISUAL

Management activities may result in a natural appearing (Retention) to a modified (Modification) visual setting. Visual quality should be subordinate to riparian habitat objectives.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Maintain dead tree (snag) habitat at the 100 percent level for all cavity users as described in 'Wildlife Habitats in Managed Forests-Blue Mountains of Oregon and Washington' (Thomas and others 1979). Emphasis will be given to retaining large diameter trees (20 inches d.b.h. or greater).

Retain large dead and down woody material (20 feet or more in length and 12 to 17 inches in diameter at the small end) at the rate of four Class I or Class II logs per acre, as defined by Thomas and others (ibid.). The desired condition is uncharred logs.

Manage riparian areas to produce satisfactory cover. Satisfactory cover consists of tree stands at least 40 feet in height, with a crown closure of 70 percent or more, and two or more canopy layers.

Structural and nonstructural wildlife habitat improvement projects and their maintenance are permitted. Prescribed burning may be utilized to meet the riparian management objectives.

FISH

Anadromous fish habitat (includes stream and associated riparian area) will be managed to produce at least 90 percent of potential smolt habitat capability index (SHCI). The standard should be achieved by meeting the following:

- Riparian vegetation will be managed to promote floodplain, bank, and channel stability, to provide resiliency to disturbance and promote aquatic diversity.
- Where natural conditions permit, streamside vegetation along the entire length of perennial streams will be managed to maintain an average shading of 80 percent of the entire stream surface shaded. Where existing shading is already below this level, retain all vegetation contributing to stream surface shading.
- Lands and trees adjacent to perennial streams will be managed to provide for a continuous, well distributed supply of naturally occurring, large woody material for instream fish and riparian habitat. At a minimum, these lands will include a zone within one tree height of the stream channel but may be extended to upland areas when the additional areas are determined to be critical to the provision of future large wood to downstream fish bearing reaches.
- Streams will be managed to provide pools that are relatively large, frequent, well distributed, and persistent during low flows.
- Forest-wide Standards and Guidelines for water temperature and instream flows will be met.
- The sediment budget will fall well within the range and frequency adapted to by indigenous aquatic communities.

Fish habitat enhancement, restoration, and maintenance practices (projects) will be used to increase smolt habitat capability.

RANGE

Intensive range management, including superior grazing systems, such as periodic rest, will be practiced to protect and improve riparian vegetation and anadromous fish and wildlife habitats. Periods of extended rest may be utilized in some situations where it is necessary to allow re-establishment of desired shrub communities.

Meet the forage utilization standards for riparian areas, found in the Range portion of Forest-wide Standards and Guidelines.

Range management techniques that control livestock distribution and timing of use will be used to meet riparian habitat goals. Range improvements that maintain or enhance riparian habitat goals will be permitted. Improvements should be located to encourage livestock use away from the riparian areas. Grazing systems utilizing riparian pastures may be required to maintain water quality and protect riparian vegetation. Riparian corridor fencing should be considered on a limited basis for special applications.

TIMBER

Timber will be managed on a scheduled basis.

EXCEPTION: All C5 riparian areas in the headwaters of the Tucannon River system will not have scheduled timber harvest.

A range of silvicultural practices and intensities, including both even-aged and uneven-aged management, is permitted when compatible with water quality and anadromous fish and wildlife habitat objectives. Uneven-aged management strategies are emphasized. Single tree selection is the preferred management tool within 50 feet of the stream channel.

The selected silvicultural systems applied to timber stands within suitable forest lands will be based on a site specific examination and analysis, and will be designed to achieve management goals. Harvest practices may include group or individual tree selection, salvage, removal, and commercial thinnings, as well as clearcutting, shelterwood, and seed tree. Other cultural practices may be used including natural and artificial regeneration, planting genetic stock when available, release, precommercial thinning, and insect, disease, and animal damage protection or control.

Created openings adjacent to live streams may be permitted, provided the stream surface shading, large woody material, and water quality requirements for fisheries are met. If natural shading is below the 80 percent level, meet the Forest-wide Standards and Guidelines for riparian/fish habitat (Class III streams).

Created openings should generally be 1 acre or smaller, but no larger than 2 acres in size. No more than 6 percent of the entire riparian area within a subwatershed will be in created openings (trees less than 10 feet in height) at any time.

All yarding or skidding systems are acceptable. Constraints may be placed on yarding and skidding systems on a site-specific basis to protect riparian vegetation and habitat, and to preclude damage to soil and water resources. Meet tree falling and logging Forest-wide Standards and Guidelines in riparian/fish habitat (Class III streams).

Discourage cutting of dead and down material for fuelwood within riparian area.

Mechanical site preparation or aerial application of fertilizer is not permitted.

WATER

Meet Forest-wide Standards and Guidelines.

SOIL

Within 250 feet of all streams and wet areas associated with streams, limit the mineral soil exposed by ground-disturbing activities to 10 percent of the project area.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines while protecting fish habitat investments.

LANDS

Meet Forest-wide Standards and Guidelines for riparian/fish habitat, lands and land uses.

TRANSPORTATION

Construction, reconstruction, and the maintenance of roads will be permitted when consistent with the riparian management goals. New roads should be located outside the riparian area (except for crossings) unless alternatives are determined to have higher adverse impacts to resources.

Water quality and fisheries habitat problems caused by roads will be corrected.

FIRE

The appropriate wildfire suppression response should emphasize control and/or contain strategies.

Wildfire suppression efforts should utilize low-impact methods. Use of heavy equipment may require restoration and/or mitigation to maintain riparian values.

FUELS

Fuels management activities will be designed and executed to maintain or enhance the anadromous fish and wildlife habitat within the constraints of 10 percent exposed mineral soils and 80 percent stream surface shading.

Fuels should not exceed an average of 9 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches, as depicted in the Photo Series for Quantifying Forest Residues (Technical Report PNW 52, 1976) (USDA Forest Service 1976b):

3-PP4-PC 4-PP-1-TH 1 -PP&ASSOC-4-PC 2-LP3-PC

Prescribed fire may be used, consistent with riparian objectives.

PESTS

Use integrated pest management (IPM) principles and strategies in managing insects and disease to meet management objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments consistent with resource objectives can be prescribed at the earliest opportunity.

Consistent with resource objectives, protect forest stands (habitats) by practicing prevention activities. Emphasis will be on the prevention of stand and fuels conditions that favor pests increases above epidemic levels.

The use of pesticides must not conflict with riparian/wildlife management objectives.

C7 SPECIAL FISH MANAGEMENT AREA

GOAL

MAINTAIN AND ENHANCE WATER QUALITY AND PRODUCE HIGH LEVELS OF ANADROMOUS FISH HABITAT ON AN AREA-WIDE BASIS.

DESCRIPTION

The special fish management area includes all land within a watershed, subwatershed, or other manageable area. The management area applies to much of the Umatilla National Forest portion of the North Fork John Day drainage (referred to in Senate Report No. 98-465, dated May 18,1984). The management area is located on the North Fork John Day District, as shown on management area maps.

DESIRED FUTURE CONDITION

In riparian areas, a natural to near natural setting and vegetation development will predominate, with a variety of plant communities, sizes, and age classes. A high tree canopy layer will be present, and the forest will appear denser than surrounding areas. Forest canopy of conifers and hardwoods will provide desired levels of stream surface shading and long-term supply of large woody material for instream fish habitat and snags. Vegetation will contribute to stable streambanks and complex fish habitat along the banks. Dispersed recreation opportunities associated with stream and stream sides will be available for all Forest visitors.

In upland areas of the watersheds, the Forests will appear as a mosaic of even-aged and uneven-aged stands with highly dispersed created openings of 1 to 40 acres in size. Management activities of all types will be observable. Horizontal and vertical diversity in vegetation will be apparent; also, a discontinuity in forest age classes (noncontinuous and fewer age classes) will be noticeable within a watershed.

Emphasis placed on careful timber harvest and road construction and maintenance will be reflected in the high quality water being produced. Dispersed recreation opportunities of all types will be available, though some limitations in access may occur. As a result of management, anadromous fish recovery and long-term fish population goals will be met.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

A Roaded Modified and Roaded Natural social and physical setting (ROS) may result from meeting the goal. Dispersed recreation activities that meet the goal are permitted.

Recreation site modifications and facility development levels 1 and 2 (see Glossary) are permitted.

Provide the opportunity for road oriented, walk-in, and horseback activities. Motorized access may be limited to designated roads, trails, and areas.

