

Wallowa County Comprehensive Management Plan

This management plan is direction based on the input given by citizens of Wallowa County in the direction and methods for USFS federal land management in Wallowa County based in the wants and needs of the people of Wallowa County. Where current law and active management plans adequately define the limitations and opportunities, no additional goals, objectives or standards are recommended. It is assumed that current law will be followed as a basic premise of management. Those laws and management plans include but are not limited to:

- Wallowa County Nez Perce Tribe Salmon Habitat Recovery Plan
- Wallowa Whitman National Forest Management Plan
- Hells Canyon National Recreation Area Comprehensive Management Plan
- Endangered Species Act
- Clean Air Act
- Clean Water Act
- Oregon Wilderness Act of 1984
- Omnibus Oregon Wild and Scenic Rivers Act
- 1968 Wild and Scenic Rivers Act
- Oregon's Removal-Fill Law
- Management Plans for:
 - Wilderness Management Plan
 - Wild and Scenic Snake River Recreation Management Plan
 - Allotment Management Plans
 - National Environmental Policy Act
 - Federal Land Policy Act

In summary, this plan addresses seven of the significant issues relative to land management in Wallowa County: Recreation, Ecological Condition, Forage Management, Forest Management, Heritage Resources and Traditional Uses, and Riparian Management, Wildlife Management in the following manner:

Management area Guidelines, Objectives and Standards will apply so that activities can continue until watershed analysis and site, or project specific analysis under the Forest Management Plan and the Wallowa County Nez Perce Tribe Salmon Habitat Recovery Plan have been completed. After watershed analysis and site, or project specific analysis has occurred, the site specific analysis will be used for management direction.

We recognize that nature will re-establish a natural landscape if left alone. However we also recognize that nature's methods can be harsh (large scale wildfires and insect infestations) and take centuries. We are proposing to work with natural and management processes to decrease the time needed to restore eco-system functions that fall within the normal range and to reduce the negative effects of catastrophic fires and insect infestations. The re-establishment of old growth forests will still take centuries. (See Stewardship Principles, Appendix A)

Management activities within the National Forest will continue as valid uses including ranching, grazing, farming, timber harvesting, and the occupation of private homes and lands.

Recreation would be managed to provide a range of high-quality recreation settings and opportunities. Visitor management strategies would be utilized to manage increases in recreation use to maintain desirable recreation experience opportunity levels and desired conditions for developed and dispersed recreation sites.

Recreational facilities would continue to be managed for day and overnight use, with an emphasis on maintenance of newer facilities and replacement of old facilities.

Access should be managed at a level consistent with the above listed significant issues with some specifically identified improvements to trail and road systems. Road and trail systems would remain consistent with the Wallowa County Travel Management System managing as needed to eliminate resource damage or protect public or private assets. Improvement to major roads would be balanced with the upgrade of recreational facilities along those roads. Road closures would be by gate or natural degradation. Winter over-snow access is provided for in the traditional groomed trail areas.

Vegetation management will primarily be accomplished through human-induced management practices to achieve the desired condition for forested structural stages and grassland ecosystems. The Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan will provide the guidelines for appropriate silvicultural treatment of forested stands to maintain a viable, healthy ecosystem, to promote natural-appearing landscapes, and to meet landscape character goals. Management-ignited fire use could be used in forested stands to enhance ecological values, promote natural-appearing landscapes, meet landscape character goals, and facilitate natural processes.

Range forage and soil conditions would be managed to achieve a minimum satisfactory condition of at least moderate departure or better using the Rangeland Health Attribute rating. (See Appendix B for detail information)

Prehistoric sites would be protected by custodial maintenance of existing interpretation opportunities. Non-historic structures and facilities would be evaluated for stabilization, restoration, or maintenance based on potential historical value.

Various activities would be monitored to provide an evaluation of the effect of management activities. Evaluations would measure compliance in achieving the goals and objectives of meeting the intent of the enabling legislation. Based upon an evaluation of the monitoring results, Wallowa County would recommend to the Forest Supervisor such changes to the management direction for the public lands

Monitoring and evaluation has a distinctly different purpose and scope. In general, monitoring is designed to gather the data necessary for evaluation. During evaluation, data provided through monitoring are analyzed and interpreted. This process would be conducted and displayed through the annual Forest Plan Monitoring and Evaluation Report. The *Forest Plan Monitoring and Implementation Plan* provides an avenue in which management accomplishments, trends, and needs are reported and evaluated by the responsible managers. Implementation of the specific monitoring items is dependent upon funding levels. Pre-project implementation would be based on an assessment of compatibility with the goals, objectives, and standards and guidelines.

The Forest Service would actively pursue cooperative agreements for monitoring and inventory with users, organizations, and the Nez Perce Tribe.

Definitions for Goals, Objectives, Standards, and Guidelines

The goals, objectives, standards, and guidelines in this section are designed to direct management activities to meet the intent and objectives of Wallowa County, the Nez Perce Tribe, and the rest of the United States.

Goals are concise statements that describe a desired condition to be achieved sometime in the future. All goal statements perpetuate the intent of the Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan, and form the principal basis from which objectives are developed.

Management objectives describe the incremental progress expected to take place over a ten-year period to meet the desired conditions. These objectives help determine estimated quantities of services and accomplishments to be produced during the Forest and Rangeland Renewable Resources Planning Act (RPA) ten-year planning periods.

Standards are limitations placed on management activities to ensure compliance with applicable laws and regulations or to limit the discretion authority in project decision making. Standards are limited to those actions that are within the authority and ability of the agency to meet or enforce. Compliance with relevant standards is mandatory.

Guidelines describe a preferred or advisable, but not mandatory, course of action. Consequently, implementation of a project in variance from a guideline would not initiate a Forest Plan amendment.

Objectives, Standards, and Guidelines have been coded to make it easy to relate them to each resource area. Codes for each resource area are as follows:

Rec	Recreation	Bio	Biologically Unique
Acc	Access	Tes	Threatened/Endangered
Fac	Facilities	Buc	Biologically Unique
WSR	Wild and Scenic River	Rna	Research Natural Areas
Wil	Wilderness	Soi	Soils
Her	Heritage	Fire	Fire
Veg	Vegetation	Air	Air Quality
For	Forestland	Aqu	Aquatic Habitat
Gra	Grassland	Wld	Wildlife Habitat
Rip	Riparian	Geo	Geologic
Nox	Noxious Weeds	Min	Minerals
Wum	Water Use Management	Tri	Tribal Trust Responsibilities

O = Objective S = Standard G = Guideline

Example: Objectives, Standards, and/or Guidelines for recreation would be:

Objective Rec-O1

Standard Rec-S1

Guideline Rec-G1

Compatibility Objectives, Standards, and Guidelines (36 CFR 292)

Objective: Continue recreation, livestock grazing, timber harvest, and mining as traditional and valid uses.

Standard: If annual (or periodic interval) monitoring and evaluation identifies potential or actual incompatibilities with the provisions of 36 CFR 292 (public lands regulations) on Federal lands, the incompatibility must be validated. Develop options for the resolution of valid incompatibilities that are programmatic in nature through public participation processes; memorandums of understanding (MOUs), as needed, with affected county, state, federal, and tribal governments; and the appropriate level of environmental analysis. Resolve site-specific incompatibilities on Federal lands with the appropriate level of environmental analysis, project design, implementation and/or administration.

Guideline: When resolving programmatic incompatibilities on Federal lands, ensure involvement of agency personnel, all affected permit holders, inholders of private lands, interested publics, county and tribal governments, technical specialists from appropriate state, federal, and public agencies and institutions.

Recreation

Goals, Objectives, Standards, and Guidelines

I. Goal: Manage outdoor recreation to ensure that recreational and ecological values and public enjoyment of the area are maintained and enhanced and compatible with the other uses of the forest.

Objective Rec-O1: Provide educational and interpretative opportunities about forest resources, protection, and management.

Standard Rec-S1.1: Maintain recreation use opportunities and levels.

Guideline Rec-G1

Increase recreation users' awareness of ecological functions and processes, protection of heritage resources, low impact use practices, and management practices.

II. Goal: Outfitter and guides will actively promote the varied recreational uses of the federal land in a manner that promotes a level of use consistent with the ecological capacity of the area.

Objective Rec O2: Permit availability should maximize economic activity up to levels that allow for the maintenance of ecological condition and function within appropriate ranges.

Standard Rec S2.1: Permits should be considered, particularly non-traditional options, if

they are not impacting other commercial users.

Standard Rec-S2.2: Special use permits for outfitted and guided aviation use of the back country landing strips would be permitted:

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Standard Rec-S2.3: Require outfitters to obtain heritage resource protection training as a condition of permit issuance so they can inform customers/guests of the significance and sensitivity of heritage resources and potential penalties for damaging, defacing, or removing heritage resources.

Guideline Rec-G2.1:

Provide heritage resource protection training for outfitters and guides on an annual basis, or as needed, to foster increased sensitivity and awareness.

Objective Rec O3: Maintain spring and water development, allowing for proper range and vegetation conditions.

Standard Rec S2.4. Require outfitters to manage their livestock and use patterns so as to meet range condition standards.

Access

Goals, Objectives, Standards, and Guidelines

I. Goal: Manage the transportation system (roads, trails, airstrips, and waterways) to provide a wide range of management opportunities.

