

Final Environmental Impact Statement for the Hells Canyon National Recreation Area



July 2003

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We are pleased to announce that after a lengthy environmental review process, the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) for the Hells Canyon National Recreation Area Comprehensive Management Plan are complete.

The purpose of the Final Environmental Impact Statement is to update the Comprehensive Management Plan (CMP) for Hells Canyon National Recreation Area (HCNRA).

The FEIS reflects years of scientific assessments and studies; extensive public involvement and review; and consultation with county, state, federal agencies, and tribal government.

The new plan is framed by Congressional legislation that established the HCNRA 28 years ago:

“to assure that the natural beauty, and historical and archeological values of the Hells Canyon area..., are preserved for this and future generations, and that the recreational and ecologic values and public enjoyment of the area are thereby enhanced.”

This amended plan provides us the management direction to achieve and continue this shared vision and Congressional direction. The Forest Service team that prepared the FEIS reflects professional and technical expertise from a wide range of disciplines and skills. The team consulted and collaborated with numerous other land managers and resource specialists during the formulation of the plan; and sought extensive public participation, review, and comments during the planning process.

The final EIS presents five management alternatives: a Native Ecosystem alternative, developed by a coalition of conservation and preservation interests; a Wallowa County alternative, developed by a coalition of twelve counties in Oregon, Idaho, and Washington; and three Forest Service generated alternatives.

The ROD selects a modified alternative that is responsive to resource needs and protection, scientific assessments and studies, public comment, and is consistent with Congressional legislation that established the HCNRA.

“My decision for the final EIS, as documented in the ROD, incorporates what I believe is the best scientific information available for the continued protection and stewardship of this unique area. The decision balances the needs and desires of society to use and enjoy this wonderful and valued place.”
Karyn L. Wood, Forest Supervisor.

Background and Need for Change

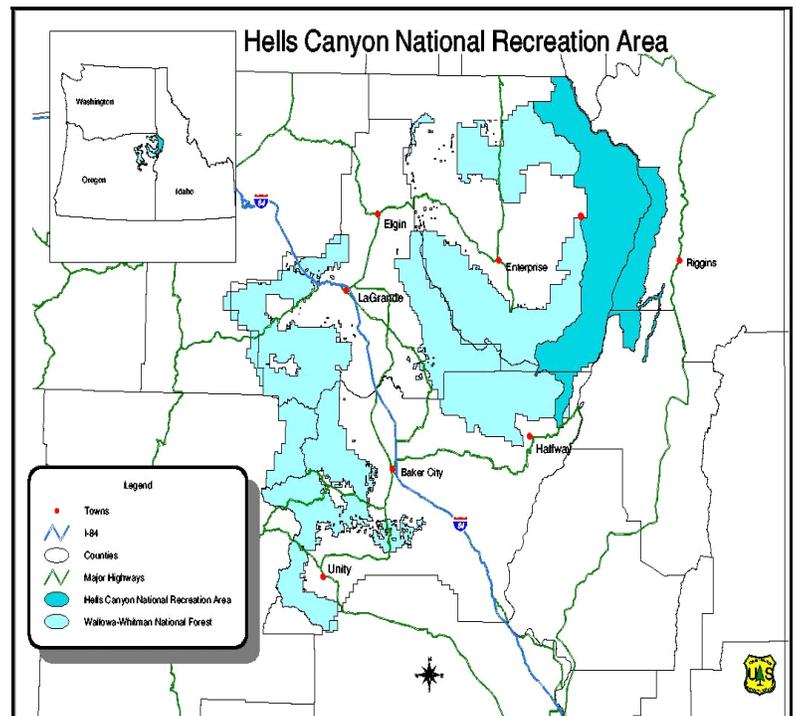
The HCNRA was established in 1975, including the Hells Canyon Wilderness, Wild and Scenic Rapid and Snake Rivers. A CMP was approved in 1982 and incorporated into the *Wallowa-Whitman National Forest Land and Resource Management Plan (Forest Plan)* in 1990.

The HCNRA is located in western Idaho and the northeast corner of Oregon on portions of the Wallowa-Whitman, Nez Perce, and Payette National Forests. It is administered by the Wallowa-Whitman National Forest (WWNF). There are 652,488 acres within the HCNRA boundary which is approximately 28 percent of the land under the administration of the WWNF. About 33,000 acres of privately-owned land occur within the HCNRA. Approximately 117,073 acres of the Nez Perce and 24,000 acres of the Payette National Forests occur in the HCNRA. It lies within Baker and Wallowa counties in Oregon; Adams, Idaho and Nez Perce counties in Idaho; and near the Asotin County border in Washington.

Existing Management Direction

The *HCNRA Act* is the principal legislation that guides management of the HCNRA. Several sections clarify the intent for the HCNRA. Section 1(a) of the *HCNRA Act* explicitly states that the HCNRA was created to assure that this area would be preserved for this and future generations, and that the recreational and ecological values and public enjoyment of the area are thereby enhanced.

Section 7 of the *HCNRA Act* states that the recreation area will be administered for public outdoor recreation in a manner compatible with seven objectives. Section 8 directs the development of a CMP to provide for a broad range of land uses and recreation opportunities. Section 10 directs that rules and regulations will be promulgated for public and private lands. Section 13 addresses the recognized traditional and valid uses of the recreation area.



Several changes in direction that apply to the HCNRA have occurred in the past ten years including changes for riparian, ecosystem, and wildlife standards (Eastside Screens), *Public and Private Land Use Regulations*, *Wild and Scenic Snake River Recreation Management Plan*, strategies for fish (PACFISH/INFISH), and termination of sheep grazing.

Purpose and Need for Change

Adjustment of the existing (1982) CMP was initiated in 1993 and the *Draft Environmental Impact Statement (DEIS)* was released in 1996. The Forest Supervisor re-initiated the process in 1998 with a revised DEIS (RDEIS) based on:

- Monitoring and evaluation reports indicating areas needing change such as defining desired conditions for visitor management and recreation use
- New standards from the 1994 *Public and Private Land Use Regulations* regarding use of motorized and mechanical equipment, protection and preservation of cultural and paleontological resources, mining, private land use, timber harvesting, and grazing activities
- The need to set clearly defined desired conditions for Wilderness settings
- New scientific information for the Interior Columbia Basin
- Changing social values that indicate people want to retain the natural, undeveloped character of the area

The purpose of the amendment is to align the existing CMP and *Forest Plan* management direction to better achieve the objectives of the *HCNRA Act* including Section 7 and other related laws, regulations, and Forest Service policies.

Public Involvement and Issues

Public participation has been a major component of the process. Many news releases, mailings, and public meetings have occurred to provide information to the public since 1993. Several meetings and ongoing communications have occurred between the Interdisciplinary Team, Nez Perce Tribe, Wallowa County, Hells Canyon CMP Tracking Group, and others to build understanding of their interests.

Two citizen-generated alternatives were submitted to the WWNF for inclusion in the RDEIS. The Native Ecosystem alternative was developed by the Hells Canyon CMP Tracking Group representing conservation, preservation organizations, Umatilla and Nez Perce tribes. The Wallowa County alternative was developed by a coalition of Oregon, Idaho, and Washington counties.

As a result of extensive interest by the public, the Hells Canyon Subgroup to the John Day/Snake Resource Advisory Council (RAC) was established. They actively reviewed the RDEIS when it was released in March 2000 to identify areas of consensus to submit to the RAC and to the Forest Supervisor for the FEIS.

Alternatives Considered

Five alternatives were analyzed in detail in the RDEIS. Alternative E from the RDEIS was modified based on public comment, the purpose and need for change, and the significant issues and presented as Alternative E-modified in the FEIS. No other alternatives were developed for the FEIS.

Alternative A (no action) is a continuation of the management direction as stated in the *Forest Plan*, including the direction in all amendments.

Alternative B (proposed action) is a continuation of the management direction as stated in the *Forest Plan*, including all amendments, but modified to emphasize maintaining the existing recreation experience while maintaining and restoring vegetation conditions within the historic range of variability (HRV).

Alternative E-modified (preferred) is a continuation of the management direction as stated in the *Forest Plan*, including all amendments, but with specific changes designed to address the need for change. It emphasizes maintaining the rustic and primitive nature of the area while restoring the natural role of fire and maintaining vegetative conditions within HRV.

Alternative W (Wallowa County) was developed by Wallowa County. It emphasizes maintaining the rustic nature of the area while restoring vegetative conditions through natural and managed processes of thinning, stand replacement, and plant succession.

Alternative N (Native Ecosystem Alternative) was developed by the Hells Canyon CMP Tracking Group. It emphasizes a healthy native ecosystem and provides for least-impact of human activities to allow native ecosystems and processes to function as naturally as possible.

Section 7 of the HCNRA Act

Except as otherwise provided in Sections 2 and 3 of this Act, and subject to the provisions of Section 10 of this Act, the Secretary shall administer the recreation area in accordance with the laws, rules, and regulations applicable to the national forests for public outdoor recreation in a manner compatible with the following objectives:

- 1) the maintenance and protection of the free flowing nature of the rivers within the recreation area;
- 2) conservation of scenic, wilderness, cultural, scientific, and other values contributing to the public benefit;
- 3) preservation, especially in the area generally known as Hells Canyon, of all features and peculiarities believed to be biologically unique including, but not limited to, 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 associated therewith;
- 4) protection and maintenance of fish and wildlife habitat;
- 5) protection of archeological and paleontologic sites and interpretation of these sites for the public benefit and knowledge insofar as it is compatible with protection;
- 6) preservation and restoration of historic sites associated with and typifying the economic and social history of the region and the American West; and
- 7) such management, utilization, and disposal of natural resources on federally owned lands, including, but not limited to, timber harvesting by selective cutting, mining and grazing and the continuation of such existing uses and developments as are compatible with the provisions of the Act.

At the heart of the issues is the use of the word 'compatible' in Section 7 of the Act.

Significant Issues

- **Compatibility with Section 7 of the HCNRA Act** – Some people question whether activities meet the intent of Section 7(1-7) in regard to the compatibility and the Act's discussion of traditional and valid uses.
- **Recreation Settings, Experiences and Opportunities** – There is a concern that existing direction would allow for increases in recreation use, diminishing semi-primitive and primitive recreation opportunities.
- **Access and Facilities** – There is a concern that existing direction would allow for increases in motorized access and recreation developments with potential resource impacts.
- **Vacant Allotments Disposition and Satisfactory Range Conditions** – There is a concern that vacant allotments should be closed to provide for long term, naturally functioning grassland ecosystems. There is a concern about defining satisfactory conditions.
- **Forested and Grassland Vegetation** – There is a concern that existing management direction does not adequately define desired conditions for grasslands and forested areas.
- **Heritage Resources** – There is a concern that increased access and recreation use may lead to damage and destruction of prehistoric and historic sites.

Highlights of the Decision (Significant Issues)

The ROD selects Alternative E-modified to provide the needed changes in direction to best meet resource objectives and provide for compatible uses. The decision is responsive to resource protection, scientific assessments and studies, public comment, and is consistent with the *HCNRA Act*.

The decision constitutes a collection of small-focused changes in the long-range strategy for the HCNRA for 16 resource areas (recreation settings, experiences, and opportunities, including Wilderness and scenery; access and facilities; forested vegetation, grasslands, and forest understory; vacant allotments disposition and satisfactory range conditions; heritage resources; federal trust responsibilities; soils; Wild and Scenic Rivers; biologically unique species, habitats, and ecosystems; fire and air quality; riparian/aquatic habitat and water quality; wildlife habitat; scientific research; geologic resources; minerals; land management and special uses. It adjusts goals, objectives, standards, guidelines, monitoring, evaluation, and management areas (MA). The major points of the decision are summarized below in relation to the significant issues and the specific resource areas:

Compatibility with Section 7 of the HCNRA Act

- The WWNF interprets compatibility to mean that uses can occur as long as they meet objectives in Section 7(1-6). The decision maintains the fundamental concept that outright exclusion of uses does not meet the intent of the *HCNRA Act*. It resolves the issue of what compatibility means at two levels.
- Programmatic direction in the form of goals, objectives, standards and guidelines provides the context for uses to be compatible with resource objectives from Section 7(1-6). Site-specific activities will need to meet this direction to be compatible. As long as site-specific activities meet the goals, objectives, standards, and guidelines of the amended direction they are considered compatible with meeting objectives of Section 7(1-7).
- A site-specific compatibility determination will be required for all project-level decisions. If site-specific incompatibilities are identified, then the project will need to be changed or mitigated to avoid the incompatibility. Some incompatibilities may lead to further amendments to the *Forest Plan*.

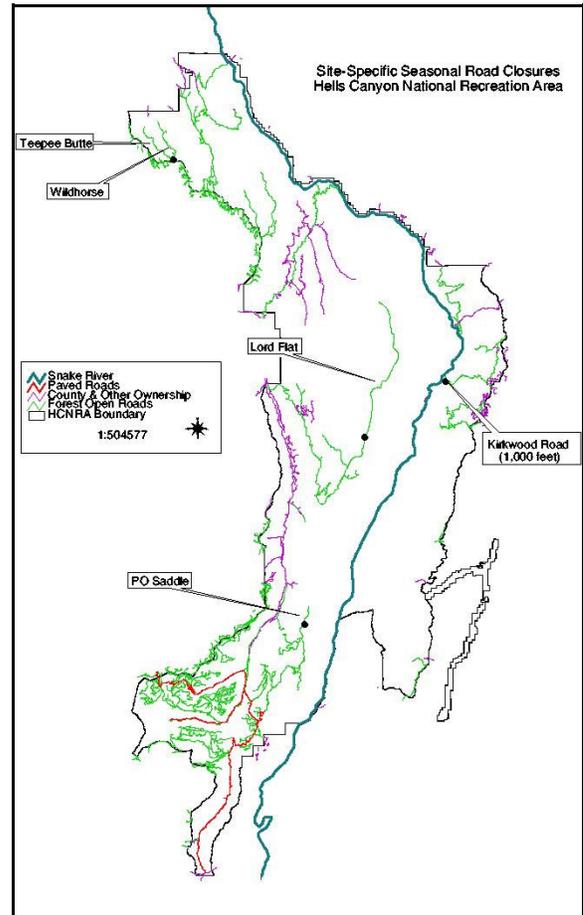
Recreation Settings, Experiences, and Opportunities

- The majority of the HCNRA provides nonmotorized, and semi-primitive opportunities. The Hells Canyon Wilderness encompasses 35 percent of the HCNRA. The decision retains the broad range of high-quality recreation settings and opportunities while emphasizing maintenance of the rustic and primitive character.
- New direction establishes thresholds of use through Recreation Opportunity Spectrum (ROS) setting indicators for appropriate levels of access, remoteness, scenery, social encounters, visitor management, impacts, and facilities.
- Recreation use is managed through implementation of visitor management strategies to meet these thresholds. Strategies are defined from least restrictive to most restrictive for managing recreation use at sites or areas where impacts are occurring or occur in the future. Specific social and biophysical standards are further defined for the Wilderness to achieve desired conditions and to prevent degradation.
- Outfitter/guide services are maintained (currently 57% of service days are unused). Growth is enhanced with one new permit for fishing/rafting on the Imnaha River and to provide aviation services (1 term permit with 150 service days and pool of 150 service days for temporary permits) to outlying communities (new total of 22 permits, 15% increase in authorized service days). The decision establishes criteria for new or expanded permits to ensure that the service is needed to continue public recreation as provided by the *HCNRA Act*.
- The Scenery Management System is incorporated into project planning to integrate ecological and social attributes and conserve scenic values contributing to the public benefit. Scenic integrity levels are established to define the sense of place provided by the landscape. Guidelines for acceptable levels of human-caused impacts to landscape character from vegetation, recreation, range, wildlife, and fisheries activities are defined.
- Wilderness will be managed consistent with both the *Wilderness Act* and Section 7(2) of the *HCNRA Act* to protect and conserve wilderness values. The decision provides the needed definition of desired conditions, minimizes negative impacts to wilderness character, and ensures acceptable levels of visitor management and impacts. It manages noxious weeds in a manner consistent with Wilderness objectives.

Highlights of the Decision (Significant Issues)

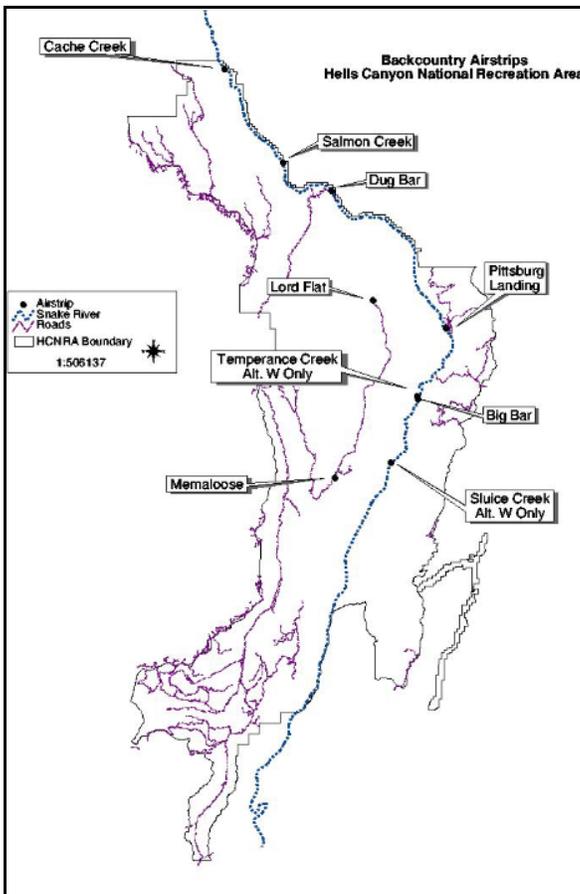
Access and Facilities

- The new direction aligns road management objectives, maintenance levels, traffic service levels, and facilities development to meet ROS settings and the intent of the resource objectives in Section 7(1-6). It places priority on reducing or reconstructing existing roads, trails, and facilities based on user input and recreational demands. The decision provides for maintaining many of the existing recreation experiences while allowing for some reconstruction and improvements to maintain adequate and safe roads and facilities where deteriorating conditions exist. Some roads may be decommissioned to meet resource objectives.
- To protect plants, heritage resources, and prevent the spread of noxious weeds; motorized use (including all-terrain vehicles) will be limited to designated open roads, trails, and dispersed camping sites or areas. Special Fuelwood Areas will be designated through the current *Fuelwood Plan*. The majority of the HCNRA is already currently not accessible by motorized vehicles due to *Forest Plan* travel restrictions that limit off-road travel to 300 feet on either side of open roads for dispersed camping or fuelwood cutting in MAs 10 and 11.
- Two seasonal road closures will be modified and three new seasonal road closures will be implemented (27 miles total) to minimize disturbance to wildlife, protect fish habitat, and prevent resource damage to the roads.
- PO Saddle road has an existing seasonal closure from rifle season (late September) to early June. This closure will be increased from three days before archery season (late August) to June 15th. The seasonal closure on Kirkwood Road (April 1 to June 30) will be retained (1,000 feet to the Kirkwood Historic Ranch) but will be modified to exclude mechanized equipment to protect habitat during critical spawning periods for fish.
- New seasonal closures will occur from three days before archery season on Teepee Butte, Wildhorse roads, and Lord Flat Trail to the end of elk season (late November). Because the most use of these areas occurs in hunting season, seasonal closures provide the most benefit to plateau habitat and associated species.
- Recreation use will still be possible during the summer depending on the snow levels and road conditions (mid-June to end of August). Hunters will still be able to access these popular areas, but their form of access will need to change. These short-term closures present an opportunity for outfitter/guides to fill unused capacity with this demand to continue to provide outdoor recreation compatible with the *HCNRA Act*.
- Most subwatersheds in the HCNRA (51 of 61) have open-road densities at or below 1.5 mi./sq. mi. Some roads will be closed to meet new open-road densities (1.35 mi./sq. mi.) to minimize disturbance to wildlife (approximately 177 miles; 33% of open roads). One subwatershed will be managed at a higher rate (1.9 mi./sq. mi.) because it provides the main access to the Upper Imnaha area.
- These road closures will occur mostly in the southern portion of the HCNRA (McGraw, Upper Imnaha, and North Pine) where past timber harvesting has created an extensive network of old logging roads that have not been closed. Specific roads will be evaluated through a future site-specific analysis. Public input will be important to mitigate impacts to recreation uses while providing for compatibility with protecting wildlife and riparian habitat, heritage sites, biologically unique resources, and preventing the spread of noxious weeds.



Highlights of the Decision (Significant Issues)

- The intent of the access and facilities decision is to manage existing use while providing a more enforceable management situation for the future. Areas will be closed unless designated open or as specifically allowed by permit. Roads, areas, and sites will be signed as open to make it obvious where uses are allowed. Some users will need to change their location or season of use, but the impacts are expected to be mitigated at the site-specific level.
- All currently open backcountry airstrips (7 total) will remain open. Five airstrips along the Snake River will remain open year-round for private, commercial, and administrative use as previously decided in the *Wild and Scenic Snake River Recreation Management Plan* (Big Bar, Dug Bar, Pittsburg Landing, Salmon Bar, Cache Creek - private use only). Two airstrips in the uplands will remain open to private, commercial, and administrative use (Lord Flat and Memaloose). A self-registration system will be employed to monitor use.



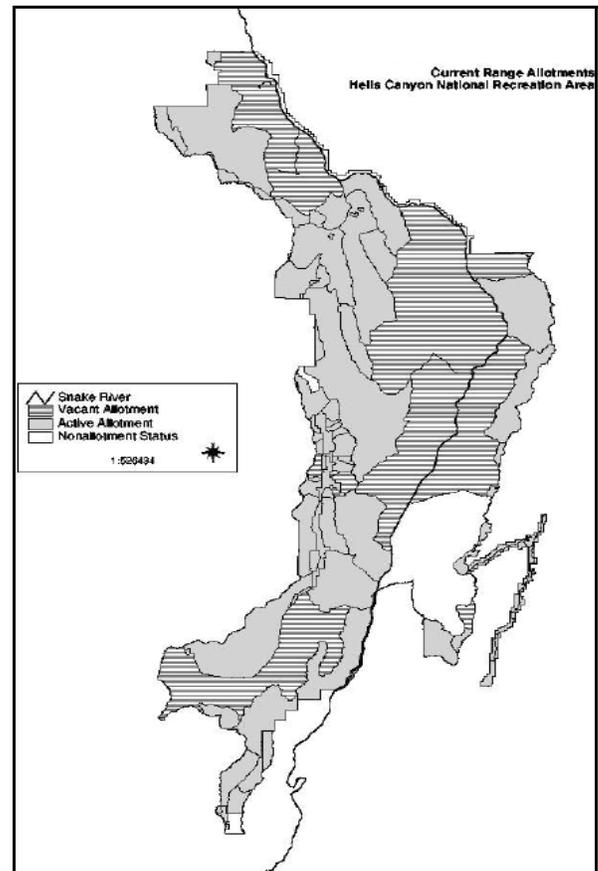
- The Imnaha River Road (Forest Road 3955) will continue as part of the Hells Canyon Scenic Byway. Trail construction/reconstruction opportunities (4 mi.) for viewing the canyon and access to the Snake River are provided. Motorized trails along the Imnaha River, across Rapid River, and near Big Canyon will continue.
- Opportunities to see and experience the HCNRA in the winter-time will continue on designated snowmobile routes (132 miles) and snow-play areas (40,262 acres). Minimum snow depths on routes (12") and areas (24") will be necessary before use can occur. Popular parts of the HCNRA in Oregon (Salt Creek Summit, McGraw, and Halfway) and Idaho (Cow Creek, Sawpit, Low saddles, and Cold Springs) will remain available.
- Facilities will be managed to meet ROS settings with an emphasis on replacing worn out facilities with new, low-maintenance facilities to correspond with the public's desire to keep the rustic and primitive character.
- Some incompatible uses are adjusted through these changes to meet the intent of Section 7(1-6) and to fit the public's desire to maintain the rustic and primitive nature of the HCNRA.
- The majority of the HCNRA will continue to provide many opportunities for outdoor public recreation users seeking a nonmotorized experience while allowing the continuation of motorized uses compatible with Section 7 of the *HCNRA Act*.

Vacant Allotments Disposition and Satisfactory Range Conditions

- Almost 40 percent (267,506 acres) of the HCNRA contains allotments that have been vacant for two decades or more due to difficulty of management and remote locations that limited access and contributed to uneconomical operations. Many were not restocked due to lack of interest when they originally became vacant. Three allotments were closed (1995) due to the incompatibility between domestic and bighorn sheep.
- The vacant allotments provide large blocks of intact, native grasslands that are limited in the Interior Columbia Basin. They also provide a diversity of habitat and edges between cold forest, moist forest, dry grass and shrubs, and riparian woodlands.
- To reduce fragmentation, improve connectivity between habitats, and allow for potential recovery of some terrestrial species, the majority of vacant allotments (245,782 acres) will be closed except for two (Hope and Turner) along the Imnaha River (3,641 acres). Part of the vacant allotments (18,083 acres) will continue as administrative horse pastures.

Highlights of the Decision (Significant Issues)

- The same level of active sheep and cattle grazing as currently exists (298,905 acres) is retained. About 46 percent of the HCNRA will continue to support grazing operations.
- Hope and Turner allotments provide flexibility for future grazing on a temporary basis where fire, flood damage, or other unforeseen situations may displace permittees from active allotments. These areas will need to be evaluated before stocking occurs.
- Satisfactory range conditions are defined to achieve a mid-seral ecological status with an upward trend for grasslands. Direction is provided for fall, winter, and spring forage utilization specific to the HCNRA based on plant phenology, climate, and plant responses to grazing.
- Social values and economic benefits associated with livestock grazing as part of traditional lifestyles in the Imnaha Wild and Scenic River corridor will be maintained. Closure of the vacant allotments will continue to maintain recreation experiences and social values associated with solitude in ungrazed areas of the Wild and Scenic Snake River corridor and the Wilderness.
- The decision balances meeting the objectives of Section 7 and maintains livestock grazing as a traditional and valid use as stated in Section 13 of the *HCNRA Act*.



Forested and Grassland Vegetation

- The decision provides a goal of promoting forested vegetation within HRV for structural stages. It promotes achieving the potential natural community for grasslands (community that would result if succession were completed without interference by humans while allowing for natural disturbances).
- Ecological processes of forested and grasslands in the context of HRV are emphasized through these desired conditions to maintain the HCNRA as a healthy ecosystem that functions within the Interior Columbia Basin. The decision emphasizes the restoration of sites where possible to maintain or restore ecosystem function, conserve soil, and enhance native plant species and communities to achieve HRV. However, some sites may already be so altered such as old homesteads that they are not restorable to this condition.



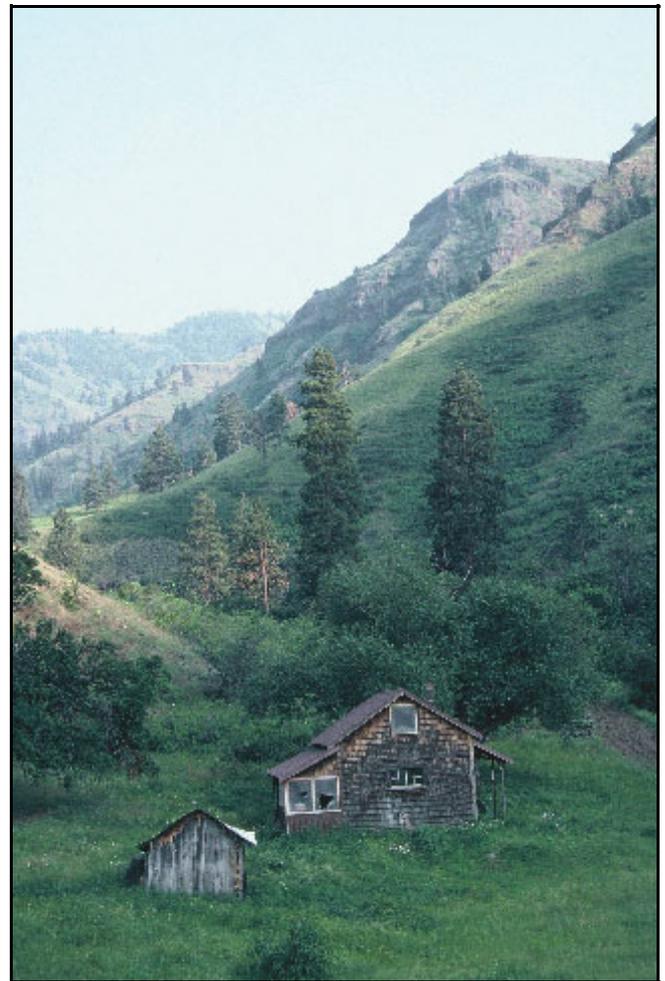
- Current direction does not fully portray fire's ecological function within the HCNRA, or address the role of fire in the natural and current disturbance regimes of the HCNRA.
- The new direction provides a refined goal for returning fire to its natural role, as nearly as possible, within the Hells Canyon Wilderness.
- Prescribed fire will be an option in Wilderness to reduce fuel loadings in order to maintain acceptable fire effects to conserve scenic, wilderness, cultural, scientific, and other values as specified by Section 7(2) of the *HCNRA Act*.

Highlights of the Decision (Significant Issues)

- Outside the Wilderness, wildland fire use for resource benefits (WFU) and prescribed fire will be expanded to emulate the historic function of fire where compatible with Section 7 objectives of the *HCNRA Act* while providing basic protection to human life and property. WFU will be the primary method to achieve desired vegetation conditions in MAs 8, 9, 11, and 12 (Wild and Scenic Snake River, Dispersed Recreation/Native Vegetation, Dispersed Recreation/Timber Management, and Research Natural Areas).
- Prescribed fire will be used to replicate the naturally-occurring processes which have shaped the character of the landscape in MAs 7, 10, and 11 (Wild and Scenic Imnaha and Rapid Rivers, Forage Emphasis, and Dispersed Recreation/Timber Management).
- Selective cutting will be restricted to uneven-age management, precommercial thinning, commercial thinning, and salvage and sanitation harvesting to meet the objectives of the *HCNRA Act*. These tools will help manage risks to private land, campgrounds, bridges, facilities, and scenic qualities to conserve scenic and cultural values as specified in Section 7(2) of the *HCNRA Act*.

Heritage Resources

- Specific direction for the development of a management plan for heritage resources will result from the decision. Managing for self-discovery interpretation opportunities will protect prehistoric sites in low recreation-use areas and within Wilderness. In high recreation-use areas outside the Wilderness, prehistoric sites will be protected by custodial maintenance of existing interpretation.
- The most significant historic structures (outside and inside Wilderness) will be maintained, stabilized, or restored. Other historic structures will be allowed to deteriorate following data collection.
- Nonhistoric structures outside Wilderness will be evaluated for stabilization, restoration, or maintenance based on potential historic value. Sites used in Wilderness administration and permitted livestock operations will remain.
- Direction for heritage resources will reduce the risk of resource damage or loss by addressing increasing or improperly managed recreation use. It will emphasize restoring historic sites that typify the economic and social history of the region, determining the relative significance of all heritage resources within the Wilderness, and levels of protection and/or preservation of unique vestiges of early homesteading and ranching in the Wilderness.
- It will also ensure that the rights and interests of the Nez Perce Tribe are appropriately protected.



Federal Trust Responsibilities

- Specific management direction for consultation and coordination with the Nez Perce Tribe in the planning and implementation of resource projects will ensure meeting treaty rights and tribal interests.
- The decision affords greater assurances that federal trust responsibilities will be met through government-to-government consultation and that the rights and privileges afforded to the Tribe by virtue of the *Treaty of 1855* will continue.

Highlights of the Decision (Other Issues)

Soils

- Soil stability will be managed for mid-seral ecological status with an upward trend. Soil surface conditions will be managed consistent with the potential natural community to maintain soil productivity and stability.

Wild and Scenic Rivers

- Six outstandingly remarkable values are established for the Wild Rapid River (traditional/cultural use, prehistoric/historic cultural resources, scenery, fisheries, and water quality). Additional direction for the other resource areas will protect these values to meet the intent of the *Wild and Scenic Rivers Act* and Section 7(1).
- Management direction from the *Imnaha Wild and Scenic River Management Plan* (USDA 1993) and the *Wild and Scenic Snake River Recreation Management Plan* (USDA 1999) is supplemented with direction for motorized and mechanical use, forested stands, grasslands, recreation, administrative facilities, heritage resources, and access to protect the outstandingly remarkable values for these Wild and Scenic rivers.
- The decision aligns party sizes for hikers and pack stock in the Wild and Scenic Snake River corridor with the party sizes for the Hells Canyon Wilderness (8 people and 16 stock animals) to maintain integrity of the Wilderness values and outstandingly remarkable values for the corridor.

Noxious Weeds, Nonnative Plants, and Invasive Species

- The presence of noxious weeds continues to be a serious concern. New direction provides a focus on nonnative, invasive species in addition to noxious weeds. Managing grasslands for the potential natural community will require evaluation of the persistence and contribution of native species to restoring sites.
- Successful restoration techniques are still being developed, but the decision emphasizes maintaining or restoring native grasslands to resist occupancy by noxious weeds. Public education efforts will be increased with reporting mechanisms. Partnerships will continue to be important to integrated weed management.

Biologically Unique Species, Habitats, and Ecosystems

- The decision defines biologically unique species, habitats, and ecosystems as those that are (1) limited solely or principally to the HCNRA, (2) limited within the HCNRA although they may be relatively common within neighboring ecoregions, or (3) limited within the three neighboring ecoregions. Biologically unique categories are identified as rare plant species (including plants with 'disjunct' populations in the HCNRA that are geographically separated from the main distribution of a species); endemic plant species; rare combinations of aquatic, terrestrial, and atmospheric habitats; and rare combinations of outstanding and diverse ecosystems and parts of ecosystems to meet the intent of Section 7(3) of the *HCNRA Act*.
- New direction for biologically unique species, habitats, and ecosystems will manage the HCNRA for high biological diversity and endemism to ensure sustainability of native ecosystems that contribute to biological uniqueness. These species, habitats, and ecosystems will be protected through project-level planning.

Riparian/Aquatic Habitat and Water Quality

- The decision incorporates watershed management objectives from the *Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan with Multi-Species Habitat Strategy* (Wallowa County 1999) and inventory elements from the *Coarse Screening Process* (Rhodes et al 1994). The intent is to meet the goals of the *Spirit of the Salmon Plan* (CRITFC 1996) to restore fish habitat in the Columbia and Snake River subbasins.
- Water quality direction is added to determine total maximum daily loads and to develop plans for water quality management and restoration with other federal and state agencies to meet the *Clean Water Act*.

Highlights of the Decision (Other Issues)

Wildlife Habitat

- Forested areas in the HCNRA provide late/old structure (25%) for forest-associated species. The HCNRA will be managed as a healthy ecosystem that is an integral component of a larger bioregion. Managing for all structural stages, including late/old, will achieve functional old-growth habitat for associated species.
- The decision establishes objectives to protect and maintain wildlife habitat for existing native and desired nonnative vertebrate wildlife species and invertebrate organisms. Specific direction is provided for protecting bald eagles, Townsend's big-eared bats, lynx, wolverines, elk, old-growth species, and native land birds to ensure meeting the objectives of Section 7(4) of the *HCNRA Act*. The amended direction incorporates the *Canada Lynx Conservation Assessment and Strategy* for the HCNRA to meet the *Endangered Species Act*.

Scientific Research

- Supplemental direction is established for scientific research to optimize and enhance scientific knowledge, and focus research on resolution of management issues.

Geologic Resources

- Paleontological and unique geologic resources are afforded protection from damage or destruction, through protection measures, scientific research, interpretation and education, and restrictions on access to caves.

Minerals

- Mining is maintained subject to existing rights determination based upon claims as of 1975 (36 unpatented mining claims exist and no significant activity has occurred). No new mineral entry is allowed.

Land Ownership

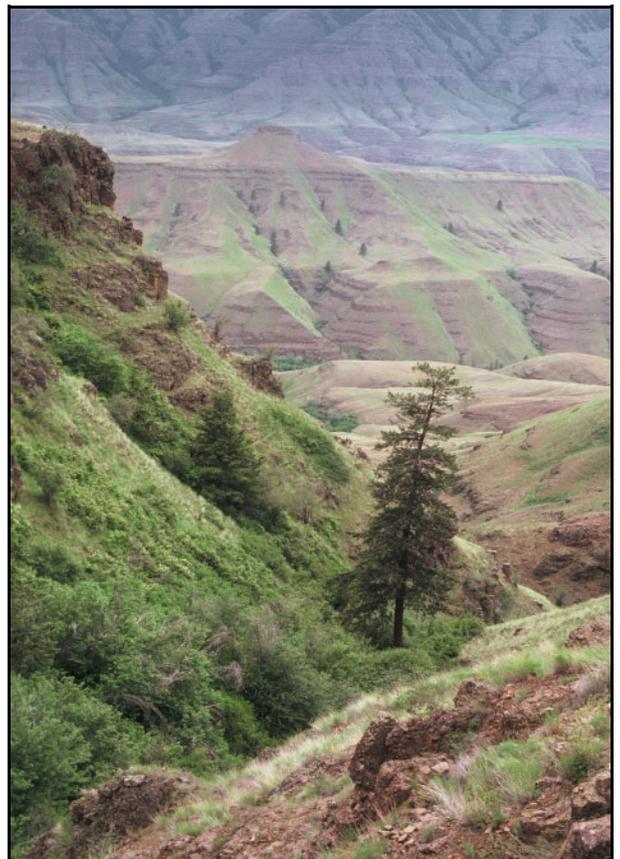
- Direction for managing land ownership, access to private lands, and standards for use and development of private land in the HCNRA will meet Section 13 of the *HCNRA Act* to allow for occupation of homes and lands as a traditional and valid use while protecting the objectives in Section 7 of the *Act*.

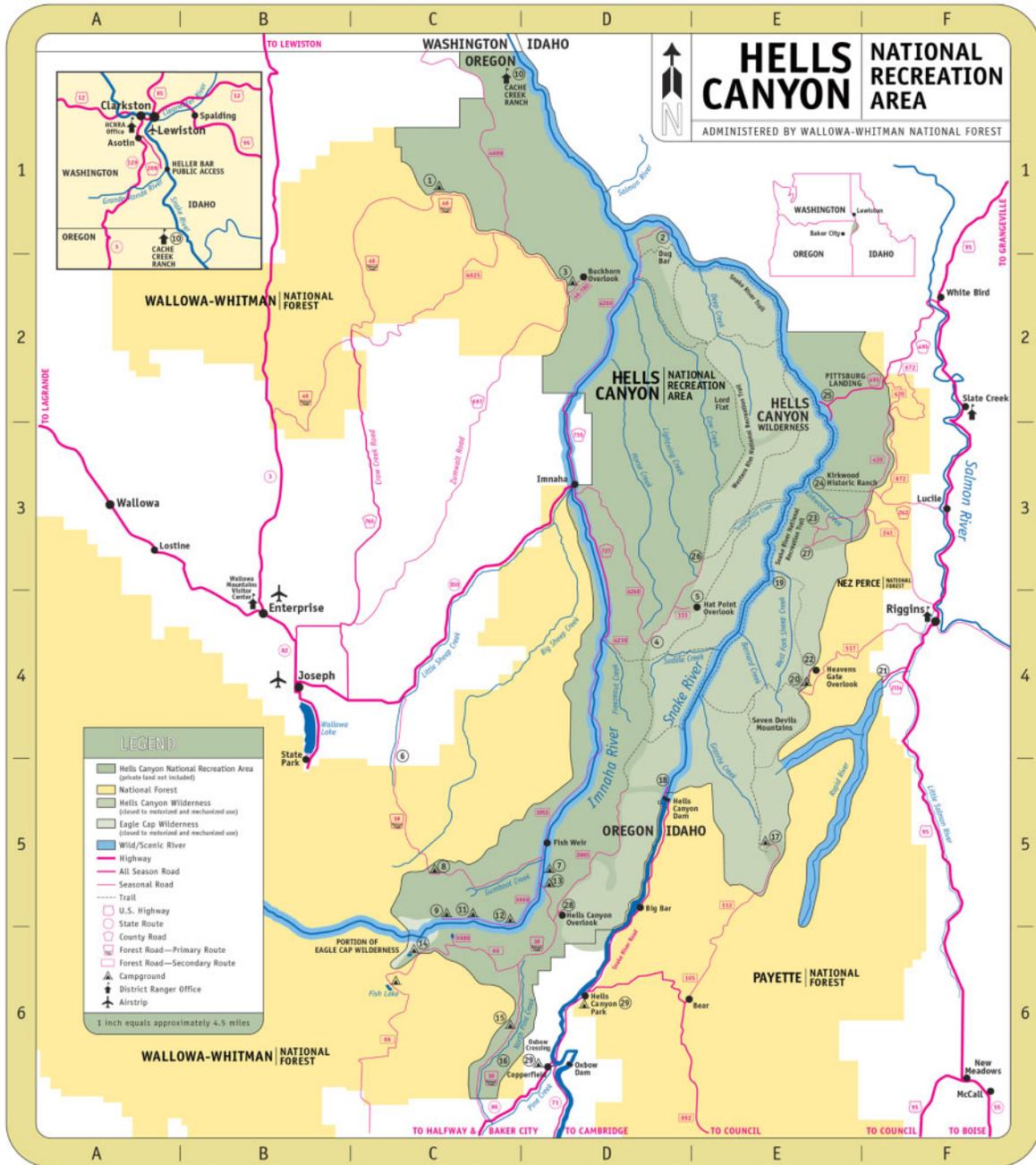
Monitoring and Evaluation

- A specific monitoring and evaluation plan is established to supplement existing *Forest Plan* monitoring to ensure the amended goals, objectives, standards, and guidelines meet the intent of the *HCNRA Act*. Monitoring efforts emphasize cooperative agreements with users of the HCNRA.

Socioeconomic Conditions

- Selective cutting may provide a benefit to local communities surrounding the HCNRA. Livestock grazing will continue to support related employment and income. As recreation use (including outfitter/guides) increases in the future, related employment and income provides an opportunity to support benefits primarily in Wallowa and Baker counties due to the majority of visits occurring in that part of the HCNRA.
- Traditional and valid uses of ranching, grazing, farming, timber harvesting, and the occupation of homes and lands as specified in Section 13 of the *HCNRA Act* will continue to be maintained and contribute to the quality of lifestyle that is important to local residents and communities around the HCNRA.





Document produced by:
 USDA Forest Service
 Pacific Northwest Region
 Wallowa-Whitman National Forest

Photos by Charles G. Johnson Jr.

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Implementation Strategy

Implementation of this decision begins seven calendar days from the day after the legal notice of this decision is published in the *Baker City Herald*, Baker City, Oregon; the official newspaper of record. Access and Travel Management decisions will be phased in with public education over the next year. Seasonal road closures will be implemented in April 2004 and August 2004.

Appeal Rights

This decision is subject to appeal in accordance with 36 CFR Part 217. A *Notice of Appeal* must be submitted in writing and clearly state that it is a *Notice of Appeal* filed pursuant to 36 CFR Part 217. The 45-day appeal period begins the day after the date the legal notice of this decision is published in the *Baker City Herald*, Baker City, Oregon (official newspaper of record). This period is not extendable. The *Notice of Appeal* must be filed (two copies) with the Reviewing Officer (Regional Forester) and must include sufficient narrative evidence and argument to show why this decision should be changed or reversed (36 CFR 217.9). Send *Notice of Appeal* to: Linda Goodman, Regional Forester; ATTENTION: 1570 Appeals; P.O. Box 3623; Portland, Oregon 97208-3623.

Further Information

The Record of Decision (ROD), Summary of the FEIS, and FEIS are available to the public on the Hells Canyon National Recreation Area web site at <http://www.fs.fed.us/hellscanyon/>. Printed desk copies of the documents are available for review at Forest Service offices in Enterprise, Baker City, and Halfway, Oregon; Clarkston, Washington; and Riggins, Idaho; and at public libraries in Enterprise, Halfway, La Grande, and Baker City in Oregon; and Lewiston, Riggins, and Council in Idaho. A compact disc containing the above documents will also be available to the public in early August. Send requests for information to Elaine Kohrman via e-mail R6HellsCanyonNRA@fs.fed.us. An open house to facilitate public understanding of the final decision is scheduled from 3-7 p.m., August 27, 2003, at the Joseph Community Center, in Joseph, Oregon.

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RECORD OF DECISION AND FOREST PLAN AMENDMENT #29

Introduction

This *Record of Decision* (ROD) documents my decision and rationale for the selection of Alternative E-modified from the *Final Environmental Impact Statement* (FEIS) (United States Department of Agriculture [USDA] 2003) to be implemented as the amended *Comprehensive Management Plan* (CMP) for the Hells Canyon National Recreation Area (HCNRA). The ROD also determines the *National Forest Management Act* (NFMA) level of significance for amending the *Wallowa-Whitman National Forest Land and Resource Management Plan* (*Forest Plan*). The full text of the FEIS and appendices is located on the compact disc at the end of this document.

Background and History

When Congress established the HCNRA on December 31, 1975 by the *Hells Canyon National Recreation Area Act* (*HCNRA Act*) also referred to as PL 94-199 (Public Law), the development of a CMP was one of the requirements created. The Chief of the Forest Service (FS) approved the existing CMP on April 30, 1982, and it was amended by subsequent appeal decisions in 1983 and 1984 (USDA 1982 as amended).

In 1990, the existing CMP was incorporated without modification into the *Forest Plan* (USDA 1990). The *Forest Plan* has also been subsequently amended (refer to **Chapter 1, pages 18-20, Table 1: Summary of Existing Management Direction for the HCNRA**). The existing CMP is an integrated part of the *Forest Plan* and subject to the procedures for modifying management direction found in the NFMA regulations (36 Code of Federal Regulations [CFR] 219).

More than 20 years have passed since the existing CMP was approved and over 10 years since the *Forest Plan* incorporated it. In December 1993, the Forest Supervisor of the WWNF at that time initiated a process to assess the need for adjusting direction due to changes in conditions or demands from the public (36 CFR 219.10). A combination of factors including concerns raised through monitoring and evaluation reports, changes in regulations for public and private lands in the HCNRA, new scientific information, and public comments indicating changing social values, use patterns, and resource conditions led me to re-initiate the process in 1998.

Based upon the assessment of the need for adjustment, I proposed to amend the *Forest Plan* to change management direction for the HCNRA where necessary. Some management direction will not change. Any changes in management direction will reflect the intent of the *HCNRA Act; Public and Private Land Use Regulations (Public and Private LURs)* (36 CFR 292, USDA 1994); FS directives; changing social values; agency emphasis on ecosystem sustainability; new information and research findings; and results from monitoring and evaluation.

This amendment process follows the implementing regulations of the NFMA (36 CFR 219.10 (e) and (f)), FS Manual [FSM] 1922.51 and 1922.52, and FS Handbook [FSH] 1909.12, Chapter 5.32. This FEIS documents the planning process, as required by the *National Environmental Policy Act* (NEPA) and in accordance with Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR, Parts 1500-1508).

The FS is in the process of developing changes to the 1982 federal planning rule to guide the forest planning process. A new planning rule was adopted in November 2000 that established requirements for the implementation, monitoring, evaluation, amendment and revision of land and resource management plans.

Based on a review of the 2000 rule, the FS undertook a number of changes based on questions regarding implementation. In May 2001, the public had an opportunity to comment on the effects of extending the compliance date for the new rule (66 FR 01-12384; May 15, 2001). An interim rule was issued in May 2002 to extend the date by which all land and resource management plan amendments and revisions would otherwise be subject to the planning regulations adopted in November 2000 (67 FR 02-12508; May 17, 2002).

This amendment process was initiated in 1993 under the 1982 regulations and the RDEIS was available for public review in March 2000. The amendment process will continue to be managed pursuant to the 1982 planning regulations. A new CMP will be prepared to replace the existing CMP.

Area Location and Description

The HCNRA is located in west central Idaho and the northeast corner of Oregon on portions of the Wallowa-Whitman, Nez Perce, and Payette National Forests. The entire HCNRA is administered by the Wallowa-Whitman National Forest (WWNF). There are 652,488 acres within the HCNRA boundary, approximately 28 percent of the land under the administration of the WWNF, including approximately 33,000 acres of privately owned land. Approximately 117,073 acres of the Nez Perce and 24,000 acres of the Payette National Forests occur in the HCNRA.

It lies within Baker and Wallowa Counties in Oregon, and Adams, Idaho and Nez Perce Counties in Idaho and near the border of Asotin County in Washington. Baker County comprises four percent of the HCNRA, Wallowa County 74 percent, Adams four percent, Idaho County 18 percent, and Nez Perce County less than one percent. Principal nearby communities in Oregon include Imnaha, Joseph, Enterprise, Halfway and Richland. Baker City and La Grande are also nearby. In Idaho, principal nearby communities include Riggins, Grangeville and Lewiston. The Boise/Caldwell/Nampa area is also near the HCNRA. Asotin and Clarkston in Washington are also nearby. See **Figure 1** for a map of the vicinity.

The principal physical feature of the HCNRA is Hells Canyon. Measuring 7,993 feet deep from mountain peaks to the river and, at places, 10 miles from rim to rim, it forms the deepest river canyon in North America. The HCNRA comprises an exceptional richness, diversity, and productivity of vegetation that combines with unique geology (uplands, benchlands, canyonlands, and mountains) to support a diversity of fish and wildlife. Where developed areas exist, they are rustic in nature and are often associated with homesteads or old mining sites.

The economy of the surrounding area has historically been based on wood products and ranching. However, in recent years tourism and recreation-related activities have grown and become increasingly important to the local economy.

**Figure 1
Hells Canyon National Recreation Area
Vicinity Map**

Purpose and Need

The need for the proposed action is derived from several actions and findings. Using the authority delegated to the Forest Supervisor through 36 CFR 219.10 and FSM 1950, Environmental Policy and Procedures, a CMP adjustment strategy was established. A monitoring and evaluation report was completed that consolidated information from 1984 through 1993 and identified several items needing change (USDA 1994). For example, results indicate that desired conditions for visitor management and recreation use need to be defined better to protect and maintain recreation experiences than provided for under the existing CMP and *Forest Plan* (as amended).

Based on these findings, the team responsible for conducting the planning recommended an adjustment to the existing CMP through an amendment to the *Forest Plan*. The team recommended adjustments in the management direction for the following sixteen resource areas in terms of goals, objectives, standards, guidelines, monitoring and evaluation, and management area (MA) direction:

- recreation settings, experiences, and opportunities, including Wilderness and scenery;
- access and facilities;
- forested vegetation, grasslands, and forest understory;
- vacant allotments disposition and satisfactory range conditions;
- heritage resources;
- federal trust responsibilities;
- soils;
- Wild and Scenic Rivers;
- biologically unique species, habitats, and ecosystems;
- fire and air quality;
- riparian/aquatic habitat and water quality;
- wildlife habitat;
- scientific research;
- geologic resources;
- minerals; and
- land management and special uses.

I reviewed these recommendations and determined the changes in direction needed for each of the resource areas as described in detail in **Chapter 1 (pages 5-14)** of the FEIS. In summary, I determined that the overall need for change is based on: 1) the results of WWNF monitoring and evaluation reports indicating areas needing change such as defining desired conditions for visitor management and recreation use (USDA 1994); 2) the standards set forth in the *Private and Public LURs* approved in 1994 (36 CFR 292) for the use of motorized and mechanical equipment; the protection and preservation of cultural and paleontological resources; mining; private land use; timber harvesting; and grazing activities; 3) the potential need to set clearly defined desired conditions for Wilderness settings; and 4) new scientific information from the Interior Columbia Basin Ecosystem Management Project (ICBEMP).

The underlying purpose of the action is to amend some elements of the programmatic direction for these sixteen resource areas and also for monitoring and evaluation within the existing CMP and the *Forest Plan* (as amended). My decision aligns management goals, objectives, standards, and guidelines; MA direction; and monitoring and evaluation with the intent of better achieving the objectives of the *HCNRA Act* (PL 94-199), which established the HCNRA, the Hells Canyon Wilderness, and the Rapid and Snake Wild and Scenic Rivers; with the *Oregon Wilderness Act* (PL 98-328); the *Omnibus Oregon Wild and Scenic Rivers Act* (PL 100-552); *Private and Public LURs* (36 CFR 292); *Forest Plan* content regulations (36 CFR 219.11); and FSM 1920.

If action is not taken to amend the programmatic management direction in the existing *Forest Plan* and the existing CMP, objectives set forth in Section 7 of the *HCNRA Act* may not be met:

Section 7. Except as otherwise provided in Sections 2 and 3 of this Act, and subject to the provisions of Section 10 of this Act, the Secretary shall administer the recreation area in accordance with the laws, rules, and regulations applicable to the national forests for public outdoor recreation in a manner compatible with the following objectives:

- 1) the maintenance and protection of the free flowing nature of the rivers within the recreation area;

- 2) conservation of scenic, wilderness, cultural, scientific, and other values contributing to the public benefit;
- 3) preservation, especially in the area generally known as Hells Canyon, of all features and peculiarities believed to be biologically unique including, but not limited to, 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 associated therewith;
- 4) protection and maintenance of fish and wildlife habitat;
- 5) protection of archeological and paleontologic sites and interpretation of these sites for the public benefit and knowledge insofar as it is compatible with protection;
- 6) preservation and restoration of historic sites associated with and typifying the economic and social history of the region and the American West; and
- 7) such management, utilization, and disposal of natural resources on federally owned lands, including, but not limited to, timber harvesting by selective cutting, mining and grazing and the continuation of such existing uses and developments as are compatible with the provisions of the Act.

Recreation settings, experiences, and opportunities provide an example where existing management direction is inadequate and needs changed. The existing CMP provides management direction to respond to increases in recreation use by increasing development of facilities and moving toward more developed recreation settings and opportunities. However, public surveys and scoping conducted as part of the planning process indicate people want the developed areas to remain the way they are and they do not want to provide for large increases in use or changes in the undeveloped settings. Also, existing CMP direction does not clearly define desired conditions regarding the acceptable levels of social encounters, thresholds for effects from visitor use, and appropriate strategies for managing visitor use.

A change in management direction is needed to ensure acceptable levels of social encounters and visitor effects to ensure meeting the intent of Section 7 of the *HCNRA Act*. If the existing CMP and *Forest Plan* is not amended, desired recreation settings and opportunities for the HCNRA may not be met as well as under the existing direction because recreation use now and in the future may exceed social encounter thresholds that are acceptable to the recreating public and create user conflicts. Lack of specific direction and strategies for managing use at defined thresholds may lead to resource effects such as wildlife displacement, increased number and size of dispersed recreation sites, soil compaction, and vegetative changes. Because these desired conditions and thresholds for acceptable visitor encounters and resulting effects, are not clearly defined, a change in management direction is needed.

The existing management direction and change needed for each of the sixteen resource areas is described in detail in **Chapter 1 (pages 5-14)** of the FEIS.

Summary of Existing Management Direction for the HCNRA

Legislative Direction

I have thoroughly reviewed and studied the *HCNRA Act*, the principal legislation that guides management of the HCNRA. Several sections clarify the intent for the HCNRA. Section 1(a) of the *HCNRA Act* explicitly states that the HCNRA was created to assure that this area would be preserved for this and future generations, and that the recreational and ecological values and public enjoyment of the area are thereby enhanced. Section 7 of the *HCNRA Act* states that the recreation area will be administered for public outdoor recreation in a manner compatible with seven objectives. Section 8 directs the development of a CMP to provide for a broad range of land uses and recreation opportunities. Section 10 directs that rules and regulations will be promulgated for public and private lands. Section 13 addresses the recognized traditional and valid uses of the recreation area. I also reviewed and considered the *Public and Private LURs*, the *Wilderness Act*, the *Wild and Scenic Rivers Act* and the *Treaty of 1855* with the Nez Perce Tribe. All of these documents are located in **Appendix A** of the FEIS.

Forest Plan Direction for the HCNRA

When Congress established the HCNRA, the boundary included portions of the Nez Perce, Payette and Wallowa-Whitman National Forests in Regions 1, 4, and 6, respectively. The Chief of the FS decided that the HCNRA would be managed as one administrative unit in Region 6 by the Forest Supervisor of the WWNF. The WWNF is responsible for establishing programmatic direction for the management of the HCNRA and completing consultation in accordance with the *Endangered Species Act (ESA)* for programmatic decisions.

The *Forest Plan* for the WWNF, as amended, provides guidance through its established goals, objectives, desired future conditions, forest-wide standards and guidelines, and specific MA direction. The *Forest Plan* incorporates the existing CMP, subsequent *Forest Plan* amendments, and terms and conditions related to consultation in accordance with the *ESA* to provide existing management direction for the HCNRA. A number of resource specific changes in direction have occurred including the Regional Forester's amendment establishing riparian, ecosystem, and wildlife standards (Eastside Screens), public and private land use regulations for the HCNRA, *Wild and Scenic Snake River Recreation Management Plan*, adoption of strategies for managing anadromous and inland native fish (PACFISH and INFISH), and termination of domestic sheep grazing in the HCNRA. Several fish, wildlife, and plant species have been listed in the last ten years and changes in management activities have occurred to provide protection under the *ESA*. **Chapter 1, Table 1-1 (pages 18-20)**, of the FEIS summarizes the existing direction for activities in the HCNRA. All activities in the HCNRA are managed in compliance with this direction. I did not reconsider these previous decisions unless specifically addressed in the proposed action or if scoping and/or the analysis process identified new issues not resolved. These decisions may be reconsidered during the *Forest Plan* revision scheduled to begin in October 2003.

Management Areas

As part of my review of the existing direction for the HCNRA, I also considered the *Forest Plan* multiple-use direction established for the HCNRA. Nine MAs that have similar objectives and common management prescriptions and the *Forest Plan* provides multiple use direction for managing these specific areas. The following briefly describes each MA. Refer to the *Forest Plan*, pages 4-63 through 4-98 for additional discussion. See **Figure 2** below for a map of MAs.