Trail and associated facility construction, reconstruction, and maintenance are permitted as long as consistent with water quality and anadromous fish habitat objectives.

Off-highway vehicle (OHV) use is permitted and will be managed to meet management area goals and to prevent unacceptable damage to anadromous fish habitat and associated riparian soils and vegetation.

VISUAL

A range of visual quality objectives may apply-from Retention to Maximum Modification.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Wildlife habitat improvement and maintenance projects are permitted provided the activities meet the goal.

Dead and down tree habitat will be managed in the riparian areas to provide or maintain 100 percent of the potential population level and, in the upland areas, 60 percent of the potential population level for all primary cavity excavators, and maintained for other wildlife species.

An average of one unburned slash pile for every 2 acres should be retained for wildlife cover on even-aged regeneration harvest units.

Elk habitat will be managed to achieve a habitat effectiveness index of no less than 45, including discounts for open roads (see Thomas and others 1979). A minimum of 10 percent of an area will be managed as satisfactory cover (15-20 percent is desirable). A minimum of 30 percent of an area will be managed as total cover. Management activities will not create barriers to impede movement of big game.

FISH

Anadromous fish habitat (includes streams and associated riparian areas) will be managed to produce at least 90 percent of potential smolt habitat capability index (SHCI). The standard should be achieved by meeting the following:

- Riparian vegetation will be managed to promote floodplain, bank, and channel stability, resiliency to disturbance, and aquatic diversity.
- Where natural conditions permit, streamside vegetation along the entire length of perennial streams will be managed to maintain an average shading of 80 percent of the entire stream surface shaded. Where existing shading is already below this level, retain all vegetation contributing to stream surface shading.
- Lands adjacent to perennial streams will be managed to provide for a continuous, well distributed supply of naturally occurring large woody material for instream fish and riparian habitat. At a minimum, these lands will include a zone within one tree height of the stream channel but may be extended to upland areas when the additional areas are determined to be critical to the provision of future large wood to downstream fish-bearing reaches.
- Streams will be managed to provide pools that are relatively large, frequent, well distributed, and persistent during low flows.
- Forest-wide Standards and Guidelines for water temperature and instream flows will be met.
- The sediment budget will fall well within the range and frequency adapted to by indigenous aquatic communities.

Fish habitat enhancement, restoration, and maintenance practices (projects) will be used to increase smolt habitat capability.

RANGE

Intensive range management including superior grazing systems, such as periodic rest, will be practiced to protect and improve riparian vegetation and anadromous fish habitat.

Grazing practices will normally involve complete or periodic rest.

Range management techniques that control livestock distribution and timing of use will be used to meet riparian goals. Range improvements (and their maintenance) will be permitted, and should be located to encourage livestock use away from the riparian areas.

Meet the Forest-wide Standards and Guidelines for forage utilization in riparian areas and uplands found in the Range portion of Forest-wide Standards and Guidelines.

TIMBER

In the riparian areas, salvage timber harvest may be permitted where anadromous fish habitat can be protected and improved. Other types of scheduled timber harvest will not be permitted.

Outside of riparian areas, timber will be managed on a scheduled basis. For all lands within national forest boundaries, timber harvest will be scheduled so that no more than 25 percent of the forest land within a subwatershed will have timber stand age classes of 0-20 years at any one time, except where analysis documented in an environmental assessment indicates that watershed condition and anadromous fish habitat would not be impaired.

Silvicultural systems and harvest practices within 500 feet of Class I and II streams will emphasize prevention of induced sediment production. In this zone and beyond, a full range of silvicultural practices and intensities including both even-aged and uneven-aged management systems can occur when compatible with water quality and anadromous fish habitat objectives.

All timber management practices and intensities are permitted. The selected silvicultural systems applied to timber stands within suitable forest lands will be based on site-specific examination and analysis, and will be designed to achieve management goals. Harvest practices may include clearcutting, shelterwood, seed tree, salvage, removal, and commercial thinnings, as well as group or individual tree selection. Other cultural practices may be used including natural and artificial regeneration, planting genetic stock when available, release, precommercial thinning, and insect, disease, and animal damage protection or control.

All yarding and skidding systems are acceptable within ground-disturbing constraints.

WATER

Meet Forest -wide Standards and Guidelines.

SOIL

Within 250 feet of all streams and wet areas associated with streams, limit the mineral soil exposed by ground-disturbing activities to 10 percent of the project area.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines while protecting fish habitat investments.

LANDS

Acquiring private inholdings within riparian areas is a high priority for landownership adjustments.

Exchange of riparian areas will be undertaken only to improve overall national forest riparian management.

Meet the Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

Road construction, reconstruction, and maintenance are permitted as long as consistent with the objectives of water quality and anadromous fish habitat.

Road construction will rarely occur within 500 feet of Class I and II streams, within 250 feet of Class III and IV streams, or on slopes over 60 percent. Road location, design, construction, and maintenance techniques used will focus on minimizing soil loss impacts to water quality and fisheries habitat.

Water quality and fisheries habitat problems caused by roads will be corrected.

Roads may be closed to motorized use to meet water quality, fisheries, recreation, and/or big game objectives.

FIRE

For moderate to high intensity wildfires (average flame lengths over 2 feet), emphasis should be on the appropriate suppression response of control and/or contain.

Wildfire suppression efforts should utilize low-impact methods.

Use of heavy equipment may require restoration and/or other mitigation to maintain fish habitat quality.

FUELS

Fuels management activities will be designed and executed to maintain or enhance anadromous fish habitat.

Within the riparian constraints of 10 percent exposed mineral soils and 80 percent stream surface shading, prescribed burning may be utilized in riparian areas as long as consistent with strategy goals. Within fish and water goals, prescribed fire may be used on the remainder of the management area in order to meet resource objectives.

Fuels should not exceed an average of 9 tons per acre in the 0 to 3-inch size class, and an average residue depth of 6 inches as depicted in the Photo Series for Quantifying Forest Residues (Technical Report PNW 52, 1976) (USDA Forest Service 1976b):

3-PP-4-PC	4-PP-1 -TH	1-PP&ASSOC-4-PC	2-LP-3-PC

PESTS

Use integrated pest management (IPM) principles and strategies in managing insects and disease to meet management objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments consistent with resource objectives can be prescribed at the earliest opportunity.

Consistent with resource objectives, protect forest stands (habitats) by practicing prevention activities. Emphasis will be on the prevention of stand and fuels conditions that favor pests increases above epidemic levels. Aggressively suppress insects and disease using the cost efficient strategies when outbreaks threaten resource objectives.

The use of pesticides must not conflict with riparian, fish, and water management objectives.

C8 GRASS-TREE MOSAIC (GTM)

GOAL

ON AREAS KNOWN AS GRASS-TREE MOSAIC (GTM). PROVIDE HIGH LEVELS OF POTENTIAL HABITAT EFFECTIVENESS, HIGH QUALITY FORAGE FOR BIG GAME WILDLIFE SPECIES, VISUAL DIVERSITY, AND PROTECT EROSIVE SOILS.

DESCRIPTION

The strategy applies to all or parts of lands covered primarily with grassland vegetation interspersed with patches or stringers of forest vegetation, often on steep topography with shallow soils. The lands can be further identified as follows:

1. Most of the area is composed of big game winter ranges delineated in coordination with the Oregon Department of Fish and Wildlife and Washington Department of Wildlife.
2. The remainder of the area consists of summer range land contiguous to the identified big game winter ranges.

The combination is known as grass-tree mosaic and is identified on Forest planning maps. The designated winter range portions of the GTM encompass areas that provide habitat for 90 percent or more of the wintering elk populations, during the winter use period, 6 years out of 10. Each winter range is assigned a winter use period ranging from 4 to 4 ½ months. In general, the area contains more than 70 percent herbaceous vegetation.

The C8 Management Area applies to areas on the Pomeroy, Walla Walla, and Heppner ranger districts as shown on the management area maps. The area encompasses about 98,500 acres.

DESIRED FUTURE CONDITION

Generally these areas will remain natural appearing with the predominant view being made up of patches or stringers of timber occurring on open, generally steep hillsides. Many forest stands will appear as mature timber with some having multi-layered canopies. Some stands will be more open as the result of management activities designed to improve big game habitat. Areas of early spring forage green-up will occur in a mosaic pattern over the winter range portion of this area. Forage will be abundant and improved through management. Quality big game habitat will be maintained and enhanced, thereby helping to achieve big game management population and productivity goals. In addition, during an average winter, most of the wintering big game will remain on public lands, helping to keep impacts to private lands low.