Objective Acc-O1.1 : Manage the transportation system to provide safe and efficient access for the movement of people and materials on public lands. Provide and manage facilities that permit access to a variety of settings, opportunities, and experiences, regardless of visitor's physical abilities.

Standard Acc -S1.1 : Follow the watershed approaches in the Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan for road management.

Standard Acc-S1.2: Allow construction after site specific analysis of short-term roads for timber harvest activities. Upon completion of harvest activities, short-term roads will be immediately stabilized and closed

Standard Acc-S1.3: Maintenance of roads will be managed to retain existing surfacing, alignment, and prism.

Standard Acc-S1.4: Where appropriate, provide mountain biking opportunities during updates of the Trails Management Plan.

Standard Acc-S1.5: Recreation aircraft (fixed wing and rotary) landings will be limited to designated public landing strips. Any specific site usable for landing/take-off will be allowed in an Emergency situation.

Guideline Acc-G1:

Develop new travel opportunity guides indicating open roads, seasonal closures, and winter travel routes including maintenance levels of roads and difficulty rating of trails.

II. Goal: Provide Over-Snow Travel

Standard Acc-S2.1: Manage for motorized over-snow vehicle activities on designated routes and areas..

Guideline Acc-G1:

Accommodate requests, where possible, for changes in over-snow vehicle routes and play areas.

Facilities

Goals, Objectives, Standards, and Guidelines

I. Goal: Manage facilities to meet objectives of Wallowa County, the Nez Perce Tribe and the rest of the United States.

Objective Fac-O1: Develop or modify recreation facilities that alleviate resource problems at existing sites; provide quality experiences commensurate with goals identified for that recreational site; reduce maintenance costs; provide, to the extent possible, barrier-free areas; and address health and safety issues.

Guideline Fac-G1:

Provide a range of accessibility levels for a variety of visitors regarding health, physical ability, and age. Natural impediments and challenges will generally not be removed, altered, or modified unless areas are designed specifically to accommodate physically-challenged visitors.

Wild and Scenic River

Goals, Objectives, Standards, and Guidelines

I. Goal: Manage wild and scenic rivers in a manner compatible with current management agreements, plans and laws.

Wilderness

Goals, Objectives, Standards, and Guidelines

I. Goal: Manage wilderness in a manner compatible with current management agreements, plans and laws.

Heritage

Goals, Objectives, Standards, and Guidelines

Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. This includes artifacts, records, and remains that are related to and located within such properties. A heritage resource is defined as that fragile and nonrenewable evidence of human activity, occupation and or endeavor as reflected in districts, sites, structures, artifacts, objects, ruins, works of art, architecture and natural features that were or are of importance in human events. Heritage resources are further categorized in terms of their prehistoric and historic values; however, each of these aspects represents a part of the continuum of events representing the earliest evidence of man to the present day.

I. Goal: Ensure that management actions which may affect heritage resources are consistent with the National Historic Preservation Act, the Archaeological Protection Act of 1979, and Management Standards and Guidelines for Heritage Resources.

II. Goal: Manage heritage resources for their protection from damage or destruction. Manage heritage resources for scientific research, public education and enjoyment to the extent consistent with protection.

Objective Her-O2.1 : Evaluate historic sites for preservation and restoration that typify the economic and social history of the region and the American West

Objective Her-O2.2: Promote use of those sites that are appropriate.

Objective Her-O2.3: As part of the management of American Indian heritage sites, consult with the Nez Perce Tribe to ensure that tribal concerns are addressed and treaty rights protected.

Standard Her-S2.1: Protect significant heritage resources on-site unless: 1) adequate on-site protection is not possible, 2) the resource is adequately represented and protected on-site elsewhere, 3) protection on-site is not consistent with administration of wilderness lands, or 4) for other good causes shown.

Standard Her-S2.2: Consult with the Nez Perce Tribe prior to construction of facilities within proximity to significant heritage resource sites.

Standard Her-S2.3: Protect Nez Perce sites, where determined to be necessary and desirable, using natural barriers such as native vegetation.

Guideline Her-G2.1:

Consider the use of a programmatic memorandum of agreement to help meet concerns of the Nez Perce Tribe regarding traditional use and prehistoric resources.

Guideline Her-G2.1:

Heritage resource protection and sensitivity guidelines should be provided for the general public.

Standard Her-S2.4: Continue mapping heritage resources, including global positioning coordinates, based on priorities of sites listed, eligible for listing, or potentially eligible for listing on the National Register of Historic Places.

Guideline Her-G2.3:

Emphasize the development of a heritage resource management plan. A heritage resource management plan should include the following direction:

1. Determine the relative significance of all heritage resources.
2. Establish protection, preservation, and enhancement priorities for prehistoric and historic resources.
3. Establish interpretive opportunities and priorities.
4. Develop research design and establish research priorities for heritage resources.
5. ID & develop management guidelines for traditional use sites through consultation with Nez Perce Tribe.
6. Develop maintenance and protection plan for key historic structures.
7. Establish monitoring priorities and develop monitoring plan and monitoring schedule.
8. Develop/establish inventory priorities.

Guideline Her-G2.4:

Develop a heritage site stewardship plan in cooperation with the public and all users.

Standard Her-S2.5: Protect by custodial maintenance existing interpretation opportunities for prehistoric sites in areas that receive higher recreation use outside of Wilderness Areas. For prehistoric sites in lower recreation use areas, manage for self-discovery interpretation opportunities.

Standard Her-S2.6: Maintain, stabilize, or restore the most significant representative historical structures

Guideline Her-G2.5:

Evaluate non-historical structures and facilities for stabilization, restoration, or maintenance based on potential historical value.

Vegetation

Goals, Objectives, Standards, and Guidelines

This section provides general vegetation management direction common to both forested and grassland vegetation categories. More specific Goals, Objectives, Standards, and Guidelines for these two vegetation categories are provided under the subheadings entitled Forest Stand Management and Grassland Management. Goals, Objectives, Standards, and Guidelines apply to all management areas unless specific areas are identified.

Management area Guidelines, Objectives and Standards will apply so that activities can continue until watershed analysis and site or project specific analysis under the Wallowa County Nez

Perce Tribe Salmon Habitat Recovery Plan have been completed. After watershed analysis and site or project specific analysis has occurred, the site specific analysis will be used for management direction.

I. Goal: The public land in Wallowa County functions as a healthy ecosystem that is an integral component of a larger biological region. Sustainability of ecological functions and processes is deemed important to maintaining ecosystem health and shall be attained by promoting vegetation for seral stages (grassland vegetation) and structural stages (forested vegetation).

Objective Veg-O1.1: Manage forest and grassland vegetation to maintain viable and healthy ecosystems that ensure: the maintenance and/or enhancement of fish and wildlife habitats; conservation of scenic, wilderness, and scientific values; preservation of biologically unique species, habitats, and rare combinations of outstanding ecosystems; wild and scenic river's outstandingly remarkable values.

Objective Veg-O1.2: Manage vegetation to control insect and disease levels.

Standard Veg-S1.1: Insect and disease control methods will be holistically evaluated in appropriately scaled site specific analyses before they are adopted or implemented.

Guideline Veg-G1.1:

Early prevention of epidemics is favored over application of control methods after infestations have occurred. However, control must be a viable option, when necessary. Prevention methods may include silvicultural treatments, prescribed fire, biological controls, and grazing. Control options may include biological controls and spraying of appropriate pesticides.

Objective Veg-O1.3: Manage native and introduced vegetation at administrative and developed recreation sites to meet the objectives of the site plan, and to meet health and safety needs of all users.

Objective Veg-O1.4: As appropriate, maintain or restore ecosystem function, conserve soil, and enhance native plant species and communities. Maintain biological diversity, and sustain long-term site productivity.

Guideline Veg-G1.2:

Restore riparian and upland vegetation where current conditions are below (not at) desired levels as determined by site-specific analysis.

Guideline Veg-G1.3:

To the extent practicable, seeds and plants used in erosion control, fire rehabilitation, riparian restoration, forage enhancement, and other revegetation projects shall originate from genetically local sources of native species. When project objectives justify the use of nonnative plant materials, documentation explaining why nonnatives are preferred will be part of the project planning process.

Forestland

Goals, Objectives, Standards, and Guidelines

I. Goal: Manage forested vegetation to maintain and/or enhance forested watershed conditions.

Objective For-O1: Follow the watershed approaches in the Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan for forest management.

Standard For-S1.1: This plan identifies 209,950 acres¹ on the Wallowa Valley and Eagle Cap Ranger Districts and 39,000 acres² on the Hells Canyon National Recreation Area as available, capable, and suitable for timber production. From these acres, timber harvests should occur on 12,448 acres with an estimated 40 million board feet being removed annually.³

Standard For-S1.3: Silvicultural treatment activities shall maintain a viable and healthy ecosystem, referencing the historic range of variation in stand structure and seral stage for different biophysical environments, as well as future ranges dictated by changing environmental / climatic conditions.

Guideline For-G1.1:

The tree density should be 40-50 percent shading (winter sun) at noon on 50 percent of all forested watersheds.

