



United States  
Department of  
Agriculture



Forest Service

Pacific  
Northwest  
Region

# Hells Canyon National Recreation Area

## Comprehensive Management Plan



Photos by Dan Ermovick



**Wallowa-Whitman National Forest**  
Hells Canyon National Recreation Area  
Baker and Wallowa Counties in Oregon  
Adams, Idaho, and Nez Perce Counties in Idaho

## Acronyms and Abbreviations

|         |                                                                                                                                       |
|---------|---------------------------------------------------------------------------------------------------------------------------------------|
| AMP     | Allotment Management Plan                                                                                                             |
| AUM     | Animal unit month                                                                                                                     |
| BLM     | Bureau of Land Management                                                                                                             |
| C&H     | Cattle and Horse                                                                                                                      |
| CFR     | Code of Federal Regulations                                                                                                           |
| cfs     | Cubic feet per second                                                                                                                 |
| CMP     | Comprehensive management plan                                                                                                         |
| DBH     | Diameter breast height                                                                                                                |
| FEIS    | Final environmental impact statement                                                                                                  |
| FSH     | Forest Service Handbook                                                                                                               |
| FSM     | Forest Service Manual                                                                                                                 |
| HCNRA   | Hells Canyon National Recreation Area                                                                                                 |
| HRV     | Historic range of variability                                                                                                         |
| INFISH  | Interim strategies for managing inland fish-producing watersheds in Eastern Oregon and Washington, Idaho, and portions of California  |
| LURs    | Land use regulations (used with "Public" or "Private" preceding it)                                                                   |
| MA      | Management Area                                                                                                                       |
| MIST    | Minimum impact suppression tactics                                                                                                    |
| MOU     | Memorandum of Understanding                                                                                                           |
| NEPA    | National Environmental Policy Act                                                                                                     |
| NFMA    | National Forest Management Act                                                                                                        |
| NFS     | National Forest System                                                                                                                |
| ODFW    | Oregon Department of Fish and Wildlife                                                                                                |
| PACFISH | Interim Strategies for managing anadromous fish-producing watersheds in Eastern Oregon, Washington, Idaho, and portions of California |
| PF      | Prescribed Fire                                                                                                                       |
| PFC     | Proper functioning condition                                                                                                          |
| PL      | Public Law                                                                                                                            |
| PNC     | Potential natural community                                                                                                           |
| RN      | Roaded Natural                                                                                                                        |
| RHCA    | Riparian Habitat Conservation Area                                                                                                    |
| RMO     | Riparian Management Objective                                                                                                         |
| RNA     | Research Natural Area                                                                                                                 |
| ROS     | Recreation Opportunity Spectrum                                                                                                       |
| S&G     | Sheep and Goats                                                                                                                       |
| SPM     | Semi-primitive Motorized                                                                                                              |
| SPNM    | Semi-primitive Nonmotorized                                                                                                           |
| TMDL    | Total Maximum Daily Load                                                                                                              |
| TPA     | Trees per acre                                                                                                                        |
| WFU     | Wildland Fire Use for Resource Benefit                                                                                                |
| WWNF    | Wallowa–Whitman National Forest                                                                                                       |
| WQMP    | Water Quality Management Plans                                                                                                        |
| WQRP    | Water Quality Restoration Plans                                                                                                       |
| USDA    | U.S. Department of Agriculture                                                                                                        |

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# Overall Management Direction

## Introduction

This *Comprehensive Management Plan* (CMP) documents the amended programmatic management direction for the Hells Canyon National Recreation Area (HCNRA) selected from Alternative E-modified in the *Record of Decision* (USDA 2003). It replaces or supplements the previous CMP (USDA 1982), and supplements or modifies the *Land and Resource Management Plan* (Forest Plan) direction for the Wallowa-Whitman National Forest (WWNF). This new CMP along with the existing 1990 *Forest Plan* direction (as amended) provides the management direction for all of the HCNRA, including those portions managed by the Nez Perce and Payette National Forests in Idaho.

## 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 Public Law 94-199, the development of a CMP was one of the requirements created. The Chief of the Forest Service approved the previous CMP on April 30, 1982 and it was amended by subsequent appeal decisions in 1983 and 1984 (USDA 1982 as amended).

In 1990, the CMP was incorporated without modification into the WWNF *Forest Plan* (USDA 1990). The *Forest Plan* has also been subsequently amended several times. This CMP provides amended direction for the HCNRA and was signed on July 21, 2003 by the Forest Supervisor of the WWNF. The *Forest Plan* is still an integral part of the management direction for the HCNRA and subject to the procedures for modifying management direction found in the NFMA regulations (36 Code of Federal Regulations [CFR] 219).

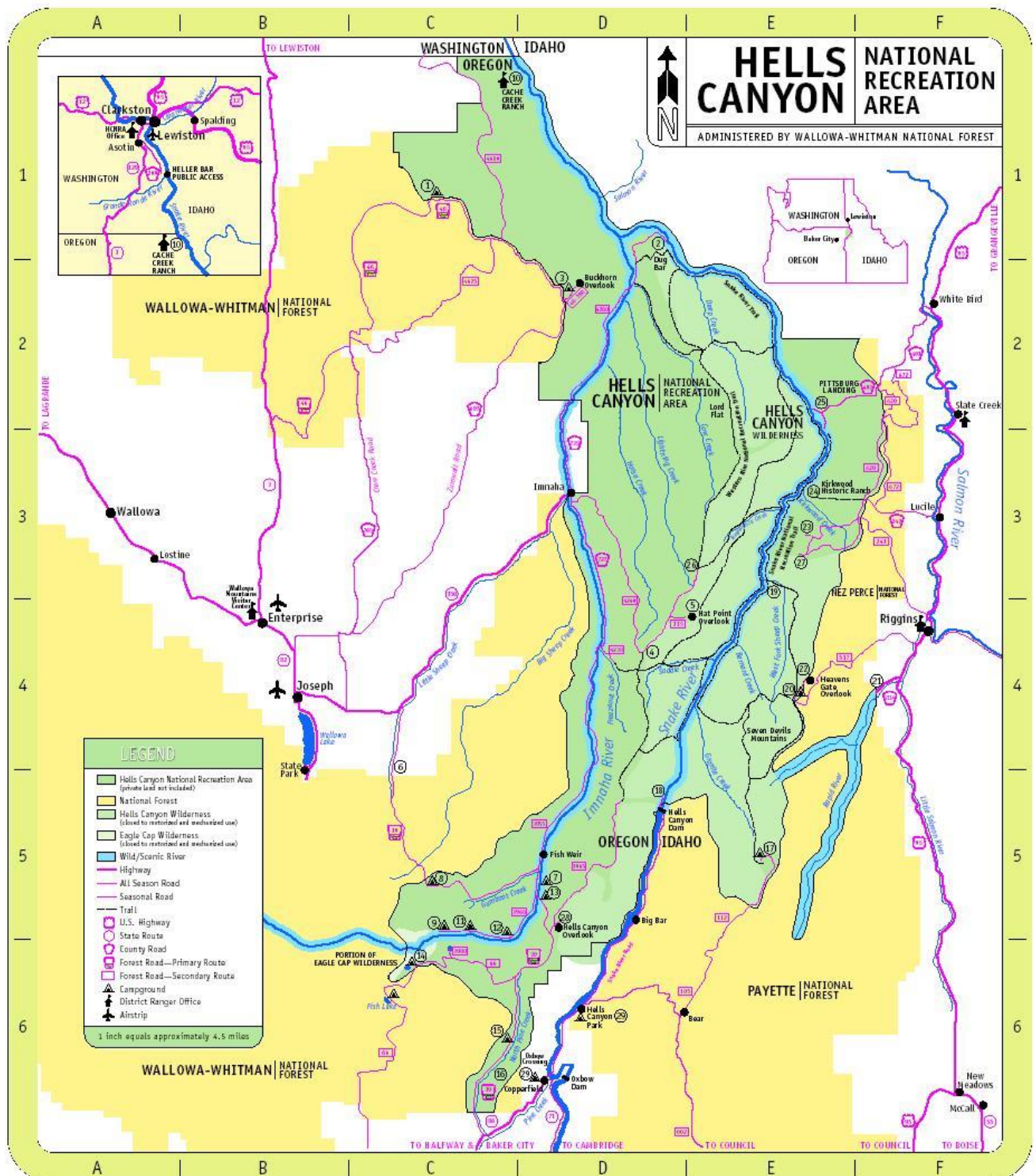
## Area Location and Description

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. There are 652,488 acres within the HCNRA boundary 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. Refer to **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. Tourism and recreation-related activities have grown and become increasingly important to the local communities.

Figure 1. Hells Canyon National Recreation Area Vicinity Map



# Summary of Existing Management Direction for the HCNRA

## Legislative Direction

The *HCNRA Act* is the principal legislation that guides management of the HCNRA. The purpose for its creation, as stated in the preamble is:

“... to assure that the natural beauty, and historical and archaeological values of the Hells Canyon area and the seventy-one mile segment of the Snake River between Hells Canyon Dam and the Oregon-Washington border, together with portions of certain of its tributaries and adjacent lands, are preserved for this and future generations, and that the recreational and ecologic values and public enjoyment of the area are thereby enhanced...”

Several sections clarify the intent for the HCNRA. Section 7 of the *HCNRA Act* states that the recreation area will be administered for public outdoor recreation in a manner compatible with the following seven objectives:

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.

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.

The *HCNRA Act* designated 67.5 miles of the Snake River along the Idaho and Oregon border and 26.8 miles of the Rapid River within the national forest of Idaho as components of the National Wild and Scenic Rivers System. An additional 34.5 miles of the Snake River north of river mile 180.1 to Asotin, Washington, was designated as a study river under Section 5(a) of the Wild and Scenic Rivers Act of 1968. The Imnaha river was added in 1988.

The Hells Canyon Wilderness was also established by the *HCNRA Act*. Three Wilderness Study Areas were added to the Hells Canyon Wilderness through the *Oregon Wilderness Act* of 1984 (the Westside Reservoir Face, McGraw Creek, and part of Lick Creek).

Public and private land use regulations (*Public LURs* or *Private LURs*) were promulgated in 1994 (USDA 1994). These established standards for the protection and preservation of historic, archaeological, and

paleontological resources; the use of motorized equipment and river craft; the management, utilization, and disposal of natural resources by timber harvesting, mining, and grazing within the HCNRA; and for use of private property within the boundaries of the HCNRA.. The *Treaty of 1855* with the Nez Perce Tribe also provides direction relevant to managing the HCNRA. Refer to **Appendix A** for the complete text of these documents (*HCNRA Act*, *Wild and Scenic Rivers Act*, *Wilderness Act*, *Public LURs*, *Private LURs*, and *Treaty of 1855*).

### **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 Forest Service decided to manage the HCNRA as one administrative unit in Region 6 within the WWNF. The Forest Supervisor is responsible for establishing programmatic direction for the management of the HCNRA and the Area Ranger for the HCNRA is responsible for implementing this direction.

Although the HCNRA is administered by the WWNF, the Nez Perce and Payette National Forests coordinate with the WWNF to manage the portions of the HCNRA in Idaho. The *Forest Plans* for the Nez Perce and the Payette National Forests provide direction to administer those portions of the HCNRA according to the *Forest Plan* for the WWNF (USDA 1990 as amended). Program management is shared between the three forests; the HCNRA and the ranger districts. Ongoing and proposed site-specific activities to implement the management direction for the HCNRA are coordinated between the Forest Supervisors and staff on a regular basis to ensure adequate communication about responsibilities occurs.

This CMP includes new, amended, supplemented, or modified goals, objectives, standards, guidelines, management areas, 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.

The *Forest Plan* incorporates this new CMP amendment, previous *Forest Plan* amendments, and terms and conditions related to consultation in accordance with the *Endangered Species Act* to provide management direction for the HCNRA.

# Management Direction by Resource

## Introduction

This section presents the management direction as goals, objectives, standards, and guidelines and supplements the Forest Plan (as amended). In places where it may conflict, the most restrictive direction applies. Refer to **Appendix B** for a summary of direction to understand all of the overall management direction.

### Management Direction Terms

**Goals** - Goals are concise statements that **describe a desired condition** to be achieved **sometime in the future** (36 CFR 219.3) with respect to resource programs and management activities. All goal statements perpetuate the intent of the *HCNRA Act* and the land use regulations, and form the principal basis from which objectives are developed to shape the implementation of those programs and activities. Examples of broad programs and activities include the provision and/or protection of recreation opportunities, wildlife habitat, heritage resources and transportation systems.

**Objectives** - Objectives are focused statements that **describe the incremental progress** expected to take place to meet goals (desired conditions) over the planning period (36 CFR 219.11 (b)) with respect to estimated quantities of services and accomplishments (*Forest and Rangeland Renewable Resources Planning Act*). Objectives identify likely future proposals in terms of ongoing programs and discrete projects to support the goals for the planning area. Examples of ongoing programs include visitor education, resource inventory, facility maintenance, and use monitoring. Examples of discrete projects include campground development, wildlife introduction, prescribed burning and road decommissioning.

**Standards** - Standards are mandatory measures that place **limitations on management activities** to ensure compliance with applicable laws and regulations or to limit the discretion authority in making decision on projects. Standards are limited to those actions that are within the authority and ability of the agency to meet or enforce. They establish procedures, set thresholds, constrain activities, prescribe remedies, and define penalties. Examples of standards include density for road systems, cover for elk herds, buffers for riparian areas, and levels of social encounters for recreation experience.

**Guidelines** - Guidelines are **discretionary measures preferable or advisable** that may be incorporated into projects and programs. They provide management options for adapting projects and programs to current physical, biological, social, economic, technical and legal conditions. Examples of guidelines include strategies to manage visitor use using suggested technical publications, recommendations to consider using traditional equipment at cultivated sites, and considering fall burning to protect areas with biological crusts.

The management direction is organized by resource topics and coded according to goals (goal), objectives (O), standards (S) and guidelines (G). The shading and bold text in the following table indicate the major topics and the nonshaded items are subtopics under that section. For example, "Recreation Setting, Experiences, and Opportunities" is the major topic with "Aviation Services" as a subtopic.

Some of the direction cited here already exists in other plans and the source is noted in parenthesis after each item (ie Public LURs). Refer to **Appendix B** for abbreviations of the existing management direction.

**Table 1: Management Direction by Resource**

| <b>Code</b> | <b>Resource</b>                                                     |
|-------------|---------------------------------------------------------------------|
| Com         | Compatibility                                                       |
| Rec         | Recreation Settings, Experiences, and Opportunities                 |
| Upl         | Upland Outfitter and Guide Services                                 |
| Avi         | Aviation Services                                                   |
| Wil         | Hells Canyon Wilderness                                             |
| Sce         | Scenery                                                             |
| Acc         | Access and Facilities                                               |
| Roa         | Roads and Trails                                                    |
| Bac         | Backcountry Airstrips                                               |
| Ove         | Over-snow Vehicle Travel                                            |
| Fac         | Facilities                                                          |
| Veg         | Forested Vegetation, Grasslands, and Forest Understory              |
| For         | Forested Vegetation                                                 |
| Gra         | Grasslands and Forest Understory                                    |
| Vac         | Vacant Allotments                                                   |
| Adm         | Administrative Horse Pastures                                       |
| Liv         | Livestock Grazing and Recreation Use Interactions                   |
| Wat         | Water Use Management                                                |
| Cul         | Cultivated Areas                                                    |
| Cru         | Biological Soil Crusts                                              |
| Nox         | Noxious Weeds, Nonnative and Invasive Plants                        |
| Her         | Heritage Resources                                                  |
| Tru         | Federal Trust Responsibilities                                      |
| Soi         | Soils                                                               |
| Wsr         | Wild and Scenic Rivers                                              |
| Wrr         | Wild Rapid River                                                    |
| Bio         | Biologically Unique Species, Habitats, and Ecosystems               |
| Rare        | Rare and Endemic Plant Species                                      |
| Ode         | Rare Combinations of Outstanding and Diverse Ecosystems             |
| Ata         | Rare Combinations of Aquatic, Terrestrial, and Atmospheric Habitats |
| Rna         | Research Natural Areas                                              |
| Fire        | Fire                                                                |
| Air         | Air Quality                                                         |
| Rip/Aqu     | Riparian/Aquatic Habitat and Water Quality                          |
| Rip/Aqu     | Riparian/Aquatic Habitat                                            |
| Wqq         | Water Quality                                                       |
| Wld         | Wildlife Habitat                                                    |
| Tesw        | Threatened, Endangered, and Sensitive Wildlife Species              |
| Los         | Late/old Structure                                                  |
| Bgg         | Big-game Habitat                                                    |
| Sci         | Scientific Research                                                 |
| Geo         | Geologic Resources                                                  |
| Min         | Minerals                                                            |
| Lan         | Land Management and Special Uses                                    |

## Compatibility

The following direction defines a process for resolving the issue of compatibility as used in Section 7 of the *HCNRA Act*.

**Com-O1:** Continue recreation, livestock grazing, timber harvest, and mining as traditional and valid uses of the HCNRA, compatible with sections 7 and 13 of the *HCNRA Act* so long as these activities are managed to meet the goals, objectives, standards, and guidelines of this plan.

**Com-S1:** If monitoring, evaluation, and/or scientific information identify potential or actual incompatibilities with the provisions of 36 CFR 292 on federal lands, or the goals, objectives, and standards of this plan, validate the incompatibility. Develop options for the resolution of valid incompatibilities that are programmatic in nature through public participation processes; memorandums of understanding, as needed, with affected county, state, federal, and tribal governments; and the appropriate level of environmental analysis. Resolve site-specific incompatibilities on federal lands through the appropriate level of environmental analysis, project design, implementation and/or administration.

**Com-S2:** Disclose a finding of compatibility in project planning decision documents with the rest of the management direction and the monitoring elements to ensure compatibility through project implementation.

**Com-G1:** When resolving programmatic incompatibilities on federal lands, ensure involvement of agency personnel, affected special use permit holders, in-holders of private lands, interested publics, county and tribal governments, technical specialists from appropriate state, federal, and public agencies and institutions.

## Recreation Settings, Experiences, and Opportunities

The following direction supplements Forest Plan management direction (pages 4-31 through 4-32), PACFISH management direction (page C-13), and INFISH management direction (page A-9).

**Goal:** Manage for a range of high quality recreation settings and opportunities, with emphasis on the more primitive settings, in a manner compatible with the primary objectives set forth in Sections 1 and 7(1-7) of the *HCNRA Act*.

**Goal:** Manage outdoor recreation to ensure that recreational and ecological values and public enjoyment of the area are enhanced and compatible with the objectives of the *HCNRA Act*.

**Rec-O1:** Provide education and resource interpretation opportunities for visitors to learn about resources, protection, and management while maintaining the rustic and primitive character of the HCNRA.

**Rec-O2:** Manage developed recreation sites in 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).

**Rec-S1:** Maintain recreation use levels according to individual Recreation Analysis Areas. Within each area, manage Recreation Opportunity Spectrum (ROS) characteristics for access, remoteness, naturalness/ visual quality, facilities, social encounters, visitor impacts, and visitor management. Refer to the **Management Direction Specific to Recreation Analysis Areas** for a map and detailed directions for the Recreation Analysis Areas.

**Rec-S2:** Manage and maintain developed recreation sites and administrative facilities to meet access and facility management objectives and ROS settings by Recreation Analysis Area.

**Rec-S3:** Utilize visitor management strategies to manage increased use and social encounter rates to meet the intended ROS setting in each Recreation Analysis Area.

**Rec-S4:** Prohibit paragliding, hang-gliding, glide planes, and other nonmotorized aerial sports below the canyon rim to maintain existing ROS and recreation settings, except that these activities are acceptable in roaded natural areas where they meet ROS standards.

**Rec-S5:** Review recreational activities introduced by new technology or equipment through appropriate NEPA analysis to determine suitability, compatibility, and appropriate use levels. Equipment or activities determined to be valid may be accepted, permitted, and regulated.

**Rec-S6:** All pack and saddle stock users must carry and use pellets or other certified weed-free feed.

**Rec-S7:** Limit the party size for all users (including outfitter and guides) in the Hells Canyon Wilderness to 8 people and 16 stock animals to coincide with the Wild and Scenic sections of the Snake River corridor party sizes. Adjust party size as necessary to meet standards for water, soil, fish, and social capacity if monitoring and evaluation indicates a need for change.

**Rec-G1:** Design management activities to maintain desired recreational experience levels and conditions for developed and dispersed sites. Use thresholds from the visitor management strategies.

**Rec-G2:** Increase recreation users' awareness of ecological functions and processes, protection of heritage resources, low-impact use practices, and management practices.

**Rec-G3:** Enhance recreation resources and opportunities by entering into partnerships with other governmental and nongovernmental organizations.

### **Upland Outfitter and Guide Services**

**Upl-O1:** Manage upland outfitter and guide services both within and outside the Hells Canyon Wilderness to provide quality recreation experiences consistent with HCNRA objectives and in the public interest. Minimize conflicts between users.

**Upl-O2:** Manage outfitter and guide operations to promote restoration of human-caused impacts to soil, water, and riparian areas. Reduce adverse effects caused by users.

**Upl-S1:** Manage outfitter and guide operations to insure social and biophysical limits of acceptable change standards and setting indicators are not exceeded.

**Upl-S2:** Manage outfitter and guide use to support both Hells Canyon Wilderness and nonwilderness management objectives. Refer also to **Management Direction Specific to Recreation Analysis Areas**.

**Upl-S3:** Manage outfitter and guide use in a manner that assures adequate opportunities for public use while providing commercial opportunities commensurate with demonstrated need.

**Upl-S4:** Manage outfitter and guide permits to reflect demand and resource conditions. Validate levels of use and permit allocation.

**Upl-S5:** Area Ranger approval is required on a case-by-case basis for use exceeding permitted priority use or currently established party size limitations. The group must demonstrate or be trained in leave-no-trace principles before granting approval to exceed limitations.

**Upl-S6:** Manage upland outfitter and guide permits for Hells Canyon Wilderness and nonwilderness at the following level for the first three years following plan implementation. Thereafter, evaluate the need to

consider new applications for outfitter and guide permits every three years. If conditions change substantially prior to the scheduled three year review, conduct an interim review.

Table 2: Number of Upland Outfitter and Guide Permits by Type

| Type of Special Use Permit                                            | Wilderness |       | Nonwilderness |       |
|-----------------------------------------------------------------------|------------|-------|---------------|-------|
|                                                                       | Oregon     | Idaho | Oregon        | Idaho |
| Cougar/bear hunting (day use only, access from roads only, no horses) | --         | --    | 3             | --    |
| Progressive horse/mule trips, big game, cougar/bear, hunting, fishing | 7          | 2     | 2             | --    |
| Progressive llama trips                                               | 2          | --    | --            | --    |
| Mountain biking                                                       | --         | --    | 1             | --    |
| Guided fishing, whitewater trips on the Imnaha Wild and Scenic River  | --         | --    | 2             | --    |
| Guided photography                                                    | --         | --    | 1             | --    |
| Motorized ground transportation (road only)                           | --         | --    | 1             | --    |
| Total                                                                 | 9          | 2     | 10            | --    |

**Upl-S7:** Proposed or solicited use must be consistent with the recreation opportunity spectrum for the Wilderness (WROS) or nonwilderness (ROS) settings.

**Upl-S8:** Activities must be manageable to mitigate or prevent detrimental resource impacts. Activities must not introduce nonconforming uses into proposed use areas. Activities must not foreclose all other recreational or management activities.

**Upl-S9:** Ensure applications for one-time, short-duration, nationally or regionally important activities do not create unacceptable resource or user impacts to existing outfitter or nonguided recreation activities.

**Upl-S10:** Assure that temporary use meets the ROS or WROS setting, and the potential for resource damage can be adequately mitigated.

**Upl-S11:** If a significant number of outfitters in an area have consistently used 70 percent or more of their assigned priority use, the need for raising existing use levels and or issuing new permits may be analyzed.

**Upl-S12:** Any decision to change priority use levels on an existing permit or issue an additional outfitter and guide permit must take into account the relationship between the existing total use level (guided and nonguided sectors) and the level of conflict occurring, if any, between outfitters, and guided or nonguided public. Analyze use levels and trends for the activity in question. Maintain an appropriate balance of use between the two sectors to ensure all users a reasonable opportunity to enjoy a quality recreation experience. Base decisions to adjust use levels on the need to meet use levels and encounter rates established by the ROS or WROS. Use levels may be adjusted up or down for all existing outfitter and guide permittees.

**Upl-S13:** If a significant number of permitted outfitters and guides use less than 70 percent of the assigned level of service days three out of five years during the previous five-year period, public demand for additional outfitters is not sufficient by itself to justify analyzing the need to raise use assignment levels or to issue additional permits. Under these requirements, determine whether or not to add additional permits or to reduce use for permittees who have used less than 70 percent of their use assignment level

during the previous five-year period. Before any reductions or additional permits are issued, consider other factors including the general market and other economic fluctuations, the availability of state hunting licenses, weather, and other natural phenomena which may adversely affect the ability of the permit holder to make full use of assigned service days.

**Upl-S14:** During reviews of proposed or solicited use, consider whether the resource provides adequate opportunities to sustain a commercial operation, and whether the necessary elements required by the proposed activity are available.

**Upl-S15:** Additional outfitter and guide use days may not be granted where standards are exceeded for the ROS or WROS setting indicators or where a trend suggests that standards will be exceeded. Outfitter and guide use may be reduced from current levels along with all visitor use, in areas where standards are exceeded.

**Upl-S16:** If the scheduled review determines the need to change the existing number of permits, and/or existing assigned use levels, solicit applications for use from existing outfitters and new applicants. Conduct interdisciplinary analysis to determine potential effects and conduct public scoping with potentially affected groups or individuals prior to issuing a new permit.

**Upl-S17:** Select new permittees according to applicants rating based on the evaluation criteria set forth in the prospectus bid process. The intent is to provide high quality, diverse service to the public at competitive prices.

**Upl-S18:** Develop and approve an annual operating plan (AOP) for each permittee, signed by the Area Ranger and permittee, prior to the permittee entering the HCNRA for the purpose of commercial outfitting. Establish itinerary, reserve camp, and performance standards in the AOP. Confirm trips and route in advance of permittee entering the HCNRA. Incorporate special provisions and requirements for occupancy and use of the Hells Canyon Wilderness into the AOP. Conduct annual reviews for compliance with criteria and conditions.

**Upl-S19:** Manage outfitter and guide pack and saddle stock pasturage consistent with forage utilization standards as livestock grazing permits. Establish grazing limitations for pack and saddle stock used by the permittee and clients in accordance with resource protection. Any authorization to graze pack and saddle animals under these permits is on a temporary basis and such grazing does not establish a priority for future use of the range. The permittee may be required to pack livestock feed into the area.

**Upl-G1:** Use evaluation criteria in **Appendix C** as part of considering new requests and expansion of existing permits.

**Upl-G2:** Administer outfitter and guide use in coordination with the Idaho Outfitters and Guides Licensing Board as provided in their memorandum of understanding with the WWNF (see 1580 files at HCNRA office in Enterprise, Oregon).

**Upl-G3:** Coordinate outfitter and guide administration with adjacent forests, districts, and planning areas (including the Snake River corridor).

**Upl-G4:** Coordinate itineraries and route selections for progressive trips with each outfitter/guide to avoid simultaneous use of travel routes and campsites. Emphasize a quality experience for the public by reducing conflicts and overlaps in the trip area through timing, dates, and access. If conflicts are identified, modify proposed itineraries giving preference to the earliest submitted itinerary. Progressive trips include spring/summer progressive sightseeing or photography trips; drop camps for specialty hunts such as bear, cougar, or sheep; and specialty guided hunts for sheep, bear, or cougar.

**Upl-G5:** Administer outfitter and guide use during general big-game hunting seasons (deer and elk) according to designated outfitter areas for the Hells Canyon Wilderness and inaccessible portions of the

HCNRA identified in conjunction with Eastern Oregon Outfitter and Guides Association (see 1920 CMP files at WWNF headquarters in Baker City, Oregon).

**Upl-G6:** Game animals killed in another outfitter's designated area in error or as a result of wounded animals crossing designated areas are the responsibility of the contracted outfitter.

**Upl-G7:** Locate reserved base camps in areas less likely to be used by the general public to reduce conflicts. Require posting two weeks prior to use. Consider reserve camps for another outfitter's area only after the cooperating outfitters submit a written agreement to the Forest Officer in charge.

**Upl-G8:** Delineate specific permitted activities. For example, an outfitter permitted to hunt big game is not authorized to conduct technical instruction in fishing. They may, however, provide transportation and packing for another outfitter or guide who provides fishing instruction in lieu of, or in addition to, their expected use.

**Upl-G9:** Services may be approved providing they meet the needs of the public to visit Hells Canyon Wilderness and nonwilderness areas (e.g., senior citizens, people with disabilities, minority groups, or youth groups).

**Upl-G10:** Service projects supported by outfitter and guides may be approved subject to the number of projects that could potentially be accomplished by visitors (e.g., trail maintenance; campsite or trail restoration; bridge repair, construction or removal; or trail pickup, abandoned equipment, nonconforming use and removal).

### **Aviation Services**

Refer to Management Direction Specific to Recreation Analysis Areas for additional direction.

**Avi-O1:** Provide opportunities for temporary special use permits to ensure adequate outfitter and guide aviation service from areas not served by the permanent special use permit.

**Avi-S1:** Allow one special use permit with 150 service days for outfitted and guided aviation use of backcountry airstrips.

**Avi-S2:** Allow temporary use permits totaling up to 150 service days from the following locations:

- 50 service days - Lewiston/Clarkston area
- 70 service days - Grangeville, Riggins, McCall, Boise area
- 30 service days – La Grande, Baker City, Pendleton area

**Avi-S3:** Prohibit regularly scheduled landings at backcountry airstrips.

### **1990 Land and Resource Management Plan Direction (pp. 4-31 to 4-32)**

#### **Special Uses**

##### **Goal**

To provide for the use and occupancy of the National Forest by private individuals or Federal, State, and local governments when such use is consistent with forest management objectives and is in the public interest.

##### **Standards and Guidelines**

1. Private Development. Make National Forest land available for support facilities for private development when suitable private land is not available for such needs.

2. Hydrometeorological Sites. Manage and protect snow survey and other hydrometeorological sites in accord with the Memorandum of Understanding between the Forest Service and the Soil Conservation Service.
3. Recreation Residences. Recreation residence permits will neither be issued for currently unoccupied lots nor will they be issued for lots which become vacant during the period this plan is in effect Current recreation residences are under permit through 1999. Extensions beyond that time will be considered in the next Forest Land and Resource Management Plan.
4. Crop Production. Deny permits for crop production unless granting such permits is clearly in the public interest. Existing permits which are not within this intent will be terminated as the opportunity arises.
5. Outfitters and Guides. Authorize and permit outfitter and guide operations where FSM 2720 criteria are met and when supported by an environmental analysis.
6. Priority. Give the needs of the general public priority over those of the applicant in considering special use applications.
7. Permit Process. Special use evaluation, permit issuance, and administration will be in accordance with Forest Service Manual 2700.

### **Hells Canyon Wilderness**

The following direction supplements Forest Plan management direction (pages 4-63 through 4-67). Refer also to Management Direction Specific to Recreation Analysis Areas for additional direction.

**Goal:** Preserve the Hells Canyon Wilderness for the use and enjoyment of the American people to leave it unimpaired for future use and enjoyment as a wilderness. Provide for protection and preservation of its natural conditions and unique character.

**Wil-O1:** Manage historic sites that typify the economic and social history of the region and the American West in conformance with direction and regulations in the *National Historic Preservation Act of 1966*, as amended, and the *Wilderness Act of 1964*.

**Wil-O2:** Focus restoration efforts on human-caused impacts utilizing standards for the setting indicators to correct erosion, dispersed site expansion, vegetation degradation, and to achieve native plant community restoration as well as ensuring fire plays its natural role.

**Wil-O3:** Minimize the use and existence of structural range improvements and the use of equipment associated with allotment management and activities while maintaining overall permitted livestock animal unit months (numbers and seasons).

**Wil-S1:** Conduct water-yield measurements (including snow surveys) by nonmotorized transportation only.

**Wil-S2:** Do not rehabilitate erosion from natural processes through management actions. Minimize human-caused erosion and use rehabilitation measures consistent with wilderness values.