Recreation opportunities of all types will be available throughout the area. Through portions of the area, recreationists will be able to enjoy motorized activities. Vehicle access will be restricted on many roads year-round and others seasonally during winter big game use periods, and on important calving areas during the spring and early summer. Additionally, road construction and reconstruction will generally be limited.

The identified roadless areas will remain unroaded and will provide opportunities for recreationists to experience closeness to nature, self-reliance, and tranquility.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

Areas mapped as roadless (1984) within the GTM will remain roadless; the roadless areas will primarily provide Semi-primitive Nonmotorized, with some Semi-primitive Motorized settings (ROS). The remaining area may provide Roaded Natural and Roaded Modified opportunities in meeting the goal.

Recreation site modifications and site development should be level 2 or less (See Glossary). Facilities will generally be limited to meeting safety and sanitary needs. A minimum of onsite controls and restrictions will be utilized to protect resources and promote safe use of the area.

RECREATION

Access will be mostly for walk-in and horseback opportunities.

Off-highway vehicle (OHV) use is permitted and will normally be restricted to designated trails or closed roads. However, such use may be curtailed by closure or other measures where it is determined to be detrimental to big game species. Motorized use will be permitted on designated open roads.

Trail and associated facility construction, reconstruction, and maintenance will be permitted. Trail systems will be designed and maintained to disperse use, provide varying but challenging difficultly levels, and meet area objectives. Trail use may be curtailed by closure where and when determined to be detrimental to wintering big game species and/or other resource values.

If needed, implement limits on group size, number of animals, and/or other measures (based on limits of acceptable change criteria) to meet social encounter criteria for semi-primitive recreation opportunities. Utilize a minimum of onsite controls and restrictions to protect resources and promote safe use of the area.

VISUAL

A range of visual quality objectives will apply—from Retention to Modification.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Elk habitat will be managed to maintain a habitat effectiveness index of no less than 70, including discounts for open roads. Marginal and satisfactory cover will be managed to the greatest extent possible in order to meet optimum size and distribution criteria, as described in the draft publication 'Habitat Effectiveness Index for Elk on Blue Mountain Winter Ranges' (Thomas and others 1988). The habitat effectiveness standard will be measured on a subwatershed (allocation zone) basis.

Cover

Where possible, a minimum of 10 percent of the winter and summer range parts of the GTM will be managed as satisfactory cover (15-20 percent is desirable). If this is not attainable because of low natural potential, the highest percentage of satisfactory cover potentially attainable will be created or maintained. Where possible, a minimum of 30 percent of an area will be managed as total cover (satisfactory and marginal).

Stands managed for satisfactory cover will meet the following criteria:

- Provide stand width of 600-1,200 feet. Exceptions can be made according to Forest-wide Standards and Guidelines;
- be at least 40 ft. in height with a canopy closure of at least 70 percent in all forest types and in the ponderosa pine type on big game winter ranges maintain a canopy closure of at least 50 percent; and
- should be at least 10 acres in size. Larger cover areas are preferable.

The desired cover condition will generally appear as a multi-layered stand, and will meet elk 'hiding' criteria by obscuring 90 percent of a standing elk at a distance of 200 feet or less.

Marginal cover will include stands no less than 10 feet in height with a canopy closure of at least 40 percent and will meet above the above elk 'hiding' criteria.

Forage

Available forage will be allocated to meet big game management objectives. Available forage in excess of wildlife needs may be allocated to domestic livestock.

Big game forage and cover enhancement projects are encouraged. Improvement projects such as prescribed burning, seeding and planting, browse planting, release, mechanical ground and vegetative disturbance, fertilization, and others may be employed. Structural improvements may be used to protect these investments.

Other

All management activities will be regulated during the big game winter use period of December 1 through March 30 or April 15.

Management activities will not create barriers to impede movement of big game animals.

Dead and down tree habitat will be managed to provide or maintain 80 percent of the potential population level for all primary cavity excavators and other non-game wildlife species, as described in Wildlife Habitats in Managed Forests (Thomas and others1979).

FISH

Fish habitat improvement projects and their maintenance will be permitted.

RANGE

Domestic livestock grazing is permitted at a level C management strategy. All available range and livestock management practices may be used consistent with the primary management goals of maintaining or enhancing the big game winter and summer ranges, and providing sufficient residual forage for big game species during the winter use period.

Structural range improvements are permitted to the extent that they are compatible with big game management.

TIMBER

Timber harvest will not be scheduled. However, timber management activities (including harvest, reforestation, and others) may be permitted and used only where analysis shows they are needed to achieve the objectives for big game harvest and for other wildlife species. Under catastrophic conditions, timber may be salvaged and cover reestablished.

EXCEPTION: The time limited or 'sunset' strategy concept may be used on designated areas within C8 under conditions listed in Forest-wide Standards and Guidelines. The concept applies to tentatively suitable lands in and adjacent to the Horseshoe Ridge Roadless Area as described below. Timber harvest volume will be scheduled for such areas. If no actions take place, or if results of timber harvest fail to meet specified objectives above, areas will revert automatically to standard C8 direction (no scheduled harvest) and schedules.

The approximately 9,000-acre Horseshoe Ridge area is south of a line from 'Smith Gate' east to Meacham Creek and is described as follows: Starting at the NE corner of section 19, T. 1 N., R. 36 E. bearing southerly and northeasterly along the proposed dedicated old growth (as shown on the management area maps) to Duncan Canyon, thence down Duncan Canyon to Meacham Creek. Thence southerly, westerly and northwesterly along Meacham Creek to the Forest boundary at about the SE corner of section 30, T.1 N., R. 36 E., north along the east boundary of sections 30 and 19 to the point of beginning. Important attributes for the area are cover for big game, 'spiritual' resources, high riparian and fish values, and visual quality. Timber may be harvested on a scheduled basis as directed by C8 Management Area Standards and Guidelines 'Exception' and resource objectives established for each project (timber sale) until the year 2000. By the year 2000, if the objectives above are not met, 'excepted' areas will revert to C8 without the 'Exception' and be removed from the scheduled cut. If objectives are met, the area

may be allocated to a different management strategy through the project review process and a separate NEPA evaluation.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

All delineated winter range acres and adjacent land in Federal ownership will generally be retained.

Acquire inholdings within delineated winter range lines and adjacent land where opportunities exist.

Other Forest-wide Standards and Guidelines for lands and land uses apply.

TRANSPORTATION

Where no other feasible and economical options exist, roads may be constructed, reconstructed, and maintained through the area to provide access to other management areas, as long as they are consistent with the stated visual, watershed, and wildlife objectives.

Portions of the grass-tree mosaic (GTM) currently identified (mapped) as roadless will be maintained in an unroaded condition.

Roads will be closed to motorized use, as needed, to meet big game habitat effectiveness objectives.

FIRE

For moderate to high intensity wildfires (average flame lengths over 2 S), all wildfire suppression strategies may be emphasized. Under appropriate fire prediction conditions, wildfires may be permitted to play a natural role on the winter ranges to meet big game habitat and other resource objectives.

FUELS

In the forested areas, fuels should not exceed an average of 12 tons per acre in the 0 to 3-inch size class, and an average residue depth of 6 inches as depicted in the Photo Series for Quantifying Forest Residues (Technical Report PNW 52) (USDA Forest Service 1976b)'

3-PP4-PC 4-PP-1 -TH 1-PP&ASSOC-4-PC 2-LP-3-PC

All types of prescribed fire may be used including broadcast burning, underburning, or range burning.

PESTS

Use integrated pest management (IPM) principles and strategies in meeting management area objectives. Aggressively suppress insects and disease using the cost efficient strategies when outbreaks threaten resource objectives or resources on adjacent lands. Favor biological methods in meeting protection and suppression requirements.

Protect forest stands (habitat) consistent with resource objectives by practicing prevention activities. Prescribed fire may be used to help reduce stocking and conditions favorable for bark beetle and dwarf mistletoes. Control of defoliators may also be accomplished by spraying following approval of an environmental analysis. Use of salvage harvest is limited to catastrophic events.