Guideline For-G1.2:

Maintain appropriate average density of trees, e.g.,. 50 - 110 square feet per acre basal area on south facing slopes and ridges and 90-160 square feet per acre basal area on north facing slopes.

Guideline For-G1.3:

Riparian management should be site-specific with the realization that the design of silvicultural treatments will be to enhance all the attributes of the riparian zone.

Guideline For-G1.4:

Vary thinning to emphasize spatial heterogeneity and achieve patchy/clumpy tree distributions. Leave skips (untreated areas) and gaps (openings) in units following treatment. Leave clumps of trees. Embed denser forest patches within a treated landscape to provide for sustainable diverse wildlife habitat over time.

Guideline For-G1.5:

Shift species composition from drought and fire intolerant species to drought and fire tolerant species.

¹ Total National Forest Acres in Wallowa County is 1,387,231 with the subtraction of Wilderness (570,361), nonforested (97,663), private land (73,707), Research Natural Areas (12,707), BLM (397), Hells Canyon National Recreation Area (399,246), and Unsuitable Forest Land (24,000) the total acres are 209,950.

² Total potential acres of forested vegetation treatment in Alternative W of Comprehensive Management Plan (Page C-237 of FEIS)

³ Assume entries every 20 years. 248,950 acres /20 years, 12,448 acres to treat per year and average of 3.21 MBF/acre removed.

Guideline For-G6:

Reduce dwarf mistletoe's detrimental effects to the forest on a site-by-site basis.

Guideline For-G7:

Place treatment units strategically on the landscape to moderate wildfire behavior and aid in control.

Objective For-O2: Silvicultural treatments may include but not limited to: Uneven aged management, single tree selection, group selection, prescribed natural fire, management-prescribed fire, commercial thinning, pre-commercial thinning, salvage, sanitation cutting, and even-aged management: pre-commercial thinning, commercial thinning, seed tree, shelterwood preparatory, shelterwood seed, shelterwood removal, clear cut, and irregular shelterwood .

Standard For-S1.4: This silvicultural system, Uneven-Aged Management-Single Tree Selection, is intended to perpetuate uneven-aged stands composed of intermingled trees of differing ages, species, and sizes.

Guideline For-G8:

Individually selected trees are removed to maintain a desired range of tree sizes over a prescribed distribution. Cyclic entries designed to control the structure and species composition and provide the openings necessary for establishment and growth of the continuously occurring regeneration are a function of the site quality and resource considerations.

Standard For-S1.5: The group selection variant of uneven-aged management is designed to facilitate the establishment of shade intolerant species, reduce damage to the residual stand, and lengthen the cyclic entry period.

Guideline For-G9

The opening created under the group selection prescription will often be no larger than one to two tree heights (as influenced by aspect and slope) so as not to lose the site protection afforded by the surrounding trees.

Guideline For-G10

Size, shape, and location of groups should be designed to achieve landscape character goals and scenic integrity objectives.

II. Goal: Prescribed Natural and Management-Ignited Prescribed Fire

Since early in the 20th century, the natural role of fire has been partially excluded from ecosystems by effective fire suppression. This intervention has altered the natural function of ecosystems. Fuels accumulate and stand structures become more homogeneous in the absence of periodic fire, or other disturbances. The long-term effect of these conditions is to create conditions for wildfires to burn outside of the intensities and scales that the plant community has adapted. The continued exclusion of fire may produce effects counter to values expected or desired for the future.

Objective For-O2.1: Where applicable, reintroduction of fire into the ecosystem to protect and maintain diversified stand structures across the landscape.

Standard For-S2.1: Prescribed fire is intended to mimic natural fire regimes.

Guideline For-G11:

Reduce the risk of fires burning outside of historic intensities and severities that could substantially reduce long-term productivity.

Guideline For-G11:

Use prescribed fire to maintain tree species compositions that occur under the natural disturbance regime, reduce competition, increase nutrients, prepare sites for natural regeneration, improve forage resources (including culturally significant food resources), enhance/create wildlife habitat, and protect private and public property values.

Guideline For-G12:

Prescribed fires should not consume significant quantities of commercial wood products or herbaceous forage in a way that damages the long-term commercial viability of the resources.

III. Goal: Use Manual Treatments to Achieve Healthy Forests.

Objective For-O2.2: Use commercial thinning opportunities to accelerate the development of the "large diameter tree" component of late seral stand structure, improve stand health and vigor, and reduce the potential of major, stand-replacing disturbance events.

Standard For-S2.2: Choose residual densities to maintain wildlife habitat requirements, optimize stand vigor and health, meet landscape character goals and scenic integrity objectives, and allow for the future function of natural fire.

Objective For-O2.3: Use precommercial thinning to improve the health and vigor of sapling-sized material and promote stand differentiation (a condition where individual tree dominance is expressed, rather than overall stand stagnation).

Stands which are thinned will maintain a higher level of growth and vigor, and a greater resistance to damaging agents such as insects, disease, fire, snow, and wind damage. A rapidly-growing, vigorous stands also offers the most options for future treatment and the most flexibility for meeting diverse management objectives.

Standard For-S2.3: Develop site-specific prescriptions to be compatible with recreation, scenery and wildlife objectives.

Guideline For-G13:

Limited maximum treatment areas for both commercial and precommercial thinning proposals to achieve the standard of maintaining big game cover on summer range at 60 percent of potential based on stand structure historic range of variability levels.

Objective For-O2.4: Use salvage cuttings for the primary purpose of removing trees that have been or are in imminent danger of being killed or damaged by injurious

agents other than competition between trees, or are damaged by fungi, insects, fire, wind, or other agents.

Standard For-S2.3: Use commercial sales or firewood cutting to: 1) capture the highly perishable values in (of) trees that are seriously damaged, dying, or already dead; 2) provide space vacancies that may be claimed by younger and more vigorous trees of desirable species; 3) reduce extremely heavy dead wood fuel loadings and thereby reduce the negative impacts of high intensity fire that may damage soils, watersheds, and long-term site productivity potential; 4) remove damaged, dying, or dead tree considered hazardous to forest users or facilities and improvements; 5) maintain long-term operability on the terrain by removing dead and dying trees that fall down and hamper current recreation uses or future resource management operations; and 6) reduce fuel loading by product utilization to reduce negative impacts to air quality produced by either prescribed or conflagration wildfire.

Standard For-S2.4: Where appropriate from a safety consideration, an appropriate stocking of snags and large down wood should be left on site given the importance of these features to native wildlife.

Objective For-O2.4: Use sanitation cuttings to eliminate trees that have been attacked or appear in imminent danger of attack by dangerous insects and fungi in order to prevent these pests from spreading to other trees.

Standard For-S2.4: Sanitation cuttings differ from other forms of salvage cuttings only to the extent that they are combined with or represent precautions to reduce the spread of damaging organisms to the residual stands.

Standard For-S2.54: Sanitation cuttings may be done in anticipation of attack in attempts to forestall the establishment of damaging organisms. It can be combined with salvage cuttings.

III. Goal: Manage Forests for Reforestation.

Standard For-S3.1: When removing of the majority of the trees on the site leave the best appearing trees for seed.

Guideline For-G14:

The number of reserve trees varies between 7 and 12 per acre.

Standard For-S3.2: For even-aged shelterwood preparatory remove the competitors of future seed trees, expanding the crowns and root system of the reserve trees, and enhancing cone development.

Standard For-S3.2: For even-aged seed cut of shelterwood open up enough growing space in a single operation to allow the establishment of regeneration

Guideline For-G14:

The number of reserve trees depends on size and species (usually 15-30 trees per acre)

Standard For-S3.2: Shelterwood removal is gradually uncovering the new crop of trees and of making best use of the potentialities of the remnants of the old crop to increase in value can be one or more entries for removal

Standard For-S3.3: Irregular shelterwood cut maintains 2 to 4 evenage classes in the stand- intermediate position between evenage and unevenage management (manage easy of evenage with appearance of unevenage).

Standard For-S3.4: Clearcut is any type of cutting in which all the merchantable timber is cut, and all the trees that cannot be utilized profitably are left.

Guideline For-G14:

Clearcuts should be two acres and larger in size

Grassland

Goals, Objectives, Standards, and Guidelines

Range (grasslands) are the uncultivated grasslands, shrublands, or forested lands with an herbaceous and or shrubby understory, particularly those areas producing forage for grazing or browsing by domestic and wild animals. It includes lands with native vegetation cover, but also lands naturally or artificially revegetated with native or adapted, introduced forage plant species not requiring periodic reestablishment, subsequently managed like native range.

I. Goal : Maintain a diversity of grassland structural conditions through space and time on grasslands suitable for grazing.

Objective Gra-O1.1: Manage grassland to maintain and/or enhance watershed conditions as identified in the Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan.

Guideline Gra-G1.1:

Emphasize enhancement of native vegetation.

Guideline Gra-G1.2:

For allotment NEPA projects, analyze effects and management of both wildfire and prescribed fire in conjunction with domestic livestock grazing to achieve grassland goals, objectives, standards, and guidelines.

Guideline Gra-G1.3:

Where appropriate Consider initiating enhancement projects to reintroduce and/or increase existing native decreaser species (species that will be replaced by another species if under or over grazed) to improve the biodiversity of the Wallowa-Snake province rangelands.