Management Area 4 – Wilderness: The management intent of these areas is to preserve the wilderness qualities. These areas will be managed in accordance with the *Wilderness Act*, the *HCNRA Act* (establishing the Hells Canyon Wilderness), the *Oregon Wilderness Act*, and the FSM 2320. The intent of the *Wilderness Act* is to preserve and protect the natural condition and characteristics of designated lands and to provide for current and future public enjoyment of these areas and their wilderness character. These areas are to remain essentially unaltered and undisturbed by man, with natural ecological processes (including the natural role of fire) permitted to function with a minimum of human interference (**approximately 220,000 acres**).

Management Area 7 – Imnaha and Rapid Wild and Scenic Rivers: Management in this area is intended to protect and enhance the special values of those rivers or river segments (meaning the river plus its associated corridor) which are part of the National WSR System. Management of lands will not diminish the rivers free flow, water quality, and outstandingly remarkable values (**approximately 35,474 acres**).

Management Area 8 – Wild and Scenic Snake River: This area includes the 67.5-mile Wild and Scenic River corridor along the Snake River. The primary management emphasis is to protect and enhance the values for which the river was designated Wild and Scenic under the *WSR Act* (**approximately 14,535 acres**).

Management Area 9 – Dispersed Recreation/Native Vegetation: In these areas, all activities will be managed to provide many opportunities for dispersed recreation and to enhance native vegetation. It is envisioned that these areas will eventually be almost entirely occupied by native plant species. Rangelands will be managed to maintain satisfactory range condition that will be achieved and maintained primarily by nonstructural means. These areas provide a mix of primitive, semi-primitive nonmotorized, and semi-primitive motorized recreation opportunities (**approximately 161,078 acres**).

Management Area 10 – Forage Emphasis: This area lies within the grasslands interwoven with timbered stringers in the HCNRA. The grassland portions of these areas will be managed to provide maximum forage production with rangeland maintained in satisfactory condition (desired ecological status) and structural

improvements being rustic in nature. Timbered portions will provide old-growth habitat at approximately current levels. These areas provide both semi-primitive motorized and semi-primitive nonmotorized opportunities (**approximately 123,029 acres**).

Management Area 11 – Dispersed Recreation/Timber Management: These areas combine dispersed recreation with timber management on the more productive sites within the HCNRA. The management objective is to provide a variety of tree species, a diversity of healthy timber stands, and ample dispersed recreation opportunities. These areas provide both semi-primitive motorized and semi-primitive nonmotorized opportunities (**approximately 70,706 acres**). Timber volume removal from the HCNRA is classified as unregulated and does not contribute to the WWNF allowable sale quantity (*Public LURS*, USDA 1994).

Management Area 12 – Research Natural Areas: The objectives for establishing Research Natural Areas (RNAs) are to preserve examples of all significant natural ecosystems for comparison with those influenced by humans, to provide educational and research areas for ecological and environmental studies, and to preserve gene pools for typical and rare and endangered plants and animals (**approximately 11,640 acres**).

Management Area 16 – Administrative and Recreation Sites: These areas include sites such as fire lookouts, permitted ranch headquarters, campgrounds, and other areas which are occupied by facilities for administration, public recreation, or features of cultural significance.

Management Area 17 – Power Transportation Facility Retention: These areas are presently used for the transport of electricity. Through proper design and management, optimum use will be made of those lands allocated to power facilities. To the extent possible, use will be made compatible with other uses of the forest including consideration of scenery management objectives.

Inventoried Roadless Areas – This environmental impact statement covers all inventoried roadless areas in the HCNRA. Inventoried roadless areas were identified in the *Forest Plan* and are also listed in the set of inventoried roadless area maps, contained in the *Forest Service Roadless Area Conservation, FEIS, Volume 2*, (USDA 2000). These maps are located at the Washington Office in Washington, D.C. Thirteen areas occur wholly or partially within the HCNRA. They total 44 percent of the HCNRA. See **Figure 3** for a map of roadless areas (**approximately 290,158 acres**).

Figure 2
Hells Canyon National Recreation Area
Management Areas

Figure 3
Hells Canyon National Recreation Area
Inventoried Roadless Areas

Decision

Using the authority delegated to me through 36 CFR 219.10 and FSM 1950, Environmental Policy and Procedures and FSM 1920 Land and Resource Management Planning, I selected Alternative E-modified as written in the FEIS for the amended programmatic direction for the HCNRA subject to existing rights, contracts, previous plan amendments and specific direction established by law. My decision constitutes a collection of small, focused changes in the long-range strategy for the HCNRA for specific resources areas needing change.

Refer to the compact disc at the end of this document for the full text of Alternative E-modified management direction as described in **Appendix C (pages 1-249)** of the FEIS. This table provides a detailed description of the existing CMP direction and the new goals, objectives, standards and guidelines for Alternative E-modified that would replace or supplement the existing direction. Alternative E-modified management direction also includes sections of **Appendix F, G, and H** of the FEIS as referenced in **Appendix C, Table C-1 (pages 1-150)**.

Scope of the Decision

My decision provides programmatic goals, objectives, standards, guidelines and MA direction based on the decisions I identified for each of the specific resources areas needing change (**Chapter 1, pages 14-17**). Standards and guidelines, the restrictions and recommendations that govern on-the-ground management practices, are the key to successful implementation of the amended direction through site-specific projects. They must be properly applied to projects that emanate from this change in direction.

My decision also includes five site-specific seasonal road closures on 27 miles of road described below under Access and Facilities. Monitoring and evaluation are key factors in determining whether standards and guidelines are effective in meeting the intent of the *HCNRA Act* for the areas where management direction has changed. I have included monitoring and evaluation items in my decision to gauge whether the amended direction is adequate and to evaluate changes in direction to ensure compliance with the *HCNRA Act*.

It is important to state what my decision does not do. It does not:

- Maximize any single resource use or public service.
- Propose recreational use levels beyond the biological capability of the HCNRA to support that use.
- Propose management of the HCNRA based solely on values in the market place.
- Direct site-specific management activities such as constructing a trail or a campground, or harvesting timber at specific locations. Future projects will be based on the direction in my decision with further site-specific analysis (except as noted below under Access and Facilities).
- Dictate day-to-day administrative activities needed to carry out the internal operations (i.e., personnel matters, law enforcement, fleet equipment, or organization).

Amended Management Direction

My decision replaces or supplements the existing CMP, as amended, and supplements and/or modifies *Forest Plan* direction for MAs 4, 7, 8, 9, 10, 11, 12, 16, and 17 relative to the HCNRA. My decision provides new, amended, supplemented, or modified goals, objectives, standards, guidelines, and monitoring tied specifically to achieve the objectives of the *HCNRA Act* (PL 94-199), which established the HCNRA, the Hells Canyon Wilderness, and the Rapid and Snake Wild and Scenic Rivers; *Oregon Wilderness Act of 1984* (PL 98-328); the *Omnibus Oregon Wild and Scenic Rivers Act* (PL 100-552); *Public and Private LURs* (36 CFR 292); *Forest Plan* content regulations (36 CFR 219.11); and FSM 1920.

In summary, my decision amends management direction for the following resource areas needing change and provides 'new' direction as discussed previously under Purpose and Need:

Recreation Settings, Experiences, and Opportunities

Social Encounters, Visitor Management, Visitor Impacts, and Management Strategies

- Retains a broad range of high quality recreation settings and opportunities, while emphasizing maintenance of the rustic and primitive character of the HCNRA. ROS settings will emphasize management towards the less developed end of each setting (**Appendix C, Table C-1, pages 7-19**).
- Establishes specific direction utilizing the ROS setting indicators (access, remoteness, scenery [naturalness/visual quality], social encounters, visitor management, visitor impacts, and facilities) by Recreation Analysis Area to maintain the recreation experience and opportunities (**Appendix C, Tables C-2a through C-2d, pages 148-158; Tables C-3a and C-3b, pages 158-192**). See **Figure 4** below for a map of Recreation Analysis Areas.
- Implements indirect and direct visitor management strategies over time to manage impacts progressing from least restrictive to most restrictive at developed and dispersed sites in both the Hells Canyon Wilderness and nonwilderness portions of the HCNRA (**Appendix C, Tables C-5a and C-5b, pages 202-205**).

Hells Canyon Wilderness

- Replaces existing CMP management direction and supplements *Forest Plan* management direction for Wilderness management by providing a management goal derived from the *Wilderness Act* and Section 7(2) of the *HCNRA Act* (**Appendix C, Table C-1, pages 13-17**).
- Provides specific social and biophysical standards by Recreation Analysis Area to meet Wilderness ROS settings (**Appendix C, Table C-2c, pages 148-151; and Table C-3a, pages 158-165**).
- Implements indirect and direct visitor management strategies over time to manage impacts progressing from least restrictive to most restrictive in the Hells Canyon Wilderness (**Appendix C, Table C-5a, pages 202-203**).
- Additional management direction specified under the other resource areas provides protection of Wilderness values and resources.
- Retains party sizes of 8 people and 16 stock animals in the Wilderness, and limits party sizes to the same level in the Wild and Scenic Snake River corridor. Allows for adjustment in party sizes based on monitoring and evaluation to meet standards for water, soils, fisheries, and social capacity (**Appendix C, Table C-1, page 10**).

Upland Outfitter and Guides

- Enhances the commercial recreational opportunity and public enjoyment by maintaining the current outfitter and guide permits (21 special use permits including aviation use) and adds one permit to provide opportunities for guided fishing/whitewater rafting on the Imnaha River (total of 22 permits) (**Appendix C, Table C-1, pages 10-13**).
- Manages upland outfitter and guides services to provide opportunity for quality recreation experiences while minimizing user conflicts. Uses outfitter and guide operating guidelines to manage existing permits and new applications (**Appendix H, pages 1-7**).
- Ensures compatibility of the services offered by reviewing use levels and permits every three years to determine changes in type and number of permits, or level of service days based on the demonstrated need for the service. Evaluates use to ensure that the social and biophysical limits of acceptable change are not exceeded (**Appendix H, pages 1-7**).

Aviation Services

- Ensures adequate aviation service to the HCNRA by adding 200 service days (300 service days total). Adds 50 service days to the existing aviation special use permit (100 service days) and allows temporary use permits with 150 service days total from the following locations: Lewiston/Clarkston area - 50 service days; Grangeville/Riggins/McCall/Boise area - 70 service days; La Grande/Baker City/Pendleton area - 30 service days. The pool of service days allows other aviation operators to provide service from communities not served by the existing aviation permit.
- Prohibits regularly scheduled commercial landings at backcountry airstrips (**Appendix C, Table C-1, pages 12-13**).

Figure 4
Hells Canyon National Recreation Area
Recreation Analysis Areas

Scenery

- Incorporates the Scenery Management System (SMS) to integrate social and ecological attributes during project planning to conserve valued landscape character attributes and elements of scenic attractiveness (**Appendix C, Table C-1, pages 18-19**).
- Establishes objectives for scenic integrity levels by Recreation Analysis Area to consider the effects of management actions such as fire, vegetation management, grazing, and recreation on the sense of place provided by the landscape (**Appendix C, Tables C-3a and C-3b, pages 158-192**).
- Ecological conditions will be moved toward the historic range of variability (HRV) to maintain or restore the sustainable stand structures that contribute to landscape character (**Appendix C, Table C-1, pages 18-19**).
- Defines guidelines for acceptable levels of human-caused impacts to landscape character from vegetation, recreation, range, wildlife, and fisheries management activities (**Appendix C, Table C-4, pages 200-201**).

Access and Facilities

Roads

- Establishes road management objectives, maintenance levels, and traffic service levels by Recreation Analysis Area to meet ROS settings. Favors primitive and semi-primitive experiences over roaded natural and rural experiences (**Appendix C, Table C-1, pages 20-30; Appendix C, Tables C-2a through C-2d, pages 148-157; Tables C-3a and C-3b, pages 158-192**).
- Limits use of motorized and mechanical equipment to designated open roads and trails except where authorized by a permit. Allows all-terrain vehicles (50 inches wide or less) on designated routes only (**Appendix C, Table C-1, page 21**).
- Establishes standards and guidelines for road construction, reconstruction, and decommissioning. New road construction will only occur in conjunction with access to developed sites, for temporary harvest objectives in MAs 10 and 11, or for access to private land as appropriate with applicable laws and regulations. Road reconstruction will occur with realignment or improvement of existing roads or reconstruction of developed recreation facilities or to meet minimum safety standards. Segments closed or replaced will be evaluated for decommissioning (**Appendix C, Table C-1, pages 22-24**).
- Manages open-road density (NFS and other roads) for all 61 subwatersheds in the HCNRA to less than 1.35 mi./sq. mi. by subwatershed except subwatershed (9L) that will be managed at or below 1.9 mi./sq. mi. Subwatersheds with roads occur outside Wilderness (**Appendix C, Table C-1, page 130**).
- Selected closed roads will be managed as part of the trail system to maintain nonmotorized access.
- Maintains use of motorized and mechanical equipment on the following site-specific roads except closes 27 miles during periods where use is seasonally incompatible with resource values:
 - Prohibits motorized vehicles and mechanical equipment on the lower 1,000 feet of Kirkwood Road (Forest Road 2062-132) from April 1 through June 30 to protect fisheries habitat (**Appendix C, Table C-3b, page 169**).
 - Prohibits motorized vehicles on 12 miles of Teepee Butte Road (Forest Road 46-595) and Wildhorse Road (Forest Road 46-596) at their junction from three days prior to archery season to the end of antlerless elk season (late August through late November) to minimize wildlife disturbance (**Appendix C, Table C-3b, page 174**).
 - Prohibits motorized vehicles on 15 miles of Lord Flat Trail (#1774) at Warnock Corral Trailhead from three days prior to archery season to the end of antlerless elk season (late August through late November) to minimize wildlife disturbance (**Appendix C, Table C-3b, page 179**).
 - Prohibits motorized vehicles on 2.5 miles (existing closure) of PO Saddle Road (Forest Road 3965-320) at the existing gate to motorized vehicles from three days prior to archery season (late August) and open in the spring after the roadbed is dry enough to drive on to minimize resource damage (June 15) and to minimize wildlife disturbance (**Appendix C, Table C-3b, pages 185-186**). See **Figure 5** for a map of these seasonal road closures.

- Designates sites or areas for dispersed camping with motorized vehicles (**Appendix C, Table C-1, page 21**).
- Continues fuelwood cutting in the HCNRA, but limits this activity to Special Fuelwood Areas only as provided for under the *WWNF Fuelwood Program* (USDA 1994) (**Appendix C, Table C-1, page 21**).

Hells Canyon Scenic Byway

- Maintains Forest Road 3955 as part of the Hells Canyon Scenic Byway (**Appendix C, Table C-1, page 23, Table C-3b, pages 187-188**).

Trail Construction

- Provides an opportunity for 1.25 miles of new horse and hiker trail construction to create a loop in the vicinity of Temperance Bench (between #1778 and #1751 in Oregon), and 0.75 miles of new horse and hiker trail construction in the vicinity of Stormy Point (Idaho) to provide access to view the canyon (**Appendix C, Table C-3c, page 193**).
- Allows opportunity for minor reconstruction of Brush Creek to Granite Creek (4 miles) along the Snake River to provide greater access to the Wild portion of the Snake River corridor (**Appendix C, Table C-3c, page 193**).

Backcountry Airstrips

- Retains access to Memaloose and Lord Flat backcountry airstrips for private, commercial and administrative use. See **Figure 6** for a map of backcountry airstrips.
- Limits type of aircraft (fixed wing and rotary) and implements a self-issue permit system to monitor use.
- Continues to manage four airstrips in the Snake River corridor (Big Bar, Dug Bar, Pittsburg Landing, and Salmon Bar) open year-round to private, commercial and administrative use; and Cache Creek airstrip for private and administrative use only as determined in the *Wild and Scenic Snake River Recreation Management Plan* (USDA 1999).
- Continues use of the Temperance Creek airstrip in conjunction with the facilities special use permit (**Appendix C, Table C-1, pages 24-27**).

Over-snow Vehicle Travel

- Establishes over-snow vehicle travel routes on existing roads (132 miles) and play areas (approximately 40,262 acres). See **Figure 7** for a map of over-snow vehicle travel routes and play areas.
- Allows access on designated routes with a minimum of 12 inches of snow and on play areas with a minimum of 24 inches of snow (**Appendix C, Table C-1, pages 28-29**).

Facilities

- Provides development level objectives and maintenance level standards for recreation and administrative facilities to meet ROS settings (**Appendix C, Table C-1, pages 29-30; Appendix C, Tables C-2a through C-2d, pages 148-158; Tables C-3a and C-3b, pages 158-192**). Identifies a priority for suppressing wildfire at facilities (**Appendix C, Table C-6, pages 206-226**).
- Emphasizes maintenance of newer facilities and replacement of deteriorating facilities with new, low-maintenance rustic facilities.
- Some new rustic interpretation and day-use facilities will be developed in the Buckhorn/Cold Springs, Lower Imnaha, Hat Point, and East Rim Loop Recreation Analysis Areas to manage use at popular sites (**Appendix C, Table 3-Cd, pages 193-199**).
- Pursuant to the standards and guidelines of the *Forest Plan*, allocates all developed recreation sites and facilities (outside the Wilderness) to MA 16 (Administrative and Recreation Sites) (**Appendix C, Table C-1, page 29**).

Figure 5
Hells Canyon National Recreation Area
Seasonal Road Closures – Alternative E-modified

Figure 6
Hells Canyon National Recreation Area
Backcountry Airstrips

Figure 7
Hells Canyon National Recreation Area
Over-snow Vehicle Travel and Play Areas

Forested Vegetation, Grasslands, and Forest Understory

Desired Vegetative Conditions

- Provides direction to manage the HCNRA as a healthy ecosystem that is an integral component of a larger biological region.
- Establishes a goal of managing forested vegetation to achieve HRV for structural stages.
- Establishes a goal of managing grassland communities to achieve their potential natural community (PNC) recognizing the HRV as a reference condition. Also recognizes that the potential for some grassland communities to achieve their PNC may already be altered and therefore unattainable without active restoration methods (**Appendix C, Table C-1, pages 31-34**).

Vegetative Practices

- Provides specific direction to allow forest and grassland vegetation to function in a nearly natural manner by using wildland fire use for resource benefits (WFU) as the primary method to achieve desired vegetative conditions in MAs 4, 8, 9, and 12 (Wilderness, Wild and Scenic Snake River, Dispersed Recreation/Native Vegetation, and RNAs).
- Provides for prescribed fire (PF) from planned ignitions to facilitate WFU to maintain, restore, and sustain healthy forests and grasslands.
- Provides specific direction to maintain viable and healthy ecosystems using forested vegetation treatments and PF from planned ignitions as primary methods to replicate the naturally-occurring process which shape the character of the landscape in MAs 7, 10, and 11 (Wild and Scenic Imnaha and Rapid Rivers, Forage Emphasis, and Dispersed Recreation/Timber Management).
- Emphasizes PF from planned ignitions in MA 10 (Forage Emphasis) to maintain, restore, and sustain healthy forests and grasslands (**Appendix C, Table C-1, pages 34-41**).

Vacant Allotments Disposition and Satisfactory Range Conditions

Satisfactory Range Conditions

- Provides a specific definition for satisfactory condition for rangeland vegetation and soils in terms of ecological status (**Appendix C, Table C-1, pages 42-46**).
- Provides direction to manage for at least mid-seral ecological status with an upward trend or better based on PNC. For sites identified in unsatisfactory condition, management practices will be designed to improve ecological status to a satisfactory condition.

Grassland Vegetative Conditions

- Provides direction for the purpose of maintaining and restoring grassland vegetation with the goal of moving toward PNC while recognizing the HRV.
- Establishes site-specific rates of recovery during the allotment management planning process to achieve the goals for ecological status, soil conditions, and riparian management objectives in conjunction with other resource standards and guidelines (**Appendix C, Table C-1, pages 44-53**).

Utilization Standards

- Provides direction for fall, winter, and spring forage utilization specific to the HCNRA based on plant phenology, climate, and plant responses to grazing (**Appendix C, Table C-1, pages 47-49**).

Vacant Allotments and Administrative Horse Pastures

- Incorporates one percent (3,641 acres) of vacant allotments (Hope and Turner) into active allotments. Site-specific analysis will occur before restocking allotments (**Appendix C, Table C-1, pages 54-58**).
- Closes 92 percent (245,782 acres) of the vacant allotments (see **Figure 8**).
- Establishes seven percent (18,083 acres) of vacant allotments as administrative horse pastures.
- Retains the same level of active sheep and cattle grazing as currently exists (298,905 acres).

**Figure 8
Hells Canyon National Recreation Area
Vacant Allotments – Alternative E-modified**

Water Use Management and Cultivated Areas

- Maintains existing water rights and obtains new water rights to meet current and foreseeable water needs for HCNRA facility and resource management objectives (**Appendix C, Table C-1, pages 58-63**).

Recreation Use and Livestock Grazing Interactions

- Provides direction that livestock grazing practices will minimize evidence and/or interaction with recreationists at high-use recreation sites and corridors (**Appendix C, Table C-1, pages 64**).

Biological Soil Crusts

- Provides management direction to maintain, enhance, and facilitate restoration of biological soil crusts (**Appendix C, Table C-1, pages 64-66**).

Noxious Weeds

- In addition to the current WWNF *Integrated Noxious Weed Management Plan* (USDA 1992) establishes direction to reduce impacts on plants, wildlife, and other resources using a combination of integrated weed management processes of prevention, restoration, eradication, control, and containment.
- Adds direction to evaluate the extent of nonnative invasive plants, their relative impacts and potential for restoration and factors contributing toward the spread of nonnative invasive plants and implement prevention strategies during implementation of projects.
- Provides guidelines relative to PF and containment or control of aggressive noxious weeds.
- Prevents further noxious weed introduction and spread by implementing prevention measures in the form of seed testing and requirement for the use of pelletized or certified weed-free feed in all areas of the HCNRA. Emphasizes active restoration including the use of native seed where appropriate, closure or restrictions on use where appropriate (**Appendix C, Table C-1, pages 67-68**).

Heritage Resources

- Provides direction for managing and protecting heritage resources including development of a heritage resource management plan
- Protects prehistoric sites in low recreation-use areas and inside the Wilderness by managing for self-discovery interpretation opportunities.
- In high recreation-use areas and outside the Hells Canyon Wilderness, prehistoric sites will be protected by custodial maintenance of existing interpretation opportunities.
- The most significant historic structures inside or outside the Wilderness will be maintained, stabilized, or restored.
- Other historic structures will not be maintained or stabilized and will be allowed to deteriorate following appropriate data collection.
- Nonhistoric structures and facilities outside the Wilderness will be evaluated for stabilization, restoration, or maintenance based on potential historical value.
- Retains all sites and structures in Wilderness used in administration of the Wilderness resource and permitted livestock operations.
- Manages interpretative opportunities based on a thematic approach relative to: prehistoric settlement, self-discovery, historic mining, historic American Indian, Forest Service and fire management, historic ranching, homesteading, and traditional use depending on the Recreation Analysis Area (**Appendix C, Table C-1, pages 69-76**).

Federal Trust Responsibilities

- Provides specific direction for government-to-government relationships to ensure meeting federal trust responsibilities and treaty rights specified in the *Treaty of 1855* with the Nez Perce Tribe.
- Emphasizes consultation and coordination with the Nez Perce Tribe in the planning and implementation of resource projects and the monitoring of treaty rights and projects.

- Provides direction for management of natural resources consistent with federal trust responsibilities and the intent of the *Treaty of 1855*.
- Direction emphasizes working closely with the Nez Perce Tribe to develop and implement a feasible grazing strategy upon request to exercise treaty-grazing rights (**Appendix C, Table C-1, pages 77-79**).

Soils

Soil Stability Ratings

- Manages soil surface conditions and soil stability consistent with mid-seral or higher ecological status with an upward trend depending on PNC (**Appendix C, Table C-1, pages 80-84**).

Protection of Soils in Nonwilderness Areas

- Provides management direction for inventory, surveys, and site-specific analysis of soil resources for projects and mitigation measures to protect soil productivity that replaces the existing CMP and supplements *Forest Plan* direction (**Appendix C, Table C-1, pages 80-84**).

Wild and Scenic Rivers

Wild Rapid River

- Manages the Wild Rapid River pursuant to management direction for the applicable resources.
- Manages recreation and administrative facilities in a manner compatible with protecting and enhancing the outstandingly remarkable values of traditional use/cultural, prehistoric cultural resources, historic cultural resources, scenery, fisheries, and water quality (**Appendix K**).
- Manages forested areas only to provide for recreational facilities, to reduce the risk of hazard trees, and to manage for desired ecosystem function because of natural events (**Appendix C, Table C-1, pages 85-87**).

Imnaha Wild and Scenic River

- Maintains existing management direction from the *Forest Plan*, as amended by the *Imnaha Wild and Scenic River Management Plan* (USDA 1993).
- Establishes management direction to manage motorized and mechanical use, forested stands, and recreation and administrative facilities in the river corridor.
- Establishes desired vegetative conditions for forested stands and grasslands.
- Establishes recreation management emphasis within the established ROS settings for the Upper and Lower Imnaha Recreation Analysis Areas (29 and 41) (**Appendix C, Table C-1, pages 85-87**).

Wild and Scenic Snake River

- Maintains existing management direction for the Snake River through the *Wild and Scenic Snake River Recreation Management Plan* (USDA 1994, 1999), and *Wild and Scenic Snake River Outfitter Environmental Assessment* (USDA 1996) to protect and maintain outstandingly remarkable values.
- Establishes management objectives for motorized, nonmotorized, and mechanical use; forested stands, recreation, and administrative facilities; and limits on backpacker and stock party sizes (8 people and 16 stock animals) within the Wild river section to be compatible with the outstandingly remarkable values.
- Management direction proposed for desired forested and grassland vegetative conditions, heritage resources, and roads and trails previously described will apply within the river corridor (**Appendix C, Table C-1, pages 85-87**).

Biologically Unique Species, Habitats, and Ecosystems

Definition of Biologically Unique Species, Habitats, and Ecosystems

- Establishes criteria for identifying biologically unique species, habitats, and ecosystems as those that are: (1) limited in distribution solely or principally to the HCNRA; or (2) limited in distribution within the HCNRA, but may be relatively common within the neighboring ecoregions; or (3) relatively abundant in the HCNRA, but limited in distribution within the three neighboring ecoregions.
- Identifies biologically unique species, habitats, and ecosystems as rare plant species (including 'disjunct' populations in the HCNRA that are geographically separated from the main distribution of a species); endemic plant species; rare combinations of aquatic, terrestrial, and atmospheric habitats; and rare combinations of outstanding and diverse ecosystems and parts of ecosystems.
- Rare plant species (137) are threatened, endangered, or proposed plants listed by U.S. Fish and Wildlife Service; sensitive species in Regions 1, 4, and 6; or disjunct plant species (separated geographically from the main range of species).
- Endemic plant species (9) are restricted to the HCNRA or immediate vicinity (defined as the Snake River Canyon from Oxbow Dam downriver to the Washington State border, the lower Salmon River, the middle and lower portions of the Imnaha River including the tributaries of these river reaches).
- Rare combinations of aquatic, terrestrial and atmospheric habitats (6) principally reflect physical environmental features of the landscape that are produced from a unique combination of soils, climate, precipitation, and aspect.
- Rare combinations of outstanding and diverse ecosystems are plant community types and associations (16) that are biologically unique because they occur in the HCNRA and nowhere else or occur in limited amounts within the HCNRA (**Appendix C, Table C-1, page 90; Appendix G**).

Management Direction

- Manages the HCNRA as an area of high biological diversity and endemism to ensure the maintenance and/or restoration of ecological function and sustainability of species, habitats, and ecosystems that contribute to its biological uniqueness.
- Provides specific direction for identification, protection, and mitigation of effects for biologically unique species, habitats, and ecosystems through identification, protection, and mitigation of effects during project-level planning.
- RNAs will continue to be managed under existing direction in the *Forest Plan* (MA 12) to preserve significant natural ecosystems for comparison with those influenced by humans; for provision of ecological and environmental studies; for preservation of gene pools for typical and rare and endangered plants and animals. In addition, RNAs will also be managed to protect rare combinations of outstanding and diverse ecosystems that occur within RNAs.
- Fuelwood cutting, commercial mushroom harvesting, and commercial collection of special forest products in proposed and established RNAs will be prohibited. Provides direction to analyze livestock grazing and recreation use in RNAs and develop mitigations measures if necessary. If livestock grazing or recreation use is causing degrading levels of impacts the use will be discontinued.
- Fire will managed to return to its natural role, intensity, and periodicity in proposed RNAs except if it negatively effects the values for which the RNA was proposed (**Appendix C, Table C-1, pages 88-110**).

Fire and Air Quality

Fire

- Provides direction to allow lightning-caused fire to resume a more natural role in MA 4 (Hells Canyon Wilderness) as nearly as possible within specified conditions of fuels, weather, and topography to achieve WFU objectives.
- In MAs 8, 9, and 12, lightning-caused fire will be as managed as WFU to mimic historic fire effects to the extent that safety, fuel accumulations, and social constraints permit. The role of fire as a vital component of the landscape will be assessed in project design.

- Forested vegetation treatment and PF from planned ignitions will be primary methods to achieve desired vegetation in MAs 7, 10 and 11 (Wild and Scenic Imnaha River, Forage Emphasis, and Dispersed Recreation/Timber Management). Fire will be managed to the extent practical to emulate the historic function of fire while providing basic protection to human life and property and where compatible with Section 7 objectives of the *HCNRA Act*.
- Fire suppression responses will be based on priorities for protecting private land, campgrounds, bridges, facilities, administrative sites, and vegetation scenic qualities within the Imnaha River corridor, from Imnaha River Woods upstream to the Eagle Cap Wilderness boundary, North Pine Creek, and the headwaters of Big Sheep Creek (Mud and Lick Creek subwatersheds)
- PF from planned ignitions will be emphasized in MA 10 (Forage Emphasis) to maintain, restore, and sustain healthy forests and grasslands.
- PF from planned ignitions will be an appropriate management activity in all MAs including MA 8 (Wild and Scenic Snake River) and MA 4 (Hells Canyon Wilderness) consistent with management direction from adjacent areas where WFU cannot be safely implemented or is determined to be incompatible with Section 7 of the *HCNRA Act* or other laws.
- Fire management activities or suppression will be guided by firefighter safety, values at risk, weather, natural features, cost-effective methods, and other relevant factors to determine the appropriate response to protect life, property, and resources within the HCNRA and adjacent property.
- After fire, an interdisciplinary team will determine when activities such as livestock grazing might resume in burned areas (**Appendix C, Table C-1, pages 111-115**).

Air Quality

- Manages the Hells Canyon Wilderness as a Class 1 airshed to meet the *Clean Air Act*.
- Establishes a goal to 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 the HCNRA (**Appendix C, Table C-1, pages 116-117**).

Riparian/Aquatic Habitat and Water Quality

- Replaces existing CMP management direction for fisheries and water quality and supplements existing management direction from the *Forest Plan* (as amended by PACFISH, INFISH, and related terms and conditions from the Biological Opinions (BOs) for threatened and endangered species).
- Provides direction to maintain or improve riparian/aquatic proper functioning condition (PFC) and emphasizes restoration of human-caused disturbances.
- Provides direction to manage lands with Wallowa County to achieve the watershed management objectives of the *Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan with Multi-Species Habitat Strategy* (Wallowa County 1999).
- Incorporates elements from the *Coarse Screening Process* (Rhodes et al 1994) as coordinated with the Nez Perce Tribe into aquatic assessments to reinforce PACFISH and INFISH standards and to assess biological indicators to meet the objectives of the *Wy-Kan-Ush-Mi-Wa-Kish-Wit: Spirit of the Salmon Plan* (CRITFC 1996) and the *Wallowa County/Nez Perce Tribe Salmon Plan*.
- Adds direction for determining total maximum daily loads for waters in the HCNRA, and to develop water quality management and restoration plans (**Appendix C, Table C-1, pages 117-126**).

Wildlife Habitat

- Replaces existing CMP direction for wildlife and supplements existing management direction from *Forest Plan* (as amended by PACFISH, INFISH, Eastside Screens, and related terms and conditions from the BOs for threatened and endangered species).
- Provides direction for nonwilderness to ensure the protection and maintenance of wildlife habitat for existing native and desired nonnative vertebrate wildlife species and invertebrate organisms.
- Direction is provided for management of bald eagles, Townsend's big-eared bats, lynx, wolverines, elk, old-growth habitat, and open-road densities.
- Provides direction for Wilderness to ensure restoration of natural habitat conditions and populations.
- Modifies direction to provide habitat for old-growth dependent species by providing a variety of structural stages in late/old structure and within HRV.

- Amends the *Forest Plan* to incorporate the *Canada Lynx Conservation Assessment and Strategy* (Reudiger et al 2000 as updated) for the HCNRA.
- Maintains open-road densities at or below 1.35 mi./sq. mi. in 60 subwatersheds and at or below 1.9 mi./sq. mi. in one subwatershed (9L).
- Provides quality big-game habitat to meet elk and deer populations, calf, fawn, buck and bull ratios established cooperatively by the States of Oregon and Idaho and the Nez Perce Tribe.
- Ensures long-term maintenance of healthy populations of native landbirds by implementing biological objectives in the *Landbird Conservation Strategy* (Partners in Flight 2000 as updated) (**Appendix C, Table C-1, pages 127-133**).

Scientific Research

- Directs research opportunities to optimize discovery of useful information for management and restoration activities, and for the advancement of scientific knowledge (**Appendix C, pages 134-136**).
- Focuses research on resolution of management related issues, concerns, and opportunities.
- Emphasizes inventory and monitoring to determine future scientific research.

Geologic Resources

- Provides direction to protect paleontological and unique geologic resources from damage or destruction.
- Allows for management of paleontological resources for scientific research to consistent with protection.
- Allows for interpretation of and education about unique geologic events.
- Emphasizes public safety by restricting public use of caves (**Appendix C, Table C-1, page 137**).

Minerals

- Provides for managing common-variety mineral materials for facilities within the HCNRA; restoration of abandoned mineral material sites (and existing sites upon closure); and all mining activities subject to valid existing rights determinations of 1975.
- Adds consideration of other resource objectives such as scenic values when determining locations for rock sources (**Appendix C, Table C-1, pages 138-139**).

Land Management and Special Uses

- Manages land ownership patterns to best meet the intent for which the HCNRA was established.
- Provides for the coordination of land management plans with affected counties; management of access to nonpublic lands within the HCNRA; and establishes standards for the use and development of private lands in the HCNRA.
- Adds consideration of future uses of existing structures on private land prior to acquisition in order to minimize future maintenance costs (**Appendix C, Table C-1, pages 140-142**).

Monitoring and Evaluation

- Provides a specific monitoring and evaluation plan for activities and outputs to ensure conformity to goals, objectives, guidelines, and compatibility with the intent of the *HCNRA Act*. Project planning decisions would disclose applicable monitoring elements required before, during, and after implementation.
- Actively pursues cooperative agreements for monitoring and inventory with HCNRA users, organizations, and the Nez Perce Tribe (**Appendix C, Table C-1, pages 143-145; Appendix F, pages 13-15**).

Public Involvement

Summary

Public participation has been a major component of this planning process since the beginning of the adjustment strategy in 1993. **Table 1** summarizes the legal notices announcing the public scoping and comment periods in the public involvement process. Refer to **Table 1-2 in Chapter 1 (pages 33-36)** of the FEIS for a more detailed chronology of activities. The analysis file contains the complete record of all contacts and involvement activities from 1993 through 2003.

Table 1: Summary of Legal Notices for Public Scoping and Comment Periods

Date	Action
November 1994	Notice of Intent published in Federal Register, 45-day public scoping period on proposed action announced
January 1995	Public scoping period ends
February 1996	Notice of Availability of DEIS published in the Federal Register, news release announcing release of DEIS, 90-day comment period begins
May 1996	Comment period on DEIS ends
June 1998	Notice of Intent for revision of DEIS published in the Federal Register, 45-day public scoping period begins
July 1998	Notice of Extension of public scoping period for 45-days to September 25, 1998, based on public requests
October 1998	Notice of Extension of public scoping period for 45 days to January 8, 1999, based on public requests
January 1999	Public scoping period ends
March 2000	Notice of Availability of RDEIS published in the Federal Register; news releases and newspaper-style summaries announcing release; 120-day comment period begins

Draft Environmental Impact Statement (1993-1997)

The need for this action arose in 1993. News releases and mailings to the forest mailing list provided information regarding the proposed adjustment process beginning in 1993. A public opinion survey was completed in August 1994 followed by release of the proposed action in November 1994. The FS published a Notice of Intent in the *Federal Register* on November 16, 1994, clearly describing the proposed action and notifying the public of the 45-day public scoping period. Over 120 people attended six public meetings held both in the local and regional area to provide public comments on the proposed action by the end of the public scoping in January 1995.

From January 1995 to January 1996, several briefings and meetings were held with the Nez Perce Tribe, Wallowa County, and other interested stakeholders to discuss concerns related to development of the DEIS. News releases and informative mailings were disseminated to keep the public notified of the development of significant issues and alternatives. A group of individuals that are knowledgeable of the area, represent diverse interests, and support a protective mandate for the ecosystem with representation from Oregon, Idaho, and Montana formed the Hells Canyon CMP Tracking Group to ensure that "the Forest Service considers a full range of options for human use and designations...in order to accomplish protection of NRA ecosystems." The CMP Tracking Group was provided reference material and they developed and submitted an alternative called the Native Ecosystem Alternative that represented their vision for managing the HCNRA.

The DEIS was released in February 1996 for a 90-day public comment period. A Notice of Availability of the DEIS was published in the Federal Register February 23, 1996. Several public meetings and discussion occurred with various members of the Nez Perce Tribe, Wallowa County, CMP Tracking Group and parties interested in the decision. The number of comment letters received on the DEIS totaled 305 by the end of the public comment period in May 1996. The main concerns expressed by the public supported lower levels of roaded access and commodity uses, maintenance of multiple uses and balanced management, advocates for existing or increased use of roads, and continued support for off-road use, livestock grazing, and some form of logging. Motorized use associated with jet boats on the Snake River was also a concern. From May through July 1997, the Interdisciplinary Team held several meetings and briefings with the Nez Perce Tribe, Wallowa County, range permittees, and the CMP Tracking Group to discuss concerns related to development of the FEIS.

Revised Draft Environmental Impact Statement (1997-2000)

Several events occurred from August 1997 to May 1998 that led me to re-initiate the planning process in June 1998:

- The CMP Tracking Group (described above) expressed concern to CEQ and the Washington Office of the FS that the 1995 version of the Native Ecosystem Alternative (Alternative N) developed by their group had not been fully incorporated and analyzed.
- The WWNF experienced delays with the consultation process for newly listed species under the ESA.
- New science assessments released by ICBEMP included a variety of information relevant to the HCNRA.

Based on these events, I decided to issue a second Notice of Intent that was published in the Federal Register on June 18, 1998, announcing the intent to prepare the RDEIS and initiating a 45-day public scoping period. The decision to revise the DEIS was based on two factors: (1) over two years had passed since the release of the DEIS and new science information has been released from the ICBEMP that may affect the project area, thus warranting a review; and (2) an additional alternative should be analyzed in detail that was submitted by interest groups in 1995 and was never fully analyzed in the February 1996 DEIS.

The scoping period was extended twice (July 1998 and October 1998) for 90-days to allow for additional public input. From June 1998 to January 1999, several meetings occurred between the WWNF and interested county commissioners and members of the public. Six counties in the three states surrounding Hells Canyon (Oregon, Idaho, and Washington) convened a Hells Canyon Summit several times to meet and exchange information on planning, management, and projects related to the HCNRA.

The CMP Tracking Group revised their original alternative and resubmitted a revised version for consideration (Native Ecosystem Alternative, Hells Canyon CMP Tracking Group 1999). In addition, Wallowa County took the lead for the communities surrounding the HCNRA and developed a citizen-generated alternative for consideration (Wallowa County Alternative). They were provided reference material so they could develop and submit an alternative that represented their point of view. A number of science documents and reference papers were submitted by the CMP Tracking Group and were reviewed by the Interdisciplinary Team and evaluated for usefulness to the management of the HCNRA. The Interdisciplinary Team met frequently with representatives from both the CMP Tracking Group and Wallowa County to discuss development of their alternatives. Both alternatives were fully incorporated; refer to **Chapter 2, Appendix C, Appendix I, and Appendix J** for complete descriptions.

In October 1998, the Hells Canyon Subgroup was formed as a subgroup to the John Day/Snake Resource Advisory Council (RAC). The subgroup consists of 18 individuals representing various interests in the HCNRA. They subsequently met over the next two years and continue to meet on a variety of issues related to the management of the HCNRA. Over 3,700 public comments were received during the public scoping process for the RDEIS from June through January 1999.

Briefings to the Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, Hells Canyon Subgroup, outfitters and guides, Wallowa and Idaho county commissioners, CMP Tracking Group, range permittees, and others interested in the HCNRA occurred to keep people informed of the development of the RDEIS. The RDEIS was released in March 2000 for a 120-day public comment period. The Notice of Availability of was published in the Federal Register March 3, 2000.

The RDEIS was available both on the WWNF website as well as in compact disc format. Eight public meetings were held in local communities surrounding the HCNRA (Halfway, Imnaha, Enterprise, La Grande, Riggins, and Clarkston) and in the Boise and Portland area. Almost 150 people attended these meetings to provide a diverse array of comments on the RDEIS. By the end of the comment period in June over 2,000 people had commented on the RDEIS. The Hells Canyon Subgroup provided recommendations to the John Day/Snake RAC, pursuant to their established charter and guidelines in the *Federal Advisory Committee Act* for submitting comments to the WWNF. The RAC reviewed these recommendations and concurred unanimously with 18 of the 37 recommendations and submitted them to me for consideration in the development of the FEIS.

The main issues from the comment period revolved around the level of roaded access with some people desiring less and others requesting to maintain existing levels. Other comments focused on livestock grazing and provided opposing views on incorporating vacant allotments into existing allotments or closing them entirely.

Other topics of concern included diverse opinions about motorized use of the Snake River, ecosystem restoration including forested vegetation and grasslands, monitoring, levels of recreation opportunity, noxious weeds, compliance with the HCNRA Act, and consultation with the Nez Perce Tribe. Refer to the analysis file for a complete description of the content analysis of all comments received.

Final Environmental Impact Statement (2000-2003)

The Interdisciplinary Team compiled and maintained a list of interested individuals and key contacts throughout the planning process. Copies of published information sheets, updates, and news releases sent to individuals and organizations on the mailing list over the past seven years are available for review in the analysis file.

In addition to the information sheets and public meetings, there have been many informal meetings, telephone conversations, and emails with the Nez Perce Tribe and staff; Wallowa County Court; CMP Tracking Group; and interested organizations and individuals. The status of the FEIS planning process has been published in the quarterly schedule of proposed actions for the WWNF.

Interdisciplinary Team representatives met several times with Nez Perce Tribe members and natural resource staff to understand, identify, and resolve issues and concerns. These activities were conducted pursuant to federal trust responsibilities to consult early and frequently with the Nez Perce Tribe on a government-to-government basis, as a federally recognized tribe with off-reservation treaty rights within the HCNRA.

Frequent discussions or meetings occurred with representatives of the Natural Resource Advisory Committee representing Wallowa County to clarify development and interpretations of the Wallowa County's Alternative W. Discussions also occurred pursuant to the Memorandum of Understanding between the WWNF and Wallowa County to further government-to-government communications and relationships.

Interdisciplinary Team members met frequently with the CMP Tracking Group to discuss issues of concern and gain clarification of the intent and analysis for the Native Ecosystem Alternative, Alternative N. These meetings were conducted in the interest of gaining a better understanding of the proposed management direction developed for Alternative N and to clarify analysis assumptions.

The Hells Canyon Subgroup of the John Day/Snake RAC was briefed on a number of occasions concerning the planning process and actively participated in the review of the RDEIS, pursuant to their established charter. Refer to the analysis file for minutes of these meetings.

From June 2000 to June 2003, several briefings and meetings occurred with the Nez Perce Tribe, Wallowa County, the CMP Tracking Group, Hells Canyon Subgroup, outfitter and guides, and other interested parties to keep them informed of the planning process. Updates were mailed to people have an interest in the HCNRA or who commented on the RDEIS to notify them of the status of the FEIS.

Issues

Using the comments from the public, other agencies, the Nez Perce Tribe, and the alternatives submitted by Wallowa County (Alternative W) and the CMP Tracking Group (Alternative N), I recognized several areas of controversy regarding the effects of the proposed action.

Six significant issues were identified relating to meeting the intent of the *HCNRA Act*. At the heart of the issues is the use of the word 'compatible' in Section 7 of the *HCNRA Act*. Section 7 states that public outdoor recreation, timber harvesting by selective cutting, mining, and grazing can continue as long as they are 'compatible' with resources objectives from Section 7(1-6). Section 8 of the *HCNRA Act* directs that a "comprehensive management plan for the recreation area which shall provide for a broad range of land uses and recreation opportunities" shall be developed. In addition, Section 13 states that "ranching, grazing, farming, timber harvesting, and the occupation of homes and lands associated therewith, as they exist on the date of enactment of this Act, are recognized as traditional and valid uses of the recreation area."

The significant issues related to compatibility and the intent of the *HCNRA Act* revolve around the appropriate level of recreation settings, experiences, and opportunities; designating appropriate levels of access and facilities for recreation use; defining desired vegetative conditions for forested stands and grasslands; the disposition of

vacant allotments and defining satisfactory range conditions; and determining appropriate levels of interpretation and protection of heritage resources. The six significant issues are summarized below (**Chapter 1, pages 36-39**):

- **Compatibility with Section 7 of the HCNRA Act**

Public interpretation has resulted in various stated positions about the intent of the *HCNRA Act*. Some people question whether proposed management activities meet the intent of Section 7(1-7) concerning compatibility and the *HCNRA Act's* discussion of traditional and valid uses in other sections. Many people feel that Congress intended that the traditional and valid uses as specified in the *HCNRA Act* would continue into perpetuity at the same levels present with the establishment of the HCNRA in 1975. Further, many feel that traditional and valid uses contribute to the economic conditions and quality of lifestyles for residents and communities near the HCNRA, and are a significant factor in the sense of place that defines the HCNRA. Individuals who believe that the occurrence of traditional and valid uses are diminishing, and compromising the intent of the *HCNRA Act* raised concerns.

Other people feel that these uses should either not occur at all within the HCNRA, or should only occur where it is clearly demonstrated that they are "compatible" with other objectives of the *HCNRA Act*, primarily Section 7(1-6). These people feel that reducing or eliminating these traditional and valid uses are justified when there are documented or perceived potential incompatibilities. The WWNF interprets Section 7 as the primary management objectives for which the HCNRA should be managed.

- **Recreation Settings, Experiences, and Opportunities**

There is a concern that existing management direction would allow for increases in recreation use, diminishing semi-primitive and primitive recreation opportunities. Users generally want existing recreation settings and opportunities to be maintained at their current levels. Some users suggest that use be reduced to provide for more semi-primitive and primitive recreation opportunities, while others suggest that the HCNRA should provide greater motorized opportunities.

- **Access and Facilities**

There is a concern that existing management direction would allow for increases in motorized access and recreation developments. There are basically three groups of people who commented: those who want more and easier access and greater recreation opportunities; those who think present access and facilities is about right; and those who want less access, undeveloped routes, and fewer developed recreation opportunities. Some commentors would minimize human impacts by eliminating new and/or improved access and developments. Others want to see high standard roads opened to new Hells Canyon vistas that can easily be viewed from passenger cars. Existing direction identifies a number of recreational opportunities for future development. Some people are uncomfortable about what has happened, or may happen, regarding access to public lands across private lands. Many commentors indicated concern over lack of accessibility for physically challenged individuals at developed recreation sites.

- **Forested Vegetation, Grasslands, and Forest Understory**

There is a concern that existing management direction does not adequately define desired vegetative conditions for forested and grassland areas. This issue is focused on the development and implementation of management direction that ensures vegetation within the HCNRA, achieves or moves toward the HRV for seral/structural classes, and is compatible with Section 7 of the *HCNRA Act*. Additionally, concerns were raised that future management direction should focus on restoring the resiliency of the ecosystem to disturbance. Management activities that can be used to manage vegetation include the level and type of timber harvesting or forest stand treatments within MAs 7, 10, and 11, fire use, and livestock/wild ungulate grazing.

There is a growing advocacy for using WFU and PF to reduce the extent of large, stand-replacing fires because of historic fire suppression activities. Use of wildland or prescribed fire to benefit resources can improve ecosystem function and sustainability, by allowing fire to play a more natural role and occurring more frequently. Some people favor using thinning to revitalize forested stands, where necessary and

others think any tree removal is simply a way to get logs to local mills with little thought given to the environmental cost.

- ***Vacant Allotments Disposition and Satisfactory Range Conditions***

The disposition of grasslands within vacant livestock allotments is a major concern expressed by commentors. Commentors have concerns that the vacant allotments should be abolished to provide for long term, naturally functioning grassland ecosystems. Other commentors expressed concerns that these vacant allotments should be incorporated into existing allotments to provide a broader array of management options, to utilize the available forage resources, and to support the "traditional and valid uses" clause of the *HCNRA Act*. *An Assessment of Ecosystem Components in the Interior Columbia Basin* (Quigley and Arbelbide 1997) provides a focus of concern for the maintenance of the high quality grasslands within the HCNRA as one of the last remaining areas of significant size where healthy native grasslands occur in the Pacific Northwest.

Concerns were expressed on how to define the minimum satisfactory range conditions in which livestock would be authorized as required by the *Public LURs*.

- ***Heritage Resources***

There is a concern that increased access and recreation use may lead to damage and destruction of prehistoric and historic sites. Comments expressed a need for protecting prehistoric sites, with some individuals feeling that limiting access and allowing for self-discovery should achieve protection. Others would like to see interpretation at selected sites. Most people who commented about historic resources favor preserving at least some part of the homestead/farm era, even in Wilderness: the question is where and how much. Although a few would allow the remnants of the past to return to a natural site over time, most people favor that at least some the sites be restored and maintained.

I also acknowledged some issues, concerns, and opportunities raised during the scoping process were not considered significant in relation to the proposed action (**Chapter 1, pages 39-42**), but they are important for achieving the goals and objectives of the proposed action and in meeting the purpose and need and the intent of the *HCNRA Act*. Other issues, concerns, and opportunities were eliminated from further consideration for a variety of reasons (**Appendix B**). I carefully reviewed and considered all comments on the RDEIS (**Volume 3** of the FEIS) in arriving at my decision to select Alternative E-modified.

Alternatives

Considered in Detail

The Interdisciplinary Team developed a wide variety of alternative themes to resolve the significant issues generated from the proposed action. Many of these were not carried forward for detailed study as noted in **Chapter 2 (pages 2-5)** of the FEIS. The alternatives carried forward for detailed study were designed to achieve the purpose and need for change and to resolve the significant issues previously described surrounding the proposed action (**Chapter 1, pages 4-5**).

Five alternatives were developed and analyzed (**Chapter 2, pages 2-25; Appendix C, pages 1-249**) in the FEIS, including the no action (Alternative A) and four action alternatives (Alternatives B, E-modified, W, and N). Each of the four action alternatives provided a unique means of resolving the issues that were generated by analyzing the proposed action. Alternative B is the original proposal provided to the public for comment to develop the RDEIS (**Chapter 2, page 6**).

I directed the Interdisciplinary Team to modify the preferred Alternative E identified in the RDEIS to reflect public comments on the RDEIS and management concerns regarding the significant and other issues. As discussed in the summary of public involvement above, Alternative W was submitted by Wallowa County and Alternative N was submitted by the CMP Tracking Group and fully incorporated into the alternative development process. The following briefly describes the alternatives examined in detail:

Alternative A (no action) is a continuation of the management direction in the *Forest Plan*, including the direction in all amendments. This is the "no action" alternative as required by NEPA. It emphasizes continued management under the current direction.

- It provides a baseline against which action alternatives can be evaluated.
- *Forest Plan* management direction as amended, including direction set forth in 36 CFR 292, would remain in effect until the *Forest Plan* is revised.
- This alternative does not fully reflect existing conditions because some portions of the current plan have not been implemented. Those portions of the current plan not yet implemented could be applied over the course of the planning decade.
- This alternative does not meet the underlying need to update management direction for the HCNRA and does not address many of the issues identified during scoping.

Alternative B (proposed action) is a continuation of the management direction in the *Forest Plan*, including all amendments, but modified to address the need for change. It emphasizes maintaining the existing recreation experience while maintaining and restoring vegetation conditions within HRV.

- It implements the proposed action that was used in public scoping to identify issues. It builds on the expressed values of public opinion identified in public surveys.
- It focuses on maintaining existing recreation opportunities and experiences by managing for a slower rate of growth within those areas experiencing growth. Increases in recreation use will be managed through indirect and direct visitor management strategies. The level of planned facilities development is reduced from the existing CMP with an emphasis on replacing existing facilities.
- Outfitter and guide use is managed based on the need for new or expanded uses (one new permit for guided fishing/whitewater rafting on the Imnaha River. Total of 22 permits including one term permit for aviation services).
- Management of forested areas emphasizes maintenance of high levels of canopy closure, old-growth connectivity and interior forest habitat. Stands will have high levels of canopy closure for thermal cover, old-growth connecting habitat, and enhanced levels of interior forest habitat, and will meet landscape character goals and scenic integrity objectives.
- Protects prehistoric sites within the entire HCNRA (including those in Wilderness) by custodial maintenance of existing interpretation opportunities. Historic structures (including those in Wilderness) that have been maintained or could be self-maintained will continue to be maintained.
- Other historic structures (including those in Wilderness) will be allowed to deteriorate following data collection. Nonhistoric structures and facilities (including those in Wilderness) will be evaluated for stabilization, restoration, or maintenance based on potential historic value.

Alternative E-modified (selected) is a continuation of the management direction in the *Forest Plan*, including all amendments made so far, but with specific changes designed to address the need for change. It emphasizes maintaining the rustic and primitive nature of the area while restoring the natural role of fire and maintaining vegetative conditions within HRV.

- It manages recreation opportunities and experiences by emphasizing the maintenance or enhancement of the rustic and primitive character of the HCNRA.
- Increases in recreation use will be managed through indirect and direct visitor management strategies. The development level of facilities is reduced from the existing CMP and is managed to meet ROS setting indicators with an emphasis on replacing deteriorating facilities with new, low-maintenance rustic facilities.
- Outfitter and guide use is managed based on the need for new or expanded uses (one new permit for guided fishing/whitewater rafting on the Imnaha River. Total of 22 permits including one term permit and a pool of service days for aviation services through temporary permits).
- Vegetation management emphasizes moving toward HRV as the goal for forested vegetation and using HRV as a reference point for grassland vegetation to achieve the potential natural community (PNC).
- HRV is maintained or restored through management practices in harmony with natural processes and functions.
- Protects prehistoric sites in low recreation-use areas and within Wilderness by managing for self-discovery interpretation opportunities. In high recreation-use areas outside the Wilderness, prehistoric sites will be protected by custodial maintenance of existing interpretation opportunities.

- The most significant and representative historic structures (including those in Wilderness) will be maintained, stabilized, or restored. Other historic structures will be allowed to deteriorate following data collection.
- Nonhistoric structures and facilities outside Wilderness will be evaluated for stabilization, restoration, or maintenance based on potential historic value. All sites and structures used in Wilderness administration and permitted livestock operations remain in Wilderness.

Alternative W (Wallowa County) was developed and submitted to the WWNF by Wallowa County. It emphasizes maintaining the rustic nature of the area while restoring vegetative conditions through natural and managed processes of thinning, replacement, and succession. Alternative W authors recognize that nature will re-establish a natural landscape if left alone. However, they also recognize that nature's methods can be harsh (large-scale wildfires and insect infestations) and can take centuries.

- It manages recreation opportunities and experiences by emphasizing the maintenance or enhancement of the rustic and primitive character of the HCNRA.
- Increases in recreation use, facilities development, and maintenance emphasizes meeting ROS setting indicators. Some improvements to the trail and road systems will be implemented. Nine additional outfitter and guide permits will be allowed (32 total, including two for aviation services) in various activities to ensure competition among outfitters providing the same type of service to the public.
- It works with natural and management processes to decrease the time needed to restore ecosystem functions that fall within the normal range and to reduce the negative effects of large-scale fires and insect infestations. The re-establishment of old-growth forests will still take centuries, but vegetation management will be a tool utilized to achieve desired ecological conditions.
- MAs, objectives, standards, and guidelines apply so that activities continue until watershed and site- or project-specific analyses under the *Forest Plan* and the *Wallowa County/Nez Perce Tribe Salmon Plan* (Wallowa County 1999) have been completed. After those analyses have occurred, the site-specific analysis or analyses will be used for management direction.
- Heritage resource (prehistoric and historic sites) will be managed similar to Alternative E-modified for levels of protection and interpretation.
- Refer to **Appendix I** of the FEIS for Alternative W as submitted by Wallowa County.

Alternative N (Native Ecosystem Alternative) was developed and submitted to the WWNF by the Hells Canyon CMP Tracking Group, a consortium of conservation groups, individuals, tribes, and organizations. It emphasizes a healthy native ecosystem and provides for least-impact human activities to allow native ecosystems and processes to function as naturally as possible. This alternative manages the HCNRA with the following goals:

- The HCNRA thrives as a healthy native ecosystem integral to the larger native bioregion.
- Section 7(1-7) of the *HCNRA Act* will be implemented with priority given, as mandated, to Section 7(1-6). Human activities will be constrained by the native ecosystem processes and natural ruggedness of this area. Human intervention, expectations, and habitual uses will be subject to compatibility with Section 7(1-6) of the *HCNRA Act*.
- Human activities will be undertaken with no adverse impact or the least adverse impact to allow native ecosystems to function and recover as naturally as possible. Goals, objectives, standards and guidelines, and monitoring requirements will be stated in objective, measurable terms so that activities and human users can be held accountable to the goals. All human activities that pose a potential for negative effects on native ecosystems, including outfitter and guide operations, will be disallowed unless they were publicly monitored on a stated schedule for compatibility with Section 7(1-6) of the *HCNRA Act*.
- Recreation management will focus on slowing user growth by providing fewer amenities and emphasizing least impacting recreation opportunities.
- Natural processes play a more significant role in achieving the desired ecological conditions, although there will be some vegetation management.
- Native American sites and resources will be identified in a manner and to the degree that Native American religious meanings and uses are not compromised. The protection of Native American sites will take precedence over resource-consumptive activities. Ongoing traditional uses of Native American sites and cultural traditions will be accommodated.
- Nonnative sites will be surveyed for historic significance. Historically significant sites will be protected while nonsignificant sites will be allowed to deteriorate naturally.
- Historic sites will be managed for self-discovery; historic resources in Wilderness will be allowed to deteriorate. Refer to **Appendix J** of the FEIS for Alternative N as submitted by the CMP Tracking Group.