**Wil-S3:** Consider minimum tool requirements in the planning phase of all project level work.

**Wil-S4:** Manage noxious weeds within the Hells Canyon Wilderness using the minimum management tool to insure the most compatible, but effective means of meeting objectives. (INWMP Plan)

**Wil-S5:** Use the minimum tools requirement in all restoration activities. Focus restoration on maintaining natural ecosystem function and health using native species and materials. Give preference to natural recovery processes unless there is a high probability that natural recovery is unlikely.

**Wil-S6:** Do not permit roads, powerlines, telephone lines, flow-maintenance structures, reservoir, or other improvements except as authorized under section 4(d), 5(a), and 5(b) of the *Wilderness Act*.

**Wil-S7:** Limit signing. Informational signs may be provided at trailheads and major trail junctions. Post the Hells Canyon Wilderness boundary at heavy use areas where trails enter and at points where motor vehicle access is possible.

**Wil-S8:** Prohibit the use of motorized and mechanical equipment in Hells Canyon Wilderness except as provided for in Sections 4(c) and (d) of the *Wilderness Act* and regulations at 36 CFR parts 261 and 293. (Public LURs, 36 CFR 292.44 (2)(c))

**Wil-S9:** Permit occupancy, structures, and the use of motorized and mechanized equipment related to mining and exploration within the provisions of the *HCNRA Act*. Allow access to private land to the extent provided by law and regulation. Make reasonable efforts to minimize the effect on the Hells Canyon Wilderness.

**Wil-S10:** Permit grazing of cattle and sheep where established prior to classification of the Hells Canyon Wilderness (pursuant to section 4(d)(4) of the *Wilderness Act*) to the extent it is consistent with the maintenance of the wilderness resource and priorities established above (36 CFR 293.7).

**Wil-S11:** Favor native vegetation with special emphasis on the preservation of threatened, endangered, and sensitive species.

**Wil-G1:** Use visitor management strategies as appropriate, to maintain desired recreational experience levels and conditions for dispersed sites.

**Wil-G2:** Use current research and proven management techniques to correct identified problems.

**Wil-G3:** Manage Hells Canyon Wilderness under a nondegradation principle to maintain the wilderness settings. Nondegradation applies to all values of wilderness -- biophysical and social standards for the setting indicators.

**Wil-G4:** Relocate, reconstruct, or close substandard trails or sections to meet objectives of this plan.

## Scenery

The following direction supplements Forest Plan management direction (pages 4-42 through 4-44). Refer also to Management Direction Specific to Recreation Analysis Areas for additional direction.

**Goal:** Manage forest resources in a manner that maintains and enhances the positive natural and cultural elements in landscapes that is consistent with the historical landscape character and to provide an overall desired scenic impression.

**Goal:** Manage forest resources in a manner that ensures the sustainability of the biophysical environment thus maintaining the landscape character.

**Sce-O1:** Manage to meet landscape character goals that conserve and preserve valued landscape character attributes and elements of scenic attractiveness.

**Sce-O2:** Use constituent information surveys to gather information from constituents to define desired landscape character at various levels of landscape scale. Use survey information to determine social

values and consider in conjunction with other resource data to determine appropriate management strategies.

**Sce-O3:** Integrate social values and biophysical considerations when developing management strategies to maintain or improve a sustainable desired landscape character. Utilize mitigation measures and design techniques to reduce effects (short and long term, direct and indirect) to landscape aesthetics).

**Sce-O4:** Inventory areas and site-specific locations where alterations deviate from desired landscape character. Evaluate and prioritize efforts to restore and/or rehabilitate.

**Sce-S1:** Manage vegetation to achieve ecological integrity levels that sustain desired landscape character and in a manner compatible with scenic integrity levels.

**Sce-G1:** Consider the acceptable level of alteration when implementing site-specific projects and management strategies, using the rating aspects of scenic impact to landscape character.

**Sce-G2:** Consider the acceptable level of alteration when implementing management strategies using the following scenic integrity objectives:

Table 3: Scenic Integrity Objectives

| Scenic Integrity | Objectives           |
|------------------|----------------------|
| Very high        | Less than 1% impact  |
| High             | Less than 5% impact  |
| Moderate High    | Less than 10% impact |
| Moderate Low     | Less than 15% impact |
| Low              | Less than 20% impact |
| Unacceptably Low | 20% impact or more   |

## 1990 Land and Resource Management Plan (pages 4-42 through 4-44)

### Landscape Management

#### Standards and Guidelines

1. VQO's. Meet visual quality objectives through management techniques described in National Forest Landscape Management, Volumes 1 and 2, and the Wallowa-Whitman National Forest Visual Management Plan - Desired Visual Model (maps showing visual objectives are available at the Forest Headquarters in Baker). See also maps of Level I and Level II viewsheds in the FEIS.
2. Retention Foreground. In retention foregrounds the area regenerated per decade should not exceed 7 percent\* or be **less** than 3 percent\* of the suitable forest land within the viewshed. Maximum seen area disturbed at any one time should not exceed 10 percent\* within any viewshed Limit regeneration unit size to that which meets retention and desired character including consideration of future entries and regrowth. The approximate range of sizes necessary to accomplish this is 1/2 to 2 acres in the immediate foreground (**less** than 500 feet) and 3 to 5 acres in the foreground greater than 500 feet from the road or trail Units against road or trail edges should be shelterwoods or selection cuts rather than clearcuts. Target tree size IS 36 inches where biologically feasible.
3. Partial Retention Foreground and Retention Middleground. In partial retention foreground and retention middleground, the area regenerated per decade should not exceed 9 percent\* or be less than 5 percent\* of the suitable forest land within any viewshed. The maximum seen area disturbed at any one time should not exceed 14 percent\* of any viewshed. Limit regeneration unit size to that which meets partial retention and desired character including consideration of future entries and regrowth. The approximate range of sizes necessary to accomplish this is 1/2 to 2

acres in the immediate foreground (less than 500 feet) and 3 to 5 acres in the foreground greater than 500 feet from the road or trail. Target size tree in foreground is 26 inches, where biologically feasible.

\* Applies to regeneration harvest. Not applicable to intermediate cuts, overstory removals, or individual tree selection harvest.

FIGURE 4-2  
VISUAL QUALITY OBJECTIVES

|               |         | Sensitivity Level |     |     |     |     |     |                |
|---------------|---------|-------------------|-----|-----|-----|-----|-----|----------------|
|               |         | fg1               | mg1 | bg1 | fg2 | mg2 | bg2 | 3              |
| Variety Class | Class A | R                 | R   | R   | PR  | PR  | PR  | PR             |
|               | Class B | R                 | PR  | PR  | PR  | M   | M   | M <sup>1</sup> |
|               |         |                   |     |     |     |     |     | MM             |
|               | Class C | PR                | PR  | M   | M   | M   | MM  | MM             |

1: If a 3B area is adjacent to RETENTION or PARTIAL RETENTION visual quality objective, select the MODIFICATION visual quality objective. If adjacent to MODIFICATION or MAXIMUM MODIFICATION objective areas, select MAXIMUM MODIFICATION.

4. Partial Retention Middleground. In partial retention middlegrounds, the area regenerated per decade should range between 8 and 10 percent\*. Limit maximum regeneration unit size to 10 acres. Maximum area disturbed at any one time should not exceed 20 percent\*.
5. Created Openings. Consider a created opening is to no longer be an opening, visually, when trees reach 20 feet in height. Rotation periods will be sufficient to grow large tree character in viewshed foregrounds.
6. Resolving Conflicts. Where conflicts develop between visual quality objectives and timber or range management objectives, these conflicts will be resolved in favor of meeting the visual objectives. Where conflicts occur between old-growth objectives and visual objectives, oldgrowth will have priority.
7. Viewshed Plans. Plans will be prepared for all Level I viewsheds that will refine boundaries, establish project design.

## Access and Facilities

The following direction supplements Forest Plan management direction (pages 4-34 through 4-36), PACFISH management direction (pages C-10 through C-12), and INFISH management direction (pages A 7-8). Refer also to Management Direction Specific to Recreation Analysis Areas for additional direction that applies to access (road, trails, backcountry airstrips, over-snow vehicle travel) and facilities.

**Goal:** Manage the transportation system (roads, trails, airstrips, and waterways) to meet the primary objectives for which the HCNRA was established (Sections 1 and 7 of the *HCNRA Act*) and to provide a range of recreation experience opportunities. Favor primitive and semi-primitive experiences over roaded natural and rural experiences.

**Acc-O1:** Manage the transportation system to provide safe and efficient access, within ROS direction, for the movement of people and materials involved in the use and protection of the HCNRA. Continue to actively pursue right-of-way acquisition for access to public lands.

**Acc-O2:** Provide and manage facilities that permit access to a variety of HCNRA settings, opportunities, and experiences, regardless of visitor's physical abilities. Manage access appropriate to the ROS classification by Recreation Analysis Area.

**Acc-O3:** Manage the HCNRA road system in 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).

**Acc-O4:** Focus restoration efforts related to roaded activities on recovery of potential and adverse effects to watershed integrity, soil productivity, and aquatic/riparian and terrestrial species and habitats.

**Acc-O5:** Provide an adequate, well maintained trail system to serve HCNRA users.

## **Roads and Trails**

**Roa-S1:** Prohibit the use of motorized and mechanical equipment off open designated Forest Service roads, trails and backcountry airstrips except where authorized by permit. (Public LURs, 36 CFR 292.44(a)(1) and (a)(2))

**Roa-S2:** Allow dispersed camping with motorized vehicles within designated sites or areas only. Manage dispersed camping to meet management objectives for resource protection including heritage, soils, riparian, or other identified resource concerns.

**Roa-S3:** Designate special fuelwood areas for fuelwood cutting by permit off any designated open road within Management Areas (MA) 10 and 11.

**Roa-S4:** Allow use of motorized all-terrain vehicles and equipment 50 inches wide or less in conformance with all state and federal regulations on designated open routes.

**Roa-S5:** The use of motorized and mechanical equipment on designated Forest Service roads, trails, and backcountry airstrips is permissible on wild and scenic river segments classified "scenic" or "recreational" subject to terms and conditions necessary for safe use of such equipment, providing its use is compatible with the *Wild and Scenic Rivers Act* and meets the provisions of the *Imnaha River Wild and Scenic River Management Plan* (USDA 1993) and the *Wild and Scenic Snake River Recreation Management Plan* (USDA 1999). (Public LURs, 36 CFR 292.44(b)(1), Imnaha WSR Plan, Snake River Plan)

**Roa-S6:** The use of motorized and mechanical equipment on designated Forest Service roads, trails, and backcountry airstrips is prohibited on wild and scenic river segments classified "wild" except as provided for by the authorized office upon a determination that such use is necessary for the administration of the river or to protect and enhance the values for which the river was designated as provided in the *Imnaha River Wild and Scenic River Management Plan* (USDA 1993), the *Wild and Scenic Snake River Recreation Management Plan* (USDA 1999), and in this plan for the Rapid River corridor. (Public LURs, 36 CFR 292.44(b)(2), Imnaha WSR Plan, Snake River Plan)

**Roa-S7:** Allow reconstruction specifically associated with realignment or improvement of existing roads or reconstruction of developed recreation facilities to meet management direction by Recreation Analysis Area. Allow reconstruction and realignment of existing roads to meet minimum standards necessary to meet objectives of the project. Close segments of road that are replaced and decommissioned. Allow road construction for access to private in-holdings as appropriate with applicable laws and regulations.

**Roa-S8:** Within Management Areas (MA) 10 and 11, allow temporary use of existing closed roads for timber harvest activities that are compatible with other resource objectives. Upon completion of harvest activities, immediately close the roads. Prohibit public access on these roads during this temporary use.

**Roa-S9:** Unless specifically addressed by management direction for Recreation Analysis Areas, manage roads to maintain existing surfacing, alignment, and prism.

**Roa-S10:** Manage trails pursuant to the *HCNRA Trail Management Plan* (USDA 1994). Where appropriate, provide mountain biking opportunities during updates of the trail plan.

**Roa-S11:** Provide adequate water bar and cross-drain spacing on roads removed from the transportation system to minimize erosion and sediment. (FSM 7730)

**Roa-G1:** Develop new travel opportunity maps indicating open roads, seasonal closures, designated dispersed camping areas and sites or other general areas.

**Roa-G2:** Decommission or convert roads to trails if they are not needed for future management or achievement of recreation goals. On a site-specific basis, determine road restoration or road decommissioning activities to restore watershed integrity, soil productivity, and ecosystem function to the extent practicable.

**Roa-G3:** Where possible, locate and design all system roads, trails and recreation developments to minimize soil damage. Control vehicle access to low standard roads during wet soil conditions to prevent rutting. Use barriers such as rocks, logs, and vegetation to direct visitor use and prevent or reduce damage to soils and riparian/aquatic resources.

**Roa-G4:** Maintain Forest Road 3955 and County Road 727 as part of the Hells Canyon Scenic Byway System. (Forest Plan)

**Roa-G5:** Close or relocate trails or trail segments that conflict with site-specific resource objectives.

**Roa-G6:** Manage roads pursuant to ROS setting indicators by Recreation Analysis Area.

**Roa-G7:** Where gates or berms are necessary to close a road, provide information explaining the type of usage allowed and the objectives of the road. (FSM 7700)

**Roa-G8:** Manage roads and trails in coordination with the WWNF *Integrated Noxious Weed Management Plan*. Where roads or trails are maintained, ensure an up-to-date inventory of all noxious weed sites within the right-of-way and plan for appropriate treatment to prevent the spread of weeds during maintenance activities. Strive to maintain an effective ground cover on all adjacent disturbed surfaces consistent with safety considerations to provide a degree of protection against the spread or invasion of noxious weeds. Where roads or trails are closed, ensure that pre-planning provides for an inventory of noxious weeds sites and for continued treatment of those sites. During closure activities, ensure that on-site or seeded native plant species are considered with the focus on minimizing bare ground. (INWMP Plan)

**Roa-G9:** When a decision is made to eliminate a road, consider decommissioning or restoring the roadbed to the original contours of the land. If this is not feasible, close the road and take all actions expected to reduce sediment delivery to aquatic systems from related roads and landings.

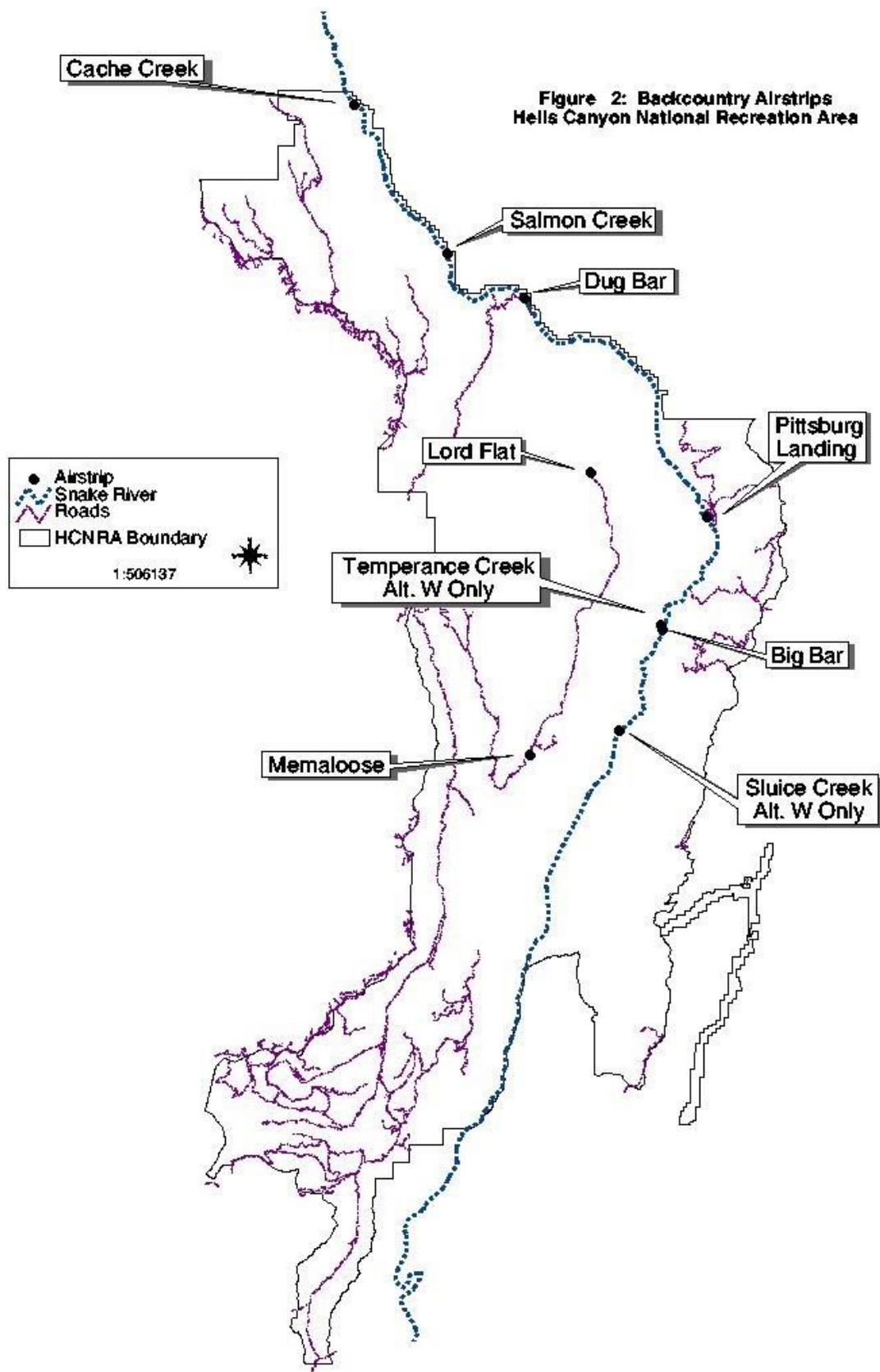
## **Backcountry Airstrips**

**Bac-O1:** Provide opportunities for recreation aircraft (fixed wing and rotary) landings for recreation and administrative use within the ROS classification.

**Bac-S1:** Require self-issue permits for aircraft at all backcountry airstrips.

**Bac-S2:** Allow private, commercial, and administrative use on Memaloose and Lord Flat backcountry airstrips. All backcountry airstrips are available for emergencies. Refer to **Figure 2** for a map of backcountry airstrips in the HCNRA.

Note to reader: Big Bar, Dug Bar, Pittsburg Landing, and Salmon Bar backcountry airstrips are open year-round to private, commercial, and administrative aircraft use. Cache Creek airstrip is open, year-round to private and administrative use only. Temperance Creek is open by special use permit only. (Snake River Plan)



## **Over-snow Vehicle Travel**

**Ove-S1:** Manage motorized over-snow vehicle travel on designated routes and areas. Refer to **Figure 3** for a map of designated over-snow vehicle play areas and routes in Recreation Analysis Areas 36, 40, 41 and 42.

**Ove-S2:** Designated over-snow vehicle routes must be covered with a minimum of 12 inches of snow and designated over-snow vehicle play areas must be covered with a minimum of 24 inches of snow before allowing over-snow vehicle travel.

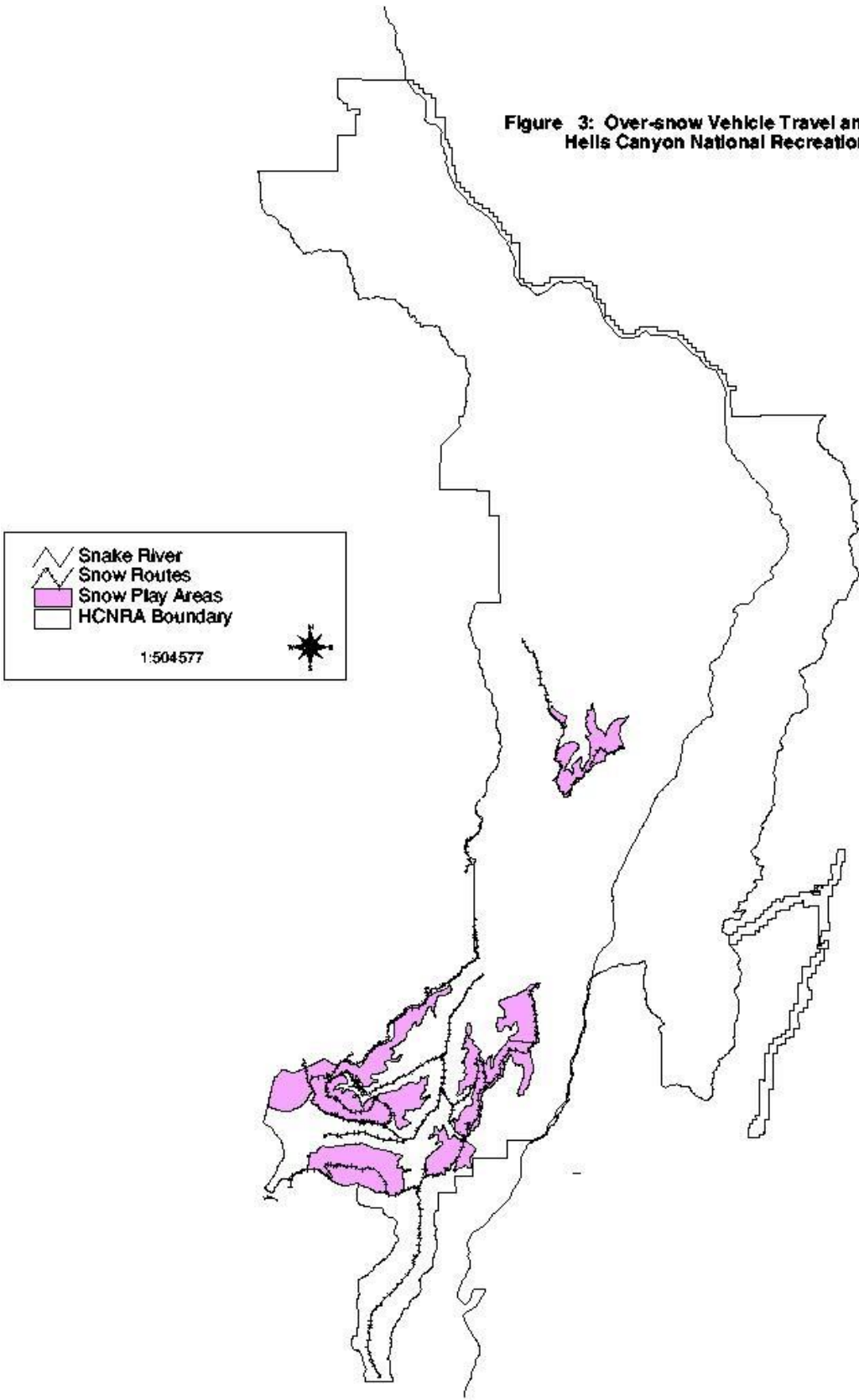
**Ove-S3:** Manage motorized over-snow vehicles on designated routes and play areas to maintain assigned ROS setting.

**Ove-S4:** Manage use commensurate with available access facilities (parking lot, staging area), public safety, and resource objectives.

**Ove-G1:** Consider requests, when compatible with the resource objectives of this plan, for changes in over-snow vehicle routes and play areas.

**Ove-G2:** Through monitoring, identify necessary improvements to minimize user conflicts, and provide for acceptable levels of public safety.

**Figure 3: Over-snow Vehicle Travel and Play Areas  
Hells Canyon National Recreation Area**



## 1990 Land and Resource Management Plan Direction

### TRANSPORTATION SYSTEM

#### Goal

To provide safe, efficient, environmentally sound access for the movement of people and materials involved in the use and management of the National Forest lands.

#### Standards and Guidelines.

1. Planning and Development. Plan and develop the transportation system to serve long-term multiple resource needs rather than short-term individual project proposals.
2. Provide the minimum system necessary for the specific activities authorized under the management area direction.
3. Where appropriate, develop the system in stages as various resource activities occur.
4. Design, construct, operate and maintain roads and trails of the Forest transportation system based on resource objectives and intended uses, considering safety, total cost of transportation, and impacts on the land.
5. All road designs and management actions will be based on specific road management objectives that document the need for and planned uses of a road. These objectives will state whether or not there is a need for the road to be open for use by the public or others between project activities.
6. Manage road and trail uses to protect resources, accommodate or restrict conflicting **uses**, provide reasonable safety, and prevent damage to the facilities. Roads and trails may be made available for different user groups at different times, or otherwise restricted through the Forest Travel Management Plan Closed roads may be converted to other uses such as special purpose trails.
7. Protecting Water Quality. Protect water quality in all aspects of road and trail system management Use practices which will avoid or minimize sediment production from new road construction and will correct existing sediment sources.
8. Safety. Conform with Forest Service manuals and handbooks regarding adequacy and safety of the transportation system.
9. Access Management. Accept or encourage access to historical dispersed recreation sites by standard vehicles when this is compatible with management area direction and overall road management objectives Some recreation traffic may be discouraged or eliminated on logging roads during timber hauling operations.
10. If a road is not at an adequate and safe standard for the traffic expected to **use** it, reconstruct the road or restrict traffic to a level for which the existing road is adequate.
11. Manage traffic as needed due to structural limitations of the road or limitations imposed by other resources such as wildlife or recreation.
12. Trails and Helispots. Construct and maintain trails to provide a recreation experience as well as a transportation route Provide trails to meet specific management objectives and to achieve prescribed difficulty levels.
13. Trails and helispots may be constructed in all management areas unless excluded or constrained by management area direction.

14. Manage National Recreation Trails according to the direction in their individual management Plans.

15. Emphasize trail retention, maintenance and improvement (and additions where there is a valid need) in Management Areas 4-11,13, 15 and 16.

16. Evaluate the need for trails within the other management areas and perpetuate, or move to a new location, those trails which will serve a continuing purpose and which appear likely to be used.

17. Open-Road Density Meet the specific open-road density guidelines found in the direction for individual management areas unless a specific exception is determined, through the Forest Service NEPA process, to be needed to meet management objectives.<sup>3</sup>

[ 3: The method used for calculating open road densities is an important factor. The average road density is calculated by dividing an area by the number of miles of open roads within that specific area. If the area is too large, the average becomes meaningless; conversely, if the area is too small, the resulting figures may not provide useful information. For the purpose of implementing this direction, open road density will normally be calculated on the basis of subwatersheds. The area of each Management Area contained in each subwatershed will be calculated, and the open roads within that management area subwatershed will also be calculated to determine the open road density. The acreage and road mileage included in the calculation will include all acres (NF and private) within the major proclaimed boundaries of the National Forest, but will exclude private land acreage outside the major proclaimed boundaries "Islands" of proclaimed National Forest which are outside the major proclaimed boundaries will be included in the calculations if they are still under National Forest management. Decisions to leave open road densities greater than the guidelines are expected be the exception rather than the rule.]

18. Implement open road density guidelines as opportunities arise. Normally this will be following a timber sale project, but may also include special projects aimed at reducing open road densities in key areas.

19. Analyze projects which will require construction of new roads or which require opening old roads, with the intent of meeting specific management area road density guidelines during the activity. If the analysis indicates that meeting these guidelines during project activity is important in meeting the resource management objectives, and if the project will require an open road density in excess of the guideline, then mitigation of the effects of adding open roads will take place where practical. Mitigation may include efforts such as closing other roads in the analysis area, scheduling projects and activities to minimize impacts, or managing timber sale activities so activity is limited to part of the sale at one time. The practicability of mitigation will be analyzed and decisions documented as part of the project decision.

20. Although the open road densities prescribed for each management area will normally be sufficient for management purposes, the guidelines are not intended to place restrictions on emergency **uses** such as wildfire control, search and rescue, etc.

21. All-Terrain and Off-Road Vehicles. Permit all-terrain vehicle (ATV) use and over-the-snow vehicle use on blocked or closed roads unless this use is found to be incompatible with resource management objectives. These types of uses are generally felt to be an acceptable form of recreation except where site specific analysis shows them to be incompatible due to resource management problems. This determination will be made through the Forest Travel Management Plan.

22. Forest Access and Travel Management Plan. A plan will be maintained identifying road, trail and off-road vehicle (ORV) restrictions for wildlife protection, recreation, and other purposes. This travel plan will be consistent with management direction for individual management areas and with other standards and guidelines herein (See also standards and guidelines for Recreation)

23. Road Obliteration. Obliterate roads not needed for future management (as determined by resource management objectives) at the end of project **use** and return them to resource production based on

management area direction Complete obliteration of roads within ten years after termination of the contracts, leases or permits.

24. Reestablish vegetative cover on obliterated roads by natural processes, where possible, or supplement by such means as scarifying, ditching, contouring, and seeding.

25. Special Areas. Manage the Joseph Canyon Roadless Area (as described in Appendix C of the FEIS) so as to retain an "essentially roadless" character.

26. Block or close to standard vehicles all new roads constructed within the Upper Five Points. Creek drainage following project completion. New logging roads will be closed to public use during all project activities. Specific areas may be opened to the public for purposes of firewood removal for a period of 13 years following completion of a timber sale.

## **Facilities**

All facilities (i.e., administrative, campground, picnic area, observation point, lookout, rest stop, trailhead, etc.) are allocated to MA 16 and are managed pursuant to the standards and guidelines in the Forest Plan (pages 4-91 to 4-93).

**Goal:** Manage facilities to meet primary objectives of the HCNRA and in compliance with the facility maintenance plan (objectives include ROS, cultural heritage, Hells Canyon Wilderness, etc.).

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

**Fac-O2:** Manage recreation facilities so they are in compliance with health and safety regulations and meet regional ROS standards. Protect resources by limiting developments to those necessary to meet standards and ROS.

**Fac-O3:** Protect and manage water developments, water rights, and water uses in compliance with applicable laws and directives to meet long-term resource objectives of the HCNRA.

**Fac-S1:** Manage facilities pursuant to management direction by Recreation Analysis Area.

**Fac-G1:** Provide a range of accessibility levels at facilities for a variety of visitors regarding health, physical ability, and age. Generally, retain natural impediments and challenges unless areas are designed specifically to accommodate physically-challenged visitors. Provide access appropriate to ROS.

**Fac-G2:** Use, maintain, and update standardized designs for HCNRA site furniture (e.g., toilets, corrals, bulletin boards, picnic tables) to ensure uniformity in site components and appearance.

## **1990 Land and Resource Management Plan Direction (pages 4-91 to 4-93)**

MANAGEMENT AREA 16 (5,744 ACRES)  
(ADMINISTRATIVE AND RECREATION SITE RETENTION)

### **Description**

These areas include sites such as work centers, fire lookouts, permitted ranch headquarters, campgrounds, seed orchards, and other areas which are occupied by facilities for administration, public recreation, or features of cultural significance. Also included are two summer home tracts.

This management area does not contribute to the Forest's allowable sale quantity.

Direction

1. Watershed. Apply Forest-wide standards and guidelines.
2. Wildlife. Manage wildlife habitat consistent with the primary administrative or recreational objectives.
3. Timber. Timber harvest may occur to facilitate recreational, administrative or other uses or for safety reasons.
4. Transportation. Construct roads, parking lots, trails, and aircraft and boat landing facilities as necessary to provide access to the sites or facilitate their use.
5. Manage roads to permit passenger car traffic when sites are open for use.
6. Range. Domestic livestock grazing will not normally be permitted although administrative stock may graze on some administrative sites.
7. Recreation. Permit recreation activity on administrative sites which does not interfere with administrative or other uses for which the site is intended.
8. Interpretation will be through signs and other structures, such as overlooks, decks and guided walks. There may be staff contacts at contact stations, principal attractions and amphitheaters.
9. Manage developed recreation sites according to FSM 2300.
10. Manage recreation residences according to FSM 2700.
11. Provide roaded natural and rural recreation opportunities.
12. Cultural Resources. Apply Forest-wide standards and guidelines.
13. Landscape Management. Apply Forest-wide standards and guidelines.
14. Landownership. Retain in Federal ownership as long as administrative use is warranted.
15. Minerals. The sites will not normally be recommended for withdrawal from mineral entry.
16. Fire. The minimum acceptable suppression response is 'contain" at all FIL's.
17. Firelines constructed by hand will be favored over machine fireline.
18. Prescribed fire from unplanned ignitions will not be used in this management area.
19. Prescribed fire from planned ignitions may be used to enhance the appearance of some sites or to meet recreation objectives.
20. Facilities. Provide and manage administrative facilities sufficient to accomplish the land and resource management and protection objectives of the Forest.
21. Prepare administrative site development plans for all forest administrative sites. Long-term development and maintenance costs will be a consideration in facilities planning.
22. If, through an environmental analysis, it is determined that additional administrative or recreational sites are needed, additional areas may be added to Management Area 16 sufficient to meet the identified need. This change in land allocation will normally be considered a nonsignificant amendment to this Forest Plan because of the relatively small areas involved.