Guideline Gra-G1.4:

After fire or other disturbances, facilitate the natural recovery of vegetation as much as possible. Seed native or adaptable introduced species when natural recovery is not feasible timely, or as needed for soil protection. Use of native seed may not be appropriate in many situations. Native seeds, in many instances are slower to

germinate and less aggressive in establishing. Add to this that some species have a very poor live seed component and a high cost of purchase native seed offers a very high cost coupled with a lower and slower success rate of establishment. This offers invasive plants a very success rate of establishing and dominating a site after a large disturbance. This opportunity to establish effective forage plants that will control erosion and keep the soil in place should not be lost.

Standard Gra-S1.1: On lands determined to be suitable for grazing by domestic livestock but not moving toward a satisfactory condition in a timely manner, management should be changed to allow for improvement of conditions to allow for an upward trend.

Standard Gra-S1.2: Satisfactory condition* in which domestic livestock grazing would be authorized under grazing permit is as follows:

- a) Range forage condition is at least fair with an upward trend.
- b) Soil stability rating is at least fair with an upward trend.

For grasslands in less than satisfactory condition related to range forage condition, soil stability rating, riparian hardwood age class distribution, and riparian hardwood form class distribution, domestic livestock grazing may be authorized providing the rate of recovery to meet satisfactory condition. This would be determined through comparison with reference areas of similar site potential.

*The definition of "satisfactory condition" establishes the minimum standards for allocation of forage through the issuance of an appropriate grazing permit, but does not necessarily define site-specific desired conditions or recovery rates. Other resource goals, objectives, and standards and guidelines in this plan establish the desired conditions for management of the grasslands and understory herbaceous vegetation. The "satisfactory condition" definition is required by the LURs and relates only to the allocation of available grazing capacity under permit.

Standard Gra-S1.3: Allotment management plans (AMPs) would establish site-specific rates of recovery to achieve the goals for ecological status, soil conditions, and riparian management objectives, in conjunction with other applicable resource standards and guidelines contained in this management plan.

Standard Gra-S1.4: Include wildlife, recreation stock, and outfitter and guide forage along with permitted use when setting range management objectives.

II. Goal: To manage range ecosystems to ensure the basic needs of the forage and soil resources are met. To make available forage production, above that needed for maintenance or improvement of the basic resources, to wildlife (within Management Objective Levels) and permitted domestic livestock under standards and guidelines that will assure continued maintenance or improvement of the resource.

Objective Gra-O2.1: Implement utilization standards for summer season, and the following standards for fall, winter, and spring forage utilization. Based on plant phenology, climate, and plant responses to grazing, there are three basic periods to manage: fall/winter, early spring, and late spring:

Standard Gra-S2.1: Use the utilization standard charts for summer season.

Allowable Use of Available Forage in Riparian Areas				
Range Resource Management Level	Grass and Grass-like species		Shrubs	
	Satisfactory Condition	Unsatisfactory Condition	Satisfactory Condition	Unsatisfactory Condition
Livestock use managed within current grazing capacity by riding, herding, and salting. Cost effective improvements only to maintain stewardship of range	40	0-30	30	0-25
Livestock managed to achieve full utilization of allocated forage. Management system designed to obtain distribution and maintain plant vigor include fencing and water developments	45	0-35	40	0-30
Livestock managed to optimize forage production and utilization. Cost-effectiveness culture practices improving forage supply forage use and livestock distribution may be combined with fencing and water development to implement complex grazing systems.	50	0-40	50	0-35

Range Resource Management Level	Forest		Grassland		Shrubs	
	Satisfactory Condition	Unsatisfactory Condition	Satisfactory Condition	Unsatisfactory Condition	Satisfactory Condition	Unsatisfactory Condition
Livestock use managed within current grazing capacity by riding, herding, and salting. Cost effective improvements only to maintain stewardship of range	40	0-30	50	0-30	40	0-25
Livestock managed to achieve full utilization of allocated forage. Management system designed to obtain distribution and maintain plant vigor include fencing and water developments	45	0-35	55	0-35	45	0-30

Livestock managed to optimize forage production and utilization. Cost-effectiveness culture practices improving forage supply forage use and livestock distribution may be combined with fencing and water development to implement complex grazing systems.	50	0-40	60	0-40	50	0-35
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- Utilization of grass and grasslike species is based on a percent of annual production removed by weight.
- Utilization of shrubs is based on measurement of amount of current available leaders.
- Satisfactory Range Condition – on suitable range, forage condition is at least fair, with stable trend, and allotment is not classified as PC (basic resource damage) or PD (other resource damage)
- PC – basic resource damage, allotments are classified as PC when analysis or evaluation indicates that one or more of the following conditions exist and livestock use on the allotment is or has been one major factor contributing to this condition: a.) Maximum summer water temperatures are elevated above State Standards or other approved criteria on the SMU class I or II streams and this is largely due to the loss of shade-producing vegetation in the allotment b.) Management induced instability exceeds 20 percent of the total miles of the stream (SMU classes I-IV) in an allotment c.) Gully development of sufficient size to lower the seasonally saturated zone and change the plant community type is occurring d.) Soil condition rating on 25 percent or more of the Key Areas is rated as poor or very poor.
- PD – other resource damage, these allotments may or may not have approved Allotment Management Plans but adverse impacts on resources other than the basic soil and water resources are occurring. These impacts are the result of resource management objectives not being met. An allotment will be classified as PD when 10 percent or more of its area meets these criteria. Damage to vegetation is bases on use in excess of what is planned.
- Unsatisfactory Range Condition – Allotment does not meet criteria for satisfactory condition.

Standard Gra-S2.2: Forage utilization standards for **Fall/Winter** will be set at 60 percent on the key species (on a site-specific basis). This will be based on a percent of the weight removed from the total annual growth resulting from the previous growing season. Adjustment to this utilization standard may be made based on other than plant physiology needs to respond to issues such as visual quality objectives, soils, wildlife, etc.

Guideline Gra-G2.1:

This period basically begins when all key perennial forage plants have achieved dormancy. It runs through the dormant period and ends just prior to the initiation of new growth on the key cool season perennial forage species in the spring. In very general terms, this often begins in mid to late October and runs through February, March, or April depending on the elevation, aspect and the weather patterns for a given year.

Standard Gra-S2.3: Forage utilization standards for **early spring** will be set at 60 percent of current key cool season species forage production (on a site-specific basis). This is determined on an air-dried weight basis of total current annual production occurring until livestock are removed. Further, all livestock will be removed from the unit based on ensuring that adequate soil moisture exists at the time of removal to provide for re-growth. Additional monitoring will be conducted on a spot check basis following termination of annual growth for the summer to document that re-growth was achieved.

Guideline Gra-G2.2:

Early spring is defined as that period when the perennial cool season forage plants initiate growth and begin shoot elongation. It extends through the period of maximum carbohydrate use and the beginning of carbohydrate storage. The end of this period is determined by soil moisture. It ends prior to the time that soil moisture is expected to become limiting to the extent that essentially full re-growth cannot be ensured.

Guideline Gra-G2.3:

Browse utilization standards are not normally needed during this period as the browsing animals (both domestic and wild) focus on the highly palatable and nutritious green growth of the forage species.

III. Goal : Support multi-species grazing, including cattle, horses, domestic Sheep and goat grazing.

Objective Gra-O3.1: Support continuation of grazing permits offering long term stability for grazing, ranches and the community.

Standard Gra-S3.1: Grazing is attained through a grazing permit, which quantifies the area authorized for grazing (allotment), the number and class of livestock, and the season for which the grazing will occur.

Guideline Gra-G3.1:

The combination of the information on the grazing permit equates to the carrying

capacity authorized for grazing.

Guideline Gra-G3.2:

The carrying capacity is determined by an analysis of the allotment and the amount of suitable and capable lands within the allotment. Wallowa County

Objective Gra-O3.2: support continuing and/or expanding the use of sheep grazing on the Wallowa Whitman National Forest lands as per the Bighorn/Domestic Sheep Compatibility Decision Notice of August 2, 1995.

Guideline Gra-G3.3:

Support continuing research to find a solution to the alleged disease issue (pathogen that causes pneumonia and lamb mortality).

Standard Gra-S3.1: Evaluate domestic sheep grazing on a case by case basis.

Guideline Gra-G3.4:

In each case a risk assessment should be made to identify the actual risk of significant contact being made between the domestic sheep and Big Horn Sheep. The analysis should include, but not be limited to, distance, terrain, physical barriers, herding, ewe estrus cycle assessments and big horn sheep proximity monitoring.

Guideline Gra-G3.5:

Following the assessment monitoring and management measures should be developed to limit that risk if grazing is allowed.

Guideline Gra-G3.6:

AOI meetings should include discussions regarding communications, protocols, information sharing and agency/permittees roles and responsibilities specific to grazing

Riparian

Goals, Objectives, Standards, and Guidelines

A riparian area is the area of land adjacent to a stream, lake, or wetland. Most healthy, natural riparian areas have moist, fertile soils that support many types of plants. These plants provide food and shelter to numerous fish and wildlife, which is especially important in arid areas of the West.