Environmentally Preferable Alternative

NEPA regulations require agencies to specify the alternative or alternatives that were considered environmentally preferable (40 CFR 1505.2(b)). The environmentally preferable alternative is defined by the CEQ as the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historic, cultural, and natural resources. According to FS policy, the environmentally preferable alternative is the alternative that best meets the goals of Section 101 of NEPA. Section 101 emphasizes the protection of the environment for future generations; the preservation of historic, cultural, and natural resources; and attainment of the widest range of beneficial uses.

I focused on the goals set forth in NEPA to select the environmentally preferable alternative. The goals of Section 101 are similar to the objectives from Section 7 of the *HCNRA Act* which provides for outdoor recreation and continuation of management, utilization, and disposal of natural resources in a manner compatible with protecting, conserving, preserving, and maintaining these resources.

In this context, I am identifying Alternative E-modified as the environmentally preferable alternative. Alternative E-modified emphasizes environmental protection measures while allowing compatible social uses with the intent of providing safe settings that are aesthetically and culturally pleasing. Important historic, cultural, and natural aspects of our natural heritage are provided through protection of prehistoric and historic sites, and a balance of traditional and valid uses. The move towards HRV for forested and grasslands and the emphasis on maintenance and enhancement of the rustic and primitive character of the HCNRA in Alternative E-modified is consistent with balancing resource protection and uses for future generations.

Alternative E-modified has the appropriate mix of management actions with natural processes to move the HCNRA towards its desired HRV over the planning period. I base my belief on the need for active management and restoration to achieve land management goals, instead of the passive approach proposed in Alternative N. Alternative E-modified has the highest potential to achieve the ROS settings defined in the FEIS based on an emphasis to maintain or enhance the rustic and primitive nature of the HCNRA. In my judgment, Alternative E-modified provides appropriate safeguards for ecological, social, and economic effects to assure this alternative can be carried out in an environmentally safe manner. I find that Alternative E-modified best meets the goals of Section 101 of NEPA and thus, is the environmentally preferable alternative.

I did not identify Alternative W as the environmentally preferable because it emphasizes a higher level of development and utilization than Alternative E-modified through increases in timber harvesting activities, outfitter and guide permits, and incorporation of vacant allotments into active allotments.

I did not select Alternative N because it does not provide the balance between management opportunities (forest and grassland vegetative treatments) and natural processes to move towards the desired HRV, nor does it provide for the desired recreation experiences with its extensive road closures.

Based on the environmental consequences in **Chapter 3**, I do not believe that Alternative W or N adequately respond to Section 101 of NEPA, nor to the purpose and need for change addressed in **Chapter 1 (pages 5-14)** of the FEIS.

Rationale for the Decision

In this section, I describe the rationale I used in selecting Alternative E-modified from the FEIS. I first describe what information I reviewed and how it influenced my decision-making in general. I then describe how specific information influenced my decision. This section is organized by significant issue and resource area, under the same titles and in the same order presented in the FEIS.

I made this decision by first reviewing the legislated requirements stated in **Chapter 1 (pages 5-17)** of the FEIS in relation to the purpose and need for change for each of the resource areas and the needed changes in management direction as listed in the decision framework. I carefully reviewed several sections of the FEIS in reaching my decision. The significant issues brought forward by the public as described in **Chapter 1 (pages 36-42)** and the comments from the public on these issues (refer to **Volume 3** of the FEIS) provide a diversity of

viewpoints and knowledge that I considered in reaching an informed and balanced decision. I weighed each alternative's resolution of the significant issues summarized in **Chapter 2 (pages 5-25)** and in further detail in **Appendix C (pages 1-249)** against the physical, biological, social and economic consequences of the alternatives disclosed in **Chapter 3 (pages 1-482)**.

My decision to select Alternative E-modified from the FEIS as the amended direction for the HCNRA stems from my conclusion that it responds best to the significant issues and provides the needed change in direction to better meet the intent of the *HCNRA Act* and other acts. My decision was strongly influenced by information from the purpose and need for change and the issues in **Chapter 1** of the FEIS, the legislated requirements of the *HCNRA Act* (PL 94-199); the *Oregon Wilderness Act* (PL 98-328); the *Omnibus Oregon Wild and Scenic Rivers Act* (PL 100-552); *Public and Private LURs* (36 CFR 292); *Forest Plan* content regulations (36 CFR 219.11); and FSM 1920.

Compatibility with Section 7 of the HCNRA Act

A concern expressed by the public and agency personnel throughout this planning process has been the compatibility of motorized recreation, timber, and grazing activities with the objectives of Section 7 of the *HCNRA Act*. This concern has been the focus of many ongoing activities and recent site-specific project proposals. My objective throughout this planning process has been to establish management direction that will resolve these issues of compatibility at the programmatic level. Further, there is a need to establish direction on how to address compatibility of future site-specific projects based on my decision.

I realized that I would not be able to satisfy all of the public concerns to their fullest extent because many of them are mutually exclusive. In making this decision, I carefully reviewed the *HCNRA Act* and considered my understanding of compatibility in light of recent court cases on management issues in the HCNRA. In 1993, a court order (Cv. No. 92-1432-ST) stated the purpose of the *HCNRA Act* and its Congressional mandates require the Secretary to do more than simply maintain the status quo in the HCNRA. In addition, they strongly imply that users of public lands in the HCNRA are the intended beneficiaries of requirements of the *HCNRA Act*, and that the intended benefit to those users is an enhancement of "recreational and ecologic values" unique to the HCNRA. Other interests, while being recognized as valid uses, are subordinate to this overriding concern (**Chapter 3, page 6**). Additionally, in 1996, a court opinion (Cv. No. 94-1347-AS) stated that the *HCNRA Act* requires the WWNF to allow the continuation of livestock grazing only if grazing is compatible with other provisions of the *HCNRA Act*. The court further stated that if Congress had intended to favor grazing in the manner asserted by interveners, it would not have conditioned the continuation of grazing in the HCNRA on its compatibility with the specified purposes of the *HCNRA Act*, including the protection and maintenance of wildlife.

I concluded based on my review and these findings that compatibility means that timber harvesting by selective cutting, mining (on the valid existing claims), livestock grazing as stated in Section (7) and a broad range of recreation opportunities can occur so long as they meet the objectives of *HCNRA Act*, Section 7(1-6). This provided the basis for my review of each of the alternatives management direction and their resulting environmental consequences (**Chapter 3, pages 1-482**) in reaching my decision to select Alternative E-modified to resolve this significant issue.

Alternatives A and B do not propose specific management direction for making a compatibility determination and would lead to questions about whether uses and projects were compatible with the intent of the *HCNRA Act* and would not resolve this concern (**Appendix C, page 6**).

Alternatives E-modified and W propose management direction that would establish a process to determine the compatibility of ground-disturbing management activities with management direction. When recreation, livestock grazing, timber harvest, and mining (activities listed in Sections 7 and 13 of the *HCNRA Act*) occur on public land, and meet the goals, objectives, standards, and guidelines, the use is programmatically compatible with the intent of the *HCNRA Act* (**Appendix C, page 6**). This establishes the fundamental concept that an outright exclusion of any of these uses does not meet the intent of the *HCNRA Act* (**Chapter 3, page 22**).

Alternative N proposes management direction that emphasizes the priorities mandated through Section 7(1-6) of the *HCNRA Act* and that human activities would be undertaken which have no adverse impact or the least impact to the ecosystem. The direction further emphasizes that activities and human users must be measurable and

held accountable for attaining these goals. All ongoing and proposed human activities that pose a potential for adverse impact would be continued only if they are publicly monitored and determined compatible (**Appendix C, page 6**).

Although Alternative W would lead to resolution of issues of compatibility with the *HCNRA Act*, it would result in overall higher levels of livestock grazing and timber harvesting that may lead to site-specific incompatibilities. I find Alternative E-modified preferable to Alternative W because it provides additional direction for project-level planning decisions to disclose a finding of compatibility with the goals, objectives, standards and guidelines and to include monitoring elements that would ensure compatibility through project implementation (**Chapter 3, page 23**). This direction demonstrates my commitment to link monitoring with project implementation, thereby ensuring each project's compatibility with the management direction of Alternative E-modified. My decision also provides a process for resolving any site-specific incompatibilities through public participation processes; memorandums of understanding, as needed, with affected county, state, federal, and tribal governments; and the appropriate level of environmental analysis.

Fundamentally, my decision reinforces that uses are programmatically compatible with the intent of Section 7(1-6) of the *HCNRA Act* if they meet goals, objectives, standards and guidelines for resource protection (**Appendix C, page 6**). Although Alternative N emphasizes Section 7(1-6), I do not believe that Alternative N meets the overall intent of the *HCNRA Act* based on its management direction that would result in significant reductions in the level of motorized recreation, access, livestock grazing, and timber harvesting (**Chapter 3, page 23**). In my review of the *HCNRA Act*, it is clear that Congress intended that the recreation and ecological values and public enjoyment of the area be enhanced, and that traditional and valid uses in Section 7(7) be allowed to continue as long as they are compatible with the resource objectives of Section 7(1-6). I believe that implementation of the amended management direction provide by my decision will meet this intent (**Chapter 3, page 23**).

I also considered other factors in reaching my decision to select Alternative E-modified to balance the diverse and competing uses of the HCNRA. The management direction in Alternative E-modified is designed to specifically meet the intent of the *HCNRA Act*, Section 7 and the *Public LURs* (36 CFR 292.40). The goal statements for each resource area are written to articulate the intent of a particular objective under Section 7. Thus, the objectives, standards, guidelines, and monitoring are designed to guide site-specific implementation to achieve those goals, particularly in terms of ongoing uses that are compatible with Section 7(1-7). As part of my decision, I am directing that the Area Ranger for the HCNRA make a site-specific compatibility determination during project-level planning based on the management direction embodied in Alternative E-modified. If site-specific incompatibilities are identified with a project proposal, then the project will need to be changed or mitigated to avoid the incompatibility.

It is my determination, following a thorough review of the FEIS and its appendices, that as long as site-specific activities, both ongoing and proposed, meet the goals, objectives, standards, and guidelines of Alternative E-modified then they are compatible with meeting the objectives of Section 7(1-7) of the *HCNRA Act*. Thus, my decision resolves this significant issue. My specific reasons for selecting Alternative E-modified are listed for the other significant issues and resource areas described in the following sections.

Recreation Settings, Experiences, and Opportunities

Social Encounters, Visitor Management, Visitor Impacts, and Management Strategies

To facilitate my decision for recreation settings, experience, and opportunities, I directed the Interdisciplinary Team to use the ROS as established by FS directives. FS policy requires the use of ROS as an aid in determining an adequate mix of recreation opportunities to ensure the protection of the physical and social attributes of National Forest System (NFS) lands. Although delineation of the ROS classes assists in quantifying the extent of the areas, other factors influence a person's perception of an area (such as remoteness and naturalness) and overall experience. The strength of utilizing ROS is that it provides a range of diverse opportunities from primitive to more roaded to give recreationists a choice based on their preferences. In developing the standards for the ROS settings, the Interdisciplinary Team delineated the HCNRA into 33 Recreation Analysis Areas where seven ROS setting indicators (access, remoteness, scenery [naturalness/visual quality], social encounters, visitor management, visitor impacts, and facilities) will apply. See **Figure 4** for a map of Recreation Analysis Areas. Recreation Analysis Areas were identified to characterize the 'sense of place'

users associate with an area and to provide a range of recreation opportunities within the ROS framework. Further, I believe these Recreation Analysis Areas serve as a useful reference for managing and monitoring overall recreation use.

As described in **Chapter 3** Recreation Settings, Experiences, and Opportunities (**page 27**) respondents to public surveys about the HCNRA want to protect the vastness, solitude, and undeveloped character of the HCNRA. Based on the mix of ROS settings combined with restrictions for designated open roads, access to dispersed campsites, and fuelwood cutting, the majority of the HCNRA provides nonmotorized experiences. My decision maintains the existing level of motorized and nonmotorized ROS settings to maintain the rustic and primitive character of the HCNRA. It also provides for minor modifications of some ROS classifications to more closely align the management of the area with the public's desired ROS experiences based on the Recreation Analysis Areas. I believe that maintaining no net loss in the existing mix of ROS settings will meet the public's desire to retain the current mix of nonmotorized/motorized, developed/undeveloped camping and Wilderness opportunities.

As part of my decision, I considered the potential for growth in recreation use in relation to the potential capacity provided by different ROS settings. Current use potentially exceeds capacity at three developed sites (Black Lake Campground, Windy Saddle Campground, and Cow Creek Trailhead) during the summer months due to the location of these sites near popular lakes and streams. This situation is likely to continue over the next decade as predicted in the *Forest Plan*. These instances are expected to be minor (5 sites out of 90; and 2,642 acres of semi-primitive nonmotorized and motorized settings) over the next decade (**Chapter 3, page 32**). Consequently, I do not believe it is necessary to increase the level of nonmotorized ROS settings as outlined by Alternatives B (2% increase) and N (11% increase). Alternative N manages toward more primitive settings and minimizes human uses by proposing a level of nonmotorized setting that I consider unacceptable for meeting the intent of the *HCNRA Act* to allow for recreation use that is compatible with resource objectives from Section 7 (**Chapter 3, page 43**). My decision retains the majority of the HCNRA for dispersed activities of a nonmotorized nature while providing for motorized experiences in semi-primitive settings over the next decade and beyond.

My decision also provides detailed objectives, standards, and guidelines for managing acceptable levels of use to retain the ROS settings. I have established social and biophysical thresholds for ROS setting indicators of remoteness, scenery (naturalness/visual quality), social encounters, visitor management, and visitor impacts for Wilderness and nonwilderness areas by Recreation Analysis Area. The access and facilities ROS setting indicators are discussed in the section below on Access and Facilities. The ROS setting indicators for each Recreation Analysis Area provide appropriate safeguards to protect and enhance natural resources while meeting the need to ensure acceptable levels of visitor management and impacts as stated in **Chapter 1 (pages 6-7)** of the FEIS. The ROS setting indicators will facilitate meeting the resource objectives from Section 7(1-6) of the *HCNRA Act* while providing for compatible recreation uses (**Chapter 3, page 43**). To balance these objectives, some local opportunities will be reduced as described below in the Access and Facilities section.

Visitor management strategies are also an important element of maintaining these ROS settings. My decision provides for indirect and direct visitor management strategies for both the Wilderness and nonwilderness portions of the HCNRA. These strategies will be essential in providing flexibility to manage increases in recreation use with varying levels of restrictions to ensure that the setting indicators are not exceeded by Recreation Analysis Area. Monitoring and evaluation of these indicators will be used to activate a sequence of management activities that ensure recreation use is not exceeding established thresholds or causing adverse impacts. The sites mentioned above where potential crowding occurs during the summer provide an excellent opportunity to implement the indirect and direct strategies to manage visitor impacts. Monitoring the site-specific social and biophysical setting indicators in these instances will determine what the appropriate strategies are and when to trigger management actions to control use. Although Alternatives A and W maintain the same level of ROS settings as my decision, neither one of them provides specific strategies that manage impacts to developed and dispersed recreation sites as described for Alternative E-modified and would not be as effective in protecting resource objectives outlined in Section 7(1-6) of the *HCNRA Act* (**Chapter 3, page 53**).

Many users to the HCNRA seek a backcountry experience found in the semi-primitive nonmotorized settings outside of the Wilderness. In the future, these settings will become more important in the Interior Columbia River Basin, and the HCNRA will provide a relatively large area in the region that maintains this setting. Based on my review of the environmental consequences described in **Chapter 3** of the FEIS, I believe my decision to manage recreation settings, experiences, and opportunities within the existing mix of ROS settings (**page 43**) combined with introduction of social and biophysical setting indicators (**page 62**) and implementation of indirect and direct visitor management strategies (**page 53**) resolves the significant issue related to the appropriate level of

recreation settings, experiences, and opportunities. My decision resolves the issue because it provides direction that is compatible with Section 7(1-6) of the *HCNRA Act* and ensures acceptable levels of visitor management and impacts occur as stated in the need for change (**Chapter 1, pages 6-7**).

Hells Canyon Wilderness

An important element of my decision is to ensure management direction for recreation use protects and conserves wilderness values and is consistent with the *Wilderness Act* and Section 7(2) of the *HCNRA Act*. By establishing standards for social and biophysical impacts in Wilderness through the ROS setting indicators in each Recreation Analysis Area as described above, this goal will be met. This provides a specific approach to measure and manage use in more popular areas of the Wilderness such as the Seven Devils where Wilderness values are most at risk. In addition, indirect and direct visitor management strategies for the Wilderness will facilitate maintaining acceptable use levels within these thresholds as described above (**Chapter 3, pages 40; 56**). I believe Alternative E-modified provides the clearest definition of desired conditions for Wilderness settings because it defines specific thresholds for Wilderness ROS setting indicators, whereas Alternatives A, W, and N do not (**Chapter 3, page 54**). The indirect and direct visitor management strategies specified in Alternative E-modified provide a broader range of approaches compared to the other alternatives to manage visitor impacts and provides flexibility to take action to meet the resource objectives of Section 7 of the *HCNRA Act* in the Wilderness (**Chapter 3, pages 10-11; 58**).

Although Alternative B provides similar definitions of desired conditions for Wilderness settings and indirect and direct visitor management strategies, the emphasis on conserving wilderness values in Section 7(2) of the *HCNRA Act* influenced my decision to select Alternative E-modified. Alternative E-modified provides stronger management direction for conserving wilderness values. For example, it emphasizes self-discovery of prehistoric and historic sites in the Wilderness rather than direct interpretation which will protect prehistoric and historic sites and minimize visitor impacts (**Chapter 3, page 33**). In addition, Alternative E-modified introduces standards for preventing and controlling noxious weeds by requiring the use of pelletized or certified weed-free seed in all areas of the HCNRA. It also directs restoration efforts to use native species and materials, ensuring the least-impact and most cost-effective means of meeting Wilderness objectives (**Chapter 3, page 208**).

Another important aspect of managing the social and biophysical impacts in the Wilderness is my decision to manage party sizes for groups using trails in the Wild and Scenic sections of the Snake River corridor consistent with the adjacent Hells Canyon Wilderness. These two areas will now have the same size limitations of 8 people and 16 stock animals. This will manage use and ensure that users entering the Wilderness from trails along the Snake River conform to limitations in the Wilderness and provide consistent resource protection both inside and outside the Wilderness. While Alternative B prescribes a similar approach to Alternative E-modified, Alternatives A and W retain the current party size of 24 people and 24 stock in the Scenic section of the corridor, and Alternative W increases the party size to 12 people and 24 stock in the Wild section of the corridor. Alternative N does not specify a limit on party size on trails in the corridor. My decision to select Alternative E-modified will better achieve desired recreation experiences in the Wilderness and will ensure the continued protection and enhancement of the recreation outstandingly remarkable value for the Snake River than Alternatives A, W, or N. My decision ensures that groups using Wilderness trails to access the Wild and Scenic sections conform to Wilderness group size limitations while in the Wilderness, even though their destination may be the Scenic river corridor (**Chapter 3, page 255**).

Implementing the direction as described for the ROS settings indicators and other resource direction in this decision will meet the goal of managing Wilderness consistent with the intent of both the *Wilderness Act* and Section 7(2) of the *HCNRA Act* to protect and conserve wilderness values. Upon review of the environmental consequences in **Chapter 3** of the FEIS, I believe that my decision provides the needed change in direction to define desired conditions for Wilderness settings, minimizes negative impacts to wilderness character and values, ensures acceptable levels of visitor management and impacts, and provides for management of noxious weeds in Wilderness in a manner consistent with Wilderness objectives (**Chapter 1, pages 6-7**).

Upland Outfitter and Guides including Aviation Services

My decision allows for the continued operation of the current outfitter and guide permits (21 special use permits including aviation) with one additional permit opportunity for guided fishing/whitewater rafting on the Imnaha Wild and Scenic River (22 total). The guided fishing/whitewater rafting activity already occurs on private land demonstrating the need for this service. A special use permit provides an opportunity to continue this service

onto NFS lands to ensure the activity provides a high level of recreation experience while minimizing any conflicts that may occur between this use and other uses in the vicinity (**Chapter 3, page 257**).

My decision also allows for the continuation of the Oregon special use permit for aviation services with an increase of 50 service days (total of 150 service days for this permit) and also provides for the same level of aviation service (150 service days) for other operators from Idaho, Washington, and Oregon through temporary permits for a total of 300 service days. Based on public comment on the RDEIS by several air taxi operators who requested more permanent permits for the HCNRA based on their current use, my decision enables air taxi operators to provide additional services from surrounding communities not serviced by the existing special use permit. After reviewing the levels of use by the current operator, I find that 300 total service days for aviation services is adequate at this time to allow for growth in this service to the public and provide an equitable level of service with the existing special use permit holder (**Chapter 3, page 451**).

I believe temporary permits are the best approach for these operators rather than issuing a limited number of permanent permits as proposed in Alternative W (2 permits with 300 service days) because it allows flexibility for various operators to transport the public to backcountry airstrips on an incidental and as needed basis while managing this use without increasing service days beyond an acceptable level. Alternatives A, B, and N do not address this need for increased public service. My intent is to eliminate the opportunity for future growth in scenic tours or other scheduled activities that will be incompatible with the remoteness of the HCNRA and the resource objectives in Section 7 of the *HCNRA Act*. To avoid this type of growth, my decision prohibits regularly scheduled landings at backcountry airstrips. In the future, if the pool of service days is fully utilized by temporary permits and the need for further public service to backcountry airstrips is adequately demonstrated, my decision provides a process for consideration of increases in use or issuing permanent permits (**Appendix H**).

My decision does not establish a permanent limit on the number of outfitter and guide permits and service days (including aviation services) over the next decade. However, my review of **Chapter 3** indicates there is no need to increase current levels (other than those already described for fishing/rafting and aviation services) because the existing outfitter and guide operators have used less than half of their authorized use (1,008 used service days out of 2,498 authorized service days) over the last five years (**Chapter 3, page 442**). Upland outfitter and guide use accounts for less than one percent of the total upland use on the HCNRA, and an even smaller percentage of the total carrying capacity. The majority of the current use is associated with big-game hunting and progressive horse and llama pack trips (80%). Fishing, aviation trips to backcountry airstrips, and cougar/bear hunting account for the remainder of the use (20%) provided by outfitter and guides. Special use permits for biking, photography, and motorized ground transportation have shown little to no use over the last five years.

Because demand is flat or on a slight decline (1.4% annually over the last five years), I do not see the demonstrated need to increase the number of permits (10 new permits) or the number of service days (15%) as proposed by Alternative W. However, I do believe there is enough demonstrated need for the guided fishing/whitewater rafting on the Imnaha River and aviation services from surrounding communities to allow for an additional 15 percent growth in gross revenues if capacity is fully utilized. The seasonal road restrictions I have decided to implement may increase demand for big-game packing services during the fall hunting seasons to the Lord Flat, Teepee Butte, Wildhorse, and PO Saddle areas. Assuming some visitors will seek an outfitter to pack them into the same area, potential increases in outfitter and guide use will occur. Alternatives A and N do not address these demonstrated needs. Alternative B would reduce the level of aviation service (50 service days total) below the current demonstrated need and would not meet the intent to provide for public service for visitors that cannot visit the backcountry or Wilderness areas on their own as I specified in the need for change (**Chapter 1, page 7**).

My decision establishes new operating guidelines that address the HCNRA objectives (**Appendix H**). Existing permits and new permits for fishing/rafting on the Imnaha River or temporary aviation services will be evaluated using these guidelines before approving or authorizing these uses. I believe these guidelines establish a process for evaluating the demonstrated public need for new and existing permits; consider operator's performance, skill, equipment, educational opportunities, and safety provisions; determine adequate use levels; and protect and enhance the public's expectation and service from commercial operators. These guidelines provide the flexibility to address demonstrated needs for increased public service, meet management objectives, and protect resources. I believe these guidelines also support Wilderness goals by protecting resource conditions and reducing human-caused impacts. The big-game outfitter and guides have worked under and have supported this direction for some time; therefore, I expect minimal impact to outfitter and guide operations in the Wilderness.

This process also ensures that the social and biophysical thresholds established through my decision for ROS setting indicators are not exceeded by outfitter and guide use and provides for compatible commercial recreation use with the objectives of Section 7 of the *HCNRA Act*. These standards for social and biophysical conditions will also be applied to outfitter and guide operations in the Wilderness to ensure conservation of wilderness values and adequate resource protection while allowing opportunities for public use. Except for Alternative B, none of the other alternatives provide a process for making these determinations and will protect neither the public recreation experience nor resource objectives from Section 7 of the *HCNRA Act* (**Chapter 3, page 451**).

For the past several years, the Area Ranger has been operating under a moratorium on new outfitter and guide permits until completion of my decision for amended direction for the HCNRA. My decision removes this moratorium. All new applications and existing outfitter and guide services will be subject to the amended direction in my decision described here and in the other sections of this ROD. Following implementation of my decision, outfitter and guide services will be reviewed on a three-year basis to evaluate the overall contribution of outfitter and guide use to the HCNRA and to make any adjustments as needed. Interim reviews will be conducted if conditions change substantially warranting more frequent reviews. I expect to use the ROS setting indicators as an information baseline in these reviews.

Overall, my decision will continue operations of all existing outfitter and guides and will provide future growth opportunities with an increase of 350 service days and 15 percent more gross revenues compared to the existing authorized capacity. Because the current level of authorized service days are underused (57%) for some types of outfitting/guiding, issuing additional permits for these types of services is not warranted at this time. Future consideration of new applications for existing types of permits will need to demonstrate a greater demand than currently exists. New activities that may be proposed by applicants such as backcountry skiing or snowmobiling will be evaluated as part of the three-year review process.

My decision provides the best balance of the number and type of authorized permits currently needed to ensure outfitter and guide services are available to those who cannot visit backcountry or Wilderness on their own as identified in **Chapter 1** of the FEIS. It also establishes the best process for avoiding unacceptable numbers of social encounters or changes in recreation settings and opportunities as described in the need for change (**Chapter 1, page 7**). These decisions resolve the issues around the appropriate level of outfitter and guide use and ensure that resource objectives from Section 7 of the *HCNRA Act* will be met.

Scenery

My decision replaces existing CMP management direction and supplements *Forest Plan* management direction for scenery management. An important element of this decision is the implementation of the new Scenery Management System (SMS) which builds on physical, biological, and cultural/social concepts related to managing landscapes for desired attributes (USDA 1993).

My decision emphasizes integrating social values with biophysical considerations to best maintain or improve a sustainable, desired landscape character. Using the scenery (naturalness/visual quality) ROS setting indicator, my decision provides scenic integrity levels for each Recreation Analysis Area. Scenic integrity levels in combination with the ROS settings by Recreation Analysis Area identify the sense of place that users attribute to an area. My decision on vegetation management described below will achieve ecological integrity levels that sustain desired landscape character by moving or maintaining vegetation toward the HRV. These objectives will facilitate management of site-specific projects and ensure achievement of the goals and objectives to conserve aesthetic values as specified in Section 7(2) of the *HCNRA Act* (**Chapter 3, pages 9; 67; 77; 80**).

Alternative A does not implement the SMS and does not meet the need for change to provide additional direction to conserve scenic values. Alternative N would incorporate public input regarding impairments to natural scenery, but also provides a greater risk to conserving ecological landscape integrity by not treating forested vegetation allowing a greater number of natural fires to burn in a less controlled setting. Alternatives B and W both implement the SMS approach, but I believe my decision to select Alternative E-modified provides the best balance of managing ecological landscape integrity and social values. Alternative E-modified provides for forested vegetation treatment, wildland fire use for resource benefits, and prescribed fire, as described below. It also integrates the social values attributed to the landscape through the scenic integrity levels (**Chapter 3, pages 9; 67**).

I also find that Alternative E-modified's specific definitions of human-caused impacts and direction to consider acceptable levels of these alterations during project management will help mitigate and reduce foreground impacts to desired landscape character. These objectives, standards, and guidelines are designed to promote highly valued landscapes for today's user and future generations by preserving, restoring, and improving the scenic and ecological integrity of the HCNRA. The other alternatives lack this specificity (**Appendix C, pages 200-201; Chapter 3, page 53**). I believe the new SMS in combination with specific direction provided by my decision is an excellent approach for managing the scenic resources to achieve the *HCNRA Act* Section 7(2) objective of conserving aesthetic values while at the same time contributing to the public benefit as described in the need for change in **Chapter 1** of the FEIS (**page 7**).

Access and Facilities

I selected Alternative E-modified because it places priority on reducing or reconstructing existing roads, trails, backcountry airstrips, and facilities based on user input and recreational demands. Although some new facilities are planned for construction, it is a departure from the construction schedule specified under the current management direction. Much of the current direction proposes improvement and upgrades of roads to provide new developed facilities in settings that are currently remote, dispersed, or not needed. Surveys of the public's interest in the HCNRA as discussed in **Chapter 1 (page 5)** of the FEIS for the development of the proposed action indicate this is not what the majority of the public wants. Most people did not want to see big changes in the existing situation. They expressed values for keeping it the way it is, in a rustic and primitive setting. The public expressed preferences for the unspoiled natural beauty, undeveloped opportunities, backcountry trails, solitude, and less motorized recreation. They also stated preference for the existing mix of roads, facilities, and management activities including logging and grazing (Eiselein 1994, Brick et al 1995, Zaglauer and Watson 1995). Public comment during scoping and on the RDEIS continued to support the need to maintain the rustic backcountry settings of the HCNRA. Alternative E-modified provides for maintaining many of these experiences while allowing for some reconstruction and improvements to maintain adequate and safe roads and facilities where deteriorating conditions exist.

Roads

The appropriate level of roaded access for the HCNRA is one of the most controversial issues based on the wide degree of public comments. Several commentors listed specific roads they wanted either open year-round or closed year-round. Concerns were expressed by various commentors about off-road vehicle uses and the various potential environmental effects associated with these uses and the detraction from the nonmotorized experience. All of the alternatives offered varying levels of resolution. In considering the level of access to provide in the HCNRA, I directed the Interdisciplinary Team to conduct a road analysis of Maintenance Level 3-5 roads to meet the new roads policy (FSM 7710) and to review the current restrictions from the *Forest Plan*, the *WWNF Travel Management Plan*, and the *Public LURs*. I directed the Interdisciplinary Team to provide a more detailed analysis of these potential effects to resource objectives from Section 7 of the *HCNRA Act*.

Based on my review of the road analysis (reference the analysis file) and the environmental consequences (**Chapter 3, page 31**), I have concluded that most of the HCNRA already has some form of travel restriction on routes or areas for seasonal or year-round uses. A minor amount of the HCNRA is available for authorized motorized uses under the current management direction including the *Forest Plan* travel restrictions. In general, the areas without restrictions on motorized use correspond to MA 10 (Forage Emphasis) and MA 11 (Dispersed Recreation/Timber Management) from the Upper Imnaha River to Dug Bar, near Memaloose and Hat Point, and in the McGraw Lookout area (see **Figures 1 and 2**). Activities in the HCNRA primarily associated with motorized use include sightseeing from open roads, access on motorized trails, camping at developed sites, access to dispersed campsites from designated open roads, and fuelwood cutting. Off-road travel as a recreational pursuit currently occurs at low levels in the HCNRA and is generally along established "spur tracks" from main roads that have developed over years of repeated use to dispersed campsites or during the fall hunting season. Other uses may occur by permit on a case-by-case basis and are limited in scope.

My decision provides road management objectives, standards, and guidelines for levels of road access, construction, reconstruction, and maintenance for roads in each Recreation Analysis Area. In establishing this management direction, I directed the Interdisciplinary Team to mesh road management objectives, maintenance levels, and traffic service levels with the ROS settings. This integration provides meet a variety of recreation

settings and opportunities with the objective of maintaining the rustic and primitive nature of the HCNRA while meeting the objectives of Section 7 of the *HCNRA Act*.

I decided to limit motorized access (including all-terrain vehicles) to designated roads only or as authorized by permit. These limitations will protect biologically unique species, habitats, and ecosystems; prehistoric and historic resources; meet the riparian management objectives for PACFISH, protect wildlife habitat; and minimize the introduction of noxious weeds along disturbed areas from vehicle access to meet the resource objectives from Section 7(1-6) of the *HCNRA Act* (**Chapter 3, pages 205-212; 213-222; 259-308; 343-372; 373-424**). My decision also meets the requirements of the *Public LURs* to specify designated routes (**Chapter 1, pages 8; 36; CFR 292.44**). Use associated with all-terrain vehicles is currently minor in the HCNRA compared to other areas of the WWNF and the surrounding region. Restricting use to designated routes will have minimal effect on current users while restricting future growth in this activity to ensure recreation use that is compatible with the resource objectives from Section 7 of the *HCNRA Act*. I am aware that some changes will need to occur in the management of dispersed camping and fuelwood cutting to achieve this objective, and I further discuss my decision in relation to those activities below.

My decision establishes maintenance standards and guidelines for designated open roads to assure that they retain their existing surface, alignment, and prisms or meet specifications for each Recreation Analysis Area. I have allowed for minor amounts of new road construction to meet objectives for relocating developed recreation facilities that may be causing resource damage. The closed segments will be rehabilitated and closed. Some existing roads or temporary roads may be used for timber harvesting activities based on site-specific analysis in the future to meet objectives for achieving HRV in forested stands. These temporary roads will be closed to the public following related activities. Roads not needed for future management will be restricted, closed, or decommissioned to motorized access to reduce sedimentation or erosion. Some of the road closures will provide select opportunities for nonmotorized trail access in the future (**Chapter 3, page 90**).

Most of the subwatersheds in the HCNRA (51 out of 61) currently have an open-road density at or below 1.5 mi./sq. mi. and provide low to moderate impacts (**Chapter 3, page 392**) on wildlife sensitive to human disturbance, based on scientific findings for the Interior Columbia River Basin. Greater than 70 percent of broad-scale terrestrial species are negatively impacted by factors associated with roads (snag and down log reduction from firewood cutting, habitat loss, fragmentation, negative edge effects, over hunting and trapping, poaching, harassment, collisions, barriers to movement, displacement or avoidance, and chronic negative interactions with humans) (**Chapter 3, page 391**).

To reduce impacts to wildlife and to meet the intent of Section 7(4) of the *HCNRA Act*, my decision establishes new open-road densities (<1.35 mi./sq. mi. in 60 out of 61 subwatersheds; 1.9 mi./sq. mi. in one subwatershed). One subwatershed (9L) will be managed at a slightly higher level (1.9 mi./sq. mi.) because the roads in this subwatershed consist of main access routes to the Upper Imnaha Recreation Analysis Area. As a result, approximately one-third of the existing open roads will be closed through separate site-specific road analyses mostly in the southern portion of the HCNRA (McGraw, Upper Imnaha and North Pine Recreation Analysis Areas) where past timber harvesting has created a network of old logging roads that have not been closed. Although the overall level of motorized access in the HCNRA will be reduced through implementation of these density standards, the majority (51) of the subwatersheds already have open-road densities (1.5 mi./sq. mi.) close to these levels. All main access routes to popular areas will remain open, and access to developed sites will be maintained. All motorized trails will remain open year-round except for Lord Flat Trail as described below. I am directing the Area Ranger to conduct a separate site-specific analysis of road closures in this area and other subwatersheds. This analysis will solicit public input to mitigate impacts to recreation uses while protecting riparian habitat, heritage sites, and biologically unique resources, and preventing the spread of noxious weeds. Converting roads in these subwatersheds to nonmotorized trails or decommissioning them will be considered at that time based on the overall amended management direction provided by my decision.

As part of the road analysis, I also directed the Interdisciplinary Team to re-examine the effects of open roads on plateau habitat and associated wildlife species based on the public comments on this topic. My staff met several times with members of the Nez Perce Tribe and Oregon Department of Fish and Wildlife to adequately understand and examine these effects. Several roads were specified by name by various commentors for closure. These roads were included in the road analysis, however, there was lack of about the site-specific effects to users, the benefit from closing these roads, detailed information about where, when and how these particular roads might be closed, and appropriate disposition of the road following closure. I directed the Interdisciplinary Team to consider only five roads from the road analysis for site-specific decisions under each of

the alternatives in the FEIS, and to address the other roads listed by commentors in the context of the programmatic decision for road management objectives and ROS settings by Recreation Analysis Area.

Based on my review of the environmental consequences in **Chapter 3** including a literature review of road effects to wildlife habitat (**Chapter 3, pages 416-419**), I decided to apply seasonal restrictions (3 days before the start of archery season) on motorized vehicles on Teepee Butte Road, Wildhorse Road, Lord Flat Trail and lengthen the closure period on PO Saddle Road to mitigate effects to key plateau habitat areas and to minimize disturbance to wildlife (see **Figure 5** for a map of these roads). Although Alternatives A, B, and W proposed maintaining the existing seasonal restrictions that already occur during rifle hunting season, I am compelled by the *HCNRA Act* to tighten the restrictions on recreation opportunities to maintain and protect fish and wildlife habitat as described in Section 7(4). The roads to Teepee Butte, Wildhorse, and Lord Flat areas are generally accessible six months a year (June through November) depending on the snow levels and PO Saddle is limited to four months (June through September). Because the heaviest use period and potential impacts occurs in the archery and rifle hunting season as described in **Chapter 3** Recreation Settings, Experiences, and Opportunities **page 34**; Access and Facilities **pages 91-92**; and Wildlife Habitat (**pages 383-384; 388**), implementing a seasonal closure before archery season will provide the most benefit to plateau habitat by reducing the opportunity to disturb and displace wildlife, and reducing impacts to associated species (**Chapter 3, pages 416-418**).

Some commentors expressed a desire to close these roads year-round as specified in Alternative N to provide a nonmotorized and rugged recreation experience. Closing these five roads year-round will provide marginal improvement in habitat protection because the impact occurs during hunting season and will not meet the intent of the *HCNRA Act* to provide for public outdoor recreation opportunities where compatible with objectives of Section 7. Additional closures to motorized uses in these areas during the summer months are not warranted based on my review of the recreation use and the potential wildlife impacts. The impacts to recreation use from these seasonal closures will include displacement to other dispersed areas in the HCNRA or adjacent districts (Wallowa Valley Ranger District and Pine Office of the Whitman Unit) during this period causing an increase in social encounters. Although social encounters are generally higher during hunting season and part of the experience, some hunters may leave the area altogether due to an increase in social encounters and potential crowding (**Chapter 3, pages 48; 52; 60; 62**).

I decided to continue the seasonal restriction of motorized vehicles consistent with Alternatives A, B, and W and to add a restriction prohibiting the use of mechanical equipment on the Kirkwood Road (Forest Road 2062-132) from April 1 to June 30 to protect threatened fisheries during the spawning season for steelhead trout. This closure will provide additional benefits to wildlife and other resources although my primary consideration in maintaining this closure is pursuant to existing terms and conditions under the *ESA* (**Chapter 3, pages 352; 360**). Part of my decision for road management objectives and maintenance levels in the Kirkwood Recreation Analysis Area allows consideration of future site-specific proposals to provide motorized and mechanical access to Kirkwood Historic Ranch for recreationist during this period on the lower 1,000 feet of the road if they protect and mitigate fisheries concerns. This is not a consideration under Alternatives A, B, and W. My decision provides an opportunity to balance recreation use during the popular time of year in the spring if potential effects to riparian and fisheries resources within the lower portions of Kirkwood Road are mitigated. I considered the year-round closure of Kirkwood Road proposed by Alternative N but do not find that existing use is incompatible with protection and recovery of the native ecosystem because the critical spawning period is already protected. Alternative N provides direction similar to my decision to meet the intent of the *ESA*, and the year-round closure forecloses existing recreation use which is inconsistent with the intent of the *HCNRA Act* to allow compatible uses.

I decided to designate dispersed campsites and areas and to implement the Special Fuelwood Areas option available under the current Fuelwood Program because I am concerned about potential impacts described in **Chapter 3** from these motorized uses to rare and endemic plants, heritage resources, fish and wildlife habitat (**pages 269-286; 219-221; Appendix E; 356-372; 388-424**) as specified in Sections 7(3-5) of the *HCNRA Act*. I also am extremely aware of the consequences of the spread of noxious weeds or other nonnative invasive species in Hells Canyon (**Chapter 1, page 10; Chapter 3, page 205**). My decision to designate areas for these activities in combination with my decision on the level of access, provides protection for the resources specified in Section 7 of the *HCNRA Act*, avoids the impacts to these resources from future increases in the popularity of all-terrain vehicles, and reduces the spread of noxious weeds now and in the future.

My intent is to continue access to and use of dispersed campsites while minimizing the potential impact from off-road driving to resources specified in Section 7 of the *HCNRA Act*. The overall change to this activity will occur in

terms of posting sites as open with signs, and designating access to these sites with signs on designated roads. Trails or tracks that 'spur' off designated roads and provide access to known dispersed sites will be designated and signed as part of the transportation system following the appropriate level of surveys and inventories to ensure resources specified under Section 7 of the *HCNRA Act* are adequately protected from any impacts from access or dispersed camping. In some cases, sites may need to be closed to meet this objective which may reduce the availability of dispersed camping. While I expect these occurrences to be limited, relocation of the sites or other mitigation measures will be pursued where possible to continue to provide these opportunities in the HCNRA (**Chapter 3, page 93**).

Dispersed camping at known sites with motorized vehicles may also be reduced slightly (-9%) as a result of closing some roads to meet new open-road densities. My decision provides a slightly higher impact on dispersed camping than Alternatives A (0%), B (-5%), and W (-2%). Because the year-round road closures will occur on a site-specific basis with public input about the use and location of dispersed sites, I believe my decision provides enough flexibility to mitigate this impact to dispersed recreationists while providing protection of resources specified in Section 7 of the *HCNRA Act*. Alternative N provides the greatest impact to dispersed camping (-32%) due to the highest amount of road closures. I find that closing one-third of the existing sites is inconsistent with maintaining compatible recreation use. My decision balances the level of access to address areas where incompatible uses may be occurring and provides the best approach to maintaining the majority of the sites.

I also am aware that my decision will temporarily reduce access to dispersed campsites with motorized vehicles at a higher rate (-22%) during the fall seasonal road closures to Teepee Butte, Wildhorse, and Lord Flat (**Chapter 3, page 93**). Based on our experience with seasonal closures in the HCNRA, some users will likely convert to nonmotorized use and continue to access the area or seek out other dispersed sites accessible by motorized vehicle rather than forego their hunting trip altogether (**Chapter 3, page 40**). To balance the public's desire to hunt in these popular areas and to manage visitor use during the seasonal closure period, my decision allows for some facilities to be improved or developed as necessary. For example, Warnock Corral Trailhead at the head of the Lord Flat Trail may need to be upgraded to facilitate the seasonal road closure and to mitigate potential impacts from hunters seeking other places to camp. Overall, my decision will retain most of the traditional dispersed campsites if they are compatible with protection of heritage resources, biologically unique resources, and fish and wildlife habitat as specified by Section 7 of the *HCNRA Act*. Although some sites may no longer be accessible due to future road closures or to meet resource objectives, I expect that relocation of sites, reduction in size of sites, or designation of alternate sites will provide opportunities to mitigate this effect to achieve no net change in the amount of dispersed camping as much as possible. All sites in these areas will continue to be available to nonmotorized access.

My decision does not change the overall fuelwood opportunities, although the level of access and the location of areas will change. Rather than a general permit allowing use in MAs 10 and 11, users will be directed to Special Fuelwood Areas designated in MAs 10 and 11 as specified in the *WWNF Fuelwood Program*. Because this option is currently available under existing management direction and all alternatives, but has not been used on the HCNRA, this may improve people's ability to obtain fuelwood in the long-term by aiding users to cut and retrieve fuelwood (**Chapter 3, page 93**). Access within these sites with motorized and mechanical equipment will be considered on a site-specific basis prior to allowing fuelwood cutting to protect heritage resources, biologically unique resources, and fish and wildlife habitat consistent with my decision to limit access to designated routes and areas to meet the objectives of Section 7 of the *HCNRA Act*.

Based on the effects described above and disclosed in **Chapter 3**, I believe that my decisions for managing roads reduces the level of road development proposed in the existing CMP in balance with public's desire for maintaining nonmotorized experiences. My decision still provides semi-primitive motorized experiences in some places to balance both types of uses. Alternative E-modified provides the needed change in direction to ensure that resource objectives from Section 7 and the *Public LURs* are met and that the primitive roads of the HCNRA stay somewhat difficult to access as described in the need for change (**Chapter 1, page 8**). Since Alternative A does not provide this direction, it does not meet the need for change. Although Alternatives B and W provide direction for protecting ecological functions and process, heritage resources, and encourage low-impact practices, they continue the practice of off-road driving up to 300 feet from open roads. These alternatives do not provide specific limitations or control of motorized uses to sufficiently prevent the spread of noxious weeds from motorized vehicles. While Alternative N reduces access the most by closing key access roads to entire areas, I believe the amount (-64%) is beyond the level necessary based on my review of the impacts to wildlife, riparian/aquatic, biologically unique species, habitats, and ecosystems; soil, noxious weeds, and heritage resources as previously described. Because the impacts are primarily associated with off-road driving to dispersed campsites and

recreation uses during the fall hunting season, I believe that my decisions to limit use to designated routes, sites, or areas, and the seasonal closures I've decided to implement will avoid these impacts. My decision will allow continued recreation use in the HCNRA consistent with the intent of the *HCNRA Act*.

The net effect of my decisions to road access is that the HCNRA will essentially be closed to motorized use unless designated open for specific uses in specified locations or authorized specifically by permit. Although some changes in recreation use associated with open roads, dispersed camping, and fuelwood cutting is expected, I believe that the level of ROS settings and the subsequent level of motorized and nonmotorized access fits the public's desire to maintain the rustic and primitive nature of the HCNRA. The majority of the HCNRA will continue to provide many opportunities for users seeking a nonmotorized experience while allowing the continuation of motorized uses compatible with Section 7 of the *HCNRA Act*.

The net effect of my decisions to resource objectives from Section 7(1-6) of the *HCNRA Act* is a reduction in impacts to biologically unique resources, fish and wildlife habitat, and archeological sites. My decision adjusts some incompatible uses and provides direction to evaluate other uses on a site-specific basis through implementation of access and facilities management objectives and standards, and indirect and direct visitor management strategies. These will be implemented over time to evaluate and manage incompatible recreational uses in the HCNRA (**Appendix C, Tables C-3a and C-3b, pages 158-192; C-4, pages 200-201; C-5a and C-5b, pages 202-205**). The overall change from the current situation will provide adequate resource protection, provide a more enforceable management situation, prevent the spread of noxious weeds from motorized uses, and protect HCNRA values from future increases in use. My decision resolves the significant issue of the appropriate level of access that is compatible with Section 7(1-6) of the *HCNRA Act*.

Hells Canyon Scenic Byway

I will maintain the Hells Canyon Scenic Byway designation for Forest Road 3955 as part of the National Forest Scenic Byway System because this is consistent with the existing management plan (USDA 1993) for protecting the outstandingly remarkable value of "traditional value/lifestyle adaptation" for the Imnaha Wild and Scenic River. Alternatives A, E-modified and W would maintain this designation, and potentially increase conflicts between residents and visitors. Alternatives B and N would remove this designation and provide greater levels of protection and enhancement by reducing the emphasis and levels of recreation use which would lead to fewer conflicts, real and perceived, between residents and visitors (**Chapter 3, page 257**). Despite the potential increase or decrease in these conflicts, all alternatives provide protection for this outstandingly remarkable value. Therefore, my primary consideration in making this decision was to be consistent with the interests of the residents of Imnaha as described in the need for change (**Chapter 1, page 8**). Between the RDEIS and the FEIS, they expressed a desire to retain the Hells Canyon Scenic Byway designation to enhance their opportunities for necessary reconstruction of sections of County Road 727 that are hazardous to residents and visitors traveling on the road.

Trails

I will continue to manage the trail system according to the *HCNRA Trail Management Plan* (USDA 1994). My decision will also provide opportunities for about two miles of new trail construction to provide loop and scenic viewing opportunities in Hells Canyon. I decided to continue to allow consideration of minor reconstruction of the trail from Brush Creek to Granite Creek to provide hiker access to the Wild section of the Snake River. These opportunities will require site-specific analysis prior to implementation. Although Alternatives B and N do not provide for these opportunities, I find that there is sufficient need to accommodate current use in these areas as outlined in Alternatives E-modified and W. Because the level of opportunities is reduced from the level proposed in Alternative A and requires site-specific analysis prior to implementation, I believe these trail developments or upgrades meet the purpose and need for change and meet public opinion regarding reductions in the level of planned development (**Chapter 1, page 8**).

Backcountry Airstrips

My decision will maintain access to Memaloose and Lord Flat backcountry airstrips for private, commercial, and administrative use because they are the only places authorized to land aircraft in the HCNRA besides the Snake River corridor. These airstrips generally receive low use, and one special use permit currently provides service to this area. None of the airstrips are regularly maintained.

I believe maintaining access to these airstrips but limiting the type of aircraft (fixed wing and rotary) allowed to land, requiring self-issue permits for all landings, and excluding regularly scheduled commercial landings will manage future use of these airstrips. These restrictions will prevent noise and disturbance associated with scenic tours that will diminish the remoteness and sense of solitude in the HCNRA (**Chapter 3, page 101**). All other alternatives also proposed maintaining access to these airstrips. My decision provides the needed change in direction to manage increasing use at backcountry airstrips as described in the need for change (**Chapter 1, page 8**).

Alternative W would open Temperance Creek and Sluice Creek airstrips in the Snake River corridor to private, commercial, and administrative use, and Cache Creek airstrip to commercial use in addition to private and administrative use. The decision to open or close Snake River corridor airstrips was previously considered in the FEIS and ROD (USDA 1994) for the *Wild and Scenic Snake River Recreation Management Plan*. This need was not described as part of the need for change (**Chapter 1, page 8**). I did not identify any environmental consequences in the FEIS that led me to believe there is a need to reconsider this previous decision. The Temperance Creek airstrip will continue to be managed through the existing special use permit for this facility.

Over-snow Vehicle Travel

My decision designates over-snow vehicle travel routes and play areas on a minor portion of the HCNRA (less than 6%). The designated over-snow play areas (**Figure 7**) contain very little big game winter habitat and therefore, have little or no effect on big game. Because snowmobile use is restricted to designated routes and snow play areas I expect the impact to medium-sized and small animals over the entire HCNRA to be low. Although snowmobiles may affect small animals using the air space between snow and the ground surface through compaction of the snow, I expect the minimum snow depths required by my decision for routes (12") and play areas (24") to reduce this impact to subnivean (under the snow) animals over the entire HCNRA (**Chapter 3, pages 393-394**).

Each of the alternatives, except Alternative N, allow for the same amount of snowmobile use in designated routes and snow play areas. Because snowmobile use is restricted to less than six percent of the entire HCNRA, the overall impact to wildlife for all alternatives, except N, is expected to be low. Although the impact from Alternative N would be the lowest (less than 1% of the HCNRA), I believe that the standards and guidelines for the appropriate level of snow depth critical are adequate to protect resource objectives from Section 7 of the *HCNRA Act* and to manage growing recreation use in the next decade to ensure maintenance of recreational experiences (**Chapter 3, page 104**). My decision provides the needed changes in direction to identify and manage designated play areas and increasing use while mitigating disturbance to wildlife as described in the need for change (**Chapter 1, page 8**).

Facilities

The level and type of facility development and maintenance for Wilderness and nonwilderness was a common concern with many publics during scoping and the RDEIS comment period. The management direction in the existing CMP and the *Forest Plan* (**Tables C-3a and C-3b, pages 158-199 for Alternative A**) emphasizes construction of a number of new developed sites in the HCNRA including campgrounds in the Upper Imnaha River area, Dug Bar, near Hat Point and Low Saddle, and the Seven Devils. These improvements along with substantial road and trail improvements to compliment the site development were expected to increase developed capacity in the HCNRA in the first decade (since 1990). They were intended to address the backlog of deteriorating facilities and improve distribution of sites across the WWNF. Most of these improvements have not yet occurred due to declining budgets and other Region 6 emphasis areas such as deferred maintenance needs and improved accessibility.

Based on public comments on the RDEIS, and concerns with long-term budget projections, I selected Alternative E-modified because it emphasizes the maintenance or enhancement of the rustic and primitive character of the HCNRA. This will lead to managing recreation settings (including facilities) towards the less developed end of each setting compared to Alternative A. Although some additional rustic interpretative and day-use facilities will be replaced or constructed, the overall emphasis of my decision is to maintain newer and structurally adequate facilities and replace or reconstruct deteriorating facilities. Alternatives B, E-modified, and W would manage fewer facilities with lower development levels compared to Alternative A. Alternative N would provide for custodial maintenance of facilities and prevent overcrowding by not expanding any facilities. Several developed sites

would be decommissioned as road closures are implemented and reduce access for physically-challenged users (**Chapter 3, pages 115-116**).

As stated previously, I directed the Interdisciplinary Team to adjust the ROS settings for each Recreation Analysis Area to ensure that road management objectives, social encounters and facility development and maintenance are commensurate with each other. I believe that Alternative E-modified ROS settings best provide facility objectives that either maintain campgrounds and facilities for their existing character or replace aging structures with new, low-maintenance and rustic facilities to meet the objectives of the *HCNRA Act* (**Chapter 3, page 115**). In making this decision, I considered the uniqueness of each site, the management and recreational objectives of the sites within the HCNRA, and the appropriate maintenance standard to achieve the desired ROS setting. Although self-reliance and independence at sites will be emphasized, some sites will also provide comfort, convenience, and accessibility consistent with their ROS setting. My decision also prioritizes facilities for resource protection during fire suppression to enable efficient use of firefighting resources. These sites will be managed in accordance with *Forest Plan* MA 16 direction and the ROS settings established in Alternative E-modified.

I believe that my decision for the ROS settings and the management direction for development and maintenance of facilities achieve the needed change that provides for the appropriate level of facility development, meets user expectations, and ensures compatibility with desired ROS settings as stated in the need for change (**Chapter 1, page 9**).

Forested Vegetation, Grasslands, and Forest Understory

Desired Vegetative Conditions

My decision for desired vegetation conditions replaces the existing CMP management direction and supplements *Forest Plan* management direction, as amended. Alternative E-modified will provide for a management goal of promoting forested vegetation within HRV for structural stages. It will also promote grassland vegetation to achieve the PNC, recognizing the HRV as a reference condition for seral stages. HRV is defined as the natural fluctuation of ecological and physical processes and functions that will have occurred in an ecosystem during a specified previous period. In the context of the HCNRA, HRV refers to the range of conditions that are likely to have occurred before the settlement of northeastern Oregon by Euro-Americans (approximately 1850). HRV incorporates the range of spatial, structural, compositional, and temporal characteristics of ecosystem elements during this period to represent 'natural' conditions.

My decision provides for sustainability of ecological function and processes of forested vegetation, grasslands, and forest understory in the context of HRV and manages the desired vegetation conditions to maintain the HCNRA as a healthy ecosystem that functions within the larger HRV of the Interior Columbia Basin (Quigley and Arbelbide 1997). The concept of promoting HRV as a management goal leads to the sustainability and conservation of plant and animal species, and ecosystem processes by ensuring the abundance, distribution, and interrelationships of all structural and seral stages (**Chapter 3, page 127**).

HRV as a management goal for forested structural stages further embodies the Eastside Screens. In that decision by the Regional Forester, direction was given to the national forests east of the Cascades to screen vegetation management proposals so that treatments are eliminated if they move stands away from late and old structural conditions, where that structure is lacking. My decision builds on the Eastside Screens by promoting HRV as the long-term desired condition for forested vegetation in the HCNRA and to return, as much as possible, to natural disturbance regimes by restoring forest ecosystems to the HRV (**Chapter 3, page 128**).

Managing grassland communities to achieve their PNC as the goal while recognizing HRV will lead to desired ecological conditions, over several decades, while recognizing that some sites may be so altered that achieving the PNC is not possible without active restoration. HRV will provide a reference condition rather than a goal, since some sites may already be permanently altered due to the long-term effects of homesteading and historic grazing on the benches (plowed and farmed), and some of the flatter bottomlands and ridges where livestock were concentrated. In some places, soil layers and structure have been permanently altered, with significant loss of top soil. These areas no longer have the potential to be improved to a satisfactory condition under a natural recovery process (Johnson et al 1994) and will require active restoration methods (**Chapter 3, page 78**) as described by my decision on vegetative practices below.

In selecting these goals to define the desired vegetation conditions in the HCNRA, I find that existing management direction (Alternative A) lacks distinction for both forested stands and grassland communities within a landscape context. It does not address the recognized importance of maintaining a relatively natural mosaic of vegetative seral stages across the land and has no provisions for striving toward HRV for grasslands (**Chapter 3, page 157**). Although Alternatives B and W would provide a more landscape-oriented approach for vegetation by managing for the goal of HRV for both forested stands and grasslands, I believe specifying PNC as the goal for grasslands within the context of HRV is more appropriate. This approach acknowledges that some sites have been altered to a very-early seral status where native species are missing or in such low presence that they cannot out-compete the invasive vegetation (**Chapter 3, page 158**). This means that management will be designed to move landscapes toward defined ranges of seral stages or to maintain landscapes at a mix of given seral stages in order to meet HRV objectives. My decision also provides the best possible management for the grasslands because it approximates naturally occurring conditions before Euro-American settlement to the extent possible.