23. Facilities will be planned, developed, maintained and operated for safe use, support of the Forest resource programs, and cost effectiveness. The construction of new buildings or additions to existing buildings shall comply with approved site development plans.

24. Other. Permits for fuelwood removal will normally not be issued for these sites.

25. Insects and Diseases. Prevent insect and disease outbreaks including noxious weeds, with a minimum of disturbance to developments or users Favor biological and silvicultural treatments.

## Forested Vegetation, Grasslands, and Forest Understory

The following direction supplements Forest Plan management direction (pages 4-48 through 4-55, including management of noxious weeds (Forest Plan Amendment 4), Regional Forester's Amendment #2, and PACFISH management direction (pages C-10 and C-12 through C-13) and INFISH (pages A-6 through A-9).

**Goal:** The HCNRA functions as a healthy ecosystem that is an integral component of a larger biological region. Sustainability of ecological functions and processes is deemed important to maintaining ecosystem health and shall be attained by promoting vegetation within the historic range of variability (HRV) for structural stages (forested vegetation). Manage grassland communities to attain their potential natural community (PNC) recognizing their HRV and that the potential for some communities may be altered. (Eastside Screens, New)

**Veg-O1:** Provide for restoration of ecosystem function, where determined to be needed, in a manner compatible with the primary objectives of the *HCNRA Act*, congressionally designated areas, and established Forest Plan management areas. (Forest Plan, CMP)

**Veg-O2:** Manage the vegetation in Wallowa County to achieve the watershed management objective of the *Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan with Multi-Species Habitat Strategy* (Wallowa County 1999).

**Veg-S1:** Harvest of any parts of nonconiferous plant, lichen, or fungal species is limited to incidental use only. Incidental use is defined as possession of one gallon of any part of any species of plant, lichen, or fungal material. In some cases, commercial permits may be issued outside Hells Canyon Wilderness after appropriate NEPA analysis. Legally designated noxious weeds are exempt from this standard; they may be harvested in unlimited quantities without a permit. In addition, American Indians collection of plant, lichen, or fungal materials under treaty rights is exempt from this limitation.

Note to reader: This section provides goals, objectives, standards, and guidelines common to all management areas for both forested and grassland vegetation unless specifically identified. More specific goals, objectives, standards, and guidelines for these vegetation categories are provided under the subheadings entitled Forested Vegetation and Grasslands and Forest Understory.

Management Areas 4, 8, 9, and 12

**Veg-O3:** Allow forest and grassland vegetation to function in a nearly natural manner with major disturbances being the result of natural events and processes such as wildfires, wildland fire use for resource benefits (WFU), storms, floods, landslides, wildlife grazing, insects and diseases, and rodents. Similar human-caused management practices such as livestock grazing, prescribed fire (PF) and in some cases fire suppression are compatible with the primary objectives of the *HCNRA Act* outside the Hells Canyon Wilderness.

**Veg-G1:** If a particular insect or disease infestation becomes a concern, involve specialists and the public to determine whether it warrants control efforts. Control methods may include insect trapping, PF, biological controls, and aerial spraying.

Management Areas 7, 10, and 11

**Veg-O4:** Manage forest and grassland vegetation to maintain viable and healthy ecosystems that ensure: the protection and enhancement of fish and wildlife habitats; conservation of scenic and scientific values; preservation of biologically unique species, habitats, and rare combinations of outstanding ecosystems; protection and enhancement of a wild and scenic river's outstandingly remarkable values; and compatible public outdoor recreation.

**Veg-O5:** Manage vegetation to control insect and disease levels, consistent with the Section 7 objectives of the *HCNRA Act*.

**Veg-G2:** Early prevention of insect and disease epidemics can be considered more favorable than applying control methods after infestations have already occurred; however, control can be a viable option. Prevention methods may include silvicultural treatments and PF. Control options may include insect trapping, use of pesticides and biological controls.

Management Area 16

**Veg-O6:** Manage native and introduced vegetation at administrative and developed recreation sites to meet the objectives of the site plan, and to meet health and safety needs of all users.

Restoration

**Veg-O7:** As appropriate, and as determined to be necessary within overall goals for HRV, maintain or restore ecosystem function, conserve soil, and enhance native plant species and communities. Ensure the continued viability and genetic integrity of all native plant species in the HCNRA. Maintain and enhance biological diversity, sustain long-term site productivity, and ensure the function and sustainability of native plant communities.

**Veg-G3:** Restore riparian and upland vegetation where current conditions are below desired levels or outside the HRV. Enhance and protect vegetation improvement project areas as needed to ensure establishment and long-term sustainability.

**Veg-G4:** To the extent practicable, seeds and plants used in erosion control, fire rehabilitation, riparian restoration, forage enhancement, and other re-vegetation projects shall originate from genetically local sources of native species. When project objectives justify the use of nonnative plant materials, document why they are preferred as part of the project planning process. As costs, availability, and technical knowledge permit, use of local native plant materials shall become standard practice.

**Veg-G5:** For restoration projects that use nonnative plants, give preference to species that are nonpersistent in the environment, and that meet site-specific objectives.

**Veg-G6:** In some cases persistent nonnative perennials may be used. This shall be the exception rather than the rule. Administrative sites such as backcountry airstrips, historical ranches, and campgrounds are areas where this may be necessary. Roadsides and other areas of high erosion hazard and low chance of natural re-establishment by native plants are other areas that may need this treatment.

**Veg-G7:** Consider the likelihood of natural recovery of native vegetation when analyzing the need for rehabilitation. Assess the probability of resprouting, and natural seedling establishment before prescribing reseeding projects. In areas with a moderate to high probability of natural recovery, allow natural processes to proceed without artificial seeding.

Note to reader: Refer to the **Noxious Weed, Nonnative and Invasive Plants** section for additional direction on noxious weeds and the Wilderness section for additional direction on restoring vegetation in the Hells Canyon Wilderness.

## **Forested Vegetation**

**For-O1:** Outside Hells Canyon Wilderness, manage forested vegetation to restore the HRV for structural stages (i.e. very-early, early, early/late-mid, late/old). (Eastside Screens)

**For-O2:** Manage livestock grazing within forested stands to ensure ecological function and sustainability of understory vegetation consistent with management of overstory vegetation objectives. Use grazing-related standards and guidelines to manage grazed forested understory vegetation.

Management Areas 4, 8, 9, and 12

**For-S1:** WFU is the primary activity available to achieve a natural structure. PF may be used to facilitate WFU or to protect nonwilderness values.

**For-S2:** Timber harvesting is prohibited in MA 4 except as provided in Sections 4 (c) and (d) of the *Wilderness Act* and regulations at 36 CFR part 293. (Public LURs, 36 CFR 292.46(c))

**For-S3:** Forest vegetation management activities and the gathering of fuelwood is prohibited in MAs 4, 8, 9, and 12, except that dead and down wood may be used for campfires, administrative, and permitted uses, where applicable. Use of dead and down wood in MA 8 for campfires is prohibited.

Management Areas 7, 10, and 11

**For-S4:** Silvicultural treatment and PF shall be the primary methods used to achieve a desired forested vegetation structure.

**For-S5:** Vegetation management activities in forested stands shall protect and enhance ecosystem health, wildlife habitat, or recreational and scenic uses; or to respond to natural events such as wildfire, flood, earthquake, volcanic eruption, high winds, and disease or insect infestations (Public LURs, 36 CFR 292.46(a)(1)).

**For-S6:** Silvicultural treatment activities shall maintain a viable and healthy ecosystem and be designed to replicate the naturally-occurring processes which shape the character of the landscape. Natural disturbance regimes most commonly operating in the HCNRA include: wildfire, high winds, and insect/disease infestations. Forest vegetation and fuels management activities based upon ecological principles can be implemented to mimic these kinds of natural disturbance events.

**For-S7:** Manage forested vegetation at dispersed recreation sites and along transportation corridors to meet health and safety requirements and to protect forest users. This may include cutting trees considered hazardous to the recreating and traveling publics.

**For-S8:** Allow for fuelwood removal compatible with WWNF fuelwood policies in MAs 10 and 11 through designated special fuelwood areas only. Prohibit fuelwood removal in the wild river sections of MA 7. (Fuelwood Program)

**For-S9:** Silvicultural treatments available to achieve a desired structure include: Uneven-aged management, (single-tree selection and group selection), WFU for resource benefits, PF, commercial thinning, precommercial thinning, salvage, and sanitation cutting. Refer to the **Glossary** for the definition of these treatments specific to the HCNRA.

**For-G1:** Openings created by harvesting forest products must be limited in size and number to the minimum necessary to accomplish the purpose of the harvest, and must blend the natural landscape to the extent practicable. (Public LURs, 36 CFR 292.46(a)(2))

**For-G2:** As much as possible within the context of maintaining structural stages at HRV levels, manage riparian zones to provide connectivity corridors between late/old structure stands. (Eastside Screens)

Note to reader: Timber volume removed from the HCNRA is classified as unregulated and does not contribute to the WWNF allowable sale quantity. Refer to the **Access and Facilities** section for management direction related to gathering fuelwood. Refer to the **Glossary** for an explanation of the silvicultural treatments described in this section.

## **1990 Land and Resource Management Plan Direction (pp. 48-51)**

### Timber Management

#### Goal

To provide for production of wood fiber consistent with various resource objectives, environmental requirements and economic efficiency.

#### Standards and Guidelines

1. Soil Stabilization. Stabilize lands disturbed as a result of timber management activities or road construction to control soil erosion and enhance forage and browse production, where appropriate. Stabilization methods and timing will recognize site-specific needs and objectives and will be decided through the NEPA process for individual projects or activities. (Also see Standards and Guidelines for Soils and Watershed).

2. Silvicultural Systems. Prepare silvicultural prescriptions prior to all harvest activities. These prescriptions will be reviewed by a certified silviculturist.

Select silvicultural systems which will, to the extent possible and within the intent of the land management objectives:

- a. Permit the production of a volume of marketable trees sufficient to utilize all trees that meet utilization standards and are designated for harvest.
- b. Permit the use of an available and acceptable logging method that can remove logs and other products without excessive damage to the identified desirable residual vegetation.
- c. Be capable of providing special conditions, such as a continuous canopy or continuous high density live root mats, when required by critical soil conditions or as needed to achieve particular management Objectives, such as streamside protection, wildlife needs, and visual enhancement.
- d. Permit control of vegetation to establish desired numbers and rates of growth of trees, as well as vegetation needed to achieve other management objectives identified in site-specific silvicultural prescriptions.
- e. Promote a stand structure and species composition that minimizes serious risk of damage caused by mammals, insects, disease, or wildfire, and will allow treatment of existing insect, disease, or fuel conditions.
- f. Be capable of achieving management objectives such as those for streamside protection, wildlife needs, and visual resources.
- g. Develop manageable stands of at least five acres in size having a single future cultural treatment.

- h. Consider dispersion of future regeneration harvest units in the treatment of existing stands. Where appropriate to achieving dispersion objectives for other resources, prescriptions will provide for regeneration harvest of portions of large stands which might otherwise be treated with a single commercial thinning.
- i. Include consideration of fuel treatment commensurate with resource needs.
- j. Be the most economical system to meet the desired objectives.

4. Use clearcutting only where analysis by a certified silviculturist shows that it is clearly preferable to other cutting methods for achieving management objectives. Selection of cutting methods will be made as a part of protect-level analysis.

5. Make waste wood residue from timber harvesting available for fuelwood gathering. Where this is impractical, residues in excess of those needed on-site will be disposed of by burying, broadcast burning, crushing, or other means, depending upon site-specific analysis. Economic and resource conditions may dictate several methods within one timber sale area.

6. Limit forest openings created by the application of even-aged harvest methods to a maximum size of 40 acres. Exceptions are permitted for natural catastrophic events (such as fires, windstorms, or insect and disease attacks) or on an individual basis after a 60-day public notice period and review by the Regional Forester. In addition, the limits may be exceeded by as much as 50 percent without necessitating review by the Regional Forester or 60 days public notice when exceeding the limit will produce a more desirable combination of net public benefits and when any one of the following four criteria is met:

- a. When a larger created opening will enable the use of an economically feasible logging system that will lessen the disturbance to soil, water, fish, riparian resources, or residual vegetation. Such lessening is to be achieved by reducing landing or road construction, by enabling such construction away from unstable soil, or by reducing soil and vegetation disturbance caused by dragging logs.
- b. When created openings cannot be centered around groups of trees infected with dwarf mistletoe or root rot and therefore need to be expanded to include these trees in order to avoid infection of susceptible adjacent conifers.
- c. When visual quality objectives require openings to be shaped and blended to fit the landform.
- d. When larger openings are needed to achieve regeneration objectives in harvest areas being cut by the shelterwood method and where destruction of the newly created stand would occur as a result of delayed removal of shelter trees. This exception applies only to existing shelterwood units and to shelterwood units under contract prior to approval of the Forest Plan.

7. Separate created openings by blocks of land that generally are not classed as created openings and that contain one or more logical harvest units. These areas shall be large enough and contain a stand structure appropriate to meet resource requirements of the Forest. Plan Resource requirements may include wildlife habitat, watershed, landscape management, and others. Contiguous harvest units (cornering or otherwise touching) are not precluded, but together must be considered as a single opening which must be created within requirements for size, exception procedures, and justification.

8. The total area of created openings contiguous to 30-acre or larger natural openings should normally be limited to an area not exceeding one-third the size of the natural opening and not occupying more than one-third of the natural opening perimeter. Openings should not be created adjacent to any natural openings (regardless of size) unless adequate vegetation along the edge can be developed or retained in sufficient density to protect wildlife values and visual quality objectives. The determination of adequate vegetation will be made by an appropriate interdisciplinary team.

9. A harvested area of commercial forest land will no longer be considered a created opening for silvicultural purposes when stocking surveys, carried out in accordance with Regional instructions, indicate prescribed tree stocking that is at least **4 1/2** feet high and free to grow. When other resource management considerations (such as wildlife habitat, watershed needs, or visual requirements) prevail, a created opening will no longer be considered an opening when the vegetation in it meets a particular management objective stated in the applicable management strategy.

10. Any harvests (regeneration or intermediate cuttings) which reduce stocking below the minimum crop tree stocking level will be considered a regeneration harvest. They will, therefore, require provisions for establishing new stands and be subject to created-opening spacing constraints.

11. Slopes 30 percent or **less** will normally be harvested using ground-based logging equipment (tractors, rubber-tired skidders, low ground pressure equipment, etc.). Slopes greater than 30 percent will normally be harvested using short-reach cable systems, long-reach cable systems, or aerial systems.

12. Precommercial thinning in future regenerated stands will normally be accomplished before cut stems exceed two inches in diameter at ground level in order to avoid the need for slash disposal.

13. In some instances, notably naturally-regenerated ponderosa pine and Douglas-fir, the timber volume remaining following a shelterwood or seed tree regeneration harvest may not be adequate to cover the expense of a subsequent overstory removal. Where this occurs the remaining overstory may be harvested at the time **of** the next commercial entry.

Reforestation. Selection of reforestation methods will be made on a site-by-site basis during project-level analysis. This analysis will always consider the option of natural regeneration. Design harvest and regeneration practices so that there is reasonable assurance of adequate restocking within five years after final harvest.

Re-evaluation of Unsuitable Lands. Re-evaluate areas which were identified during the Forest planning process as unproductive or technically unsuitable for timber management during site-specific analysis of adjoining lands. When this analysis shows these lands to be suitable for timber management they will be managed with the adjoining lands, consistent with the applicable management area direction. Conversely, when site-specific analyses show additional lands to be unproductive or unsuitable, timber management on these lands will not occur.

16. Harvest on Unsuitable Lands. Permit commercial timber harvest on lands identified as technically unsuitable or unproductive (within management areas where harvest is not precluded) only for the following purposes.

- a. Salvage or sanitation harvesting of trees or stands substantially damaged by fire, windthrow, or other catastrophe or which are in imminent danger from insect or disease attack.
- b. Cutting of individual trees or stands to test logging systems, to conduct experiments, or for the purpose of gathering information about tree growth, insect or disease organisms, or the effect of such harvesting on other resources.
- c. Cutting of trees to promote the safety of Forest users. This includes hazard tree removal in camp and picnic grounds, in administrative sites, and along roads open to the public.
- d. Harvesting to meet habitat objectives for threatened or endangered animal or plant species or to maintain or improve habitat for other wildlife or fish management indicator species.
- e. Harvesting to improve the scenic resource by opening scenic vistas or by improving visual variety.
- f. Harvesting of fuelwood and Christmas trees.

- g. Harvesting to provide for access; for example road construction.
- h. To permit the construction of recreation or administrative sites, roads, trails, or other facilities needed for the management of the Forest.

17. Utilization Standards. Use timber utilization standards specified in the Regional Guide.

18. Culmination of Mean Annual Increment. Even-aged stands scheduled for regeneration harvest will generally have achieved culmination of mean annual increment on a cubic foot basis.

19. Harvest of Catastrophic Mortality. In cases of catastrophic timber mortality such as from fire, insect epidemic, or windthrow, efforts will be made to salvage the affected timber as quickly as possible within the objectives of the affected management areas.

### **Grasslands and Forest Understory**

Refer to Vegetation and Forested Vegetation sections for corresponding goals for grasslands.

**Gra-O1:** Manage grassland vegetation to ensure continued ecological function and sustainability of native ecosystems. Maintain and/or restore the ecological status of grassland communities to their PNC recognizing their HRV.

**Gra-O2:** Develop management plans for all active grazing allotments which address identified issues and compatibility with the provisions of the *HCNRA Act*.

**Gra-O3:** Evaluate rangeland capability and suitability, and present rangeland condition or ecological status in relation to PNC.

**Gra-O4:** Evaluate annual impacts associated with livestock grazing in relation to established standards and thresholds.

**Gra-S1:** On lands determined to be unsuitable or not capable for grazing by domestic livestock or determined to be in an unsatisfactory condition, do not allocate the rangeland vegetation production for these lands to the allotment's carrying capacity. However, domestic livestock may still be permitted.

In most situations, do not authorize livestock on lands determined to be unsuitable. In some situations incidental livestock use may be authorized on lands identified as unsuitable. In these situations, remove livestock before rangeland vegetation use exceeds 10 percent and soil disturbance exceeds 10 percent on lands determined to be unsuitable.

**Gra-S2:** Evaluate satisfactory condition during the allotment management planning process. The minimum condition and trend standards must be met for rangelands to be considered as satisfactory:

- Rangeland vegetation in both upland and riparian habitats are in a mid-seral\* ecological status with an upward trend or higher condition based on PNC.
- Soils, this includes soil surface conditions and soil stability, are in a mid-seral\* ecological status with an upward trend or higher condition based on PNC.
- Riparian hardwood age class are in a mid-seral\* ecological status with an upward trend or higher condition based on PNC.
- Riparian hardwood form class distributions show no more than 10 percent in heavy and 35 percent in moderate, long-term browsing impact classes.

\*The mid-seral ecological status is considered equal to the range condition of fair with an upward trend.

For sites in satisfactory condition, design management practices to maintain or improve the ecological status. For sites identified in unsatisfactory condition, design management practices to improve ecological status to a satisfactory condition. Where rangeland resources are in an unsatisfactory condition, livestock grazing may continue if the rate of recovery is within 70 percent of the natural rate of recovery (recovery on areas with similar ecological type and status without livestock grazing).

The definition of "satisfactory condition" establishes the minimum standards for determining carrying capacity, but does not necessarily define site-specific desired conditions or recovery rates. Other resource goals, objectives, and standards and guidelines in this plan establish the desired conditions for management of the rangeland resources. The "satisfactory condition" definition is required by the *Public LURs* (36 CFR 292.48(a)) and relates only to the allocation of available carrying capacity. The rangeland resource inventory identifies the carrying capacity for a land use area.

**Gra-S3:** Establish site-specific rates of recovery in allotment management plans (AMP) to achieve the goals for ecological status, soil conditions, and riparian management objectives in conjunction with other applicable resource standards and guidelines contained in this management plan when determining appropriate livestock stocking levels.

**Gra-S4:** When determining carrying capacity and range management objectives during the AMP process and, include other uses such as wildlife, threatened and endangered species, recreation stock, PF, ecological goals, and outfitter and guide activities as specified in the *HCNRA Act*.

**Gra-S5:** Implement grazing management practices to minimize the potential for transport of invasive plant propagates or seeds, or creation of habitats suitable for establishment of invasive species.

**Gra-S6:** Implement Forest Plan utilization standards (pages 4-52 and 4-53). (Forest Plan)

The following maximum upland forage (grass/forb) utilization standards for fall, winter, and spring may be applied once resource objectives are met. Maximum browse standards are the same as those listed in the Forest Plan. Based on plant phenology, climate, and plant responses to grazing, there are three basic periods to manage: fall/winter, early spring, and late spring (in application, the following standards may be converted to allowable stubble height standards).

- Fall/Winter Standards

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

Maximum forage utilization standards for this period are 60 percent on the key species (on a site-specific basis). This is based on a percent of the weight removed from the total annual growth resulting from the previous growing season.

- Early Spring Standards

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

Maximum forage utilization standards for this period are 60 percent of current key cool season species forage production (on a site-specific basis). This is determined on an air-dried weight basis of total current annual production occurring until livestock are removed. Further, remove all livestock from the unit based on ensuring that adequate soil moisture exists at the time of removal to provide for essentially

full re-growth. Conduct additional monitoring on a spot check basis following termination of annual growth for the summer to document that re-growth was achieved.

- Late Spring Standards

Late spring is defined as that period when the key perennial cool season forage plant growth is still occurring but soil moisture is beginning to limit growth. Livestock removal is not planned to occur during the time when assurance can be made that essentially full re-growth will occur.

Utilization standards for both forage and browse use for this period are the same as established by the Forest Plan for the standard summer season grazing.

**Gra-S7:** Where domestic livestock grazing is incompatible with the protection, restoration, or maintenance of fish and wildlife or their habitats; public outdoor recreation; conservation of scenic, wilderness, and scientific values; rare combinations of outstanding ecosystems, or the protection and enhancement of the values for which a wild and scenic river was designated, the livestock use shall be modified as necessary to eliminate or avoid the incompatibility. In the event an incompatibility persists after the modification or modification is not feasible, the livestock use shall be terminated. (Public LURs, 36 CFR 292.48(b))

**Gra-S8:** Design and locate range improvements to minimize their impact on wilderness, scenic, heritage, fish, wildlife, unique botanical, and other resources. (Public LURs, 36 CFR 292.48(c))

**Gra-S9:** The authorization of grazing use, through a grazing permit, must provide for terms and conditions which protect and conserve riparian areas. (Public LURs, 36 CFR 292.48(d))

**Gra-G1:** Emphasize enhancement and/or restoration of potential native vegetation.

**Gra-G2:** Incorporate management considerations in *Plant Associations of the Wallowa-Snake Province* (Johnson and Simon 1987) to determine the appropriate timing, intensity, duration, and frequency of grazing use by community type. Likewise, use *Mid-Montane Wetlands Classification of the Malheur, Umatilla, and Wallowa-Whitman National Forests* (Crowe and Clausnitzer 1997) or other Forest Service approved guides, score cards or keys.

**Gra-G3:** During the AMP process, evaluate periodic rest and deferred rotations grazing systems.

**Gra-G4:** During the AMP process, analyze effects and management of both wildfire and PF in conjunction with domestic livestock grazing to achieve grassland goals, objectives, standards, and guidelines.

**Gra-G5:** Where feasible and desirable, plan and implement restoration projects to improve the health and sustainability of HCNRA grasslands, where current ecological conditions are mid- or earlier-seral status.

**Gra-G6:** Encourage the Payette and Nez Perce National Forests to adjust allotment boundaries, for those allotments containing HCNRA lands, to the HCNRA boundary line as opportunities arise.

Note to reader: Refer to the Fire section for post-fire management direction.

**1990 Land and Resource Management Plan Direction (pp. 51-55)**

- Range

Goal

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

#### Standards and Guidelines

1. Forage Allocation. Allocate forage resources on an allotment and/or management area specific basis to meet the basic plant and soils needs as the first priority. Forage production above that needed for basic resource needs may be allocated to wildlife (as provided for in agreed upon Management Objectives) and permitted livestock.

2. Utilization Standards. Apply utilization standards to all management areas as shown in tables 4-7 and 4-8. These standards provide for maximum utilization levels regardless of which species of animal uses the forage or browse.

Table 4-7

Allowable Use of Available Forest in Riparian Areas<sup>1</sup>

| Range Resource Management Level                                                                                                                                                                                                                                           | Maximum annual utilization (percent) |                           |                         |                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------|-------------------------|---------------------------|
|                                                                                                                                                                                                                                                                           | Grass & Grasslike <sup>2</sup>       |                           | Shrubs <sup>3</sup>     |                           |
|                                                                                                                                                                                                                                                                           | Sat. Cond. <sup>4</sup>              | Unsat. Cond. <sup>5</sup> | Sat. Cond. <sup>4</sup> | Unsat. Cond. <sup>5</sup> |
| Livestock use managed within current grazing capacity by riding, herding, and salting. Cost-effective improvements used only to maintain stewardship of range. (Stewardship)                                                                                              | 40                                   | 0-30                      | 30                      | 0-25                      |
| Livestock managed to achieve full utilization of allocated forage. Management systems designed to obtain distribution and maintain plant vigor include fencing and water development. (Extensive)                                                                         | 45                                   | 0-35                      | 40                      | 0-30                      |
| Livestock managed to optimize forage production and utilization. Cost effectiveness culture practices improving forage supply, forage use and livestock distribution may be combined with fencing and water development to implement complex grazing systems. (Intensive) | 50                                   | 0-40                      | 50                      | 0-35                      |

1. This will be incorporated in allotment management plans and will be implemented in accordance with the Allotment Management Planning Schedule. Allotment management plans may include utilization standards which vary from the above guidelines when associated with management systems and integrated resource objectives which will meet desired future condition objectives of the riparian dependent resources, Includes cumulative annual use by big game and livestock.

2. Utilization is based on percent of annual production removed by weight.

3. Utilization based on measurement of weight and/or twig length of current available leader growth.

4. Satisfactory Range Condition - see glossary (satisfactory range condition is determined by allotment classification and/or forage condition).

5. Unsatisfactory Range Condition - see glossary (anything not 'satisfactory')

Table 4-8

Allowable Use of Available Forest on Suitable Ranges other than Riparian<sup>1</sup>

| Range Resource Management Level                                                                                                                                                                                                                               | Maximum annual utilization (percent) <sup>2</sup> |                           |                    |              |                    |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------|--------------------|--------------|--------------------|--------------|
|                                                                                                                                                                                                                                                               | Forest                                            |                           | Grassland          |              | Shrubland          |              |
|                                                                                                                                                                                                                                                               | Satisfactory Cond. <sup>3</sup>                   | Unsat. Cond. <sup>4</sup> | Satisfactory Cond. | Unsat. Cond. | Satisfactory Cond. | Unsat. Cond. |
| Livestock use managed within current grazing capacity by riding, herding, and salting. Cost-effective improvements used only to maintain stewardship of range. (Stewardship)                                                                                  | 40                                                | 0-30                      | 50                 | 0-30         | 40                 | 0-25         |
| Livestock managed to achieve full utilization of allocated forage. Management systems designed to obtain distribution and maintain plant vigor include fencing and water development.                                                                         | 45                                                | 0-35                      | 55                 | 0-35         | 45                 | 0-30         |
| Livestock managed to optimize forage production and utilization. Cost effectiveness culture practices improving forage supply, forage use and livestock distribution may be combined with fencing and water development to implement complex grazing systems. | 50                                                | 0-40                      | 60                 | 0-40         | 50                 | 0-35         |

1: This will be incorporated in allotment management plans and will be implemented in accordance with the Allotment Management Planning Schedule. Allotment management plans may include utilization standards which vary from the above guidelines when associated with management systems and integrated resource objectives which will meet desired future condition objectives for the riparian dependent resources. Includes cumulative annual **use** by big game and livestock.

2. Utilization based on percent removed by weight for grass, grasslike, and forbs and by twig length, weight measurements, or incidence of use, for shrubs.

3. Satisfactory Range Condition - See glossary (satisfactory condition is determined by allotment classification and/or forage condition).

4. Unsatisfactory Range Condition - see glossary (anything not "satisfactory").

3. Allotment Management Planning. Include in range allotment management plans a strategy for managing riparian areas for a mix of resource uses. A measurable desired future riparian condition will be established based on existing and potential vegetative conditions

4. Identify management actions needed to meet riparian objectives within the specific time frame. Measurable objectives will be set for key parameters, such as stream surface shaded, streambank

stability, and shrub cover. This process is described in 'Managing Riparian Ecosystems. (Zones) for Fish and Wildlife in Eastern Oregon and Eastern Washington' (1979).

5. Address the monitoring needed to determine the desired rate of improvement is occurring. Allotment management plans currently not consistent with this direction will be developed or revised on a priority basis under a schedule established by the Forest Supervisor (see Appendix C). Some grazing allotments with riparian areas in unsatisfactory range condition (see glossary), and which do not have approved or functioning management plans, have been identified and are displayed in Table 4-9 This list may be supplemented as additional areas are identified.

6. Identify suitable lands in unsatisfactory range condition (**see** glossary). Allotment plans with specific objectives for these lands will be developed on a priority basis under a schedule established by the Forest Supervisor. These objectives will define a desired future condition based on existing and potential values for all resources.

7. The allotment plan will include. (a) a time schedule for improvement, (b) activities needed to meet forage objectives, and (c) a range project effectiveness analysis.

**Table 4-9**  
Range Allotments with Identified Riparian Problems

Log Creek  
Grouseline

### Vacant Allotments

**Vac-S1:** Where an allotment or a portion of an allotment is closed, manage those lands as unsuitable for permitted domestic livestock use. Allow recreational or permitted outfitter and guide activities when properly administered. Where an allotment or portion of a vacant allotment is incorporated as part of another active allotment, do not stock the portion to be added until an AMP process is completed. Refer to **Table 4** for the status of vacant allotments. Refer to **Figure 4** for map with approximate locations of vacant allotment boundaries.

Table 4: Status of Vacant Allotments

| Number           | Name                                        | Acres   | Type of Use | Status                                                                        |
|------------------|---------------------------------------------|---------|-------------|-------------------------------------------------------------------------------|
| 071              | Jim Creek                                   | 12,490  | C&H         | Administrative Horse Pasture (12,178 acres)<br>Closed (312 acres)             |
| 167              | Big Canyon                                  | 8,045   | C&H         | Closed                                                                        |
| 183              | Cache Creek                                 | 8,245   | C&H         | Administrative Horse Pasture (2,197 acres-Jim Creek)<br>Closed (6,048 acres)  |
| 082              | Cherry Creek                                | 21,924  | C&H         | Administrative Horse Pasture (1,720 acres-Jim Creek)<br>Closed (20,204 acres) |
| 108              | Hope Creek                                  | 2,207   | C&H         | Vacant until an AMP is completed.                                             |
| 118              | Turner Creek                                | 1,434   | C&H         | Vacant until an AMP is completed.                                             |
| 191              | Canyon                                      | 80,554  | C&H         | Administrative Horse Pasture (1,988 acres)<br>Closed (78,566 acres)           |
| 084,162, and 164 | Temperance-Snake, Mud Duck, and Sheep Creek | 130,491 | S&G         | Closed                                                                        |
| N/A              | Curren Hill                                 | 2,116   | S&G         | Closed                                                                        |

Note to reader: Acreages shown below for cattle and horse (C&H) and sheep and goat (S&G) allotments are derived from Geographic Information Systems boundaries and may vary as they are implemented. Use topography for boundaries to incorporate allotments while minimizing other resource concerns.