By virtue of its high productivity, diversity, continuity, and critical contributions to both aquatic and upland ecosystems, riparian areas provide a rich and vital resource. Because riparian areas are generally a narrow band, these areas cover a relatively small portion of the watershed. Riparian areas contain elements of both aquatic and terrestrial ecosystems which mutually influence each other and occur as transitions between aquatic and upland habitats.

Riparian areas perform many functions to the watershed from supplying a large part of the available forage for livestock and wildlife to maintaining habitat essential to fish survival and productivity, and it is critical in supporting healthy instream conditions.

These strategies are intended to be a menu of options, not all strategies will be implemented in all locations

Riparian Vegetation-

- Shades streams maintaining cool temperatures in stream (can be done by trees, shrubs, grasses, sedges, overhanging banks or other geological forms)
- Provides forage for both livestock and wildlife
- Plant roots stabilize stream banks and control erosion and sedimentation
- Creates overhanging cover for fish.
- Filters sediment and nutrients out of runoff
- Moderates stream volumes by reducing peak flows during flooding periods and by storing and slowly releasing water into streams during low flows.
- Contributes leaves, twigs, and insects to streams, thereby providing basic food and nutrients that support fish and aquatic wildlife
- Provide large trees that fall into streams creating pools, riffles, backwater, small dams, and off-channel habitat that are necessary to fish for cover, spawning, rearing, and protection from predators.

Riparian areas used for livestock grazing need special care to remain healthy and productive. Healthy riparian areas include a variety of types and ages of plants, including trees, shrubs, grasses, and groundcovers. Recreation and grazing use can change riparian areas either positively or negatively depending on the management and the type and amount of use.

Riparian habitat is limited geographically; however, managing riparian habitat may yield the greatest gains for a healthy watershed while involving the least amount of area.

I. Goal: Maintain or enhance the riparian conditions in Wallowa County.

Objective Rip-O1.1: Improve hardwood diversity that is appropriate (within) site capability (riparian shrubs right next to stream, terrace shrubs drier sites).

- Strategy Manage riparian areas so that they can be moving toward site potential
- Establish baseline conditions and trends by monitoring using one or several types of monitoring (Properly Functioning Condition, Multi-Indicator Monitoring)
- Plant hardwoods in areas that don't have enough for that site potential.
- Reduce competition from conifers when encroachment is occurring
- Protect plantings or natural new growths with caged fencing where appropriate.
- Take photos at set points.
- Eradicate/control noxious weeds using appropriate methods

Standard Rip-S1.1 :National Forest land in Wallowa County will be managed to assure that forage production will be sufficient for the health of the plant and soil resources.

Guideline Rip-G1.1:

An adequate forage base for harvest by wildlife and domestic livestock at the livestock levels being grazed shall be maintained

Standard Rip-S1.2: Manage to maintain or enhance riparian areas

Guideline Rip-1.2

Maintain or enhance streambank vegetation

Standard Rip-S1.3: Manage to maintain native and desirable introduced or historical plant and animal species, and will provide for all seral stages in abundance and distribution .

Standard Rip-S1.4: Prevention of invasive plant introduction, establishment and spread will be addressed in all planning including but not limited to watershed analysis; roads analysis; fire and fuels management plans, Burned Area Emergency Recovery Plans; emergency wildland fire situation analysis; wildland fire implementation plans; grazing allotment management plans, recreation management plans, vegetation management plans, and other land management assessments.

Standard Rip-S1.5: Use only pelletized or certified weed free feed on all National Forest System lands. Forests should require feed certified to be weed free using North American Weed Free Forage Program standards or a similar certification process.

Objective Rip-O1.2: Improve riparian/wetland vegetation to increase streambank stability, water quality, dissipate energy during high flows and appropriately filter sediment/nutrients from runoff.

Guideline Rip-G1.3

- Plant cut-banks with willows or other appropriate species and cage if needed.
- Seed with appropriate grass species
- Identify chronic areas of concern and figure out how to deal with them
- Develop management strategy for continued upward vegetation trend.
- Address tree density

Standard Rip-S1.6: Manage to maintain or enhance riparian areas

Guideline Rip-G1.4

Maintain or enhance water quality

Guideline Rip-G1.5

Maintain or enhance water temperatures

Guideline Rip-G1.6

Maintain or enhance fish habitat

Guideline Rip-G1.7

Maintain or enhance channel stability

Objective Rip-O1.3: Utilize grazing strategy to enhance range and riparian conditions including sediment entry and deposition in channel bottom

Guideline Rip-G1.8

- Develop alternative water sources such as ponds, springs, hardened water gaps etc. where it is necessary to improve livestock distribution or part of a management strategy to improve adjacent resource condition i.
- Utilize adaptive grazing management adjusting year to year depending on climatic and grass conditions.
- Cut livestock trails through trees to help with livestock distribution utilizing old roads or trails where available and practical.
- Improve soil water storage in soils through riparian improvements
- Monitor channel shape to manage for appropriate shape that is efficient for sediment processing
- Utilize long term effectiveness monitoring for instream sediment measurements.
- Utilize low stress livestock handling

Standard Rip-S1.7: Manage for timber and grazing through sound livestock management in riparian zones.

Standard Rip-S1.8: Encourage livestock trailing, bedding, watering, salting, loading, and other handling efforts to those areas and times that will allow for attainment of Riparian management objectives

Standard Rip-S1.9: Modify grazing practices (e.g. accessibility of riparian areas to livestock, length of grazing season, stocking levels, timing of grazing, riding, etc.) to enhance riparian conditions.

Objective Rip-O1.4: Improve vegetation to provide fish and wildlife habitat for a diversity of species.

Strategy

- Gather baseline information for wildlife and aquatic species
- Monitoring for a change in vegetation and wildlife species.
- Take photos from set points

Standard Rip-S1.10: Manage to maintain or enhance riparian areas

Guideline Rip-G1.8

Maintain or enhance fish habitat

II. Goal: Maintain or modify existing uses of riparian areas.

Objective Rip-O2.1: Graze riparian pastures consistent with other objectives. Maintain livestock allotments as an integral part of sustainable and economical livestock operations which, which do not impede, enable natural recovery processes. Strive for longevity and to maintain or enhance conditions.

Guideline Rip-G2.1

- Provide economically viable livestock production.
- Maintain grazing opportunities and allotments that support commercial ranching.
- Use livestock grazing as a tool to aid in the natural recovery processes.
- Maintain grazing opportunities as an integral part of a sustainable and economically viable operation while allowing natural watershed processes.
- Evaluate season, numbers, and rotation for riparian areas (flexibility). Evaluate early and late season grazing to strive toward riparian condition.
- Use adaptive management strategies to improve riparian condition within pastures.

Standard Rip-S2.1: Locate new livestock handling and/or management facilities outside of Riparian Areas.

Standard Rip-S2.2: For existing livestock handling facilities inside the Riparian Areas, assure that facilities do not prevent attainment of Riparian Management Objectives.

Standards and Guides

Riparian

Range Condition	Grass & Grass-Like Species	Shrubs
Satisfactory	45%	50%
Unsatisfactory	0-35%	0-30%

Riparian

Range Condition- Riparian Condition	Grass & Grass Like Greenline	Sedge & Rush Sinks	Kentucky Bluegrass/ Mixes Species
Satisfactory-Proper Functioning Conditions or functioning at risk	4 inches	3 inches	2 inches
Unsatisfactory- nonfunctioning	6 inches	4 inches	4 inches

Objective Rip-O2.2: Maintain and/or enhance access through effective trail and roads systems

Standard Rip-S2.3: Provide fish passage for all.

Standard Rip-S2.4: Ensure culverts and bridges are working properly.

Standard Rip-S2.5: Ensure roads and trails are not impeding the riparian function.

Standard Rip-S2.6: Provide adequate road and trail systems to meet the needs of the people of Wallowa County, the state and the nations.

Standard Rip-S2.7: Maintain roads and trails.

Objective Rip-O2.3: Maintain and enhance forest condition to manage fire risk and produce marketable products

Standard Rip-S2.8: Control tree densities through the use of uneven-aged management

Standard Rip-S2.9: Manage tree species to match site potential

Standard Rip-S2.10: Manage fire risk reducing fuel loads to no more than 35 tons per acre.

Standard Rip-S2.11: Encourage salvaging as rapidly as possible while leaving adequate large woody debris.

Objective Rip-O2.4: Offer recreation opportunities consistent with healthy riparian function

Standard Rip-S2.12: Move all recreational improvements 100 ft from stream banks.

Standard Rip-S2.13: Encourage dispersed recreation camp sites to occur outside of riparian areas.

Standard Rip-S2.14: Set barriers to restrict vehicles from stream banks.

Standard Rip-S2.15: Inventory camp grounds and other recreational sites, identify problems and solutions.

III. Goal: Establish some kind of monitoring plan in riparian areas based on the site, concerns and goals.

Objective Rip-O3.1: Identify minimum amount of monitoring and follow through and do the monitoring planned for. This may require being creative about getting monitoring done. Every time someone is on the ground it should include monitoring. Your eyes see it, document it. Monitoring is an ongoing process.

Standard Rip-S3.1: Monitoring plans need to include objectives, timeframes, budgets of both dollars and time to be a viable monitoring plan.

Standard Rip-S3.2: All specialists, landowners, managers, contractors and permittees need to talk regularly which should include on the ground.