D2 RESEARCH NATURAL AREA

GOALS

PRESERVE NATURALLY OCCURRING PHYSICAL AND BIOLOGICAL UNITS WHERE NATURAL CONDITIONS AND PROCESSES ARE MAINTAINED, INSOFAR AS POSSIBLE, FOR THE PURPOSES OF: 1) COMPARISON WITH THOSE LANDS INFLUENCED BY MAN; 2) PROVISION OF EDUCATIONAL AND RESEARCH AREAS FOR ECOLOGICAL AND ENVIRONMENTAL STUDIES; AND 3) PRESERVATION OF GENE POOLS FOR TYPICAL AND RARE AND ENDANGERED PLANTS AND ANIMALS.

DESCRIPTION

Eight areas have been identified and are managed as research natural areas. Two (Pataha and Rainbow Creek) have been established by Chief's order. The other six candidate areas are: Elk Flats Meadow, Elk Flats-Wenaha Breaks, Kelly Creek Butte, Mill Creek Watershed, Vinegar Hill, and Birch Creek Cove. Establishment reports and management plans for each area may contain more specific constraints or permitted uses.

DESIRED FUTURE CONDITION

The ecological community will continue to evolve through natural processes. Natural physical, and biological conditions will be maintained, insofar as possible, to preserve the vegetation for which the area was created. Use, except for scientific and educational purposes, will be generally discouraged.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

Establishment reports and management plans for each area will contain specific constraints or permitted uses.

RECREATION

Recreation activities and uses, including overnight camping, hunting and trapping, and pack and saddle stock use will be discouraged or prohibited if such use threatens or interferes with the objectives and values of the Research Natural Area.

All recreation OHV use will be prohibited.

There will be no onsite interpretive or demonstrative facilities.

Educational use of an RNA may be approved for any group or purpose.

Publicity that would attract the general public will be avoided.

Existing trails will remain and be maintained as long as the RNA objectives are not compromised. Travel should be restricted to the trails.

New trails will not be constructed, unless needed for research purposes.

WILDERNESS

For an RNA(s) established in wilderness, management direction for wilderness will take precedence.

Research on RNA's in wilderness will be related to wilderness.

VISUAL

Retention is the visual quality objective for RNA's.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE AND FISH

Habitat manipulation and introduction of exotic species of plants, animals, or fish is not permitted.

Snags and down tree habitat will be maintained at naturally occurring levels.

RANGE

Prohibit grazing of domestic livestock unless it is needed to establish or maintain a specific vegetation type.

Improvements are not permitted; boundary fencing may be required to provide protection to the RNA.

TIMBER

Timber management use and practices are excluded. Cutting and removal of vegetation is prohibited, except as part of an approved scientific investigation.

Firewood cutting is not permitted.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

For RNA(s) established in municipal watershed(s), management direction for the municipal watershed will take precedence.

In cooperation with the PNW Research Station, rehabilitation plans will be developed and implemented in the event of soil disturbing activities such as fire suppression. Soil stabilization of naturally occurring soil loss or movement should not be permitted unless part of an authorized study.

MINERALS

Valid claims existing prior to Research Natural Area designation may be developed. Valid claims existing prior to any withdrawal from mineral entry shall be required to have an operating plan providing the least amount of impact. Mineral leases will require 'No Surface Occupancy' stipulation. Research Natural Areas may be recommended for withdrawal from mineral entry in situations where mitigation measures do not adequately protect management area values. The mineral potential of the area shall be assessed before withdrawal is recommended.

LANDS

RNA's should generally be retained in public ownership. When possible, inholdings may be acquired when they contribute to RNA objectives.

An Establishment Record will be written for each RNA recommended in the Forest Plan. A management plan should be written for each established RNA. The management plan should include analysis of surrounding lands as related to the integrity of the RNA. The only special use permits issued will be those related to research; all others will be denied. Noncompatible existing special uses will be terminated. RNA's are 'Avoidance' areas for utility corridors.

Rights-of-way easements existing before RNA establishment will be honored. Upgrading easements that would compromise the objectives of the RNA will be discouraged. The Forest should recommend against FERC licenses or permits that compromise the objectives of the RNA.

Meet other lands and land use Forest-wide Standards and Guidelines contributing toward RNA objectives.

TRANSPORTATION/FACILITIES

New transportation facilities are not acceptable.

New facilities shall not be bulk except on valid existing mining claims with approved operating plans, or as required as part of an authorized study.

FIRE

For moderate to high intensity wildfires, the appropriate suppression response should emphasize control strategies. Wildfire should be extinguished by the least disturbing means possible.

FUELS

If authorized in a management plan, low intensity unplanned fire or prescribed burns may be used as a tool to mimic a natural fire to: (1) Perpetuate the sere and thus the cell(s) the RNA represents; (2) return fire to its natural role in the area; and (3) return plant communities to a condition similar to that existing prior to active fire suppression.

PESTS

Action to control insects or diseases will not be taken unless an outbreak will drastically alter the natural processes within the RNA, or if it poses an unacceptable threat to resources adjacent to the RNA. Treatment to control insects and diseases within an RNA will support and promote the basic objective and purposes of establishing the area (FSM 4063.3[8]). Biological methods are preferred.

RESEARCH

Research projects and management will be coordinated with Pacific Northwest Research Station. Research will not be approved that will change vegetative or surface character of the area.

GENERAL

Research Natural Areas inside of wilderness or municipal watershed will be guided by direction for those areas, in situations where conflicts occur.

E I TIMBER AND FORAGE

GOAL

MANAGE FOREST LANDS TO EMPHASIZE PRODUCTION OF WOOD FIBER (TIMBER) AND ENCOURAGE PRODUCTION OF FORAGE.

DESCRIPTION

Applies to all or parts of the forest areas classified as tentatively suitable for timber management and to inclusions of grasslands suitable for livestock grazing. The following areas are managed for timber and forage production under the management area:

- The area west of State Highway 207 on the Heppner Ranger District;
- generally, an area east of State Highway 207, and north of the hydrodivide of Stalling Butte, Tamarack Mtn. and Ant Hill; thence, northerly to Forest Road 22;
- nominally, a band or area south of Forest Roads 21, 2104, and 2105 ranging east from Forest Road 22 to the hydrodivide between Wickiup and Little Potamus Creeks, and
- that portion of the Squaw Roadless Area complementing the Wallowa-Whitman NF laying in the Grande Ronde drainage allocation.

DESIRED FUTURE CONDITION

Intensive management of forests for timber production and other commodity products will be apparent. The Forest will primarily be a diverse mosaic of even-aged stands of many age classes, with trees somewhat uniformly spaced and well stocked. Regenerated stands will generally range from 20-40 acres. Stands managed using uneven-aged principles will also be apparent, particularly in the ponderosa pine types. A diversity of species will be present in plantations, but seral, more pest free species such as ponderosa pine, western larch, and lodgepole pine will be most evident. Larger trees will average 16-18 inches in diameter with the exception of trees left to meet cavity dependent wildlife needs and for the recruitment of large woody debris. Accumulated fuels will generally be light, and large destructive fire will seldom occur; prescribed fire will be an important management tool.

A variety of native and seeded grasses, sedges, forbs, and shrubs will be provided for both domestic livestock and wildlife. More of the forested rangelands will be in good forage condition class as the overstory is removed and understories thinned. Forage use will be high with improvements installed to facilitate stock distribution and the effective use of available forage. Fences and water developments will be evident. Recreational opportunities will be available for hunters, fishermen, off-highway vehicle operators, and other motorists.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

A Roaded Modified social and physical setting may result from meeting the goal. Recreation site modification and facility development levels 1 and 2 (Primitive and Semi-primitive) (see Glossary) are permitted. Dispersed recreation activities that meet the goal are permitted.

Provide the opportunity for mostly road-oriented recreation activities. Motorized access may be limited to designated roads, trails, and areas.

Trail and associated facilities construction, reconstruction, and maintenance are permitted.

Off-highway vehicle (OHV) use is permitted. OHV use may be restricted where damage to soil and water resources is occurring and/or public safety is threatened.

VISUAL

Manage areas to meet at least the Maximum Modification visual quality objective.

Provide for rehabilitation where needed to meet the visual quality objective.

CULTURAL RESOURCES

Meet Forest-wide Standards and Guidelines

WILDLIFE

Elk habitat will be managed to achieve a habitat effectiveness index of at least 30, including discounts for roads open to motorized vehicular traffic, as described in Wildlife Habitats in Managed Forests (Thomas and others 1979). The habitat effectiveness standard will be measured on a subwatershed (allocation zone) basis.