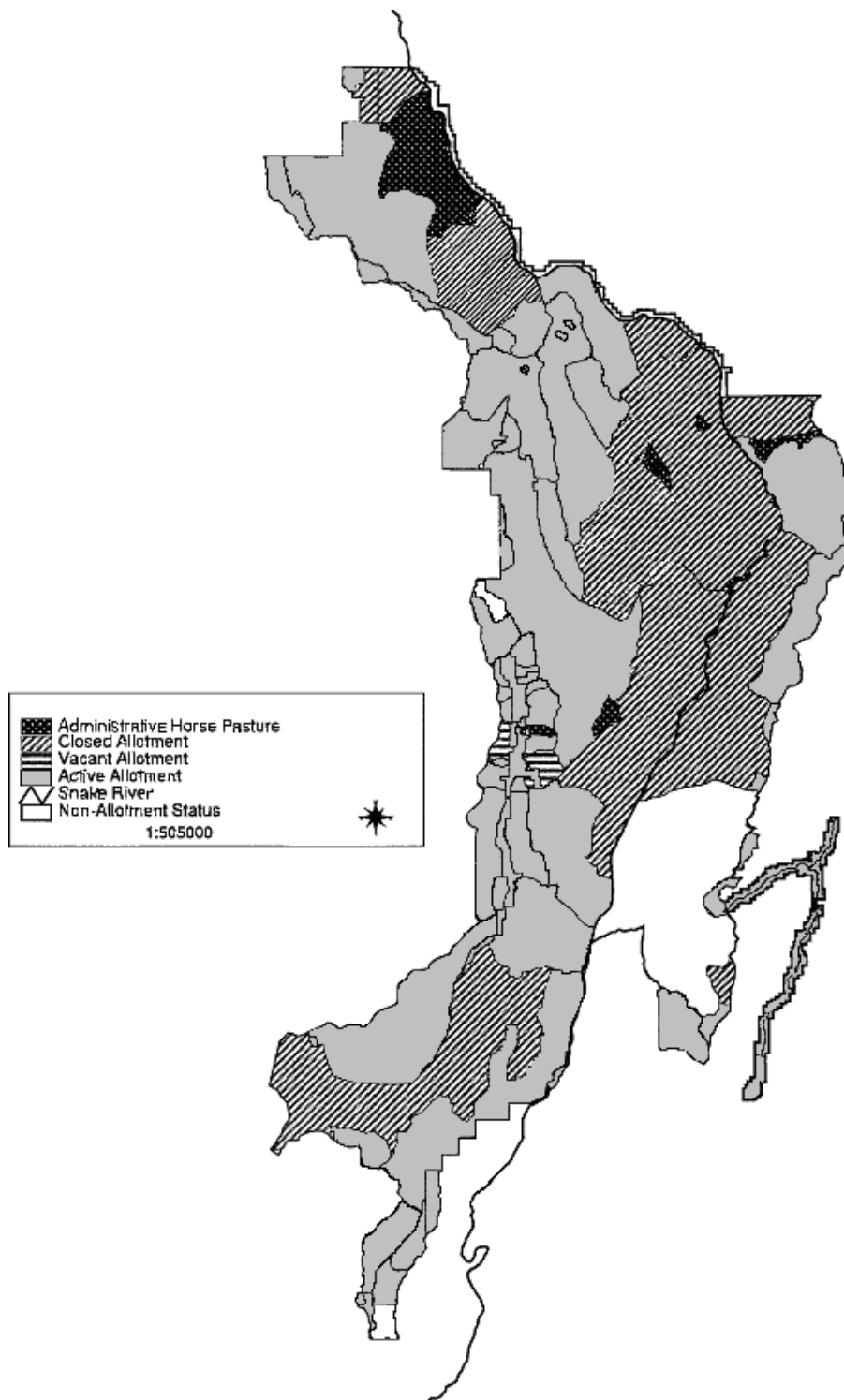


Figure 4 Hells Canyon National Recreation Area Vacant Allotments

## Administrative Horse Pastures

**Adm-O1:** Manage administrative horse pastures within the HCNRA for the purpose of maintaining pack and saddle stock. Maintain these pastures to provide high quality pasture, well-maintained facilities, late to mid-seral vegetative status with a stable trend or better, and a visual appearance that reflects well on management of the HCNRA.

**Adm-S1:** Apply Forest Plan forage utilization standards on all administrative horse pastures.

**Adm-G1:** Develop management plans that allow for the maintenance of administrative horse pastures to provide a very well-managed setting in compliance with the *HCNRA Act*. Manage pastures to promote and maintain late to mid-seral status with an upward trend to PNC.

**Adm-G2:** Where pastures currently contain nonnative rangeland vegetation, manage for recovery of native species.

**Adm-G3:** Refine boundaries of administrative horse pastures to minimize conflicts between other uses and to ensure compatibility with the *HCNRA Act* Section 7(1-7).

## Livestock Grazing and Recreation Use Interactions

**Liv-G1:** Manage livestock grazing to meet recreation objectives in several high-use Recreation Analysis Areas as follows:

Table 5: Management Objectives for Livestock Grazing and Recreation Use

| Area | Name               | Management Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12   | East Rim Loops     | Minimize interface <sup>1</sup> on collector roads. Outside collector road corridors, minimize interface and evidence of domestic livestock during trailing.                                                                                                                                                                                                                                                                                                              |
| 14   | Pittsburg Landing  | Eliminate on-site ground evidence <sup>2</sup> of domestic livestock grazing from the developed recreation site. In the remainder of the area, allow for interface with recreation users, but strive to lessen impacts.                                                                                                                                                                                                                                                   |
| 29   | Lower Imnaha       | Minimize interface <sup>1</sup> of domestic livestock use by controlling the timing of grazing use. If livestock feeding occurs, reduce extensive evidence <sup>2</sup> of feeding by mechanical harrowing, burning, or other available methods.                                                                                                                                                                                                                          |
| 36   | Hat Point          | Minimize interface <sup>1</sup> of domestic livestock and administrative horse use with summer season motorized recreation use.                                                                                                                                                                                                                                                                                                                                           |
| 40   | McGraw             | Minimize interface <sup>1</sup> of domestic livestock with motorized users. Avoid livestock grazing within developed sites.                                                                                                                                                                                                                                                                                                                                               |
| 41   | Upper Imnaha       | Minimize interface <sup>1</sup> of domestic livestock with motorized users. Avoid livestock grazing within developed sites.                                                                                                                                                                                                                                                                                                                                               |
| 42   | North Pine         | Minimize evidence <sup>2</sup> of domestic livestock around Duck Lake and Twin Lakes. Accept interface with recreation users within the Duck Creek corridor.                                                                                                                                                                                                                                                                                                              |
| 50   | Wild Snake River   | Minimize interface <sup>1</sup> of domestic livestock with river users during the primary season by controlling the timing and distribution of livestock.                                                                                                                                                                                                                                                                                                                 |
| 51   | Scenic Snake River | Minimize interface <sup>1</sup> of domestic livestock use by controlling the timing of grazing use. If livestock feeding occurs, reduce extensive evidence <sup>2</sup> of feeding by mechanical harrowing, burning, or other available methods. Eliminate on-site ground evidence <sup>2</sup> of domestic livestock grazing from the developed recreation sites. In the remainder of the area, allow for interface with recreation users, but strive to lessen impacts. |

<sup>1</sup> Visitors only encounter or sense evidence of singles or small groups of cattle in the immediate foreground. Generally, the primary grazing season does not correlate with high-use recreation periods, or

livestock are distributed away from primary recreation corridors, areas, and sites during the high-use recreation period.

<sup>2</sup> Visitors do not readily identify evidence of grazing or livestock presence in the more heavily traveled corridors or high-use recreation sites.

## **Water Use Management**

The following direction supplements Forest Plan management direction (page 4-26).

**Wat-O1:** Maintain existing water rights and obtain new water rights to meet current and foreseeable water needs for HCNRA facility and resource management objectives. (Forest Plan, FSM 2541)

**Wat-S1:** Maintain water use rights granted by the State of Oregon through exemptions, permits, certificates, and court decrees; also maintain unadjudicated vested rights. Maintain water use rights granted by the State of Idaho through exemptions, permits, and licenses; also maintain water uses described on claims submitted in the Idaho Snake River Adjudication. Maintain reserved water rights claimed under federal law. Refer to **Management Direction Specific to Recreation Analysis Areas** for a list of water rights and water developments appurtenant to major facilities.

**Wat-S2:** Comply with water use limitations described on existing water rights, including water source, authorized location of point of diversion and place of use, diversion rate or storage capacity, annual duty, and period and type of use, as required by State of Oregon and Idaho water laws.

**Wat-S3:** Exercise water rights obtained under State of Oregon and Idaho laws at least one year in each five-year period to avoid water right forfeiture under state law due to nonuse.

**Wat-S4:** Comply with state water use reporting requirements including the State of Oregon requirements to install, and maintain water measurement devices and to monitor and report monthly water use for diversions of at least 0.1 cfs. Refer to **Management Direction Specific to Recreation Analysis Areas** for a list of water rights and water developments appurtenant to major facilities.

**Wat-S5:** Install and maintain fish screens and fish ways at stream diversions on fish-bearing streams in compliance with State of Oregon and Idaho laws.

**Wat-S6:** Obtain new water rights through State of Oregon or Idaho water laws before beginning construction of new water diversion and transmission facilities and/or before commencing new diversion of water, or before changing the point of diversion, place of use, period of use, type of use, or enlarging the diversion rate or storage capacity for existing water developments, if the new or altered water uses are not exempt under state law or do not qualify as federal reserved water rights.

**Wat-G1:** Consider using water management opportunities at cultivated field sites to maintain and/or enhance use of existing water rights. Consider other water management tools such as temporary transfer to instream use, and permanent transfer to a different facility, source, point of diversion, place of use, and/or nature of use.

**Wat-G2:** Develop evidence to support claims for pre-water code vested water rights at historic ranches in the HCNRA. Prepare and submit claims, as needed, to Oregon and Idaho to maintain these rights.

**Wat-G3:** Consider developing a long-term water resource management strategy for HCNRA that addresses consumptive and nonconsumptive water rights, uses, and requirements, including instream flow needs. Use this strategy to guide update of existing and writing of new site plans. Consider policies, objectives, guidelines and standards in the State of Oregon's Grande Ronde Basin Program (OAR 690-508), Powder Basin Program (OAR 690-509), Middle Snake River Basin Program (OAR 690-520), and Public Interest Standards for New Applications (OAR 690-33), and in the Idaho State Water Plan (1992) and Comprehensive State Water Plan Rules (IDAPA 37.02.01).

## **1990 Land and Resource Management Plan Direction (p. 4-26 to 4-27)**

### **Municipal Watersheds**

#### **Goal**

All domestic supply watersheds will be managed to maintain or improve water quality and stream flows so that with adequate treatment by the purveyor a safe and satisfactory water supply will result.

#### **Standards and Guidelines Applicable to All Domestic Supply Watersheds**

1. Logging and Transportation Systems. Design and develop logging and transportation systems to protect water quality.
2. Project Analysis. Site-specific analysis under the Forest Service NEPA process will be completed for all projects and activities proposed within the watersheds having the potential to affect water quantity or quality. This analysis will include consultation with the city served by the watershed in the case of vegetation manipulation, this analysis may include evaluation of opportunities for improving streamflow volume and timing.
3. Monitoring. Monitor activities having the potential to affect water quality to determine if objectives are met. If not, on-site corrective measures within the municipal watershed, will be immediately initiated by the Forest Service.
4. Use Of Chemicals. Use fertilizers and pesticides (chemical or biological) within the watersheds only in emergency situations, and then only following close coordination with the City.
5. Avoid use of fire retardants within domestic supply watersheds when other effective measures of fire control are available. When the use of fire retardants within domestic supply watersheds is necessary, all reasonable efforts will be made to avoid direct application into live streams. Only fertilizer-based retardants will be used.
6. Fire Camps and Timber Sale Operations. Locate fire camps only outside of municipal supply watersheds. When timber sales or other operations are located within a municipal watershed, wastes (including domestic, human, oil from machinery, etc.) will be transported outside the watershed for disposal.
7. Other Practices. Where practices other than those specified in management area direction better serve the multi-resource objectives of the watersheds, and these practices will serve to protect or enhance water quality, quantity, or timing, these practices may be used.

#### **Cultivated Areas**

The following guidelines are opportunities that may need further site-specific analysis.

**Cul-O1:** Maintain historic uses of cultivated fields and pastures outside Hells Canyon Wilderness.

**Cul-G1:** Management of historic cultivated lands outside Hells Canyon Wilderness, including those sites within wild and scenic rivers, may include use of traditional equipment, including tractors, plows, harrows, mowers, buck rakes and similar equipment.

**Cul-G2 for Cache Creek Ranch:** Consider managing up to 64 acres for native plant production, and/or pasture of livestock, including plowing, disking, planting, irrigating, grazing, harvesting, herbicide use for noxious weed control, and irrigation ditch maintenance, as needed.

**Cul-G3 for Dug Bar Ranch:** Consider authorizing the Lone Pine Allotment permittee to continue to irrigate the 25-acre field for hay production, nonnative crops, native plant production, and/or pasture, including plowing, disking, planting, irrigating, grazing, harvesting, herbicide use for noxious weed control and irrigation system maintenance, as needed. If the Lone Pine Allotment permittee no longer desires or requires the use of these lands, manage to maintain the water rights and consider management for native seed production and aesthetic values.

**Cul-G4 for Pittsburg Ranch:** Consider irrigating the lawn and orchard for interpretative and administrative purposes. Consider transferring part of the Dug Bar water right to the old irrigated field if needed for pack and saddle stock or to protect the rights at Dug Bar Ranch from nonuse. If the fields are irrigated again, management activities may include plowing, disking, planting, irrigating with a sprinkler system and/or ditch system, grazing, harvesting, herbicide use for noxious weed control, and irrigation system maintenance, as needed.

**Cul-G5 for Temperance Creek Ranch:** Consider authorizing permittee to manage about 80 acres for hay production, nonnative crops, native plant production, and/or pasture, including plowing, disking, planting, irrigating, grazing, harvesting, herbicide use for noxious weed control, and irrigation ditch and/or sprinkler system maintenance, as needed.

**Cul-G6 for Circle C Ranch:** Consider authorizing the Pittsburg Allotment permittee to manage about 80 acres for hay production, nonnative crops, native plant production, and/or pasture, including plowing, disking, planting, irrigating, grazing, harvesting, herbicide use for noxious weed control, and irrigation ditch maintenance, as needed. If the Pittsburg Allotment permittee no longer desires or requires the use of these lands, manage to maintain the water rights and consider management for native seed production and native ecosystem.

**Cul-G7 for Kirkwood Historic Ranch:** Consider managing about eight acres for pasture by recreational and administrative pack and saddle stock, including plowing, disking, planting, irrigating, grazing, harvesting, herbicide use for noxious weed control, and irrigation ditch maintenance, as needed.

**Cul-G8 for Thorn Creek Guard Station:** Consider managing the two pastures (5.2 acres) for Forest Service pack and saddle stock, including plowing, disking, planting, irrigating, grazing, harvesting, herbicide use for noxious weed control, and irrigation ditch maintenance, as needed.

**Cul-G9 for Sheep Creek Ranch:** Consider managing about four acres for pasture by recreational and administrative pack and saddle stock, including plowing, disking, planting, irrigating, grazing, harvesting, herbicide use for noxious weed control, and irrigation ditch maintenance, as needed.

**Cul-G10 for Other Sites:** Consider managing other historic cultivated fields located outside Hells Canyon Wilderness for pasture, or native plant production, as needed, including fields located at Cat Creek Ranch, Cherry Creek Ranch, Christmas Creek Ranch, and Jim Creek Ranch. If additional cultivated lands within HCNRA are acquired through land exchange or purchase, consider maintaining management to maintain historic uses in development of site plans.

## **Biological Soil Crusts**

**Cru-O1:** Conduct management activities in a manner that maintains, enhances, and facilitates restoration of healthy biological soil crust communities.

**Cru-O2:** Develop a management plan for biological soil crusts in the HCNRA. Include an analysis of which plant associations have high to moderate existing or potential development of biological soil crusts; maps showing various crust potential, recommendations for maintenance and restoration of biological soil crusts, and monitoring techniques.

**Cru-O3:** Develop, through project level planning, management objectives that include desired levels of biological soil crust development based on site capability and rangeland health indicators of site stability and nutrient cycling. Use the biological soil crust evaluation process developed by the Bureau of Land Management-Idaho Office for this evaluation until a HCNRA specific evaluation process is developed.

**Cru-S1:** Where human-caused activities are found to be creating unacceptable impacts to biological soil crusts, implement changes in management to reduce or eliminate the impacts. These may include changes in the timing, intensity, frequency, or duration of the activity.

**Cru-G1:** Designate and protect representative biological soil crust communities as reference areas and genetic reserves geographically throughout the HCNRA.

**Cru-G2:** In areas with high potential or current biological soil crust development, consider grazing strategies that minimize the frequency of surface disturbance during dry periods, and in the spring to allow re-growth. Encourage use of grazing systems that maximize the time between disturbances.

**Cru-G3:** Consider locating water developments and salting areas on sites with low potential for biological soil crust development. Use fences or other structures to divert trailing away from sites with high potential for biological soil crust.

**Cru-G4:** When planning PF, identify areas with high current, or potential for, biological soil crusts. Consider using burning techniques and timing that minimize potential negative impacts to biological soil crusts. These include fall burning, minimal use of mechanical equipment, encouraging low-intensity fires, and encouraging burning in mosaic patterns.

**Cru-G5:** Following prescribed or wildfire, consider rest or modification of grazing season in areas of high potential habitat for biological soil crusts.

### **Noxious Weeds, Nonnative and Invasive Plants**

The following direction supplements the WWNF Integrated Noxious Weed Management Plan (USDA 1992) and Forest Plan Amendment 4.

**Nox-O1:** Manage noxious weeds to reduce negative impacts to native plants, wildlife, and other resources. Use all reasonable and feasible integrated weed management processes available under existing decisions and direction to prevent, restore, eradicate, control, contain, or otherwise reduce negative impacts of noxious weeds.

**Nox-O2:** Evaluate extent of nonnative invasive plants, their relative impacts and potential for restoration.

**Nox-O3:** Evaluate the factors contributing toward the spread of nonnative invasive plants and implement appropriate prevention strategies.

Note to reader: Refer to the **Recreation** section for direction that requires all pack and saddle stock users to carry and use pellets or other certified weed-free feed.

**Nox-G1:** Conduct restoration activities on grassland sites in mid-seral or earlier status to improve the ability of native vegetation on site to resist invasion and occupancy by noxious weeds.

**Nox-G2:** Develop a public information and education program on preventing the introduction and spread of noxious weeds. Provide a reporting method for and encourage the public to report new weed sites.

**Nox-G3:** Provide for natural restoration of degraded sites by modifying management activities as necessary.

**Nox-G4:** Consider quarantine or closure of some areas, trails, and/or roads to prevent the spread of noxious weeds to adjacent areas.

**Nox-G5:** When planning PF projects, identify sites of known noxious weeds and/or invasive species of concern. Avoid burning through identified weed sites and/or prescribe management actions that minimize the potential for creation of site conditions favorable to the spread of invasive weeds.

**Nox-G6:** Contain and/or control aggressive noxious weeds and other nonnative plants that reduce ground cover, reduce perennial plant cover, and accelerate erosion.

#### **1990 Land and Resource Management Plan Amendment #4**

In 2005, the regional forester amended the 1990 forest plans with the direction displayed below. Many standards and guidelines in the 1990 forest plans were superseded by this new amendment. The numbering is not sequential because the selected alternative adopted no standard for standards 5, 9, 10, and 17.

### ***2005 Preventing and Managing Invasive Plants FEIS ROD Elements***

#### ***Standards and Guidelines***

Standard 1. Prevention of invasive plant introduction, establishment and spread will be addressed in watershed analysis; roads analysis; fire and fuels management plans, Burned Area Emergency Recovery Plans; emergency wildland fire situation analysis; wildland fire implementation plans; grazing allotment management plans, recreation management plans, vegetation management plans, and other land management assessments.

Standard 2. Actions conducted or authorized by written permit by the Forest Service that will operate outside the limits of the road prism (including public works and service contracts), require the cleaning of all heavy equipment (bulldozers, skidders, graders, backhoes, dump trucks, etc.) prior to entering National Forest System Lands.

This standard does not apply to initial attack of wildland fires, and other emergency situations where cleaning would delay response time.

Standard 3. Use weed-free straw and mulch for all projects, conducted or authorized by the Forest Service, on National Forest System Lands. If State certified straw and/or mulch is not available, individual Forests should require sources certified to be weed free using the North American Weed Free Forage Program standards (see Appendix O) or a similar certification process.

Standard 4. Use only pelletized or certified weed free feed on all National Forest System lands. If state certified weed free feed is not available, individual Forests should require feed certified to be weed free using North American Weed Free Forage Program standards or a similar certification process. This standard may need to be phased in as a certification processes are established.

Standard 6. Use available administrative mechanisms to incorporate invasive plant prevention practices into rangeland management. Examples of administrative mechanisms include, but are not limited to, revising permits and grazing allotment management plans, providing annual operating instructions, and adaptive management. Plan and implement practices in cooperation with the grazing permit holder.

Standard 7. Inspect active gravel, fill, sand stockpiles, quarry sites, and borrow material for invasive plants before use and transport. Treat or require treatment of infested sources before any use of pit material. Use only gravel, fill, sand, and rock that is judged to be weed free by District or Forest weed specialists.

Standard 8. Conduct road blading, brushing and ditch cleaning in areas with high concentrations of invasive plants in consultation with District or Forest-level invasive plant specialists, incorporate invasive plant prevention practices as appropriate.

Standard 11. Prioritize infestations of invasive plants for treatment at the landscape, watershed or larger multiple forest/multiple owner scale.

Standard 12. Develop a long-term site strategy for restoring/re-vegetating invasive plant sites prior to treatment.

Standard 13. Native plant materials are the first choice in re-vegetation for restoration and rehabilitation where timely natural regeneration of the native plant community is not likely to occur. Non-native, noninvasive plant species may be used in any of the following situations:

- 1) When needed in emergency conditions to protect basic resource values (e.g., soil stability, water quality and to help prevent the establishment of invasive species);
- 2) As an interim, non-persistent measure designed to aid in the reestablishment of native plants;
- 3) If native plant materials are not available; or
- 4) In permanently altered plant communities. Under no circumstances will nonnative invasive plant species be used for re-vegetation.

Standard 14. Use only APHIS and State-approved biological control agents. Agents demonstrated to have direct negative impacts on non-target organisms would not be released.

Standard 15. Application of any herbicides to treat invasive plants will be performed or directly supervised by a State or Federally licensed applicator. All treatment projects that involve the use of herbicides will develop and implement herbicide transportation and handling safety plan.

Standard 16. Select from herbicide formulations containing one or more of the following 10 active ingredients: chlorsulfuron, clopyralid, glyphosate, imazapic, imazapyr, metsulfuron methyl, picloram, sethoxydim, sulfometuron methyl, and triclopyr.

Mixtures of herbicide formulations containing 3 or less of these active ingredients may be applied where the sum of all individual Hazard Quotients for the relevant application scenarios is less than 1.0.

All herbicide application methods are allowed including wicking, wiping, injection, spot, broadcast and aerial, as permitted by the product label. Chlorsulfuron, metsulfuron methyl, and sulfometuron methyl will not be applied aerially. The use of triclopyr is limited to selective application techniques only (e.g., spot spraying, wiping, basal bark, cut stump, injection).

Additional herbicides and herbicide mixtures may be added in the future at either the Forest Plan or project level through appropriate risk analysis and NEPA/ESA procedures. This standard will be applied to invasive plant projects with NEPA decisions signed after March 1, 2006.

Standard 18. Use only adjuvants (e.g. surfactants, dyes) and inert ingredients reviewed in Forest Service hazard and risk assessment documents such as SERA, 1997a, 1997b; Bakke, 2003.

Standard 19. To minimize or eliminate direct or indirect negative effects to non-target plants, terrestrial animals, water quality and aquatic biota (including amphibians) from the application of herbicide, use site-specific soil characteristics, proximity to surface water and local water table depth to determine herbicide formulation, size of buffers needed, if any, and application method and timing. Consider herbicides registered for aquatic use where herbicide is likely to be delivered to surface waters.

Standard 20. Design invasive plant treatments to minimize or eliminate adverse effects to species and critical habitats proposed and/or listed under the Endangered Species Act. This may involve surveying for listed or proposed plants prior to implementing actions within unsurveyed habitat if the action has a reasonable potential to adversely affect the plant species. Use site-specific project design (e.g. application rate and method, timing, wind speed and direction, nozzle type and size, buffers, etc.) to mitigate the potential for adverse disturbance and/or contaminant exposure.

Standard 21. Provide a minimum buffer of 300 feet for aerial application of herbicides near developed campgrounds, recreation residences and private land (unless otherwise authorized by adjacent private landowners).

Standard 22. Prohibit aerial application of herbicides within legally designated municipal watersheds.

Standard 23. Prior to implementation of herbicide treatment projects, National Forest system staff will ensure timely public notification. Treatment areas will be posted to inform the public and forest workers of herbicide application dates and herbicides used. If requested, individuals may be notified in advance of spray dates.

#### ***Desired Conditions***

In National Forest lands across Region Six, healthy native plant communities remain diverse and resilient, and damaged ecosystems are being restored. High quality habitat is provided for native organisms throughout the region. Invasive plants do not jeopardize the ability of the National Forests to provide goods and services communities expect. The need for invasive plant treatment is reduced due to the effectiveness and habitual nature of preventative actions, and the success of restoration efforts.

#### ***Goals and Objectives***

##### **Goal 1**

Protect ecosystems from the impacts of invasive plants through an integrated approach that emphasizes prevention, early detection, and early treatment. All employees and users of the National Forest recognize that they play an important role in preventing and detecting invasive plants.

Objective 1.1 Implement appropriate invasive plant prevention practices to help reduce the introduction, establishment and spread of invasive plants associated with management actions and land use activities.

Objective 1.2 Educate the workforce and the public to help identify, report, and prevent invasive plants.

Objective 1.3 Detect new infestations of invasive plants promptly by creating and maintaining complete, up-to-date inventories of infested areas, and proactively identifying and inspecting susceptible areas not infested with invasive plants.

Objective 1.4 Use an integrated approach to treating areas infested with invasive plants. Utilize a combination of available tools including manual, cultural, mechanical, herbicides, biological control.

Objective 1.5 Control new invasive plant infestations promptly, suppress or contain expansion of infestations where control is not practical, conduct follow up inspection of treated sites to prevent reestablishment.

##### **Goal 2**

Minimize the creation of conditions that favor invasive plant introduction, establishment and spread during land management actions and land use activities. Continually review and adjust land management practices to help reduce the creation of conditions that favor invasive plant communities.

Objective 2.1 Reduce soil disturbance while achieving project objectives through timber harvest, fuel treatments, and other activities that potentially produce large amounts of bare ground.

Objective 2.2 Retain native vegetation consistent with site capability and integrated resource management objectives to suppress invasive plants and prevent their establishment and growth.

Objective 2.3 Reduce the introduction, establishment and spread of invasive plants during fire suppression and fire rehabilitation activities by minimizing the conditions that promote invasive plant germination and establishment.

Objective 2.4 Incorporate invasive plant prevention as an important consideration in all recreational land use and access decisions. Use Forest-level Access and Travel Management planning to manage both on-highway and off-highway travel and travel routes to reduce the introduction, establishment and spread of invasive plants.

Objective 2.5 Place greater emphasis on managing previously “unmanaged recreation” (OHVs, dispersed recreation, etc.) to help reduce creation of soil conditions that favor invasive plants, and reduce transport of invasive plant seeds and propagules.

### Goal 3

Protect the health of people who work, visit, or live in or near National Forests, while effectively treating invasive plants. Identify, avoid, or mitigate potential human health effects.

Objective 3.1 Avoid or minimize public exposure to herbicides, fertilizer, and smoke.

Objective 3.2 Reduce reliance on herbicide use over time in Region Six.

### Goal 4

Implement invasive plant treatment strategies that protect sensitive ecosystem components, and maintain biological diversity and function within ecosystems. Reduce loss or degradation of native habitat from invasive plants while minimizing adverse effects from treatment projects.

Objective 4.1 Maintain water quality while implementing invasive plant treatments.

Objective 4.2 Protect non-target plants and animals from negative effects of both invasive plants and applied herbicides. Where herbicide treatment of invasive plants is necessary within the riparian zone, select treatment methods and chemicals so that herbicide application is consistent with riparian management direction contained in PACFISH, INFISH, and the Aquatic Conservation Strategies of the Northwest Forest Plan.

Objective 4.3 Protect threatened, endangered, and sensitive species habitat threatened by invasive plants. Design treatment projects to protect threatened, endangered, and sensitive species and maintain species viability.

### Goal 5

Expand collaborative efforts between the Forest Service, our partners, and the public to share learning experiences regarding the prevention and control of invasive plants, and the protection and restoration of native plant communities.

Objective 5.1 Use an adaptive management approach to invasive plant management that emphasizes monitoring, learning, and adjusting management techniques. Evaluate treatment effectiveness and adjust future treatment actions based on the results of these evaluations.

Objective 5.2 Collaborate with tribal, other federal, state, local and private land managers to increase availability and use of appropriate native plants for all land ownerships.

Objective 5.3 Work effectively with neighbors in all aspects of invasive plant management: share information and resources, support cooperative weed management, and work together to reduce the inappropriate use of invasive plants (landscaping, erosion control, etc.).

## Heritage Resources

The following direction supplements Forest Plan management direction (pages 4-19 through 4-21).

**Goal:** Heritage resource management and potential management activities that may affect heritage resources are consistent with the *National Historic Preservation Act of 1966 as amended; National Environmental Policy Act of 1969; Executive Order 11593; American Indian Religious Freedom Act of 1978; Archaeological Resource Protection Act of 1979 as amended; Native American Graves Protection and Repatriation Act of 1990; Executive Order 13007; and Public LURs (36 CFR 292.43)* within the HCNRA.

**Goal:** Historic sites that typify the economic and social history of the region and American west are managed for their preservation and restoration.

**Goal:** Heritage resources are protected from damage or destruction. Heritage resources are managed for scientific research, public education and enjoyment to the extent consistent with their protection. (Public LURs, 36 CFR 292.43(a)(1))

**Her-O1:** Evaluate historic sites for preservation and restoration that typify the economic and social history of the region and the American West. Preserve and restore selected sites that typify the economic and social history of the region and the American West.

**Her-O2:** Focus restoration efforts on historic sites with a high potential for on-site interpretation of the economic and social history of the region and the American West and/or that could be utilized in the Recreation Rental or Fee Demo programs, and on prehistoric sites that are in danger of being damaged or destroyed by natural or other processes.

**Her-O3:** As part of the management of American Indian heritage sites, consult with the Nez Perce Tribe to ensure that tribal concerns are addressed.

**Her-S1:** Determine the significance of heritage resources by applying the National Register criteria for evaluation (36 CFR 800), that consider the architecture, archeology, engineering, and culture of districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association with prehistory or American history. (36 CFR 800)

**Her-S2:** Public education and information activities concerning heritage resources are not offered or established within the Hells Canyon Wilderness. If deemed necessary or appropriate, provide interpretive activities involving heritage resources at visitor centers, trailheads, or schools. (Public LURs, 36 CFR 292.43 (b)(2), New)

**Her-S3:** Do not develop new trails or relocations of existing trails for the sole purpose of providing public access to heritage resource sites in Hells Canyon Wilderness. (Public LURs, 36 CFR 292.43(b)(3), New).

**Her-S4:** Utilize criteria set forth in 36 CFR 800 as amended to determine whether projects, operating plans, or proposed activities have an adverse effect on heritage resources. (36 CFR 800)

**Her-S5:** Protect significant heritage resources on-site unless off-site protection is preferable because: 1) adequate on-site protection is not possible, 2) the resource is already adequately represented and protected on-site elsewhere, 3) protection on-site is not consistent with administration of the Hells Canyon Wilderness, or 4) for other good causes shown. (Public LURs, 36 CFR 292.43 (a)(2) and (a)(3))

**Her-S6:** Consult with interested American Indian groups and appropriate tribal governments prior to construction of facilities within proximity to significant heritage resource sites.

**Her-S7:** Consult with the Nez Perce Tribe to prioritize and manage plant, wildlife, and fishery species identified as important to Tribe for harvesting, gathering, and for cultural, spiritual, and religious activities.

**Her-S8:** In conjunction with the Nez Perce Tribe, protect American Indian sites, where determined to be necessary and desirable, using natural barriers such as native vegetation.

**Her-S9:** Prevent degradation of heritage resource sites from domestic livestock grazing through appropriate practices.