It is likely that in the HCNRA, long-term management would actually result in early seral stages being at the lower ends of their HRV ranges in order to meet other objectives. These objectives include prevention of noxious weeds and other invasive species, protection of biologically unique species and habitats, and restoration of native ecosystems that have been damaged by past activities. Alternative N would not specifically address HRV and gives no specifics in terms of seral stage ranges, so presumably what occurs on the landscape because of natural effects defines the goal (**Chapter 3, page 158**). Although the result may be similar to my decision in terms of providing a mosaic of seral stages, I believe that the sustainability of ecological function and processes will be best attained by maintaining and restoring vegetation within the context of HRV for seral stages (grasslands) and structural stages (forest vegetation). My decision provides direction that native vegetation will be present in stages of succession and in proportions of such stages as are necessary to sustain long-term native vegetation composition and processes.

Implementation of Alternative E-modified will allow management activities to occur with the objective of moving forested stands and grasslands towards or achieving HRV over multiple decades. Further, HRV is an adaptive and dynamic management philosophy that meets the need for change in direction to define desired vegetative conditions on a landscape basis for both Wilderness and nonwilderness portions of the HCNRA. This approach adequately defines the standards and guidelines necessary to ensure the programmatic compatibility of vegetative management activities with Section 7 of the *HCNRA Act* as identified in the need for change (**Chapter 1, page 9**).

Vegetative Practices (Forested and Grassland)

In conjunction with utilizing HRV as a goal for forested structural stages, my decision modifies management direction to provide specific standards and guidelines for permissible restoration activities and silvicultural treatments within all MAs. WFU will be the primary method for achieving forest and grassland desired vegetation conditions and allows fire to play its natural role as nearly as possible in MA 4 (Wilderness). WFU provides a method for emulating the historic function of fire in MAs 8, 9, and 12 (Wild and Scenic Snake River, Dispersed Recreation/Native Vegetation, and RNAs). PF will be allowed in these areas, including Wilderness, to maintain, restore, and sustain healthy forests and grasslands. My decision will expand the use of WFU outside of Wilderness to mimic historic fire patterns and intensities where compatible with Section 7 of the *HCNRA Act* and to protect human life and property. Timber harvesting is not allowed in these areas.

My decision does, however, provide for the use of forested vegetation treatments through silvicultural methods and PF to replicate the naturally-occurring processes which have shaped the character of the landscape in MAs 7, 10, and 11 (Wild and Scenic Imnaha and Rapid Rivers, Forage Emphasis, and Dispersed Recreation/Timber Management). Silvicultural treatments will be restricted to uneven-age management, PF, WFU, precommercial thinning, commercial thinning, salvage and sanitation harvesting. Specific definitions for these methods have been refined for Alternative E-modified to reflect the emphasis and intent of achieving HRV seral/structural stages and restoring healthy and resilient ecosystems rather than emphasizing a commercial product. These management activities will be the tools used to achieve the management goals for forested vegetation. All of the other standards and guidelines provided by my decision (**Appendix C, Table C-1, pages 1-249**) will need to be met to ensure these activities are compatible with the resource objectives from Section 7 of the *HCNRA Act*.

Additionally, my decision to manage forested vegetation with a goal of achieving HRV modifies the standards and guidelines for MA 10 by providing for all structural classes within this MA as part of the entire HCNRA rather than

managing all of MA 10 as one structure (old growth). Existing late and old structure for the HCNRA occurs on approximately 68,700 acres of forested plant associations (**Appendix C, Tables C-14a through C20c, pages 237-243**) or about 25 percent of the total forested acres in the HCNRA. The intent of my decision is to manage for old-growth habitat as part of the vegetative management structure within HRV levels for all structural stages, including late/old structures. As a result, HRV levels of functional old-growth habitat will also be achieved. Although functional old-growth habitat is closely correlated with late/old structure in most cases, I recognize there are exceptions to this when late/old structure is at very low density, canopy layering is absent, and other components of dead and down material are insufficient to meet the definition of functioning old growth. These conditions also existed before Euro-American settlement and are part of the context for HRV established by my decision (**Chapter 3, page 124**). Managing MA 10 for old growth as a static habitat on the landscape is not sustainable over time given the role that fire has historically played in the HCNRA.

With the selection of PNC as a management goal for grasslands, I am emphasizing the restoration of sites to maintain or restore ecosystem function, conserve soil, and enhance native plant species and communities to achieve HRV where possible. This approach will ensure continued ecological function and sustainability of native grasslands in the HCNRA. I am directing the Area Ranger for the HCNRA to incorporate the effects of fire, grazing, recreational impacts, and natural disturbances in project planning and implementation to achieve the ecological status in relation to the PNC primarily through the allotment management planning process.

In selecting Alternative E-modified, I carefully reviewed the potential forested vegetation treatment opportunities by alternative (**Appendix C, Tables C-14a through C20c, pages 237-243**), and the environmental consequences disclosed in **Chapter 3 (pages 135-144)**. These potential opportunities provide the basis for the analysis to determine potential environmental consequences of the proposed management direction. They also provide a basis for implementing the programmatic guidance in this plan to achieve the goals of the plan and to meet the intent of the *HCNRA Act*.

I find that the proposed treatments in Alternatives A, E-modified, and W would provide the greatest degree of ecosystem sustainability within the HCNRA and within the Interior Columbia Basin, as noted in *An Assessment of Ecosystem Components in the Interior Columbia Basin* (Quigley and Arbelbide 1997) (**Chapter 3, page 144**). Alternative B would result in less than half the amount of treatment extended by my decision. Alternative N has a similar amount of total cumulative treatment acres affecting tree density, but entirely from prescribed fire. Limiting treatments to prescribed fire does not preserve large-diameter seral species at beneficial densities as well as my decision because a blend of forested vegetation treatments, PF and WFU will reduce risks of large-stand replacing fires that would consume large-diameter species (**Chapter 3, page 143**).

I believe the level of activities estimated for Alternative E-modified will best facilitate moving vegetation toward the forested and grassland goals within the context of HRV and natural disturbances. These activities do not constitute a decision to conduct the site-specific activity, and will be subject to future site-specific analysis. My decision retains the direction that timber removed from the HCNRA is not part of the regulated category for calculating the WWNF allowable sale quantity pursuant to the *Public LURs*. All timber harvest activities resulting from the amended direction will be allowed only to protect and enhance ecosystem health, wildlife habitat, or recreational and scenic uses; to reduce the risk of harm posed by hazard trees; or to respond to natural events such as wildfire, flood, earthquake, volcanic eruption, high winds, and disease or insect infestation as specified in the *Public LURs* (36 CFR 292.46).

The combination of my decision for desired vegetative conditions, vegetative practices that will be allowed, and standards and guidelines for these activities meets the need to change direction to determine appropriate vegetative treatment standards and potential vegetative management activities. As described in the need for change (**Chapter 1, page 9**), my decision prevents potential damage to ecosystem functions and to fish and wildlife habitat from natural disturbances such as fire and/or insect and disease infestations outside the HRV. My decision also provides the needed change in standards and guidelines that ensure compatibility of timber harvest activities with the *HCNRA Act* and the *Public LURs* and modifies standards and guidelines for forested vegetation in MA 10 to recognize ecosystem dynamics and sustainability based on HRV for all structural classes. My decision will ensure the continued viability and genetic integrity of all native plant species in the HCNRA (**Chapter 3, page 152**), maintain and enhance biological diversity (**Chapter 3, pages 398-402**), and sustain long-term site productivity (**Chapter 3, page 144**). Therefore, it provides the best approach to resolving the significant issue related to forested and grassland vegetation.

Vacant Allotments Disposition and Satisfactory Range Conditions

Satisfactory Range and Grassland Vegetative Conditions

Alternative E-modified establishes a satisfactory condition definition of 'mid-seral ecological status with an upward trend as the minimum standards for available forage where domestic grazing may be authorized, pursuant to the *Public LURs* (36 CFR 292.48). In considering these standards for implementation, I carefully reviewed the environmental consequences in **Chapter 3 (pages 163-184)** of the FEIS. The analysis demonstrates that the management direction in Alternative E-modified for satisfactory conditions in conjunction with the goal to achieve PNC for grasslands will lead to an improvement toward desired rangeland vegetation, soils, and riparian habitat over the next decade. Because existing direction (Alternative A) is expressed in terms of range forage condition to meet a 'good' condition which has not been clearly defined and has different interpretations, it does not provide the clarification needed pursuant to the *Public LURs*. Alternatives A, B, and W would continue to provide direction based on range forage condition which evaluates health through analysis of primarily forage conditions. This analysis measures the browse and herbaceous material available to grazing animals and employs a slightly different rating scale than ecological status which measures vegetative and soil health relative to the PNC of the site. Alternative N would be similar to Alternative E-modified in terms of meeting objectives for satisfactory range forage condition, but it does not specifically establish a definition for satisfactory condition as required by the *Public LURs*.

I believe because Alternative E-modified defines satisfactory condition with specific standards in terms of ecological status of overall rangeland vegetation this provides a more relevant approach to achieving PNC. It reconciles the definition of satisfactory conditions with the concept of HRV as part of my decision for overall desired vegetative conditions and considers other ecological factors such as soils and riparian vegetation in the same context. My decision does not mean that all sites will meet the satisfactory condition defined as mid-seral status with an upward trend or better because no lower seral stages would be present and HRV would not be attained. This condition is neither naturally occurring nor desirable (Hobbs and Huenneke 1992, Miller et al 1994). Most species, both plant and animal, occurring in the grasslands evolved with disturbance regimes (**Chapter 3, page 179**). Some sites, due to past disturbances, have altered site potentials and will likely remain in earlier seral stages or a disclimax (a climax community that has been disturbed by various influences, especially by humans and domestic animals, such as a grassland community that has been altered by overgrazing). In addition, many noncapable or unsuitable range sites will continue to be affected by other disturbances and would be more representative of HRV.

Grazing capacity for allotments will be based only on capable and suitable rangelands in satisfactory conditions. For grasslands in unsatisfactory condition, livestock grazing will be authorized as long as the projected rate of recovery is at least 70 percent of the rate of recovery absent livestock grazing (**Chapter 3, page 177**). The clarified definition for satisfactory condition in combination with the goal for PNC addresses grassland communities where the site potential is not being achieved. For those sites in unsatisfactory condition, management practices will be designed to improve ecological status to a satisfactory condition. This management direction will also result in improvements in range and riparian conditions for sites that are currently less than satisfactory because management practices will be designed to improve ecological status to a satisfactory condition. My decision sets forth direction to make these determinations through the allotment management planning process.

My decision also provides for more rapid recovery than the other alternatives primarily due to an increased focus on restoration, on prevention and management of noxious weeds and invasive species, and on the closure of larger acreages of vacant allotments. This could result in up to a full condition level improvement on sites in mid-seral status and a movement to late-seral status with a stable trend on sites currently in satisfactory condition. In addition, as restoration techniques are developed and refined, they will be applied to the earlier seral sites with emphasis on those sites that would be most capable of responding to treatment. These sites will include the deeper soil benches and bottoms where noxious weeds or other invasive plants are being controlled or would be capable of being controlled. This response will be predicated on successful restoration of sites occupied by invasive species, and on big-game impacts remaining constant or decreasing (**Chapter 3, page 181**).

These conditions are measurable and attainable because my decision provides specific standards and guidelines with established agency protocols. My decision provides the minimum acceptable factors for meeting satisfactory conditions and meets the intent of the *Public LURs* (36 CFR 292.48). In addition, it meets the need for change to

achieve desired vegetative grassland conditions relative to HRV and ecological status as stated in **Chapter 1 (page 9)** of the FEIS, and resolves this significant issue.

Utilization Standards

Incorporation of fall, winter, and spring forage utilization standards will allow for the maintenance of satisfactory vegetative conditions while addressing the unique plant phenology, climate, and plant responses associated with fall, winter, and spring grazing as disclosed in **Chapter 3 (page 146)** of the FEIS. Alternatives A and N do not incorporate standards specific to these seasons. Although Alternatives B, E-modified, and W define specific utilization standards based on seasons, I concluded that Alternative E-modified is a better selection because it also incorporates an effective means for defining and measuring satisfactory conditions for grasslands. These features together make this alternative the best approach to meeting the need to supplement *Forest Plan* standards that apply to summer ranges only and do not reflect plant and habitat needs associated with other seasons as described in the need for change in **Chapter 1 (page 9)**.

Vacant Allotments and Administrative Horse Pastures

The Interior Columbia Basin has experienced increased fragmentation and loss of connectivity between habitats isolating some habitats and reducing the ability of wildlife populations to move across the landscape. The HCNRA is an area that provides potential recovery for some terrestrial species in the greatest need of habitat restoration (USDA 2000, Quigley and Arbelbide 1997). Because of this concern, my decision closes the majority of the currently vacant allotments (245,782 acres). The remaining 49 percent (316,988 acres) of the HCNRA will be maintained as active allotments or administrative horse pastures. None of the existing active allotments will be closed. See **Figure 8** for a map of the vacant allotments that will be closed. Closure of the vacant allotments will maintain relatively large blocks of intact, native grasslands (greater than 300,000 acres including areas previously considered not suitable or capable for grazing) where connectivity for terrestrial habitat will be maintained. These areas provide a diversity of habitat and edges between cold forest, moist forest, dry grass and to a lesser extent dry shrub and riparian woodlands. Maintaining these habitat types will improve connectivity while locally reducing fragmentation (**Chapter 3, page 175**).

As part of my consideration, I reviewed the reasons these allotments initially became vacant. They have been difficult to stock in the past as evidenced by their history due to their remote location and difficulty of terrain which caused economic hardships for the permittee. Most of these term grazing permits were waived back to the government for economic or personal reasons. Some of these allotments have been vacant for more than 20 years (**Chapter 3, page 164**). Alternative A does not fully resolve the issue of vacant allotments because it retains 50 percent of them as vacant and does not establish administrative horse pastures that are currently being grazed in vacant allotments. Alternatives B and W establish administrative horse pastures but leaves 50 percent of the allotments vacant for future consideration. Alternatives A, B, and W incorporate vacant allotments at varying degrees to provide greater management flexibility for existing allotments but would not increase the level of animal units months (AUMs). In fact, grazing levels are expected to decrease gradually (7%) over the next decade following implementation of the management direction to meet the compatibility standards of Section 7(1-7) of the *HCNRA Act* regardless of incorporating additional acres.

My decision may cause a slightly greater decline in AUMs (-10%) to meet the satisfactory conditions for grasslands, rest and recovery guidelines following fire, and the other resource objectives specified for Section 7 of the *HCNRA Act*. Alternative N proposes management direction that will reduce if not eliminate livestock grazing in the HCNRA. However, I find that there will be only minor differences in achieving vegetation conditions between Alternative N and Alternative E-modified because vacant allotments have been vacant for a number of years and current and proposed livestock management will improve vegetative conditions on active allotments only at a slower rate than Alternative N (**Chapter 3, page 175**).

Furthermore, my review of the environmental consequences leads me to conclude that the active allotments are and will continue to be managed on capable and suitable lands in a manner that is compatible with the objectives of the *HCNRA Act* (**Chapter 3, page 176**). The standards and guidelines from my decision for desired vegetative conditions and other resource objectives (**Appendix C, Table C-1, pages 1-249**) will be incorporated into site-specific allotment management plans. These amended management plans will achieve the PNC with flexibility for active improvement or restoration on current sites where feasible and meet the resource objectives specified by Section 7 of the *HCNRA Act*. My decision places a high priority on managing existing active allotments to meet the intent of the *HCNRA Act* through this amended direction.

I do not believe that Alternative N's reductions or closure of active allotments is consistent with maintaining traditional and valid uses as specified in the *HCNRA Act*. Many of the property owners within the HCNRA are dependent on NFS lands for grazing. Cancellation of these term grazing permits will likely result in the loss of economic viability of some operators, and substantially reduce viability for others particularly those that rely on forage from the HCNRA. Reliance on forage from the HCNRA is particularly evident along the middle and lower portions of the Imnaha River where allotment boundaries were established during the homesteading era. These permitted areas include steep terrain, grassy bench lands, and cliffs that act as natural barriers in conjunction with adjoining private land. Several small landowners along the middle portion of the Imnaha River rely on these allotments to sustain their livelihood. Along the lower portion of the Imnaha River, larger tracts of private property along streams and bench lands are intermixed with NFS land. With the loss of economic viability, some ranches will likely be sold to other ranching operators or for recreational or residential uses. As a result, permittees will not sustain their economic viability, thus affecting the local communities surrounding the HCNRA. This will not be consistent with the *Imnaha Wild and Scenic River Management Plan* that provides for traditional use/lifestyle adaptation associated with the ranching community as an outstandingly remarkable value for the Imnaha River (**Chapter 3, pages 257; 455-456**).

I included the vacant sheep allotments in my decision to close vacant allotments because current research since the release of the RDEIS in 2000 indicates that the development of a vaccine to protect bighorn sheep from disease transmitted by domestic sheep seems unlikely based on the current research (**Chapter 3, pages 167; 420**). Although this eliminates these allotments for future sheep grazing unless changed through another planning process, my decision will maintain healthy bighorn sheep populations in the long term by eliminating the known incompatibility between domestic sheep and bighorn sheep (**Chapter 3, pages 164; 167; 176**). Since these vacant allotments are currently not stocked, closure of them will not decrease grazing levels or management of active allotments and does not directly threaten traditional and valid uses as part of the *HCNRA Act*. All vacant allotment acres closed under my decision will be classified as unsuitable for permitted livestock grazing.

Alternative E-modified will allow two vacant allotments (Hope and Turner) in the Imnaha River drainage to be considered for active grazing following site-specific NEPA analysis through development of allotment management plans. I believe that these vacant areas may also provide flexibility for future grazing on a temporary basis where fire, flood damage, or other unforeseen situations may displace permittees on currently active allotments. However, these areas (3,641 acres) will need to be evaluated prior to any stocking. Administrative horse pastures will be officially established as part of my decision as to maintain administrative use of FS stock. The FS utilizes saddle and pack stock for use in backcountry trail maintenance, field surveys, and other administrative purposes. These pastures are centrally located on pastures with winter and summer forage and are essential to reduce transportation costs, aid in availability during administrative activities, and maintain the health and physical condition of the stock. Grazing practices on administrative horse pastures will comply with direction regarding grassland, forest understory, and riparian/aquatic habitats, including the *Forest Plan* as amended by PACFISH, INFISH, and terms and conditions from the related BOs (**Chapter 3, page 176**).

More than half of the HCNRA will remain ungrazed by domestic livestock over the next decade. These actions, taken as a whole, will promote the restoration of sites in less than satisfactory condition and will improve the biological status and importance of the HCNRA grasslands ecosystem within the Interior Columbia Basin (**Chapter 3, pages 175; 183; 399-402**). Closure of the vacant allotments will continue to maintain existing recreation experiences and social values associated with solitude in ungrazed areas of the Hells Canyon Wilderness and the Wild and Scenic Snake River corridor (**Chapter 3, pages 167; 175-176**). Social values and economic benefits associated with livestock grazing as part of the traditional lifestyles in the Imnaha Wild and Scenic River corridor will also be maintained.

I believe my decision provides a balanced approach to meeting the Section 7 objectives of the *HCNRA Act* while providing for compatible livestock grazing to maintain traditional and valid uses in the HCNRA as specified in Section 13. This resolves the significant issue over whether all or part of allotments should be used to increase management flexibility of existing allotments and administrative horse pastures as described in the need for change (**Chapter 1, pages 9-10**).

Water Use Management and Cultivated Areas

Alternative E-modified will provide management direction for the maintenance of water rights on administrative sites, in addition to providing guidelines for managing cultivated fields at historic homesteads and administrative sites. This direction meets the intent of state laws to maintain water rights and allows for raising limited agricultural crops or feed for wildlife or other opportunities that continue the traditional uses as compatible with Sections 7(6) and 13 of the *HCNRA Act*. The focus of this decision is on maintaining water rights that provide flexibility for restoring native and introduced plant species where possible.

All alternatives would retain water rights except Alternative E-modified emphasizes retaining water rights for future opportunities at existing sites. My decision also emphasizes restoring native species where possible. Alternative N would minimize the use of water rights for irrigating livestock pasture (such as at Thorn Creek Guard Station and Kirkwood Historic Ranch) or exotic lawns (for example at Kirkwood Historic Ranch and Pittsburg Administrative Sites) to that needed for resource protection, and would maximize use of the water rights for restoring native plant species and aquatic habitat. Because no irrigation would occur at any of the eight sites or at any other sites where the FS has maintained water rights, existing pastures or hayfields for either permitted or administrative use would be eliminated. In many areas, as the irrigated plants died out, they would be replaced with annuals and other weedy species unless significant efforts were taken to revegetate with native species (**Chapter 3, page 189**). I believe the use of these sites is an appropriate way to maintain water rights for existing and future uses at recreation and administrative sites. My decision provides the needed direction to maintain water rights as noted in the need for change (**Chapter 1, pages 9-10**).

Recreation Use and Livestock Grazing Interactions

My decision provides management direction to resolve existing incompatibilities between domestic livestock grazing and high-use recreation areas. I believe that implementation of these objectives to minimize encounters or evidence of grazing in high-use areas will ensure the grazing activities meet the test of compatibility with Section 7 of the *HCNRA Act* and with 36 CFR 292.48. Alternatives A, B, and W would provide some level of resolution of these incompatibilities (**Chapter 3, page 191**). Alternative N provides no direct process for resolving potential or existing incompatibilities between livestock grazing and recreational activities, but indirectly reduces conflicts by reducing or eliminating grazing. I've concluded that the standards and guidelines in Alternative E-modified will resolve conflicts by minimizing interface between domestic livestock and recreationists through controlling the timing of use, reducing extensive evidence of feeding, and eliminating on-site evidence of cattle in specific, high use areas (**Chapter 3, page 192**). Although local incompatibilities between social values associated with recreation and livestock grazing may arise, they will be addressed through site-specific planning processes, pursuant to the compatibility direction contained in Alternative E-modified. These measures provide the needed change in direction for livestock management within or adjacent to high recreation use areas to resolve social incompatibilities as described in the need for change (**Chapter 1, pages 9-10**).

Biological Soil Crusts

My decision integrates specific objectives, standards and guidelines for protection and maintenance of biological soil crusts into the decision-making process for grazing management, PFs, and following wildfires. Biological soil crusts are most sensitive to effects due to trampling, erosion, and fire. The *HCNRA* provides an area within the Interior Columbia Basin where crusts have had relatively low effects as compared with other geographic areas such as the Palouse (conversion to agriculture) or high desert (grazing effects and conversion to agriculture and urbanization). The other alternatives do not provide direction specifically for the protection of this resource. Because my decision incorporates new standards and guidelines for grasslands and crusts into the allotment management planning process, I concluded that Alternative E-modified reduces the risk to biological soil crusts the most and will provide the greatest improvement in crusts over time and the best opportunity to provide an area with high ecological status within the Interior Columbia Basin (**Chapter 3, page 204**). My decision provides the change in direction need for direction for biological soil crusts to ensure their maintenance in some specific communities across the landscape commensurate with their HRV as described in the need for change (**Chapter 1, pages 9-10**).

Noxious Weeds

Although I did not identify noxious weeds as a significant issue in the FEIS, they continue to be a serious management concern to the *HCNRA*. Alternative E-modified recognizes the legal status of noxious weeds and

provides supplemental management direction to the existing *Integrated Noxious Weed Management Plan*. My decision provides the needed programmatic direction to manage noxious weeds and specifically focuses on identifying nonnative, invasive plant species in addition to legally classified noxious weeds. I recognize that successful restoration techniques are still being developed, but my decision provides for efforts to move susceptible sites, for example those in very-early to early-seral status, toward their PNC. My emphasis on maintaining or restoring ecological status of native grasslands to PNC will focus evaluation on the extent and persistence of native species and their contribution to restoring sites to PNC. This will be accomplished through treatment projects under the *Integrated Noxious Weed Management Plan* combined with actions to re-establish native perennial grasses and other site-adapted species.

I carefully reviewed the environmental consequences of the alternative approaches to preventing and controlling noxious weeds. Alternatives A, B, and W would continue using the *Integrated Noxious Weeds Management Plan* which provides adequate emphasis and direction to ensure proper management of noxious weeds in the HCNRA. Nonetheless, I've concluded that Alternative E-modified's emphasis on nonnative and invasive plant species will assist native grassland sites in mid-seral or earlier status to resist vegetation and occupancy by noxious weeds. Alternative N would focus on invasive and noxious weeds, but many of its objectives, standards, and guidelines potentially make the noxious weed program difficult to implement. For example, the requirement to have species management guides for any species which may be adversely affected by noxious weed or invasive plant management programs essentially means that virtually all "special species" would require management guides before a weed control program would be implemented. Noxious weeds are widespread and may occupy many "special species" habitats throughout the HCNRA. The requirement that only "nonpersistent, nonbio-accumulative herbicide formulations" be used eliminates a major portion of the few herbicides currently available for use in Region 6, which are effective on many of the most problematic weeds. Restrictions regarding treatment in the Wilderness greatly increases costs and significantly reduces effectiveness. Therefore, even if control efforts would be undertaken in the HCNRA under this alternative, the costs would be much greater, and program effectiveness would be less than under other alternatives (**Chapter 3, page 208**).

My decision continues to emphasize public education as an important element of controlling noxious weeds and increases efforts to provide a reporting method for the public to report new weed sites. My decision also implements prevention measures in the form of seed testing, requirement for the use of pelletized or certified weed-free feed in all areas of the HCNRA, restrictions on livestock management, emphasis on native seed, and closure and restoration of roads. My decision to limit motorized vehicles including all-terrain vehicles to designated routes, dispersed campsites or areas, or Special Fuelwood Areas will also enable stricter control of use areas, improve enforcement, and minimize the spread of noxious weeds. Closing the majority of the vacant allotments including the vacant sheep allotments as described previously will maintain less than 50 percent of the HCNRA for livestock grazing and prevent any spread into vacant areas due to livestock grazing. Other natural and human-caused vectors of disturbance such as fire, floods, recreation use, pack stock, wildlife, and nonmotorized access will continue to have some influence on increase of noxious weeds (**Chapter 3, page 210**).

The net effect of these prevention, detection, control, restoration, and monitoring practices in addition to the current *Integrated Noxious Weed Management Plan* will help prevent the spread and control of noxious weeds. These actions will reduce sites susceptible to infestation, although noxious weeds and other invasive plants will continue to occur on the HCNRA. My decision provides the greatest emphasis on prevention, treatment, and restoration and would likely provide the best opportunity to retain the HCNRA as an area within the Interior Columbia Basin that has relatively low impacts from noxious weeds. Seeking partnerships for funding and cooperative management of noxious weeds with affected landowners and other interested parties will continue to be a major program emphasis area for the HCNRA. My decision for managing noxious weeds and nonnative plant species provides the needed change in direction to maintain biodiversity, threatened and endangered species, wildlife habitat, and recreation experiences as described in the need for change (**Chapter 1, page 10**).

Heritage Resources

My decision will replace existing CMP management direction and supplement *Forest Plan* management direction. The management goal is designed to specifically meet the intent of the *HCNRA Act*, Sections 7(5 and 6) and articulate the intent of the *Public LURs* (36 CFR 292.43). The objectives, standards, guidelines, and monitoring will guide site-specific implementation to achieve these goals.

I find that management direction in Alternative A is too general and generic because some classes of heritage resources, such as historic sites and traditional cultural properties, may not be receiving appropriate protection or management, which may lead to not meeting laws and policy. Alternative W's goal is very similar in intent with my decision, but no additional objectives, standards or guidelines are proposed, thus existing management direction under Alternative A would apply. Alternatives B and E-modified would manage heritage resources in a manner consistent with the *National Historic Preservation Act*, as amended; *National Environmental Policy Act*; *Executive Order 11593*; *American Indian Religions Freedom Act*; *Archaeological Resource Protection Act*, as amended; *Native American Graves Protection and Repatriation Act* *Executive Order 13007*; and *Public LURs* (36 CFR 292.43). Additionally, heritage resources would be managed to protect them from damage or destruction as well as for scientific research and public education and enjoyment to the extent that is consistent with protection. Several of the standards and guidelines also refer to consultation with interested American Indian groups (the Nez Perce Tribe in particular) which is consistent with the new revised *Advisory Council on Historic Preservation Regulations* (36 CFR 800) (**Chapter 3, page 215**).

Alternative N would manage prehistoric heritage resources primarily for the use and benefit of Native Americans. The management direction would be beneficial in preserving heritage resources. However, direct, noncompetitive contracting with the Nez Perce Tribe or approval of contracts by the Nez Perce Tribe would constitute a violation of federal contracting requirements for competitive bidding (Part 6, *Federal Acquisition Regulations*). I believe that government-to-government consultation is a more appropriate means of ensuring participation and to address concerns with the Nez Perce Tribe. I do not find that there is a need to eliminate visitation to sites by interested individuals who could be agents for future site protection. Alternative N stresses management of "Native American" sites, and "Non-Native American" sites for protection which is inconsistent with existing laws or regulations and may lead to lower standards that could cause the loss of heritage resources that meet criteria for significance (36 CFR 800) (**Chapter 3, page 216**).

My decision provides for development of a heritage resource management plan with specific direction to continue protection of prehistoric sites in high-use recreation areas through custodial maintenance of existing interpretation opportunities. Prehistoric sites in lower-use recreation areas and within the Hells Canyon Wilderness will be managed for self-discovery interpretation opportunities. Significant historic structures inside and outside the Hells Canyon Wilderness will be maintained, stabilized, or restored. Other historic structures will be allowed to deteriorate following appropriate data collection. Within the Hells Canyon Wilderness, historic and nonhistoric structures (except administrative sites) will be evaluated and may be maintained and stabilized to meet Section 7(5 and 6) of the *HCNRA Act*. Some historic sites will be allowed to deteriorate following appropriate data collection under the *National Historic Preservation Act*. Nonhistoric structures and facilities outside the Wilderness will be evaluated for stabilization, restoration, or maintenance based on potential historical value.

Alternative E-modified establishes guidelines for managing interpretative opportunities based on a thematic approach by Recreation Analysis Area relative to: prehistoric settlement, self-discovery, historic mining, historic American Indian, Forest Service fire management, historic ranching, homesteading, and traditional use. Heritage resources direction also emphasizes the protection of heritage resources and government-to-government consultation with the Nez Perce Tribe to meet concerns regarding traditional use and prehistoric resources. Specific direction will guide co-management of the Dug Bar crossing site with the National Park Service to protect and provide interpretation consistent with the goals and objectives of the *General Management Plan for Nez Perce National Historical Park* (USDI 1997).

In selecting Alternative E-modified for implementation, I carefully reviewed the management direction in conjunction with the environmental consequences (**Chapter 3, pages 215-222; Appendix E**). I considered the direct relationship between fire, livestock grazing, recreation use levels, facilities development, and forested vegetation treatment opportunities on the potential to directly or indirectly affect heritage resources. I concluded that this programmatic management direction provides the needed changes in protection for heritage resources to reduce the risk of resource damage or loss. This direction protects resources by addressing increasing or improperly managed recreation use, restoring historic sites that typify the economic and social history of the region and the American West, determining the relative significance of all heritage resources within the Wilderness, determining levels of protection and/or preservation of unique vestiges of early homesteading and ranching in the Wilderness, and ensuring the rights and interests of the Nez Perce Tribe are appropriately protected as described in the need for change (**Chapter 1, page 10**).

I have determined that Alternative E-modified best meets the intent of the *Public LURs*, the *HCNRA Act*, and other applicable laws relative to heritage resource protection. It also resolves this significant issue through its

emphasis on maintaining the rustic and primitive character of the HCNRA, established user thresholds by recreation analysis area, visitor management strategies, emphasis on maintenance of newer facilities and replacement of old facilities, limited development of rustic interpretative and day-use facilities, and the management direction provided for heritage resources. Further, although there are inherent risks to heritage resources with the potential levels of forested vegetation treatment and fire in Alternative E-modified, for the decade, I am confident that the heritage resources will be protected through site-specific planning processes and required consultation with state agencies and the Nez Perce Tribe.

Federal Trust Responsibilities

My decision provides new management direction that supplements the existing *Forest Plan* direction for government-to-government relationships to ensure federal trust responsibilities are met. The management goal establishes my commitment to manage the HCNRA natural resources consistent with treaty rights afforded the Nez Perce Tribe. I considered that the standards and guidelines provide the guidance needed to meet the intent of the *Treaty of 1855* with the Tribe for "the exclusive right of taking fish in all streams where running through or bordering said reservation is further secured to said Indians; as also the right of taking fish at all usual and accustomed places in common with citizens of the Territory; and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horse and cattle upon open and unclaimed land."

Although existing direction and guidance provides a framework for consultation with American Indian tribes on the management of the natural resources within the HCNRA, it does not specifically identify the Nez Perce Tribe as having ceded lands that encompass the HCNRA as part of the *Treaty of 1855*. This lack of direction would lead to a lack of emphasis on government-to-government consultation and potential inadequate protection of treaty-reserved rights and tribal interests. Alternatives B, E-modified, and W provide direction that specifically addresses managing natural resources consistent with the federal trust responsibilities of the *Treaty of 1855* with the Nez Perce in conjunction with other applicable laws and executive orders. Alternative N does not provide corresponding management direction specific to federal trust responsibilities, but rather, approaches this need through management direction for managing resources such as heritage, fire, wildlife, fisheries, and access. As with Alternative A, the lack of specific emphasis on government-to-government consultation would lead to potential inadequate protection of treaty-reserved rights (**Chapter 3, page 225**).

After reviewing the alternatives and effects, I find that the specific elements of my decision provide the best direction to consult with the Nez Perce Tribe concerning management and monitoring relative to the harvesting and gathering of resources, and for cultural, spiritual, and religious activities. I believe this honors tribal rights relative to taking fish in usual and accustomed places, and the privileges of hunting, gathering roots and berries, and pasturing horses and cattle on unclaimed lands. Additional direction to restore, manage, and rehabilitate vegetative, wildlife, and fishery resources coupled with monitoring and tracking systems will allow for the taking and harvesting of the managed resources for the long term. Consultation with the Tribe on any changes in access or ownership that may affect treaty reserved rights will occur to maintain access to fishing, hunting, gathering, and cultural sites where possible while meeting the goals of the *HCNRA Act*. Impacts to culturally significant fish, wildlife, and plants will be examined during site-specific analysis of projects to develop management strategies that maintain and enhance these resources. The management direction in Alternative-E modified will provide sufficient habitat to support species important to the Tribe and will ensure identification, analysis, protection, and/or restoration of resources associated with tribal uses. My decision specifically acknowledges the Nez Perce Tribe's treaty grazing rights and emphasizes working closely with the Tribe upon request to exercise these rights in a feasible manner (**Chapter 3, page 226**).

It is my determination that Alternative E-modified in conjunction with the *Forest Plan* and other applicable laws and executive orders provides the needed change in direction for managing resources such as heritage, fire, wildlife, fisheries, and access. It also affords greater assurances that the federal trust responsibilities of the *Treaty of 1855* will be met through direct government-to-government consultation processes as described in the need for change (**Chapter 1, page 11**).

Soils

Soil Stability Ratings

My review of the environmental consequences in **Chapter 3 (pages 231-250)** of the FEIS leads me to conclude that managing satisfactory conditions for rangelands to achieve a mid-seral status with an upward trend in conjunction with managing soil surface conditions to achieve a late-seral status depending on the PNC will manage soil resources compatible with those values for which the HCNRA was established. Alternatives A, B, and W would continue to manage soil stability ratings in terms of range forage condition. Alternative N would emphasize direction for soil surveys, inventories, research, and restoration priorities. Implementation of the direction in Alternative E-modified provides the best direction because it is consistent with my decision for managing grassland vegetation in terms of ecological status. My decision also sets forth the process for establishing rates of recovery on site-specific basis as part of the allotment management planning process.

It is my determination that this management direction provides the needed change in direction to develop a soil stability rating that is commensurate with the range forage condition of fair with an upward trend and/or a mid-seral status rating with an upward trend for Wilderness and nonwilderness as stated in **Chapter 1 (page 11)** of the FEIS.

Protection of Soils in Nonwilderness Areas

I also carefully reviewed the measures proposed to protect soils during project activities and the resulting environmental consequences. Alternative A lacks clarity in protection of soil resources specifically with respect to describing detrimental soil conditions which would lead to continued effects to the soil resource. Alternatives B and W would provide additional management direction for soil compaction, soil stability and water quality protection measures that provide more refined direction to protect soil resources. Alternative W establishes a standard to follow watershed approaches in the *Wallowa County/Nez Perce Salmon Plan* (Wallowa County 1999) for roads, forests, and campground management, but the direction is in the form of guidance which is not as restrictive as standards. Alternatives B and W do not provide management direction related to use of native vegetation for restoration, to post-fire restoration, to use of fertilizer and coarse woody debris or, to monitoring. Under these two alternatives, decisions on these issues would be left up to project-scale NEPA processes. Alternative E-modified provides management direction for soil compaction and soil stability based on soil quality standards and guidelines in FS manuals and handbooks and would manage soil surface conditions to achieve a high-seral status depending on the PNC. It includes specific direction for soil surveys, with an emphasis on restoration including post-fire to ensure adequate recovery of burned areas prior to livestock grazing. Alternative N's management direction for soil compaction is more restrictive than all other alternatives because it limits compaction to no more than 10 percent of an activity area including roads, developed recreation sites and trails and requires a minimum of five years revegetation following a fire prior to resuming human activities. Unlike the other alternatives, Alternative N would establish reference/control areas representative of excellent soil conditions of all major soil types within the HCNRA and focuses on educating the public about the importance of soil in the ecosystem (**Chapter 3, page 235**).

I have concluded based on my review of these environmental consequences that the management direction provided by Alternative E-modified for inventory, surveys, and site-specific analysis of soil resources for projects will maintain soil productivity and soil stability at acceptable levels by minimizing soil or ground cover disturbance during implementation of management activities. In addition, my decision incorporates direction for identifying and characterizing unique soils that are a necessary part of the habitat for federally listed threatened and endangered, proposed, or sensitive plant and animal species and biologically unique and rare combinations of outstanding and diverse ecosystems. This direction is unique to the HCNRA and will ensure forested vegetation treatment activities are compatible with the *HCNRA Act*. This combination of new direction will supplement the *Forest Plan* and replace the existing CMP direction to minimize detrimental soil conditions and best meets the change in direction needed for refinements to forested vegetation management activities as described in the need for change (**Chapter 1, page 11**).

Wild and Scenic Rivers

Wild Rapid River

Since the outstandingly remarkable values for the Wild Rapid River were never established with the *HCNRA Act* when the river was designated as part of the Wild and Scenic River system, my decision will accomplish this piece of needed direction to ensure maintenance of the river as part of the national system. Designating traditional use/cultural, cultural resources (historic and prehistoric), scenery, fisheries (high quality habitat for both resident and anadromous fish), and water quality as outstandingly remarkable values using the national standardized process provides a specific framework for future protection of the river values. In addition, the Wild Rapid River is important to the Nez Perce Tribe for religious activities, fishing, hunting, and gathering and this was an important part of my consideration of which values qualify as outstandingly remarkable. Refer to **Appendix K**, Wild Rapid River Resource Assessment, for detailed information on outstandingly remarkable values.

In addition to the existing management direction for the Wild Rapid River provided in the existing CMP, and the *Forest Plan* as amended, the new management direction from my decision provides programmatic direction to protect and enhance each of these river values, and protects the river from harmful effects of water resource projects. For example, my decision includes direction for development of water quality management and restoration plans to meet requirements for total maximum daily loads. In addition, the *Coarse Screening Process* (Rhodes et al 1994) will be used as an element of inventory and monitoring to supplement the assessment of PFC to provide more comprehensive biological habitat information as needed. Additional parameters for physical and water quality analysis will be added as necessary in cooperation with the Nez Perce Tribe and state fish and wildlife agencies (**Chapter 3, page 253**)

Alternative A, B, and W maintain the existing direction and would not identify outstandingly remarkable values or protection measures for these values. Although Alternative N eliminates or reduces grazing which may provide greater protection, it also would provide specific management for fire that may lead to some water quality degradation due to the greater potential for disturbances such as high-intensity wildfire.

I find that Alternative E-modified places greater emphasis on traditional use/cultural, cultural resources (prehistoric and historic), scenery, fisheries, and water quality outstandingly remarkable values to assure their protection and enhancement. It places slightly more emphasis on minimizing motorized access through the corridor. The new management direction provides specific standards and guidelines to protect and enhance the outstandingly remarkable values, and protect the river from harmful effects of water resource projects (**Chapter 3, page 257**).

A separate plan will not be prepared for Rapid River because the new management direction in Alternative E-modified is integral to managing for these outstandingly remarkable values. A new CMP for the HCNRA will be prepared, including a section on the Rapid River that includes the supplemented or modified management direction. The compilation of all of the amended and the new direction from my decision provides the comprehensive river management plan for the Rapid River. I believe my decision is consistent with the national process for identifying the outstandingly remarkable values, establishes programmatic direction for these values, and also provides specific direction relative to Section 7 of the WSR Act for protecting the river from harmful effects of water resource projects as identified in the need for change (**Chapter 1, pages 11-12**).

Wild and Scenic River Imnaha River

Although Alternative A implements the existing direction in the *Imnaha River Wild and Scenic River Management Plan* and *Environmental Assessment* (USDA 1993) to protect and enhance the outstandingly remarkable values, it lacks direction for desired vegetative conditions and recreation management emphasis including outfitter and guide services. The management direction established through my decision on Forested Vegetation, Grasslands and Forest Understory, and Fire will provide direction for achieving desired vegetative conditions within the Imnaha Wild and Scenic River corridor. ROS settings for Alternatives B, E-modified, and W would provide higher levels of protection and enhancement for the general river corridor based on specific management objectives for recreation and administrative sites. As I previously described for my decision on Recreation Settings, Experiences, and Opportunities and Access and Facilities, the emphasis of Alternative E-modified best meets the objectives for the established ROS settings. My decision also establishes an opportunity to allow outfitter and guide permits for guided fishing/whitewater rafting in the Imnaha River corridor (in-river and on-shore). The process for applying for these permits as previously described in the Upland Outfitter and Guides section above

will ensure that there is a public demand for this service and applicants will protect and enhance the values for which the river was designated.

As I also previously described, Alternatives E-modified and W would maintain Hells Canyon Scenic Byway status and potentially increase conflicts between residents and recreationists in the corridor. Alternatives B and N would remove this designation and reduce these potential conflicts. I believe Alternative N would have too high of an impact to the farming and ranching lifestyle that is part of the traditional use and lifestyle adaptation due to the rapid elimination or reduction in grazing over the next decade. Ultimately, grazing would be eliminated as a traditional and valid use of the HCNRA.

The combination of my decisions for recreation settings, experiences, and opportunities; upland outfitter and guides; access and facilities; forested, grassland, and forest understory; and vacant allotments disposition and satisfactory range conditions; provides the best supplemental management direction for the Imnaha River Wild and Scenic River. Alternative E-modified will meet the need for change in direction to provide broader direction on desired vegetative conditions and recreation settings to protect and enhance the outstandingly remarkable values for the Imnaha River as noted in the need for change (**Chapter 1, pages 11-12**).

Wild and Scenic Snake River

My decision will continue to manage the Snake River through the *Wild and Scenic Snake River Recreation Management Plan* (USDA 1999), and *Wild and Scenic Snake River Outfitter Environmental Assessment* (USDA 1996) to protect and maintain the outstandingly remarkable values. Alternative E-modified also provides supplemental programmatic management direction for desired vegetative conditions, heritage resources, maintenance levels for roads and trail in the corridor, and party sizes in the corridor. The management direction established through my decision on Forested Vegetation, Grasslands and Forest Understory, Fire, Heritage Resources, Recreation Settings, Experiences, and Opportunities; and Access and Facilities will protect and enhance the outstandingly remarkable values from river-related recreation use.

As previously discussed above for Wilderness, my decision provides a new standard that aligns party sizes (8 people and 16 stock animals) within the Wild river corridor with those standards for the Hells Canyon Wilderness. This provides the best means of all alternatives to achieve desired recreation experiences in the Wilderness and will ensure the continued protection and enhancement of the recreation outstandingly remarkable value for the Wild and Scenic Snake River. This will ensure that groups using Wilderness trails to access the Wild and Scenic sections conform to Wilderness group size limitations while in the Wilderness, even though their destination may be the Scenic river corridor.

My decision also re-affirms the determination in the *Snake River Plan* FEIS and ROD that motorized use of the Kirkwood Road is consistent with protection and enhancement of the outstandingly remarkable values for the Snake River under the *WSR Act*. The ROD for the *Snake River Plan* authorized a long-term strategy for the river's outstandingly remarkable values and established desired ROS settings to ensure protection and enhancement of the river's values. The plan allocated the Kirkwood Historic Ranch to MA 16 (Administrative and Recreation Sites) recognizing that some sites are anomalies in the Wild river corridor and provided for motorized access to the site with the Kirkwood Road. All the elements required by Section 10(a) of the *WSR Act*, and 36 CFR 292.44b(2) are presented in the *Snake River Plan* FEIS and ROD which documents the finding that motorized use of the Kirkwood Road is consistent with protection and enhancement of the outstandingly remarkable values for the Snake River under the *WSR Act* (**Chapter 3, page 254**). As previously discussed for my decision regarding Access, by continuing the seasonal closure from April 1 to June 30 on the Kirkwood Road, my decision provides the best balance of all the alternatives between providing public access to the WSR corridor while protecting the outstandingly remarkable values.

These changes in direction will provide programmatic direction to achieve desired vegetative conditions, protect heritage resources, maintain roads and trails in manner that protects resources, and manages recreation use on the trails in the river corridor. I believe Alternative N's approach to managing the Wild Snake River as nonmotorized (with exceptions) and the Scenic section at 1975 levels of motorized use would require development of a new management plan for allocating commercial and private use. Reduced or eliminated motorized access would reduce opportunities for Wild river and adjacent Wilderness users desiring motorized access, and enhance opportunities for users preferring nonmotorized access. The decision to manage use on the Wild and Scenic Snake River corridor was previously considered in the FEIS and ROD (USDA 1994) for the *Wild and Scenic Snake River Recreation Management Plan*. This need was not described as part of the need for change (**Chapter 1, page 12**) and I did not identify any environmental consequences in the FEIS that leads me to

believe there is a need to reconsider this previous decision. Watercraft on the Snake River will continue to be managed through the existing management plan.

In addition to the resource-specific management direction that applies to these rivers, my decision also establishes specific management goals, objectives, standards and guidelines for Wild and Scenic Rivers that stress protecting and enhancing the values for which these rivers were designated. The objectives are derived directly from *Public LURs* (36 CFR 292.45 and 292.46) to manage motorized and mechanical equipment including rivercraft, forested activities, roads, trails, administrative facilities, and water resource projects compatible with the *WSR Act* and the *HCNRA Act*. Alternative E-modified includes specific programmatic direction relative to the application of Section 7 of the *WSR* and Section 7(1) of the *HCNRA Act* to protect the free-flowing nature and water quality of the rivers. I also provide for managing water quality consistent with the *Wallowa County/Nez Perce Tribe Salmon Plan* (Wallowa County 1999) for lands within Wallowa County. I believe the changes in direction meet the need for change as stated in **Chapter 1 (pages 11-12)** of the FEIS and meet the intent of the *WSR Act*, the *HCNRA Act*, and the *Public LURs*.

Biologically Unique Species, Habitats, and Ecosystems

Definition of Biologically Unique Species, Habitats, and Ecosystems

Existing direction lacks specificity for defining and managing biologically unique features and peculiarities in Hells Canyon beyond that provided by the *Forest Plan* for RNAs, and threatened, endangered, and sensitive species. My decision provides clear definitions and criteria for determination of biologically unique features and peculiarities consistent with Section 7(3) of the *HCNRA Act*. Although the *HCNRA Act* specifies preserving biologically unique features and peculiarities in the “area generally known as Hells Canyon”, this description is too general for determining appropriate activities through site-specific planning that are consistent with Section 7(3).

Hells Canyon has long been recognized for its unique botanical resources resulting from the combination of topography, geology, climate, and elevation range. The same factors that provide botanical diversity in general have facilitated the evolution of many plant species that are found only in Hells Canyon and the adjacent area. The *HCNRA* is a botanical bridge which links interior Rocky Mountain plant species and communities with those found in the Blue Mountains and further west and to the south. The subalpine habitats in the Seven Devils Mountains and parts of the western rim of the canyon provide habitat for species that are normally found only in the Rocky Mountains, in the Cascade Mountains, or further north in boreal habitats. The hot, dry climate at the bottom of the canyon provides a refuge for plants that are commonly found in the Great Basin or south of the *HCNRA*. Over 1,000 plant species have been documented in the *HCNRA*, which represents about two thirds of the plants known to occur on the *WWNF* (**Chapter 3, page 259**).

Because the *HCNRA* lies at the junction of three major ecoregions (Columbia Basin, Northern Rockies, and Northern Great Basin), I believe that the entire area provides a diverse array of features and peculiarities that reflect biological characteristics from these ecoregions. My decision provides for identifying biologically unique features and peculiarities as those that are (1) limited in distribution solely or principally to the *HCNRA*; or (2) limited in distribution within the *HCNRA*, but relatively common within the neighboring ecoregions; or (3) relatively abundant in the *HCNRA*, but limited in distribution within the three neighboring ecoregions. This meets the intent of biological uniqueness for the *HCNRA* as expressed in Section 7(3) of the *HCNRA Act* because it emphasizes the area generally known as Hells Canyon but does not limit consideration of biological uniqueness solely to a geographic basis (**Chapter 3, pages 259-260; Appendix G, pages 1-2**).

Section 7(3) of the *HCNRA Act* focuses specifically on preserving biological uniqueness in Hells Canyon in relation to rare and endemic plants, rare combinations of aquatic, terrestrial, and atmospheric habitat and rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated therewith. In reviewing the appropriate criteria to determine biologically unique and rare plant species, I considered that the *HCNRA* overlies two states and three FS Regions (1, 4, and 6) with their own Sensitive Species programs that specify rarity both globally and within individual states. I also considered that six sensitive plant species are federally listed under the *ESA* as threatened, endangered, proposed or candidates for listing in the *HCNRA* and thus are considered rare (**Chapter 3, pages 259-260; Appendix G, pages 3-5**).

I carefully reviewed the criteria for rarity for these designations. I believe that plants listed as threatened, endangered, proposed, or FS Sensitive Species both globally (G) and within individual states (S) meets the intent of biologically unique and rare plant species under Section 7(3) of the *HCNRA Act*. This approach includes some species that may be more common on a global or national scale, but are vulnerable or rare within states. This approach does not include species that are apparently secure, but with cause for long-term concern, (scale 4-5) because they are not considered rare. I also considered plant populations that are separated geographically or 'disjunct' from the main distribution of species. Because these disjunct populations are not found for dozens to hundreds of miles outside of the HCNRA and are rare in their distribution in the HCNRA, they also meet the definition of biologically unique, and thus are included as biologically unique and rare plant species under Section 7(3) of the *HCNRA Act* (**Chapter 3, pages 259-260; Appendix G, pages 3-6**).

Section 7(3) of the *HCNRA Act* clearly considers plants endemic to the HCNRA, particularly Hells Canyon. Plants endemic to the HCNRA are confined to this area and are found nowhere else. Some plant species are locally endemic because they have a narrow, restricted geographic range (such as a river canyon). I considered that some endemic species inhabit areas slightly beyond the administrative boundary of the HCNRA due to similarity of habitats outside of the HCNRA. For example, some endemic plants in the Snake River Canyon may also occur in the lower portions of the Salmon River upstream from the HCNRA boundary. The Snake River Canyon from Oxbow Dam downriver to the Washington State border, the lower Salmon River, the middle and lower portions of the Imnaha River, and tributaries to these river reaches defines the area of plants endemic to the HCNRA. Rare plants listed in the FS Sensitive Species program also include plant species that are endemic to the region, at the edge of their range, or widespread but rare. Endemic plants restricted mainly to the HCNRA also meet the definition of biologically unique, and thus are included as biologically unique and endemic plant species under Section 7(3) of the *HCNRA Act* (**Chapter 3, pages 259-260; Appendix G, pages 3-9**).

Rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated therewith as expressed by Section 7(3) of the *HCNRA Act* are plant associations and plant community types that are biologically unique to the HCNRA or isolated within the HCNRA. The plant associations and plant community types represent rare combinations of outstanding and diverse ecosystems and are biologically unique in the HCNRA because they occur nowhere else or occur in limited amounts within the HCNRA (**Chapter 3, pages 259-260; Appendix G, pages 10-17**).

Rare combinations of aquatic, terrestrial, and atmospheric habitats may be common elsewhere, but within the HCNRA they are limited and are thus biologically unique. Wet cliffs, natural caves, cliffs and talus slopes, natural salt licks, river beaches, springs, seeps, and other wetland areas merit attention as being of a relatively unique nature in the HCNRA. I believe these habitats represent rare combinations of aquatic, terrestrial, and atmospheric habitats because they principally reflect the physical environmental features of the landscape that are produced from a unique combination of soils, climate, precipitation, and aspect. These habitats may also occur in combination with rare terrestrial and aquatic species or other species that are dependent upon these habitat types, but fish and wildlife habitat are provided protection under Section 7(4) of the *HCNRA Act* (**Appendix G, pages 9-10**).

I also evaluated other features and peculiarities in my decision for determination of biologically unique species, habitats, and ecosystems under Section 7(3) of the *HCNRA Act*. Some regional endemic plants or plants at the edge of range are more common although they may be limited in distribution to the Blue Mountains and western Idaho. I did not include them as biologically unique and endemic because they extend beyond the area of endemism for the Hells Canyon. I also reviewed rare habitats due to human-caused activities (described in the *Analysis of Vascular Plants*, Croft et al 1997), but did not include them because they are not biologically unique. These habitats are managed through the forested and grassland vegetation decisions previously described.

I also evaluated terrestrial and aquatic species, but no terrestrial or aquatic species are endemic to the HCNRA. Rare terrestrial and aquatic species are defined as threatened, endangered, and sensitive, but they do not meet the definition of biologically unique. My decision for riparian/aquatic habitat, water quality, and wildlife habitat does provide protection for these species and habitats under Section 7(4) of the *HCNRA Act*. I also considered terrestrial habitats such as described in *Source Habitats for Terrestrial Vertebrates of Focus in the Interior Columbia Basin: Broad-Scale Trends and Management Implications* (Wisdom et al 2000) and the portion of the riparian and other wetland vegetation within the HCNRA has been sampled but not classified. Neither of these habitats meets the definition of biologically unique or the categories and criteria as described above. My decision does provide management direction for these habitats under Section 7(4) of the *HCNRA Act* that provides for the protection of fish and wildlife habitat.

I also evaluated other plant communities, plant associations, and other species such as insects, pollinators, amphibians, carnivores, and fungi but determined they are not biologically unique and rare and endemic plants; rare combinations of aquatic, terrestrial, and atmospheric habitats; or rare combinations of outstanding and diverse ecosystems as described by Section 7(3) of the *HCNRA Act*. I recognize, however, that rare combinations of aquatic, terrestrial, and atmospheric habitats and rare combinations of outstanding and diverse ecosystems may provide important resources for these species or associated habitats. Management direction for the biologically unique categories described above in combination with management direction for Forested Vegetation, Grasslands and Forest Understory, Wildlife Habitat and Riparian/Aquatic Habitat and Water Quality and other management direction will protect these species and their associated habitat (**Appendix G, pages 17-18**).

Alternative A does not specifically identify biologically unique species, habitats, and ecosystems. Alternatives B and W identify threatened, endangered, and sensitive plant species, and biologically unique plant communities and plant associations. Alternative N recognizes the entire HCNRA as biologically unique habitat (**Appendix C, pages 88-89**). I believe the definition I have provided for biologically unique in conjunction with the categories specifically described by Section 7(3) of the *HCNRA Act* and the criteria for these categories meets the need for clear definitions as identified in the need for change (**Chapter 1, page 12**). While the *HCNRA Act* is not limited to these categories, because my decision also provides a process for future determination of new discoveries of features and peculiarities that may be biologically unique, I find that this approach best meets the intent of the Section 7(3) of the *HCNRA Act*.

Management Direction

Alternative E-modified will provide new management direction for biologically unique resources to ensure preservation of these species, habitats, and ecosystems. My decision will supplement existing direction in the *CMP* and *Forest Plan* for threatened and endangered species.

Based on public comment on the RDEIS, I directed the Interdisciplinary Team to refine the management direction of this section to provide clear objectives, standards, and guidelines. The management goal for this section is derived directly from Section 7(3) of the *HCNRA Act*. The management objectives recognize the HCNRA for its high biological diversity and endemism and stresses maintenance of the ecological function and sustainable conditions. Standards and guidelines provide direction for the management of rare and endemic plant species including threatened, endangered, sensitive and disjunct plant species, rare combinations of outstanding and diverse ecosystems, and rare combinations of aquatic, terrestrial, and atmospheric habitat.

In deciding on this management direction, I carefully considered the lack of inventories of rare and endemic plants, rare combinations of outstanding and diverse ecosystems, and rare combinations of aquatic, terrestrial, and atmospheric habitat. I also reviewed the potential environmental consequences of this management direction described in the **Chapter 3 (pages 259-307)** and the Biological Assessment (BA) and Biological Evaluation (BE) for plant species (refer to the compact disc at the end of the document). Alternatives E-modified and N provide the most protection for sensitive, rare, and endemic species. Alternatives B, W, and A would incur increasing levels of potential impact to these species due to higher levels of actions that may cause impacts. I believe identification of these biologically unique species, habitats, and ecosystems through site-specific projects and protection and mitigation measures as specified in **Appendix C (pages 88-110)** will provide the most specific direction to ensure preservation of the biologically unique features and peculiarities of the HCNRA.