Dead and down tree habitat will be maintained at 40 percent of the potential population level for all primary excavators and maintained for other cavity users.

Structural and nonstructural improvement, development, and maintenance for wildlife are permitted.

FISH

Meet Forest-wide Standards and Guidelines. Fish habitat improvement and maintenance projects are permitted.

RANGE

Manage range and livestock through Range Management Strategies C and D with improved management systems. The full range of development and maintenance of structural and nonstructural improvements is permitted.

Seeding of forage species is permitted where tree establishment and growth are not restricted.

Permit increased domestic livestock and big game grazing to capture forage increases on transitory range.

Timber will be managed on a scheduled basis. All timber management practices and intensities will be permitted. Even-aged silviculture will be the most commonly used silvicultural system in the mixed conifer, associated species, and lodgepole pine plant communities. Uneven-aged management would be the preferred silvicultural system in ponderosa pine and mixed pine-Douglas-fir plant communities. Uneven-aged management may also be used where necessary to meet management goals.

The following practices may be employed:

TIMBER

1. Site preparation - by chemical, mechanical, biological, manual means, or prescribed fire,
2. tree improvement - improved growing stock, genetic evaluation plantations, and seed production and seed orchard sites;
3. reforestation - natural or artificial;
4. protection of growing stock from animals, insects, and disease;
5. release and weeding;
6. precommercial thinning;
7. fertilization/pruning - may be permitted on a case-by-case basis;
8. commercial thinning;
9. salvage of mortality as needed: and

10. final harvest - including even-aged management practices of shelterwood, seed trees, and clearcut, and uneven-aged management practices of individual trees and group selection

All types of logging systems are permitted in order to meet resource objectives.

Maintain a blend of tree species with a preference for ponderosa pine, western larch, Douglas-fir, and lodgepole pine across the Forest. Shade tolerant species such as grand/white fir, Engelmann spruce, and sub-alpine fir should be maintained as minor stand components. Plant diversity should be enhanced or maintained.

Fuelwood and other miscellaneous forest products should be available for public use.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Land Classification Group III (available for land adjustment) is applicable.

Meet other Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

Meet Forest-wide Standards and Guidelines for roads and trails.

Roads may be closed to motorized use in order to meet resource objectives and/or to reduce maintenance costs.

FIRE

For all wildfires in the management area, all suppression strategies (appropriate responses) may be used. Suppression practices should be designed to protect investments in managed tree stands and prevent losses of large acreages to wildfire.

Wildfire prevention activities should be emphasized.

FUELS

Fuels should not exceed an average of 9 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches.

Desired fuel loadings are depicted by the following (Technical Reports PNW 51, 52):

Treatment/Working Class	Ponderosa Pine	Mixed Conifer	Lodgepole Pine
Precommercial Thinning	1-PP-1-TH 4-PP-1-TH	3-DF-1-TH 4-DF-1-TH	1-PP-1-TH
Clearcut	1-PP-4-CC	2-DF-4-CC 3-DF-4-CC	1-LP-3-LL
Shelterwood	3-PP-4-PC	1-DF-4-PC 3-DF-4-PC	--
Commercial Thinning/Removals	2-PP-4-PC	2-DF-3-PC	2-LP-3-PC
Selection	2-PP-4-PC	5-PP&ASSOC-4-PC	2-LP-3-PC

	4-PP-1-TH		

All methods of fuel treatment are appropriate. Utilization of wood residues should be encouraged in order to reduce fuel loadings. When treatment is needed to meet resource objectives, prescribed fire is preferred in fire-dependent ecosystems. In ecosystems where fire is not a useful tool, direct fuel treatment methods should be used in reducing fuel accumulations to meet resource management objectives.

Prescribed burning may be used to accomplish a variety of timber and forage production objectives. Care will be used when using prescribed fire due to high resource values and risk of escape fire.

PESTS

Use integrated pest management (IPM) principles and strategies in managing insects and diseases to meet management objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments consistent with resource objectives can be prescribed at the earliest opportunity.

Protect growing stock consistent with the level of investment by practicing high intensity prevention activities. Emphasis will be on the prevention of stand and fuels conditions that favor pests increases above epidemic levels. Aggressively suppress insects and diseases using the most cost-effective suppression strategies when outbreaks threaten resource management objectives. Use a variety of methods in meeting protection and suppression requirements.

E2 TIMBER AND BIG GAME

GOAL

MANAGE FOREST LANDS TO EMPHASIZE PRODUCTION OF WOOD FIBER (TIMBER), ENCOURAGE FORAGE PRODUCTION, AND MAINTAIN A MODERATE LEVEL OF BIG GAME AND OTHER WILDLIFE HABITAT.

DESCRIPTION

Applies to all or parts of the Forest area classified as tentatively suitable for timber management and other included acres classified as suitable and transitory range.

The management area applies to about 25 percent of the suitable lands across the Forest on all Districts. The following areas are managed for timber and forage production under Management Area E2 (Locations are shown on management area maps):

- On Pomeroy Ranger District, the general forest area surrounding the north end of Road 40 from the Tucannon River and upper end of North Fork Asotin Creek north to the Forest Boundary;
- the High Ridge-Horseshoe Prairie, the Middle Ridge-Ruckel Junction, and the Griffin Peak-Chase Mountain areas on the Walla Walla Ranger District;
- Generally, an area ranging in a band from Alder Creek on the Heppner Ranger District east to the Forest Boundary; and
- generally, areas range southeasterly between Forest Roads 5412, 5427, astride State Highway 244 and north of Hidaway Creek on the North Fork John Day Ranger District.

DESIRED FUTURE CONDITION

Management of forests for timber production, domestic livestock, big game, and other wildlife habitat will be apparent. Forests will contain a mosaic of even-aged and uneven-aged stands dispersed in a manner creating patterns of tree cover for big game and openings providing forage. Created openings will range from 1-3 acres up to 40 acres, but will often be 20-30 acres in size. Horizontal and vertical diversity will be apparent; tree species will be diverse, but seral, more pest-free species such as ponderosa pine, western larch, and lodgepole pine will predominate. Accumulated fuels will be generally light, and large destructive fires will seldom occur. Prescribe fire will continue to be an important management tool.

A variety of native and seeded grasses, sedges, forbs, and shrubs will be available for big game, other wildlife, and domestic livestock. Range and timber management practices will result in improved range condition and increased amounts of available forage for both big game and domestic livestock. Dispersed recreation opportunities of all types will be available for a variety of users. However, management of roads will result in a noticeable amount of travel restrictions in some areas.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

A Roaded Modified social and physical setting (ROS) may result from meeting the goal. Dispersed recreation activities that meet the goal are permitted.

Recreation site modifications and facility development levels 1 and 2 (see Glossary) are permitted.

Provide the opportunity for road oriented, walk-in, and horseback activities. Motorized access may be limited to designated roads, trails, and areas.

Trail and associated facilities construction, reconstruction, and maintenance are permitted.

Off-highway vehicle (OHV) use is permitted on designated roads, trails, and areas where compatible with big game habitat effectiveness, recreation, and other resource objectives.

VISUAL

Manage areas to meet Modification visual quality objective.

Provide for rehabilitation where needed to meet the visual quality objective.

CULTURAL RESOURCES

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Elk habitat will be managed to achieve a habitat effectiveness index of no less than 45, including discounts for roads open to motorized vehicular traffic, as described in *Wildlife Habitats in Managed Forests* (Thomas and others 1979). Marginal and satisfactory cover and forage areas will be managed to meet or exceed the habitat effectiveness standard, using processes described in *Habitat Effectiveness Index for Elk on Blue Mountain Winter Ranges* (Thomas and others 1988). The habitat effectiveness standard will be measured on a subwatershed (allocation zone) basis.

A minimum of 10 percent of the area will be managed as satisfactory cover (15 to 20 percent is desired). If this is not attainable because of low natural potential, the highest percentage of satisfactory cover potentially attainable will be created or maintained. A minimum of 30 percent of an area will be managed as total cover.

Stands managed for satisfactory cover will meet the following criteria:

- Be at least 40 feet in height, with a canopy closure of at least 70 percent in mixed conifer/lodgepole pine types, and no less than 50 percent in the ponderosa pine type;
- should be 1,200 to 1,850 feet in width (larger cover areas are preferable) though exceptions may be made by wildlife biologists based on an on-the-ground assessment of the stand(s) value for elk: and
- should generally appear as a multi-layered timber stand.