**Her-S10:** Conduct maintenance, renovation, and/or restoration activities involving listed or potentially eligible historic properties, in accordance with the *Secretary's Standards for Rehabilitation of Historic Properties*. (36 CFR 68)

**Her-S11:** Continue to monitor those sites listed on the National Register of Historic Places, or those sites eligible for listing, on an interval/frequency sufficient to determine if change or adverse impacts are occurring, at no less than three-year intervals.

**Her-S12:** Manage outfitter and guide program pursuant to heritage resource protection. Require outfitters to obtain heritage resource protection training as a condition of permit issuance so they can inform customers/guests of the significance and sensitivity of heritage resources and potential penalties for damaging, defacing, or removing heritage resources.

**Her-S13:** Permitted activities resulting in damage or destruction of heritage resources are responsible for their restoration.

**Her-S14:** Continue mapping heritage resources, including global positioning coordinates, based on priorities of sites listed, eligible for listing, or potentially eligible for listing on the National Register of Historic Places.

**Her-S15:** Protect prehistoric sites in higher use areas and outside the Hells Canyon Wilderness with custodial maintenance of existing interpretation opportunities. Protect prehistoric sites in lower recreation use areas and inside the Hells Canyon Wilderness by managing for self-discovery interpretation opportunities.

**Her-S16:** Maintain, stabilize, or restore the most significant representative historical structures within or outside Hells Canyon Wilderness. Allow other structures to deteriorate following appropriate data collection. Within the Hells Canyon Wilderness, allow structures or sites used in administration of wilderness resources and permitted domestic livestock operations to remain.

Note to reader: Refer to the **Federal Trust Responsibilities** section for additional management direction related to the Nez Perce Tribe.

**Her-G1:** Consider the following elements in addition to 36 CFR 800 as amended criteria to determine adverse effects on heritage resources:

- Surface disturbance - cultural/human or natural surface disturbance occurs when either vegetation or mineral soil is disrupted to the point that context or integrity of site is threatened.
- Removal or alteration of structural elements.
- Removal or alteration of mapped artifacts.
- Modification or alteration of physical environment or setting.

**Her-G2:** Consider the use of a programmatic memorandum of agreement to help meet concerns of the Nez Perce Tribe regarding traditional use and prehistoric resources.

**Her-G3:** Consider *Nez Perce National Historical Park General Management Plan* (USDI 1997) in protecting and providing interpretation for Nez Perce sites on the HCNRA.

**Her-G4:** Make heritage resource protection and sensitivity guidelines available for the general public. Make videos available for viewing in visitor centers and offices. Provide heritage resource protection training for outfitters and guides on an annual basis, or as needed, to foster increased sensitivity and awareness.

**Her-G5:** In cooperation with private landowners, develop mechanism for monitoring heritage resources on private lands within the HCNRA per the Private LURs. (Private LURs, 36 CFR 292.23(a)(6))

**Her-G6:** Develop a heritage resource management plan including the following elements:

- Determine the relative significance of all heritage resources within the HCNRA using a thematic approach (Refer to **Her-G10**).
- Establish protection, preservation, and enhancement priorities for prehistoric and historic resources.
- Establish interpretive opportunities and priorities and tier to HCNRA interpretive plan.
- Develop research design and establish research priorities for heritage resources.
- Identify and develop management guidelines for traditional use sites through consultation with American Indian community.
- Develop maintenance and protection plan for key historic structures.
- Establish monitoring priorities and develop monitoring plan and monitoring schedule.
- Develop/establish inventory priorities for uninventoried portions of HCNRA.

**Her-G7:** Consider developing a heritage data base that interacts with geographic information systems.

**Her-G8:** Develop a heritage site steward plan in cooperation with the public and outfitter communities.

**Her-G9:** Evaluate structures and facilities within the entire HCNRA, including Hells Canyon Wilderness, for stabilization, restoration, or maintenance based on potential historical value.

**Her-G10:** Use the following interpretive heritage themes in each of the Recreation Analysis Areas:

Table 6: Heritage Themes for Recreation Analysis Areas

| Area | Name          | Heritage Theme         |
|------|---------------|------------------------|
| 01   | Sheep Creek   | Prehistoric Settlement |
| 02   | Dry Diggins   | Self-discovery         |
| 03   | Sheep Lake    | Self-discovery         |
| 04   | Seven Devils  | Self-discovery         |
| 05   | Baldy Lake    | Self-discovery         |
| 06   | East Face     | Self-discovery         |
| 07   | Horse Heaven  | Self-discovery         |
| 08   | Granite Creek | Prehistoric Settlement |
| 09   | Lakes Basin   | Self-discovery         |
| 10   | Black Lake    | Historic Mining        |

|    |                       |                                                         |
|----|-----------------------|---------------------------------------------------------|
| 11 | Windy Saddle          | Forest Service, Fire Management, Self-discovery         |
| 12 | East Rim Loops        | Self-discovery                                          |
| 13 | Kirkwood              | Historic Ranching, Prehistoric Settlement               |
| 14 | Pittsburg Landing     | Prehistoric Settlement, Homesteading, Historic Ranching |
| 15 | Big Canyon            | Self-discovery                                          |
| 26 | Cottonwood            | Prehistoric Settlement                                  |
| 27 | Buckhorn/Cold Springs | Historic American Indian                                |
| 28 | Jim/Cherry Creek      | Prehistoric Settlement                                  |
| 29 | Lower Imnaha          | Prehistoric Settlement, Historic Ranching               |
| 30 | Tryon/Deep Creek      | Prehistoric Settlement, Historic Ranching               |
| 31 | Somers Point          | Self-discovery                                          |
| 32 | Lord Flat             | Historic Ranching                                       |
| 33 | Mormon Flat           | Self-discovery                                          |
| 34 | Horse Creek           | Self-discovery                                          |
| 35 | Imnaha                | Self-discovery                                          |
| 36 | Hat Point             | Forest Service, Fire Management, History                |
| 37 | Saddle Creek          | Self-discovery                                          |
| 38 | Lookout Mountain      | Self-discovery                                          |
| 39 | Buck Creek            | Self-discovery                                          |
| 40 | McGraw                | Prehistoric Settlement                                  |
| 41 | Upper Imnaha          | Historic American Indian                                |
| 42 | North Pine            | Prehistoric Settlement                                  |
| 50 | Wild Snake River      | Historic Ranching, Prehistoric Settlement, Homesteading |
| 51 | Scenic Snake River    | Historic Ranching, Prehistoric Settlement, Homesteading |
| 99 | Rapid River           | Prehistoric Settlement, Traditional Use                 |

## 1990 Land and Resource Management Plan Direction (p. 4-19 to 4-21)

### CULTURAL RESOURCES

#### Goal

To provide for the identification, protection, preservation, enhancement and interpretation of prehistoric and historic sites, buildings, objects, and antiquities of local, regional or National significance so as to preserve their historical, cultural, and scientific values for the benefit of the public.

#### Standards and Guidelines

1. Overview. Maintain a Forest-wide cultural resources overview that summarizes and compiles known cultural resource information.
2. Research Design. Maintain a Forest research design to guide cultural resource surveys, establish site significance, and establish priorities for scientific investigation and opportunities for interpretation.
3. Inventory. Conduct Forest-wide cultural resource inventories (survey and site recordation) according to strategies and consultation procedures established on the Forest. Emphasize areas where ground disturbing activities are planned, to ensure discovery of all reasonably locatable cultural resources. Inventories of other areas (e.g., wilderness and National Recreation Area) will be accomplished as needed to protect resources in high use areas. These inventories will be designed and supervised by a cultural resource professional.
4. Evaluation. Evaluate cultural resources that may be affected by project activities. Evaluate against the criteria for eligibility to the National Register of Historic Places. Develop a plan to evaluate all other

cultural resources by theme groups, agreements, or other cost-effective means as Forest-wide inventory nears completion.

5. Nomination. Nominate cultural resources that meet the appropriate criteria to the National Register of Historic Places. Nominations will be scheduled incidentally until completion of the Forest-wide inventory of cultural resources.

6. Protection. Protect the resources considered eligible for the National Register of Historic Places by making reasonable efforts to avoid adverse impacts to the resources or develop a procedure to conserve the values through proper scientific methods and study.

7. Consider the effects of all Forest Service undertakings on significant cultural resources and avoid or mitigate any adverse effects.

8. Protect eligible cultural resources from human depredation and natural destruction. Protection plans may include physical protection such as fences and barriers, scientific study and collection, patrol and site monitoring, proper use or removal of signs, maintaining site anonymity, and gaining public understanding and support through education.

9. Protect and maintain eligible historic sites and structures based on an analysis of utility, interpretive value, and public interest, existing site or area allocation, funding sources, existing agreements, etc.

10. Resource Enhancement. Interpret suitable cultural resource properties for the recreational use and educational benefit of the general public. The measure of suitability should be based on accessibility to the public, with other resource management activities within or adjacent to the area, thematic representation, and value to public groups. Interpretive service and facilities should be compatible with the nature, qualities, and integrity of the cultural sites selected for enhancement. Preferred methods include brochures, signs, and self-guided tours. Handicapped access to interpreted sites will be provided wherever practicable.

11. Provide opportunities for scholarly/scientific use of designated historic and prehistoric sites, after coordinating selection of appropriate prehistoric sites with the relevant Native American groups. This may require "banking" of sites for future use, processing of antiquities permits for testing, and excavation of sites by qualified professionals.

12. Protect, enhance, and interpret both archaeological and historic resources, for the public benefit and knowledge, insofar as it is compatible with protection, in accordance with PL 94-199, the act establishing the Hells Canyon National Recreation Area.

13. Conflicts with Other Activities. When other resource management activities conflict with the protection and management of cultural resource properties, the sites will be evaluated to determine their significance. Depending on the nature of the project, the activity may be redesigned to avoid damage or disturbance to a significant site, or damage otherwise mitigated. In instances where avoidance is not possible, the value of the property may be conserved through a professionally-acceptable data recovery program.

14. Coordination. Coordinate management of cultural resources with other agencies including the State Historic Preservation Offices and the Advisory Council on Historic Preservation, as required by Federal and State historic preservation laws and regulations.

15. Management of traditional religious sites will be coordinated with American Indian groups.

16. Present information about planned project activities to American Indian groups for coordination about effects on traditional religious sites.

17. Site Developing. Develop cultural resources for educational, scientific, or recreational purposes including interpretation, as long as the integrity of the resource is maintained where appropriate.

18. Ensure that cultural resource properties and their records are protected to prevent unauthorized uses and degradation.

19. Monitoring. Monitor public use of cultural properties to prevent degradation or as specified in a management plan for the property.

## Federal Trust Responsibilities

The following direction supplements Forest Plan management direction (pages 4-18 through 4-19), and the Columbia River Basin Anadromous Fish Habitat Management Policy and Implementation Guide (USDA 1991).

**Goal:** Manage natural resources consistent with the 1855 treaty with the Nez Perce Tribe (FSM 1563). Express rights reserved under the *Treaty of 1855* include those found in Article 3 of the Treaty, "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".

**Tru-O1:** Consult with the Nez Perce Tribe and other agencies to prioritize, manage and monitor population trends of harvestable species, effectiveness of actions, and conflicts with other users, management, or resources demands.

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

**Tru-S2:** Assure that management actions do not prevent access to usual and accustomed fishing places, hunting locations, gathering sites, and other cultural sites. Consult with the Nez Perce Tribe before changing access, closing roads, or exchanging these lands.

**Tru-S3:** Consult with the Nez Perce Tribe on changes in access or ownership that may affect treaty reserved rights or the exercising of said rights on National Forest System land.

**Tru-S4:** Conduct and document an analysis of impacts to culturally significant plants during site-specific NEPA analysis. Design projects to minimize negative impacts to culturally significant plant populations; and when possible, enhance habitat of these species.

**Tru-S5:** Consult with the Nez Perce Tribe to identify species and/or areas of cultural concern and to develop recommended management strategies to enhance populations and habitat of culturally significant plants, wildlife, and fisheries.

**Tru-S6:** Work closely with the Nez Perce Tribe in supporting efforts to exercise treaty grazing rights and implement a feasible grazing strategy.

**Tru-G1:** Work closely with the Nez Perce Tribe to prioritize and manage natural resources important to the Tribe for harvesting, gathering, and for cultural, spiritual, and religious activities identified by the Tribe.

**Tru-G2:** Work closely with the Nez Perce Tribe, and other tribes with treaty rights, in supporting efforts to restore, manage, and rehabilitate vegetative, wildlife, and fishery resources which are not currently meeting tribal goals and responsibilities or are expected to decline in the future.

**Tru-G3:** Consult with the Nez Perce Tribe to develop and implement a strategy to monitor the taking and harvesting of natural resources for which the Forest Service has management responsibilities to determine whether the activity adversely impacts habitat or reduces populations of species to the point where federal listing may become necessary, or where federally listed threatened and endangered or proposed, or candidate species are adversely affected.

**Tru-G4:** Consult with the Nez Perce Tribe to develop and implement management strategies where user conflicts develop, or demand exceeds supply for harvest and gathering resources desired by tribal and nontribal users. Identify opportunities with the Nez Perce Tribe to enhance plant species of interest to the Tribe.

Note to reader: Refer to the **Heritage, Vegetation, Fire, Riparian/Aquatic Habitat, and Wildlife Habitat** sections in this plan for additional management direction related to protecting treaty resources.

## **1990 Land and Resource Management Plan Direction (p. 4-18 to 4-19)**

### **CIVIL RIGHTS**

#### **Goal**

To provide all persons equal opportunity regardless of race, color, creed, **sex**, marital status, age, handicap, religion, or national origin.

#### **Standards and Guidelines**

1. Barriers. Manage the Forest to minimize social and administrative barriers to its use.
2. Affirmative Action. Maintain and implement an affirmative action plan for hiring, supervisory, and contracting procedures.
3. Employing the Handicapped. Actively pursue the employment of the handicapped and ensure that the needs of the handicapped are considered in the design of Forest facilities.
4. Compliance Reviews. Conduct compliance reviews as required by Title VI of the Civil Rights Act of 1964, within standards established by the Forest Service.
5. Informing the Public. Inform the general public, including minorities and the underprivileged, of benefits they are eligible to receive from Forest programs Techniques and the media best suited to increase awareness and participation will be used.
6. Ceded Lands. Consider and appropriately provide for the ceded land rights and privileges of the Walla Walla, Cayuse, Umatilla, and Nez Perce Indian Tribes, under the treaties of 1855 in all Forest activities.\*

[\*Certain rights and privileges are afforded members of the Nez Perce and the Umatilla Confederated Indian Tribes by virtue of the treaties of 1855. These treaties resulted in cession by the Indians to the United States of a large territory which includes approximately two-thirds of what is now the Wallowa-Whitman National Forest. The treaties provide that the Indians will continue to have the rights of taking fish in streams running through and bordering the reservations and at all other usual and accustomed stations in common with other citizens of the United States and of erecting suitable buildings for fish curing, the privilege of hunting, gathering roots and berries, and pasturing stock on unclaimed lands. These rights will be considered through the management of appropriate resources such as fish, wildlife, and riparian areas.]

7. Access. Provide all Native American Indians access to sites, use and possession of sacred objects, and their freedom to worship through ceremonial and traditional rights as specified in the American Indian Religious Freedom Act (P. L. 95-341). Appropriate management consideration of these areas will be coordinated with the leaders of the Nez Perce Tribe, and the Confederated Tribes of the Umatilla Indian Reservation, the Northern Paiute Tribe, and the Shoshone Tribe.

8. Coordination. Coordinate with American Indians whenever a site that is sacred to any Native American group may be affected by management activities.

8. Site Protection. Meet the standards of 36 CFR 296.7. If an activity of the agency will harm or destroy a prehistoric site, the appropriate Indian tribe must be notified at least 30 days before.

9. Complete the Section 106 process (of the National Historic Preservation Act) for every potentially impacting Forest Service undertaking. This includes notification of interested Native American groups and tribes (36 CFR 800.1 (I) III).

## Soils

The following direction supplements Forest Plan management direction (pages 4-21 through 4-26).

**Goal:** Manage soil resources in a manner compatible with those values for which the HCNRA was established, recognizing that soil management objectives for particular management areas, ecosystems, habitats, sites, and resources may include preservation, conservation, protection, restoration and/or maintenance activities.

**Goal:** Maintain soil productivity and soil stability at acceptable levels by minimizing soil or ground cover disturbance during implementation of management activities. (Forest Plan)

**Soi-O1:** Manage soil surface conditions consistent with late-seral status depending on the PNC. During project planning and monitoring, document the location and condition of soils or sites that do not have this potential, or that have a lower rating due to impacts from wildfire, flood, or management activities, and develop appropriate soil improvement objectives, where needed.

**Soi-O2:** Complete a watershed improvement needs inventory for HCNRA that includes soil resource improvement needs. Focus soil resource restoration activities on management-related impacts not meeting desired conditions. (FSM 2522.04 WO Amend. 2500-2000-2 as updated)

**Soi-O3:** Complete an Order 2/3 ecological inventory (based on National Cooperative Soil Survey protocols) and Order 4 land systems inventory (based on Forest Service protocols) of HCNRA to provide basic soils, vegetation, geology, climate and landform information for evaluation of management activities. Inventory data and interpretations will be of sufficient detail to allow appropriate soil productivity and soil stability evaluations for management activities. (FSM)

**Soi-O4:** Identify and characterize unique soils that are a necessary part of the habitat for federally listed threatened and endangered, proposed or sensitive plant or animal species, biologically unique and rare combinations of outstanding and diverse ecosystems.

**Soi-S1:** Identify and evaluate adverse impacts to soil productivity and soil stability. (Forest Plan)

**Soi-G1:** Use soil information from land system inventories, ecological inventories, soil surveys, and soil site inspections, as appropriate, to evaluate soil characteristics, potentials and limitations, effects on soils, and protection, rehabilitation and monitoring needs when implementing management activities that will disturb soil or vegetation resources.

**Soi-G2:** Consider using the following methods to achieve soil quality and soil-related riparian/water quality objectives for management activities involving ground-based equipment use: (Forest Plan)

- Restrict equipment use to slopes under 30 percent gradient
- Restrict equipment use to periods of favorable soil moisture levels (i.e., when soils are dry, or the ground is frozen to at least 4 inches or snow depth is at least two feet).
- Designate landing and skid trail locations.
- Use full or partial suspension log yarding, where practicable and mechanically feasible, to minimize ground disturbance.

**Soi-G3:** Consider using the following methods to achieve soil quality and soil-related riparian/water quality objectives for all management activities:

- Restore damaged soils to as near pre-impact conditions as possible, where appropriate and practicable.
- Use native species, where practicable, when re-establishing vegetative ground cover following wildfire or management activities. (FSM 2600)
- Keep erosion control work current, when required; plan to complete all work prior to the first major rainfall or snowfall event that may prevent achievement of project objectives. (Forest Plan)
- Use fertilizer, where and when appropriate, to accelerate vegetation establishment or growth.

**Soi-G4:** Maintain the appropriate quantity and distribution of fine organic matter (less than 3 inch diameter) and coarse woody material (greater than 3 inch diameter) necessary to control erosion and to maintain nutrient recycling for long-term soil productivity.

#### **1990 Land and Resource Management Plan Direction (p. 4-21 to 4-26)**

#### **SOILS**

##### **Goal**

To maintain or enhance soil productivity.

##### **Standards and Guidelines**

1. Conflicts with Other Uses. Give maintenance of soil productivity and stability priority over uses described or implied in all other management direction, standards, or guidelines. Exceptions may occur for such things as campgrounds or transportation facilities when it is determined, through environmental analysis, to be in the public interest.
2. Protection. Minimize detrimental soil conditions with total acreage detrimentally impacted not to exceed 20 percent of the total acreage within the activity area including landings and system roads. Where detrimental conditions (see glossary) affect 20 percent or more of the activity area, restoration treatments will be considered. Detrimental soil conditions include compaction, puddling, displacement, and severe burning.
3. Give special consideration to scablands or other lands having shallow soils during project analysis. Such analysis will especially consider the fragile nature of the soils involved and, as necessary, provide protection and other mitigation measures.
4. Use approved skid trails, logging over snow or frozen ground, or some equivalent system for limiting the impact and areal extent of skid trails and landings and to prevent cumulative increases from multiple entries in tractor logging areas.
5. Re-establish vegetation following wild fire or management activities where necessary to prevent excessive erosion.

WATERSHED, (INCLUDING RIPARIAN ECOSYSTEMS, STREAMSIDE MANAGEMENT UNITS, FLOODPLAINS, WETLANDS, WATER RIGHTS, AND FISH HABITAT)

Goal

To maintain or enhance the unique and valuable characteristics of riparian areas and to maintain or improve water quality, streamflows, wildlife habitat, and fish habitat Design and conduct all management activities in all streamside management units to maintain or improve water quality and associated beneficial uses in SMU Class I and II streams. Management indicator species for riparian habitat include steelhead and resident trout.

Standards and Guidelines

1. Conflicts with Other Uses. Give management and enhancement of water quality, protection of watercourses and streamside management units, and fish habitat priority over uses described or implied in all other management standards or guidelines.

2. Water Quality Standards and BMP's. Meet Water Quality Standards for waters of the States of Oregon (Oregon Administrative Rules, Chapter 340-41) and Idaho through planning, application, and monitoring of Best Management Practices (BMP's) in conformance with the Clean Water Act, regulations, and federal guidance issued thereto.

3. Use the following process in cooperation with the States of Oregon and Idaho

a. Select and design BMP's based on site-specific conditions, technical, economic, and institutional feasibility, and the water quality standards for those waters potentially impacted. (See Watershed Management Practices Guide for Achieving Soil and Water Objectives, Wallowa-Whitman NF).

b. Implement and enforce BMP's.

c. Monitor to ensure that practices are correctly applied as designed.

d. Monitor to determine the effectiveness of practices in meeting design expectations and in attaining water quality standards.

e. Evaluate monitoring results and mitigate where necessary to minimize impacts from activities where BMP's do not perform as expected.

f. Adjust BMP design standards and application when it is found that beneficial uses are not being protected and water quality standards are not being achieved to the desired level. Evaluate the appropriateness of water quality criteria for reasonably assuring protection of beneficial uses. Where appropriate, consider recommending adjustment of water quality standards.

4. State Water Quality Management Plans. Implement (Oregon) State Water Quality Management Plans on lands administered by the USDA Forest Service as described in Memoranda of Understanding between the Oregon Department of Environmental Quality and U.S. Department of Agriculture, Forest Service (2/12/79 and 12/7/82), and "Attachments A and B" referred to in this MOU (Implementation Plan for Water Quality Planning on National Forest lands in the Pacific Northwest 12/78 and Best Management Practices for Range and Grazing Activities on Federal Lands, respectively.)

5. Mitigation. Mitigate negative impacts causing reduction in water quality to return water quality to previous levels in as short a time as possible. (It is recognized that short-term reductions in water quality may result from some activities For example, turbidity may increase for several days following bridge or culvert installation.)

6. Timber Management. Harvest will not occur, on a scheduled basis, within 100 feet of the high water line on either side of Class I and II streams. Harvest may occur along these streams, for other than timber

management purposes, when doing so would maintain or enhance water quality, fish habitat, and wildlife habitat. Along Class III and IV streams, manage tree stands to maintain the vegetative characteristics needed for water quality protection or improvement and to maintain or enhance stream channel stability. Only those treatments that maintain or enhance water and riparian quality and are consistent with riparian management and fish habitat goals will be applied. Actual harvest levels will be determined on a site-specific basis and will be governed by needs to protect and improve the riparian-dependent resources.

7. Stream Temperatures. Prevent measurable temperature increases in Class I Streams (less than a 0.5 degree Fahrenheit change). Temperature increases on SMU Class II (and fishbearing SMU Class III) streams will be limited to the criteria in State standards. Temperatures on other streams may be increased only to the extent that water quality goals on downstream, fish-bearing streams will still be met. Normally stream shade management on Class III streams will differ little from treatment on Class II streams.

8. Channel Stability. Maintain natural large woody debris, plus trees needed for a future supply, to protect or enhance stream channel and bank structure, enhance water quality, and provide structural fish habitat within all SMU classes. Quantities and sizes will be determined on a case-by-case basis.

9. Enhance streambank vegetation and/or large woody debris where it can be effective in improving channel stability or fish habitat.

10. Give areas in which water quality or channel stability are being adversely impacted high priority for treatment to minimize the effects of the impact or to correct the impacting activity.

11. Conduct Cumulative Effects Analyses. When project scoping identifies an issue or concern regarding the cumulative effects of activities on water quality, stream channels, or fish habitat a cumulative effects assessment of these effects will be made. This will include land in all ownerships in the watershed. Activities on National Forest System lands in these watersheds should be dispersed in time and space to the extent practicable, and at least to the extent necessary to meet management requirements. On intermingled ownerships, coordinate scheduling efforts to the extent practicable.

[NOTE, Individual, general Best Management Practices are described in General Water Quality Best Management Practices, Pacific Northwest Region, 11/88. This provides guidance but is not a direction document. Also included in this document is a description of the process and limitations and use of these BMP's. Each BMP listed includes the Title, Objectives, Explanation, Implementation and Responsibility, and Monitoring. Evaluations of ability to implement and estimate effectiveness are made at the project level. Not all of the general BMP's listed will normally apply to a given project, and there may be specific BMP's which are not represented by a general BMP in this document. The sensitivity of the project determines whether the site-specific BMP prescriptions are included in the environmental assessment, environmental impact statement or in the sale project plan, or in the analysis files. For a more complete explanation of the above, refer to Appendix 0 in the FEIS, "Best Management Practices."]

12. Alter watershed conditions only to the extent that aquatic and riparian goals will still be met and other valid water uses, such as irrigation, will not be adversely affected. When planned projects are likely to adversely affect watershed conditions, a hydrologic analysis will be conducted considering past, present, and future activities. If the results of this analysis indicate that the proposed project would adversely affect watershed condition, the project will be altered. This may include such things as deleting or rearranging harvest units in timber sales, selecting different silvicultural prescriptions, or delaying activities for one or more decades.

13. Groundwater. All projects or activities (including but not limited to pesticide application, fertilizer application, or storage of potentially hazardous volumes of fuels and other chemicals on National Forest System land) with the potential to adversely affect surface or ground waters, will include constraints and/or mitigation measures designed to prevent contamination, and will include a plan for dealing with accidental spills.

14. Floodplains. Address in all project environmental analyses the presence of, and potential impacts, to any floodplain within the project area.

15. Invest in major structures, roads, or other facilities within floodplains only if no feasible alternative site outside the floodplain exists.

16. Permit short-term adverse impacts on floodplains only in conjunction with specific mitigation measures designed to minimize the impacts. Where activities adversely affect natural floodplains, the floodplains will be restored, to the extent practicable, shortly after the activity has ceased.

17. Wetlands Address in all project environmental analyses the presence of, and potential impacts to, any wetlands within the project area. Particular attention will be paid to protection of springs during road location, timber sale plans, and range allotment management plans. Adverse impacts to wetlands will be avoided or mitigated.

18. Roads and Skid Trails. Do not construct roads through the length of riparian areas. Roads crossing riparian areas will not alter stream or ground water flow characteristics to a degree which will impact the riparian characteristics.

19. Design and maintain road drainage to prevent the influx of significant amounts of road sediment runoff into stream courses.

20. Manage roads currently located in riparian areas or streamside management units to minimize impacts to water quality and wildlife habitat. In some instances, this will require higher levels of maintenance, road surfacing, or drainage than would normally be justified on the basis of road use alone. Roads may be closed, obliterated, and rehabilitated when it is determined, through an environmental analysis considering all resources, to be the best alternative.

21. Locate skid trails and roads to avoid paralleling stream channels in streamside management units. Log landings will not be placed in riparian areas. Skidding logs downstream courses or ephemeral draws will not occur.

22. Avoid the use of heavy equipment (such as crawler tractors and skidders) within riparian ecosystems. When such use is unavoidable (as in the construction of bridges or other stream crossing devices or during the construction of stream channel improvements) the activity will include mitigation measures designed to minimize adverse effects on the riparian zone and downstream values. Ground disturbing activities will normally be limited to 10 percent exposed soil or less within riparian ecosystems.

23. Manage recreation activities to prevent site deterioration within riparian areas. Trails will be designed and maintained to minimize riparian impacts.

24. Fuel Treatment. Remove slash created as the result of an activity within the normal high water zone of Class I and II streams unless needed for soil protection or other purposes. Slash removal from other streams may be required where resource damage would otherwise result. Slash piles normally will not be located within riparian areas.

25. Sewage Disposal. Dispose of sewage effluent from campgrounds, administrative sites, and other developed areas in a manner which will prevent the contamination of surface or subsurface water. Sewage disposal practices will comply with State of Oregon requirements for sites in Oregon and State of Idaho requirements for sites in Idaho.

26. Mining Activities. Protect watershed values to the fullest extent possible under existing laws in evaluating and developing mineral operating plans.

27. When areas within 100 feet of Class I, II, or III streams or other perennial water bodies are disturbed by mining activities, they shall later be restored by the operator to equal or comparable

condition. This restoration will occur whenever the operator is finished with an area that is large enough to logically restore. An inventory of existing conditions should be performed by Forest Service before approval of the operating plan is given. If this is not possible, then the inventory shall be performed before mining operations begin, with an amendment made to the operating plan. This inventory will determine

(a) Densities of trees, riparian brush (alders, willows, etc.), nonriparian brush, and herbaceous vegetation;

(b) Fish habitat suitability (expressed as percent of habitat optimum). The inventory method used will be Cow-Fish<sup>1</sup> or a similar one.

[1. Lloyd, James R Cow-Fish Habitat Capability Model USDA Forest Service, Northern Region, Box 7669, Missoula, Montana 59807 June 1986.]

28. Require the mining operator, as part of the restoration process to

(a) Plant trees and riparian brush at spacings that will achieve the original densities of these types. This spacing will at least be equal to what existed originally, except when the original densities were too great for good growth.

(b) Plant grass to achieve a density equal to or greater than the total of the original herbaceous plus nonriparian brush types--greater densities may be required if needed for erosion control.

29. Require the mining operator, as part of the restoration process, to (where appropriate)

(a) Construct a temporary fence to exclude livestock from the planted area if needed for protection from livestock grazing.

(b) Place whole trees, construct habitat enhancement structures, or perform comparable improvements within the stream channel at a density required to bring the fish habitat suitability index up to the same value that existed before the mining operations began. This is needed if instream work has disrupted the fish habitat suitability index by five or more percentage units.

The estimated costs of the above operator requirements shall be incorporated into the value of the operator performance bond.

30. Evaluate and restore all other surface areas impacted by mining as in the previous paragraphs except for those items dealing with fish habitat.

31. Water Rights and Instream Flows. File for water rights in accord with State law and FSM 2500.

32. Protect instream flow on National Forest System lands through critical analysis (via NEPA) of proposed water uses, diversions, and transmission applications and renewal of permits. Protection may be achieved through filing protests with States where applications are made that adversely affect National Forest resources, asserting claims for this water under Federal or State laws where applicable, inserting protection measures into special use permits, or reaching formal agreements over use. Purchase of water rights and impoundments are other means for reducing these impacts. (Also see Standards and Guidelines for Livestock Grazing and Wildlife.)

## **Wild and Scenic Rivers**

The following direction supplements the management direction for the Imnaha Wild and Scenic River Management Plan (USDA 1993) and the Wild and Scenic Snake River Recreation Management Plan (USDA 1999).

**Goal:** Manage wild and scenic rivers within the HCNRA in a manner compatible with protecting and enhancing the values for which the river was designated.

**Goal:** Manage Sheep Creek and Granite Creek as MA 7 and the lower Snake River section (4.2 miles) as MA 8 pending further administrative review of recommended wild and scenic river systems, or until released from consideration, or until formally added to the river system by Congress.

**Wsr-O1:** Manage use of motorized and mechanical equipment to be compatible with the outstandingly remarkable values of each river designated recreation, scenic, and wild consistent with the *Wild and Scenic Rivers Act*.

**Wsr-O2:** Manage use of motorized and nonmotorized rivercraft on the Wild and Scenic Snake River in a manner compatible with the protection and enhancement of the river's outstandingly remarkable values consistent with the *Wild and Scenic Rivers Act*. (Snake River Plan, Public LURs, 36 CFR 292.45 (b)(d)(e)(f)(g))

**Wsr-O3:** Perpetuate forested stands within wild and scenic rivers in "scenic" and "recreational" designations to protect and enhance the river's outstandingly remarkable values and to ensure compatibility with the primary objectives of the *HCNRA Act*. (Public LURs, 36 CFR 292.46(b)(1))

**Wsr-O4:** Manage recreation and administrative facilities in a manner compatible with protecting and enhancing the values for which the river was designated.