Objective Rip-O3.2: Adaptive management and monitoring should include – short term (annual – triggers, endpoint), mid-term (3-5 years), long-term (10+ years). Short-term is when you interpret it to help adjust management.

Standard Rip-S3.1: Short-term monitoring should include

- Stubble height trigger

- Streambank alteration protocol.—(This protocol has not been adequately refined, it should not be implemented until the science behind the methodology and the repeatability is completed)
- Incidence of use on shrubs.
- Photo points.
- Forest and riparian regeneration establishment

Standard Rip-S3.1: Mid-term monitoring should include

- Winwards riparian vegetation monitoring protocols.
- Multiple Indicator Monitoring for appropriate Indicators
- Photo points.
- Macroinvertebrate monitoring.
- Forest stand structures and species composition

Standard Rip-S3.1: Long-term monitoring should include

- Winward's riparian vegetation monitoring protocols
- Multiple Indicator Monitoring for appropriate Indicators
- Surveyed cross sections
- Photo points (before and after grazing monthly to show regrowth if possible).
- Temperature
- Channel morphology assessment
- Long term range trend
- Forest density

Noxious Weeds

Goals, Objectives, Standards, and Guidelines

I. Goal: Manage noxious weeds to reduce negative impacts to native plants, wildlife, and other resources.

Objective Nox-O1.1: Use all feasible means to eradicate, control, contain, or otherwise reduce negative impacts of noxious weeds.

Standard Nox-S1.1: Wallowa County Ordinance (91-001) prohibits importing hay into Wallowa County. This ordinance states: In order to prevent a further spread, or any re-infestations in the control area (Wallowa County), it shall be unlawful to transport into the control area any hay, straw, grass or chopped and/or ground hay straw, or grass from any state, county, or district that are infested with noxious weeds, except such shipments accompanied by a certificate signed by a qualified inspector of the State Department of Agriculture at the point of origin, certifying that all of the hay, straw, or grass was grown in and shipped from a field of fields free from noxious weeds.

Guideline Nox-G1:

In Oregon, encourage the use of pelletized feed, or weed-free feed and straw bedding for pack and saddle stock. Encourage feeding of pelletized feed or weed-free feed for 72 hours before entering Wallowa County.

Guideline Nox-G2: Provide information to forest users to prevent the spread of noxious weeds. Inform the public about and encourage the use of animal hygiene

techniques that prevent the spread of noxious weeds such as grooming (brushing of animals, including tail and mane), and cleaning trailers before entry into the forest.

Guideline Nox-G2:

Encourage users of the federal ground to report noxious weed sites.

Standard Nox-S1.2: On hay shipments transported directly to private property, the landowner shall accept the responsibility to monitor and control any infestation of noxious weeds that was/is caused by this shipment.

Standard Nox-S1.3: Active grazing allotments appear to have fewer noxious weeds, therefore, encourage active use of allotments.

Guideline Nox-G3:

Encourage permittees of the federal ground to report & monitor noxious weed sites. This increases active monitoring for invasive weeds, reduces time between invasion and detection and increases timeliness of control.

Guideline Nox-G4:

The act of grazing reduces seed set on many noxious plants.

Water Use & Management

Goals, Objectives, Standards, and Guidelines

I. Goal: Find ways to supply water needed for healthy ecological conditions.

Objective Wum-O1.1: Cooperate with water-right holders and governmental water conservation/management agencies (e.g. Natural Resources Conservation Service (NRCS), Soil and Water Conservation Districts (SWCDs), Oregon Water Resources Division (OWRD), and the Bureau of Reclamation.

Objective Wum-O1.1: Support ways to supplement low flows include irrigation conservation measures, improve forest management, control tree densities, and replace stream diversions.

Objective Wum-O1.2: Maintain existing water rights which can include irrigation, domestic use, livestock use, and fire protection.

Standard Wum-S1.1: Use water for the purposes described in the water rights at least one year in a five-year period to avoid forfeiture by nonuse (ORS 540.610).

Standard Wum-S1.2: Comply with Oregon Water Resources Department (OWRD) water use reporting requirements, including installation, maintenance, and monitoring of OWRD-approved water measurement devices for diversions of 0.1 cubic feet per second (cfs) or larger (OAR 690-85).

Standard Wum-S1.3: Install and maintain fish screens and fishways at irrigation diversions on fish-bearing streams in compliance with Oregon Department of Fish and

Wildlife (ODFW) requirements (ORS 498 and 509).

Threatened/Endangered

Goals, Objectives, Standards, and Guidelines

Objective Tes-O1.1: Determine the occurrence and distribution of endangered and threatened plants and animals listed in the Federal Registrar.

Objective Tes-O1.2: Provide protection of threatened and endangered species found in the forest. To the extent practical, provide opportunities for them to expand their numbers and distribution.

Standard Tes-S1.1: Recognize that wolves are a game mammal in Oregon and are managed by the Oregon Department of fish and Wildlife through the Oregon Wolf Management Plan (revised 2010). Wolves are habitat generalists and do not need special habitat.

Objective Tes-O1.3: Maintain or enhance the well-being of sensitive animal and plant species.

Standard Tes-S1.2: Ensure that legal and biological requirements of endangered, threatened, and sensitive plants and animals are considered prior to, and during, all management actions.

Standard Tes –S1.3: Inventory the occurrence and distribution of endangered, threatened, and sensitive plant and animal species in the forest.

Biologically Unique

Goals, Objectives, Standards, and Guidelines

I. Goal: Ensure the preservation of rare and endemic plant species, rare combinations of aquatic, terrestrial, and atmospheric habitats, and the rare combinations of outstanding and diverse ecosystems and parts of ecosystems.

Objective BUC-O1.1: Protect and manage habitat for the perpetuation and recovery of plants which are listed as threatened or endangered, and prevent sensitive species from becoming listed.

Objective BUC-O1.2: Maintain biologically unique plant communities and plant associations in a healthy condition.

Standard BUC-S1.1: Document and map biologically unique plant communities and plant associations when they are encountered during range analysis, rare plant surveys, and timber stand examinations.

Research Natural Areas

Goals, Objectives, Standards, and Guidelines

Before Proposed RNA's can be managed as formally established RNA's a public process must be conducted to determine whether proposal is valid.

I. Goal: Manage RNAs to preserve significant natural ecosystems for comparison with those influenced by man; for provision of ecological and environmental studies; and for preservation of gene pools for threatened and endangered plants and animals.

Objective RNA-O1.1: To manage all proposed RNAs as if they have been formally established until such time that establishment reports and management plans are completed. Once each area has been formally designated, promote research and educational opportunities, while maintaining the integrity of the ecosystem.

Objective RNA-O1.2: Planning and implementation would continue on proposed RNAs.

Soils

Goals, Objectives, Standards, and Guidelines

Objective Soi-O1.1: Manage grassland and shrubland soil conditions to achieve a soil stability rating of moderate departure or better (Rangeland Health Attribute rating). See appendix C for detail information.

Standard Soi-S1.1: Supplement Forest Plan soils S&G 2 with the following definition for detrimental conditions on an activity area:

- Soil Compaction (Non-Volcanic Soils): Fifteen percent increase in bulk density; 50 percent decrease in macro pore space; less than 15 percent macro pore space**
- Soil Compaction (Volcanic Ash): Fifteen percent increase in bulk density**
- Soil Displacement: Removal of 50 percent of A and/or AC horizons from a 100-square-foot or larger area
- Soil Puddling: Loss of soil structure by rutting at greater than 6-inch depth
- Burning: Top layer of mineral soil changed in color to red, next 0.5 inch blackened

Guideline Soi-G1:

Consider using the following activities to achieve soil and riparian/water quality standards and guidelines:

- Proper location and design of all system and temporary roads, recreation developments, and trails
- Control traffic during wet periods
- Designate landing locations for tree removal projects
- Re-establish vegetation following wild fire or management activities
- Locate and construct sanitary facilities, when needed, to minimize pollution and contamination of surface and ground water

Standard Soi-S1.2: Follow Watershed approaches in the Wallowa County Nez Perce Tribe Salmon Habitat Recovery Plan for Roads, Forests, and Campground management.

Fire

Goals, Objectives, Standards, and Guidelines

I. Goal: Manage natural and prescribed fire to emulate historic function of fire. Provide basic protection to human life and property.

Standard Fire-S1.1: Management-ignited fires shall be conducted to mimic historic fire effects to the extent that safety, fuel accumulations, and social constraints permit. The use of fire would help reduce the negative impacts of future wildfires and past fire exclusion. Historic patterns of fire frequency, patch size, and seasonality would be considered in project design and program management. The role of fire as a component of landscape function will be assessed for all significant land management actions.

Standard Fire-S1.2: Management-ignited fire from planned ignitions may be used in developed recreation sites, consistent with the management direction from adjacent management areas.

Standard Fire-S1.3: Fire suppression shall continue as a necessary management action to protect life, property, and resources. Suppression actions will be conducted so as to provide the least-cost-plus-loss that will meet land management objectives and provide the greatest degree of fire fighter safety.

Standard Fire –S1.4: Prescribed fire will be used for range management, watershed improvement and improve scenic values. Prescribed fires should not consume significant quantities of commercial wood products or herbaceous forage that could be removed in a commercially viable manner in a way that damages the long-term commercial viability of the resources.