EXCEPTIONS: Exceptions to the achievement of HEI and cover standards may be made on an individual project basis. Such cases would include situations where past harvesting, large scale insect and disease damage, and/or catastrophic fires have made the possibility of accomplishing the desired future condition (DFC) (long-term potential) marginal within a reasonable period (without applying additional silvicultural treatments such as regeneration harvest, tree planting, release, and other cultural operations).

Where these situations exist, activities may occur that reduce HEI and cover further in the near term only if they are consistent with the ultimate goal of the management area, and if the activities will clearly result in achieving a higher HEI cover condition and desired future condition (DFC) in a shorter period of time than if the area was left untreated.

All such activities will be supported by a documented NEPA analysis and will include a cumulative effects analysis of big game habitat in the project area over time. The analysis will also describe the anticipated improved condition on a subwatershed or management area basis. All exceptions must be recommended by the District Ranger and approved by the Forest Supervisor for implementation.

Available forage will be allocated on an approximately equal basis between big game and domestic livestock.

Dead and down tree habitat will be managed to provide or maintain 60 percent of the potential population level for all primary cavity excavators, and maintained for other cavity users.

Structural and nonstructural improvement, development, and maintenance for wildlife are permitted.

Management activities will not create barriers to impede movement of big game animals.

An average of one unburned slash pile for every 2 acres should be retained for wildlife cover on even-aged regeneration harvest units.

Manage to maintain or establish a high level of vegetative diversity at a minimum level of 10 percent in each of the following five seral stages:

Grass/Forb	Young Sawtimber
Shrub/Seedling	Mature/Overmature
Pole/Sapling	

FISH

Meet Forest-wide Standards and Guidelines. Fish habitat improvement projects and their maintenance are permitted.

RANGE

Manage range and livestock at Range Management Strategies C and D with improved management systems. The full range of development and maintenance of structural and nonstructural improvements is permitted.

Seeding of forage species is permitted where tree establishment and growth are not restricted. Prescribed burning may be practiced to improve range forage conditions and trend.

Permit increased domestic livestock and big game grazing to capture forage increases on transitory range.

TIMBER

Timber will be managed on a scheduled basis. All timber management practices and intensities will be permitted. Even-aged silviculture will be the most commonly used silvicultural system in the mixed conifer, associated species, and lodgepole pine plant communities. Uneven-aged management would be the preferred silvicultural system in ponderosa pine and mixed pine-Douglas-fir plant communities. Uneven-aged management may also be used where necessary to meet management goals.

The following practices may be employed:

1. Site preparation - by chemical, mechanical, biological, or manual means, or prescribed fire;
2. tree improvement - improved growing stock, genetic evaluation plantations, and seed production and seed orchard sites;
3. reforestation - natural or artificial;
4. protection of growing stock from animals, insects, and disease;
5. release and weeding;
6. precommercial thinning;
7. fertilization/pruning - may be permitted on a case-by-case basis;
8. commercial thinning;
9. salvage of mortality as needed and

10. final harvest - including even-aged management practices of shelterwood, seed trees, and clearcut, or uneven-aged management practices of individual tree and group selection.

All types of logging systems are permitted in order to meet resource objectives.

Maintain a blend of tree species with a preference for ponderosa pine, western larch, Douglas-fir and lodgepole pine across the Forest. Shade tolerant species such as grand/white fir, Engelmann spruce, and sub-alpine fir should be maintained as a minor stand component. Vegetative diversity should be enhanced or maintained.

Fuelwood and other miscellaneous forest products should be available for public use.

WATER AND SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Land Classification Group III (available for land adjustment) is applicable. Meet other Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

Meet Forest-wide Standards and Guidelines for roads.

Roads may be closed to motorized use in order to meet big game habitat objectives, meet recreation and other resource objectives, and/or reduce maintenance costs.

FIRE

For all wildfires in the management area, all suppression strategies (appropriate responses) may be used. Suppression practices will be designed to protect investments in managed tree stands and prevent losses of large acreages to wildfire.

Wildfire prevention activities should be emphasized.

FUELS

Fuels should not exceed an average of 9 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches.

Desired fuel loadings are depicted by the following (Technical Reports PNW 51, 52):

Treatment/Working Class	Ponderosa Pine	Mixed Conifer	Lodgepole Pine
Precommercial Thinning	1-PP-1-TH 4-PP-1-TH	3-DF-1-TH 4-DF-1-TH	1-PP-1-TH
Clearcut	1-PP-4-CC	2-DF-4-CC 3-DF-4-CC	1-LP-3-LL
Shelterwood	3-PP-4-PC	1-DF-4-PC 3-DF-4-PC	--
Commercial Thinning/Removals	2-PP-4-PC	2-DF-3-PC	2-LP-3-PC
Selection	2-PP-4-PC 4-PP-1-TH	5-PP&ASSOC-4-PC	2-LP-3-PC

All methods of fuel treatment are appropriate. Utilization of wood residues should be encouraged in order to reduce fuel loadings. When treatment is needed to meet resource objectives, prescribed fire is preferred in fire-dependent ecosystems. In ecosystems where fire is not a useful tool, direct fuel treatments methods should be used in reducing fuel accumulations to meet resource management objectives.

Prescribed fire may be used to accomplish a variety of timber and forage production objectives. Care will be used when using prescribed fire due to high resource values and risk of escape fire.

PESTS

Use integrated pest management (IPM) principles and strategies in managing insects and diseases to meet management objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments consistent with resource objectives can be prescribed at the earliest opportunity. Protect growing stock consistent with the level of investment by practicing high intensity prevention activities.

Emphasis will be on the prevention of stand and fuels conditions that favor pest increases above epidemic levels. Aggressively suppress insects and diseases using the most cost-effective suppression strategies when outbreaks threaten resource management objectives. Use a variety of methods in meeting protection and suppression requirements.

F2 MILL CREEK MUNICIPAL WATERSHED - UNDEVELOPED

GOALS

PROVIDE WATER AT A LEVEL OF QUALITY AND QUANTITY WHICH, WITH PRIMARY TREATMENT BY THE MUNICIPALITY, WILL RESULT IN A SATISFACTORY AND SAFE POTABLE WATER SUPPLY.

DESCRIPTION

The management area applies to all land in the Mill Creek Municipal Watershed above the intake, located in Section 12, Township 6 North, Range 37 East, W.M. The area was established as a municipal watershed by a cooperative agreement between the City of Walla Walla and the Secretary of Agriculture on June 26,1918 (USDA Secretary 191 8). The watershed, comprising 21,740 acres, is located in Oregon and Washington.

DESIRED FUTURE CONDITION

Natural vegetative conditions will occur throughout the watershed. Riparian areas will be in natural condition except where activities associated with culinary water supply development occur. The watershed will not be grazed by domestic livestock. Administrative and recreation access will continue to be restricted to meet water quality goals. The quantity and quality of surface waters shall be maintained or enhanced and will be suitable for culinary use by the City of Walla Walla after treatment

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Special big game hunts are allowed by permit for the purpose of protecting water quality. Other recreation activity is not allowed. Off-highway vehicle use is prohibited.

VISUAL

Meet Partial Retention visual quality objectives.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Meet Forest-wide Standards and Guidelines.

Dead and down tree habitat will be managed to provide or maintain 80 percent of the potential population level for all primary cavity excavators and maintained for other cavity users.

FISH

Meet Forest-wide Standards and Guidelines.

RANGE

Livestock grazing is not permitted

TIMBER

No scheduled timber harvest activities are permitted. Firewood cutting is not permitted.

WATER

Provide water at a level of quality which meets Federal and state standards, and which, with primary treatment by the municipality, will result in a satisfactory and safe potable water supply.

Water resource management shall be conducted as follows:

1. Administer cooperative agreement with the City of Walla Walla;
2. monitor water quantity and quality;
3. administer area closure and provide a watershed rider;
4. administer permit system to control entry;
5. cooperate with Oregon Department of Fish and Wildlife and Washington Department of Wildlife on permit system:
6. coordinate with the Washington Department of Health; and
7. sanitary regulations will be observed by persons who occupy or are employed in the watershed.

SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS

Lands within the watershed are withdrawn from all forms of location, entry, and patent under mining laws, and from disposition under laws pertaining to mineral leasing.

LANDS

As opportunities arise and as needed, acquire watershed lands to improve overall watershed management.