**Wsr-S1:** The use of nonmotorized river craft may be permitted subject to restrictions on size, type of craft, numbers, duration, seasons, or other matters which may be deemed by the authorized officer to be necessary to ensure the safe use and enjoyment of the rivers: Provided, that where wild and scenic rivers are concerned, the authorized officer may impose such additional terms and conditions as may be necessary to protect and enhance the values for which the river was designated. (Public LURs, 36 CFR 292.45(a))

**Wsr-S2:** The use of motorized and nonmotorized river craft is subject to all federal and state boating registration and safety laws. (Public LURs, 36 CFR 292.45(c))

**Wsr-S3:** Manage forested areas within "scenic" or "recreational" to protect and enhance the values for which the river was designated. (Public LURs, 36 CFR 292.46(b)(1))

**Wsr-S4:** Manage forested areas within "wild" designations only to provide for recreational facilities, such as trails, to reduce the risk of hazard trees, or to manage for the desired ecosystem function in response to natural events. Manage activities consistent with the *Wild and Scenic Rivers Act* and applicable management direction. (Public LURs, 36 CFR 292.46(b)(2))

**Wsr-S5:** Limit the party size for all users in the Wild and Scenic sections of the Snake River corridor to 8 people and 16 stock animals to coincide with the Hells Canyon Wilderness party sizes. Adjust party size as necessary to meet standards for water, soil, fish, and social capacity if monitoring and evaluation indicates a need for change.

**Wsr-S6:** Evaluate any proposed water resources project in a designated wild and scenic river under the direction in (FSM 2354.7), and guidance provided by *Wild and Scenic Rivers Act: Section 7 Technical Report to the Interagency Wild and Scenic Rivers Coordinating Council* as updated (USDA 1997). This includes completing a *Wild and Scenic Rivers Act* Section 7(a) determination for the Hells Canyon Complex relicensing project. (Forest Plan, FSM 2354.7)

## **Wild Rapid River**

The following direction is specific to the Wild Rapid River in addition to the management direction listed above for Wild and Scenic Rivers and in the other sections of this plan.

**Wrr-O1:** Manage 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.

**Wrr-O2:** Maintain the high water quality of the river, thereby facilitating the successful operation of the Rapid River fish hatchery.

**Wrr-O3:** Provide recreation opportunities including hiking, horseback riding, hunting, fishing and the viewing of scenery and wildlife.

**Wrr-S1:** Coordinate with the Payette and Nez Perce National Forests management of resources and uses including livestock grazing, timber management, fire, and mining activities within the entire drainage to meet the management objectives for the Rapid River.

**Wrr-S2:** Maintain water quality within the State of Idaho standards.

**Wrr-S3:** Manage recreation use within ROS settings and resource setting indicators specified in the **Management Direction Specific to Recreation Analysis Areas** for Rapid River (#99).

**Wrr-S4:** Maintain the current level of permitted outfitter and guide services.

**Wrr-S5:** Manage vegetation for dominance of native grasses. Permit no cutting of live trees or standing dead trees except for hazard tree removal near areas of concentrated public use.

**Wrr-S3:** Manage livestock grazing, forested vegetation, fire, heritage sites and other resources consistent with the management direction in the other sections of this plan.

**Wrr-G1:** Cooperate with Idaho Power Company and the Idaho Department of Fish and Game to provide interpretive information (such as outdoor tours and/or tours of the hatchery) about the fish hatchery and the objectives for management of the river.

**Wrr-G2:** Coordinate fish and wildlife habitat management with the Idaho Department of Fish and Game.

Note to reader: Refer to **Appendix K** of the Final Environmental Impact Statement for the HCNRA CMP (USDA 2003) for a description of the outstandingly remarkable values designated for the Rapid River.

## **Biologically Unique Species, Habitats and Ecosystems**

The following direction supplements Forest Plan management direction for biologically unique species, habitats and ecosystems (pages 4-30 through 4-31, and 4-46 through 4-48); threatened, endangered, and sensitive species; and ecosystems.

**Goal:** Maintain or restore habitat to provide viable populations of rare and endemic plant species in the HCNRA. Maintain and restore biologically unique and rare combinations of outstanding and diverse ecosystems and parts associated therewith to ensure their continued functionality and sustainability. Maintain and restore biologically unique and rare combinations of aquatic, terrestrial, and atmospheric habitats.

**Bio-O1:** Manage the HCNRA as an area of high biological diversity and endemism.

**Bio-O2:** Manage the HCNRA to ensure the maintenance and/or restoration of ecological function and sustainability of those species, habitats, and ecosystems that contribute to its biological uniqueness.

**Bio-S1:** During project-level planning, to the extent feasible, survey and document the location of populations of rare and endemic plant species; rare combinations of outstanding and diverse ecosystems and parts associated therewith; and rare combinations of aquatic, terrestrial, and atmospheric habitats. Refer to the **Glossary** for these definitions. Use the criteria in **Appendix D** for determining rare and endemic plant species; rare combinations of outstanding and diverse ecosystems and parts associated therewith; and rare combinations of aquatic, terrestrial, and atmospheric habitats

**Bio-S2:** Consider the effects of proposed projects on populations of rare and endemic plant species; rare combinations of outstanding and diverse ecosystems and parts associated therewith; and rare combinations of aquatic, terrestrial, and atmospheric habitats.

**Bio-S3:** Prescribe mitigation and protection for populations of rare and endemic plant species; rare combinations of outstanding and diverse ecosystems and parts associated therewith; and rare combinations of aquatic, terrestrial, and atmospheric habitats.

### **Rare and Endemic Plant Species**

**Rare-O1:** Manage habitat and populations of all rare and endemic plant species to ensure their continued existence and viability in the HCNRA.

**Rare-O2:** Manage habitat and populations of federally listed threatened, endangered or proposed plant species to ensure their continued existence and recovery in the HCNRA. Ensure that ongoing and new management actions do not jeopardize federally listed threatened, endangered or proposed plant species. Implement restoration and recovery activities to facilitate removal of species from the federal threatened and endangered species list. (Forest Plan, FSM 2670)

**Rare-O3:** Manage habitat and populations of all Forest Service sensitive plant species to ensure their continued existence and viability in the HCNRA. Ensure that all actions do not contribute to the species becoming federally listed threatened and endangered under the *Endangered Species Act*. (Forest Plan, FSM 2670)

**Rare-O4:** Implement recovery plans for federally listed threatened, endangered or proposed plant species cooperatively with the U.S. Fish and Wildlife Service. Contribute to revisions of recovery plans, and carry out recommended actions in recovery plans. (Forest Plan, FSM 2670)

**Rare-O5:** Conduct habitat improvement projects for federally listed species. These may include fencing, burning, closing roads, treatment of noxious weeds, plant propagation, or other actions.

**Rare-S1:** When evaluating ongoing and new actions, survey probable habitat for rare plants. Mitigate potential conflicts or modify the project to ensure the protection of rare plants and their associated habitat. (Forest Plan, FSM 2670)

**Rare-S2:** Monitor population trends and habitat conditions for federally listed threatened, endangered or proposed plant species. (Forest Plan)

**Rare-S3:** Manage habitat and populations of Forest Service sensitive species consistent with conservation agreements or conservation strategies.

**Rare-S4:** In the absence of conservation agreements or strategies, manage sensitive plant species to ensure their continued viability in the planning area. (Forest Plan, FSM 2670)

**Rare-G1:** To achieve recovery plan goals, consider reintroduction of federally listed species, in suitable, currently unoccupied habitat.

**Rare-G2:** Consider modifications to activities such as seasonal or permanent closures for roads, trails, exclusion of domestic livestock grazing, and modification of grazing plans where conflicts with the protection of rare plant species are identified. (Forest Plan)

### **Rare Combinations of Outstanding and Diverse Ecosystems**

**Ode-O1:** Maintain biologically unique and rare combinations of outstanding and diverse ecosystems and parts associated therewith in an ecologically functioning sustainable condition.

**Ode-O2:** Outside Hells Canyon Wilderness, maintain rare combinations of outstanding and diverse ecosystems and parts associated therewith or manage to attain the PNC within the HRV.

**Ode-S1:** Document and map biologically unique and rare combinations of outstanding and diverse ecosystems and parts associated therewith when they are encountered during site-specific activities such as range analysis, rare plant surveys, and vegetation examinations.

**Ode-G1:** Consider selecting biologically unique and rare combinations of outstanding and diverse ecosystems and parts associated therewith as key utilization areas in range analysis where applicable and appropriate.

#### **Bluebunch wheatgrass/Wyeth's buckwheat Plant Association**

**Ode-S2:** Restoration efforts on the bluebunch wheatgrass/Wyeth's buckwheat plant association sites will involve natural succession as enhanced by limitations on human-caused impacts.

**Ode-G2:** Discourage grazing by domestic livestock on these sites.

#### **Douglas' buckwheat/Sandberg's bluegrass Plant Community Type**

**Ode-O3:** Ensure that management practices on these communities do not lead to further soil erosion or damage to the Douglas' buckwheat/Sandberg's bluegrass.

**Ode-S3:** Restoration efforts on Douglas' buckwheat/Sandberg's bluegrass sites will involve only natural succession as enhanced by limitations on human-caused impacts.

**Ode-S4:** Practice deferred rotation grazing systems to allow for soil drying and seed set.

**Ode-G3:** Avoid or minimize management effects to Douglas' buckwheat/Sandberg's bluegrass communities when soils are saturated. Work with state agencies to manage big-game populations to minimize effects of early season wildlife use on these sites.

#### **Bitterbrush/bluebunch wheatgrass Plant Association**

**Ode-S5:** Outside Hells Canyon Wilderness, evaluate the effects of seasonality and intensity of fire on the persistence and distribution on bitterbrush, and the consequences to other resource values when featuring this species over other objectives.

**Ode-G4:** In management of fires, to the extent possible, protect these areas from moderate or high intensity fire. If PF is used in the area, give preference to low intensity very early spring burns when there is higher potential for current or subsequent periods of wet soil conditions.

**Ode-G5:** Work with state wildlife management agencies to manage the impacts to bitterbrush related to fall/winter/spring use by big game, primarily deer. Use exclosures to help monitor use/nonuse of bitterbrush. Discourage additional numbers of big game within areas containing this plant association.

Where feasible, develop alternate sources of fall and spring feeding areas with highly palatable forage sources to attract big game away from these areas.

**Ode-G6:** Manage livestock grazing in bitterbrush/bluebunch wheatgrass plant associations to limit browsing by livestock by controlling the timing of use, intensity, duration, and frequency. Discourage livestock grazing in these associations after the period when the bitterbrush/bluebunch wheatgrass begins to lose palatability and livestock begin to browse on shrubs.

#### Buckwheat/Oregon Bladderpod Plant Association

**Ode-S6:** Classify Buckwheat/Oregon bladderpod associations as unsuitable for grazing, but they may receive incidental use.

**Ode-G7:** Restoration efforts on buckwheat/Oregon bladderpod sites will involve only natural succession as enhanced by limitations on human-caused impacts. No artificial regeneration or enhancement is needed or desirable due to the inherent low productivity potentials on which these sites occur. Discourage ground-disturbing activity that may disrupt the natural erosion pavement.

#### Sand Dropseed Plant Association

**Ode-O4:** Maintain or enhance sand dropseed plant associations found within the Bill's Creek Research Natural Area (RNA). On sites it has invaded, strive for a return to their PNC.

**Ode-S7:** Manage Bill's Creek RNA to maintain sand dropseed in approximately its current distribution and acreage.

**Ode-G8:** Outside Hells Canyon Wilderness, recognize that periodic light-to-moderate early spring grazing and/or low intensity fire is more beneficial to the dominance of these sites by the sand dropseed than grazing exclusion, high intensity fire, or the disturbance associated with heavy summer season grazing. Where this plant association has invaded native bluebunch wheatgrass sites, manage livestock grazing to favor bluebunch wheatgrass over sand dropseed.

#### Wallowa Lewisia Rim Plant Community Type

**Ode-S8:** Classify the Wallowa Lewisia rim community type as unsuitable for grazing, but they may receive incidental use.

**Ode-G9:** Do not locate roads or road pullouts on rim areas where this community occurs.

#### Subalpine fir/fool's huckleberry Plant Association

**Ode-O5:** Maintain areas with subalpine fir/fool's huckleberry plant association by allowing natural processes to occur in MAs 4 and 9, but do not plan management activities to enhance or expand. In MA 11, allow very-early and early-seral stages represented by HRV, and allow mid-seral stages represented by grand fir and Engelmann spruce at levels within HRV.

**Ode-S9:** Do not use active management strategies for subalpine fir/fool's huckleberry associations in MA 4 or 9. Manage forested vegetation by individual tree and small group selection where this type occurs in MA 11 on the Idaho side of the Snake River in the headwaters of Kirkwood and Lost Chance Creeks.

**Ode-G10:** In project planning, recognize the regeneration difficulty and soil compaction potential for subalpine fir/fool's huckleberry on moist, cold sites.

#### Ponderosa pine/Idaho fescue and Ponderosa pine/bluebunch wheatgrass Plant Associations

**Ode-O6:** Maintain or enhance the spatial distribution and/or acreage occupied by ponderosa pine/Idaho fescue and ponderosa pine/bluebunch wheatgrass plant associations in the Little Granite RNA within the extent of the PNC. There is no need for conscious effort to enhance or expand populations outside Little Granite RNA.

**Ode-G11:** Outside Hells Canyon Wilderness, recognize and manage for high frequency, low intensity fire regimes which have historically occurred in ponderosa pine/Idaho fescue and ponderosa pine/bluebunch wheatgrass plant associations during site-specific planning.

**Ode-G12:** Limit grazing by domestic livestock in ponderosa pine/Idaho fescue and ponderosa pine/bluebunch wheatgrass plant associations when soils are saturated. Design management to favor Idaho fescue and/or bluebunch wheatgrass as appropriate through control of the timing, intensity, duration, and frequency of livestock use. Manage grazing to ensure that forage utilization standards are not exceeded in order to ensure plant and soil health and adequate fine fuels for natural fire to carry. Encourage distribution of livestock by salting and herding to avoid concentration areas. Use prescribed natural fire to control Douglas fir succession on micro-sites within these plant associations.

#### Quaking aspen Plant Community Type

**Ode-O7:** Outside Hells Canyon Wilderness, enhance and expand quaking aspen community types for scenery, wildlife habitat, ecological function, and biodiversity purposes on sites that show evidence of current or past occurrence.

**Ode-S10:** Allow natural fire to determine the role of quaking aspen communities in MA 4. In MAs 8, 9, and 12 use fire as the primary method to propagate aspen. In MAs 7, 10, 11 and 16, use PF, harvest of encroaching conifers, and cutting of mature aspens for the purpose of releasing the sprouts from the inhibition effects of the mature parent plants.

**Ode-G13:** Use site-specific analyses to determine propagation methods for quaking aspen communities, and to determine needs for and methods of protection of seedling stands from grazing ungulates.

**Ode-G14:** Discourage livestock grazing in these sites. Where livestock browsing is determined to be a factor in limiting reproduction and health of these stands, consider fencing or other means to exclude livestock.

**Ode-G15:** Outside Hells Canyon Wilderness, where big-game browsing is determined to be a factor in limiting reproduction and health of these stands, consider fencing or other means to exclude the animals.

#### Netleaf hackberry/bluebunch wheatgrass Plant Association

**Ode-O8:** Maintain or enhance hackberry plant associations in proposed RNAs (Bob Creek, Pleasant Valley, and Alum Beds). Strive to reduce animal and human pressures on these communities for their benchmark status for the type.

**Ode-S11:** Manage Bob Creek, Pleasant Valley, and Alum Beds RNAs to maintain or enhance their hackberry associations. Classify these RNAs as unsuitable for livestock grazing, but they may receive incidental use.

**Ode-G16:** Discourage livestock use in these plant associations. Where past activities have resulted in an understory of annuals, consider restoration activities to restore the native understory.

**Ode-G17:** Recognize, during recreation planning, that human uses of RNAs containing the netleaf hackberry/bluebunch wheatgrass plant association can lead to the wheatgrass component directly under hackberry trees being replaced with annual vegetation species. Discourage recreational camping, driving, etc. in these communities.

### Giant wildrye Plant Community Type

**Ode-O9:** Maintain or enhance the giant wildrye plant community type found within the Pleasant Valley RNA. Outside this RNA, provide for the maintenance of the community type.

**Ode-S12:** Manage Pleasant Valley RNA to maintain or enhance giant wildrye in approximately its current distribution and acreage.

**Ode-S13:** If areas with giant wildrye are grazed, limit late winter, early spring use periods and ensure a residual stubble height of at least 8 inches.

**Ode-G18:** Outside Hells Canyon Wilderness, consider the use of giant wildrye for revegetation/restoration efforts in any of the bottoms near drainages and many of the homesteaded benchlands.

**Ode-G19:** Manage livestock grazing to maintain or enhance the giant wildrye plant community type. Recognize that when giant wildrye communities are overgrazed, annual plants invade and become prominent (i.e., bedstraw (*galium aparine*), miners lettuce (*montia perfoliata*), and annual bromes).

**Ode-G20:** Recognize that giant wildrye survives severe to light burns well.

### Spiny green-bush/bluebunch wheatgrass Plant Association

**Ode-S14:** Manage the Alum Beds RNA (proposed) to represent a natural area established to benchmark this community.

### Curlleaf mountain-mahogany Plant Community Type

**Ode-O10:** Maintain or enhance the curlleaf mountain-mahogany plant community type found within the Pleasant Valley RNA.

**Ode-S15:** Manage Pleasant Valley RNA to maintain or enhance the curlleaf mountain-mahogany plant community type in approximately its current distribution and acreage.

**Ode-G21:** Outside Hells Canyon Wilderness, recognize that mountain mahogany suffers high mortality from fire; however, light burns along the ground surface assist in germination of seedlings. In fire planning, strive to protect these areas from moderate or high intensity burns. Careful use of low intensity, cool season, ground fires may be considered.

**Ode-G22:** Do not try to increase big-game presence in areas containing mountain mahogany. If feasible, use practices to enhance forage quality in order to encourage big-game use away from these sites.

**Ode-G23:** Discourage livestock distribution into these areas.

### Mountain big sagebrush/Idaho fescue Plant Association

**Ode-S16:** Manage livestock grazing by controlling the timing of use, intensity, duration, and frequency in the mountain big sagebrush/Idaho fescue plant association to limit invasion of sod-forming mats of Kentucky bluegrass.

**Ode-G24:** Outside Hells Canyon Wilderness, recognize that mountain big sagebrush can be killed by severe burns but community vigor is enhanced when the shrubs are burned by light to moderate fires. In fire planning, strive to protect these areas from high intensity burns. Careful use of moderate or low intensity ground fires may be considered to sustain the health of this plant association.

### Slender sedge Plant Community

**Ode-O11:** Manage the slender sedge plant community at Duck Lake to ensure its ecological function and sustainability.

**Ode-S17:** Classify the Duck Lake slender sedge plant community as unsuitable for livestock grazing, and do not authorize use. Restrict human access to this site (the Duck Lake peat bogs) through provision of an elevated access and restriction of all foot traffic off the "boardwalk". Do not allow vehicle use within 300 feet of the bog.

## **Rare Combinations of Aquatic, Terrestrial, and Atmospheric Habitats**

### **Wet Cliffs**

**Ata-S1:** Ensure that spring developments, water diversions, and other human-caused activities do not alter the hydrologic regime of wet cliff habitats. Before conducting activities that may impact this habitat type, conduct field surveys and design projects so that they do not negatively impact either the water regime or the species composition of wet cliffs.

**Ata-G1:** Where roads or other human-caused impacts impinge on these communities, ensure that they are disturbed as little as possible during maintenance or other activities.

### **Caves**

Note to reader: Refer to management direction specific to cave management contained on pages 4-46 through 4-48 of the Forest Plan.

### **Cliffs and Talus Slopes**

**Ata-S2:** Do not alter cliffs and talus slopes.

**Ata-G2:** Through user education programs, inform forest users of the importance of minimizing impacts and disturbances that may reduce the habitat values of cliffs and talus slopes.

### **Natural Salt Licks**

**Ata-O1:** Discourage human activities that may impact natural salt licks.

**Ata-S3:** Provide adequate salt for livestock grazing in pastures where natural salt licks exist to ensure that livestock are kept away from the natural salt licks.

### **River Beaches**

**Ata-O2:** Maintain or restore sandbars, river terraces, and other fluvial and alluvial features in the Wild and Scenic Snake River corridor.

**Ata-S4:** Actively participate in the Hells Canyon Complex relicensing to develop terms and conditions that address maintenance or restoration of sandbars, river terraces, and fluvial and alluvial features.

**Ata-G3:** Through user education programs, inform river users of the importance of minimizing impacts and disturbances that may exacerbate erosion and/or slow restoration efforts.

### **Springs, Seeps, and Other Wetlands**

**Ata-O3:** Ensure that management activities provide for protection, retention, or enhancement of water quality and quantity from natural springs, seeps and other wetlands.

**Ata-S5:** Where springs are developed for any purpose ensure that the water source is protected from trampling damage; the trough or other use point is located away from the spring and watercourse; and that overflow water remains at the spring source (use of float valves) or is transported back to the natural channel.

**Ata-G4:** Protect or manage undeveloped springs impacted by livestock, big game, recreationists, etc. to restore functionality. Protection or management may include fencing, placement of large woody debris, or restriction of activities as needed.

## **1990 Land and Resource Management Plan Direction (Pages 4-30 to 4-31)**

### **DIVERSITY**

#### **Goal**

Maintain native and desirable introduced or historic plant and animal species and communities. Provide for all seral stages of terrestrial and aquatic plant associations in a distribution and abundance to accomplish this goal. Maintain or enhance ecosystem function to provide for long-term integrity and productivity of biological communities.

#### **Standards and Guidelines**

1. Project Analysis. Develop, during project planning, site-specific management prescriptions the goals for diversity and ecosystem function.
2. Vegetation Manipulation. Provide and maintain developing an ecologically sound distribution and abundance of plant and animal communities and species at the forest stand, basin, and Forest level. This distribution should contribute to the goal of maintaining all native and desirable introduced species and communities (see discussion in EIS Appendix G).
3. Base tree species used in planting harvest units on the potential of the site as indicated by plant associations. Consideration should be given to regenerating and maintaining a mixture of tree species, where appropriate for the site. Retain, through precommercial and commercial thinning, a diversity of tree species based on site potential.
4. Allow for all natural species to function following vegetation manipulation. None should be eliminated from the site.

### **THREATENED, ENDANGERED AND SENSITIVE SPECIES**

#### **Goal**

To protect and manage habitat for the perpetuation and recovery of plants and animals which are listed as threatened, endangered, or sensitive. (A list of these species can be found in the Forest Plan EIS). To assure that management activities do not jeopardize the continued existence of sensitive species or result in adverse modification of their essential habitat.

#### **Standards and Guidelines**

1. Reviews/Biological Evaluations. Review all actions and programs, authorized, funded, or carried out by the Forest Service, to determine their potential effects on threatened, endangered, and sensitive species. Conduct these reviews, including biological evaluations, per direction in FSM 2670 and appropriate R-6 manual supplements.

2. Prepare a biological evaluation during the environmental analysis of each project to determine possible effects of the proposed activity on threatened, endangered, and sensitive species.

3. Other Activities. Restrict or prohibit other activities (e.g., off road vehicles impacting plants or habitats) and monitor activities where necessary to protect threatened, endangered, or sensitive species.

4. Cooperation with Other Agencies. Cooperate with the States of Oregon, Washington, and Idaho in all aspects of sensitive plant management under the auspices of the Master Memoranda of Understanding. The Oregon Natural Heritage Data Base and the Washington Natural Heritage Program will be contacted regarding sensitive species information.

5. Cooperate with the US Fish and Wildlife Service, the States of Oregon, Washington, and Idaho and the Oregon Natural Heritage Data Base and the Washington Natural Heritage Program in the development of Species Management Guides for sensitive species adversely affected by standard management practices.

6. Cooperate with the same agencies/organizations in the development and implementation of recovery plans for threatened and endangered species. Where such plans conflict with other management direction, the recovery plans will take precedence.

7. Inventory. Inventory, by 1991, areas on the Forest identified in any existing recovery plans as having high potential as habitat for threatened or endangered species will be inventoried by 1991, or within three years of the publication of such plan. Features of habitat necessary to support the objective number of individuals will be identified. Corrective measures to avoid possible adverse effects on recovery of populations will be implemented.

8. Collection. Allow collection of threatened, endangered, and sensitive species only under permit in accordance with FSM 2673.

9. Data Bases. Maintain the Forest data base for threatened, endangered, or sensitive plant sitings and inventory information at the Supervisor's Office in Baker. In addition, all sitings will be documented and provided to the Natural Heritage Program managers and to the US. Fish and Wildlife Service as appropriate.

Monitoring. Monitor known populations of sensitive species and their habitats in accordance with the Forest Monitoring Plan.

#### **1990 Land and Resource Management Plan Direction (Pages 4-46 to 4-48)**

See below under "Geologic Resources"

### **Research Natural Areas**

The following direction supplements Forest Plan management direction (pages 4-83 through 4-85).

**Goal:** Manage Research Natural Areas (RNAs) to preserve significant natural ecosystems for comparison with those influenced by humans; for provision of ecological and environmental studies; and for protection of biologically unique and rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated therewith. Protect RNAs against activities that directly or indirectly modify ecological processes and functions. The prime consideration in managing RNAs is maintenance of unmodified conditions and natural processes (FSM 4063.3).

**Rna-O1:** Manage all proposed RNAs as if they have been formally established until such time that establishment reports and management plans are completed. Promote research and educational opportunities while maintaining the integrity of the ecosystem. (Forest Plan)

**Rna-O2:** Conduct botanical and biological surveys for all existing and proposed RNAs to identify any threatened and endangered, proposed, or sensitive plant or animal populations and to identify any biologically unique and rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated therewith.

**Rna-O3:** Complete establishment reports for the following proposed RNAs: Alum Beds, Basin Creek, Bill's Creek, Bob Creek, Duck Lake, Lake Fork, Lightning Creek, and Pleasant Valley. Complete management plans for the areas that are established as RNAs. Little Granite Creek currently has an establishment report, but no management plan). (Forest Plan, FSM)

**Rna-S1:** Protect established and proposed RNAs from human-caused disturbances that degrade their qualities. (Forest Plan)

**Rna-S2:** Prohibit fuelwood cutting, commercial mushroom harvesting, and commercial collection of special forest products in proposed and established RNAs.

**Rna-S3:** Establish acceptable casual or incidental domestic livestock grazing in established and proposed consistent with the management prescription for the RNA (FSM 4063.3). Develop mitigations to livestock grazing if necessary. Prohibit additional livestock grazing. Prohibit salting or water developments. (Forest Plan, FSM 4063, New)

**Rna-S4:** Monitor domestic livestock grazing in the Basin Creek, Lake Fork, and Duck Lake RNAs. Implement changes to the grazing system or discontinue use If grazing is determined to causing degrading levels of impacts.

**Rna-S5:** Evaluate recreation use in all established and proposed RNAs. Implement changes in management if it is determined that recreation use is causing unacceptable impacts to the RNA. There will be no new recreational developments, or expansion of existing developments, in proposed or existing RNAs except Duck Lake proposed RNA, where recreational developments currently exist. Evaluate the Duck Lake recreational developments and determine mitigation in the RNA establishment report and management plan.

**Rna-S6:** Exclude new transportation and utility corridors from proposed and existing RNAs.

**Rna-S7:** Allow fire to assume its natural role, in terms of intensity, and periodicity, in proposed and established RNAs. Strive to minimize fire suppression impacts where firefighter safety or suppression objectives will not be compromised. Allow PF when it is determined that fire will not negatively impact the values for which the RNA was established. (Forest Plan, New)

**Rna-S8:** Promote research and cooperate with universities and other investigators for studies in RNAs. Use nondestructive and nonconsumptive research techniques (refer to **Scientific Research** section later in this appendix). (Forest Plan, FSM)

**Rna-G1:** Cooperate with state wildlife agencies to ensure wild ungulate use is within an acceptable range of impacts on RNAs.

**Rna-G2:** Evaluate the expansion of the RNA system based on recommendations from establishment records, proposals generated from scientific research, or proposals from the Forest RNA Coordinator. Add new areas to the RNA system, based on the approved listing of Blue-Ochoco Province elements, for plant communities not currently in RNAs or proposed RNAs. Use the wetlands plant association classification completed by the Area Ecology Zone to add new areas based on riparian and wetland elements not currently in proposed or existing RNAs.

Note to reader: Refer to the Forest Plan FEIS, Appendix H, for a complete description of each RNA.

## 1990 Land and Resource Management Plan Direction (Pages 4-83 to 4-85)

### MANAGEMENT AREA 12 (RESEARCH NATURAL AREAS)

#### Description

The objectives for establishing RNA's 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.

RNA's typify important forest, shrubland, grassland, alpine, aquatic, and geologic types and other natural situations that have special and unique characteristics of scientific interest and importance. Activities in RNAs are limited to research, study, observations, monitoring, and kinds of educational activities that are nondestructive and nonmanipulative.

A research natural area establishment report will be prepared for each recommended area. These studies will determine the boundaries of the areas. Until the establishment reports are signed by the Chief of the Forest Service, the areas designated by this plan are recommendations. Proposed RNA's will be protected from uses which would reduce their suitability for RNA designation. The Indian Creek RNA has been established by the Chief. Following establishment, a management plan (approved by the District Ranger) will be developed for each RNA.

Additional RNAs may be proposed during the life of this Plan to fill RNA needs identified in Appendix H to the EIS.

#### Direction

1. Watershed. Apply Forest-wide standards and guidelines.
2. Wildlife. Prevent the introduction of non-native species.
3. Timber. Timber harvest will not occur unless for research purposes.
4. Range. Objectives for grazing will **be** defined in situations where grazing is needed to establish or maintain vegetative communities.
5. In research natural areas where livestock grazing is not part of the management prescription, the Regional Forester and Station Director shall, as appropriate, establish a level of acceptable casual or incidental livestock use that can be tolerated and is consistent with the management prescription for the research natural area.
6. Transportation. Roads and trails will normally be the minimum necessary to provide access for research and education objectives.
7. Off-road vehicle use will be prohibited.
8. Research. Prepare establishment reports and management plans for each proposed RNA. In addition to the one existing research natural area, 18 areas are recommended for addition to the Research Natural Area System:

Lightning Creek  
Alum Beds  
Bob Creek  
West Razz Pond and Razz Lake  
Bills Creek  
Duck Lake  
Government Draw

Pleasant Valley  
Little Granite  
Craig Mountain Lake  
Mt. Joseph  
Vance Knoll  
Pt Prominence  
Basin Creek

Indian Creek (existing RNA)  
Horse Pasture Ridge  
Lake Fork

Haystack Rock  
Cougar Meadow  
Pleasant Valley

9. Recreation. Manage these areas to accommodate recreational **use** similar to the management areas surrounding them.

10. Discourage public recreation use if levels become so high as to be incompatible with the primary objective.

11. Where special orders are needed to limit, restrict, or control specific activities such as camping, seasons of use, or other uses, that are not compatible with the objectives of the research natural area, the Forest Supervisor shall issue orders pursuant to 36 CFR 261, subpart B, to protect an area's features. Any such orders shall incorporate the special closure provisions of 36 CFR 261.53.

12. Landscape Management. Apply Forest-wide standards and guidelines.

13. Landownership. Retain these lands in Federal ownership and acquire private lands as opportunity or need occurs.

14. Minerals. Recommend formally classified RNA's for withdrawal from mineral entry.

15. Fire. Design suppression activities to minimize site disturbance Prescribed fires will be used only in conjunction with approved research projects.

16. The minimum acceptable suppression response will be "confine" at all FILS.

17. Insects and Diseases. The decision on treatment of Forest pests will be made on a case-by-case basis. Where pest management activities are prescribed, they shall be as specific as possible against target organisms and induce minimal impact to other components of the ecosystem.

18. Other. Prohibit the gathering of fuelwood for commercial or home use.

## Fire

The following direction supplements Forest Plan management direction (page 4-37), PACFISH management direction (pages C-15 through C-16), and INFISH management direction (pages A-10 through A-11).