Air Quality

Goals, Objectives, Standards, and Guidelines

I. Goal: Preserve the atmospheric habitats in a manner compatible with the preservation of rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated with public lands

Standard Air-S1.1 Manage airsheds to meet the requirements of the Clean Air Act.

Aquatic Habitat

Goals, Objectives, Standards, and Guidelines

I. Goal: Ensure the protection and maintenance of aquatic habitat.

Objective Aqu-O1.1: Manage lands within Wallowa County to achieve the watershed management objectives of the Wallowa County/Nez Perce Salmon Recovery Strategy.

Standard Aqu-S1.1: Follow the watershed approaches in the Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan for Aquatic management.

Wildlife Habitat

Goals, Objectives, Standards, and Guidelines

I. Goal: Ensure the protection and maintenance of wildlife habitat.

Objective Wld-O1.1: Provide habitat for all existing native and desired nonnative vertebrate wildlife species and invertebrate organisms.

Objective Wld-O1.2: Manage lands within Wallowa County to achieve the watershed management objectives of the Wallowa County/Nez Perce Salmon Recovery Strategy.

Standard Wld-S1: Follow the watershed approaches in the Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan for wildlife management.

Standard Wld-S2: Follow the habitat guidelines developed in the Elk Nutrition Study (John Cook and Bob Riggs 2014).

Guideline Wld-G1:

Maintain a diversity of wildlife habitats.

Objective Wld-O1.3: Manage vehicular access seasonally, as necessary to protect or maintain wildlife habitat during critical life cycle functions of wildlife species. Project-level planning or a district access travel plan would be used to determine specific restrictions.

Objective Wld-O1.4: Provide quality big game habitat to meet the elk and deer herd populations, calf, fawn, buck, and bull ratios established by Oregon Department of Fish and Wildlife, and to promote a large mature male segment into the populations, wherever practicable.

Objective Wld-O1.55: Manage for compatible numbers of big game and livestock within appropriate carrying capacities for both species.

Guideline Wld-G2:

Manage recreational livestock to minimize the potential for transmission of harmful domestic animal diseases to wildlife.

Geologic

Goals, Objectives, Standards, and Guidelines

I. Goal: Provide for the protection of paleontological and unique geologic resources from damage or destruction. Manage paleontological resources for scientific research to the extent consistent with protection. Provide for interpretation and education of unique geologic events.

Standard Geo-S1.1: Allow for the collection of invertebrate and vertebrate paleontological materials only by professional paleontologists/geologists with legitimate research interests and research plans. Collections would require permits issued by the

District Ranger.

Guideline Geo-G1:

All geological research should be coordinated, particularly consumptive research involving fossil collection, to reduce and/or eliminate redundant collection and research efforts.

Guideline Geo-G2:

Consider placing signs at major portals and/or at specific locations (not on site) where damage to significant fossil-bearing formations is occurring to educate the public about the collection of paleontological materials and associated prohibitions.

Guideline Geo-G3:

Continue to identify, inventory, and map paleontological resources.

Standard Geo-S1.2: Maintain integrity and scenic quality of geologic features such as caves, rock shelters, talus slopes, natural salt licks, cliffs, rims, limestone outcrops, and uplifts, by avoiding alteration or allowing for protection.

Guideline Geo-G4:

Public access may be limited to prevent damage to special geologic features, or if there are determined safety hazards to visitors.

Guideline Geo-G5:

Provide interpretation and education of paleontological resources through off-site methods rather than on-site signing to protect locations of the sites.

Guideline Geo-G6:

Visitors should be informed about the value of special features, management actions being taken to protect their value, and opportunities for public use. Scientific or educational use of special features may be allowed under permit.

Minerals

Goals, Objectives, Standards, and Guidelines

Objective Min-O1.1: Manage common variety mineral materials for the sole purpose of construction and maintenance of facilities including, but not limited to roads, airfields, trails, and recreation developments.

Standard Min-S1: Subject all mining activity, whether it be by pan, sluice box, suction dredge, or some other means, to valid existing rights determination as of December 31, 1975.

Guideline Min-G2:

Reclaim abandoned mine portals to minimize risk to public safety and provide wildlife habitat.

Tribal Trust Responsibilities

Goals, Objectives, Standards, and Guidelines

I. Goal: Manage natural resources consistent with trust responsibilities of the treaty with the Nez Perce, 1855.

Standard Tri-S1.1: Consult with the Nez Perce Tribe to prioritize and manage plant species significant to the Tribe for harvesting, gathering, and for cultural, spiritual, and religious activities identified as documented by the Tribe.

Standard Tri-S1.2: Protect the Tribal rights of taking fish in all usual and accustomed places in common with other citizens of the United States and of erecting suitable buildings for curing; together with the privilege of hunting, gathering roots and berries, and pasturing stock on unclaimed lands through sound management of appropriate resources such as aquatic habitat, wildlife habitat, forage, and riparian areas as stated in the Treaty of 1855.

Guideline Tri-G1:

Work closely with the Nez Perce Tribe in supporting efforts to restore, manage, and rehabilitate vegetative resources which are not currently meeting tribal goals and responsibilities or are expected to decline in the future.

Guideline Tri-G2:

Consult with the Nez Perce Tribe and other agencies to establish a monitoring and tracking system, as needed, for tribal harvest, population trends of harvest species, effectiveness of treatments, and conflicts with other users, management, or resources demands.

Guideline Tri-G3:

Monitor the taking and harvesting of natural resources for which the Forest Service has management responsibilities to determine whether the activity adversely impacts habitat or reduces populations of species to the point where federal listing may become necessary, or where federally listed, proposed, or candidate (C1) species are adversely affected.

Guideline Tri-G4:

Consider a permit system to allocate resources where user conflicts develop, or demand exceeds supply for harvest and gathering resources desired by tribal and nontribal users.

Standard Tri-S1.3: Consult Nez Perce Tribe to assure that management actions do not prevent access to usual and accustomed fishing places. Consult with Nez Perce Tribe before changing access, closing roads, or exchanging these lands.

Standard Tri-S1.4: Consult with the Nez Perce Tribe on changes in access or ownership that may affect treaty reserved rights or the exercising of said rights on public land.

Appendix A

Stewardship Principles

The Wallowa County Natural Resources advisory committee developed the following principles to guide the in Watershed planning processes. With time and experience, it is anticipated that agreement will be reached on principles to guide management across the watershed.

The ecological systems in A Watershed are disturbance-adapted systems. Competition within and between species, and natural disturbance regimes of fire, insects, disease, wind, flood, and herbivory, create mosaics of vegetation cover and structure that change over time and space. The native biological diversity of the landscape is adapted to these dynamics.

In this context, habitat diversity is important. The alteration of disturbance regimes (through the control of disturbance or resource use) can lead to a simplification of vegetation patterns and riparian systems, which may impair watershed functions and jeopardize the persistence of many native species. Processes that lead to simplification increase the risks for larger scale disturbances (such as uncontrolled fire, insects, and disease occurrences).

These principles provide a framework to exercise continuing responsibility for maintaining and enhancing watershed conditions. In some areas, restoration is needed to reestablish both structure and function within the watershed. These principles guide the development of specific management recommendations, and facilitate the collaborative efforts already taking place in the community.

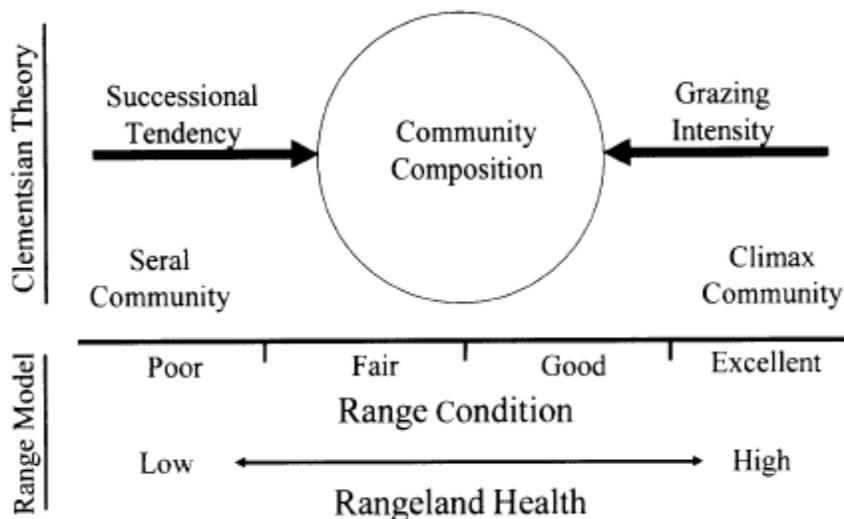
Stewardship efforts should:

- Begin with analysis of the current and historic ecological conditions at the watershed level – ridgetop to ridgetop;
- Incorporate the social, cultural, and economic dynamics of the community;
- Maintain spatial and temporal patterns of species composition, structure, and seral stages that are within a resilient range for the landscape;
- Address not only symptoms, but also the causes of habitat loss and modification which exceed normal ranges and cycles for these disturbance-adapted systems;
- Avoid strategies likely to entail recurring high maintenance costs;
- Define clear, achievable and measurable management objectives;
- Use adaptive and flexible management, supported or modified by feedback from monitoring – with multi-party monitoring being an important tool for collaborative processes on public lands.