Meet Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

Construction of transportation facilities is not permitted. Maintain existing trails.

FIRE

The area is high priority for control of wildfires. The appropriate wildfire suppression response should emphasize control strategies.

If retardant is needed for any reason, only water will be used. Tractor use will not be permitted on slopes of over 50 percent or within riparian areas. Fire suppression activities may require restoration and/or other mitigation to maintain water quality and quantity.

If catastrophic conditions occur, rehabilitation practices may be used all rehabilitation activities will be directed toward protecting or improving water quality, quantity, and timing. Projects will be coordinated with the City of Walla Walla.

FUELS

Use of prescribed fire is permitted outside the riparian influence zone where needed to improve watershed conditions or reduce significant risk of watershed damaging wildfire. Prescribed burns are designed, located and scheduled to minimize risk of short term degradation of water quality.

PESTS

Use integrated pest management (IPM) principals and strategies in managing insects and diseases to meet management objectives. Management of insects and diseases (including suppression activities) is permitted, in coordination with the City of Walla Walla, to prevent unacceptable damage in the watershed. The preferred method is use of biological controls.

GENERAL

If conflicts occur between direction in Management Area D2, Research Natural Area, and direction for the Mill Creek Municipal Watershed, Management Area F2 requirements will prevail in order to meet municipal watershed objectives.

F3 HIGH RIDGE EVALUATION AREA

GOAL

TO PROVIDE AN ADMINISTRATIVE STUDY AREA TO EVALUATE THE EFFECTS OF TIMBER HARVESTING ACTIVITIES ON WATER QUALITY AND STREAMFLOW REGIMES.

DESCRIPTION

The F3 Management Area applies to the High Ridge Evaluation Area which is approximately 560 acres in size. It is the part of the Umatilla National Forest Barometer Watershed that has been the study site for timber operations and watershed response testing.

Hydrologic data collection was initiated in 1965. Data currently being collected are measures of streamflow, water and air temperature, precipitation, and suspended sediment. Three smaller watersheds, located at the headwaters of Buck Creek, were silviculturally treated in 1976. The fourth watershed was untreated and serves as the control watershed. Additional timber harvest is planned. The hydrologic response to the treated watersheds is compared against that of the control in order to assess changes in flow regimes as a result of timber harvest. Of primary interest are changes in peakflow timing, peakflow volumes, peakflow durations, annual hydrograph distribution, streambank stability, and water quality.

DESIRED FUTURE CONDITION

The barometer watershed study will continue through the next IO-year period. The watershed will be characterized by a variety of vegetative conditions ranging from natural to highly modified. Modifications in timber canopy will result from a variety of standard timber harvest techniques and strategies, and will be studied for their impacts on water quality and streamflow regimes. Other development activities inconsistent with study objectives will be absent or show minimal impact. Changes in possible allocation will be reviewed at the next Forest Plan development.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Dispersed recreation uses are permitted. Developed recreation is not permitted.

VISUAL

A Maximum Modification visual quality objective is permitted.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Meet Forest-wide Standards and Guidelines.

FISH

Meet Forest-wide Standards and Guidelines. No fish habitat is within the area.

RANGE

Livestock grazing will be permitted after timber operations are completed as long as grazing meets the objectives of the study.

TIMBER

Timber harvest and management entries are permitted based on outcome of present study. The full range of timber management practices and intensities is available.

Maintain the control watershed in a natural or unharvested condition.

WATER

Monitor water quality and quantity to determine effects of timber and other forest management operations on water resources. Periodically report results of the barometer watershed monitoring.

SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Meet Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

Maintain the existing road system and keep the existing roads open. Roads may be constructed based on the requirements of the study.

FACILITIES

Maintain and protect existing weather and water measuring stations. Other monitoring facilities may be added, as study needs arise.

FIRE

The area has a high priority for protection from wildfire. The appropriate wildfire suppression should emphasize control strategies. Standard fire suppression techniques should be used.

Based on the objectives and requirements of the study, standard rehabilitation practices may generally be used where intense wildfire or suppression activities create a need for protecting or rehabilitating soil and water resources.

Fuel hazards may be treated to standards found in areas with intensive timber practices, or to levels determined from study requirements. Typical fuel treatment practices should be used.

FUELS

Prescribed burning from planned ignitions will be used to accomplish a variety of timber and forage production objectives. Prescribed fire from unplanned ignitions will not be used due to high resource values and risk of escape fires.

PESTS

Use integrated pest management (IPM) principles and strategies in managing insects and diseases to meet management objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments consistent with resource objectives can be prescribed at the earliest opportunity. Protect growing stock consistent with the level of investment by practicing high intensity prevention activities.

Emphasis will be on the prevention of stand and fuels conditions that favor pests increases above epidemic levels. Aggressively suppress insects and diseases using the most cost-effective suppression strategies when outbreaks threaten resource management objectives. Use a variety of methods in meeting protection and suppression requirements.

F4 WALLA WALLA RIVER WATERSHED

GOAL

PROVIDE HIGH QUANTITY AND QUALITY OF WATER AND ELK HABITAT EFFECTIVENESS WHILE SUSTAINING OR ENHANCING OTHER RESOURCE VALUES. MANAGEMENT ACTIVITIES WILL NOT SUBSTANTIALLY CHANGE THE LEVEL OF WATER DISCHARGE FROM THE NATIONAL FOREST DURING THE MAY 1 THROUGH SEPTEMBER 30 PERIOD.

DESCRIPTION

The management area applies to all National Forest land within the north and south forks of the Walla Walla watershed-except for the Target Meadows area on the south edge of the watershed and areas between both the Skyline Road (64) and the Tiger Canyon Road (65), and the watershed boundary. Aside from some forest management activities in the northwest portion of the area, most of the area is a natural appearing environment and is undeveloped.

DESIRED FUTURE CONDITION

The headwaters of the north and south forks of the Walla Walla River will remain as large, natural appearing, primarily undeveloped area. The area will continue to provide high quantities of quality water, undisturbed big game and other wildlife habitat, and recreation opportunities featuring closeness to nature and self-reliance. Some additional logging and timber management will be evident only in areas where past harvest has occurred.

Riparian areas will be in a natural state. Surface runoff in streams will be of high quality and show no reduction in average annual yield or low flows. On the average, spring snowmelt peaks will not change significantly in magnitude. Quality big game habitat will be maintained and, in some cases, improved through prescribed fire, thereby helping to achieve big game management and Forest recreation goals. Forage will be abundant and improved through management.

Recreationists will be able to enjoy a variety of challenging off-highway vehicle (OHV) and other dispersed opportunities on trails, drive ways, or closed roads. Opportunities to enjoy hiking, camping, hunting, and other recreational activities in a natural setting will be available. Existing wheel tracks and primitive roads will become OHV trails. Emphasis will be on providing a quality hunting experience in an undisturbed environment. Road closures and other management techniques will result in a noticeable amount of travel restrictions across the area.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Manage dispersed recreation for Semi-primitive Motorized physical and social settings (SPM - ROS Users Guide) on the area by maintaining opportunities to get away from others and experience feelings of remoteness. A Roaded Modified physical and social setting may result from meeting the goal on a small part of the developed area.

Recreation site modification and facility development levels 1 and 2 (see Glossary) are permitted.

Access will be primarily for remote off-highway vehicle (OHV), and walk-in or horseback opportunities on the undeveloped and parts of the developed areas, and for a small amount of motorized opportunities on the developed areas.

Trail and associated facility construction, reconstruction and maintenance are permitted, as long as consistent with overall area objectives.

Off-highway vehicle (OHV) use is permitted on roads, trails, and areas. Use may be limited to designated roads, trails, and areas to meet water quality and quantity, habitat effectiveness, and recreation objectives.

VISUAL

Management activities will result in a range of visual quality objectives primarily Retention (R) and Partial Retention (PR) to some Modification (M).

Provide for rehabilitation needed to meet visual quality objectives where visual standards have not been met.

CULTURAL RESOURCES

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Areas with Timber Management

Elk habitat will be managed to achieve a habitat effectiveness index of no less than 60, including discounts for roads open to motorized vehicular traffic, as described in Wildlife Habitats in Managed forests (Thomas and others 1979). Marginal cover, satisfactory cover, and forage areas will be managed to meet size and spacing criteria as described in Habitat Effectiveness Index for Elk Habitat on Blue Mountain Winter Ranges (Thomas and others 1988).