My decision also supplements management direction for RNAs in the *Forest Plan*. This direction establishes a goal of preserving significant natural ecosystems for comparative study, provides for ecological and environmental studies, and protects RNAs against direct or indirect modification of ecological processes and functions. My primary consideration of management direction for the RNAs is to maintain unmodified conditions and natural processes in these areas and to protect the values for which the RNAs were proposed. All alternatives retain current proposals for the establishment of RNAs. The only significant differences would be how much existing or potential livestock grazing would occur within the RNAs. Under Alternatives A, B, W, and E-modified, RNAs within active allotments would continue to experience grazing effects until a decision was made through the establishment process as to whether to exclude livestock. The number of RNAs that would be within active allotments varies under Alternatives A, B, W, and E-modified. Alternative N eliminates all livestock grazing within RNAs (**Chapter 3, page 311**).

I decided to select Alternative E-modified because it prohibits fuelwood cutting, commercial mushroom harvesting, and commercial collection of special forest products in proposed and established RNAs to achieve the goal of preserving significant natural ecosystems for comparative study. Livestock grazing and recreation use in RNAs will continue to occur as long as they do not degrade ecological functions and processes. As part of my decision to restore the natural role of fire to a broader portion of the HCNRA, I am providing for RNAs to be managed within the natural intensity and periodicity of fire to provide education and research opportunities for ecological effects of fire. Because of RNAs research purpose as benchmarks of significant natural ecosystems, I believe WFU may be appropriate in some situations to maintain, restore, and sustain these ecosystems as long as fire does not negatively impact the values for which the RNA was proposed.

It is my determination that my decision for biologically unique species, habitats, and ecosystems and RNAs meets the need for new management direction to define which species, habitats, and ecosystems contribute to the biological uniqueness of the HCNRA and provides management direction to ensure their protection and maintenance. This management direction, through site-specific project implementation, will ensure the protection and preservation of biologically unique species, habitats, and ecosystems in the HCNRA, meeting the intent of Section 7(3) of the *HCNRA Act*. My decision also provides needed management direction to protect and maintain the values for which RNAs were proposed (**Chapter 1, page 12**).

Fire and Air Quality

Fire

My decision will replace existing CMP management direction and supplement *Forest Plan* management direction, as amended. Alternative E-modified provides a refined goal for the management of fire within the Hells Canyon Wilderness and other parts of the HCNRA. The use of fire, both WFU and PF is an important tool in achieving sustainable ecosystems as part of this significant issue. My decision expands WFU outside the Wilderness to ensure fire plays its natural role as nearly as possible in the Hells Canyon Wilderness and manages natural and PF to emulate the historic function of fire where compatible with Section 7 objectives of the *HCNRA Act*. PF will be an option in Wilderness to reduce fuel loadings so that when opportunities arise for WFU, an acceptable range of fire effects are maintained. My decision also provides standards for use of WFU and PF to provide basic protection of human life and property.

In selecting this management direction for implementation, I carefully reviewed the management emphasis of each alternative with respect to the use of fire and the environmental consequences as disclosed in **Chapter 3 (pages 313-333)** of the FEIS. Fire has been a significant disturbance process within the HCNRA historically and is essential to proper ecosystem function. The greatest changes in fire regimes have occurred within forestlands, particularly the warm/dry and warm/moist types where fire has been partially excluded since the turn of the century (**Chapter 3, page 311**). Therefore, I considered how the alternatives would restore the natural role of fire to the HCNRA as a key consideration. I viewed the potential treatment acres projected by fire type as possible outcomes although I recognize based on our experience in Hells Canyon that fire occurrence is extremely variable depending on the several factors including seasonal moisture, existing fuels, and weather patterns.

Alternative A would continue to aggressively suppress fires in the majority of the HCNRA and would not fully portray fire's ecological function within the HCNRA or its significance in achieving desired vegetative conditions and in managing other resources. Alternative B would also continue suppression of wildfires, and increases the use of WFU but only in Wilderness. Consequently, a low number (12%) of fire acres in forested habitats would occur and HRV would not be met, nor would the risk of large, stand-replacing fires be reduced. Both Alternatives E-modified and W relax the traditional fire suppression approach to wildfires by increasing the amount of fires in forest habitats and provide a balance between PF, WFU, and unwanted wildfire. Alternative E-modified would provide almost twice as much WFU and PF compared to Alternative W. Alternative W would manage more forested areas for treatment and removal of a commercial product. By the end of the decade, these alternatives would move toward HRV and reduce the risk of large, stand-replacing fires. Alternative N would increase the amount of fire over the next decade the most and represents a large volume of stand-replacing fires. It would come closest to re-establishing the reference-period disturbance levels for fire frequency and would re-establish WFU as a dominant force in the HCNRA. Consequently, it has highest potential of any alternative to adversely impact species requiring forest structure over the next decade but reduces the future risk of large fires (**Chapter 3, pages 329-333**).

I selected Alternative E-modified because I believe it is the best balance to reducing fuels and restoring the natural role of fire while protecting immediate fish habitat, water quality, wildlife habitat, and other resource values in Section 7 of the *HCNRA Act*. It identifies greater opportunities for WFU and PF that more accurately reflect fire return intervals needed to move plant communities and forest structural components toward HRV. My decision provides a refined goal for returning fire to its natural role, as nearly as possible, within Hells Canyon Wilderness. PF will be an option in Wilderness to reduce fuel loadings to maintain an acceptable range of fire effects to conserve scenic, wilderness, cultural, scientific, and other values as specified by Section 7(2) of the *HCNRA Act*. Outside the Wilderness, fire will be expanded to emulate the historic function of fire while providing basic protection to human life and property and where compatible with Section 7 objectives of the *HCNRA Act*.

I find that the potential short-term risks to riparian habitat, water quality, wildlife habitat, and private property over the next decade that would result from Alternative N's level of fire are too high compared to Alternative E-modified (**Chapter 3, pages 322-328; 362-364; 396-399**). My decision uses PF and thinning to maintain viable and healthy ecosystems along the Imnaha and Rapid River corridors (MA 7), the headwaters of Big Sheep Creek, and North Pine Creek (MA 10 and 11). This will help manage risks to private land, campgrounds, bridges, facilities, administrative sites, and scenic qualities to conserve scenic and cultural values as specified in Section 7(2) of the *HCNRA Act*. Designating priorities for fire suppression for each facility will better protect historic sites and values in the HCNRA to meet Section 7(6) of the *HCNRA Act* while allowing flexibility to manage fire-fighting resources (**Chapter 3, page 321**). Because not all areas would be suitable for forested vegetation treatments in the short-term, Alternative W would not reduce fuel profiles as much as my decision. Stand structure would continue to be at risk to large, stand-replacing fire. I also believe Alternative W's greater reliance on management intervention through manipulation of fuels and stand structures will entail significant costs to access remote, unroaded portion of the HCNRA and will reduce the likelihood of using these methods to manage toward HRV (**Chapter 2, page 67; Appendix C, pages 244-248**).

Even under PF and WFU conditions, I believe fuel models will burn with sufficient intensity to change seral conditions, but these changes allowed by my decision will be within the anticipated cycling of landscape conditions due to natural processes within HRV across this complex terrain. Approximately 33 percent of the HCNRA will be affected by fire over the next decade, a doubling of the current program, and will provide more flexibility in managing natural fires and fire-fighting resources. Implementation of site-specific fire projects will be conducted according to standards and guidelines provided by my decision and lead towards accomplishing the goals, objectives, and desired vegetative conditions described previously by my decision for forested and grassland vegetation. My decision also incorporates aspects of the *Wildland Fire Management Policy* (USDA 1995) that will be important to guiding appropriate management responses to fire suppression; acceptable tactics; suppression priorities; economic parameters; protection of critical features; constraints for fire intensity, size, duration, and seasonality; firefighter safety; desired conditions; standards and guidelines for management areas; and parameters of risk (**Appendix C, pages 244-248**).

I have chosen Alternative E-modified because it provides the needed change in direction for the use of fire as part of the natural and current disturbance regimes. It is compatible with other resources and values including native species in the HCNRA, it clarifies the use of PF, and it addresses the provisions of the 1995 policy on managing WFU and PFs as described in the need for change (**Chapter 1, page 13**). My decision facilitates a balanced management approach to resolution of the Forested Vegetation, Grasslands, and Forest Understory significant issue and facilitates achievement of Section 7 objectives of the *HCNRA Act*.

Air Quality

My decision provides new management direction for air quality that supplements the existing *Forest Plan* direction. This management direction recognizes the need to preserve the atmospheric habitats, develop monitoring protocols for the Hells Canyon Wilderness Class I airshed and to manage fire-related emissions pursuant to existing memorandum's of understanding.

I considered the environmental consequences to air quality as part of my decision on the appropriate balance of restoring fire to the HCNRA. Estimated PM₁₀ and PM_{2.5} emissions per decade would increase progressively in Alternative A, B, W, E-modified and N based on the potential projected areas for fire (**Chapter 3, page 340**).

I selected Alternative E-modified because although it increases the WFU and PF program, and increases higher risk from emissions to visibility, visitor health, and downwind communities, it provides flexibility in the control over the timing and conditions under which fire is allowed to function in comparison to burn periods, consumption,

seasonality, and patch sizes. Although Alternative E-modified has the second highest tonnage of material consumed by fire, the timing element of the PF program in comparison to unwanted wildland fire is most favorable for Alternative E-modified. Therefore, the amount of control over emission timing may be greater with E-modified than any other alternative except W. Site-specific fire management proposals will analyze the potential effects of actions on the Class I airshed, providing mitigation to ensure compliance. My decision also will continue to expand smoke management with the state regulatory agencies of Oregon and Idaho so that projects that produce emissions within the HCNRA are coordinated with outside-the-area projects so that regional, cumulative effects to air quality can be managed.

Monitoring of the seven Air Quality Related Values (AQRVs) for the HCNRA (visibility, vegetation, soil, archaeological resources, water quality, wildlife, and odors along with human-health effects to individuals and communities) will also be an important consideration during restoration activities and fire events. Visibility and archaeological resources are considered unique and potentially sensitive to airborne effects. Because effects to visitors may be most apparent in the Wild and Scenic Snake River corridor, my decision specifies notification of the public of potential health hazards as integral to all fire activities. Selected monitoring of AQRVs will assess ambient air quality and establish baseline information for protecting the atmospheric habitat from adverse ambient effects to air quality. Upon review of the environmental consequences of the potential fire management opportunities in conjunction with the air quality management direction, I believe that the intent of Section 7(3) in terms of preserving atmospheric habitat of the *HCNRA Act* will be achieved.

Riparian/Aquatic Habitat and Water Quality

My decision will replace the existing CMP management direction, maintain the *Forest Plan* as amended by PACFISH, INFISH, and terms and conditions from the related BOs for threatened and endangered species and provide supplemental direction to ensure meeting the intent of Section 7(4) of the *HCNRA Act*. Establishing objectives for PFC for riparian habitat will lead to an improving trend in Riparian Habitat Conservation Areas (RHCA) to reinforce PACFISH and INFISH standards.

In selecting Alternative E-modified, I considered the management direction of each alternative and the potential environmental consequences that would result from the primary activities that influence effects on riparian habitat and water quality (livestock grazing, roads, recreation, forested vegetation treatment, and fire). The highest risk of potential effects to riparian/aquatic habitat and water quality would occur from fire. The differences between road, recreation, grazing, and timber management risks are relatively insignificant when they are compared to fire effects by alternative. However, the threat to water quality from a poorly maintained, closed road system is high. The PACFISH, INFISH, and terms and conditions from the related BOs for the *Forest Plan* would continue to apply to livestock grazing, roads, recreation, and forested vegetation treatments and would maintain the HCNRA riparian/aquatic habitat and water quality in a condition that is better than generally reported to exist across the Interior Columbia Basin (**Chapter 3, page 371**).

All alternatives would potentially have adverse effects to water quality and riparian/aquatic resources from fire management. Alternatives A, B, and W would minimize the risk of severe fire in the short term but increase the risk of high-intensity fire in the long term and would adversely affect the riparian and water quality of the HCNRA for decades. Alternative E-modified provides a balance between immediate short-term effects and delayed, inevitable long-term effects of high-intensity fire. Alternative N would introduce managed fire for resource benefits over such a large area that the risk of adverse effects to water quality and riparian/aquatic resources are high. The impact of a single, large fire would last longer (50 to 100 years) and be more severe than all of the other actions combined as proposed under each alternative. The high level of fire proposed by Alternative N would eventually reduce fuel loads and stand structure more toward the early seral stages (**Chapter 3, page 370**).

I selected Alternative E-modified because it would provide the least risk of negative effects to riparian/aquatic habitat and water quality with a balanced mixture of PF, WFU, and forested vegetation treatments combined with standards for range, recreation, and forested vegetation treatments that would not result in adverse cumulative effects (**Chapter 3, page 371**). Alternative E-modified also provides an objective to manage lands within Wallowa County to achieve the watershed management approaches in the *Wallowa County /Nez Perce Tribe Salmon Habitat Recovery Plan with Multi-Species Habitat Strategy* (Wallowa County 1999). After reviewing the BA and BE (refer to the compact disc at the end of this document) for aquatic species and the effects to riparian/aquatic habitat and water quality described in **Chapter 3 (pages 356-357)** of the FEIS, I believe that the management direction contained in Alternative E-modified is compatible with achieving the intent of this plan. In places where

Alternative E-modified direction conflicts with the approaches in this plan, the most restrictive approaches will apply.

The direction from Alternative E-modified and the watershed management approaches in the *Wallowa County/Nez Perce Tribe Salmon Plan* combined meet the intent of the broader goals of restoring spawning and rearing habitat in the *Wy-Kan-Ush-Mi-Wa-Kish-Wit: Spirit of the Salmon Plan* (CRITFC 1996). Additional guidelines in Alternative E-modified to incorporate elements from the *Coarse Screening Process* (Rhodes et al 1994) as coordinated with the Nez Perce Tribe into aquatic assessments will reinforce PACFISH and INFISH standards. The purpose is to supplement the inventory protocol using the PFC process which assesses the physical function of riparian and wetland areas with biologically based habitat variables. Ultimately, this information is used for additional evaluation and guidance of land use practices to prevent the degradation of water quality and increase the quality of fish habitat. Where appropriate, the *Coarse Screening Process* will be used to provide a framework for establishing minimum monitoring requirements for habitat evaluation. The combination of these objectives, standards, and guidelines will assist in restoring fish habitat in the Columbia and Snake River subbasins.

Alternative E-modified provides additional standards to improve water quality impaired streams through development of Water Quality Management Plans and Water Quality Restoration Plans following guidance developed to meet the *Clean Water Act* and the States of Oregon and Idaho regulations for 303(d) listed streams in the HCNRA. I believe that this management direction coincides with the priorities from other habitat and water quality restoration efforts and meets the intent of ensuring activities are compatible with maintaining fish habitat as specified in Section 7(4) of the *HCNRA Act*. This direction provides the needed change in management and restoration activities to achieve the desired conditions for riparian/aquatic habitat and water quality as expressed in the need for change (**Chapter 1, page 13**).

Wildlife Habitat

My decision will replace existing CMP management direction and supplement the *Forest Plan*, PACFISH, INFISH, Eastside Screens management direction, and related terms and conditions from the BOs for threatened and endangered species. The management goal derived from Section 7(4) of the *HCNRA Act* establishes protection and maintenance of wildlife habitat in conjunction with the *Forest Plan* wildlife goal (p. 4-44). The objectives, standards, and guidelines provide management direction relative to wildlife habitat, vehicular access, and big-game populations.

Based on public comments on the RDEIS, I directed the Interdisciplinary Team to review the effects of open roads on wildlife habitat, and particularly plateau habitat as previously stated under the discussion on Access and Facilities. I reviewed the wildlife environmental consequences in **Chapter 3 (pages 373-424)** of the FEIS and the BA and BE (refer to the compact disc at the end of this document) for terrestrial species including the results of the available scientific research and a literature review provided by the Nez Perce Tribe. I carefully studied the effects on habitat associations; threatened, endangered, and sensitive species; special species groups; and terrestrial invertebrates for all alternatives.

Alternative A represents the open-road density direction from the existing CMP and has the most miles of open-road density (533 miles of NFS roads) and would result in the highest impact to forest-associated species. Alternatives B, E-modified, and W have similar amounts of open and closed roads, resulting in about a 30-38 percent reduction in NFS open-road density and would provide a significant reduction in effects roads have on forest-associated wildlife. Alternative N closes approximately 64 percent of the existing NFS roads open on the HCNRA, resulting in the highest mitigation for wildlife from roads. Effects of open-road densities on plateau areas specifically would be the highest in Alternative A primarily in the McGraw, Duck Creek, and Lick/Gumboot plateau areas. Alternatives B, E-modified, and W would have a moderate impact for those same three complexes, and a low impact to all other complexes. Alternative N would have a very low impact for all plateau areas (**Chapter 3, page 393**).

In general terms, a low impact to wildlife sensitive to open roads occurs at less than 1.0 mi./sq. mi., a moderate impact between 1.0-2.5 mi./sq. mi., and a high impact may occur with more than 2.5 mi./sq. mi. of open-road densities (**Chapter 3, page 392**). I believe my decision for open-road densities as previously described in conjunction with the five seasonal road closures (Teepee Butte, Wildhorse, PO Saddle, Lord Flat and Kirkwood Road) and closing approximately 33 percent of the open roads through site-specific roads analysis represents the

best approach to mitigating effects roads have on forest-associated wildlife. The degree will depend on the species, time of year, hunting pressure, and degree of habituation to human disturbance. Because the seasonal road closures will occur during the spring and fall when these areas are used the most by people, the effect will be the greatest in terms of protecting wildlife habitat and species. In particular, effects to plateau habitat in the McGraw, Duck Creek, and Lick/Gumboot plateau areas will be reduced from high to moderate while effects to Lord Flat and PO Saddle plateau areas will be reduced during the fall hunting seasons to the lowest impact by closing these areas to motorized vehicles. One subwatershed will maintain a moderate impact (1.9 mi./sq. mi.). Wildlife sensitive to open-road densities, such as elk, may use this subwatershed about 55 percent less than the other subwatersheds (Leege 1984). Because my decision provides for an average open-road density of less than 1.0 mi./sq. mi. on plateau habitat and 0.72 mi./sq. mi. across the HCNRA, this represents a significant lower impact (over existing conditions).

Other access and recreation aspects of my decision were also important considerations in selecting Alternative E-modified. Alternatives A and W would have more development and higher levels of recreation use than other alternatives and have the highest potential impact to wildlife. Alternatives B and E-modified would have similar levels of access, numbers of facilities, and snowmobile use. Alternative N would have the lowest recreation use levels and consequently the lowest potential impact to forest-associated wildlife. Because my decision provides restriction in locations, timing, or frequency of recreation use, roads, and facilities developments, I believe effects on most forest associated wildlife species will be reduced (low to moderate). My decision will provide direction to achieve a low impact to wildlife sensitive to open roads and will benefit many wildlife species.

Some public comments on the RDEIS expressed concern about adequately addressing comprehensive wildlife habitat and species needs in terms of old-growth habitat. My close review of the RDEIS shows that the need for change in direction was based on embodying the Regional Forester's decision for Eastside Screens to screen vegetation management proposals so that treatments are eliminated if they move stands away from late and old structural conditions, where that structure is lacking. As previously described for my decision on desired vegetative conditions, my decision promotes HRV as the long-term desired condition for forested vegetation in the HCNRA and to return, as much as possible, to natural disturbance regimes by restoring forest ecosystems to the HRV. My review of the analysis of HRV (**Appendix C, Tables C-8 through C-20, pages 232-343**) concludes that existing late and old structure is above historic levels for most plant associations in most watersheds on the HCNRA. Approximately 25 percent of the forested vegetation in the HCNRA is currently in late/old structure. Based on these estimates, the HCNRA is providing source habitat in the form of late/old structure which supports long-term wildlife species, persistence, or characteristics of vegetation that contribute to a stable or positive population trend. I recognize this is important on a regional basis because many forest habitats outside the HCNRA do not have these characteristics to provide for wildlife species associated with late/old structure (Wisdom et al 2000) (**Chapter 3, page 403**).

In reaching my decision to select Alternative E-modified, I considered alternative approaches to managing forested vegetation as described previously for my decision on desired vegetative conditions and also reviewed the resulting effects to wildlife habitat. Alternatives A and W would have the most acres of potential forested vegetation treatment and would have a moderate impact on all forest-associated species in the managed forest. Alternatives B and E-modified would treat fewer acres and present a low adverse impact to forest-associated species in the managed forest while Alternative N would not harvest timber, and therefore no negative effects to forest-associated wildlife would occur. No effects from timber harvest would be expected outside the managed forest.

My decision for managing forested vegetation in the HCNRA is to return, as much as possible, to natural disturbance regimes by restoring forest ecosystems to HRV. Consequently, there is an opportunity to use forested vegetation treatments or PF to help maintain these stands longer, or to begin the process of regenerating new stands (**Chapter 3, page 139**). Harvest will be limited to early and mid-successional stands that do not meet late and old structure in MAs 7, 10, and 11. The Eastside Screens limit timber harvest in areas where late and old structure is below the HRV levels to only those treatments that promote achievement of historic levels of late and old structures. Therefore, harvest in those MAs that have functional late and old structure below historic levels will not be treated in a manner that reduces late and old structure. My decision will supplement the wildlife habitat direction to provide a variety of structural stages in late/old structure within HRV to ensure that habitat for old-growth dependent species is provided. I believe that because vegetative management direction will maintain HRV levels for all structural stages, including late/old, then HRV levels of functional old-growth habitat will also be achieved. Although functional old-growth habitat acreage is closely correlated with late/old structure in most cases, I recognize that there are exceptions when late/old structure is at very low density, canopy layering is

absent, and other components of dead and down material are insufficient. Because these conditions also existed before Euro-American settlement, the baseline for historic conditions, I believe my decision to manage for HRV for forested structural stages will ensure adequate levels of old-growth habitat for associated wildlife species (**Chapter 3, page 403**).

I also reviewed the environmental consequences to wildlife habitat as a part of my decision for satisfactory range conditions and the disposition of vacant allotments. Alternatives A, B, and W would have a moderate effect from livestock grazing on most small mammals, avian predators, ground-nesting birds, reptiles, herbivores. Alternative E-modified would have a lower effect since it closes almost all vacant allotments. Alternative N would have a low to no effect by reducing or eliminating grazing. I believe that maintaining approximately half of the HCNRA as ungrazed by livestock provides the greatest benefit to wildlife habitat while maintaining traditional and valid uses of active grazing as I discussed under my decision for vacant allotments.

I also considered the effects to wildlife habitat from my decision to restore more fire to the HCNRA. Fire would have similar effects to those described previously for the alternatives and in addition, large stand-replacing forest fires would have the largest potential to adversely impact late/old structure associated species. Because nearly half of the forested acres in the HCNRA would burn in the next decade, Alternative N would have the highest impact to late/old structure associated species and reduce associated populations by 50 percent over the next 15 years (**Chapter 3, page 404**). If this occurs, HCNRA would no longer provide source habitat for late/old structure associated species. I believe my decision to manage for HRV through a balanced mix of PF, WFU, and forested vegetation treatments provides the best approach to protecting and maintaining vegetative interspersions that maintain a diversity of structural stages within plant associations. Niches for all wildlife species will be provided for if the number of acres, locations, frequency, and timing is carefully designed and implemented across the landscape as directed by my decision (**Chapter 3, pages 398; 405**).

I have also decided to amend the *Forest Plan* to incorporate the *Canada Lynx Conservation Assessment and Strategy* (Reudiger et al 2000 as updated) for the HCNRA. My decision also provides for managing habitat to ensure long-term populations of big-game species and native landbirds are maintained consistent with Section 7(4) of the *HCNRA Act*. None of the other alternatives include these strategies. This direction will provide conservation measures to remove or minimize the risks to lynx habitat in future site-specific projects and activities. In the long-term, my decision will contribute to the potential recovery of lynx to the HCNRA because managing toward the HRV has positive effects to lynx habitat, if these treatments are spatially designed in a mosaic (**Chapter 3, page 411**).

The combination of my decision on management direction for recreation, access, forested and grassland vegetation, vacant allotments, fire, and wildlife habitat will provide the change in direction for long-term protection and maintenance of wildlife habitat to achieve desired conditions as stated in the need for change (**Chapter 1, page 13**). I believe that implementation of Alternative E-modified will lead to obtaining the stated goal to "ensure the protection and maintenance of wildlife habitat", meeting the intent of Section 7(4) of the *HCNRA Act*.

Scientific Research

The HCNRA has many unique scientific values related to the biological and physical features of the area. My decision provides for considerable opportunity to continue the discovery of useful information for management and advancement of scientific knowledge. I examined the alternatives approaches and environmental consequences to continuing scientific research in reaching my decision. Alternative A and W would provide for continued research and would establish a committee of scientists and resource managers (within *Federal Advisory Committee Act* guidelines) to identify research needs, potentials limitations, and to screen and recommend proposals for approval. Alternatives B and E-modified would provide more refined management direction for scientific opportunities focusing on optimizing discovery of useful information for management and restoration and advancement of knowledge specifically in line with Section 7(2) of the *HCNRA Act* and to the *Public and Private LURs*. Approved study plans would be required before any research activities to promote research proposals that more clearly meet management goals and objectives. Alternative N would focus on research and restoration of "least-impact" human activities; therefore, research activities would be nondestructive. Procedures would be established to use research to achieve the alternative's goals (**Chapter 3, pages 425-426**).

I believe that management direction in Alternative E-modified provides the clearest objectives and standards to ensure the discovery of useful information directly in relation to the *HCNRA Act*. It emphasizes research focused

on resolution of management related issues and further, establishes guidelines for cooperative research, and notification to the public of proposed, ongoing, and results of research. The John Day/Snake Resource Advisory Council and Hells Canyon Subgroup could assist in these future research efforts. This change in direction will best lead to conservation of all scientific values that contribute to the public benefit as expressed by Section 7(2) of the *HCNRA Act* and provides for collection and interactive use of scientific information to better manage the resources of the HCNRA as described in the need for change (**Chapter 1, pages 13-14**).

Geologic Resources

My decision provides for new management direction specific to the protection of paleontological and unique geologic resources derived from Section 7(5) of the *HCNRA Act* and the *Public LURs* (36 CFR 292.43). I considered how well the alternatives would protect these resources from damage or destruction within both Wilderness and nonwilderness because failure to provide this protection may lead to irreplaceable and/or irretrievable damage and/or destruction of these resources. The alternatives with higher recreation use levels (A, W, and E-modified) would have the greatest potential risk to these resources from the highest proposed recreation use levels. Alternatives B and N provide for a decreasingly lower potential risk, respectively. Although higher use levels provide for a greater risk, I considered the risk as low in all the action alternatives due to their proposed management direction (**Chapter 3, pages 427-428**).

I selected Alternative E-modified because it provides the needed change in direction to protect these resources, and also allows for interpretation and education opportunities to inform the public of these unique values while providing for the safety of the public (restricts access to caves). Standards and guidelines are provided for the collection, interpretation, and education of paleontologic materials and for protection of geologic features. I believe that this management direction best meets the need for change (**Chapter 1, page 14**) and will lead to achievement of the management goal meeting the intent of Section 7(5) and to ensure protection of these resources consistent with the standards and guidelines set forth in the *Public LURs* (36 CFR 292.43) for the preservation and protection of the resources in the HCNRA.

Minerals

Management direction set forth my decision for minerals will replace existing CMP direction and supplement *Forest Plan* management direction. The management goal stresses the need to manage mining of existing mineral rights to meet the intent of the *HCNRA Act*. The objectives, standards, and guidelines are primarily derived from the *Public LURs* (36 CFR 292.47). Because the *HCNRA Act* withdrew the HCNRA from mineral entry with the exception of valid existing rights which allows for operations within both the HCNRA and its Wilderness, new mineral entry is prohibited. I reviewed the alternatives and environmental consequences with the consideration that any mining activity associated with existing valid claims or for future acquisition of common varieties of gravel, sand, or stone must be "compatible with the provisions of this Act", the *Public LURs* (36 CFR 292.47), and if within Wilderness, the *Wilderness Act*. I recognize that these resources must also be managed pursuant to the *1872 Mining Law* and the subsequent regulations (36 CFR 228 A).

I concluded from my review that mining for both locatable and common variety minerals would still occur in all alternatives, but under strict controls to minimize disturbances. All surface disturbances would be reclaimed. Alternative A, however, does not provide any direction beyond that in the *Public and Private LURs* and *Forest Plan* and lack of this direction could lead to adverse environmental impacts not meeting the intent of the *HCNRA Act* and the *Public and Private LURs*. Alternatives B and E-modified would require minimizing impacts to surface resources with additional restrictions to avoid activities near or within Wilderness and the Wild and Scenic Rivers. These alternatives would emphasize the reduction of the number of pits within the HCNRA. I am aware that this would increase the costs of reclaiming existing pits and increase the cost of facilities maintenance because of longer haul distances for appropriate materials. Alternative W would have similar effects on the mineral materials program, except it would result in more pits within the HCNRA. Existing pits would not be reclaimed which may lead to continued or future adverse environmental impacts. Alternative N would only approve mining activities for enhancement of the native ecosystem function while allowing mining as little as possible within existing laws. Alternative N would reduce using mineral materials from the HCNRA resulting in very few pits within the area. This would result in enhancement of the native ecosystem and visual quality toward more natural appearances (**Chapter 3, page 431**).

Because none of the unpatented mining claims (36) have valid existing rights, nor is it likely that they can be established, I believe it is unlikely that any significant mining activity will take place on these claims. The patented mine in Idaho (Blue Jacket Mine) has had the most activity (on private land), but I concluded from my review that this claim is not likely to operate in the near future due to state permit requirements. No access across NFS lands to this site has been approved either (**Chapter 3, pages 429-431**).

I selected Alternative E-modified because it allows mining activity from these claims to continue subject to a valid existing rights determination prior to ground disturbance. Operations will be allowed following the establishment of these rights under a plan of operations to minimize environmental effects with the provisions of the *HCNRA Act* and the elements of my decision within the extent of the *1872 Mining Law*. My decision also provides the best approach to managing common variety minerals in the HCNRA because it specifies restoration objectives and consideration of other resource objectives such as scenic values when determining locations for rock sources. My decision aligns management direction for valid existing mineral rights and mineral materials to eliminate conflicts in management direction as described in the need for change (**Chapter 1, page 14**). Implementation of this amended direction in conjunction with achieving the goals, objectives, standards, and guidelines of the existing CMP and *Forest Plan* leads to my determination that these activities are compatible with the intent of Section 7(7) of the *HCNRA Act* and the *Public LURs* (36 CFR 292.47).

Land Management and Special Uses

Management direction set forth in my decision will replace existing CMP direction and supplement *Forest Plan* management direction to manage landownership patterns to best meet the objectives of the *HCNRA Act* by implementing the standards in the *Private LURs* (36 CFR 292.20). The objective and many of the standards in this section are derived from the *Public LURs* (36 CFR 292.20). I reviewed how the alternatives managed land acquisition, the *Private LURs*, ingress and egress to private lands, and management of special use permits in reaching my decision.

Alternative A does not have a goal for land ownership and Alternative N would stress respect for private lands and activities, but does not discuss land ownership. Alternatives A, B, E-modified, and W would continue to acquire private land within the HCNRA boundary as a high priority as opportunities present themselves.

Alternatives A and N do not have additional direction for private lands which may lead to activities on private lands that do not meet the intent of the *Private LURs*. Alternatives B, E-modified, and W would coordinate the *Private LURs* with counties while Alternatives B and E-modified would provide additional direction to use, develop, and monitor private lands in the HCNRA in coordination with state and county governments in support of the *Public LURs* (36 CFR 292.20-25). Alternatives B, E-modified, and N would guide acquisition or partial interests in lands if *Private LURs* are not being met.

Alternatives A, N, and W do not provide management direction for management of ingress/egress for private inholdings which may lead to future conflicts over the rights afforded landowners in the *Alaska National Interest Lands Conservation Act*. Reasonable ingress/egress through HCNRA lands would continue for access to private lands in Alternatives B and E-modified. Alternative N proposed closure of the Wild section of the Snake River to motorized watercraft would potentially affect private landowners' reasonable and customary motorized access. Alternative N would close some roads that would deprive private landowners reasonable and customary access to their parcels (T26N, R1W, Sections 23 and 24; and T5N, R47E, Sections 32 and 33).

Alternatives B, E-modified, and W would provide direction for management of special use permits including relicensing process for the Hells Canyon Complex to ensure that commercial uses in the HCNRA meet the objectives of the *HCNRA Act*. Alternatives A and N do not provide any direction on participating in the relicensing process (**Chapter 3, pages 433-434**).

I selected Alternative E-modified because it continues to pursue acquisition of private land or land exchanges as opportunities are available to the meet the objectives for which the HCNRA was established. This will continue under the standards and guidelines established with the *Private LURs* (36 CFR 292.20-25) in coordination with state and county governments. Reasonable ingress and egress through HCNRA lands will continue for access to private land. None of the seasonal road closures in my decision will affect current motorized access to private land. My decision also provides standards and guidelines to ensure commercial activities under special use permit are compatible with the amended direction. The landownership management direction provides the

guidance needed to manage standards for compatible land use and development of private lands, manage landownership patterns and acquisition, and manage access to private lands. I believe my decision provides the needed change in direction to meet the *Private LURs* and ensures access for reasonable use and enjoyment of the HCNRA as stated in the need for change (**Chapter 1, page 14**). My decision therefore, meets the intent of Sections 7 and 10 of the *HCNRA Act* to continue the occupation of homes and lands as a traditional and valid use in the HCNRA and for the use and development of privately owned property.

Monitoring and Evaluation

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 is conducted and displayed through the *Forest Plan Monitoring and Evaluation Report*. My decision maintains the monitoring required by the *Forest Plan* (*Forest Plan*, Chapter 5) and requirements set forth in other amendments to the *Forest Plan* such as PACFISH, INFISH, and related terms and conditions in the BOs which will continue to be implemented as part of ongoing Forest-wide monitoring efforts. Monitoring elements relative to interim management direction (PACFISH, INFISH, and Eastside Screens) may change based on completion of other planning processes such as revision of the *Forest Plan* scheduled to begin in October 2003. In addition to *Forest Plan* (as amended) monitoring, I've selected specific monitoring items (**Appendix F, pages 13-16**) related to evaluating the goals and objectives provided by my decision.

In reaching my decision on the scope and extent of additional monitoring to include, I reviewed the approaches provided by the other alternatives. Alternative A would maintain existing monitoring and evaluation plans including those items required by the *Forest Plan* as amended, which provides adequate monitoring data to annually assess trends and conditions of the HCNRA relative to meeting management goals. Alternatives B would add monitoring items that complement existing monitoring plans to evaluate for compatibility with the objectives of the *HCNRA Act*. Alternative E-modified provides direction similar to Alternative B but focuses monitoring on the effectiveness of the new direction to ensure compatibility with the *HCNRA Act*. It also reinforces determining that project-level activities are compatible with Section 7 of the *HCNRA Act*, and to provide monitoring and evaluation of activities and outputs related to project-level decisions. Alternative E-modified stresses cooperative agreements to assure that monitoring is successfully completed. Alternative W would maintain the existing monitoring and evaluation plans with the addition of monitoring dust and CO₂ on the Upper Innaha Road.

Alternative N provides a goal to determine if activities are compatible with Section 7(1-6) by requiring that the continuation and initiation of recreational and commercial human activities in the HCNRA be dependent upon adequate monitoring for compatibility prior to allowing the use. The intent of monitoring would be to emphasize measurement of preservation, recovery, and health of these elements in relation to stated goals of commercial and recreational human activities within the HCNRA. This is in distinct contrast to risk-based monitoring, which presumes human activities are compatible unless shown to be causing harm (**Appendix F, page 2**). This alternative did not propose a monitoring plan but specifies criteria, methods, indicators, frequencies, and activities that would be used in developing a monitoring plan. A finding of compatibility would accompany permits for human uses. This direction recommends no-impact/least-impact alternatives to reduce monitoring costs, but directs that if the monitoring program is not funded, the least-impact activity would be allowed. It directs the monitoring of all human activities on private lands within the HCNRA, which is outside the authority of the FS without landowner agreement and cooperation.

I do not agree that excluding activities in the HCNRA until monitoring of uses in the HCNRA as proposed by Alternative N meets the intent of the *HCNRA Act*. The *HCNRA Act* provides for "administer[ing] the recreation area in accordance with the laws, rules, and regulations applicable to the national forests for public outdoor recreation in a manner compatible" with the objectives from Section 7 of the *HCNRA Act*. Activities in the HCNRA currently occur under the existing CMP, and the *Forest Plan* (as amended), pursuant to existing laws, rules, and regulations. As I described in the purpose and need for change, one of the reasons the amendment process was initiated was based on monitoring results specifically for the HCNRA that showed some areas needed improved management direction. My decision to implement Alternative E-modified provides needed changes to align management direction with the intent of better achieving the objectives of the *HCNRA Act* and other applicable laws, rules, and regulations (**Chapter 1, page 14**).

As part of my decision, I recognize the importance of not only monitoring, but evaluation of the results to determine further needed changes in direction. The *Forest Plan* and other ongoing monitoring will continue to be relevant to management issues in the HCNRA and across the WWNF. Therefore, I have limited the scope of the monitoring and evaluation plan for the HCNRA to those items that address issues exclusively related to the *HCNRA Act* and my amended decision that are not already covered by the *Forest Plan* and other ongoing monitoring. In some cases, data collected for one item may also be used to answer multiple questions. The monitoring items are focused on determining the effectiveness of the direction in my decision to ensure compatibility with the *HCNRA Act* through the amended goals, objectives, standards, and guidelines. The overall emphasis of my decision is a consistent approach to monitoring and evaluation of the programmatic direction for the HCNRA to define future needs for changes in direction.

My decision provides a monitoring strategy that will facilitate and guide implementation of the monitoring and evaluation plan and allow flexibility to adapt to new information and techniques. Based upon an evaluation of the monitoring results including the *Forest Plan* and other ongoing monitoring, recommendations may be necessary for changes to the management direction for the HCNRA. These efforts will continue to provide an avenue by which management accomplishments, trends, and needs for the HCNRA are reported and evaluated by the Area Ranger and program managers relative to meeting management goals for the HCNRA.

My decision also reinforces monitoring and evaluating activities and outputs through future project-level decisions to disclose applicable monitoring items and identify elements required before, during, and following project implementation. This will identify those needs and ensure a commitment by the Area Ranger for the HCNRA to adequately monitor and determine that the project meets the alternative's management direction, and is compatible with Section 7 of the *HCNRA Act*. Lastly, I believe cooperative agreements with HCNRA users, organizations, and the Nez Perce Tribe to implement the monitoring program will be beneficial to assure that monitoring efforts are successfully completed. The results of this plan in combination with ongoing efforts for the *Forest Plan* meets the intent of ensuring compatibility with the Section 7 of the *HCNRA Act*.

Socioeconomic Conditions

I did not identify economics as a significant issue in the FEIS, but did identify it as an element of the Other Issues (**Chapter 1, page 42**) primarily in relation to Section 13 of the *HCNRA Act* which states, "ranching, grazing, farming, timber harvesting, and the occupation of homes and lands associated therewith as they exist on the date of enactment of this Act, are recognized as traditional and valid uses of the recreation area". Section 7 of the *HCNRA Act* provides for the "management, utilization, and disposal of natural resources on federally owned lands, including, but not limited to, timber harvesting by selective cutting, mining and grazing and the continuation of such uses and developments as are compatible with the provisions of the Act." I recognize that some members of the public are concerned that management direction needs to place foremost importance and recognition on maintaining these traditional and valid uses. They are concerned that changes in management direction will change the levels of these types of uses and negatively affect them. Other commentors emphasized protection of ecosystem functions and values over traditional uses and expressed concerns that business or motorized recreation uses should not be given priority. Because of these varying views about meeting the intent of the *HCNRA Act*, I believe it is appropriate to discuss how I considered the socioeconomic conditions and environmental consequences described in **Chapter 3 (pages 435-466)** in selecting Alternative E-modified.

My review of the FEIS indicates that HCNRA livestock permittees are highly reliant on forage from the allotments in the HCNRA based on the percentage of AUMs supported by NFS land (average of 82%) compared to the private portions of the permit. The reliance by grazing permittees on forage may be as high as 90 percent for some permittees who also use HCNRA allotments during the winter. This reliance on forage from the HCNRA is higher than Wallowa County level as a whole due to the amount of private property owned within the boundaries of the HCNRA. I recognize that most of the permitted cattle grazing (88%) occurs on the Oregon side of the HCNRA primarily in Wallowa County with some use in Baker County (34,990 AUMs) and that the remaining use consists of cattle and sheep grazing in Idaho County on the Idaho side of the HCNRA (4,776 AUMs) (**Chapter 3, page 443**).

As part of my decision to select Alternative E-modified, I considered the economic impacts of the other alternatives. Although Alternatives A, B, and W incorporate some portion of the vacant allotments into active allotments in the future, actual stocking and management of the added parcels would occur under a future site-specific NEPA decision, complete with *ESA* consultation. I recognize that closing vacant allotments forecloses

the opportunity to use these areas in the future, however, none of the alternatives proposed an increase in AUMs and would not result in higher economic impacts than currently occurs. The economic effects of my decision will be similar to these alternatives. As I stated previously for my decision on vacant allotments I believe that Alternative N's reductions or closure of active allotments is inconsistent with maintaining traditional and valid uses as specified in the *HCNRA Act* and is not necessary to meet the resource objectives of Section 7 of the *HCNRA Act*. It will likely result in the loss of economic viability of some operators, and will substantially reduce viability for others particularly those that rely on forage from the HCNRA (**Chapter 3, pages 455-456**).

My decision for grassland vegetation, vacant allotments disposition, and satisfactory range conditions will continue to maintain livestock grazing on all currently active allotments as previously described. Based on our past experience in the HCNRA, changes in active grazing may be needed in the future to respond to *ESA* terms and conditions, to meet satisfactory conditions for rangeland vegetation, to allow for rest and recovery guidelines following fires, and to meet other resource objectives from Section 7(1-6) of the *HCNRA Act*. These changes will possibly reduce AUMs under term grazing permits (-10%) over the next decade (**Chapter 3, page 455**). My decision will support current operations, maintains the current economic effects, and enables livestock grazing to continue as a traditional and valid use in the HCNRA as stated by Section 13 of the *HCNRA Act*.

Because the *HCNRA Act* permits timber management that is compatible with provisions of the legislation through selective harvest methods, I am allowing opportunities for forested vegetation treatments to meet the goal of HRV as described previously for my rationale under Forested Vegetation. My decision supports some timber-related employment and income through implementation of site-specific project proposals that may include commercial harvest to achieve the desired vegetative conditions. I also reviewed the other alternatives potential economic effects from timber harvesting. Timber harvesting in Alternatives A, B, E-modified and W would continue to support jobs and income primarily (92-98%) in Oregon counties due to the majority of potential forested vegetation treatment opportunities in the Oregon portion of the HCNRA. A small portion (2-8%) of the timber-related jobs and income would be attributed to Idaho counties from potential forested vegetation treatment opportunities in the Idaho portion of the HCNRA. Alternative N would not support any employment and income related directly or indirectly to timber harvest and associated activities. Alternatives W would provide the highest level of potential economic effects (**Chapter 3, page 457**).

The HCNRA is not classified as commercial timberland due to the nature of the plant communities and the steep, rocky terrain. In addition, the *Public LURs* classified timber volume removed from the HCNRA as unregulated and excluded it from contribution toward the *WWNF* allowable sale quantity. I carefully considered that any timber harvesting proposal and related activities will be subject to primarily meeting the objectives of Section 7(1-6) of the *HCNRA Act* to ensure compatibility with resource protection. I selected Alternative E-modified because it provides the best balance of fire and forested vegetation treatments to manage forested vegetation toward the goal of achieving HRV as previously described. Because no timber harvesting has occurred on the HCNRA since the early 1990s, other than removal of hazard trees, I concluded that my decision enables timber harvesting to be used as a selective tool to achieve the goals for forested vegetation as allowed by Section 7. This may increase the economic effects to local communities while allowing this activity to continue as a traditional and valid use in the HCNRA as specified by Section 13 of the *HCNRA Act*. The majority of these effects will occur from harvesting on the Oregon side of the HCNRA and will potentially impact Wallowa and Baker counties.

I have also reviewed the potential socioeconomic effects of the alternatives from recreation and outfitter and guide use. Because the level of visitation to the HCNRA will continue to increase in the future, recreation visits will continue to support economic impacts primarily (87%) in Wallowa and Baker counties due to the majority of visits occurring in the Oregon portion of the HCNRA. The remainder of the economic impacts will be potentially attributed to Asotin, Nez Perce, Idaho, and Adams counties from visitation to the Idaho portion of the HCNRA. Alternatives A, E-modified and W would support the same level of economic impacts from employment over the next decade. Alternative B would displace a slightly higher number of potential visits, but would result in minimal changes (-0.3%) in economic effects. Although Alternative N would more than double the amount of displaced visits (4.3%) compared to Alternative A due to fewer roads that access popular sites, the reduction in economic impacts is relatively small (-2.5%) compared to Alternative A. I did not see any significant differences in the resulting economic effects of the alternatives and considered this information in making my decision on the appropriate level of Recreation Settings, Experiences, and Opportunities; and Access and Facilities as previously described.

I recognize that the potential differences in economic effects from outfitter and guide use would be the highest in Alternative W. Alternative A and N would continue the current economic effects, and Alternatives B and E-

modified would provide for increases in potential gross revenue from outfitter and guides (**Chapter 3, pages 448-453**). Because the current level of authorized service days are underused (43% used), I did not see a need to provide the additional increase in permits at this time as proposed by Alternative W. However, my decision will continue operations of all existing outfitter and guides and will provide future growth opportunities as previously described for Upland Outfitter and Guides. This opportunity for growth (57% currently authorized service days are unused and 15% additional service days provided by guided fishing/whitewater rating and aviation services) in outfitter and guide use will support a higher degree of economic impact to communities surrounding the HCNRA.

I also reviewed the analysis of social and cultural values associated with customs and beliefs of landowners, adjacent communities, and visitors to the HCNRA for each alternative (**Chapter 3, pages 12-13; 459-462**). I recognize that although Alternatives B and N would provide for decreased levels of use and development, the character of communities would continue to change under all alternatives because of increased recreation use to the HCNRA. This may potentially impact private property owners in the HCNRA due to reductions in solitude and remoteness of these households. Because ranching, grazing, farming, timber harvesting, and the occupation of homes and lands would continue under all alternatives except N, their associated lifestyles would continue as traditional and valid uses as stated by Section 13 of the *HCNRA Act*. From my review, I determined that although the quality of lifestyle will change from elements outside the control of the FS under all alternatives, my decision will manage the HCNRA to maintain the rustic and primitive character. Combined with management direction for grassland management, forested vegetation management, landownership, mining, and recreation I believe that Alternative E-modified will best maintain the traditional and valid uses from Section 13 of the *HCNRA Act* and the quality of lifestyle that is important to local residents and communities around the HCNRA.

Other Considerations

Management Areas

In weighing my decision, I considered the existing MA allocations and how they would change by alternative. Alternatives B, E-modified, and W would not change existing MA allocations from the existing allocations (Alternative A). Alternatives B, E-modified, and W would analyze site-specific projects at various scales depending on the size of the project and complexity of the impacts. Alternative N would replace all MA allocations with new ones comprised of forest, grassland, and riparian areas with the intent of providing an ecological basis for project-level analysis and decision making. Proposed activities would be evaluated for their impacts on these three ecosystem areas and the larger bioregion in the context of past, present, and foreseeable human activities and uses. This alternative would retain congressionally designated areas (Hells Canyon Wilderness and the Wild and Scenic Rivers).

I decided to retain the existing MA allocations because no changes in these boundaries were identified as necessary through the monitoring and evaluation process used to determine needed changes in direction (**Chapter 1, page 42**). Since 1993, the FS has conducted ecosystem analysis at the watershed scale (mid-scale) to assess existing conditions, synthesize resource interactions, and to identify management needs and opportunities. Currently, multi-species biological assessments are used to analyze impacts to threatened and endangered species under *ESA* across multiple watersheds or at the larger subbasin scale. I believe the appropriate scale and ecological basis for analysis depends on the issues and the decisions relevant to the project. Maintenance of existing MAs as I've provided for will retain the continuity of the MA allocations which emphasize where activities will or will not occur and allows flexibility for ecosystem analysis at various geographic scales (Interior Columbia River Basin, subbasins, watersheds, and subwatersheds). Forest, grassland, and riparian areas are integral components of both the MA allocations and the analysis process (**Chapter 3, pages 469-470**).

However, I am aware that the public raised concern with the existing names of the MAs and the perceived objectives related to timber harvesting in MA 10 (Forage Emphasis) and MA 11 (Dispersed Recreation/Timber Management). The *Public LURs* changed the existing CMP by stating that timber harvest may occur only to protect and enhance ecosystem health, wildlife habitat, or recreational and scenic uses. This regulation de-emphasized the direction in the existing CMP for timber management activities within the HCNRA in both MAs 10 and 11 (36 CFR 292.46). Because the result has been a general blending of these two MA's objectives relative to forested vegetation management, my decision will eliminate names of the MAs, with the exception of the congressionally designated areas.

Program Costs

All activities, many which are interdependent, will be affected by annual budgets. As part of my decision to select Alternative E-modified, I considered the potential program management costs (**Chapter 3, pages 475-476**). Because funding levels have been declining for the past several years, I reviewed how the emphasis of each alternative would potentially shift the annual program needs to meet the goals and objectives of each alternative. Alternative A would continue to emphasize funding for access and facilities objectives primarily while Alternative B would reduce the emphasis on access and facilities and focus on funding needs to meet recreation objectives. Alternatives E-modified, W and N would primarily emphasize funding needs to meet forested vegetation and fire management objectives. Although current budgets and future budget forecasts do not currently meet budgetary needs, I recognize changes in the emphasis of annual requests and also increase needs in some program areas will be needed to implement my decision. These changes will occur primarily because of higher emphasis on management of grassland vegetation, noxious weeds, fish, wildlife, soils, threatened and endangered species, and biologically unique resources. Although I am concerned with the costs to implement my decision, this is not the sole driver of my decision. I believe Alternative E-modified is a feasible and reasonable approach to managing the HCNRA given the future program needs. My decision does not obligate the expenditure of funds and implementation will depend on adequate funding.

Economic Efficiency

I also reviewed the analysis of the financial and economic efficiency of the alternatives (**Chapter 3, pages 462-465**). All alternatives have a negative present net value based on discounted revenue received compared to the discounted total dollar-quantified costs. The analysis showed that the benefits for Alternative E-modified would accrue primarily as a result of timber harvesting that would be subject to future site-specific analysis compatible with the management direction from my decision. As explained in the FEIS, there are many outputs and effects associated with the HCNRA (soil productivity, reduced erosion, water quality improvements in temperature, and wildlife and aquatic habitat improvement) that are more difficult to quantify. I considered these factors as part of my decision to select Alternative E-modified as previously described. I concluded that my decision does the best job of balancing the trade-offs for competing uses, values, costs, and outputs and produces and I am confident that Alternative E-modified ranks highest in terms of net public benefits.

Interior Columbia Basin Strategy

I considered the recently released Interior Columbia Basin Strategy and the associated Interagency Memorandum of Understanding. I concluded that my decision is compatible with the strategy based on the analysis presented in the FEIS which considers numerous scientific findings developed in conjunction with ICBEMP (Chapter 3, pages 3; 27; 134; 151; 167; 204; 211; 231; 259; 316; 371; 374; 387; 439; 442; 446; 454; 459; 461-462). Some elements of the Interior Columbia Basin Strategy such as PACFISH and INFISH are better addressed in the upcoming revision of the Forest Plan. Hence, full implementation of the Interior Columbia Basin Strategy will be achieved through the Forest Plan revision process. The process for revising the Forest Plan is scheduled to begin in October 2003.

Forest Plan Consistency

Determination of Nonsignificant Amendment under NFMA

The existing CMP has been modified and amended before initiation of this FEIS as previously described in the section on existing management direction. Key management issues such as management of the Imnaha and Snake Wild and Scenic Rivers, bighorn sheep compatibility, and prescribed natural fire management were resolved through separate planning processes. Regional Forester interim amendments and terms and conditions from the related BOs to the *Forest Plan* (PACFISH, INFISH, Eastside Screens, terms and conditions from the BOs for salmon, steelhead, bull trout, and lynx) further resolved aquatic and wildlife management issues until further planning amends the *Forest Plan* for these issues. Lastly, the promulgation of the *Public and Private LURs* (36 CFR 292) provided standards and guidelines for management of issues relative to this amendment.

The relationship of the existing CMP to the *Forest Plan* for the WWNF is described in the Background and History section of this ROD. With this decision, I am amending portions of the existing CMP for the HCNRA and therefore

portions of the *Forest Plan*. Specific changes to the existing CMP are found in **Appendix C (pages 1-249)** of the FEIS as described under Alternative E-modified. I am directed by regulations found at 36 CFR 219.10 (f), to determine if this amendment to the *Forest Plan* is significant. Criteria to determine significance of an amendment to *Forest Plan* are found at FSM 1922.51 and 1922.52, and FSH 1909.12 Chapter 5.32. Based on the following analysis per these criteria, I have determined these changes are not a significant amendment to the *Forest Plan*.

Timing

This decision is made late in the planning period. The existing CMP was approved in 1982 and following a series of appeals was fully implemented in 1984. More than 20 years have passed since the existing CMP was approved and more than 10 years since the *Forest Plan* incorporated the existing CMP in 1990. We are now in the second decade of implementation for the *Forest Plan*. Forest Plans must be revised every 10-15 years. Since this amendment is occurring so late in the planning period, year 13 of the 15-year plan, this criteria points to nonsignificance.

Location and Size

The HCNRA is 28 percent (652,488 acres) of the area covered by the *Forest Plan* (2.3 million acres) including 33,000 acres of private land. Included in the HCNRA are 117,073 acres of the Nez Perce National Forest and 24,000 acres of the Payette National Forest administered by the WWNF. Changes made through this amendment are confined to the HCNRA. Although the area affected is over 25 percent of *Forest Plan* area, there are not hard and fast criteria for determining what size triggers significance. As discussed in other sections of this determination, only portions of existing direction for HCNRA are modified by my decision.

Goals, Objectives, and Outputs

This amendment clarifies goals that were never clearly articulated in the existing CMP as modified by appeal decisions, but does not change the goals or objectives specified in the *Forest Plan*. The existing CMP was fully incorporated into the *Forest Plan*. Therefore, the goals of the *Forest Plan* reflect direction found in the existing CMP. The goal statements in the existing CMP were designed to ensure achievement of Section 7 of the *HCNRA Act*. The objectives, standards and guidelines of my decision are designed to achieve the goals, which are derived from Section 7 of the *HCNRA Act*, and *Public and Private LURs* for the HCNRA found at 36 CFR 292. Accordingly, goal statements made through this amendment remain fully comply with the *Forest Plan* goals listed on page 4-1 through 4-3 of that plan.

Much of the management direction provided in the existing CMP and *Forest Plan* was modified in its implementation with the promulgation of the *Public and Private LURs* in 1994 (36 CFR 292). Recreation standards are set with acceptable thresholds of use levels, which respond, in part, to 36 CFR 292.44. Forested vegetation treatments are identified as potential opportunities to promote the HRV and achieve the intent of 36 CFR 292.46. Livestock grazing management direction in this amendment responds, in part, to 36 CFR 292.48 by establishing satisfactory conditions definitions and management direction to ensure programmatic compatibility of grazing with the objectives of the *HCNRA Act*. Mining management direction responds fully to the intent of 36 CFR 292.47. Management direction in this amendment relative to heritage resources responds to the intent of 36 CFR 292.43. Management direction relative to other resources is a modification, clarification of existing direction, or new direction that is responsive to the needs disclosed in **Chapter 1 (pages 5-14)** of the FEIS.

Projected outputs levels of goods and services for the *Forest Plan* are shown in Table 4-1 of that plan. Output levels for the existing CMP are not projected separately but included in Table 4-1. However, the FEIS prepared for this amendment does compare projected outputs between alternatives. Alternative A, the No Action alternative can be used to compare projected output levels for the existing CMP (No Action) and the selected Alternative E-modified. Although the question is one of significant change to projected *Forest Plan* outputs and not just outputs associated with the HCNRA, comparing these alternatives does provide a relative measure of the changes made by this decision. In particular, recreation outputs are shown in the FEIS in **Tables 3-5 and 3-6 (pages 41; 50)** outputs associated with roads in **Tables 3-20 through 3-24 (pages 90-95)**; timber outputs in **Table 3-39 (page 144)**; livestock grazing outputs in **Table 3-50 (page 183)**; wildlife outputs in **Table 3-95 (page 392)**; mining outputs in **Chapter 3 Minerals (pages 429-431)**; and economic outputs in **Tables 3-101 through 3-107 (pages 448-465)**. In some cases, the measures shown in these tables differ somewhat from the measures used in Table 4-1 of the *Forest Plan*. For example, **Tables C-11 through C-20 (Appendix C, pages 237-243)** displays acres of projected late/old structure, while Table 4-1 in the *Forest Plan* displays acres of old growth. In

addition, I directed the Interdisciplinary Team to select one measure for this comparison rather than try to address all the output parameters in *Forest Plan*, Table 4-1.

This amendment does not prescribe a significant change in outputs relative to the *Forest Plan* for recreation, roads, timber, livestock grazing, wildlife, mining, or economics.

Alternative E-modified will result in incremental changes in recreational experiences and the level of access that will maintain or enhance existing opportunities. **Tables 3-5 and 3-6** in the (**pages 41; 50**) FEIS display outputs for recreation. Recreation supply currently exceeds demand at a few sites in the HCNRA as predicted by the *Forest Plan* due to the popularity of sites near streams and lakes during the summer. Current demand is less than three percent of the practical maximum capacity for the HCNRA. A surplus of supply over projected demand will continue as predicted in the *Forest Plan* in these types of areas. As a result, less than two percent of the visitors to the HCNRA may potentially leave the area over the next decade due to these restrictions on access. This will have a minimal effect on the level of visitation and I believe this is responsive to public needs and desires while managing for future growth in visitation in the long term. The HCNRA will continue to provide half of the nonmotorized settings for the WWNF and provide a high probability for these nonmotorized experiences. Differences between alternatives in miles of roads by various maintenance levels are displayed in **Table 3-20 (page 448)**. These projected levels of maintenance levels are generally within projections for the *Forest Plan* with a few exceptions. Based on new requirements for roads analysis and the decrease in recent budget levels associated with roads, I do not find that the deviations between **Table 3-20** and projections for the *Forest Plan* constitute NFMA significance. *Forest Plan* Table 4-1 displays projections only, and these are subject to a wide variety of other influences such as changes in the road policy and budgeting cycles outside of this decision process.