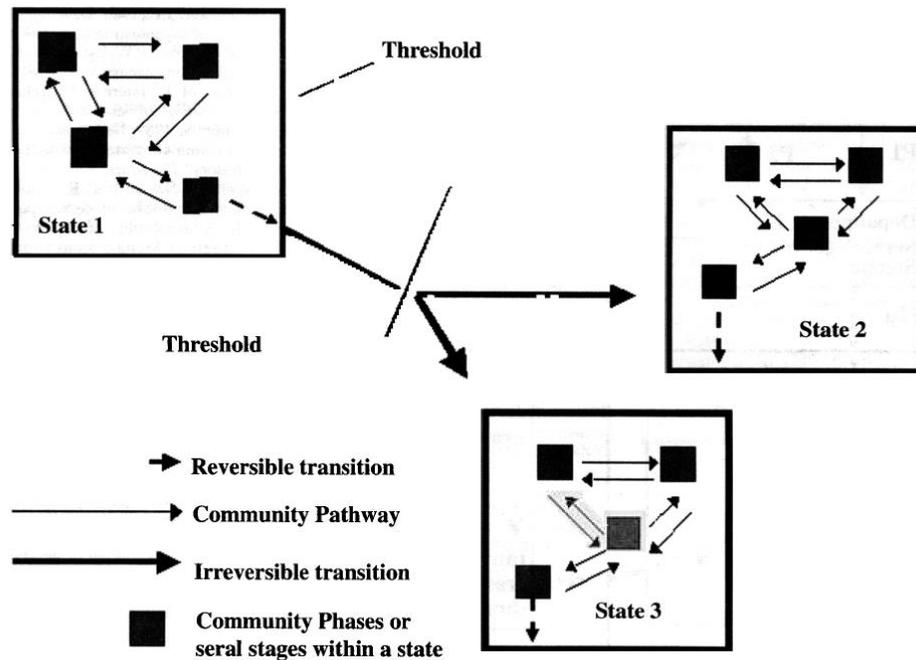
Stewardship should draw from passive and active management strategies that address specific issues and conditions within the watershed. A broad range of resource management tools needs to be available, including but not limited to: prescribed burning; pre-commercial and commercial logging; revegetation using both native and non-native plant species; managed grazing, restoring channel morphology and structure, use of herbicides and pesticides; riparian and rare plant community protection; as well as permanent and temporary road closures.

Appendix B

Ecological status is the degree of similarity between existing vegetation and soil conditions compared to the potential natural community (PNC) and desired soil conditions on a site. Methods to evaluate the ecological status and positive or negative changes to rangelands have evolved over time. Range management has shifted focus away from evaluating rangelands using the unidirectional concept of **Clementsian** succession which was expressed using seral status ranging from very early seral to climax plant communities. The term “range condition” was coined to describe various successional stages of vegetation caused by overgrazing. The stages were rated according to the percent of climax species (most like PNC) identified during monitoring. The condition stages were rated from poor to excellent. Currently the shift in concepts is to evaluate the ecological status of rangelands using the state and transition concept expressed in transitions, phases, states. The figure below shows the difference between Clementsian Theory, or concept, to the state and transition model concept (Range Model).



The **state and transition model** concept displays the changes to vegetation communities based on disturbances that have occurred on the landscape and are not exclusive to grazing disturbances. The changes between phases and states (plant communities) are displayed by the disturbances that have occurred or have the potential to occur, and transitions between phases and states are multidirectional depending on the disturbance and consequent plant responses. The figure below is a generic example of an S&T model.



With this in mind, it is important to create a crosswalk between the two concepts for future management discussion and decisions.

Clementsian Succession Concept		State and Transition Concept	
Range condition	Forage / soil condition	Departure from desired condition	State and Transition model phase or state*
Climax	Excellent 75-100% climax species	Low-moderate departure	Phase A or B
Late seral	Good 50-75% climax species	Low-moderate departure	Phase A or B
Mid seral	Fair 25-50% climax species	Moderate or greater departure	Phase C or D
Early seral	Poor less than 25% climax species	Moderate or greater departure	Phase C or D
Very early seral	Very poor	Moderate or greater departure	Phase C or D

* Depends on the state and transition model used for the site, this is a general reference.

Rangelands are considered in satisfactory condition when the desired future condition is being met or short term objectives are being achieved to move the rangeland towards the desired conditions. Conversely, rangelands are considered to be in unsatisfactory conditions when desired conditions and/or short term objectives are not being achieved.

For more information on Interpreting Indicators of Rangeland Health see: Technical Reference 1734-6

Appendix C

Indicators

Interpreting Indicators of Rangeland Health is based on qualitative indicators that provides a preliminary evaluation of soil/site stability, hydrologic function, and biotic integrity (at the ecological site level). Indicators are defined as elements of an ecosystem used to assess process that are too difficult or time consuming to measure directly.

The product of this assessment is not a single rating of rangeland health, rather a qualitative assessment of these three components which are referred to as attributes. A suite of 17 key indicators are used to describe the three attributes mentioned above. Ecological processes are described relative to reference states for the ecological sites being evaluated, requiring a reference sheet describing the range of spatial and temporal variability expected for soils and plant communities in the reference state within each ecological site. Optional indicators can be included as necessary or appropriate for specific objectives (e.g., for biological crusts in areas where it's meaningful), but in general, *none of the 17 indicators should be dropped from the protocol*. This is to maintain consistency between assessments and because indicators that have not shown change in the past may begin to show change in the future due to changing or new processes.

Indicator	Description	Integrity Attribute
1. Rills	Small erosion rivulets that are generally linear and do not necessarily follow the micro-topography (unlike water flow patterns)	S,H
2. Water Flow Patters	The path that water takes (i.e., accumulates) as it moves across the soil surface during overland flow	S,H
3. Pedestals and/or Terracettes	Pedestals are rocks or plants that appear elevated as a result of soil loss by wind or water erosion. Pedestals can occur for reasons other than erosion, so it is important to determine that observed pedestals are indeed the product of erosional processes. A terracette is a bench of soil deposition behind an obstacle caused by water (not wind) movement.	S,H
4. Bare Ground	Amount of land surface not covered by vegetation, rock, litter, visible biological crusts, and stand dead vegetation	S,H
5. Gullies	A channel cut into the soil by the action of running water. Natural flow patterns that have never eroded are not gullies	S,H
6. Wind Scour or Deposition	Evidence of wind erosion. Erosion from interspaces and/or deposition under plants	S
7. Litter Movement	Degree and amount of litter (i.e., dead plant material in contact with the soil surface) movement (e.g., redistribution) and size of litter moved	S
8. Soil Surface Resistance to Erosion	This indicator reflects resistance of soil particles to detachment and loss by raindrop impact and overland flow	S,B
9. Soil Surface Loss & Degradation	The loss or degradation of the surface horizon of the soil. The two primary soil properties used to make this	S,B

	evaluation are the organic matter content and the structure of the surface layer or horizon.	
10. Plant Community Composition and Distribution Relative to Infiltration and Runoff	The ability of a plant community - plant composition and distribution - to safely capture, store, and release precipitation.	H
11. Compaction	A near surface layer of dense soil caused by repeated impacts on or disturbances of the soil surface. Does not include textural or structural changes to soil.	S, H, B
12. Functional/Structural Groups	Suite of species that are grouped together based on similar photosynthetic pathways, plant size and structure, rooting depth and structure, nitrogen fixing ability, life cycle, etc. Where relevant, includes biological crusts.	B
13. Plant Mortality and Decadence	The proportion of dead or decadent to young or mature plants in the community, relative to that expected for the site under normal disturbance regimes.	B
14. Litter Amount	Departure from reference includes both too much or too little litter.	H,B
15. Annual Production	Net quantity of all above ground vascular plant material produced in a year	B
16. Invasive Plants	Plants (native or non-native) that will continue to increase on a site and become dominant or co-dominant (in terms of ecological processes) if not actively controlled by management intervention.	B
17. Reproductive Capability of Perennial Plants	The ability of native or seeded plants to produce seed, seedling, or vegetative reproductions in weather conditions allow. Presence/absence of young plants and seedlings is <i>not</i> used for this indicator.	B

S = Soil and site stability, H = Hydrologic function, B = Biotic integrity

Applying and Assessing the Indicators

The following flow diagram from the Interpreting Indicators Manual (version 4) illustrates the process for applying the indicators. ***Interpretation of the indicators is tied directly to ecological sites, so it is critical that the ecological site be determined first before doing any other assessments.***

Image source: Pellant et al. 2005. Interpreting Indicators of Rangeland Health, v4

Each of the 17 indicators is assessed on a sliding scale of five categories based on evaluation of the field condition against the site's reference sheet key using the following categories:

1. none to slight = Reference
2. slight to moderate
3. moderate
4. moderate to extreme
5. extreme to total

Once all of the indicators are assessed, those indicators related to soil and site stability are combined to get an overall rating for that attribute. This process is repeated for hydrologic function and biotic integrity to get three overall ratings for the site. Collapsing the three indicators into a single overall

indicator is discouraged because it combines different attributes that may not be equivalent or equally weighted.