**Goal:** Within the Hells Canyon Wilderness, as nearly as possible, ensure that fire plays its natural role. In other parts of the HCNRA, manage natural and PF to emulate historic function of fire, where compatible with the Section 7 objectives of the *HCNRA Act*. Provide basic protection to human life and property.

### Wildland Fire Use

**Fire-O1:** Manage WFU for resource benefits within MAs 4, 8, 9, 11, and 12 pursuant to the *Wallowa-Whitman National Forest Fire Management Plan* (USDA 2002 as updated) and the appropriate sections pertaining to the HCNRA.

**Fire-O1:** Allow lightning-caused fire to resume a more natural role in MA 4 as near as possible within specified conditions of fuels, weather, and topography to achieve WFU objectives.

**Fire-O2:** Manage lightning-caused fire as WFU in MAs 8, 9, and 12 to mimic historic fire effects to the extent that safety, fuel accumulations, and social constraints permit.

**Fire-O3:** Manage responses to a wildland fire by resource management objectives and constraints that reflect a commitment to safety, cost effectiveness, implementation by qualified individuals, and maintaining the versatility to vary in intensity as current and predicted conditions warrant. The following table lists the range of appropriate management responses by management area.

Table 7: Range of Appropriate Fire Management Responses by Management Area

| MA   | Fire Suppression | WFU | Remarks                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------|------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4    | Yes              | Yes | WFU is appropriate in Hells Canyon Wilderness following the development of prescriptive criteria included in an approved fire management plan. Resource benefits accrue within this MA.                                                                                                                                                                                                                                 |
| 4-7  | Yes              | Yes | MA 4-7 is the section of the Wild and Scenic Imnaha River that occurs inside the Eagle Cap Wilderness.                                                                                                                                                                                                                                                                                                                  |
| 4-12 | Yes              | Yes | Suppression only with Minimum Suppression Impact Techniques and in support of larger suppression/contingency objectives or when considering outside criteria for the area. Intent is for natural processes to occur.                                                                                                                                                                                                    |
| 7    | Yes              | No  | Primary considerations that preclude WFU in MA 7: Private land along Imnaha River from Palette Ranch to Snake River, anadromous fish concerns in Upper Imnaha River, and water quality in Rapid River.                                                                                                                                                                                                                  |
| 8    | Yes              | Yes | Contingency actions are required to protect numerous administrative sites along with heritage sites identified for protection. Public safety is a consideration within this corridor.                                                                                                                                                                                                                                   |
| 9    | Yes              | Yes | Requires coordination with permittees for active allotments. Idaho section requires coordination with Nez Perce National Forest. WFU potential is included to facilitate fire planning, identification of natural fuel breaks and geographic contingency areas, e.g. upper Horse Creek, north of Buckhorn Lookout, and Idaho side north of the Hells Canyon Wilderness boundary.                                        |
| 10   | Yes              | No  | Primary considerations that preclude WFU in MA 10: Active allotments and private land in Imnaha drainage; silvicultural concerns in North Fork Pine Creek drainage; and potential WFU size and resulting impacts to areas surrounding and adjacent to Basin, Bear, and Cottonwood Creek drainages at north end of HCNRA which are better candidates for PF. Suppression responses are driven by risk and fire location. |
| 11   | Yes              | Yes | Use WFU north of Buckhorn Lookout, Upper Horse Creek, above Coverdale adjacent to the Hells Canyon Wilderness, and on the Idaho side adjacent to the Hells Canyon Wilderness boundary.                                                                                                                                                                                                                                  |
| 12   | Yes              | Yes | Intent is for natural processes to occur. Implement MIST as a part of larger suppression risk mitigation actions.                                                                                                                                                                                                                                                                                                       |
| 16   | Yes              | No  | Sites require protection. Develop site plans to identify risk potential and reduction plans when appropriate.                                                                                                                                                                                                                                                                                                           |

**Fire-S1:** Utilize minimum impact suppression tactics (MIST) for all areas within the HCNRA when a suppression response is required. Utilize MIST with contingency actions implemented as part of WFU. Determine suppression strategies based on management objectives; recognizing that weather, natural barriers, and fuel consumption with time can be elements of a strategy. Utilize the *Wallowa-Whitman National Forest Fire Management Plan* (USDA 2002 as updated) for aerial delivered firefighter protocols for the Hells Canyon Wilderness. In all situations, firefighter safety is the overarching consideration.

**Fire-S2:** Conduct fire suppression responses 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).

The following table lists the priorities for suppression responses by management area due to limited resources and multiple ignitions. Refer also to the **Management Direction Specific to Recreation Analysis Areas** which lists fire suppression priorities for administrative, recreation and historic sites and facilities. In some cases, the suppression priorities for sites or facilities within the MAs listed may be higher than for the surrounding MA.

Table 8: Fire Suppression Priorities by Management Area

| MA                                 | Specific Locations and Reasons                                                                                                                                                                                                                                                                                                                       |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fire Suppression Priority 1</b> |                                                                                                                                                                                                                                                                                                                                                      |
| 7                                  | All MA 7 from Eagle Cap Wilderness boundary down stream to Forest Boundary near the Palette Ranch downstream to mouth of Imnaha River, and all of the Rapid River corridor. Numerous campgrounds, bridges, and other administrative structures are located in this area as well as private residences, farms, and ranches within the HCNRA boundary. |
| 10                                 | All MA 10 on both sides of the Imnaha River from Palette Ranch north to Snake River. There is a high risk to private land and government facilities in this area. All MA 10 in McGraw, Upper Imnaha, and North Pine Creek areas due to large numbers of campgrounds, bridges, and other administrative structures.                                   |
| 11                                 | All MA 11 due to intermingled MA 16 (Administration/recreation sites) and forested vegetation values.                                                                                                                                                                                                                                                |
| 16                                 | Protect administrative and recreation sites located outside of the Hells Canyon Wilderness, and surrounded by MA 7, 10, or 11 with a ¼ mile buffer.                                                                                                                                                                                                  |
| <b>Fire Suppression Priority 2</b> |                                                                                                                                                                                                                                                                                                                                                      |
| 8                                  | Protect administrative and recreation sites located outside of the Hells Canyon Wilderness, and surrounded by MA 8 with a ¼ mile buffer.                                                                                                                                                                                                             |
| 9                                  | Protect recreation and native vegetation sites located outside of the Hells Canyon Wilderness, and surrounded by MA 9 with a ¼ mile buffer.                                                                                                                                                                                                          |
| <b>Fire Suppression Priority 3</b> |                                                                                                                                                                                                                                                                                                                                                      |
| 12                                 | Protect Duck Lake, Alum Bed, Lake Fork, and Basin Creek RNAs, located outside of the Hells Canyon Wilderness.                                                                                                                                                                                                                                        |
| 8                                  | All MA 8 areas within the Wild and Scenic Snake River corridor that are not in close proximity to any recreation and administrative sites, or historic structure complexes.                                                                                                                                                                          |
| 9                                  | All MA 9 - A large block of MA 9 stretches from Saddle Creek Overlook and Picnic Area north past Lord Flat (excluding areas with facilities) on Oregon side of the Snake River. This includes portions of the Horse, Lightning, and Cow Creek drainages.                                                                                             |
| <b>Fire Suppression Priority 4</b> |                                                                                                                                                                                                                                                                                                                                                      |
| 9                                  | Protect all MA 9 on Idaho side (north of the Hells Canyon Wilderness).                                                                                                                                                                                                                                                                               |
| 9                                  | Protect all MA 9 (north of Buckhorn).                                                                                                                                                                                                                                                                                                                |
| <b>Fire Suppression Priority 5</b> |                                                                                                                                                                                                                                                                                                                                                      |
| 4                                  | Protect areas with facilities or historic structures within the Hells Canyon Wilderness with a ¼ mile buffer.                                                                                                                                                                                                                                        |
| <b>Fire Suppression Priority 6</b> |                                                                                                                                                                                                                                                                                                                                                      |
| 4-12                               | Within the Hells Canyon Wilderness, protect Lightning Creek, Bill's Creek, Little Granite, and Pleasant Valley RNAs.                                                                                                                                                                                                                                 |
| <b>Fire Suppression Priority 7</b> |                                                                                                                                                                                                                                                                                                                                                      |
| 4-7                                | Protect the Imnaha River inside the Eagle Cap Wilderness Area (above Indian Crossing Campground).                                                                                                                                                                                                                                                    |
| 10                                 | Protect the area east of Cold Springs Ridge in the Basin, Bear, and Cottonwood drainages already burned by the Teepee Butte Fire (1988).                                                                                                                                                                                                             |
| 4                                  | Protect the Hells Canyon Wilderness areas with no facilities and no RNAs within the following Recreation Analysis Areas: Dry Diggins (02), Sheep Lake (03), Seven Devils (04), Baldy Lake (05), East Face (06), Lakes Basin (09), Saddle Creek (37), Lookout Mountain (38), and Buck Creek (39).                                                     |

**Fire-G1:** Consider appropriate management response for suppression actions, guided by firefighter safety, values at risk, cost of tactical implementation, probability of success and failure, and the potential result of either outcome. Base appropriate suppression responses in the HCNRA on relative risk, external influence, and management area objectives. Guide suppression responses by current and predicted weather, time of year, natural features, and the impact to critical firefighting resources. Use the most aggressive action needed to safely mitigate threats. Utilize analysis tools such as *Wildland Fire Situation Analysis* to evaluate alternatives and determine appropriate responses to wildland fires.

**Fire-G2:** Develop risk assessments prior to implementation of WFU considering the following elements:

- Fire danger indicator(s) such as the energy release component (ERC), burning index (BI), normalized departure of vegetative index (NDVI), and fire potential index (FPI)
- Time of fire season: early, middle, late
- Long-term drought indicators such as: Palmer Drought, KBDI (Keetch Byram drought index), SPI (standardized precipitation index)
- Potential complexity

**Fire-G3:** Consider costs of wildland fire management actions relative to the values at risk, as well as the intrinsic values of preserving and protecting the ecological and historical elements that led to the HCNRA designation. Emphasize fire management actions that provide the least-cost plus loss to meet *HCNRA Act* resource goals.

**Fire-G4:** Consider historic patch size along with protection of sensitive features and habitat when establishing maximum manageable areas for WFU.

## Fuel Treatment

**Fire-O4:** Use PF to maintain, restore and sustain healthy forests and grasslands.

**Fire-O5:** Use forested vegetation treatment and PF from planned ignitions as the primary methods in MAs 7, 10, and 11 to achieve desired vegetation. Emphasize PF in MA 10.

**Fire-S3:** Conduct PF to mimic historic fire patterns and intensities to the extent that safety, fuel accumulations, and social constraints permit. Consider historic fire frequencies, patch size and seasonality in project design and program management. Assess the role of fire as a vital component of landscape function for all extensive land management actions within the HCNRA.

**Fire-S4:** PF from planned ignitions is an appropriate activity within all MAs including MA 4 and 8 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 applicable laws. PF is a low priority for use in MA 16. The tables below outline acceptable treatments and priorities.

Table 9: Acceptable Fuel Treatments by Management Area

| MA   | Prescribed Fire | Silvicultural | Mechanical |
|------|-----------------|---------------|------------|
| 4    | Restricted*     | No            | No         |
| 4-7  | Restricted*     | No            | No         |
| 4-12 | Restricted*     | No            | No         |
| 7    | Yes             | Yes           | Yes        |
| 8    | Yes             | No            | Yes        |
| 9    | Yes             | No            | Yes        |
| 10   | Yes             | Yes           | Yes        |
| 11   | Yes             | Yes           | Yes        |
| 12   | Yes             | No            | Yes        |
| 16   | Yes             | Yes           | Yes        |

\*Within MA 4, use PF only in areas where WFU cannot be safely implemented or is not compatible with Section 7 of the *HCNRA Act* or applicable laws.

Table 10: Fuel Treatment Priorities by Management Area

| MA   | Prescribed Fire | Silvicultural | Mechanical |
|------|-----------------|---------------|------------|
| 4    | 4               | No            | No         |
| 4-7  | 4               | No            | No         |
| 4-12 | 4               | No            | No         |
| 7    | 2               | 3             | 3          |
| 8    | 4               | No            | 4          |
| 9    | 1               | No            | 4          |
| 10   | 1               | 2             | 3          |
| 11   | 3               | 1             | 2          |
| 12   | 2               | No            | 4          |
| 16   | 4               | 2             | 1          |

1 = High Priority, 2 = Medium Priority, 3 = Low Priority, 4 = Very Low Priority,  
No = Treatment not allowed in MA.

**Fire-G5:** Develop risk parameters in each burn plan or other treatment based on the level of complexity of the project considering fuels to be treated as well as adjacent fuels, weather factors, fuel moistures, proximity to private land or other significant features.

**Fire-G6:** Consider plant phenology and predicted plant responses prior to implementing PF projects.

### Wildland Fire Use and Fuel Treatments

**Fire-O6:** PF may be used to facilitate WFU to mimic the historic role of fire on the landscape or to protect values outside the Hells Canyon Wilderness.

**Fire-S5:** Protect administrative, historic, and recreation structures identified as needing protection from damage by fire. Use resource advisors on all fire suppression actions. Refer to the **Management Direction Specific to Recreation Analysis Areas** for the specific fire suppression priorities for administrative, historic, and recreation facilities. These priorities may be adjusted when conditions of fire behavior, safety, resource values, or other conditions indicate a different priority for an area.

**Fire-S6:** Construct fire lines to avoid any known federally listed threatened and endangered or proposed plant species or potential habitat, unless coordinated with a resource advisor and suitable alternative locations and actions are not possible.

**Fire-S7:** Provide for firefighter safety over resource objectives.

**Fire-S8:** Coordinate WFU and PF projects with permittees within active grazing allotments.

**Fire-G7:** Use management strategies that will minimize the potential for introduction and/or spread of noxious weeds and other undesirable nonnative plants. Protect areas of active restoration from management impacts.

**Fire-G8:** After fire, use an interdisciplinary team to determine when activities may resume in burned areas. Consider rest from domestic livestock grazing after burning. Coordinate with partners and permittees when setting up guidelines for management of burned areas.

**Fire-G9:** Provide training on an annual basis on the use and effects of fire in the HCNRA to outfitters and guides. Focus on the beneficial uses of fire and the potential health risks associated with it so they may educate recreational users.

### 1990 Land and Resource Management Plan Direction (Pages 4-37)

## FIRE AND FUELS MANAGEMENT

### Goal

To provide well-planned and executed fire protection and fire use programs that are cost-efficient and responsive to land and resource management goals and objectives.

### Standards and Guidelines

(Also see Forest-wide standards and guidelines for air quality.)

1. Wildfire Control Priorities. Give wildfires that threaten life, private property, public safety, improvements, or investments the highest priority for aggressive suppression action.
2. Escaped Fire Situation Analysis. Prepare an escaped fire situation analysis if a wildfire escapes initial action and threatens to exceed established limits for individual management areas.
3. Prescribed Fire. In meeting the total resource objectives of Forest management, the role and potential of fire as an integral part of the forest and rangeland will be considered where it furthers the management objectives of the various management areas.
4. Prepare burning plans in advance of ignitions for each prescribed fire. The prescribed burning will conform to air quality guidelines. Burning plans will define what an escaped fire is, when it will be declared a wildfire, and when an escaped fire situation analysis will be prepared.
5. Unplanned ignitions from both natural and human causes may be used for prescribed fires outside of wilderness if a prescribed fire plan has been approved and a fire is burning within prescription. Exceptions will be noted for specific management areas.
6. Fuel Treatment. Use resource objectives to guide levels and methods of fuel treatment within each management area, using the most cost-efficient method.
7. Fire Prevention. Emphasize the difference between unwanted human-caused fires and prescribed fires which help meet management objectives in fire prevention efforts.
8. Target cost-effective plans for the prevention of human-caused fires at specific risks determined by ongoing monitoring of current and recent fire reports.
9. Fire Detection. Review the mix of aerial and ground detection activities periodically to maintain the most cost-efficient combination.

## Air Quality

The following direction supplements Forest Plan management direction (pages 4-29 and 4-30).

**Goal:** Preserve the atmospheric habitats in a manner compatible with the preservation of rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated within the HCNRA. Manage the Hells Canyon Wilderness Class I airshed to meet the requirements of the *Clean Air Act*.

**Air-O1:** Continue implementation of the monitoring protocol for air quality values (visibility, vegetation, soils, archaeological resources, water quality, wildlife, and odors) identified in the *Wallowa-Whitman National Forest Air Resource Monitoring Plan* (USDA 1997).

**Air-O2:** Manage fire-related emissions pursuant to the Memorandum of Understanding (MOU) with the Oregon Department of Environmental Quality, Oregon Department of Forestry, Bureau of Land

Management, and Forest Service. Coordinate any burning projects within the HCNRA that may affect Idaho with the responsible state or federal airshed management entity.

**Air-G1:** Consider only MAS 7, 10, and 11 as locations where modified timber harvest utilization standards and silvicultural treatments can be used and made a high priority to reduce emissions from PF and wildfire per the MOU strategy.

Note to reader: Human-caused noise impacts are addressed under the "remoteness" setting for ROS indicators. Refer to the **Recreation Settings, Experiences, and Opportunities** section and the **Management Direction Specific to Recreation Analysis Areas**.

## **1990 Land and Resource Management Plan Direction (Pages 4-29 and 4-30)**

### **AIR QUALITY**

#### **Goal**

To maintain air quality at a level that is adequate for the protection and use of National Forest resources, and that meets or exceeds applicable Federal and State standards and regulations.

#### **Standards and Guidelines**

1. Wilderness. Minimize the impact of prescribed burning on smoke-sensitive areas as designated in State smoke management plans and meet the air quality related requirements of Federal Class I areas. (Also see Memorandum of Understanding between USDA Forest Service and Idaho Department of Health and Welfare dated February 5, 1988.)
2. Manage visibility factors to the extent possible to keep them within limits of acceptable change (L.A.C.).
3. Manage areas designated as wilderness by the Oregon Wilderness Act of 1984 as Class II areas until formal studies are completed.
4. Prescribed Burning. Use the following prescribed burning techniques, where appropriate, to minimize smoke emissions and assure that emission objectives are met.
  - (a) Avoid burning when air stagnation advisories are in effect, during pollution episodes, or when temperature inversions exist.
  - (b) Design burning activities to utilize climatic conditions which favor rapid smoke dispersion.
  - (c) Burn under favorable moisture conditions, utilizing guides developed by Pacific Northwest Forest Fire Science Laboratory.
  - (d) Accomplish mop-up quickly to reduce residual smoke.

NOTE. Mandatory Class I areas were established by the Environmental Protection Agency on November 30, 1979. On the Wallowa-Whitman Class I areas include the Eagle Cap and Hells Canyon Wildernesses as they existed on that date. No intrusions of smoke from prescribed burning into Class I areas will occur during the period between July 4 and Labor Day. By law, the Hells Canyon National Recreation Area cannot be designated for Management below Class II, although State Implementation Plans may specify that it be managed as Class I. Smoke from all wildfires and from naturally occurring prescribed fires within wilderness areas will not be considered a violation of class I air quality standards.

- (e) Design ignition method and firing technique to aid dispersion.
  - (f) Use smoke models to predict impacts including plume trajectory.

- (g) Use rake-type dozer blades to keep soil out of piles and windrows.
- (h) Keep fire from spreading into decks of cull logs.

## Riparian/Aquatic Habitat and Water Quality

The following direction supplements Forest Plan management direction (pages 4-22 through 4-26, including Regional Forester Amendment 2), PACFISH management direction (pages C-17 through C-19), and INFISH management direction (A-1 through A-14), and including terms and conditions from the biological opinions for salmon, steelhead and bull trout.

**Goal:** Ensure the protection and maintenance of riparian and aquatic habitat and maintain viable populations of native and desired nonnative riparian and aquatic vertebrate and invertebrate species.

### Riparian/Aquatic Habitat

**Rip/Aqu-O1:** Focus restoration efforts of riparian/aquatic habitat on human-caused disturbances.

**Rip/Aqu-O2:** Manage lands in 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).

**Rip/Aqu-S1:** Protect, maintain and restore Riparian Habitat Conservation Areas (RHCAs) to meet riparian management objectives (RMOs) as defined in PACFISH and INFISH. (PACFISH/INFISH)

**Rip/Aqu-S2:** Modify or prohibit management practices causing detrimental changes in riparian areas, wetlands, flood plains, stream channels, or water quality within RHCAs to correct the problem. (PACFISH/INFISH)

**Rip/Aqu-S3:** Design all management actions to not retard attainment of RMOs within RHCAs and to ensure riparian habitat is maintained in (or moved toward) proper functioning condition (PFC). (PACFISH/INFISH)

**Rip/Aqu-S4:** Restore riparian habitat that is found to be functioning-at-risk or nonfunctional (BLM TR 1737-15, 1998 or as updated) using passive management or active restoration. Emphasize passive management over active restoration where possible.

**Rip/Aqu-S5:** Undertake active restoration actions in areas where PFC analysis, aquatic inventory, or monitoring clearly demonstrates a significantly greater benefit to the riparian/aquatic habitat than by using passive methods.

**Rip/Aqu-S6:** Active restoration actions may take place on wild and scenic river areas where PFC analysis clearly demonstrates it is consistent with the *Wild and Scenic Rivers Act*.

**Rip/Aqu-G1:** Incorporate the *Coarse Screening Process* (Rhodes et al 1994) as an element of inventory and monitoring to supplement the PFC process to provide more comprehensive biological habitat information as needed.

**Rip/Aqu-G2:** Cooperatively identify and establish inventory and monitoring sites for riparian/aquatic habitat sites for condition and trend. Utilize standard protocols to establish riparian vegetation/aquatic

habitat type and condition. Additional parameters for physical and water quality analysis will be added as necessary. (Forest Plan)

**Rip/Aqu-G3:** Cooperate with state fish and wildlife agencies and the Nez Perce Tribe to conduct species presence/absence and spawning surveys. (Forest Plan)

#### Water Quality

**Wqq-O1:** Maintain or improve water quality, while recognizing the limitations posed by marginally stable tributary stream channels in a canyon environment that efficiently collect and transport surface water from frequent intense runoff events in high-gradient, dendritic, drainage networks. (Forest Plan)

**Wqq-O2:** Maintain favorable conditions of stream flows for water quality, while recognizing limitations posed by the exercise of valid water rights, a hydropower license, and natural conditions that affect streamflow. (Forest Plan)

**Wqq-S1:** Meet or exceed state water quality standards for waters of the States of Idaho and Oregon within the HCNRA, including total maximum daily loads (TMDLs).

**Wqq-S2:** Implement water quality improvement standards and guidelines for water quality impaired waters of the States of Idaho and Oregon within HCNRA, as required in state Water Quality Management Plans (WQMPs).

**Wqq-S3:** Develop Water Quality Restoration Plans (WQRPs) for water quality impaired waters within HCNRA, as described in *Protocol for addressing Clean Water Act section 303(d) listed waters; Version 2.0, as updated* (USDA and USDI 1999).

**Wqq-G1:** Cooperate with the States of Idaho and Oregon to develop TMDLs for streams in HCNRA on State 303(d) Lists.

**Wqq-G2:** Cooperate with the States of Idaho and Oregon to develop WQMPs for subbasins in HCNRA, including Brownlee Reservoir, Hells Canyon, Imnaha, Lower Snake-Asotin, Lower Grande Ronde, Little Salmon, and Lower Salmon subbasins.

**Wqq-G3:** When developing TMDLs, WQMPs and WQRPs, evaluate the relationship between water quantity and water quality, and develop appropriate solutions, where needed.

#### 1990 Land and Resource Management Plan Direction (Pages 4-22 and 4-26)

WATERSHED, (INCLUDING RIPARIAN ECOSYSTEMS, STREAMSIDE MANAGEMENT UNITS, FLOODPLAINS, WETLANDS, WATER RIGHTS, AND FISH HABITAT)

##### Goal

To maintain or enhance the unique and valuable characteristics of riparian areas and to maintain or improve water quality, streamflows, wildlife habitat, and fish habitat. Design and conduct all management activities in all streamside management units to maintain or improve water quality and associated beneficial uses in SMU Class I and II streams. Management indicator species for riparian habitat include steelhead and resident trout.

##### Standards and Guidelines

1. Conflicts With Other Uses. Give management and enhancement of water quality, protection of watercourses and streamside management units, and fish habitat priority over uses described or implied in all other management standards or guidelines.

2. Water Quality Standards and BMP's Meet Water Quality Standards for waters of the States of Oregon (Oregon Administrative Rules, Chapter 340-41) and Idaho through planning, application, and monitoring of Best Management Practices (BMP's) in conformance with the Clean Water Act, regulations, and federal guidance issued thereto.

3. Use the following process in cooperation with the States of Oregon and Idaho:

a. Select and design BMP's based on site-specific conditions, technical, economic, and institutional feasibility, and the water quality standards for those waters potentially impacted (See Watershed Management Practices Guide for Achieving Soil and Water Objectives, Wallowa-Whitman NF.)

b. Implement and enforce BMP's.

c. Monitor to ensure that practices are correctly applied as designed.

d. Monitor to determine the effectiveness of practices in meeting design expectations and in attaining water quality standards.

e. Evaluate monitoring results and mitigate where necessary to minimize impacts from activities where BMP's do not perform as expected.

f. Adjust BMP design standards and application when it is found that beneficial uses are not being protected and water quality standards are not being achieved to the desired level. Evaluate the appropriateness of water quality criteria for reasonably assuring protection of beneficial uses. Where appropriate, consider recommending adjustment of water quality standards.

4. State Water Quality Management Plans. Implement (Oregon) State Water Quality Management Plans on lands administered by the USDA Forest Service as described in Memoranda of Understanding between The Oregon Department of Environmental Quality and U.S. Department of Agriculture, Forest Service (2/12/79 and 12/7/82), and "Attachments A and B" referred to in this MOU (Implementation Plan for Water Quality Planning on National Forest lands in the Pacific Northwest 12/78 and Best Management Practices for Range and Grazing Activities on Federal Lands, respectively).

5. Mitigation. Mitigate negative impacts causing reduction in water quality to return water quality to previous levels in as short a time as possible (It is recognized that short-term reductions in water quality may result from some activities. For example, turbidity may increase for several days following bridge or culvert installation).

6. Timber Management. Harvest will not occur, on a scheduled basis, within 100 feet of the high water line on either side of Class I and II streams. Harvest may occur along these streams, for other than timber management purposes, when doing so would maintain or enhance water quality, fish habitat, and wildlife habitat. Along Class III and IV streams, manage tree stands to maintain the vegetative characteristics needed for water quality protection or improvement and to maintain or enhance stream channel stability. Only those treatments that maintain or enhance water and riparian quality and are consistent with riparian management and fish habitat goals will be applied. Actual harvest levels will be determined on a site-specific basis and will be governed by needs to protect and improve the riparian-dependent resources.

7. Stream Temperatures. Prevent measurable temperature increases in Class I Streams (less than a 0.5 degree Fahrenheit change). Temperature increases on SMU Class II (and fishbearing SMU Class III) streams will be limited to the criteria in State standards. Temperatures on other streams may be increased only to the extent that water quality goals on downstream, fish-bearing streams will still be met. Normally stream shade management on Class III streams will differ little from treatment on Class II streams.

8. Channel Stability. Maintain natural large woody debris, plus trees needed for a future supply, to protect or enhance stream channel and bank structure, enhance water quality, and provide structural fish habitat within all SMU classes. Quantities and sizes will be determined on a case-by-case basis.

9. Enhance streambank vegetation and/or large woody debris where it can be effective in improving channel stability or fish habitat.

10. Give areas in which water quality or channel stability are being adversely impacted high priority for treatment to minimize the effects of the impact or to correct the impacting activity.

11. Conduct Cumulative Effects Analyses. When project scoping identifies an issue or concern regarding the cumulative effects of activities on water quality, stream channels, or fish habitat a cumulative effects assessment of these effects will be made. This will include land in all ownerships in the watershed. Activities on National Forest System lands in these watersheds should be dispersed in time and space to the extent practicable, and at least to the extent necessary to meet management requirements. On intermingled ownerships, coordinate scheduling efforts to the extent practicable.

[NOTE, Individual, general Best Management Practices are described in General Water Quality Best Management Practices, Pacific Northwest Region, 11/88. This provides guidance but is not a direction document. Also included in this document is a description of the process and limitations and use of these BMP's. Each BMP listed includes the Title, Objectives, Explanation, Implementation and Responsibility, and Monitoring Evaluations of ability to implement and estimate effectiveness are made at the project level. Not all of the general BMP's listed will normally apply to a given project, and there may be specific BMP's which are not represented by a general BMP in this document. The sensitivity of the project determines whether the site-specific BMP prescriptions are included in the environmental assessment, environmental impact statement or in the sale project plan, or in the analysis files. For a more complete explanation of the above, refer to Appendix 0 in the FEIS, "Best Management Practices."]

12. Alter watershed conditions only to the extent that aquatic and riparian goals will still be met and other valid water uses, such as irrigation, will not be adversely affected. When planned projects are likely to adversely affect watershed conditions, a hydrologic analysis will be conducted considering past, present, and future activities. If the results of this analysis indicate that the proposed project would adversely affect watershed condition, the project will be altered. This may include such things as deleting or rearranging harvest units in timber sales, selecting different silvicultural prescriptions, or delaying activities for one or more decades.

13. Groundwater. All projects or activities (including but not limited to pesticide application, fertilizer application, or storage of potentially hazardous volumes of fuels and other chemicals on National Forest System land) with the potential to adversely affect surface or ground waters, will include constraints and/or mitigation measures designed to prevent contamination, and will include a plan for dealing with accidental spills.

14. Floodplains. Address in all project environmental analyses the presence of, and potential impacts, to any floodplain within the project area.

15. Invest in major structures, roads, or other facilities within floodplains only if no feasible alternative site outside the floodplain exists.

16. Permit short-term adverse impacts on floodplains only in conjunction with specific mitigation measures designed to minimize the impacts. Where activities adversely affect natural floodplains, the floodplains will be restored, to the extent practicable, shortly after the activity has ceased.

17. Wetlands. Address in all project environmental analyses the presence of, and potential impacts to, any wetlands within the project area. Particular attention will be paid to protection of springs during road location, timber sale plans, and range allotment management plans. Adverse impacts to wetlands will be avoided or mitigated.

18. Roads and Skid Trails. Do not construct roads through the length of riparian areas. Roads crossing riparian areas will not alter stream or ground water flow characteristics to a degree which will impact the riparian characteristics.

19. Design and maintain road drainage to prevent the influx of significant amounts of road sediment runoff into streamcourses.

20. Manage roads currently located in riparian areas or streamside management units to minimize impacts to water quality and wildlife habitat. In some instances, this will require higher levels of maintenance, road surfacing, or drainage than would normally be justified on the basis of road use alone. Roads may be closed, obliterated, and rehabilitated when it is determined, through an environmental analysis considering all resources, to be the best alternative.

21. Locate skid trails and roads to avoid paralleling stream channels in streamside management units. Log landings will not be placed in riparian areas. Skidding logs down streamcourses or ephemeral draws will not occur.

22. Avoid the use of heavy equipment (such as crawler tractors and skidders) within riparian ecosystems. When such use is unavoidable (as in the construction of bridges or other stream crossing devices or during the construction of stream channel improvements) the activity will include mitigation measures designed to minimize adverse effects on the riparian zone and downstream values. Ground disturbing activities will normally be limited to 10 percent exposed soil or less within riparian ecosystems.

23. Manage recreation activities to prevent site deterioration within riparian areas. Trails will be designed and maintained to minimize riparian impacts.

24. Fuel Treatment. Remove slash created as the result of an activity within the normal high water zone of Class I and II streams unless needed for soil protection or other purposes. Slash removal from other streams may be required where resource damage would otherwise result. Slash piles normally will not be located within riparian areas.

25. Sewage Disposal. Dispose of sewage effluent from campgrounds, administrative sites, and other developed areas in a manner which will prevent the contamination of surface or subsurface water. Sewage disposal practices will comply with State of Oregon requirements for sites in Oregon and State of Idaho requirements for sites in Idaho.

26. Mining Activities. Protect watershed values to the fullest extent possible under existing laws in evaluating and developing mineral operating plans.