Output levels projected for forested vegetation and grassland vegetation are shown in **Tables 3-39 and 3-50 (pages 144; 183)**, respectively. Changes in forested and grassland vegetation management direction will provide for maintenance or enhancement of ecosystems that are unique to the HCNRA, better meeting the intent of the *HCNRA Act* than the existing CMP. The manner in which the areas are treated will change in terms of use of forested vegetation treatments and PF, but the overall level of treatment is expected to be similar to the current situation. Timber harvested from the HCNRA will continue to be unregulated and will have no effect on *Forest Plan* outputs because it does not contribute toward the allowable sale quantity pursuant to the *Public LURs* (36 CFR 292.46) (**Chapter 3, page 125**).

Managing grassland communities for a goal of achieving their PNC and meeting the direction outlined in **Appendix C** page of the FEIS will result in an estimated 10 percent reduction in existing AUMs. These reductions in active grazing will be within the declines projected by the *Forest Plan* (-14%) to meet management direction during allotment-specific analysis (**Chapter 3, page 182**).

Wildlife output levels are displayed in **Table 3-95 (page 392)**, and discussed in **Chapter 3 Wildlife Habitat** in the FEIS. The Eastside Screens stressed management of forested structure toward HRV and contained specific direction for late and old structural stages. Alternative E-modified does not change this direction for the HCNRA portion of the WWNF. Changes in late and old structure (**Tables C-11 through C-20**) are used to compare outputs with the No Action alternative and Alternative E-modified, with projected levels of old growth in Table 4-1 of the *Forest Plan*. Other wildlife outputs are discussed in the FEIS text cited.

No changes to projected output levels for mining are anticipated with this decision. Mining effects are discussed in **Chapter 3 Minerals (pages 429-431)** in the FEIS.

Changes in the expected economic outputs projected in the *Forest Plan* are discussed in **Chapter 3 Socioeconomic Conditions** in the FEIS. As discussed in the text and displayed in **Tables 3-101 through 3-107 (pages 448-465)**, changes expected are within those projected for the second decade of the planning period.

Based on these factors, I have determined that this amendment in relation to changes in goals, objectives, and outputs does not significantly alter the long-term relationship between the level of goods and service projected by the *Forest Plan* and is nonsignificant in terms of NFMA.

Management Prescriptions

This amendment establishes long-term management goals, objectives, standards and guidelines (desired future conditions) that apply to the entire HCNRA only for those specific items identified as needing change in the monitoring and evaluation process, results from public opinion surveys; factors in the *Public and Private LURs*; changes in FS directives; and new resource information and research (**Chapter 1, page 5**).

MA allocations themselves are not changed by this decision. Changes to specific standards and guidelines within the MAs established with the existing CMP and *Forest Plan* are made with this decision. These changes are shown for the selected Alternative E-modified in **Appendix C (pages 1-249)** of the FEIS. Changes represent a programmatic change in direction for the HCNRA. The effect of changes made in the standards and guidelines upon goals, objectives, and production of goods and services (outputs) are discussed in the preceding sections. My decision and associated changes will not alter the goals or desired conditions in the *Forest Plan*. In fact, my decision enhances achievement of the desired conditions for the HCNRA found in the *HCNRA Act* and already included in the *Forest Plan* through the existing CMP. In addition, the production of goods and services (outputs) projected in the *Forest Plan* are not substantially altered.

Based on the criteria and discussion outlined above, I concluded that my decision to implement Alternative E-modified a nonsignificant amendment to the *Forest Plan*. Although the HCNRA is a large portion of the planning area covered by the *Forest Plan*, this amendment is made late in the planning period; it does not alter the goals and objectives of the *Forest Plan*; it does not make changes to the MA prescriptions, or alter the desired conditions of those prescriptions. Finally, the projected changes to the outputs of goods and services are within those parameters expected in the *Forest Plan*.

Consistency with NFMA Requirements

I find this decision to be consistent with the *Forest Plan* and with the requirements of the NFMA implementing regulations; specifically; (36 CFR 219) for resource protection; vegetative manipulation; silvicultural practices, even-aged practices; riparian areas, soil and water; and diversity.

Findings Required by Other Laws and Regulations

My decision incorporates the elements from the purpose and need that are within my jurisdiction (**Chapter 1, pages 14-17**). The program decisions I make here are accompanied by the necessary supporting NEPA analysis and disclosure required by law and regulation. My decision complies with all legal requirements applicable to the HCNRA and the WWNF. I have identified several areas of consistency below. Refer to the legislative requirements listed in **Chapter 1 (pages 5; 42) Appendix A**, and **Chapter 3, Federal Trust Responsibilities (pages 223-228)**, and Potential Conflicts (**pages 477-482**) disclosed in the FEIS for a complete description.

Clean Air Act

My decision is in compliance with the *Clean Air Act* because it provides more control over the timing and conditions under which fire is allowed to function. It will continue to expand smoke management with the state regulatory agencies of Oregon and Idaho so that projects that produce emissions within the HCNRA are coordinated with other projects to manage cumulative impacts to air quality in the region. My decision also continues air quality monitoring established in the *Wallowa-Whitman National Forest Air Resource Monitoring Plan* (USDA 1997) to indicate risks to AQRVs from air pollution (**Chapter 3, pages 336-341; 477**).

Clean Water Act

My decision is in compliance with the *Clean Water Act* because all activities will be required to comply with state and federal clean water laws and regulations to maintain or improve water quality including anti-degradation of water quality and maintenance of high quality waters over the long-term (**Chapter 3, pages 356-372; 477**).

Endangered Species Act

I reviewed the BA prepared to evaluate the potential effects of Alternative E-modified on federally listed species and their habitat in compliance with the *ESA*. The BA concluded that implementation of Alternative E-modified may effect, but will not likely to adversely affect the fall chinook salmon-Snake River, sockeye salmon-Snake River, spring/summer chinook salmon-Snake River, and steelhead-Snake River, bull trout-Columbia Basin, northern bald eagle, gray wolf, Bliss Rapid snail, MacFarlane's four-o'clock, Spalding's catchfly, Ute ladies'-tresses, and water howellia, slender moonwort (candidate), yellow-billed cuckoo (candidate), and Columbia spotted frog (candidate). The BA also concluded that implementation of Alternative E-modified will not effect Howell's spectacular thelypody (refer to the compact disc at the end of this document for the BA).

The NOAA-Fisheries concurred (April 16, 2003) that implementation of my decision may affect, but will not likely adversely affect fall chinook salmon-Snake River, sockeye salmon-Snake River, spring/summer chinook salmon-Snake River, and steelhead-Snake River (refer to compact disc in the end of this document for the letter).

The U.S. Fish and Wildlife Service (USFWS) concurred (May 28, 2003) that implementation of my decision may affect, but will not likely adversely affect bull trout-Columbia Basin, northern bald eagle, gray wolf, Bliss Rapid snail, MacFarlane's four-o'clock, Spalding's catchfly, Ute ladies'-tresses, and water howellia. Because the District Court for the District of Columbia enjoined the USFWS from concurring with actions proposed by federal agencies, the USFWS prepared a BO for Canada lynx (May 28, 2003). The BO concluded that the activities associated with the amended direction "are not likely to jeopardize the continued existence of the Canada lynx."

The USFWS also concurred with the "not likely to adversely affect" determinations for the slender moonwort (candidate), yellow-billed cuckoo (candidate), and Columbia spotted frog (candidate). The USFWS also agreed with the "no effect" determination for Howell's spectacular thelypody (refer to compact disc in the end of this document for the letter and BO).

Environmental Justice

Alternative E-modified complies with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, and subsequent guidance from the CEQ that federal agencies make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of their programs, policies, and activities on minority populations and low-income populations. The effects of Alternative E-modified on the human environment (including minority, low-income and subsistence populations) are disclosed in **Chapter 3 (pages 460-461)**, Socioeconomic Conditions. Effects are expected to be similar for all human populations, regardless of nationality, gender, race, or income.

Federal Trust Responsibilities

Pursuant to the *Treaty with the Nez Perces, 1855 (Treaty of 1855)*, Nez Perce Tribe members have express rights reserved for the "exclusive right of taking fish in all the streams where running through or bordering said reservation is further secured to said Indians; as also the right of taking fish at all usual and accustomed places in common with citizens of the Territory; and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land." The *HCNRA Act* also specifically requires in Section 8(e) for provision of full public participation and consideration of the views of all interested agencies, organizations, and individuals including the Nez Perce Tribe.

Since 1994 when the first planning process started on the DEIS, Interdisciplinary Team representatives met several times with Nez Perce Tribe members and natural resource staff to understand, identify, and resolve issues and concerns. These activities were conducted pursuant to federal trust responsibilities to consult early and frequently with the Nez Perce Tribe on a government-to-government basis, as a federally recognized tribe with off-reservation treaty rights within the HCNRA. Refer to **Chapter 1 (pages 30-36)** of the FEIS for a summary of consultation activities.

My decision for the amended management direction for the HCNRA considered Nez Perce Tribe treaty rights and interests based on the dialogue and communication between the WWNF and the Tribe centered around cultural resources, fire, fisheries management, roads and wildlife, bighorn sheep, grazing rights, oral histories for the Wild Rapid River, and contracting opportunities.

In addition to the management direction previously described for Federal Trust Responsibilities that provides goals, objectives, standards and guidelines specifically for consultation on a government-to-government basis, my decision provides additional direction to ensure meeting federal trust responsibilities. Heritage resources direction emphasizes the protection of heritage resources and consultation with the Nez Perce Tribe under all applicable laws and executive orders including the *Native American Graves Protection and Repatriation Act* and Executive Order 13007 for sacred sites. Alternative E-modified also emphasizes consulting with the Nez Perce Tribe to prioritize and manage plant, wildlife, and fishery species important to the Tribe to ensure continued harvesting and gathering for cultural, spiritual, and religious activities. Alternative E-modified expands the natural role of fire to the landscape to areas outside Wilderness through the emphasis on WFU. PF will be used to maintain, restore and sustain healthy forests and grasslands that provide plants, berries, and habitat for wildlife important to the Tribe. The traditional fire suppression approach to wildfires will be reduced and the amount of WFU in forest habitats will be increased (28% of the forested acres). A balance of WFU, PF and wildfire will move forested habitats toward HRV over the next decade and reduce the risk of large, stand-replacement fires that may be detrimental to associated species.

Elements from the *Coarse Screening Process* (Rhodes et al 1994) as coordinated with the Nez Perce Tribe will be incorporated into aquatic assessments to reinforce PACFISH and INFISH standards and to assess biological indicators to meet the objectives of the *Wy-Kan-Ush-Mi-Wa-Kish-Wit: Spirit of the Salmon Plan* (CRITFC 1996) and the *Wallowa County/Nez Perce Tribe Salmon*. My decision closes approximately 33 percent of open roads and increases the level of seasonal road closures by 27 miles (Lord Flat, Teepee Butte, Wildhorse, PO Saddle, and Kirkwood) to mitigate effects roads have on forest-associated wildlife important to the Tribe such as elk (Nez Perce Tribe 2001). The Tribe will be consulted regarding future site-specific closures of roads to determine potential effects to access for hunting and gathering. Closing of the majority of the vacant allotments and all of the vacant sheep allotments will resolve concerns over incompatibility between domestic sheep grazing and bighorn sheep populations and continue efforts toward restoration of this species and other terrestrial species that rely on grassland ecosystems. I will honor requests by the Nez Perce Tribe to exercise their grazing rights pursuant to the Treaty and support efforts to implement a feasible grazing strategy.

I am grateful for the role the Circle of Elders played in providing oral histories about traditional uses of the Wild Rapid River to support the determination of outstandingly remarkable values (prehistoric settlement and traditional use) for the corridor. Additional opportunities for oral histories will be pursued with the Tribe through the Circle of Elders and other staff to provide greater understanding about other traditional uses such as the historic role of fire across the landscape. The WWNF will continue to pursue opportunities to work with and train tribal members as part of our ongoing work to ensure increased awareness and protection of resources important to the Tribe. I believe my decision provides strong direction to protect and maintain the Tribe's treaty-reserved rights pursuant to the *Treaty of 1855*, provides for tribal interests applicable to other laws and executive orders, and resolves the Tribe's concerns while meeting the intent of the *HCNRA Act*.

National Historic Preservation Act

Alternative E-modified is in compliance with the *National Historic Preservation Act* because all actions would comply with federal historic preservation laws and regulations, including *Executive Order 11593*; Section 106 and 110 of the *National Historic Preservation Act of 1966*, as amended; the *American Indian Religious Freedom Act of 1978*; the *Archaeological Resources Protection Act of 1979*, as amended; the *Native American Graves Protection and Repatriation Act of 1990*; *Executive Order 13007*; and the *Management Standards and Guidelines for Heritage Resources within the Hells Canyon National Recreation Area* (36 CFR 292.43) as disclosed in the Heritage Resources **Chapter 3 (pages 222; 477)** and in **Appendix E**.

Implementation of the Decision

Implementation of this decision begins seven calendar days from the day after the legal notice of this decision is published in the *Baker City Herald*, Baker City, Oregon; the official newspaper of record except for the Access and Travel Management decisions as described below.

A new management plan (new CMP) will be prepared to replace the existing CMP (USDA 1982). However, implementation of the decision is not contingent upon final preparation of a new CMP. The amended direction for the HCNRA is fully described by Alternative E-modified in **Appendix C (pages 1-249)** and appropriate sections of **Appendices F (pages 13-16), G (pages 1-18), H (pages 1-8) and K (pages 1-10)** of the FEIS as referenced in **Appendix C**. These sections of the FEIS will serve as the amended management direction until a new CMP is fully prepared (refer to the compact disc at the end of this document).

Permits, Contracts, and Special Use Authorizations

NFMA requires that “permits, contracts, and other instruments for use and occupancy” of NFS lands be “consistent” with the *Forest Plan*. NFMA qualifies this requirement in three ways:

- 1) these documents must be revised only “when necessary”;
- 2) these documents must be revised “as soon as practicable”; and
- 3) any revisions are “subject to valid existing rights.”

Permits, contracts, and other instruments which are determined by the responsible official to be consistent with this decision, or which are adjusted to be consistent may proceed. This language allows the decision maker a great deal of discretion.

Based on this discretion, I am directing the Area Ranger for the HCNRA to revise all existing permits, contracts and other special use authorizations to be consistent with the newly established management direction in Alternative E-modified as necessary subject to valid existing rights. All special use permits including outfitter and guides, other special uses such as electronic towers or diversion ditches, and grazing permits will be modified by incorporating the amended direction from Alternative E-modified into the annual operating plan or instructions as appropriate.

All special use permit holders will be officially notified by letter of any necessary modifications. These modifications will be effective upon notification of my decision.

Access and Travel Management

Management decisions for access will change allowable uses and access to areas of the HCNRA for motorized vehicles. Certain changes in travel management are necessary to bring the current travel map into compliance with the new CMP.

The use of the primary forest roads (maintenance levels 3, 4, and 5) will not be changed by this decision. While certain kinds of uses are restricted, this change does not close any designated roads except for the 27 miles of seasonal road closures as previously described in the Decision section (see **Figure 5**).

All open roads (maintenance levels 2, 3, 4, and 5) including new seasonal road closures, trails, backcountry airstrips, over-snow vehicle routes and play areas, and dispersed campsites and areas (**Appendix C, Table C-1, pages 20-30; Appendix C, Tables C-2a through C-2d, pages 148-157; and Tables C-3a and C-3b, pages 158-192**) will be designated through a new WWNF order to allow for enforcement.

Based on the time needed to notify various user groups of the changes, posting of closures, and any necessary surveys, I am exercising my discretion to provide a phased implementation of my access-related decisions. **Table 2** describes the timeline and priorities for implementation of the access and travel management decisions:

Table 2: Timeline and Priorities for Implementation of the Access and Travel Management Decisions

Date	Action
July 2003	Begin educating the public about the changes in access and travel management.
July 2003	Begin posting roads, trails, backcountry airstrips, over-snow vehicle routes and play area, and dispersed campsites and areas and conduct any necessary surveys.
January 2004	Develop a new travel management plan and maps as needed including a new WWNF order and fuelwood restrictions for the HCNRA.
April 2004	Seasonally close approximately 1,000 feet (0.2 miles) of the Kirkwood Road (Forest Road 2062-132) immediately southeast of Kirkwood Historic Ranch during the spawning period for fish from April 1 st through June 30 th each year to motorized vehicles and mechanical equipment. Close road with a gate (Appendix C, Table C-3b, page 169).
August 2004	Seasonally close approximately 5 miles of Teepee Butte Road (Forest Road 46-595) and approximately 7 miles of Wildhorse Road (Forest Road 46-596) at the junction with Forest Road 46-595 and Forest Road 46-596 from 3 days prior to archery season to the end of antlerless elk season (late August through late November) to motorized vehicles. Post roads closed with signs (Appendix C, Table C-3b, page 174).
August 2004	Seasonally close approximately 15 miles of Lord Flat Trail (#1774) at Warnock Corral Trailhead from 3 days prior to archery season to end of antlerless elk season (late August to late November) to motorized vehicles. Post the trail closed with signs (Appendix C, Table C-3b, page 179).
August 2004	Seasonally close approximately 2 ½ miles of Forest Road 3965-320 from PO Saddle to the Hells Canyon Wilderness boundary to motorized vehicles from 3 days prior to archery season (late August) and open in the spring after the roadbed is dry enough to minimize resource damage (June 15). Close road with existing gate (Appendix C, Table C-3b, pages 185-186).

Additional road closures or other actions needed to meet the new CMP will require site-specific disclosure of effects under NEPA including public involvement. I expect this road analysis to occur through implementation of my decision with a priority emphasis on the McGraw, Upper Imnaha and North Pine Recreation Analysis Areas (#40, 41, and 42) due to the extent of the road system in those areas. Roads not addressed in the Forest-wide analysis and the HCNRA road analysis will be addressed as part of proposed projects or management activities, or to address resource concerns. Needs for additional seasonal road closures can also be evaluated at that time based on further information.

Special Fuelwood Areas will be designated following site-specific analysis also in compliance with the new CMP. Fuelwood cutting area maps will be updated to reflect these changes at the earliest possible date.

All seasonal restrictions, special orders, private access rights, special use permits, and legal statutes currently in use will continue to be applicable. Current right-of-way and agreements for private land access will remain in place. In addition, roads under other jurisdictions such as county and state roads shall continue to function as currently designated.

Mitigation

My decision includes goals and objectives that may require alteration of the physical and biological environment to achieve them. Alternative E-modified includes standards and guidelines to mitigate the environmental consequences associated with modifying the landscape. Because standards are mandatory, they will prevent certain future actions, or parts of them, from occurring (40 CFR 1508.20(a)). Standards will also minimize environmental effects by limiting the level of future activities (40 CFR 1508.20(b)). In addition, the CMP displays a component of restoration (40 CFR 1508.20(c)). Thus, mitigation is an integral component of the new CMP.

Further site-specific mitigation measures will be adopted in conjunction with site-specific projects implementing this decision. Such decisions will be preceded by additional environmental analysis, at which time additional concerns regarding mitigation measures will be addressed. Use of mitigation measures will be monitored as an integral part of the *Forest Plan* monitoring and evaluation program. Results of these mitigation measures will be evaluated and the mitigation measures, or standards and guidelines, may be changed if monitoring results indicate a need. I believe all practicable means to avoid or minimize environmental consequences to the level necessary to adequately protect and enhance the objectives of Section 7 of the *HCNRA Act* have been incorporated into my decision.

Procedures for Change During Implementation

The new CMP, as incorporated into the *Forest Plan*, may be amended or revised to respond to changing needs and opportunities including resource management innovations and information developed during monitoring and evaluation of the *Forest Plan*. I have considered that scientific assessments such as the *Assessment of Ecosystem Components in the Interior Columbia Basin* (Quigley and Arbelbide 1997) may provide new information that may be used during revision of the *Forest Plan*. I have also considered that planning processes such as the *Invasive Plants EIS* may amend the *Forest Plan*, encompassing the new CMP, with long-term management direction for preventing and managing invasive plants. I directed the Interdisciplinary Team to incorporate the ICBEMP science to ensure compatibility of the new CMP management direction relative to the scope of this new information including invasive plants.

As Forest Supervisor, I am authorized to implement an amendment to the existing CMP in accordance with the requirements of 36 CFR 219.10 (e) and (f), FSM 1922.51 and 1922.52, and FSH 1909.12, 5.32.

Detailed explanations of each step in the amendment process are located in the analysis file. The FEIS contains summaries from the analysis files and includes references to the records that are on file in the Forest Supervisor's Office in Baker City, Oregon. Refer to the Contact Person listed below to review these records.

Site-specific Analysis and Proposed Projects

Other aspects of the new CMP will be implemented "as soon as practicable" as provided by NFMA through site-specific NEPA analysis, public involvement, and consultation under the *ESA* for proposed projects. The new CMP influences the determination of management activities and projects by establishing clear management goals (desired future conditions) for the HCNRA. The new CMP does not establish schedules for project actions. This approach provides flexibility for the Area Ranger to adapt program and project selection as budgets, resource capabilities, and management priorities change.

The projections of probable outcomes in the FEIS were used to estimate the environmental effects of Alternative E-modified. This amendment purposefully avoids determining activity schedules. Likely future recreation proposals, potential vegetation treatments, and prescribed fire provide examples of actions that may be proposed in the future to support the goals for the HCNRA following site-specific analysis. Implementation of site-specific projects will lead towards accomplishing goals, objectives, and desired future conditions described in the CMP.

When allotment management plans are prepared, the new direction will be evaluated and incorporated as necessary into the new permit. Other "uses and occupancy" agreements will be reviewed to determine whether or when the Area Ranger for the HCNRA should exercise discretion to bring them into compliance with the new CMP. All activities, many of which are interdependent, may be affected by annual budgets.

Appeal Rights

This decision including the five site-specific seasonal road closures is subject to appeal in accordance with 36 CFR Part 217. A *Notice of Appeal* must be submitted in writing and clearly state that it is a *Notice of Appeal* filed pursuant to 36 CFR Part 217. The 45-day appeal period begins the day after the date the legal notice of this decision is published in the *Baker City Herald*, Baker City, Oregon; the official newspaper of record. This period is not extendable. The *Notice of Appeal* must be filed (two copies) with the Reviewing Officer (Regional Forester):

Linda Goodman, Regional Forester
ATTENTION: 1570 Appeals
P.O. Box 3623
Portland, Oregon 97208-3623

The *Notice of Appeal* must include sufficient narrative evidence and argument to show why this decision should be changed or reversed (36 CFR 217.9). The written *Notice of Appeal* at a minimum must:

- State that the document is a *Notice of Appeal* filed pursuant to 36 CFR part 217;

- List the name, address, and telephone number of the appellant;
- Identify the decision about which the requester objects;
- Identify the document in which the decision is contained by title and subject, date of the decision, and name and title of the Forest Supervisor, Karyn L. Wood;
- Identify specifically that portion of the decision or decision document to which the requester objects;
- State the reasons for objecting, including issues of fact, law, regulation, or policy, and if applicable, specifically how the decision violates law, regulation, or policy; and
- Identify the specific change(s) in the decision that the appellant seeks.

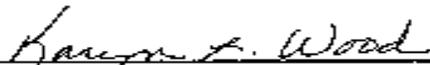
For a period not to exceed 20 days following the filing of a *Notice of Appeal*, the Reviewing Officer shall accept requests to intervene in the appeal from any interested or potentially affected person or organization (36 CFR 217.14(a)).

Contact Person

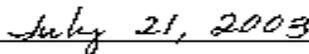
If you would like more information regarding appeal rights, or would like to review the analysis file, please contact:

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KARYN L. WOOD
Forest Supervisor



SUMMARY

Final Environmental Impact Statement

Introduction

This document summarizes the *Final Environmental Impact Statement* (FEIS) for the *Comprehensive Management Plan* (CMP) for the Hells Canyon National Recreation Area (HCNRA). The FEIS provides the basis for the *Record of Decision* (ROD) to amend the management direction in the existing CMP and the *Wallowa-Whitman National Forest Land and Resource Management Plan* (*Forest Plan*). For further information, refer to the full text of the ROD, FEIS, and other related documents available at <http://www.fs.fed.us/hellscanyon/>.

Background and History

When Congress established the Hells Canyon National Recreation Area (HCNRA) on December 31, 1975 by the *Hells Canyon National Recreation Area Act* (*HCNRA Act*) also referred to as PL 94-199 (Public Law), the development of a CMP was one of the requirements created. The Chief of the Forest Service (FS) approved the existing CMP on April 30, 1982, and it was amended by subsequent appeal decisions in 1983 and 1984 (United States Department of Agriculture [USDA] 1982 as amended).

In 1990, the existing CMP was incorporated without modification into the Wallowa-Whitman National Forest (WWNF) *Forest Plan* (USDA 1990). The *Forest Plan* has also been subsequently amended. The existing CMP is an integrated part of the *Forest Plan* (as amended) and subject to the procedures for modifying management direction found in the *National Forest Management Act of 1976* (NFMA) regulations (36 Code of Federal Regulations [CFR] 219).

More than 20 years have passed since the existing CMP was approved and over 10 years since the *Forest Plan* incorporated it. In December 1993, the Forest Supervisor of the WWNF initiated a process to assess the need for adjusting direction due to changes in conditions or demands from the public (36 CFR 219.10). A combination of factors including concerns raised through monitoring and evaluation reports, changes in regulations for public and private lands in the HCNRA, new scientific information, and public comments indicating changing social values, use patterns, and resource conditions led the Forest Supervisor to re-initiate the process in 1998.

Based upon the assessment of the need for adjustment, the Forest Supervisor proposed to amend the *Forest Plan* to change management direction for the HCNRA where necessary. Some management direction would not change. Any changes in management direction will reflect the intent of the *HCNRA Act*, *Public and Private Land Use Regulations* (*Public and Private LURs*) (36 CFR 292, USDA 1994); FS directives; changing social values; agency emphasis on ecosystem sustainability; new information and research findings; and results from monitoring and evaluation.

This amendment process follows the implementing regulations of the NFMA (36 CFR 219.10 (e) and (f)), FS Manual [FSM] 1922.51 and 1922.52, and FS Handbook [FSH] 1909.12, Chapter 5.32. This FEIS documents the planning process, as required by the *National Environmental Policy Act* (NEPA) in accordance with the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR, Parts 1500-1508).

Although the FS is in the process of developing changes to the 1982 federal planning rule to guide the forest planning process, this amendment process was initiated in 1993 under the 1982 regulations. The amendment process will continue to be managed pursuant to the 1982 planning regulations. A new CMP will be prepared to replace the existing CMP.

Area Location and Description

The HCNRA is located in west central Idaho and the northeast corner of Oregon on portions of the Wallowa-Whitman, Nez Perce, and Payette National Forests. The entire HCNRA is administered by the WWNF. There are 652,488 acres within the HCNRA boundary approximately 28 percent of the land under the administration of the WWNF, including approximately 33,000 acres of privately owned land. Approximately 117,073 acres of the Nez Perce and 24,000 acres of the Payette National Forests occur in the HCNRA.

It lies within Baker and Wallowa Counties in Oregon, and Adams, Idaho and Nez Perce Counties in Idaho and near the border of Asotin County in Washington. Baker County comprises four percent of the HCNRA, Wallowa County 74 percent, Adams four percent, Idaho County 18 percent, and Nez Perce County less than one percent. Principal nearby communities in Oregon include Imnaha, Joseph, Enterprise, Halfway and Richland. Baker City and La Grande are also nearby. In Idaho, principal nearby communities include Riggins, Grangeville and Lewiston. The Boise/Caldwell/Nampa area is also near the HCNRA. Asotin and Clarkston in Washington are also nearby. See **Figure 1** for a map of the vicinity.

The principal physical feature of the HCNRA is Hells Canyon. Measuring 7,993 feet deep from mountain peaks to the river and, at places, 10 miles from rim to rim, it forms the deepest river canyon in North America. The HCNRA comprises an exceptional richness, diversity, and productivity of vegetation that combines with unique geology (uplands, benchlands, canyonlands, and mountains) to support a diversity of fish and wildlife. Where developed areas exist, they are rustic in nature and are often associated with homesteads or old mining sites. The economy of the surrounding area has historically been based on wood products and ranching. However, in recent years tourism and recreation-related activities have grown and become increasingly important to the local economy.

Purpose and Need

The Wallowa-Whitman Forest Supervisor proposes to change the management direction of the HCNRA by amending the *Forest Plan* to provide programmatic management direction for the HCNRA. The need for change is derived from several actions and findings. Using the authority delegated to the Forest Supervisor through 36 CFR 219.10 and FSM 1950, Environmental Policy and Procedures, a CMP adjustment strategy was established. A monitoring and evaluation report was completed that consolidated information from 1984 through 1993 and identified several items needing change (USDA 1994). For example, results indicate that desired conditions for visitor management and recreation use need to be defined better to protect and maintain recreation experiences than provided for under the existing CMP and *Forest Plan* (as amended).

Based on these findings, the team responsible for conducting the planning recommended an adjustment to the existing CMP through an amendment to the *Forest Plan*. The team recommended adjustments in the management direction for the following 16 resource areas in terms of goals, objectives, standards, guidelines, monitoring and evaluation, and management area (MA) direction:

- recreation settings, experiences, and opportunities, including Wilderness and scenery;
- access and facilities;
- forested vegetation, grasslands, and forest understory;
- vacant allotments disposition and satisfactory range conditions;
- heritage resources;
- federal trust responsibilities;
- soils;
- Wild and Scenic Rivers;
- biologically unique species, habitats, and ecosystems;
- fire and air quality;
- riparian/aquatic habitat and water quality;
- wildlife habitat;
- scientific research;
- geologic resources;
- minerals; and
- land management and special uses.

In summary, the overall need for change is based on: 1) the results of WWNF monitoring and evaluation reports indicating areas needing change such as defining desired conditions for visitor management and recreation use (USDA 1994); 2) the standards set forth in the *Private and Public LURs* approved in 1994 (36 CFR 292) for the use of motorized and mechanical equipment; the protection and preservation of cultural and paleontological resources; mining; private land use; timber harvesting; and grazing activities; 3) the potential need to set clearly defined desired conditions for Wilderness settings; and 4) new scientific information from the Interior Columbia Basin Ecosystem Management Project (ICBEMP).

The underlying purpose of the action is to amend some elements of the programmatic direction for these 16 resource areas and also for monitoring and evaluation within the existing CMP and the *Forest Plan* (as amended). Management goals, objectives, standards, and guidelines; MA direction; and monitoring and evaluation would be aligned with the intent of better achieving the objectives of the *HCNRA Act* (PL 94-199), which established the HCNRA, the Hells Canyon Wilderness, and the Rapid and Snake Wild and Scenic Rivers; with the *Oregon Wilderness Act* (PL 98-328); the *Omnibus Oregon Wild and Scenic Rivers Act* (PL 100-552); *Private and Public LURs* (36 CFR 292); *Forest Plan* content regulations (36 CFR 219.11); and FSM 1920.

If action is not taken to amend the programmatic management direction in the existing *Forest Plan* and the existing CMP, objectives set forth in Section 7 of the *HCNRA Act* may not be met:

Section 7. Except as otherwise provided in Sections 2 and 3 of this Act, and subject to the provisions of Section 10 of this Act, the Secretary shall administer the recreation area in accordance with the laws, rules, and regulations applicable to the national forests for public outdoor recreation in a manner compatible with the following objectives:

- 1) the maintenance and protection of the free flowing nature of the rivers within the recreation area;
- 2) conservation of scenic, wilderness, cultural, scientific, and other values contributing to the public benefit;
- 3) preservation, especially in the area generally known as Hells Canyon, of all features and peculiarities believed to be biologically unique including, but not limited to, 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 associated therewith;
- 4) protection and maintenance of fish and wildlife habitat;
- 5) protection of archeological and paleontologic sites and interpretation of these sites for the public benefit and knowledge insofar as it is compatible with protection;
- 6) preservation and restoration of historic sites associated with and typifying the economic and social history of the region and the American West; and
- 7) such management, utilization, and disposal of natural resources on federally owned lands, including, but not limited to, timber harvesting by selective cutting, mining and grazing and the continuation of such existing uses and developments as are compatible with the provisions of the Act.

Recreation settings, experiences, and opportunities provide an example where existing management direction is inadequate and needs changed. The existing CMP provides direction to develop more facilities and move toward more developed recreation settings in response to increases in use. However, public surveys and scoping conducted as part of the planning process indicate people want the developed areas to remain the way they are and they do not want to provide for large increases in use or changes in the undeveloped settings. Desired conditions for acceptable levels of social encounters, thresholds for effects from visitor use, and appropriate strategies for managing visitor use are not clearly defined.

Amended management direction is needed to ensure acceptable levels of social encounters and visitor effects to meet the intent of Section 7 of the *HCNRA Act*. Recreation use now and in the future may exceed social encounter thresholds that are acceptable to the recreating public and create user conflicts. Lack of specific direction and strategies for managing use at defined thresholds may lead to resource effects such as wildlife displacement, increased number and size of dispersed recreation sites, soil compaction, and vegetative changes. Because these desired conditions and thresholds for acceptable recreation use are not clearly defined, a change in management direction is needed.

**Figure 1: Vicinity Map
Hells Canyon National Recreation Area**

Summary of Existing Management Direction for the HCNRA

Legislative Direction

The *HCNRA Act* provides the principal legislation that guides management of the HCNRA. Several sections clarify the intent for the HCNRA. Section 1(a) of the *HCNRA Act* explicitly states that the HCNRA was created to assure that this area would be preserved for this and future generations, and that the recreational and ecological values and public enjoyment of the area are thereby enhanced. Section 7 of the *HCNRA Act* states that the recreation area will be administered for public outdoor recreation in a manner compatible with seven objectives. Section 8 directs the development of a CMP to provide for a broad range of land uses and recreation opportunities. Section 10 directs that rules and regulations will be promulgated for public and private lands. Section 13 addresses the recognized traditional and valid uses of the recreation area. Other congressional acts, legislative acts, executive orders and policies such as the *Public and Private LURs*, the *Wilderness Act*, the *Wild and Scenic Rivers Act (WSR Act)*, and the *Treaty of 1855* with the Nez Perce Tribe also provide direction relevant to management of the HCNRA.

Forest Plan Direction for the HCNRA

When Congress established the HCNRA, the boundary included portions of the Nez Perce, Payette and Wallowa-Whitman National Forests in Regions 1, 4, and 6, respectively. The Chief of the FS decided that the HCNRA would be managed as one administrative unit in Region 6 by the Forest Supervisor of the WWNF. The WWNF is responsible for establishing programmatic direction for the management of the HCNRA and completing consultation in accordance with the *Endangered Species Act (ESA)* for programmatic decisions.

The *Forest Plan* for the WWNF, as amended, provides guidance through its established goals, objectives, desired future conditions, forest-wide standards and guidelines, and specific MA direction. The *Forest Plan* incorporates the existing CMP, subsequent *Forest Plan* amendments, and terms and conditions related to consultation in accordance with the *ESA* to provide existing management direction for the HCNRA. A number of resource specific changes in direction have occurred including the Regional Forester's amendment establishing riparian, ecosystem, and wildlife standards (Eastside Screens) (USDA 1994); *Public and Private LURs* (USDA 1994) for the HCNRA; *Wild and Scenic Snake River Recreation Management Plan* (USDA 1999); adoption of strategies for managing anadromous (PACFISH) and inland native fish (INFISH) (USDA and USDI 1995, USDA 1995); and termination of domestic sheep grazing in the HCNRA (USDA 1995). Several fish, wildlife, and plant species have been listed in the last ten years and changes in management activities have occurred to provide protection under the *ESA*. All activities in the HCNRA are managed in compliance with this direction. These previous decisions were not reconsidered in the FEIS unless specifically addressed in the proposed action or if scoping and/or the analysis process identified new issues not resolved. These decisions may be reconsidered during the *Forest Plan* revision scheduled to begin in October 2003.

Management Areas

Management areas have similar objectives and common management prescriptions. The *Forest Plan* provides multiple use direction for managing these specific areas. The following briefly describes each MA. See **Figure 2** below for a map of MAs.

Management Area 4 – Wilderness: The management intent of these areas is to preserve the wilderness qualities. These areas will be managed in accordance with the *Wilderness Act*, the *HCNRA Act* (establishing the Hells Canyon Wilderness), the *Oregon Wilderness Act*, and the FSM 2320. The intent of the *Wilderness Act* is to preserve and protect the natural condition and characteristics of designated lands and to provide for current and future public enjoyment of these areas and their wilderness character. These areas are to remain essentially unaltered and undisturbed by man, with natural ecological processes (including the natural role of fire) permitted to function with a minimum of human interference (**approximately 220,000 acres**).

**Figure 2: Management Areas
Hells Canyon National Recreation Area**

Management Area 7 – Imnaha and Rapid Wild and Scenic Rivers: Management in this area is intended to protect and enhance the special values of those rivers or river segments (meaning the river plus its associated corridor) which are part of the National Wild and Scenic River System. Management of lands will not diminish the rivers free flow, water quality, and outstandingly remarkable values (**approximately 35,474 acres**).

Management Area 8 – Wild and Scenic Snake River: This area includes the 67.5-mile Wild and Scenic River corridor along the Snake River. The primary management emphasis is to protect and enhance the values for which the river was designated Wild and Scenic under the *WSR Act* (**approximately 14,535 acres**).

Management Area 9 – Dispersed Recreation/Native Vegetation: In these areas, all activities will be managed to provide many opportunities for dispersed recreation and to enhance native vegetation. It is envisioned that these areas will eventually be almost entirely occupied by native plant species. Rangelands will be managed to maintain satisfactory range condition that will be achieved and maintained primarily by nonstructural means. These areas provide a mix of primitive, semi-primitive nonmotorized, and semi-primitive motorized recreation opportunities (**approximately 161,078 acres**).

Management Area 10 – Forage Emphasis: This management area lies within the grasslands interwoven with timbered stringers in the HCNRA. The grassland portions of these areas will be managed to provide maximum forage production with rangeland maintained in satisfactory condition (desired ecological status) and structural improvements being rustic in nature. Timbered portions will provide old-growth habitat at approximately current levels. These areas provide both semi-primitive motorized and semi-primitive nonmotorized opportunities (**approximately 123,029 acres**).

Management Area 11 – Dispersed Recreation/Timber Management: These areas combine dispersed recreation with timber management on the more productive sites within the HCNRA. The management objective is to provide a variety of tree species, a diversity of healthy timber stands, and ample dispersed recreation opportunities. These areas provide both semi-primitive motorized and semi-primitive nonmotorized opportunities (**approximately 70,706 acres**). Timber volume removal from the HCNRA is classified as unregulated and does not contribute to the WWNF allowable sale quantity (*Public LURS*, USDA 1994).

Management Area 12 – Research Natural Areas: The objectives for establishing Research Natural Areas (RNAs) are to preserve examples of all significant natural ecosystems for comparison with those influenced by humans, to provide educational and research areas for ecological and environmental studies, and to preserve gene pools for typical and rare and endangered plants and animals (**approximately 11,640 acres**).

Management Area 16 – Administrative and Recreation Sites: These areas include sites such as fire lookouts, permitted ranch headquarters, campgrounds, and other areas which are occupied by facilities for administration, public recreation, or features of cultural significance.

Management Area 17 – Power Transportation Facility Retention: These areas are presently used for the transport of electricity. Through proper design and management, optimum use will be made of those lands allocated to power facilities. To the extent possible, use will be made compatible with other uses of the forest including consideration of scenery management objectives.

Inventoried Roadless Areas – This environmental impact statement covers all inventoried roadless areas in the HCNRA. Inventoried roadless areas were identified in the *Forest Plan* and are also listed in the set of inventoried roadless area maps, contained in the *Forest Service Roadless Area Conservation, FEIS, Volume 2*, (USDA 2000). These maps are located at the Washington Office in Washington, D.C. Thirteen areas occur wholly or partially within the HCNRA. They total 44 percent of the HCNRA. See **Figure 3** for a map of roadless areas (**approximately 290,158 acres**).

**Figure 3: Inventoried Roadless Areas
Hells Canyon National Recreation Area**

Decision Framework

The Wallowa-Whitman National Forest Supervisor will make changes in management direction needed for the 16 resource areas to best meet resource and recreation user needs. The decision falls into the following three categories:

- Broad management goals and objectives for the HCNRA
- Management direction that best meets resource and recreation user needs
- Monitoring and evaluation

Public Involvement

Public participation has been a major component of the process. Various news releases, mailings, and public meetings have occurred to provide information to the public since 1993. The Interdisciplinary Team met several times with the Nez Perce Tribe to understand their concerns to ensure the amended direction would protect treaty rights and tribal interests. Several meetings and ongoing communications have occurred between the Team, Wallowa County, the Hells Canyon CMP Tracking Group, and others to build understanding of their interests.

Two citizen-generated alternatives (Native Ecosystem) and (Wallowa County) were incorporated into the range of alternatives through the public involvement process. The Hells Canyon Subgroup to the John Day/Snake Resource Advisory Council (RAC) was formed in 1998. They actively reviewed the revised DEIS (RDEIS) to identify areas of consensus to submit to the RAC and to the Forest Supervisor. The RDEIS was released for a 120-day public comment period in March 2000. Eight public workshops were held in Oregon, Idaho, and Washington and almost 150 people attended. Over 2,000 comments were received.

Significant Issues

Based on concerns and comments, six issues were identified as significant in relation to the proposed action.

Compatibility with Section 7 of the HCNRA Act

Public interpretation has resulted in various stated positions about the intent of the *HCNRA Act*. At the heart of the issues is the use of the word 'compatible' in Section 7 of the *HCNRA Act* which states that public outdoor recreation, timber harvesting by selective cutting, mining, and grazing can continue as long as they are 'compatible' with resources objectives from Section 7(1-6). Some people question whether management activities meet the intent of Section 7(1-7) concerning compatibility and the *HCNRA Act's* discussion of traditional and valid uses in Sections 8 and 13. Many feel that Congress intended traditional and valid uses as specified in the *HCNRA Act* to continue into perpetuity at levels present with the establishment of the HCNRA in 1975. Many feel that traditional and valid uses contribute to the economic conditions and quality of lifestyles for residents and communities near the HCNRA, and are a significant factor in the sense of place that defines the HCNRA. They believe that traditional and valid uses are diminishing, and compromising the intent of the *HCNRA Act*.

Other people feel that these uses should either not occur at all within the HCNRA, or should only occur where it is clearly demonstrated that they are "compatible" with other objectives primarily from Section 7(1-6). These people feel that reducing or eliminating traditional and valid uses are justified when there are potential incompatibilities. The WWNF interprets Section 7 as the primary objectives for which the HCNRA should be managed.

Recreation Settings, Experiences, and Opportunities

There is a concern that existing management direction would allow for increases in recreation use, diminishing semi-primitive and primitive recreation opportunities. Users generally want existing recreation settings and opportunities to be maintained at their current levels. Some users suggest that use be reduced to provide for more semi-primitive and primitive recreation opportunities, while others suggest that the HCNRA should provide greater motorized opportunities.

Access and Facilities

There is a concern that existing management direction would allow for increases in motorized access and recreation developments. There are basically three groups of people who commented: those who want more and easier access and greater recreation opportunities; those who think present access and facilities is about right; and those who want less access, undeveloped routes, and fewer developed recreation opportunities. Some commentors would minimize human impacts by eliminating new and/or improved access and developments. Others want to see high standard roads opened to new Hells Canyon vistas that can easily be viewed from passenger cars. Existing direction identifies a number of recreational opportunities for future development. Some people are uncomfortable about what has happened, or may happen, regarding access to public lands across private lands. Many commentors indicated concern over lack of accessibility for physically challenged individuals at developed recreation sites.

Forested Vegetation, Grasslands, and Forest Understory

There is a concern that existing management direction does not adequately define desired vegetative conditions for forested and grassland areas. This issue is focused on the development and implementation of management direction that ensures vegetation within the HCNRA, achieves or moves toward the historic range of variability (HRV) for seral/structural classes, and is compatible with Section 7 of the *HCNRA Act*. Additionally, concerns were raised that future management direction should focus on restoring the resiliency of the ecosystem to disturbance. Management activities that can be used to manage vegetation include the level and type of timber harvesting or forest stand treatments within MAs 7, 10, and 11, fire use, and livestock/wild ungulate grazing.

There is a growing advocacy for using wildland fire use for resource benefits (WFU) and prescribed fire (PF) to reduce the extent of large, stand-replacing fires because of historic fire suppression activities. Use of WFU or PF can improve ecosystem function and sustainability, by allowing fire to play a more natural role and occurring more frequently. Some people favor using thinning to revitalize forested stands, where necessary and others think any tree removal is simply a way to get logs to local mills with little thought given to the environmental cost.

Vacant Allotments Disposition and Satisfactory Range Conditions

The disposition of grasslands within vacant livestock allotments is a major concern expressed by commentors. Commentors have concerns that the vacant allotments should be abolished to provide for long term, naturally functioning grassland ecosystems. Other commentors expressed concerns that these vacant allotments should be incorporated into existing allotments to provide a broader array of management options, to utilize the available forage resources, and to support the "traditional and valid uses" clause of the *HCNRA Act*. *An Assessment of Ecosystem Components in the Interior Columbia Basin* (Quigley and Arbelbide 1997) provides a focus of concern for the maintenance of the high quality grasslands within the HCNRA as one of the last remaining areas of significant size where healthy native grasslands occur in the Pacific Northwest. Concerns were expressed on how to define the minimum satisfactory range conditions in which livestock would be authorized as required by the *Public LURs*.

Heritage Resources

There is a concern that increased access and recreation use may lead to damage and destruction of prehistoric and historic sites. Comments expressed a need for protecting prehistoric sites, with some individuals feeling that limiting access and allowing for self-discovery should achieve protection. Others would like to see interpretation at selected sites. Most people who commented about historic resources favor preserving at least some part of the homestead/farm era, even in Wilderness: the question is where and how much. Although a few would allow the remnants of the past to return to a natural site over time, most people favor that at least some the sites be restored and maintained.

Alternative Development Process

The process of developing alternatives for the amended management direction for the HCNRA began as an initial proposal to the public. The proposed action (Alternative B) was developed from the *Monitoring and Evaluation Report for the Comprehensive Management Plan* (USDA 1994); public opinion surveys; the *Public LURs* and *Private LURs*; changes in FS directives; and new resource information and research.

The WWNF Interdisciplinary Team used opinions, comments, and suggestions gathered at internal and public scoping meetings to develop alternative themes to respond to the issues generated by the proposed action. Five alternatives were carried forward for detailed study in the RDEIS. Alternative A represented no action. Four other alternatives were designed to achieve the purpose and need for change and to resolve the significant issues surrounding the proposed action in comparison to Alternative A. No additional alternatives were developed for this FEIS. Alternative E from the RDEIS was modified based on public comment; the purpose and need for change; and the significant issues. It is described in detail as Alternative E-modified in the FEIS.

Detailed Descriptions of the Alternatives

Alternative A (no action) is a continuation of *Forest Plan* direction, including the direction in all amendments.

Alternative B (proposed action) is a continuation of *Forest Plan* direction, including all amendments, but modified to emphasize maintaining the existing recreation experience while maintaining and restoring vegetation conditions within the HRV. It builds on public values expressed in surveys for the HCNRA and focuses on maintaining existing recreation opportunities by managing for a slower rate of growth. The level of planned facilities development emphasizes replacing existing facilities. One new outfitter and guide permit is added for guided fishing/whitewater rafting on the Imnaha River (22 total, including 1 for aviation services). New or expanded uses are based on need. Prehistoric sites are protected by custodial maintenance of existing interpretation opportunities. Historic structures that have been maintained or could be self-maintained will continue to be maintained.

Alternative E-modified (preferred) is a continuation of *Forest Plan* direction, including all amendments. It maintains the rustic and primitive character of the area. Recreation use is managed through implementation of visitor management strategies. The development level of facilities is managed to meet Recreation Opportunity Spectrum (ROS) settings with an emphasis on replacing deteriorating facilities with new, low-maintenance rustic facilities. Outfitter and guide use is managed based on the need for new or expanded uses (1 new permit for guided fishing/whitewater rafting on the Imnaha River. Permits total 22 including one term permit and a pool of service days for aviation services with temporary permits. It emphasizes restoring the natural role of fire, maintaining forested structures within the HRV, and achieving the potential natural community (PNC) for grasslands. Prehistoric sites are protected through a combination of self-discovery and custodial maintenance of existing interpretation opportunities. The most significant historic structures will be maintained, stabilized, or restored, and other historic structures will be allowed to deteriorate following data collection.

Alternative W (Wallowa County) was developed by Wallowa County. It emphasizes maintaining the rustic character of the area while restoring vegetative conditions through natural and managed processes of thinning, replacement, and succession. Facilities development and maintenance emphasizes meeting ROS setting indicators. Some improvements to the trail and road systems will be implemented. Additional outfitter and guide permits will be allowed (32 total, including 2 for aviation services) to ensure competition among outfitters providing the same type of service to the public.

Alternative N (Native Ecosystem) was developed by the Hells Canyon CMP Tracking Group, a consortium of conservation groups, individuals, tribes, and organizations. It emphasizes a healthy native ecosystem and provides for least-impact human activities to allow native ecosystems and processes to function as naturally as possible. All human activities, including outfitter and guide operations that pose a potential for a negative impact on native ecosystems will not be allowed unless they are publicly monitored for compatibility with Section 7(1-6) of the *HCNRA Act*. Native American sites and resources will be protected in a manner and to the degree that religious meanings and uses are not compromised. Traditional uses of Native American sites will be accommodated. Historic sites will be managed for self-discovery; historic resources in Wilderness will be allowed to deteriorate.

Comparison of Alternatives – Significant Issues

This section contains a tabular and written comparison of the environmental consequences of implementing each alternative for the significant issues. A comparison of some of the other issues is also included. Reviewers can determine how well each of the alternatives meets the specific objectives of the *HCNRA Act* by comparing the units of measure across alternatives.

Compatibility with Section 7 of the HCNRA Act (Significant Issue)

The alternatives are compared in terms of the objectives (1-6) from Section 7 of the *HCNRA Act*.

Unit of Measure – The effects of alternatives on “the maintenance and protection of the free-flowing nature of the rivers within the recreation area,” *HCNRA Act*, Section 7(1).

Free-flowing Rivers

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Provides for the continued maintenance and protection of the free-flowing nature of rivers. Allows for new road construction, which could impede free flow of streams and rivers if not properly designed.	Same as Alternative A, except does not allow new road construction. Provides direction to achieve or maintain the PFC of riparian areas and focuses restoration work on human-caused disturbances to meet water quality objectives.	Same as Alternative B.	Same as Alternative A.	Same as Alternative A, except does not allow new road construction with emphasis on little to no vegetation management activities, provides higher protection to this resource.

Unit of Measure – The effects of alternatives on the “conservation of scenic, wilderness, cultural, scientific, and other values contributing to the public benefit,” *HCNRA Act*, Section 7(2).

Scenic and Ecological Landscape Integrity

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Conserves scenic and ecological landscape integrity with potential forested vegetation treatment levels, in conjunction with PF and WFU. Does not implement the Scenery Management System (SMS).	Conserves and improves scenic and ecological landscape integrity with potential forested vegetation treatment levels, in conjunction with PF and WFU. Implements the SMS and emphasizes integration of social values and biophysical conditions to maintain desired landscape character.	Same as Alternative B.	Same as Alternative B. Conserves and improves scenic and ecological landscape integrity in balance with other traditional and valid uses.	Conserves scenic integrity through emphasis on public input regarding impairments to natural scenery. Provides a greater risk to conserving ecological landscape integrity by not using forested vegetation treatment as a tool and allowing natural fires to burn uncontrolled. Does not implement SMS.

Wilderness

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
<p>Use of PF and WFU in Alternative A allows fire to play a more natural role in the Wilderness to maintain ecological function and conserve wilderness values.</p> <p>Livestock grazing would continue, with existing and proposed management direction mitigating effects to Wilderness as far as possible under current law, which recognizes grazing as a special provisional use of Wilderness in places where it occurred before Wilderness designation.</p> <p>Recreation management may lead to use levels that result in an inability for managers to conserve wilderness values.</p>	<p>The role of fire in the Wilderness would be the same as described in Alternative A.</p> <p>Maintaining or restoring grassland vegetation within HRV and fall, winter, and spring forage utilization standards would conserve wilderness values.</p> <p>Recreation management using Wilderness setting indicators for social and biophysical thresholds and direct and indirect strategies for managing recreation use levels would conserve wilderness values.</p>	<p>The role of fire in the Wilderness would be the same as described in Alternative A.</p> <p>Alternative E-modified would maintain or restore grassland communities to their PNC (community that would result if succession were completed without interference by humans while allowing for natural disturbances) recognizing their HRV and that some communities may be altered beyond this point.</p> <p>Recreation management using Wilderness setting indicators for social and biophysical thresholds and direct and indirect strategies for managing recreation use levels would conserve wilderness values.</p>	<p>The role of fire in the Wilderness would be the same as described in Alternative A.</p> <p>Restoration of grassland vegetation within HRV would occur as described under Alternative B.</p> <p>Recreation management would be the same as Alternative A for Wilderness.</p>	<p>Same as Alternative A, except allows fire to burn primarily uncontrolled which could result in unnatural conditions created by fire exclusion.</p> <p>Scenario A (no livestock grazing) would best meet the goal for untrammelled Wilderness. Scenario B (reduction to 50 percent of current grazing levels) would also conserve wilderness values, although lack of fall, winter, and spring forage utilization standards may lead to unnatural forage conditions and reduce wilderness values. Recreation direction would conserve wilderness values with surrounding road closures increasing the primitive Wilderness ROS by 1 percent. User maintained trails may reduce use, but creation of new trails may cause damage to vegetation and soils.</p>

Federal Trust Responsibilities

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
<p>Provides direction for government-to-government consultation with American Indian tribes and protecting treaty-reserved rights.</p> <p>Does not contain specific direction identifying the Nez Perce Tribe as having ceded lands that encompass the HCNRA as part of the <i>Treaty of 1855</i>. Lack of emphasis may lead to potential inadequate protection of treaty-reserved rights and tribal interests.</p>	<p>Specifically addresses managing natural resources consistent with the federal trust responsibilities and the <i>Treaty of 1855</i> with the Nez Perce Tribe.</p> <p>Ensures treaty-reserved rights with respect to taking fish, erecting temporary buildings for curing, hunting, gathering roots and berries, and pasturing cattle and horses.</p> <p>Provides for protection of treaty resources such as aquatic habitat, wildlife habitat and grasslands.</p> <p>Manages resources to protect values important to the Nez Perce Tribe for hunting, gathering, cultural, spiritual and religious activities.</p>	<p>Same as Alternative B.</p>	<p>Provides for federal trust responsibilities and consultation with the Nez Perce Tribe in a similar manner with Alternative B. Implements a permit system to manage user conflicts for harvesting and gathering resources desired by tribal and nontribal users.</p> <p>Proposed activity levels for public outdoor recreation, timber harvesting, and grazing would provide the basis for consultation and federal trust responsibilities would be met through implementation of management direction.</p>	<p>Does not contain specific direction for federal trust responsibilities. Provides for consultation and contracting with the Nez Perce Tribe through the Heritage Resources and Fire management direction.</p> <p>Lack of specific emphasis on government-to-government consultation would lead to potential inadequate protection of treaty-reserved rights.</p> <p>Direction for managing resources such as heritage, fire, wildlife, fisheries, and access would provide guidance toward meeting federal trust responsibilities.</p>

Customs and Beliefs of Landowners and Adjacent Communities

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
<p>This alternative would allow ranching, grazing, farming, timber harvesting, and the occupation of homes and lands, and associated lifestyles to continue as traditional and valid uses.</p> <p>Community character would be changed by increases in recreation which may cause tension between residents and visitors to the HCNRA. New people moving to the area may hold different attitudes, beliefs, and values from local majority views.</p>	<p>Same as Alternative A except with lower levels of management activities.</p> <p>Private property in close proximity to the HCNRA may be impacted by increases in recreation use, which may also increase property values. Solitude and remoteness associated with rural lifestyles would decrease depending on where displaced visitors chose to go when they experience crowding or reduced recreation opportunities.</p>	<p>Same as Alternative B.</p>	<p>Same as Alternative A with higher levels of timber harvesting and higher levels of associated employment to local communities surrounding the HCNRA.</p>	<p>Alternative N would not harvest timber and eliminate (Scenario A) or reduce by half (Scenario B) livestock grazing.</p> <p>These traditional and valid uses would no longer occur, thus affecting customs and beliefs of landowners and adjacent communities</p> <p>Impacts to private property would be the highest due to the highest level of displaced recreation users from reductions in recreation opportunities.</p>

Scientific Research

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
<p>Maintains existing management direction, which provides for the conservation of scientific values.</p> <p>Research needs, potential limitations, proposals, and recommendations would be made by committee of scientists and resource managers.</p>	<p>Provides direction for the conservation of scientific values.</p> <p>Approved study plans would be required before implementation of research activities. The Hells Canyon Subgroup would identify research needs, screen and recommend projects for approval to ensure compatibility with objectives in Section 7.</p>	<p>Same as Alternative B.</p>	<p>Same as Alternative A.</p>	<p>Focuses research on effects of restoration activities and techniques and least-impact human activities.</p> <p>Procedures would need be nondestructive and be established methods. Disclosure to the public of results would be required providing better information on scientific findings relevant to the HCNRA.</p>

Unit of Measure – The effects of alternatives on “preservation, especially in the area generally known as Hells Canyon, of all features and peculiarities believed to be biologically unique including, but not limited to, 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,” *HCNRA Act*, Section 7(3).