A minimum of 10 percent of the winter range and 15 percent of the summer range area will be managed as satisfactory cower (20 percent is desirable on each area). If this is not attainable because of low natural potential, the highest percentage of satisfactory cover potentially attainable will be created or maintained. A minimum of 30 percent of the areas will be managed as total cover.

Stands managed for satisfactory cover will meet the following criteria:

- Be at least 40 feet in height, with a canopy closure of at least 70 percent in all forest types except that canopy closure will be no less than 50 percent on winter range ponderosa pine types;
- cover on summer ranges should be 1,200 to 1,850 feet in width (larger cover areas are preferable) though exceptions may be made by wildlife biologists based on an on-the-ground assessment of the stand(s) value for elk;
- width of cover on winter ranges should be 600-1,200 feet. Exceptions may be made according to Forest-wide Standards and Guidelines;
- on winter ranges, stands should be at least 10 acres in size (larger cover areas are preferred). Exceptions may be made, as shown above: and
- Satisfactory cover should generally appear as a multi-layered timber stand.

Marginal cover will be no less than 10 feet in height, with a canopy closure of at least 40 percent, and 600 to 1,200 feet wide. Exceptions may be made by wildlife biologists based on an on-the-ground assessment of the stand(s) value for elk.

All cover areas will be managed to provide sufficient vegetation to obscure 90 percent of a standing elk at a distance of 200 feet or less.

An average of one unburned slash pile for every 2 acres should be retained on even-aged regeneration harvest units for wildlife cover.

All Areas

Habitat effectiveness index of 60 and cover standards apply to all other areas within the management area.

Big game forage improvement projects such as seedling, browse planting, and fertilization may be used. Structural improvements may be used to protect these investments. Prescribed burning may be practiced in order to maintain or enhance rangeland forage conditions.

Available forage will be allocated to meet big game management objectives. Available excess forage may be allocated to domestic livestock. Manage to maintain or establish a high level of vegetative diversity.

Emphasis should be placed on retaining and/or protecting big game key use areas and habitats such as migrational corridors, calving/fawning areas, wallows, springs, seeps, and bogs.

Management activities will not create barriers to impede movement of big game animals.

Dead and down tree habitat will be managed to provide or maintain 80 percent of the potential population level for all primary cavity excavators, and maintained for other cavity users.

FISH

Meet Forest-wide Standards and Guidelines for riparian/fish habitat.

Fish habitat enhancement, restoration, and maintenance practices (projects) may be used to increase smolt habitat capability.

RIPARIAN

For all Class I, II, and III streams and associated riparian areas within the management area, anadromous fish habitat will be managed to produce at least 90 percent of potential smolt habitat index (SCHI) by meeting standards for Fish shown in Management Area C5.

RANGE

Domestic livestock grazing is permitted at Range Management Strategy C. All available range and livestock management practices may be used where consistent with the primary management goal of maintaining or enhancing water quality and quantity and big game and other species' habitats.

Meet the forage utilization standards for riparian and upland areas, as found in the Range portion of Forest-wide Standards and Guidelines.

Structural range improvements are permitted to the extent they are compatible with the management goal.

TIMBER

Within the north and south forks, Walla Walla River drainages, timber will be managed on a scheduled basis only on designated lands, as mapped. The area encompasses a total of 34,950 acres, of which 3,382 acres are suitable for timber management.

Where timber is managed on a scheduled basis, all timber management practices and intensities consistent with achieving the primary management goals will be permitted. The selected silvicultural system applied to timber stands within the suitable forest lands will be based on a site-specific examination and analysis, and will be designed to meet management goals. Harvest practices may include clearcutting, shelterwood, salvage, removal, and commercial thinning, as well as group or individual tree selection. Other cultural practices may be used including natural and artificial regeneration, planting genetic stock when available, precommercial thinning, release, and insect, disease, and animal damage protection.

Harvest of trees adjacent to existing harvested units will be scheduled only under the following conditions; no further harvest may occur until the conditions (items 1 and 2, below) are met:

1. Big game habitat, water quality and yield, and visual resource objectives can be met; and
2. units are determined to be established by using criteria in No. 1 (by acceptable stocking and appropriate species) and free to grow.

If catastrophic conditions occur, salvage may be employed where consistent with meeting water quality, quantity, and elk habitat objectives.

Timber harvest will not be scheduled or allowed in riparian areas of Class I, II, and III streams.

Logging and road building may be done with conventional practices. All yarding and skidding systems may be used, if within the ground-disturbing criteria (see Soil).

Fuelwood cutting may be permitted consistent with established goals and wildlife criteria.

WATER

In addition to meeting Forest-wide Standards and Guidelines, the following water resource management measures shall be conducted:

1. Provide for: (a) Protection of riparian areas, (b) retention of snowpack, and (c) minimal loss of soil productivity and transport of eroded materials to surface waters. Created openings will generally be less than 10 acres in size. Shape, location, and orientation of harvest units (created openings) will be designed to increase snow redistribution into created openings, reduce evapo-transpiration losses, and provide maximum shading of induced snowpacks and adjacent tree boles.
2. Monitor water quality, quantity, and timing of yields.
3. Coordinate all resource activities to maintain or enhance existing water yields for irrigation during the period of May 1 to September 30.

SOIL

Limit ground-disturbing activities within 250 feet horizontal distance of all streams, and wet areas associated with streams, to no more than 10 percent of exposed mineral soil per unit or project area.

Meet all other Forest-wide Standards and Guidelines for soils.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Meet Forest-wide Standards and Guidelines.

TRANSPORTATION

Site-specific examinations and analysis will be conducted to determine the needs for additional roads or reconstruction. If additional or rebuiit roads are needed, they will meet the following standards and guidelines.

- All roads built into these areas for the purpose of timber harvest are to be built to minimize soil disturbance and adverse effects on water, fish, and wildlife populations. No construction will be permitted within 500 feet horizontal distance of Class I and II streams except at needed crossings.
- Roads shall be constructed and maintained at the minimum widths necessary to safely accommodate logging trucks and yarding equipment.

- Maintain standards of alignment and grade that will allow roads to follow, as nearly as possible, the contours of the land. Utilize a minimum of excavation and earth movement to accomplish the construction.

Roads will be maintained and shall be treated to minimize soil erosion. Erosion control measures to be taken might include, but need not be limited to:

1. Revegetation of the roadbed with herbaceous species,

2. Outsloping,

3. Crossditching,

4. Covering with logging slash, and

5. Hand maintenance of the drainage structures.

All existing and future roads will be closed at the conclusion of project activities except for:

1. Yellow Jacket Road No. 6500040,

2. Table Springs Road No. 6512000, and

3. Road No. 6500294 to Trail No. 3225.

Suitable measures shall be taken to assure revegetation and continued closure to motorized vehicle use, unless needed in emergency situations for the protection of life or property. During closure periods, measures shall be taken to ensure that motorized vehicles cannot enter onto or travel upon these roads.

FIRE

The appropriate wildfire suppression response should emphasize control and/or contain strategies for moderate to high intensity fires.

Low impact suppression methods should be used; rehabilitation and other measures may be used to mitigate wildfire and suppression impacts in conflict with water and soil objectives.

FUELS

Where timber is harvested and managed, fuels should not exceed an average of 12 tons per acre in the 0 to 3-inch size class and an average residue depth of 6 inches, as depicted in the Photo Series for Quantifying Forest Residues (Technical Report PNW 52) (USDA Forest Service 1976b):

Even-aged Management	3-PP-4-PC	4-PP-1-TH	1-PP&ASSOC+PC	2-LP3-PC
Uneven-aged Management	2-PP-4-PC	2-LP3-PC	4-PP-1-TH	5-PP&ASSOC-4-PC

All methods of fuel treatment are appropriate; hand treatment methods are preferred in riparian areas.

All types of prescribed fire may be used where consistent with meeting water quality goals.

PESTS

Use integrated pest management (IPM) principles and strategies to manage insects and diseases in meeting management area objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments consistent with resource objectives can be prescribed at the earliest opportunity.

1. Protect forest stands (habitat) where consistent with resource objectives by practicing prevention activities. Emphasis will be on the prevention of stand and fuels conditions that favor pests increases above epidemic levels.
2. Suppress pests using cost efficient strategies when outbreaks threaten dispersed recreation, water and/or wildlife habitat objectives or resources in adjacent areas. Favor biological methods when available.
3. The use of pesticides will not conflict with water and habitat objectives.