Biologically Unique Species, Habitats, and Ecosystems

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
<p>Management activity levels, with current direction, may lead to adverse impacts to biologically unique features and peculiarities.</p>	<p>Management direction would ensure preservation of biologically unique features and peculiarities through defined species, habitats, and ecosystems for protection.</p> <p>Management activity levels, with proposed direction would result in low impacts to biologically unique features and peculiarities.</p>	<p>Same as Alternative B, except management direction to identify, protect and mitigate impacts to rare and endemic plants, rare combinations of aquatic, terrestrial, and atmospheric habitats; and rare combinations of outstanding and diverse ecosystems would ensure preservation of biologically unique features and peculiarities</p>	<p>Same as Alternative B, except higher management activity levels for recreation and timber harvest, with proposed direction may have a moderate potential to affect the biologically unique features and peculiarities.</p>	<p>Managing the entire HCNRA as biologically unique habitat would reduce or eliminate uses that adversely affect the environment and would indirectly lead to protection of biologically unique features and peculiarities. Low levels for recreation, timber harvest and grazing would result in low impacts biologically unique features.</p>

Unit of Measure – The effects of the alternatives on the “protection and maintenance of fish and wildlife habitat,” HCNRA Act, Section 7(4).

Riparian/Aquatic Habitat and Water Quality

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
<p>Existing management direction (PACFISH/INFISH and related terms and conditions from the biological opinions [BO]) would continue to protect or recover riparian habitat from impacts of livestock grazing, roads and recreation, forested vegetation treatments and fire.</p> <p>Over the short-term, fire risk would be minimized by limiting the number of acres of fire burned. In the long-term, high fuel loadings would eventually lead to large high-intensity fires, and increase the probability of adverse effects to riparian/aquatic habitat.</p>	<p>Same as Alternative A, except effects from potential forested vegetation treatments would be slightly lower due to fewer treatments to achieve HRV.</p>	<p>Same as Alternative B, except additional evaluation of biological indicators from the <i>Coarse Screening Process</i> (Rhodes et al 1994) and <i>Wallowa County/Nez Perce Tribe Salmon Plan</i> (Wallowa County 1999), and determining total maximum daily loads (TMDLs) would lead to improved fish habitat and water quality conditions.</p> <p>Closing vacant allotments on nearly 50 percent of the HCNRA would improve toward the PNC resulting in improved water quality. Reductions in motorized access would limit potential impacts to Riparian Habitat Conservation Areas (RHCAs) and improve fish habitat.</p> <p>Effects from forested vegetation treatments would be similar to Alternative A except at lower risk due to fewer treated acres.</p> <p>Short-term impacts to riparian/aquatic habitat would increase due to more potential acres burning with fire. Some vegetation and canopy over stream may be lost.</p>	<p>Similar effects as Alternative A except reductions in roads would be similar to Alternative B and E-modified.</p> <p>Moving campsites 100 feet away from stream banks would reduce impacts from recreation use on RHCAs. Forested vegetation treatments would result in the highest risk due to the highest level of potential treatment areas, and lower long-term risk from fire effects as a result.</p>	<p>No livestock grazing (Scenario A) and constraints on human activities would provide the least risk of adverse impacts to riparian habitat.</p> <p>The greatest amount of reductions in road access would provide the least impact from recreation use associated with roads. Incompatible uses with protection and recovery of native ecosystems would be eliminated.</p> <p>Buffers on streams, springs, seeps, and wetlands would be greater than PACFISH and would expand the area of protection from vegetation treatments.</p> <p>Extensive areas would be burned as a result of the highest emphasis on restoring fire. The magnitude would be greater in terms of intensity and relative risk of resource damage due to larger, hotter fires. High magnitude and high probability of damage would lead to impacts detrimental to recovery of species.</p>

Wildlife Habitat

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Road System				
Risk = Moderate Maintains existing road system.	Risk = Low to Moderate Reduces road system.	Same as Alternative B.	Same as Alternative B.	Risk = Low Provides greatest reduction in road system.
Recreation Use and Development Levels				
Risk = Moderate	Risk = Low to Moderate	Same as Alternative B.	Same as Alternative B.	Risk = Low
Forested Vegetation Treatments				
Risk = Moderate	Risk = Low	Same as Alternative B.	Same as Alternative B.	Risk = Low No silvicultural treatments in this Alternative result in the lowest risk level, although there is a higher potential for loss of habitat due to insects, disease, and fire.

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Satisfactory Range Conditions				
Risk = High Slower rate of grassland recovery. Lacks direction for satisfactory range condition,	Risk = Low Moderate rate of range forage recovery.	Risk = Low Rapid rate of grassland health recovery to mid-seral ecological status, restoration and noxious weed focus.	Same as Alternative B.	Risk = High No grazing in Scenario A.
Fire Activities				
Risk = Moderate Does not address HRV. There is no significant reduction of risk for large stand replacing fires.	Same as Alternative A.	Risk = Low Fire activity levels would move toward HRV and reduce the risk of large stand-replacement fires.	Same as Alternative E-modified.	Risk = Moderate to High Fire activity levels have a high potential to impact species requiring forest structure.

Unit of Measure – The effects of alternatives on the “protection of archeological and paleontologic sites and interpretation of these sites for the public benefit and knowledge insofar as it is compatible with protection,” *HCNRA Act*, Section 7(5).

Archaeological and Paleontologic Sites

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Lack of specific direction and management activity levels would have a moderate potential to adversely affect archaeological and paleontologic resources.	Proposed management direction and management activity levels would have a low to moderate potential to adversely affect archaeological resources. Direction for paleontological resources would provide long-term protection. Using fire as a tool may impact fragile heritage resources that would be susceptible to fire.	Same as Alternative B, except effects to heritage sites near open roads would be further reduced by closing sites that may be potentially damaged. Closing vacant allotments would provide for long-term protection of heritage resources.	Same as Alternative B.	Proposed management direction and low management activity levels would have a low potential to adversely affect archaeological resources. Lack of direction for paleontological resources may result in impacts not meeting protection needs.

Unit of Measure – The effects of alternatives on the “preservation and restoration of historic sites associated with and typifying the economic and social history of the region and the American West,” *HCNRA Act*, Section 7(6).

Historic Sites

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Lack of specific direction and management activity levels would have a moderate potential to adversely affect the preservation and restoration of historic sites.	Proposed management direction and management activity levels would have a low to moderate potential to adversely affect the preservation and restoration of historic sites.	Same as Alternative B.	Same as Alternative B.	Proposed management direction and low management activity levels would have a low potential to adversely affect the preservation and restoration of historic sites. There is a high risk of irreversible effects on historic sites from letting natural fires burn uncontrolled in this alternative.

Recreation Settings, Experiences, and Opportunities (Significant Issue)

The analysis of this issue uses the ROS system. The ROS system was developed to provide a diverse range of recreation settings and opportunities. Experiences and opportunities are influenced by many factors: settings, activities, other resources present, activities by managers, and the values, expectations, and other characteristics of the recreationists. The Wilderness ROS (WROS) was developed as part of the ROS system to describe a diverse range of recreational classes in Wilderness.

About two-thirds of the HCNRA provides nonmotorized opportunities (68%) with the Hells Canyon Wilderness providing 220,000 acres (35% of the HCNRA) and semi-primitive nonmotorized (SPNM) settings providing 211,877 acres (33% of the HCNRA). One-third (201,536 acres) of the HCNRA is classified as motorized (32%) in semi-primitive motorized (SPM), roaded natural (RN), and rural (R) settings. The mix of nonmotorized and motorized ROS settings provides a framework for recreation settings, experiences, and opportunities for the activities that occur in the HCNRA. The majority of these activities include sightseeing, fishing, primitive camping, interpretation, pleasure driving and day hiking. Other activities include developed camping, picnicking, horseback riding, observing wildlife, hunting, limited motorcycle or all-terrain vehicle riding, visiting historic sites, and snowmobiling.

Table 1 and **Figure 4** displays the description of the WROS and ROS settings in the HCNRA, the percentage of settings in Wilderness and nonwilderness portions, and the WROS and ROS settings as a percent of the total.

Table 1: ROS Settings, Percentage of Each Setting in Wilderness and Nonwilderness, and the HCNRA*

WROS Setting	Percent of WROS	Percent of HCNRA	Wilderness
Pristine	8%	3%	Visitation is very limited. Emphasis is placed on maintaining a natural and unmodified environment. Visitors seldom and only temporarily displace wildlife throughout the year. This is the best opportunity for isolation and solitude, requiring a maximum degree of primitive skills, challenge, and risk. Access is difficult, requiring travel without trails or the use of routes created by animals or previous human visitation.
Primitive	74%	26%	Visitation is limited. The environment is essentially unmodified and natural with no long-term changes to the landscape except for facilities or structures that are deemed historically important to the area or experience. Signs of human use are minimal. Visitation does not displace wildlife during critical periods. High opportunity exists for exploring and experiencing considerable isolation and solitude. Primitive recreation skills are required with a high degree of challenge and risk. Access is via trails maintained to a "most difficult" standard.
Semi-primitive	18%	6%	Visitation is low to moderate. The environment is essentially unmodified and natural, with no long-term changes to the landscape except for facilities or structures that are historically important to the area or experience. Visitation does not displace wildlife during critical periods. Moderate opportunity exists for exploring and experiencing isolation, independence, and closeness to nature. No-trace camping and primitive skills are required, with a moderate to high degree of challenge and risk. Access is via constructed and maintained trails managed to "more" and "most difficult" standards.
ROS Setting	Percent of ROS	Percent of HCNRA	Nonwilderness
SPNM (semi-primitive nonmotorized)	51%	33%	Provide visitors with a high probability of getting away from sights and sounds of other people, to be independent, enjoy nature and practice outdoor skills.
SPM (semi-primitive motorized)	13%	9%	Provide visitors with a moderate probability of getting away from sights and sounds of other people, to be independent, enjoy nature, and practice outdoor skills. There is also opportunity to use motorized equipment while in the area.
RN (roaded natural)	34%	22%	Provide visitors with an opportunity to meet and enjoy other visitors and be isolated from sights and sounds of other people. Visitors have the opportunity to interact with the natural environment, but the risk and challenge associated with the SPM is not present. Both motorized and nonmotorized forms of recreation take place. All overnight and day-use facilities occur in this setting.
R (rural)	<2%	<1%	Provide visitors with a high probability of meeting and enjoying others. Convenience in access to and use of sites is important. Challenge, risk, and testing of skills are relatively unimportant, except for some specific activities such as downhill skiing.

*All percentages are approximate based on acreages from WWNF geographic information system. Totals do not include acres associated with the Wild and Scenic Snake River.

However, not all acres within motorized ROS settings (SPM, RN, and R) are authorized for motorized use. Motorized use is managed through the standards and guidelines established with the *Forest Plan*. This use is primarily allowed within MA 9 (Dispersed Recreation/Native Vegetation), MA 10 (Forage Emphasis), and MA 11 (Dispersed Recreation/Timber Management) except for those areas and roads closed with the *WWNF Access and Travel Management Plan*. MA 7 (Wild and Scenic Rivers), MA 8 (Snake River Corridor), and MA 12 (Research Natural Areas) provide limited motorized use primarily for access along the Imnaha River and across the Rapid River corridor, motorized boat access on the Snake River, and access to developed sites.

The *WWNF Access and Travel Management Plan* closed the HCNRA yearlong to motorized vehicles except where specifically provided for on designated roads and in certain areas. All other areas in the HCNRA contain travel restrictions or are closed yearlong. Motorized driving in these areas is limited to a 300-foot corridor on each side of designated open routes for dispersed camping. Some of these areas further prohibit motorized access with seasonal road closures during the fall big-game hunting seasons to reduce wildlife disturbance, provide nonmotorized hunting, and protect fragile soils. Motorized use is also allowed in MA 10 (Forage Emphasis) and MA 11 (Dispersed Recreation/Timber Management) for cutting fuelwood as authorized by a permit under the *WWNF Fuelwood Program* (USDA 1982, USDA 1995).

The mix of ROS settings combined with restrictions for designated open routes, dispersed camping, and fuelwood cutting provides motorized experiences on less than three percent of the HCNRA (19,315 acres at most although dispersed camping and fuelwood cutting may occur in the same area. Over 97 percent of the HCNRA provides a high probability for nonmotorized experiences where visitation is low or very limited (633,173 acres).

Recreation Analysis Areas

Recreation Analysis Areas (RAAs) as shown in **Figure 5** have been mapped for the HCNRA to identify areas with similar use patterns and opportunities, and provide a logical system for creating the WROS and ROS settings. Each of the WROS and ROS settings is characterized by seven indicators (access, remoteness, naturalness/visual quality, social encounters, visitor management, visitor impacts, and facilities) that represent aspects of recreation that can be influenced by management or monitored for site-specific conditions (FSM 2310.3). These indicators provide a framework for monitoring and managing use to achieve the ROS settings. **Table 2** describes the indicators for Wilderness and nonwilderness settings for the HCNRA.

Table 2: Description of Indicators for Wilderness and Nonwilderness Settings for the HCNRA

Indicator	Description
Access	Access includes type and mode of travel. Highly developed access generally reduces opportunities for solitude, risk, and challenge. It tends to increase opportunities for socializing and feelings of comfort and safety. Access for challenged individuals would correspond with ROS classifications. Access to rural settings is easiest and to primitive settings the most challenging.
Remoteness	Remoteness is the extent to which individuals perceive themselves removed from the sights and sounds of human activity. In some cases, a lack of remoteness is important in some setting experiences. Generally, remote areas are perceived to be more primitive.
Naturalness/Visual Quality	This indicator refers to the scenic condition, landscape character, sense of place, and scenic-integrity levels that determine the sustainability of scenic quality and affect the positive psychological outcomes associated with enjoying nature.
Social Encounters	This factor refers to the number and type of other recreationists met along travel ways, or camped within sight or sound. This measures the ability of the area to provide experiences such as solitude or opportunity for social interaction. Increasing the number of visitors to an area changes the kind of recreation experience offered, attracting new users and causing others to leave or stop coming.
Visitor Management	This includes the degree to which visitors are regulated and controlled as well as the level of information and services provided for visitor enjoyment. Generally, on-site information is more appropriate at the developed end of the spectrum, while off-site sources and a sense of self-discovery are preferable at the primitive end.
Visitor Impacts	This factor refers to the impact of visitor use on the environment. The relevant question for managers is not "how can impacts be prevented," but rather, "how much change will be allowed and which actions are appropriate for control?" Controlling impacts according to the designated ROS is emphasized because impacts have an effect on visitor experiences. Maintaining air, water, and noise quality standards in the face of visitor impacts is important in all classifications.
Facilities	This indicator refers to the level of site development. A lack of facilities or site modification can enhance feelings of self-reliance and independence and can provide experiences with a high degree of naturalness. Highly developed facilities can add to the feelings of comfort and convenience and increase opportunities for socializing.

**Figure 4: Recreation Opportunity Spectrum (WROS and ROS)
Hells Canyon National Recreation Area**

**Figure 5: Recreation Analysis Areas
Hells Canyon National Recreation Area**

Unit of Measure – Remoteness

Remoteness is the extent to which individuals perceive themselves as removed from the sights and sounds of human activity. The perception of remoteness is more vivid the greater the distance from human activity. Remoteness is measured by alternative in terms of acres by ROS settings and nonmotorized and motorized experiences.

All alternatives would maintain the current level (**Alternative A**) of WROS settings in the Wilderness and would not change the degree of remoteness. **Alternative N** would increase the size of the primitive setting and decrease the acres in the semi-primitive setting (+/-1%), but changes would likely not be noticeable to most Wilderness visitors. The Wilderness provides the highest sense of remoteness on the HCNRA.

Outside of the Wilderness, the change in the number of open road miles and the location by alternative is the primary factor in providing a shift in the level of ROS settings by alternative. **Table 3** displays the percentage of acres in Wilderness, nonwilderness, nonmotorized, and motorized settings; and nonmotorized and motorized experiences for each alternative. See **Figure 6** for maps of the ROS settings by alternative.

Table 3: Percentage of Acres in Wilderness, Nonwilderness, Nonmotorized, and Motorized Settings; and Nonmotorized and Motorized Experiences*

ROS Setting	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Wilderness Setting					
Pristine	8%	8%	8%	8%	8%
Primitive	74%	74%	74%	74%	75%
Semi-primitive	18%	18%	18%	18%	17%
Nonwilderness Setting					
SPNM (semi-primitive nonmotorized)	51%	54%	51%	51%	68%
SPM (semi-primitive motorized)	13%	11%	13%	13%	3%
RN (roaded natural)	34%	34%	34%	34%	28%
R (rural)	<2%	<1%	<2%	<2%	<1%
Nonmotorized and Motorized Setting					
Nonmotorized Setting	68%	70%	68%	68%	79%
Motorized Setting	32%	30%	32%	32%	21%
Nonmotorized and Motorized Experiences					
Nonmotorized Experiences	97%	97%	97%	97%	97%
Motorized Experiences	3%	3%	3%	3%	3%

*All percentages are approximate based on acreages derived from WWNF geographic information system (GIS).

Alternative A would maintain the current classification of WROS and ROS settings with 68 percent as nonmotorized (Wilderness and SPNM) and 32 percent of the total HCNRA classified as SPM, RN, and R motorized settings.

Alternative B would increase the level of SPNM settings to 54 percent and reduce the level of RN (-2%) and SPM (-1%) compared to the current level causing a minor overall change (-3%) in the mix of motorized and nonmotorized ROS settings and the level of remoteness. **Alternative E-modified** would manage for high quality recreation settings and opportunities similar to Alternative B with an emphasis on maintenance of primitive settings, but would maintain the current classification of ROS settings between nonmotorized (68%) and motorized (32%).

Alternative W would emphasize the rustic and primitive characteristics of the HCNRA but development levels and commercial uses would be slightly higher than Alternative E-modified. The current classification of ROS settings for nonmotorized (68%) and motorized settings (32%) would be maintained.

Alternative N would move the settings toward more primitive settings by minimizing motorized recreation and emphasizing ecosystem, cultural, and Wilderness values. This alternative would allow recreation activities to continue as long as long-term goals for recovery and protection of the native ecosystem would not be compromised. This alternative would result in the largest change in the level of ROS settings by shifting RN (7%) and SPM (10%) acres (74,092 acres) to SPNM settings (68%) compared to Alternative A (51%). Alternative N would provide the highest level of SPNM settings because of the emphasis on the highest level of road closures and obliteration.

**Figure 6: Recreation Opportunity Spectrum by Alternative
Hells Canyon National Recreation Area**

Unit of Measure – Social Encounters

“Social encounter” refers to the number and type of other recreationists met, whether in a specific area, along travel areas, or camped within sight or sound. Some recreation experiences require few, if any, contacts with others to meet expectations, while in some situations encounters are sought as part of the experience. Social encounters measure the extent to which an area provides experiences such as solitude or the opportunity for social interaction. Users of roaded motorized areas would tolerate more frequent rates of sound encounters than users of nonmotorized areas or Wilderness. Social encounters are measured by alternative in terms of the number of displaced visits (no longer occurs at the site or area) once thresholds for practical maximum capacity (the upper limit of use of a developed site or dispensed area) are met.

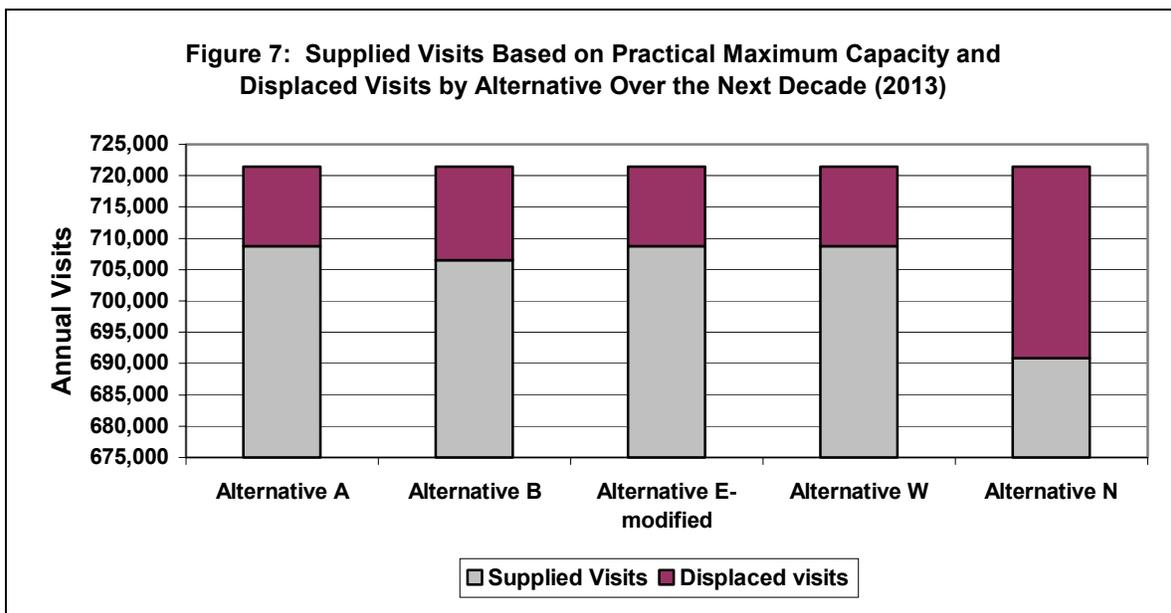
Recreation use would increase (1.6% annually to 721,474 visits) in a similar pattern over the next decade. Projected use would exceed practical maximum capacity in some places at some point depending on the level of development and access by alternative, and some long-time HCNRA users would be displaced because of their intolerance to other users and the changes in experience opportunities. Currently, very few HCNRA visitors are displaced to other areas. **Figure 7** displays the supplied visits based on the practical maximum capacity and the displaced visits by alternative over the next decade.

Alternative A would continue to develop capacity at sites and provide access to accommodate future recreation uses. Demand would continue to exceed supply in popular sites used seasonally in the summer near water (Black Lake, Seven Devils, and Cow Creek) over the next decade causing a minor (1.7%) displacement of use. Alternative A would also continue to provide opportunities for dispersed activities of an independent nature in SPNM and SPM settings, and away from popular, developed sites in RN settings.

Alternative B would reduce capacity compared to Alternative A (-15.1%) by maintaining existing facilities in their current condition and would not replace existing facilities to accommodate users. The overall displacement of use would be slightly more (2%) than Alternatives A, E-modified, or W.

Alternatives E-modified and **W** would develop less capacity than Alternative A (-6.4%), but would displace similar number of users (1.7%) as Alternative A due to the limited number of sites and areas where demand exceeds supply. New facilities would be developed or existing facilities would be upgraded to accommodate increases in use. Alternative E-modified would maintain some facilities to lower standards than A and W.

Alternative N would reduce capacity more (-24%) than the other alternatives through minimum maintenance of facilities and no new facility development. This alternative further emphasizes managing for more primitive nonmotorized experiences, closing roads, and relying on users to maintain trail access. Displaced users would more than double compared to Alternative A (4.3%) due to fewer roads that access popular sites.



Unit of Measure – Visitor Management

Visitor management objectives include regulation of visitors, and providing information and services to aid their enjoyment. Management actions to control use are expected in developed areas, but would detract from the experience of more primitive, undeveloped settings. At the primitive end of the ROS scale, management action seeks to influence behavior indirectly with off-site information and education. In more developed settings, such as campgrounds and interpretive facilities, controls are more direct and implemented through on-site education. Visitor management is measured by alternative in terms of facilities and ROS settings at practical maximum capacity that would indicate the need for management actions to control use.

Based on a projected growth rate of 1.6 percent per year, specific areas within some areas would meet some threshold levels over the next decade under all alternatives, indicating a need for management action to maintain recreation opportunities and protect resources.

Three facilities (Black Lake Campground, Windy Saddle Campground, and Cow Creek Trailhead) have already reached the practical maximum capacity and are at high risk for overcrowding and impacts from recreation use. Four additional facilities (Heavens Gate, Seven Devils, Sawpit Trailhead, and Low Saddle Trailhead) would potentially reach the threshold in the next decade. Recreation demand in other areas of the HCNRA would not reach thresholds within the next decade, however they would be increasingly affected under higher growth scenarios (3-10%).

All Wilderness acres would remain below the practical maximum capacity under the 1.6 percent annual growth scenario. Some key areas, such as the Seven Devils part of Wilderness, would exceed encounter thresholds on high-use weekends such as Fourth of July or Labor Day and would need to be managed to mitigate social and resource effects. In **Alternatives A, B, E-modified, W** and **N**, visitor management actions would not be needed in the Idaho portion of the Wilderness until higher growth rates (3-5%) were realized. The need for visitor management actions would not be needed in the Oregon portion of the Wilderness until the highest growth in use occurred (10%).

Outside of Wilderness, **Alternative A** would develop more facilities and a higher level of road improvements than the other alternatives. Due to increased access and higher standard facilities, strategies for managing use levels would be initiated across the entire HCNRA first in Alternative A.

Alternative B represents the existing conditions of facilities and roads. Many of the facilities have outlived their usefulness. Strategies for managing use levels would not be required as soon as for Alternative A, and in some instances not as soon as Alternatives E-modified and W. However, due to the failing condition of facilities, strategies for managing use levels in some developed sites and in some dispersed areas would be required sooner than in Alternatives A, E-modified, or W to protect resources from damage.

Alternatives B and **E-modified** would implement specific indirect strategies before reaching the thresholds associated with social encounters and resource objectives. Educational programs and physical alterations of use patterns, numbers of visitors, and facilities would be managed to retain personal choices, freedom of movement, and visitation for longer periods. Direct strategies would be implemented if indirect strategies were not effective at managing use and would result in more control of visitor actions.

Alternatives E-modified and **W** would develop fewer locations than Alternative A and would maintain lower standards for access. Alternative E-modified has a slightly lower development standard than Alternative W. Strategies for managing use levels would not be required as soon as in Alternative A and would be more specific to certain sites. Areas needing management action in E-modified and W would be fewer than in A.

Alternative N would limit motorized access and custodial maintenance of facilities. Strategies for managing use levels would not be needed in nonmotorized areas for a long period. Because motorized access would be reduced compared to all other alternatives, areas that remain roaded would require strategies for managing use levels sooner than in all other alternatives. Failing facilities would also require management strategies sooner than in all other alternatives. Under Alternative N, impacts would be more severe where motorized users engage in recreation, due to concentrated use in the remaining facilities.

Unit of Measure – Visitor Impacts

Visitor impacts are the effect users have on the environment. Wildlife, people, and livestock have used Hells Canyon for decades. Use locations that are desirable today are often the same sites that have been desirable for hundreds of years. The relevant question today is not how to prevent effects, but what degree of effects can be allowed and what are appropriate actions for controlling or mitigating the effects.

Use of the land for recreational purposes inevitably results in effects. Even low levels of recreation use can produce significant effects. Once effects have occurred, continued use causes relatively little additional change. Recreationists generally expect settings that are natural at the primitive end of the ROS spectrum, with visitor impacts essentially unnoticeable. Toward the developed end of the spectrum, signs of human intervention on the landscape become more acceptable and evident. Visitor effects are measured by alternative in terms of maximum site disturbance allowed.

Threshold standards would maintain site conditions and limit the amount of allowable change. As a disturbance approaches the standard, management action would occur to prevent or reverse further site degradation. The maximum amount of area disturbed at the primitive end of the ROS settings would be smaller than in the more developed ROS settings. Other measures would be taken to prolong the timeframe before thresholds were met.

Table 4 displays the maximum site disturbance allowed that would be socially acceptable based on the ROS setting for the area. Tree loss, exposed roots, and general vegetation loss are included in the evaluation criteria. The overall impact of the visual integrity of the site on the surrounding area is also considered.

Table 4: Maximum Site Disturbance Allowed

ROS Setting	Maximum Area in Square Feet (sq. ft.)
Wilderness	
Pristine	225 sq. ft. - 15 ft. x 15 ft.
Primitive	400 sq. ft. - 20 ft. x 20 ft.
Semi-primitive	625 sq. ft. - 25 ft. x 25 ft.
Nonwilderness	
SPNM	625 sq. ft. - 25 ft. x 25 ft.
SPM	1,000 to 1,500 sq. ft. - 31-38 ft. x 33-39 ft.
RN	1,500 to 2,500 sq. ft. - 38-50 ft. x 39-50 ft.
R	3,000 sq. ft. - 54 ft. x 55 ft.

Maximum allowable use levels would be used to determine if disturbance levels are within levels of acceptable change and indicate a condition where visitor impacts would result in resource damage. Increased recreation use of the area would contribute to additional impacts in some locations. Areas with motorized use continually receive more impacts and would reach thresholds sooner than nonmotorized areas.

Each alternative represents a different level of roaded access, with **Alternatives A, W** and **E-modified** having the highest road densities and greatest opportunity for roaded recreation. Road closures or seasonal closures as proposed in E-modified would have beneficial effects for recovery of sites within closed areas, while locations adjoining the closed area would experience additional impacts. Fuelwood cutting, allowed in all alternatives, would be affected by further road closures and seasonal restrictions, increasing impacts to areas where roads remain open. Designated areas for fuelwood cutting would provide firewood opportunities while limiting short-term impacts to specified areas. **Alternatives B** and **N** would be the most restrictive in terms of reducing road access.

Thresholds would be reached the soonest and require management action under **Alternative A**, followed by **W**, **E-modified**, **B**, and **N**, respectively. However, thresholds would not be reached in any of the alternatives through 2013, with the exception of a few popular locations. Monitoring efforts in these areas would be intensified to validate the need for management actions. As use patterns and user types change, so would the rate, location, and extent of disturbance. Impacts would not be as great or as noticeable as in the past. **Alternatives A, E-modified**, and **W** would displace less two percent (1.7%) of projected recreation use by 2013, followed by **Alternatives B** (2%) and **N** (4.3%). As these users sought other areas in which to recreate, they would affect public lands adjacent to the HCNRA. This would require additional management actions on adjacent lands to manage impacts within desirable thresholds

Unit of Measure – Scenery

People value landscapes, and they make decisions that affect landscapes based on their values. Landscapes are valued for natural settings that are seemingly untouched by humanity, unique landforms, water systems, historic character, or other factors that create attractive views or enjoyable recreational experiences. Those impressions are the aesthetic value of a particular landscape. Scenery (naturalness/visual quality) is measured by alternative in terms of scenic integrity and ecological landscape integrity.

Scenic Integrity

Scenic integrity measures human-caused negative visual elements that dominate, deviate, and/or detract from the desired landscape character. Each RAA (**Figure 5**) has a broad/general sense of place or desired landscape character that has been identified as a scenic integrity rating based on deviations from the social values of the landscape. Scenic integrity is measured based on the removal of deviations or potential for additional deviations by RAA. Higher integrity ratings are preferred over the lower integrity ratings for primitive or natural experiences.

The proposed alternatives would not affect the aesthetic values attributed to Wilderness. Scenic integrity would remain high or very high under all alternatives. Outside Wilderness, all alternatives would propose minimal human-caused deviations or improvements to RAAs. The alternative that proposes the most improvements to scenic integrity is **Alternative E-modified**. This alternative improves two RAAs from one level to a greater level. **Table 5** displays the number of RAAs in each scenic integrity level by alternative.

Table 5: Number of RAAs in Each Scenic Integrity Level by Alternative

Scenic Integrity	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Very High	17	17	17	17	16
High	9	10	12	10	10
Moderate	4	3	3	4	4
Low	3	3	1	1	3
Very Low	0	0	0	0	0
Unacceptably Low	0	0	0	0	0

Ecological Landscape Integrity

A landscape's ecological integrity may be compromised by practices that inhibit or minimize the sustainability of a valued landscape character. If a forested landscape is not sustainable, the long-term effects to landscape aesthetics can be severe. Ecological landscape integrity measures the percentage of forested acres outside of the HRV. The greater the percentage of acreages outside the HRV, the lower the integrity level, indicating low sustainability and a high risk of losing valued attributes of desired landscape character.

Alternatives A, B, E-modified and **W** would improve the ecological landscape integrity the most based on forested vegetation treatments to manage toward HRV. The proposed forested vegetation management would not keep up with the rate of degradation; therefore, the risk of losing desired landscape character would increase during the next decade. **Alternative N** would not improve the ecological landscape integrity because it would not use mechanical improvements. Over a 50-year period, risks may increase to an unmanageable level; thus, greater losses of landscape character attributes may occur, and deviations to the desired landscape character would be dominant across the HCNRA.

The cumulative effects of vegetation and fire management indicate that alternatives that manage ecological landscape integrity at the highest level would be **Alternatives E-modified** and **W**, followed by **Alternative A**. **Alternatives B** and **N** would produce the lowest ecological landscape integrity level. **Table 6** displays the cumulative effects of vegetation and fire management on ecological landscape integrity.

Table 6: Cumulative Effects of Vegetation and Fire Management on Ecological Landscape Integrity

Effects	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Vegetation Management	High	Moderate	Moderate	High	Low
Fire Management	Low	Very Low	High	Moderate	Low
Cumulative Effects	Moderate	Low	Moderate - High	Moderate - High	Low

Access and Facilities (Significant Issue)

The alternatives are compared in terms of access (roads by maintenance levels, dispersed camping availability, open-road density, trail construction or reconstruction, backcountry airstrips, and over-snow vehicle travel) and by facilities and site management (facilities development and maintenance levels).

Unit of Measure – Roads by Maintenance Level

Almost 60 percent of the National Forest System (NFS) roads in the HCNRA are suitable only for high-clearance vehicles (Maintenance Level 2) and 28 percent are closed to motorized use. Less than 15 percent of the roads are suitable for passenger car travel. **Table 7** below displays miles of road by maintenance levels.

Table 7: Miles of NFS Roads by Maintenance Level

Maintenance Level	General Description	Miles	Percent of NFS Roads
Level 1	Closed roads	202 mi.	28%
Level 2	High-clearance vehicle only	422 mi.	57%
Level 3	Suitable for passenger vehicle	98 mi.	13%
Level 4	Passenger vehicle, high degree of comfort	10 mi.	1%
Level 5	Provides main access to the HCNRA	3 mi.	Less than 1%
Total			
Total		735 mi.	100%

As shown in **Table 8**, all of the alternatives would convert some miles of Maintenance Level 2 roads from high-clearance vehicle access to Level 1 (closed) roads to meet the road management and ROS objectives.

Table 8: Miles of NFS Roads by Maintenance Level by Alternative

Level	General Description	Alternative A		Alternative B		Alternative E- modified		Alternative W		Alternative N	
		Miles	%	Miles	%	Miles	%	Miles	%	Miles	%
Level 1	Closed roads	202	28%	403	54%	379	51%	364	49%	544	74%
Level 2	High-clearance vehicle only	422	57%	221	31%	245	34%	260	36%	80	11%
Level 3	Suitable for passenger vehicle	59	8%	88	12%	59	8%	59	8%	98	13%
Level 4	Passenger vehicle, high degree of comfort	49	6%	10	1%	0	0%	0	0%	0	0%
Level 5	Provides main access to the HCNRA	3	<1%	13	2%	52	7%	52	7%	13	2%
Total											
Total miles of open NFS roads		533		332		356		371		191	
Percent change in open NFS roads		0%		-38%		-33%		-30%		-64%	
Total miles of seasonally-closed roads		68.5		68.5		95.5		68.5		0	
Percent change in seasonally-closed roads		0%		0%		-39%		0%		0%	

Alternative A would close the least amount of roads and maintain the highest level of access for high-clearance vehicles followed by **Alternatives W** (-30%), **E-modified** (-33%), and **B** (-38%). **Alternative N** would reduce the total level of motorized road access the most (-64%).

Alternatives A, B and **W** would continue to close 68.5 miles of road seasonally. **Alternative E-modified** would increase the level of roads closed seasonally (27 miles) for a total of approximately 95.5 miles. Specific seasonal closure periods (**Table 9**) would be established in the spring for Kirkwood Road (Forest Road 2062-132), and in the fall for Teepee Butte Road (Forest Road 46-595), Wildhorse Road (Forest Road 46-596), Lord Flat Trail, (Trail #1774) and PO Saddle Road (Forest Road 3965-320) to protect fish or wildlife habitat. **Alternative N** would permanently close all seasonally closed roads including those listed for specific seasonal closure periods under **Alternative E-modified**. See **Figure 8** for a map of the five site-specific seasonal road closures.

Table 9: Road-specific Closures by Alternative by RAA

Road	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
RAA 13 – Kirkwood					
Kirkwood Road (Forest Road 2062-132)	Closes approximately 1,000 feet (0.2 miles) of the road immediately southeast of Kirkwood Historic Ranch during the spawning period for fish from April 1 through June 30 each year to motorized vehicles. Road is closed with a gate ¹ . The season of use would continue to be approximately 8 months (April through November) depending on the snow level each year. The road would remain open for about 5 months all the way to the Ranch, and for 3 months access would be limited to within 1,000 feet of the Ranch. Nonmotorized use would be allowed on this portion of the road during the closure period.	Same as Alternative A	Same as A, except the road would be managed to allow future opportunities for improvements such as bridges across the stream to provide motorized vehicles access on the lower 1,000 feet of road from April 1 through June 30 each year while protecting and mitigating for fisheries concerns. Also closes the road to mechanical equipment.	Same as Alternative A	Year-round closure on approximately 5 miles of road at Cow Creek Saddle to Kirkwood Historic Ranch to motorized vehicles. Post road as closed with signs. Manage the road as a semi-primitive nonmotorized trail for foot and horseback travel. Allow administrative access as needed while protecting fisheries concerns.
RAA 27 – Buckhorn/Cold Springs					
Teepee Butte Road (Forest Road 46-595) Wildhorse Road (Forest Road 46-596)	Roads are currently authorized for year-round use. The season of use is approximately 6 months from June through November depending on the snow levels each year. The heaviest use period occurs during the fall hunting seasons.	Same as Alternative A	Seasonally close approximately 5 miles of Teepee Butte Road and 7 miles of Wildhorse Road at their junction (46-595 and 46-596) from 3 days prior to archery season to the end of antlerless elk season (late August through late November) to motorized vehicles. Post the roads closed with signs. The season of use would be reduced to approximately three months (June through August) depending on the snow level each year. Nonmotorized use would be allowed on this portion of the road during the closure period.	None	Year-round closure on approximately 5 ½ miles of Teepee Butte Road and 7 miles of Wildhorse Road at their junction (46-595 and 46-596). Post road closed with signs. Manage the road as a semi-primitive nonmotorized trail for foot or horseback travel.
RAA 32 – Lord Flat					
Lord Flat Trail (Trail #1774)	Depending on the snow levels, Lord Flat Trail is generally inaccessible due to snow for 6 months when the gate (T1S, R4W, Section 1) on Forest Road 4240 to Hat Point is closed (December/January) until the road dries out enough to drive on without rutting the road surface in the spring (April/May). The heaviest use period occurs during the fall hunting seasons.	None	Seasonally close approximately 15 miles of Lord Flat Trail at Warnock Corral Trailhead from 3 days prior to archery season to the end of antlerless elk season (late August to late November) to motorized vehicles. Post the trail closed with signs. The season of use would be reduced to approximately 3	None	Year-round closure on approximately 15 miles of trail year-round at Warnock Corral Trailhead. Post the trail closed with signs. Manage the trail for semi-primitive nonmotorized use for foot and horseback travel. The trail would be designated as the Hells Canyon

			months (June through August) depending on the snow level each year. Nonmotorized use would be allowed on this portion of the road during the closure period.		Wilderness Rim Trail.
RAA 40 - McGraw					
PO Saddle (Forest Road 3965-320)	Seasonally closes approximately 2 ½ miles of road from PO Saddle to the Hells Canyon Wilderness boundary to motorized vehicles from 3 days prior to rifle buck season and open in the spring after the roadbed is dry enough to drive on to minimize resource damage (late September to late May). Road is closed with an existing gate. The season of use is approximately 4 months (June through September) depending on the snow levels each year. The heaviest use period occurs during the fall hunting seasons. Nonmotorized use would continue to be allowed on this portion of the road during the closure period.	Same as Alternative A	Same as A, except the seasonal closure on Forest Road 3965-320 (2.5 miles) at the PO Saddle Trailhead to the Wilderness Boundary would be extended to 3 days prior to archery season (late August) and open in the spring after the roadbed is dry enough to drive on to minimize resource damage (June 15 th). Road is closed with an existing gate. The season of use would be reduced to approximately 3 months (June through August) depending on the snow level each year. Nonmotorized use would continue to be allowed on this portion of the road during the closure period.	Same as Alternative A	Year-round closure on approximately 2 ½ miles of road at PO Saddle. Road would be closed with an existing gate. Manage the road for semi-primitive nonmotorized use for foot and horseback travel. The road would be designated as part of the Hells Canyon Wilderness Rim Trail.
Totals					
Road-specific seasonal closures	2.7 miles	2.7 miles	29.7 miles	2.7 miles	35.0 miles
Total seasonally-closed roads	68.5 miles	68.5 miles	95.5 miles	68.5 miles	0 miles
Total open roads without seasonal closures	464.5 miles	263.5 miles	258 miles	302.5 miles	191 miles
Total open roads	533 miles	332 miles	356 miles	371 miles	191 miles

**Figure 8: Site-Specific Seasonal Road Closures – Alternative E-modified
Hells Canyon National Recreation Area**

Unit of Measure – Dispersed Camping Availability

Motorized travel on designated open routes and access for dispersed camping, retrieval of fuelwood or other permitted activities would vary by alternative based on miles of road that would remain open. As shown in **Table 10, Alternative A** would maintain the existing level of dispersed camping opportunity (200 sites) followed by a minor change (-2%) in **Alternative W. Alternatives B and E-modified** would reduce accessibility to dispersed campsites by five and nine percent (190 and 182 sites remain accessible, respectively). **Alternative N** would reduce the availability of dispersed campsites (136 sites remain accessible) to motorized vehicles the most (-32%) due to the most road closures. All sites would be accessible to nonmotorized users in all alternatives.

Dispersed camping availability would be further reduced under all alternatives in the spring or fall of the year due to seasonal road closures. **Alternatives W and B** would reduce the number of campsites available to motorized users by two and five percent, respectively, compared to **Alternative A. Alternative E-modified** would reduce motorized access to dispersed campsites by 22 percent (149 sites remain accessible) due to an additional 27 miles of seasonal road closures (Kirkwood, Teepee Butte, Wildhorse, PO Saddle roads and Lord Flat Trail) to meet resource objectives. **Alternative N** would reduce dispersed camping opportunity the most (-29%) for motorized users due to the highest level of permanent road closures (136 sites would remain accessible).

Table 10: Number of Total and Seasonally-open Dispersed Campsites Available by Alternative

Dispersed Camping	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Total dispersed campsites accessible by motorized vehicle	200	190	182	196	136
Percent change in total campsite availability due to road closures	0%	-5%	-9%	-2%	-32%
Dispersed campsites accessible by motorized vehicle during seasonal road closures	191	181	149	187	136
Percent change in campsite availability due to seasonal road closures	0%	-5%	-22%	-2%	-29%

Fuelwood cutting would continue under all alternatives as currently provided under the WWNF *Fuelwood Program* (USDA 1995) although availability would vary by alternative based on the level of designated open roads. **Alternatives A, B, and W** would continue to allow fuelwood cutting (approximately 18,000 acres) from designated open roads in MAs 10 and 11. **Alternative E-modified** would restrict access to designated roads and use designated Special Fuelwood Areas (SFAs) to aid the public in obtaining fuelwood. Motorized or mechanical equipment would be allowed off the road to retrieve fuelwood following a site-specific analysis. **Alternative N** would further reduce the level of designated open roads and would reduce the level of fuelwood availability. The difference between alternatives would be mitigated by the designation of SFAs to continue this opportunity.

Unit of Measure – Open-road Density

Total open-road density is one measure of the total effects of road closures (closures reduce road densities) on motorized and nonmotorized access. **Table 11** displays the total number of subwatersheds (61 in the HCNRA) by open-road density (NFS and other roads) in terms of mi./sq. mi. by alternative. See **Figures 9, 10 and 11** for maps of the open roads by alternative.

Table 11: Number of Subwatersheds by Open-road Density (NFS and other roads) by Alternative

Open-road density	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
0	6	10	7	7	13
Less than ½ mile	7	17	11	11	20
Between ½ to 1 mile	24	23	25	23	22
Between 1-1.5 miles	15	10	17	19	6
Between 1.5-2.5 miles	4	1	1	1	0
Greater than 2.5 miles	5	0	0	0	0
Total					
Total Subwatersheds	61	61	61	61	61
Average Open-road Density	1.0 mi./sq. mi.	0.68 mi./sq. mi.	0.72 mi./sq. mi.	0.76 mi./sq. mi.	0.45 mi./sq. mi.

**Figure 9: Current Open Roads – Alternative A
Hells Canyon National Recreation Area**

**Figure 10: Open-road Miles by Alternatives B and E-modified
Hells Canyon National Recreation Area**

**Figure 11: Open-road Miles by Alternatives W and N
Hells Canyon National Recreation Area**

Unit of Measure – Trail Construction or Reconstruction Opportunities

About 88 percent of the HCNRA is accessible by approximately 925 miles of trails (40% Wilderness; 60% nonwilderness). The extensive trail system ranges in elevation from 800 to 8,500 feet, with most trails classified “more-to-most difficult.” There are three trails within the HCNRA that allow motorized use:

- Lower Imnaha Trail (#1713) from Cow Creek to the Snake River, allows two-wheel motorized use only,
- Lord Flat Trail (#1774) also called the Western Rim National Recreation Trail from Warnock Corral Trailhead to Lord Flat, allows four-wheel drive vehicles and those 50 inches wide or less in compliance with all state and federal regulations on designated open routes,
- Big Canyon Trail (#1805) from Pittsburg Road and winding its way to the head of Jones Creek in Idaho, allows four-wheel drive vehicles and those 50 inches wide or less in compliance with all state and federal regulations on designated open routes,
- Two motorized trail crossings (#183/188 and #184/362) occur in the Rapid River corridor to provide motorized access through the area on the North Star Trail to Black Lake.

Alternatives A, E-modified, and W would enhance trail access to accommodate current needs while providing resource protection. Alternatives A, E-modified, and W would provide the opportunity for 1.25 miles of new trail construction to create a short loop in the vicinity of Temperance Bench (between #1778 and #1751) on the Oregon side of the HCNRA that would reduce overall use on two trail segments but would increase frequency of use. Additionally, 0.75 miles of new trail on the Idaho side of the HCNRA would provide access for viewing the canyon in the Stormy Point area under Alternatives E-modified and W. **Alternative B** would maintain current trail access and would not provide additional opportunities to accommodate use except along the Snake River. **Alternative N** would maintain trails in their current locations with no new construction or relocation proposed. **Table 12** summarizes the trail construction or reconstruction opportunities by alternative.

Table 12: Trail Construction or Reconstruction Opportunities by Alternative

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Maintains 925 miles of existing trail system per the <i>HCNRA Trail Management Plan</i> to focus on user safety and resource protection.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A	Maintains existing trail system at minimum standards with an emphasis for user maintenance.
Allow for 1.25 miles of new construction in vicinity of Temperance Bench area (trails 1778 and 1751) to create a loop trail.	No new trail construction.	Allows 2 miles of new trail construction in vicinity of Temperance Bench in Oregon (1.25 miles); Stormy Point in Idaho (0.75 mi.)	Same as Alternative E-modified.	No new trail construction.
Allows opportunity to upgrade and reconstruct Brush Creek to Granite Creek Trail along the Wild and Scenic Snake River (4 miles).	Allows opportunity for minor reconstruction of Brush Creek to Granite Creek Trail along the Wild and Scenic Snake River (4 miles).	Same as Alternative B.	Same as Alternative B.	No trail reconstruction.

Unit of Measure – Backcountry Airstrips

Nine backcountry airstrips occur within the HCNRA. Memaloose and Lord Flat are located in the uplands near Hat Point and Lord Flat in Oregon (open for private, commercial and administrative use). Dug Bar, Pittsburg Landing, and Salmon Bar airstrips are open to private, commercial, and administrative use in the Scenic section of the Snake River. Cache Creek airstrip, also in the Scenic section, is open only to private and administrative use. Big Bar is open to private, commercial, and administrative use in the Wild section of the Snake River. Temperance Creek is open only to the special use permittee in conjunction with Temperance Creek Ranch. Sluice Creek airstrip is closed to all use. Use is low at airstrips and they are not regularly maintained.

All alternatives would maintain the two backcountry airstrips in the uplands (Memaloose and Lord Flat) open for private, commercial and administrative use. The backcountry airstrips in the Wild and Scenic River corridor would remain open or closed as described above and previously decided in the *Wild and Scenic Snake River Recreation Management Plan* (USDA 1999). **Alternative W** would open the Sluice and Temperance Creek backcountry

airstrips in the Wild section of the Snake River to public use. All backcountry airstrips would be available for emergency landings. **Table 13** describes backcountry airstrips by alternative and **Figure 12** provides a map.

Table 13: Backcountry Airstrips by Alternative

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Maintains year-round access to the Memaloose, Lord Flat, Big Bar, Dug Bar, Pittsburg Landing, and Salmon Bar backcountry airstrips for private, commercial and administrative use.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Cache Creek airstrip is open for private and administrative use only.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A, except opens Cache Creek to commercial use.	Same as Alternative A.
Sluice Creek is closed. Temperance Creek backcountry airstrip is authorized for use by special use permit only.	Same as Alternative A.	Same as Alternative A.	Opens Sluice Creek and Temperance Creek backcountry airstrips in the Wild and Scenic Snake River for private, commercial and administrative use.	Same as Alternative A.
Allows emergency landings at all backcountry airstrips.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A	Same as Alternative A.
Allows commercial use under existing authorized outfitter and guide permits.	Same as Alternative A, except requires self-registration at all open landing strips by all users.	Same as Alternative B, except prohibits regularly scheduled commercial landings.	Same as Alternative A.	Same as Alternative E-modified.

Unit of Measure – Over-snow Vehicle Travel and Play Areas

Facilities and access for winter use in the HCNRA are limited (approximately 40,786 acres; 6.25% of the area) with about 132 miles (192 acres) of designated groomed trails. Use generally occurs from mid-to-late November through April. Elevations for riding range from 4,000-7,000 feet. Most areas within the HCNRA are not accessible to over-snow vehicles due to steep terrain, lack of access, Wilderness designation, lack of snow, and/or the lack of developed parking and staging areas. **Figure 13** shows over-snow vehicle travel and play areas.

As described in **Table 14**, all alternatives would manage snowmobile use on designated groomed trails that are a part of the NFS roads in the off-season. Impacts to watersheds are negligible or nonexistent, as compacted snow on designated trails amounts to only 160 acres out of the 652,488 acres of the HCNRA. **Alternatives A, B, E-modified, and W** would designate play areas totaling 40,626 acres. **Alternative N** would not provide play areas or allow any snowmobile activity off groomed routes. Use would be confined to paved routes only.

Table 14: Over-snow Vehicle Travel and Play Areas by Alternative

Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Manages motorized over-snow vehicle travel on designated routes and play areas in RAAs 36, 40, 41, and 42. (40,262 acres and 132 miles of existing roads in HCNRA). Allows access on designated routes and play areas with minimum of 12 inches snow depth.	Same as Alternative A	Same as Alternative A, except allows access on designated routes with minimum of 12 inches snow depth and on play areas with minimum of 24 inches snow depth. The minimum depth would alleviate potential resource damage until monitoring results or other scientific research indicates a different minimal depth.	Same as Alternative A	Manages motorized over-snow vehicle travel on designated, easily monitored, major paved routes only. Snowmobile use would be allowed only after public analysis and literature search that wildlife would not be displaced or stressed by routes, numbers, noise, and air pollution levels permitted.

**Figure 12: Backcountry Airstrips
Hells Canyon National Recreation Area**

**Figure 13: Over-snow Vehicle Travel and Play Areas
Hells Canyon National Recreation Area**

Unit of Measure – Facilities Development and Maintenance Levels

Approximately 90 developed facilities (including trailheads, viewpoints, campgrounds, lookouts, or cabins) occur in the HCNRA. These sites provide day and overnight use for recreationists, support to fire suppression or control efforts, administrative use by backcountry crews, or support associated with special use permits. Some sites are or may be classified as historic properties.

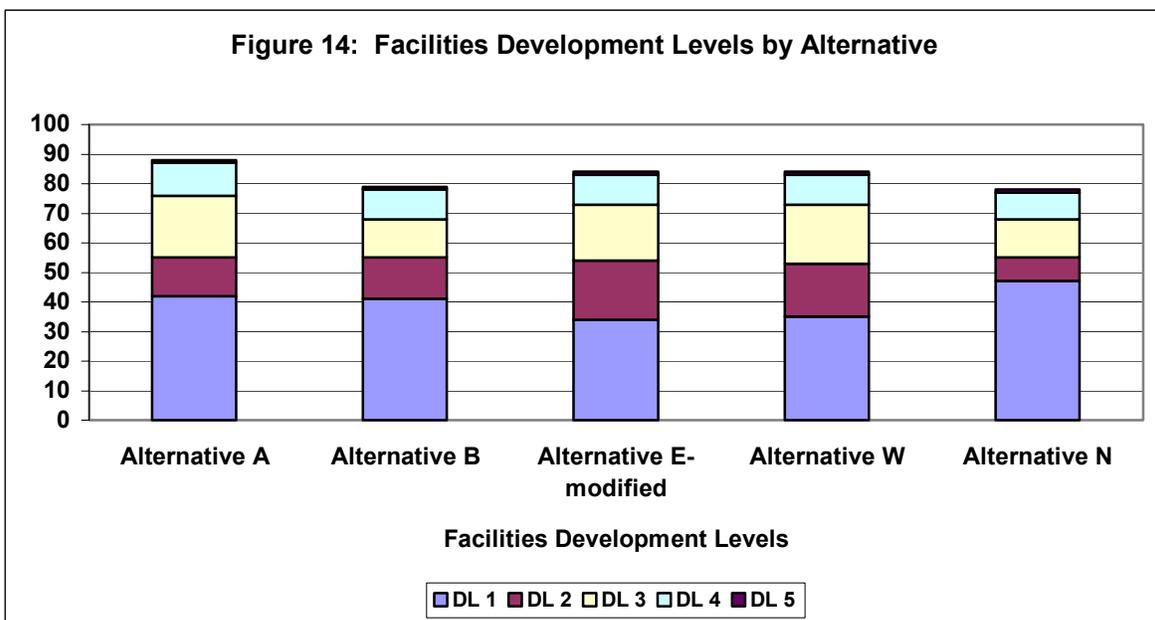
Development levels (DL) for facilities provide objectives for site modifications and the scale of development to meet the ROS setting (ranging from 1-5 for less to more developed). Maintenance levels provide standards for activities to maintain the level of development by alternative. In some cases, capital improvements or decommissioning may be necessary to meet the objectives for a site.

Alternative A would propose more development of sites than the other alternatives and would provide the greatest degree of comfort and convenience for the public. Two new campgrounds would be proposed to increase the development scale of facilities and to accommodate future use. Self-reliance and the rustic character of the HCNRA would be less than in other alternatives.

Alternatives B and E-modified would favor more rustic designs resulting in more primitive and challenging facilities on the development scale. **Alternative W** would be similar to A with respect to developed sites, but would have a lower standard of development. These alternatives would manage the number and type of facility development and maintenance levels to meet ROS setting indicators. Campgrounds would be maintained for their existing character. Aging structures would be replaced with new, low-maintenance, and rustic facilities. Development of sites would provide comfort, convenience, and accessibility but self-reliance and independence would be emphasized more in Alternatives B, E-modified, and W than in Alternative A. Alternatives B, E-modified, and W would provide a range of accessibility levels to accommodate physically challenged users.

Alternative N would manage to prevent crowding at sites by avoiding any expansion of facilities. Nonfunctional facilities would be replaced with the same type of materials that would not change the appearance. The rustic feeling of the area would be maintained, but it would least meet the needs of visitors who prefer facilities that provide comfort and convenience. Accessibility for physically-challenged users would be reduced.

Figure 14 summarizes the number of recreation sites at various development levels to meet the management objectives by alternative.



Forested Vegetation, Grasslands, and Forest Understory (Significant Issue)

The alternatives are compared in terms of potential acres of forested vegetation treatment in the next decade to maintain or improve the HRV, potential acres of fire (PF, WFU, and unwanted wildfire) in a decade, and qualitative trends in ecological status for grasslands.

Unit of Measure – Potential Acres of Forested Vegetation Treatments

The *HCNRA Act* permits uneven-aged timber management that is compatible with provisions of the legislation. Selective harvest methods were specified in the *HCNRA Act* to prevent even-aged management, such as clearcutting or seed tree harvests. The existing CMP excluded all commercial forestland (a capability classification) with low capability and approximately 25 percent of the commercial forestland with moderate to high capability from harvest. Most of the HCNRA is not classified commercial timberland due to the nature of the plant communities and the steep, rocky terrain. The *Public LURs* classified timber removed from the HCNRA as unregulated and excluded it from contribution toward the WWNF allowable sale quantity (36 CFR 292.46).

The *Public LURs* state that timber may be harvested only to protect and enhance ecosystem health, wildlife habitat, or recreational and scenic uses; to reduce the risk of harm posed by hazard trees; or to respond to natural events such as wildfire, flood, earthquake, volcanic eruption, high winds, and disease and insect infestation. The predominance of fire as a primary force shaping the vegetative environment has changed the focus of potential forested vegetation treatments in the HCNRA. Potential treatments described in **Table 15** would be a first step in facilitating fire as a management tool by reducing ground and ladder fuels in forested areas.

Table 15: Potential Acres of Forested Vegetation Treatments by Alternative Over the Next Decade

Vegetation Treatment	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Precommercial Thinning	2,400	2,275	5,400	7,100	0
Mechanical Treatment and Underburn	1,550	950	1,550	4,000	0
Single-tree Selection	21,000	7,450	8,200	19,900	0
Commercial Thinning	1,650	1,425	2,550	8,000	0
Total					
Total	26,600	12,100	17,700	39,000	0
Percentage of Forested Acres Treated*	10%	4%	6%	14%	0%
Percentage of HCNRA Acres Treated**	4%	2%	3%	6%	0%

*272,144 acres of forested stands

**652,488 acres in the HCNRA

As a result of fire exclusion, the absence of stand-density management, and prolonged drought, the pine-dominated stands have developed structures that are susceptible and vulnerable to epidemic insect and disease infestations, and fire events outside their HRV. Fire could be re-introduced into these fire-dependent ecosystems using PF to help stimulate fire-resistant plant species, thin stands, reduce fuel loads, and reduce the risk of large, extensive, stand-replacing fires.

The proposed treatments in **Alternatives A, E-modified, and W** would provide the greatest degree of ecosystem sustainability within the HCNRA and within the Interior Columbia Basin (Quigley and Arbelbide 1997).

Alternative B would result in less than half the amount of treatment extended by **Alternatives A, E-modified, and W**. Although **Alternative N** has a similar amount of total cumulative treatment acres affecting tree density, its total acreage is from PF, which does not preserve large-diameter seral species at beneficial densities as well as the other alternatives with their mixes of forested vegetation and PF treatments. **Table 16** displays the proposed total treatment acres on forested areas by alternative over the next decade.

Table 16: Proposed Total Treatment Acres on Forested Area by Alternative over the Next Decade

	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Forested Vegetation Treatment Acres	26,600	12,100	17,700	39,000	0
Prescribed Fire Acres	12,750	4,100	19,495	¹	16,460
Proposed Total Acres	39,350	16,200	37,195	39,000	16,460
Percent Forested Acres Treated*	14%	6%	14%	14%	6%
Percent of HCNRA Acres Treated**	6%	2%	6%	6%	2%

*272,144 acres of forested stands; **652,488 acres in the HCNRA

¹ Although **Alternative W** has prescribed fire on 21,040 acres, it is not added to the forested vegetation treatment acres because it is prescribed to occur only on the same areas that have had pre-treatment by forested vegetation activity.

Unit of Measure – Potential Acres of Fire

Over the past 100-plus years, the percentage of higher-burn intensities in Blue Mountain forests has increased beyond historic conditions as a direct result of increased fuels loads, which have developed from fire exclusion (Johnson 1998). Fire suppression activities have lengthened the interval between fire return and allowed for development of multi-layered canopies dominated by shade-tolerant conifers. Stands historically maintained as Fuel Model (FM) 2 (grass and open timber types) and FM 8 (open mixed-conifer forested stands) have developed into FM 10 structures (complex structure mixed-conifer forested stands with a significant amount of dead and down material) with a decrease in the historic percentage of FM 8 structures (Maruoka 1994).

Table 17 displays the potential acres of fire by fuel models (FM 2, 8, and 10) by type of fire (WFU, PF, and unwanted wildland fire) that would potentially occur by alternative over the next decade to maintain or improve the representation of all structural stages within HRV.

Table 17: Potential Acres of Fire for All Fuel Models (FM 2, 8, 10) by Alternative Over the Next Decade

Fire Type	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
All Fuels Models (FM 2, 8, and 10) Combined					
Wildland Fire Use for Resource Benefits (WFU)	7,500	14,500	115,720	64,700	263,420
Prescribed Fire (PF)	35,000	13,000	68,000	41,600	40,450
Unwanted Wildland Fire	44,780	58,440	18,680	21,660	9,130
Total					
Grand Total	87,280	85,940	202,400	127,960	313,000
Percentage of HCNRA	14%	14%	33%	21%	51%

*619,488 acres excluding private land

Alternative A proposes a moderate level of PF for FM 2 and would take nearly five decades to burn over these acres at a rate higher than what occurred following Euro-American settlement. Deviations from the reference-disturbance levels and fire regimes would continue to move stands outside of the reference period, and changes in fire frequency would result in changes in fire severity. The shift from nonlethal, mixed fire regimes in FM 8 to lethal fire regimes would continue and increase the percentage of stands highly susceptible to stand-replacing fires. FM 10 structures would be maintained until stand-replacement fire events occurred.

As a result, stands in the very early to early stage of development would increase beyond the level of structural stages within the HRV. Most of the unwanted wildland fire acres would burn under more severe conditions due to the fires occurring in complex fuel profiles. Aggressive suppression would be required. Approximately 14 percent of the HCNRA would be affected by fire under Alternative A over the next decade.

Alternative B proposes a low-to-moderate use of PF over time and would burn FM 2 acres over nearly five decades. The limited acreage permits only targeting selected areas as demonstration of historic fire influence. WFU would be more costly to implement and have a higher risk of failure due to the small acreage estimated potentially available for the decade. Large, intense wildland fire events would result in large patches of early seral communities and increases in risks to firefighters and costs would accrue to future decades.

Unprecedented and undesirable effects to wildlife habitat and resource values beyond the risk to human lives could occur (Morgan et al 1996). Existing FM 10 stands, burning under high intensity conditions, would convert to FM 2 or FM 5 (shrub) structures. Aggressive suppression would be necessary to achieve the potential acres. Approximately 14 percent of the HCNRA would be affected by fire under Alternative B over the next decade.

Alternative E-modified proposes a high level of PF in FM 2 over time and would approximate the upper end of the reference period disturbance level where the same acreage would have burned nearly every one to two decades within the true grassland communities. WFU or PF would not be a major concern for weed spread if fires occur in spring or fall when they can burn cool enough so as not to scorch the soil and create a weed-infestation condition (C. Johnson direct communication 1999).

Cumulative effects of potentially decreasing the percentage of FM 8 in unwanted wildland fire events would help meet vegetation management objectives of a sustained ecosystem function within the HRV. However, even under PF and WFU conditions, fuel models would burn with sufficient intensity to change seral conditions. This change would be within the anticipated cycling of landscape conditions due to natural processes across this

complex terrain. Approximately 33 percent of the HCNRA would be affected by fire under Alternative E-modified over the next decade.

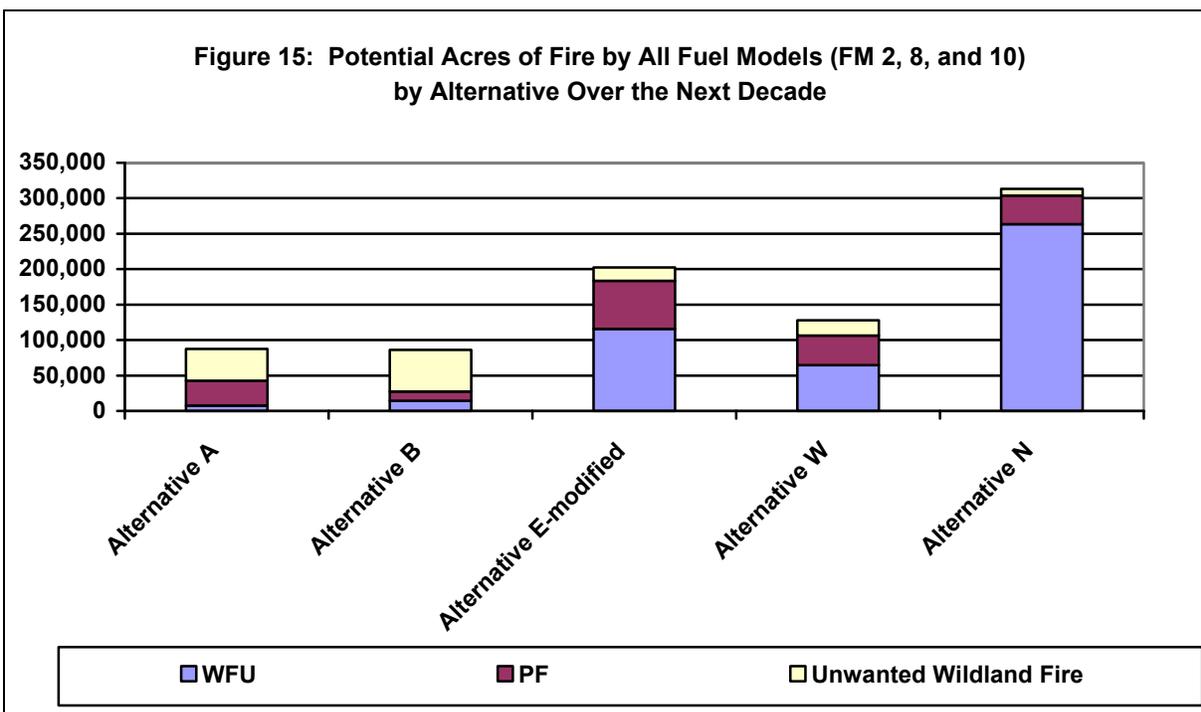
Alternative W proposes a high level of PF in FM 2 over time beyond the reference-period disturbance level for fire frequency. Cumulative effects of potentially decreasing the percentage of FM 8 in unwanted wildland fire events would help meet vegetation management objectives for sustained ecosystem function within the HRV. Because not all areas would be suitable for forested vegetation treatments in the short term, and cannot be included in PF, stand structures and fuel profiles would advance toward late-seral (FM 10) conditions, but at a much reduced rate than **Alternative A**.

Long-term monitoring would be important to assess what types of forested conditions exist under this alternative with its greater reliance on management intervention through manipulation of fuels and stand structures. Significant costs would be required to access FM 10 areas in remote, unroaded portion of the HCNRA that would potentially limit the use of mechanical methods. Approximately 21 percent of the HCNRA would be affected by fire under Alternative W over the next decade.

Alternative N proposes a high use of WFU over time and would burn FM 2 acres in one and a half decades which comes closest to the reference-period disturbance level for fire frequency and would reestablish wildland fire as a dominant disturbance force within the HCNRA. The percentage of FM 8 unwanted wildland fire events would decrease compared to **Alternative A**. Different fire may influence the subsequent spread of wildfires depending on location and size of the wildland fires.

The cumulative effects of decreasing FM 10 stand-replacing unwanted wildland fires would greatly help meet vegetation management objectives of sustaining ecosystem function to provide forested structures within the HRV. More fire shaping future landscape conditions would increase adverse effects as well as the potential benefits by reestablishing fire as a primary ecological disturbance processes. Monitoring would evaluate the results and interactions and would serve to enhance future planning within the HCNRA as well as other fire dependant landscapes of the Intermountain West. Approximately 51 percent of the HCNRA would be affected by fire under Alternative N over the next decade.

Figure 15 displays the potential acres of fire by all fuel models by alternative over the next decade.



Unit of Measure – Qualitative Trends in Ecological Status for Grasslands

Ecosystem attributes fluctuated historically within some range of variability. This HRV represents the natural fluctuation of ecological and physical processes and functions that would have occurred in an ecosystem during a specified previous period. For the HCNRA, HRV refers to the range of conditions that are likely to have occurred before the settlement of northeastern Oregon by Euro-Americans around 1850. The HRV within the grasslands provides a general approximation and comparison between current seral conditions and estimated historic conditions and allows scientists to evaluate relative trends and rates of change across the HCNRA landscape (Quigley and Arbelbide 1997).

The *Public LURs* require the definition and implementation of satisfactory condition. Ecological status (very early, early, mid, and late seral) is evaluated in terms of achieving satisfactory conditions (mid-seral status with an upward trend) within the context of HRV. The primary comparison of alternatives focuses on the definition of satisfactory conditions by alternative.

Alternative A has no provisions for striving toward grassland HRV. Alternative A requires that all grasslands be maintained in a "good" condition, which is relatively synonymous with a late-seral status. A contiguous late-seral status would not be possible or desirable, since most plant and animal species evolved in grasslands with disturbance regimes and a varied range of seral stages.

Alternatives B and W incorporate HRV as the goal for the grasslands, while Alternative E-modified uses HRV as a reference condition with the goal of achieving the PNC (community that would result if succession were completed without interference by humans while allowing for natural disturbances). Management would be designed to move landscapes toward defined ranges of seral stages or to maintain landscapes at a mix of given seral stages, in order to meet HRV objectives. This would lead to approximations of naturally occurring (before Euro-American) conditions.

Alternative E-modified would reconcile HRV objectives with the *Public LURs* definitions of satisfactory condition (i.e., fair range forage condition with an upward trend or better) by attaining a mid-seral ecological status with an upward trend or higher condition based on the PNC. Alternative E-modified would acknowledge that some sites have been altered to a very early seral stage where native species are essentially missing or in such low presence that they cannot out compete the invasive vegetation. Alternative E-modified further provides for restoration of degraded sites in early to mid-seral status to facilitate achieving HRV over time.

Alternative N does not specifically address HRV. It would allow fire to play its natural role to restore natural ecosystem processes that would dominate the landscape. Alternative N's emphasis on natural ecosystem processes would continue to provide a presence of early and mid-seral status areas across the landscape similar to that occurring under Alternatives B, E-modified, and W.

Vacant Allotments Disposition and Satisfactory Range Conditions (Significant Issue)

The alternatives are compared below in terms of the acres incorporated into active allotments, remaining vacant or closed; and the estimated capable and suitable acres for grazing. The alternatives are compared for satisfactory range conditions in terms of trends in grasslands meeting or moving toward *Public LURs* definition of satisfactory condition (mid-seral stage, or fair forage condition with an upward trend or better).

Unit of Measure – Acres of Allotments (Active, Vacant, Closed, Capable and Suitable)

About 566,411 acres (91%) of HCNRA lands are within 51 grazing allotments. Approximately 53 percent of grazing allotments are currently active (298,905 acres on 40 allotments) and 47 percent of grazing allotments are vacant (267,506 acres on 11 allotments). The 11 vacant allotments occur wholly or mostly within the HCNRA and have become vacant since 1980. The majority (83%) of the vacant acres are classified for sheep and goat grazing (221,206 acres) and the remainder are classified for cattle and horse grazing (46,300 acres).

Table 18 displays the status of allotments by alternative in terms of acres of active, incorporated into active, remaining vacant, closed, total potentially available for grazing, and capable/suitable. The estimated capable and suitable acres include only active allotments and administrative horse pastures based on the low probability of completing site-specific analysis for potentially available areas over the next decade.

Table 18: Acres of Active, Incorporated into Active, Retain as Vacant, Closed, Capable and Suitable for Livestock Grazing by Alternative

Status	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N Scenarios A and B	
Cattle	292,521	292,521	292,521	292,521	0	146,261
Horse Pastures		18,590	18,083	18,590	0	0
Sheep	6,384	6,384	6,384	6,384	0	0
Total Active	298,905	317,495	316,988	317,495	0	146,261
Cattle	134,899	63,088	3,641	89,292	0	0
Sheep	0	0	0	0	0	0
Total Incorporated into Active	134,899	63,088	3,641	89,292	0	0
Cattle	0	0	0	27,017	0	0
Sheep ²	132,607	132,607	0	132,607	0	0
Total Retain as Vacant	132,607	132,607	0	159,624	0	0
Current	54,900	54,900	54,900	54,900	54,900	54,900
Added	0	53,221	245,782	0	566,411	420,150
Total Closed	54,900	108,121	300,682	54,900	621,311	475,050
Potential Active ³	433,804	380,583	320,629	406,787	0	146,261
Potential Active that is Capable and Suitable ⁴	260,282	228,350	192,377	244,072	0	87,757
Percent Change from Alternative A	0%	-12%	-26%	-6%	-100%	-66%
Likely Active that is Capable and Suitable ⁵	190,497	190,497	190,193	190,497	0	87,757
Percent Change from Alternative A	0%	0%	<1%	0%	-100%	-54%

¹Included in vacant allotment acres (18,590 acres)

²Includes Curren Hill Allotment (sheep) administered by the Payette National Forest (2,116 acres)

³Includes all acres incorporated into active status following site-specific analysis, probability of restocking incorporated vacant acres is low over the next decade

⁴Based on 60 percent of potential active acres

⁵Includes only active and administrative horse pastures acres based on the low probability of site-specific analysis over the next decade. vacant parcels over the next decade.

Alternative A would incorporate 50 percent (134,899 acres) of the vacant allotments into active allotments, and would maintain 50 percent (132,607 acres) of the vacant allotments as vacant in four sheep allotments (Temperance-Snake, Mud-Duck, Sheep Creek, and Curren Hill). **Alternative B** would incorporate 23 percent (63,088 acres) and close 20 percent (53,221 acres) of vacant allotments, and would maintain the sheep allotments as vacant.

Alternative E-modified would incorporate one percent (3,641 acres) of the vacant allotments and close 92 percent (245,782 acres) of vacant allotments and classify them as unsuitable for permitted livestock. **Alternative W** would incorporate 33 percent (89,292 acres) into active allotments, maintain 50 percent (132,607 acres) of the vacant allotments as vacant in four sheep allotments, and maintain 10 percent (27,017 acres) as vacant for ungrazed control areas.

Alternative N includes two scenarios. Under **Scenario A**, there would be no livestock grazing in the HCNRA. Therefore, all active and vacant allotments would be closed. **Scenario B** would maintain active grazing on 146,261 acres and would close allotments that become vacant in the future. Alternative N would close all current vacant allotments including the vacant sheep allotments, all allotments that become vacant in the future, and all active sheep allotments.

Alternative A would not establish administrative horse pastures in the vacant allotments. **Alternatives B, E-modified, and W** would establish similar levels for administrative horse pastures. Alternative N would close administrative horse pastures.

Alternatives B, E-modified and W would have similar levels of capable and suitable areas for grazing based on actively grazed areas over the next decade followed by **Alternative A**. **Alternative N** would maintain about half the active acres that are capable and suitable for grazing (Scenario B) or would eliminate grazing (Scenario A).

All alternatives would reduce the total potential acres available for livestock grazing below **Alternative A**. **Alternative W** would incorporate the most vacant acres into active allotments followed by **Alternatives B and E-modified**. Allocated vacant allotments or portions thereof into active allotments would not be restocked pending completion of a site-specific NEPA decision. The probability of incorporating acres into active grazing

allotments over the next decade would be low due to other priorities to analyze currently grazed areas first, only very limited restocking would occur over the life of the plan.

Alternatives B, E-modified, and W would maintain the same level of active grazing as currently exists under Alternative A, and would establish administrative horse pastures as a separate use. The administrative horse pastures are currently used under Alternative A but have been accounted for as part of vacant allotment acres, so the net effect would be no change in the level of active grazing. Less than 50 percent of the HCNRA would be in active grazing status under these alternatives. **Alternative N** would however, eliminate active grazing altogether including administrative horse pastures and would allow approximately half of the current level of active grazing (146,261 acres) or 22 percent of the HCNRA. **Table 19** displays the disposition of individual vacant allotment acres by alternative. **Figures 16, 17, and 18** display the differences in vacant allotments by alternative.

Table 19: Disposition of Individual Vacant Allotment Acres by Alternative

Allotment Name	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N Scenarios A & B
071 - Jim Creek					
Vacant	12,490				
Closed			312		12,490
Administrative Horse		12,490	12,178	12,490	
082 - Cherry Creek					
Vacant	21,924			5,047	
Closed		5,047	20,204		21,924
Administrative Horse		1,915	1,720	1,915	
To Toomey		5,527			
To Chesnimnus		9,435		9,435	
To Rhodes				5,527	
084 - Temperance-Snake					
Vacant	42,825	42,825		42,825	
Closed			42,825		42,825
108 - Hope Creek					
Vacant	2,207		2,207		
Closed					2,207
To Blackmore		1,324			
To Saddle Creek		883			
To Dunn Creek				2,207	
118 - Turner Creek					
Vacant	1,434		1,434		
Closed					1,434
To Dunn Creek		1,434			
To Chalk Creek				1,434	
162 - Mud-Duck					
Vacant	47,020	47,020		47,020	
Closed			47,020		47,020
164 - Sheep Creek					
Vacant	40,646	40,646		40,646	
Closed			40,646		40,646
167 - Big Canyon					
Vacant	8,045				
Closed			8,045		8,045
To Pittsburg		8,045		8,045	
183 - Cache Creek					
Vacant	8,245			3,855	
Closed		3,855	6,048		8,245
Administrative Horse		2,197	2,197	2,197	
To Lost Cow		2,193		2,193	
191 - Canyon					
Vacant	80,554			18,115	
Closed		44,319	78,566		80,554
Administrative Horse		1,988	1,988	1,988	
To Cayuse		24,446		25,005	
To Cow Creek		3,952		3,952	
To Lone Pine		5,849		31,494	
Curren Hill					
Vacant	2,116	2,116		2,116	
Closed			2,116		2,116

**Figure 16: Current Range Allotments (Alternative A)
Hells Canyon National Recreation Area**

**Figure 17: Vacant Allotments for Alternatives B and E-modified
Hells Canyon National Recreation Area**

**Figure 18: Vacant Allotments for Alternatives W and N
Hells Canyon National Recreation Area**

Unit of Measure – Trends in Grasslands Meeting or Moving toward Public LURs Satisfactory Condition

The definition and implementation of satisfactory condition is required by the *Public LURs*. **Alternatives A, B and W** provide direction the use of range condition rating with evaluate health through analysis of forage conditions. **Alternative E-modified** evaluates ecological status of a site and is a comparison to the PNC. **Alternative N** does not establish a specific definition for satisfactory condition.

Alternative A would maintain a goal of having all grasslands within the HCNRA in “good” condition (late-seral status) and having all range conditions currently in less than satisfactory condition be at least in an upward trend, as stated in the CMP (USDA 1982, as amended, FEIS, p. 116). The goal was not clearly defined in the CMP, leading to a number of different interpretations. The CMP also does not define “satisfactory condition,” as required by the *Public LURs*.

Alternatives B and W would provide minimum satisfactory conditions in which available grazing lands would be authorized for use under grazing permits. Established agency protocols for range forage condition, riparian hardwood-health parameters, and soil-condition parameters would apply. These provide the minimum acceptable factors for meeting satisfactory conditions. In many instances, the site-specific goal or objective would be higher than this minimum. This proposed standard would be measurable and would meet desirable goals.

Alternative E-modified would be similar to **Alternatives B and W** but would define satisfactory condition using ecological status to attain mid-seral status or higher for grasslands, soil surface conditions and riparian hardwoods. Alternative E-modified would provide a more rapid recovery than Alternative B and W by focusing restoration efforts on noxious weed and invasive species prevention and closing vacant allotments. This would result in a full condition class on sites in mid-seral status and a movement to late-seral status with a stable trend on sites currently in satisfactory condition. This response would be predicated on successful restoration of sites occupied by invasive species, and on big-game impacts remaining constant or decreasing.

Alternative N does not specifically define “satisfactory condition” as required by the *Public LURs*. Effects would be similar or better than **Alternative E-modified** due to exclusion of livestock. The exclusion of livestock under either **Scenario A or B** could enhance natural restoration processes and would likely result in some sites in mid-seral status or poorer moving up from one-quarter to one-half condition class over the next decade. There would continue to be areas of early and very-early status where natural recovery would not be possible due to altered site potentials. This alternative would allow for limited active management due to its emphasis on natural processes and its restrictions on the use of herbicides. Some sites would not improve without active restoration due to invasive species that have taken over areas and would remain at low levels of ecological health.

Table 20 describes the trends in moving toward or achieving satisfactory conditions by alternative.

Table 20: Trends of Moving Toward or Achieving Satisfactory Condition by Alternative

Trends	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Moving toward at least mid-seral stage (fair forage condition) with an upward trend or better	Slowest	Moderate	Moderate to near natural	Moderate	Moderate to near natural

As shown in **Table 21**, **Alternatives A, B and W** would result in an estimated reduction (7%) of existing animal unit months (AUMs) over the next decade. **Alternative E-modified** direction would result in a slightly higher (10%) reduction. There would be a continued decline (-52 to -100%) in active grazing under **Alternative N**.

Table 21: Annual Permitted Grazing Use (thousand AUMs) by Alternative over the Next Decade

Permitted Use	Current Levels	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N Scenarios A & B	
Cattle in Oregon	34.99	32.53	32.53	31.49	32.53	0	18.9
Cattle in Idaho	4.59	4.36	4.36	4.13	4.36	0	0
Sheep in Idaho	0.17	0.16	0.16	0.16	0.16	0	0
Total							
Total	39.75	37.05	37.05	35.78	37.05	0	18.9
Percent Change from Current Levels	0%	-7%	-7%	-10%	-7%	-100%	-52%

Heritage Resources (Significant Issue)

Based on observation and experience, the primary causal agents for heritage disturbances for the HCNRA are fire, livestock grazing, recreation use and development, and forested vegetation management. The alternatives are compared in terms of the potential risk of impacts on heritage resources from these activities based on potential surface disturbance, removal or alteration of structural elements, removal or alteration of mapped artifacts, modification or alteration of physical environment or setting.

Unit of Measure – Potential Risk of Impacts on Heritage Resources

Risk to heritage resources from fire is far greater to historic than to prehistoric resources, and the loss of historic structures is irreversible. Most historic sites, from log and frame structures to can scatters, are located at or near the surface. **Alternatives A and B** do not differ significantly in terms of the total numbers of acres identified for potential wildfire. However, the combination of prescribed fire and wildfire under **Alternative E-modified** would potentially occur on more than twice the area of Alternative A. **Alternative W** would potentially affect 1.5 times more area than A. Alternatives E-modified and W thus have greater potential to affect heritage resources, particularly within Wilderness. Because **Alternative N** would affect the greatest number of acres with fire (approximately 51% of the HCNRA in 10 years), it presents the greatest risk to heritage resources from fire.

Livestock grazing would have a measurable effect on the protection and preservation of heritage resources based on the total number of acres available to livestock grazing. Livestock grazing has the potential to affect both prehistoric and historic heritage sites through trampling of artifacts and features. Under **Alternatives A, B, E-modified, and W**, currently vacant allotments, or portions thereof, would be incorporated into active allotments. The rate at which this occurs would depend on the site-specific analysis. **Alternative A** would potentially allow the greatest number of vacant allotments to be stocked with domestic livestock in the future, followed by **Alternatives B and W**. **Alternative E-modified** would allow a small amount of acres to potentially be restocked with domestic livestock in the future (3,641 acres) compared to Alternatives A, B, and W. Alternatives B and E-modified would use exclusionary practices to prevent degradation of heritage resources (Her-S9). **Alternatives E-modified and N**, which close all or most of existing vacant allotments, would have a significant, long-term reduction in livestock-related impacts to historic and prehistoric heritage resources.

Alternatives with the highest levels of recreation management and development would have the highest potential for affecting heritage resources because many of the developed recreational sites are also prehistoric and/or historic heritage sites. **Alternatives A, E-modified, and W**, respectively, contain the greatest number of changes in management direction, which if implemented, would be most likely to directly and indirectly affect heritage resources. Generally, these changes involve proposed opportunities that upgrade existing and/or construct new recreation developments and improve access. In doing so, they tend to make some areas more attractive to recreation visitors. This could, and probably would, result in increased recreation use over time. There would likely be a concurrent increase in recreation-user impacts to heritage resources. **Alternatives B and N** would construct no new facilities and would focus on maintenance of existing facilities. Thus, they would be less likely to affect heritage resources than **Alternatives A, E-modified, or W**. **Alternatives E-modified** would limit motorized use to designate routes, dispersed campsites or areas, and special fuelwood cutting areas and reduce potential impacts. **Alternative N** would reduce the miles of open road the most and limit off-road access to minimal incursions (60 feet) to access dispersed sites. These restrictions would reduce the impacts to heritage resources.

Alternatives with the highest levels of forested vegetation management (**Alternatives W, A, E-modified, B, and N** in descending order) would have the highest potential for affecting heritage resources. **Alternative N**, with no identified forested vegetation management activities, would have the least potential over the long term. All alternatives would require site surveys before implementation of forested vegetation management activities which would provide for the long-term protection of heritage resources.

Comparison of Alternatives – Other Issues

This section briefly describes some of the environmental consequences to some of the other issues. The issues are described here to provide the reader with further information about the potential environmental consequences beyond those associated with the significant issues.

Federal Trust Responsibilities

Some commentors questioned how the rights and privileges afforded members of the Nez Perce Tribe, by virtue of the *Treaty of 1855* would be protected. The potential impacts on cultural resources, sacred sites, and religious practices are closely related with the heritage resources management direction. The potential effects on resources or values protected by treaty or law such as the taking of fish, hunting, gathering roots and berries, and pasturing of horses and cattle is linked to protection and management measures for fish, wildlife, and vegetation. Many comments suggested allowing the Nez Perce Tribe to play a major role in managing the canyon's heritage resources. The Nez Perce Tribe has participated in the development of this EIS to address their tribal treaty rights and cultural interests.

All alternatives would minimally meet federal trust responsibilities, with the exception of **Alternatives B, E-modified**, and **W**, which would exceed them. **Alternative A** maintains existing management direction. The existing CMP does not contain direction on federal trust responsibilities.

Alternatives B and E-modified provide specific direction designed to foster achievement of the federal trust responsibilities of the *Treaty of 1855* through government-to-government relationships with the Nez Perce Tribe and other tribes. These alternatives provide the management direction and tools to monitor, evaluate, and adapt management activities that best meet tribal interests. Specific direction would apply to ensure treaty-reserved rights of the Nez Perce Tribe with respect to taking fish, erecting temporary buildings for curing, hunting, gathering roots and berries, and pasturing cattle and horses. Direction also provides for managing treaty resources such as aquatic habitat, wildlife habitat, and grasslands for protection of these rights. Direction is provided for managing resources and values important to the Nez Perce Tribe for hunting, gathering, cultural, spiritual and religious activities, and considering access to usual and accustomed fishing places, hunting locations, gathering sites, and other cultural sites.

This proposed direction complements the heritage, fire, wildlife, fisheries, and access direction and would provide additional guidance to ensure meeting federal trust responsibilities. Implementation of the proposed activity levels for public outdoor recreation, timber harvesting by selective cutting, and livestock grazing would conserve and protect federal trust responsibilities. Specific areas of concern would provide the basis for consultation. In conjunction with the specific management direction in Alternative E-modified and the strategies for managing recreation use would provide additional tools to meet federal trust responsibilities.

Alternative W provides management direction similar to **Alternatives B and E-modified** with similar effects. Proposed activity levels for public outdoor recreation, timber harvesting, and grazing would provide the basis for consultation and federal trust responsibilities would be met through implementation of the management direction.

Alternative N does not provide corresponding management direction specific to federal trust responsibilities. Alternative N does address tribal consultation through proposed standards for heritage and fire. As with Alternative A, the lack of specific emphasis on government-to-government consultation would lead to potential inadequate protection of treaty-reserved rights. Direction for managing resources such as heritage, fire, wildlife, fisheries, and access would provide guidance toward meeting federal trust responsibilities.

Although **Alternatives A and N** have existing management direction (and **Alternative N** has direction concerning contracting and consultation on specific resources), the lack of direction on meeting federal trust responsibilities of the *Treaty of 1855*, may compromise government-to-government consultation and protection of treaty rights over the long-term.

Socioeconomic Conditions

Changes in levels of resource use in the HCNRA may affect the major economic and social characteristics of the broader geographic area. Effects to social and economic conditions are compared in terms of outfitter and guide gross revenue; livestock grazing employment and income; and timber harvesting employment and income.

Unit of Measure – Outfitter Guide Use and Gross Revenue

Special use permits are authorized to provide recreation opportunities with outfitter and guides on the upland areas of the HCNRA for cougar/bear hunting; horse, mule, and llama pack trips; big-game hunting; mountain biking; fishing; photography; motorized ground transportation, and aviation service to backcountry airstrips. Demand for outfitter and guide services is 43 percent of the average permitted capacity (2,348 service days). Gross revenues average approximately \$119,113 (in 2002 dollars). Use has been declining on average 1.4 percent annually.

Alternative A would maintain outfitter and guides (21 permits including one for aviation use) at current levels (2,348 service days) with one aviation special use permit (100 service days) which limits service to the public, especially on the Idaho side of the HCNRA.

Alternatives B would increase the number of outfitter and guide opportunities (22 permits), and reduce the service days for aviation use by 50 percent (to 50 service days). An additional permit would provide guided fishing/whitewater rafting (150 days depending on demonstrated need) on the Imnaha River. Alternative B would provide a net gain of 100 service days and four percent (4.3%) more gross revenues (\$289,159) if capacity (2,448 service days) were fully utilized.

Alternative E-modified would increase the number of outfitter and guide opportunities (22 permits). The level of aviation use with one permit would be increased (150 service days total) and an additional pool of 150 service days (by temporary use permit) would provide additional services to surrounding communities from other aviation operators. Alternative E-modified would prohibit regularly scheduled landings at backcountry airstrips to eliminate the opportunity for future growth in scenic tours or other scheduled activities that would be incompatible with the remoteness of the HCNRA. Alternative E-modified would provide an increase of 350 service days and 15 percent more gross revenues if capacity (2,698 service days) were fully utilized due to the additional opportunity for guided fishing/whitewater rafting on the Imnaha River (150 service days) and aviation services (200 service days).

Alternative W would create opportunities for economic activity by adding 11 new permits with an increase of 1,431 service days. Permit numbers would initially be increased (total of 32 including two aviation permits) primarily in the permit types that are currently not filled or under utilized (guided fishing/whitewater rafting on Imnaha River, photography, mountain biking, snowmobiling, and motorized ground transportation). Two special use permits (150 service days each) for aviation services would provide enough service days to maintain viability for a business and enable operators to provide adequate service to Idaho and Oregon communities surrounding the HCNRA. Nontraditional uses would be considered if they did not affect other commercial users. Alternative W would provide an increase of 1,431 service days and 61 percent more gross revenues if capacity (3,779 service days) were fully utilized.

Alternative N would maintain existing outfitter and guide permits the same as Alternative A. Visitors that have traditionally relied on motorized access to areas that would be permanently closed under this alternative may hire a stock outfitter to pack them into the same area rather than forego their hunt altogether

Table 22 displays estimated annual outfitter and guide permits, service days, and gross revenue based on number of permits and service days by alternative over the next decade. The table also displays the percentage change by alternative compared to Alternative A.

Table 22: Outfitter and Guide Permits, Service Days, and Gross Revenues by Alternative

	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Number of Permits	21	22	22	32	21
Service Days	2,348	2,448	2,698	3,779	2,348
Estimated Gross Revenues	\$277,347	\$289,159	\$318,689	\$446,377	\$277,347
Percent Change from Alternative A	0%	4.3%	14.9%	60.9%	0%

Unit of Measure – Livestock Grazing Employment and Income

Livestock grazing permittee’s dependence on forage (in terms of AUMs) from the HCNRA varies based on a variety of factors, including season of use, availability of federal and private forage, and the number of permits available. HCNRA permittees use an average of 82 percent of the forage available from the allotments based on

the percentage of AUMs supported by NFS land compared to the private portions of the permit. This reliance on forage may be as high as 90 percent for some permittees who also use HCNRA allotments for forage during the winter (B. Garnett, J. Williams, and L. Burton, direct communication with E. Kohrman 1996). This relationship is particularly evident along the middle and lower portions of the Imnaha River where several landowners rely on HCNRA allotments to sustain their operations.

Effects to livestock grazing employment and income were derived from inputs to the intermediate production process from final demand by the consumer (permittee) for NFS forage (AUMs). Estimates include employment and income effects from feedlots in the impact zone. Estimates may be underestimated due to the higher reliance on NFS forage in the HCNRA compared to the rest of the Interior Columbia Basin (Frewing-Runyon 1995).

Table 23 displays the estimated annual livestock grazing-related employment and income by alternative. Based on the level of grazing over the next decade, **Alternatives A, B and W** would support 14.1 jobs and \$249,028 income annually due to livestock grazing. **Alternative E-modified** would support about four percent less annual employment (13.5 jobs) and income (\$237,918) than Alternative A. **Alternative N** would support the least (-59 to -100%) amount of employment (0 to 5.7 jobs) and the least amount (-79 to -100%) of income (\$0-51,453) compared to Alternative A due to eliminating grazing under Scenario A and reducing grazing by 50 percent under Scenario B.

Livestock grazing in **Alternatives A, B, E-modified** and **W** would continue to support jobs and income primarily attributed to the Oregon counties (70%). The remainder (30%) of the livestock grazing-related jobs and income would be attributed to the Idaho counties. Current operations would continue as traditional and valid uses in the HCNRA. **Alternative N** would reduce or eliminate livestock grazing-related employment and income. The loss of grazing permits and the associated grazing capacity would likely result in the loss of economic viability of some operators, and substantially reduce viability for others. With the loss of economic viability, some ranches would likely be sold to other ranching operators or for other development uses such as recreational or residential subdivisions. The net effect of Alternative N would vary between a rapid elimination and reduction in grazing over the next decade. Ultimately, grazing would be eliminated as a traditional and valid use of the HCNRA.

Table 23: Annual Livestock Grazing-related Employment and Income by Alternative

Portion of the HCNRA	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N Scenarios A&B
Employment					
Oregon	9.9	9.9	9.6	9.9	0-5.7
Idaho	4.2	4.2	4	4.2	0
Total Employment					
Grazing-related Employment	14.1	14.1	13.5	14.1	0-5.7
Percent Change from Alternative A	0%	0%	-4%	0%	-59 to -100%
Income					
Oregon	\$88,553	\$88,553	\$85,730	\$88,553	\$0-51,453
Idaho	\$160,475	\$160,475	\$152,188	\$160,475	\$0
Total Income					
Grazing-related Income	\$249,028	\$249,028	\$237,918	\$249,028	\$0-51,453
Percent Change from Alternative A	0%	0%	-4%	0%	-79 to -100%

Based on total employment by county, livestock grazing on the Oregon portion of the HCNRA would potentially support less than one percent of total jobs under all alternatives in Wallowa and Baker counties (5.7 to 9.9 jobs out of 13,447 total). Livestock grazing on the Idaho portion of the HCNRA would support less than one percent of total jobs under all alternatives in Asotin, Nez Perce, Idaho, and Adams counties (4.0 to 4.2 jobs out of 44,664 total). The estimated employment and income may be understated because other economic impacts occur from livestock grazing on nonfederal lands. Effects shown would be regional impacts to the larger economic region and not necessarily the expected impact on any one county.

Unit of Measure – Timber Harvesting Employment and Income

Timber harvesting is permitted in the HCNRA as long as it is compatible with Section 7 of the *HCNRA Act*. Selective harvest methods were specified in the *HCNRA Act* to prevent even-aged management, such as clear-cutting or seed tree harvests. The CMP excluded from harvest all commercial forestland (a capability classification) with low capability and approximately 25 percent of the commercial forestland with moderate to high capability. Most of the HCNRA is not classified as commercial timberland due to the nature of the plant communities and the steep, rocky terrain. The majority of land that would be commercially harvested is found in the upper Imnaha drainage, the North Pine Creek drainage, and along some of the plateaus and northerly slopes of the Imnaha and Snake canyons, and upper elevations of the Idaho side of the HCNRA. The *Public LURs* classified timber volume removed from the HCNRA as unregulated and excluded it from contribution toward the WWNF allowable sale quantity.

Based on the levels of timber harvest opportunities, **Alternative A** would support 42.4 jobs annually and \$1.2 million income due to opportunities for timber harvest activities (4,695 MBF). **Alternative B** would support 59 percent less annual employment (17.3 jobs) and income (\$483,018) compared to Alternative A due primarily to 65 percent fewer acres of uneven-age management. **Alternative E-modified** would support similar levels as Alternative B but with a 49 percent reduction in harvest levels and related employment and income compared to Alternative A. **Alternative W** would provide the highest overall level of employment (57.7 jobs) and personal income (\$1.6 million), a 36 percent increase compared to Alternative A due to higher levels of commercial timber harvesting. Timber harvesting would continue as a traditional and valid use under **Alternative A, B, E-modified, and W**. **Alternative N** would not support any employment and income related directly or indirectly to timber harvest and associated activities. Timber harvesting would not continue as a traditional and valid use.

Timber harvesting in **Alternatives A, B, E-modified and W** would continue to support jobs and income primarily (92-98%) in Oregon counties due to the majority of potential forested vegetation treatment opportunities in the Oregon portion of the HCNRA. A small portion (2-8%) of the timber-related jobs and income would be attributed to Idaho counties from potential forested vegetation treatment opportunities in the Idaho portion of the HCNRA.

Based on total employment by county, timber harvesting on the Oregon portion of the HCNRA would potentially support less than one percent of total jobs under all alternatives in Wallowa and Baker counties (16.9 to 52.8 jobs out of 13,447 total). Timber harvesting on the Idaho portion of the HCNRA would potentially support less than one percent of total jobs under all alternatives in Asotin, Nez Perce, Idaho, and Adams counties (0.4 to 4.9 jobs out of 44,664 total). **Table 24** displays the estimated annual timber harvesting-related employment and income by alternative.

Table 24: Annual Timber Harvest-related Employment and Income by Alternative

Portion of the HCNRA	Alternative A	Alternative B	Alternative E-modified	Alternative W	Alternative N
Employment					
Oregon	40.0	16.9	20.8	52.8	0.0
Idaho	2.5	0.4	0.9	4.9	0.0
Total Employment					
Harvest-related Employment	42.4	17.3	21.7	57.7	0.0
Percent Change from Alternative A	0%	-59%	-49%	36%	-100%
Income					
Oregon	\$ 1,113,398	\$ 471,683	\$ 579,370	\$1,471,096	\$ -
Idaho	\$ 69,273	\$ 11,336	\$ 26,450	\$ 136,026	\$ -
Total Income					
Harvest-related Income	\$ 1,182,671	\$ 483,018	\$ 605,820	\$1,607,122	\$ -
Percent Change from Alternative A	0%	-59%	-49%	36%	-100%

The estimated impact does not represent all impacts associated with timber harvesting because harvesting also occurs on nonfederal lands. The effects may be overstated because some opportunities may not be economically feasible due to inaccessibility or standards and guidelines that require methods such as helicopter logging that would overprice the supply of material (Quigley and Arbelbide 1997). Effects shown would be regional impacts to the larger economic region and not necessarily the expected impact on any one county.

Further Information

The ROD is available on the Hells Canyon National Recreation Area web site at <http://www.fs.fed.us/hellscanyon/>. Printed copies of the documents are available at public libraries in Enterprise, Halfway, La Grande, and Baker City in Oregon; and Lewiston, Riggins, and Council in Idaho. A compact disc containing the ROD, a summary of the FEIS, and the FEIS is also available to the public. Send requests for information via email to R6HellsCanyonNRA@fs.fed.us. Upon request, public workshops will also be offered during the next several months to facilitate public understanding of the final decision.

Contact: John Denne (541) 523-1246 or Elaine Kohrman (541) 523-1331
Wallowa-Whitman National Forest, P.O. Box 907, Baker City, OR 97814

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Glossary

Allotment (grazing) – Area designated for the use of a certain number and kind of livestock grazing for a prescribed period.

Allotment management plan (AMP) – A document that specifies the actions to be taken to manage and protect the rangeland resources and reach a given set of objectives.

All-terrain vehicle (ATV) – Small two-, three-, and four-wheel recreation vehicles, less than 50 inches wide, and large four-wheel drive sport utility vehicles and pick-up trucks that are capable of traveling off public roads; interchangeable with ‘off-highway vehicle’ or ‘off-road vehicle’.

Animal unit month (AUM) – The amount of forage required by one mature (1000 lb.) cow or its equivalent for one month (based upon average forage consumption of 26 lb. of dry matter per day).

Archaeological sites – Sites containing relics, artifacts, and other evidence of past human cultures including historic properties as defined by the *National Historic Preservation Act*.

Backcountry airstrips – Unimproved airstrips within national forest boundaries used by the FS for firefighter and project work and by the public for recreation. Use of these airstrips varies seasonally. Various methods of airstrip maintenance include public and/or military involvement. Airstrips in the HCNRA are classified as Category 4 – mountain/remote airstrips—and are restricted by the FS to daytime flight only using visual flight references.

Displacement – Recreation visits are considered “displaced” or no longer consumed at a site or area when practical maximum capacity thresholds of the site or area are exceeded. Visitors are assumed to completely leave the HCNRA rather than seek an alternative location for their activity.

Disturbance – Refers to events that alter the structure, composition, or function of terrestrial or aquatic habitats. Natural disturbances include, among others, drought, floods, wind, fires, wildlife grazing, and insects and diseases. Human-caused disturbances include, among others, actions such as timber harvest, livestock grazing, roads, and the introduction of exotic species.

Disturbance regime – Natural pattern of periodic disturbances, such as fire or flood, followed by a period of recovery from the disturbance such as growth of a forest after fire.

Ecological integrity – In general, ecological integrity refers to the degree to which all ecological components and their interactions are represented and functioning; the quality of being complete; a sense of wholeness. Absolute measures of integrity do not exist. Proxies provide useful measures to estimate the integrity of major ecosystem components (forestland, rangeland, aquatic, and hydrologic). Estimating these integrity components in a relative sense for an area helps to explain current conditions and to prioritize future management. Thus, areas of high integrity would represent areas where ecological functions and processes are better represented and functioning than areas rated as low integrity.

Facilities development levels – Specify the amount and scale of modification allowed at a site to meet the Facilities setting indicator for each RAA.

- **Development Level 1** – Minimal site modification is evident. Improvements mostly for protection of the site, but rustic or rudimentary improvements may be provided for the comfort of the users. Avoid use of synthetic materials. Minimum controls are subtle. No obvious regimentation, spacing is informal and extended to minimize contacts with others. Motorized access may or may not be provided or permitted.
- **Development Level 2** – Little site modification is evident. Improvement mostly for protection of the site, but rustic or rudimentary improvements may be provided for the comfort of the users. Avoid use of synthetic materials. Minimal controls are subtle. Little or no obvious regimentation. Spacing is informal and extended to minimize contacts with others. Motorized access provided or permitted over primitive roads.

- **Development Level 3** – Site modification is moderate. Facilities about equally developed for protection of site and comfort of users. Rustic design may use native or synthetic materials that approximate the look of native materials. Inconspicuous vehicular controls are usually provided. Roads may be hard surfaced and trails are clearly visible. Development density may approximate 3 family units per acre. Primary access to a site may be on a higher standard, more traveled road. Visitor information services, if available, are informal and incidental.
- **Development Level 4** – Site is heavily modified. Some facilities designed strictly for comfort and convenience of users, but luxury facilities are not provided. Facility designs are rustic but tend to incorporate more synthetic materials. Controls for vehicle traffic are present and usually obvious. Primary access is provided over more highly developed roads. Development density may be greater than 3 family units per acre. Visitor information services are frequently available
- **Development Level 5** – High degree of site modification is evident. Facilities, mostly designed for comfort and convenience of users, include flush toilets, may include showers, bathhouses, laundry facilities, and electrical hook-ups. Synthetic materials are commonly used. Formal walkways on surfaced trails may be provided. Regimentation of users is obvious. Access is usually by higher speed roads. Development densities are 8 or more family units per acre. Formal visitor information services are usually available. Architecture may be more contemporary and mowed lawns and landscaping is not unusual. This type of site is only provided in special situations or close to large cities where other lands for recreation are not available.

Federal trust responsibility – The USDA FS shares in the federal government's overall trust responsibility to Indian Tribes where treaty or other legally defined rights apply to NFS lands. In redeeming this shared responsibility, the agency assist in carrying out the intent of the treaty and any subsequent case law or amendments, by operating in a just and responsive way; making efforts to adjust the management of NFS lands in favor of the concerns of the respective Indian Tribes(s), as far as practicable, while still maintaining a responsibility to all the people – the general public. These actions and adjustments need to be carried out through consultations with other tribal officials or their designees, on a government-to-government basis.

Fire-dependent systems – Forests, grasslands, and other ecosystems historically composed of species of plants that evolved with and are maintained by fire regimes.

Fire regime – The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, and seasonality of fire.

Forested vegetation treatment – Combination of uneven-aged management methods that may be used to achieve a desired forested structure including single-tree selection, group selection, precommercial thinning, commercial thinning, salvage, and sanitation cutting.

Fragmentation (habitat) – The break-up of a large land area (such as a forest) into smaller patches isolated by areas converted to a different land type. The opposite of connectivity.

Fuel model (FM) – Combination of vegetative fuel properties of grass, shrubs, timber, and slash designed to assist land managers in predicting fire behavior. The FS uses the thirteen mathematical models. Fuel Model 1 is typified by short grass, while Fuel Model 13 is heavy logging slash; the fuel models in between represent lower to higher fuel complexes, respectively (Anderson 1982).

Grassland seral stages – Represent the current departure for a specific site from the potential natural community (PNC) for that site. PNC is based on an evaluation of site characteristics including geology, soils, aspect, climate, elevation, etc., compared to similar site characteristics from areas evaluated and estimated by plant ecologists to be at or near their biotic potential. Seral stage determinations are based on the similarity between the existing vegetative community in terms of plant species composition and/or cover with that defined for the PNC from the appropriate plant association for the Wallowa-Snake Province (Johnson and Simon 1987).

Heritage resource – Remains of sites, structures, or objects used by humans in the past—historic or prehistoric. Consists of 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 (36 CFR 800). Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places. This includes artifacts, records, and remains that are related to, and located within such properties.

Historic range of variability (HRV) – The natural fluctuation of ecological and physical processes and functions that would have occurred in an ecosystem during a specified previous period. In the context of the HCNRA HRV refers to the range of conditions that are likely to have occurred before the settlement of northeastern Oregon by Euro-Americans (approximately 1850). HRV is discussed in this document as a reference point to establish a baseline set of conditions for which sufficient scientific or historical information is available, and enables comparison to current conditions.

INFISH – Regional Forester's Amendment #4, *Inland Native Fish Strategy* (USDA 1995). Interim strategies for managing fish-producing watersheds in Eastern Oregon and Washington, Idaho, Western Montana and portions of Nevada.

Invasive plant species – Nonnative plant species that invade or are brought into an ecosystem where they have the ability to compete with, and at times overshadow, the existing native plant species. Noxious weeds are a specific type of invasive plants that carry a legal designation due to their potential for detrimental impacts to the environment.

Maintain – 1) To continue; or 2) for this FEIS, the term is intended to convey the idea of keeping ecosystem functions, processes, and/or components (such as soil, air, water, vegetation) in such a condition that the ecosystem's ability to accomplish current and future management objectives is not weakened. Management activities may be compatible with ecosystem maintenance if actions are designed to maintain or improve current ecosystem condition.

Mechanical equipment – Any contrivance which travels over ground, snow, or water on wheels, tracks, skids, or by flotation that is powered by a living source. This term does not include nonmotorized river craft, wheelchairs, or other similar devices used solely to assist persons with disabilities.

Mitigation – measures to: (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and, (e) compensation for the impact by replacing or providing substitute resources or environments (40 CFR 1508.20).

Monitoring – A process of collecting information to evaluate whether or not objectives of a project and its mitigation plan are being realized. Monitoring allows detection of undesirable and desirable changes so that management actions can be modified or designed to achieve desired goals and objectives while avoiding adverse effects to ecosystems.

Motorized equipment – Any machine powered by a nonliving source. This term does not include motorized river craft or small hand-held devices such as flashlights, shavers, wristwatches, and Geiger counters.

Native species – Species that normally live and thrive in a particular ecosystem.

Noxious weeds – Plant species designated by federal or state law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new or not common to the United States. According to the *Federal Noxious Weed Act* (PL 93-639), a noxious weed is one that causes disease or has other adverse effects on the human environment and therefore is detrimental to the agriculture and commerce of the United States and to the public health.

Outstandingly remarkable values – Term used in the *Wild and Scenic Rivers Act of 1968*; to qualify as outstandingly remarkable, a resource value must be a unique, rare, or exemplary feature that is significant at a regional or national level.

Over-snow vehicle – A self-propelled vehicle intended for travel primarily on snow driven by a track or tracks in contact with the snow, and steered by a ski, ski's or tracks in contact with the snow.

PACFISH – Regional Forester’s Amendment #3, *Interim strategies for managing anadromous fish-producing watersheds in Eastern Oregon and Washington, Idaho, and portions of California* (USDA and USDI 1995).

Paleontological resources – Any remains, trace, or imprint of a plant or animal that has been preserved in the Earth’s crust before the Holocene epoch.

Potential natural community (PNC) – The biotic community that would become established if all successional sequences were completed without interference by humans under present environmental conditions. Natural disturbances are inherent in the development.

Practical maximum capacity – The upper limit of use of a developed site or dispersed area recognizing that other setting indicators would likely trigger management actions to control use before reaching this threshold. The practical maximum capacity provides a measure of the carrying capacity of an area.

Prescribed fire (PF) – Since early in the 20th century, the natural role of fire has been partially excluded from ecosystems on the HCNRA 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 for which the HCNRA was classified. Where applicable, reintroduction of fire into the ecosystem would protect and maintain diversified stand structures across the landscape. Prescribed fire is any fire ignited by management actions to meet specific objectives. Prescribed fire is intended to mimic natural fire regimes to: 1) reduce the risk of fires burning outside of historic intensities and severities that could substantially reduce long-term productivity; 2) maintain tree species compositions that occur under the natural disturbance regime; 3) reduce competition; 4) increase nutrients; 5) prepare sites for natural regeneration; 6) improve forage resources; 7) enhance/create wildlife habitat; and 8) protect private and public property values.

Recreation Opportunity Spectrum (ROS) – A framework for stratifying and defining classes of outdoor recreation environment, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences have been arranged along a continuum or spectrum divided into seven classes: primitive, semi-primitive nonmotorized, semi-primitive motorized, roaded modified, roaded natural, rural, Urban. Primitive, roaded modified and urban do not occur in the HCNRA and are not included in this list.

Restoration – Holistic actions taken to modify an ecosystem to achieve desired, healthy, and functioning conditions and processes. Generally refers to the process of enabling the system to resume its resiliency to disturbances as if the disturbances were absent. Restoration management activities can be either active (such as control of noxious weeds, thinning of over-dense stands of trees, or redistributing roads) or more passive (more restrictive, hands-off management direction that is primarily conservation oriented).

Riparian Habitat Conservation Areas (RHCA)s – Portions of watershed where riparian-dependent resources receive primary emphasis and management activities are subject to specific standards and guidelines. RHCA)s include traditional riparian corridors, wetlands, intermittent headwater streams, and other areas where proper ecological functioning is crucial to maintenance of the streams’ water, sediment, woody debris, and nutrient delivery system.

Road – A motor vehicle travel way over 50 inches wide, unless designated and managed as a trail. A road may be classified, unclassified, or temporary (36 CFR 212.1).

Road management objectives – road management objectives define the level of service provided by a NFS road consistent with the surrounding Recreation Opportunity Spectrum (ROS) class.

Satisfactory condition – A condition in which the soil is adequately protected and the forage species composition and production meets *Forest Plan* objectives or the trend in forage species composition and production is acceptable.

Scenery Management System (SMS) – The SMS is the method that was adopted after the *Forest Plan* was completed in 1990. The SMS utilizes two indicators to determine desired landscape character: ecological landscape integrity and scenic integrity. Ecological landscape integrity evaluates whether the landscape is managed in a sustainable and ecologically sound manner. Scenic integrity evaluates whether the landscape character is being managed in a way that conserves constituent values in terms of the level of human-caused deviations that are acceptable to the public (USDA 1993).

Selective cutting – Single-tree or group-selection cutting is the periodic removal of trees individually or in small groups from an uneven-aged forest in order to maintain diverse stands, with the sustainability and improvement of the forest using an ecosystem approach to management being a primary consideration.

Self-discovery – The act or process of achieving understanding or knowledge. On-site controls do not exist and directional signing is minimal or nonexistent. Prehistoric sites would not have formal interpretation; viewing them would be left to chance and learning about them would be left to the viewer.

Special Use Permit (SUP) – A special authorization which provides permission without conveying any interest in land, to occupy and use NFS land or facilities for specified purpose, and which is revocable, terminable and noncompensable.

Stand structure – The physical and temporal distribution of trees in a stand. The distribution can be described by species, by vertical or horizontal spatial patterns; by size of trees or tree parts, including crown volume, leaf area, stem, stem cross section, and others; by tree ages; or by combinations of the above (Oliver and Larson 1990).

Sustainability – 1) Meeting the needs of the present without compromising the abilities of future generations to meet their needs; emphasizing and maintaining the underlying ecological processes that ensure long-term productivity of goods, services, and values without impairing productivity of the land; or 2) in commodity production, refers to the yield of a natural resource that can be produced continually at a given intensity of management.

Thinning – An operation to remove stems from a forest for the purpose of reducing fuel, maintaining stand vigor, regulating stand density/composition, or for other resource benefits. Although thinning can result in commercial products, in this FEIS, thinning generally refers to noncommercial operations.

Traditional uses – 1) Ranching, grazing, farming, timber harvesting, and the occupation of homes and land associated therewith within the HCNRA, or other activities including outdoor recreational activities and facilities, which existed on or before December 31, 1975 as specified in Section 13 of the *HCNRA Act* and *Public LURs* (36 CFR 292.21) (16); 2) also defined as an outstandingly remarkable value for the Wild Rapid River as the importance of the river to the Nez Perce Tribe for religious activities, fishing, hunting, and gathering.

Treaty-reserved right – Tribal rights or interests reserved in treaties, by American Indian tribes for the use and benefit of their members. The uses include such activities as described in the respective treaty document. Only Congress may abolish or modify treaties or treaty rights. In the HCNRA, treaty-reserved rights are explicitly reserved for the Nez Perce Tribe by the *Treaty of 1855*. On lands ceded by the Nez Perce Tribe to the United States that later became NFS lands, these treaty-reserved rights and privileges include the right of taking fish at all usual and accustomed places in common with citizens of the Territory; and of erecting temporary buildings for curing; together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.

Uneven-aged management – Method of forest management in which trees of different species in a given stand are maintained at many ages and sizes to permit continuous natural regeneration. Selective cutting is one example of an uneven-aged management method.

Unwanted wildland fire – A human or naturally-caused fire that does not meet land management objectives.

Wildland fire use for resource benefit (WFU) – Formerly referred to as “prescribed natural fire.” A fire ignited by lightning but allowed to burn within specified conditions of fuels, weather, and topography to achieve specific objectives. Naturally ignited wildland fires are managed to accomplish specific prestated resource management objectives in predefined geographic areas outlined in fire management plans.

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Comprehensive

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for the Comprehensive Management Plan (CMP)
for the Hells Canyon National Recreation Area (HCNRA).

This is a collection of all the tables of contents for all of the separate documents that make up the FEIS. Please use the “Bookmarks” at left to navigate between the various sections.

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