27. When areas within 100 feet of Class I, II, or III streams or other perennial water bodies are disturbed by mining activities, they shall later be restored by the operator to equal or comparable condition. This restoration will occur whenever the operator is finished with an area that is large enough to logically restore. An inventory of existing conditions should be performed by Forest Service before approval of the operating plan is given. If this is not possible, then the inventory shall be performed before mining operations begin, with an amendment made to the operating plan. This inventory will determine:

(a) Densities of trees, riparian brush (alders, willows, etc.), nonriparian brush, and herbaceous vegetation.

(b) Fish habitat suitability (expressed as percent of habitat optimum). The inventory method used will be Cow-Fish<sup>1</sup> or a similar one.

[1. Lloyd, James R. Cow-Fish Habitat Capability Model. USDA Forest Service, Northern Region, Box 7669, Missoula, Montana 59807. June 1986]

28. Require the mining operator, as part of the restoration process to

(a) Plant trees and riparian brush at spacings that will achieve the original densities of these types. This spacing will at least be equal to what existed originally, except when the original densities were too great for good growth.

(b) Plant grass to achieve a density equal to or greater than the total of the original herbaceous plus nonriparian brush types--greater densities may be required if needed for erosion control.

29. Require the mining operator, as part of the restoration process, to (where appropriate):

(a) Construct a temporary fence to exclude livestock from the planted area if needed for protection from livestock grazing.

(b) Place whole trees, construct habitat enhancement structures, or perform comparable improvements within the stream channel at a density required to bring the fish habitat suitability index up to the same value that existed before the mining operations began. This is needed if instream work has disrupted the fish habitat suitability index by five or more percentage units.

The estimated costs of the above operator requirements shall be incorporated into the value of the operator performance bond.

30. Evaluate and restore all other surface areas impacted by mining as in the previous paragraphs except for those items dealing with fish habitat.

31. Water Rights and Instream Flows. File for water rights in accord with State law and FSM 2500 Protect instream flow on National Forest System lands through critical analysis (via NEPA) of proposed water uses, diversions, and transmission applications and renewal of permits. Protection may be achieved through filing protests with States where applications are made that adversely affect National Forest resources, asserting claims for this water under Federal or State laws where applicable, inserting protection measures into special use permits, or reaching formal agreements over use. Purchase of water rights and impoundments are other means for reducing these impacts. (Also see Standards and Guidelines for Livestock Grazing and Wildlife.)

## Wildlife Habitat

The following direction supplements Forest Plan management direction (pages 4-44 through 4-46), Regional Forester Amendment #2, PACFISH management direction, and INFISH management direction.

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

**Wld-O1:** Emphasize the management of habitat for native species needs and also desired nonnative species and invertebrate organisms. (Forest Plan)

**Wld-O2:** Manage vehicular access seasonally or year-long, as necessary to protect or maintain important wildlife habitat. Determine specific restrictions during project-level planning of a district access travel plan. (Forest Plan, CMP)

**Wld-S1:** Administer HCNRA for public outdoor recreation in a manner compatible with the protection and maintenance of wildlife habitat and populations.

**Wld-S2:** Maintain open-road densities for all 61 subwatersheds at or below 1.35 mi./sq. mi., except maintain subwatershed 9L at or below 1.9 mi./sq. mi. open road densities.

**Wld-G1:** Evaluate, and where appropriate, re-establish, and/or enhance populations of indigenous wildlife species. The appropriate mechanism is to reach joint agreement, through an MOU with the appropriate fish and wildlife state agencies.

**Wld-G2:** Ensure the long-term maintenance of healthy populations of native landbirds by implementing the biological objectives in the *Landbird Conservation Strategy* (Partners in Flight 2000 as updated).

### Threatened, Endangered, and Sensitive Wildlife Species

**Tesw-S1:** Protect, enhance, and manage wildlife habitat for the recovery of wildlife that are federally listed as threatened, endangered, or sensitive. Inventory the occurrence and distribution of threatened and endangered species. (Forest Plan)

**Tesw-S2:** Implement the conservation measures in the *Canada Lynx Conservation Assessment and Strategy* (Reudiger et al 2000 as updated).

**Tesw-S3:** Locate, monitor, and protect nesting, roosting, and feeding areas for bald eagles. Develop nest site plans for new nests within two years of discovery.

**Tesw-S4:** Protect Townsend's big-eared bats from negative human-caused disturbance by managing access at the entrances of caves and mines. (Forest Plan)

**Tesw-G1:** Build and manage gates for Townsend's big-eared bats at the entrance of each cave and mine tunnel that is negatively affected by human-caused disturbance. Set gates back from the entrance to comply with visual concerns.

**Tesw-G2:** Identify and protect cave and mine shafts used for hibernation from human-caused disturbance from November 1 to April 1.

**Tesw-G3:** Identify and protect maternity colonies for Townsend's big-eared bats from human-caused disturbance from May 1 to August 15.

**Tesw-G4:** Buffer known habitat areas for Townsend's big-eared bats with uninterrupted canopy (brush or trees) of 100 feet, where possible.

**Tesw-G5:** Outside Hells Canyon Wilderness, maintain a diversity of wildlife habitats by providing a variety of structural stages for each plant association arranged in a mosaic across the landscape.

**Tesw-G6:** Identify and monitor potential wolverine natal den sites. If active natal den sites are found, restrict human use near these sites from January through May.

**Tesw-G7:** Maintain large refugia (greater than 10,000 acres) with low human-caused disturbance for wolverine, fisher, pine marten, lynx, wolf, and other forest carnivores that benefit from large undisturbed areas.

#### Late/Old Structure

**Los-O1:** Outside Hells Canyon Wilderness, maintain areas of late/old structure similar to the HRV levels for the purpose of providing habitat for dependent species.

**Los-S1:** Identify and map late/old structure in MAs 7, 10, and 11 and track its extent and distribution through time. Identify and maintain connectivity corridors between late/old structure. Use the following definitions for each vegetation series.

Table 11: Definitions for Old Growth (Region 6)

| Vegetation Series                         | Live Trees  |     |     |                            |                |                    | Dead Trees |     |          |        |
|-------------------------------------------|-------------|-----|-----|----------------------------|----------------|--------------------|------------|-----|----------|--------|
|                                           | Main Canopy |     |     | Variation in Tree Diameter | Tree Decadence | Tree Canopy Layers | Standing   |     | Down     |        |
|                                           | DBH         | TPA | Age | Yes or No                  | TPA            | Number             | DBH        | TPA | Diameter | Pieces |
| White/Grand fir Low & Medium Productivity | 21"         | 10  | 150 | Yes                        | Yes            | 2                  | 14"        | 1   | 12"      | 5      |
| White/Grand fir High Productivity         | 21"         | 20  | 150 | Yes                        | Yes            | 2                  | 14"        | 1   | 12"      | 5      |
| Douglas fir                               | 21"         | 8   | 150 | Yes                        | 2              | 1                  | 12"        | 1   | 12"      | 2      |
| Ponderosa pine Low Productivity           | 21"         | 10  | 150 | Yes                        | -              | 1                  | 14"        | 3   | -        | 0      |
| Ponderosa pine Medium & High Productivity | 21"         | 13  | 150 | Yes                        | -              | 1                  | 14"        | 3   | -        | 0      |
| Subalpine fir                             | 21"         | 10  | 150 | Yes                        | 4              | 2                  | 12"        | 2   | 12"      | 4      |

DBH – Diameter at breast height – 4 ½' from ground

TPA – Trees per acre

Tree Decadence – TPA with spike or deformed tops, bole or root decay

**Los-S2:** In MAs 7, 10, and 11, identify late/old structure replacement stands and develop a management strategy (during project-level planning) to maintain or move stands toward late/old structure conditions as needed to maintain this component within the HRV.

**Los-G1:** Identify blocks of late/old structure at least 900 acres each to provide habitat for associated species (Bull and Holthausen 1993).

#### Big-game Habitat

**Bgg-O1:** Provide quality big-game habitat to meet the elk and deer herd populations, calf, fawn, buck, and bull ratios established by ODFW and IDFG. (Forest Plan)

**Bgg-S1:** Prevent the spread of diseases from domestic sheep to wild sheep by maintaining separation of the two species. Do not stock vacant allotments with domestic sheep unless a vaccine or other technique is found that eliminates the incompatibility.

**Bgg-G1:** Outside Hells Canyon Wilderness, actively manage habitat for big-game herds to assist the States of Oregon and Idaho and the Nez Perce Tribe in reaching population objectives, bull and buck escapement, and calf and fawn ratios. Continue to recover bighorn sheep through participation with the *Restoration of Bighorn Sheep to Hells Canyon, the Hells Canyon Initiative* (Hells Canyon Bighorn Sheep Restoration Committee 1997).

**Bgg-G2:** Manage recreational livestock use to minimize the potential for transmission of harmful domestic animal diseases to wildlife.

**Bgg-G3:** Maintain elk and deer habitat to meet the current management objective levels, unless adjusted by the Oregon Fish and Wildlife Commission. Work cooperatively with Oregon Department of Fish and Wildlife on future management objective revisions. The management objectives are (ODFW 1994):

Table 12: Big-game Management Objectives

| Unit        | Objectives                                                     |
|-------------|----------------------------------------------------------------|
| Snake River | 4,200 elk, 15 bulls, 40 calves, 6,400 deer, 15 bucks, 70 fawns |
| Pine Creek  | 400 elk, 15 bulls, 45 calves, 2,500 deer, 15 bucks, 70 fawns   |
| Chesnimnus  | 3,500 elk, 10 bulls, 40 calves, 3,600 deer, 15 bucks, 70 fawns |
| Imnaha      | 800 elk, 15 bulls, 40 calves, 5,300 deer, 15 bucks, 70 fawns   |

Note: bull, calves, bucks, and fawns are per 100 cows/does.

#### 1990 Land and Resource Management Plan Direction (Pages 4-44 and 4-46)

##### WILDLIFE

##### Goal

To provide habitat for viable populations of all existing native and desired nonnative vertebrate wildlife species and to maintain or enhance the overall quality of wildlife habitat across the Forest.

##### Standards and Guidelines

1. Riparian. Manage riparian habitat consistent with Forest Service Manuals 2500 and 2600. Where natural stream characteristics permit, the management (as described in Managing Riparian Ecosystem (Zones) for Fish and Wildlife in Eastern Oregon and Eastern Washington<sup>1</sup> will provide for 60-100 percent shade on live streams, 80 percent or more of the total lineal distance of streambank in a stable condition, limiting fine inorganic sediment covering stream substrate to 15 percent, and 80 percent or more of the potential grass-forb, shrub and tree cover.

[1. Riparian habitat subcommittee of the Oregon/Washington Interagency Committee. Managing Riparian Ecosystems (Zones) for Fish and Wildlife in Eastern Oregon and Washington, March 1979.]

2. Give preferential consideration to resources such as fish, certain wildlife and vegetation, and water which are dependent upon riparian areas over other resources in actions within or affecting riparian areas.
3. Where timber is managed in riparian areas, and in other parts of the SMU directly affecting riparian conditions, harvest will generally be by selection or by group selection techniques. These areas will normally require a longer timber stand rotation than is used on areas managed more intensely for timber in situations where even-aged silviculture will better meet riparian area objectives, its application is acceptable. (Also see direction under Watershed Standards and Guidelines.)
4. Manage timber stands in riparian areas to provide habitat for snag-dependent wildlife species at not less than the 60 percent level of the optimum habitat (including snags of all sizes) as described in Wildlife Habitats in Managed Forests (Thomas, 1979).
5. Manage existing and proposed populations of wild bighorn sheep according to Wild Bighorn Sheep Conflicts with Domestic Livestock and other Wildlife Ungulates on the Wallowa-Whitman Forest - A Summary Status Report and Interim Program Direction (January 1982 – on file at Forest Headquarters).
6. Consider introductions of other native or nonnative wildlife species, such as the Rocky Mountain goat, on a case-by-case basis through the NEPA process.
7. Snag Management. Maintain at least the 20 percent level (the management requirement level) of snags 10 to 20 inches in diameter wherever higher levels are not specified and where doing so would not conflict with the primary management area objective. Exceptions include
  - a. Management Area 16 (Administrative and Recreation Sites).
  - b. Management Area 17 (Utility Corridors) if use of the corridor for its designated purpose requires clearing of vegetation.
  - c. Areas where safe use of helicopter and other systems for log yarding will require snag falling Short-term snag shortages may occur following these harvest activities. Sufficient green trees will be left in these situations so that adequate numbers of snags can be created.
  - d. Areas where catastrophic mortality such as from fire, disease, or insect epidemic precludes the leaving of green replacement trees.
  - e. Areas where harvest is occurring to treat an insect or disease situation (such as dwarf mistletoe or root rot) and leaving green replacement trees would significantly reduce the effectiveness of the treatment.
8. Provide specified snag levels within land areas that are generally no larger than a normal harvest unit (40 acres), the intent being not to average snag levels over large areas.
9. Where adequate numbers of snags are not present and cannot be created, higher snag levels may be managed in adjacent areas and averaged with the low levels in deficient areas to meet the specified levels. However, averaging should be done over a small an area as possible, and replacement snags should be planned for the deficient areas to meet the distribution requirements as soon as possible.
10. Provide snags either in patches or distributed across the landscape, reflecting safety, biological effectiveness, and operational feasibility.
11. Retain existing and naturally-occurring snags at the 40 percent level unless higher levels are established in specific management area direction.

12. Leave green replacement trees, where needed, to assure that the 20 percent snag level is met through time (i.e., at all times during a stand's rotation) Do not leave additional green trees to provide for levels higher than 20 percent (except in riparian) unless established by specific management area direction.

13. Dead and Down Material. Provide dead and down woody material to meet habitat requirements for those species of wildlife, insects, fungi, and other microscopic plant and animal species associated with this type of habitat. Actions to provide this habitat may include such things as leaving one or more concentrations of slash per acre of small mammals and ground-nesting birds, leaving unmerchantable logs on-site in various stages of decay, and activities needed to protect this debris to prescribed fire and fuelwood cutting.

14. Raptor Nest Sites. Protect all raptor nest sites in use Protect other nesting sites, important roosting, or special foraging habitats where it can be accomplished without adversely affecting long-term timber production or unreasonably complicating timber sale preparation and related activities. Such means could include adjustments in unit boundaries, operating seasons, or harvest scheduling.

15. Managing Bald Eagle and Peregrine Falcon Habitat. Manage northern bald eagle and peregrine falcon habitat as described in the section of this chapter entitled "Threatened, Endangered, and Sensitive Species."

16. Pileated Woodpecker Feeding Areas. Provide a 300-acre pileated woodpecker feeding area within 0.7 miles of any designated old-growth patch (MA 15) approximately 300 acres or larger. This will normally be a contiguous block although it may be arranged in blocks of 50 acres or larger not more than 0.25 miles apart. Within these feeding areas, maintain at least two hard snags ten inches in d.b.h. or larger.

17. Locate pileated feeding areas in areas such as wilderness, MA 6, or other areas without scheduled timber harvest, when available.

18. Unique Habitats. Avoid alteration of unique habitats such as cliffs and talus slopes. Decisions to alter or disturb these habitats will only be made following site-specific NEPA analysis including identification of suitable mitigation measures.

19. Coordination. Coordinate activities that affect fish or wildlife resources with the appropriate State wildlife management agency in accordance with formal agreement. This may include State involvement during scoping and at other stages of decision making under the Forest Service NEPA process.

20. Indian Treaty Rights. Recognize the hunting and fishing rights of the Indian tribes in habitat management activities.

21. Predator Control. Permit predator control as necessary to achieve management objectives in coordination and cooperation with the Animal and Plant Health Inspection Service (APHIS), the Oregon Department of Fish and Wildlife, and the Idaho Fish and Game Department. Such control will be in accordance with Forest Service Manuals 2600 and 2300.

## Scientific Research

**Goal:** The HCNRA provides research opportunities that contribute to the management, inventory and monitoring and restoration of the area and to the public benefit.

**Sci-O1:** Provide research opportunities designed to optimize discovery of useful information for management and restoration activities, and for the advancement of scientific knowledge. Focus research on resolution of management-related issues, concerns, and opportunities.

**Sci-S1:** Research projects require a study plan to be approved by the Area Ranger which addresses objectives, methodologies, and peer review parameters. Research study results will be supplied to HCNRA staff upon publication.

**Sci-S2:** Require an analysis of research proposals that cause ground disturbance or permanent facilities to ensure compatibility with the goals and objectives of this plan, the intent of Section 7 of the *HCNRA Act*, and other applicable laws and regulations.

**Sci-S3:** Require anyone collecting plants, lichens, or fungi for research, bio-prospecting, or herbarium vouchers to obtain an annual permit. This permit requires coordination with the Forest botanist, and will prohibit collection of any federally listed threatened and endangered, or proposed and sensitive species. (FSM 2400, New)

**Sci-G1:** Explore the feasibility of cooperative agreements with local, county, state, other federal agencies, the Nez Perce Tribe, Idaho Power Company, colleges, universities, and user groups to identify research opportunities and to cooperate in data collection, data sharing, and evaluation of findings.

**Sci-G2:** Emphasize research opportunities that provide useful information relative to Section 7 of the *HCNRA Act* and the goals and objectives of this plan for management of the HCNRA.

**Sci-G3:** Use the Hells Canyon Subgroup to the John Day/Snake Resource Advisory Council to help identify research needs, potentials, and limitations, and to recommend projects for approval.

**Sci-G4:** Report research findings and identify research needs in the monitoring and evaluation report.

**Sci-G5:** Consider research partnerships to better define soil ecological systems including:

- Status and importance of biological crusts to ecosystem diversity, soil productivity and stability.
- Soil microbiota (species, abundance, habitats, effects on soil productivity) for major soil types.
- Soil burrowing vertebrates and invertebrates, their habitats, and relationship to soil productivity.
- Reference areas for major soil types representing soil ecosystems in excellent condition.
- Soils, biota, and function of the zone adjacent to streams.

**Sci-G6:** Consider initiating partnerships to develop educational materials about ecosystems in the HCNRA.

## Geologic Resources

The following direction supplements Forest Plan management direction (pages 4-46 through 4-48).

**Goal:** Provide for the protection of paleontological and unique geologic resources from damage or destruction. Manage paleontological resources for scientific research to the extent consistent with protection. Provide for interpretation and education of unique geologic events and features. (Public LURs, 36 CFR 292.43(a)(4), New)

**Geo-O1:** Manage caves per Forest Plan management direction for cave management (pages 4-46 through 4-48) and *Federal Caves Protection Act*. (Forest Plan)

**Geo-O2:** Restore damaged paleontological and unique geologic resources to the extent practical.

**Geo-S1:** Allow for collection of invertebrate and vertebrate paleontological materials only by professional paleontologists/geologists and zoologists with legitimate research interests and research plans. Require collection permits issued by the Area Ranger. (Public LURs, 36 CFR 292.43(a)(4), New)

**Geo-S2:** Maintain integrity and scenic quality of geologic features such as caves, rock shelters, talus slopes, natural salt licks, cliffs, rims, limestone outcrops, and uplifts, by avoiding alteration or requiring protection.

**Geo-S3:** No person shall destroy, disturb, deface, mar, alter, remove or harm any significant cave or alter the free movement of any animal or plant life.

**Geo-G1:** Coordinate and share all geological research with the HCNRA, particularly consumptive research involving fossil collection, to reduce and/or eliminate redundant collection and research efforts.

**Geo-G2:** Consider placing signs at major portals and/or at specific locations where damage to significant fossil-bearing formations is occurring. Educate the public about the collection of paleontological materials and associated prohibitions.

**Geo-G3:** Continue to identify, inventory, and map paleontological resources.

**Geo-G4:** Public access may be limited to prevent damage to special geologic features or other resources, or if there are determined safety hazards to visitors.

**Geo-G5:** Provide interpretation of and educational opportunities related to paleontologic resources through off-site methods rather than on-site signing to protect locations of the sites.

**Geo-G6:** Inform visitors about the value of special features, management actions being taken to protect their value, and opportunities for public use. Scientific or educational use of special features may be allowed under permit.

## **1990 Land and Resource Management Plan Direction (Pages 4-46 to 4-48)**

### **CAVE MANAGEMENT**

To secure, protect, and preserve significant caves on Federal lands for the perpetual use, enjoyment and benefit of all people. To foster increased cooperation and exchange of information between land managers and those who use caves located on Federal lands for scientific, educational, or recreational purposes. (Also see Public Law 100-691, the Federal Cave Resources Protection Act of 1988.)

#### **Standards and Guidelines**

1. Inventory and Classification. Complete a Forest-wide, comprehensive cave inventory including a cultural resource inventory, as described in the Federal Cave Resources Protection Act of 1988 (FCRPA) and subsequent regulations. Evaluate and propose significant caves for listing on the National Significant Caves List. Unless otherwise directed in regulations subsequent to the FCRPA, caves will be classified and managed as follows:

**Class 1' Sensitive Caves** - Caves considered unsuitable for exploration by the general public either because of their pristine condition, unique natural features, significant cultural resources, or extreme safety hazards. They may contain natural or cultural features that would be impacted by low levels of visitation. These caves are not shown on maps or discussed in publications intended for general public use such as guides, brochures and magazines.

**Class 2: Undeveloped Caves** - Caves that are undeveloped or contain unmaintained or minimal developments and that are suitable for exploration by persons who are properly prepared. Although these caves contain features that generally resist degradation by recreational use, public use will not be directed toward them.

**Class 3 Directed Access Caves** - Caves with directed public access and developed for public use. These caves are shown on maps or have signs directing visitor access; frequently have guided tours and artificial lighting. Regardless of the level of development, public visitation is encouraged. The caves may have sensitive features that are protected.

2. Manage newly-discovered caves as Class 1 until an analysis of natural and cultural values is made.
3. Management Plans. Prepare individual cave management plans for caves with high natural, cultural, educational or recreational values, caves with hazardous conditions, or caves which receive heavy use. Cave management planning will be coordinated with non-forest Service organizations and individuals. (Also see Memorandum of Understanding between the USDA Forest Service and the National Speleological Society, September 29, 1988.) The public will be encouraged to help in cave management planning.
4. Protection and Management. Protect significant caves from activities which would adversely affect their recreational, biological, geological, hydrological, mineralogical, paleontological, or cultural values. Protection will be based on the classification and natural and cultural values.
5. Restrict logging, road construction, and other uses of heavy equipment above or in the vicinity of a cave with a thin roof, or the course of such a cave, if there is a potential for damage.
6. Retain vegetation in the vicinity of a cave or cave course if it is required to protect the cave's microenvironment.
7. Fell trees away from the cave and its course if timber harvesting is permitted in the vicinity of a cave.
8. Cave entrances will not be altered or used as disposal sites for slash, spoils, or other refuse and no action will be taken to prevent or hinder ingress or egress of cave-dependent wildlife.
9. Management activities will not be permitted within any area draining into a cave if they are likely to affect the cave ecosystem through sedimentation, soil sterilization, the addition of nutrients or other chemicals (including pesticides, herbicides, and fertilizers) or through change the cave's natural hydrology.
10. Surface drainage will not be diverted into caves.
11. Public Access. Limit public access if required to prevent damage to cave features. Access may also be limited if there are safety hazards. (Specific location information of Significant Caves is exempt from disclosure to the general public.)
12. Action will be taken to inform the public of the values of caves, actions being taken to protect cave values, and opportunities for public use.
13. Scientific or Educational Use. Scientific or educational use of caves may be allowed under permit.

## Minerals

The following direction supplements Forest Plan management direction (4-33 through 4-34).

**Goal:** Emphasize meeting the objectives for which the HCNRA was established with managing mining and its associated activities of valid existing mineral rights. (Public LURs, New)

**Min-O1:** Manage common variety mineral materials for the sole purpose of construction and maintenance of facilities within the HCNRA including, but not limited to roads, airfields, trails, and recreation developments. Emphasize the use of common variety mineral material sources from outside of the HCNRA. (Public LURs, 36 CFR 292.47(a)(3), New)

**Min-O2:** Restore abandoned mineral materials sites; restore existing sites upon closure.

**Min-S1:** Subject all mining activity, including pan, sluice box, suction dredge, or some other means, to valid existing rights determination as of December 31, 1975 (36 CFR 292.47). Mining activity based on valid existing rights may continue under regulations at 36 CFR 228 Subpart A. (Public LURs, 36 CFR 292.47(a)(1))

**Min-S2:** Require operating plans (in accordance with 36 CFR 228 Subpart A) to minimize adverse environmental impacts on surface resources.

**Min-S3:** Mineral materials extracted from within the HCNRA, including, but not limited to common varieties of gravel, sand, or stone may only be used within the HCNRA for the purpose of construction and maintenance of facilities such as roads, existing landing strips, trails, and recreation developments necessary for the administration and safe use of the HCNRA. (Public LURs, 36 CFR 292.47(a)(3))

**Min-S4:** Do not permit collection of mineral materials including, but not limited to, common varieties of gravel, sand, or stone for noncommercial, personal uses (e.g., landscaping material). (Public LURs, 36 CFR 292.47(a)(3)).

**Min-S5:** Locate sources of mineral materials outside the HCNRA for projects that benefit the HCNRA. Sources of mineral materials within the HCNRA may be used to benefit the HCNRA if obtaining the materials outside the HCNRA adds significantly to the cost or the transportation of the material poses a significant safety hazard. (Public LURs, 36 CFR 292.47(a)(4))

**Min-S6:** The HCNRA is not a source of mineral materials for use outside the HCNRA for projects that do not directly benefit the HCNRA. (Public LURs, 36 CFR 292.47(a)(4))

**Min-S7:** Prohibit extraction of mineral materials on Hells Canyon Wilderness lands and wild and scenic rivers except for trail reconstruction projects. (Public LURs, 36 CFR 292.47(b)(2)).

**Min-S8:** Analyze rock sources for common variety minerals for site-specific projects by considering the need for each pit, stockpiling common variety material, topsoil, location, future use, closure, rehabilitation and other resource objectives. (Public LURs, 36 CFR 292.47(a)(4))

**Min-G1:** Minimize and direct the impact of mining activities including, but not limited to, drilling and the development of ingress and egress rights, away from Hells Canyon Wilderness lands and wild and scenic rivers to the extent practicable. (Public LURs, 36 CFR 292.47(a)(2) and (b)(1))

**Min-G2:** Reclaim abandoned mine portals to minimize risk to public safety, provide wildlife habitat and minimize impact to scenic values.

**Min-G3:** Develop plans to reclaim abandoned mineral materials sites. Allow for future closure of existing sites and final reclamation of the sites.

**Min-G4:** Site reclamation may include contouring the land, re-establishing vegetation and other measures deemed appropriate by the Area Ranger to blend the site into the surroundings environment and meet the goals and objectives of this plan. (Public LURs, 36 CFR 292.47(a)(4))

## **1990 Land and Resource Management Plan Direction (Pages 4-33 to 4-34)**

### **MINERALS**

#### **Goal**

To provide for exploration, development, and production of a variety of minerals on the Forest in coordination with other resource objectives, environmental considerations and mining laws. To encourage

and assist, whenever possible, the continuation of regional geologic mapping and mineral resource studies on the Forest in cooperation with other natural resource agencies.

#### Standards and Guidelines

1. Access. Permit claimants reasonable access to their claims as specified in United States Mining Laws.
2. Operating Plans. Require operating plans, in accordance with 36 CFR 228 Subpart A, when operations are proposed which involve significant disturbance of the surface resources.
3. Operating plans will include reasonable and operationally feasible requirements to minimize adverse environmental impacts on surface resources.
4. Analyze operating plan proposals and alternatives, including alternatives for access, reclamation, and mitigation, using the Forest Service NEPA process.
5. Reclamation. Develop reclamation standards using an interdisciplinary process to ensure lands are in productive condition to the extent reasonable and operationally feasible. Reasonable opportunities to enhance other resources will be considered Concurrent reclamation will be stressed. Reclamation bonds will be based on actual reclamation costs and formulated using technical and other resource input. (Also see Standards and Guidelines for Watershed.)
6. Withdrawals. Review all existing withdrawals by 1991 in accord with Section 204(1) of the Federal Land Policy and Management Act (FLPMA) of 1976, except as provided otherwise by law.
7. Recommend areas with minerals potential for mineral withdrawal only when mitigation measures would not adequately protect other resource values which are of greater public benefit.
8. Conform with Section 204 of FLPMA in withdrawals from entry under general mining laws.
9. Common Minerals. Give priority to use of currently developed common mineral (natural gravel and hard rock) material sources over undeveloped sources Exceptions will be made when existing sources are unable to economically supply the quality and quantity of material needed or when conflicts with other resource uses are found to be unacceptable.
10. Development of mineral material sites will be done in accordance with 36 CFR 228, Subpart C.

## Land Management and Special Uses

The following direction supplements Forest Plan management direction (pages 4-71 through 4-85).

**Goal:** Manage landownership patterns to best meet the objectives for which the HCNRA was established. Implement the standards established for the use and development of private lands within the HCNRA.

**Lan-O1:** Coordinate with comprehensive land management plans for Baker and Wallowa counties in Oregon; and Idaho, Nez Perce, and Adams counties in Idaho in the implementation of Private LURs. (Private LURs, 36 CFR 292.23)

**Lan-S1:** Monitor assignments and changes in private land categories: 1) farm, forest, grazing land; 2) mining land; 3) residential land; and 4) commercial land; pursuant to the Private LURs. (Private LURs, 36 CFR 292.22)

**Lan-S2:** Monitor uses on private lands for conformity with standards of compatible land use and development pursuant to the Private LURs. (Private LURs, 36 CFR 292.23)

**Lan-S3:** Determine compliance and noncompliance of existing or proposed use or development on private lands pursuant to Private LURs. (Private LURs, 36 CFR 292.24)

**Lan-S4:** Give prompt and careful consideration to any offer from a willing seller, if adequate funds are available.

**Lan-S5:** Acquire fee title or partial interests when private land is being used, or is threatened to be used, outside standards prescribed by the Private LURs and when county regulation, through their ordinances, is not effective. Consider purchasing in fee, on a willing seller basis, if the partial interest value is in excess of 80 percent of the total appraised value of the property. (Private LURs, 36 CFR 292.20)

**Lan-S6:** Manage access to nonfederally-owned lands within the boundaries of the HCNRA in accordance with the application requirements of 36 CFR 251.54. Authorize access to secure owners reasonable use and enjoyment of those lands, based on traditional uses of such parcels (36 CFR 292.21) and the intent of the following land categories 1) farm, forest, grazing land, 2) mining land, 3) residential land, and 4) commercial land (36 CFR 292.22), provided the owner complies with the rules and regulations applicable to ingress and egress to or from the HCNRA (36 CFR 251 Subpart D). (Private LURs, 36 CFR 292.21; 22)

**Lan-S7:** Manage right-of-way acquisition for motorized and nonmotorized access pursuant to FSM 5460, FSH 5409.17, and the right-of-way acquisition plan on file at National Forest Headquarters in Baker City, Oregon. (Forest Plan, FSM 5460)

**Lan-S8:** Manage special uses in accordance with policies and procedures as outlined in FSM 2700 and FSH 2709.11. (Forest Plan)

**Lan-G1:** Refer to criteria established for the acquisition of private land parcels (on file at National Forest Headquarters in Baker City, Oregon) when there is a willing seller and the acquisition meets Forest Service management objectives. Acquisition may occur by exchange or by purchase. Lands on the Snake River, Hells Canyon Wilderness properties, and Idaho inholdings have higher priority for acquisition than other HCNRA lands. Lands that support known populations of threatened, endangered, proposed, or sensitive species will also have a high priority for acquisition. Consider acquisition of lands with existing structures, both historic and otherwise on a case-by-case basis. Consider future use of structures in the acquisition process and prioritize those lands that do not increase future (structure) maintenance obligations. Evaluate facilities associated with potential acquisitions for administrative or historic values with a site-specific future use determination. The determination does not preclude acquisition of the site in high priority areas such as the Hells Canyon Wilderness.

**Lan-G2 for Wilderness:** Acquire Hells Canyon Wilderness lands in fee as the opportunity occurs.

**Lan-G3 for the Snake Wild and Scenic River Corridor:** Limit acquisition of private lands to those interests needed to regulate use and development that is incompatible with management direction for the Snake River corridor. (Private LURs, 36 CFR 292.20)

**Lan-G4 for the Rapid River Corridor:** Present use of private land is livestock grazing in conjunction with NFS grazing allotments. Continue this use on public lands as long as the values for which the river was designated are protected (*Wild and Scenic Rivers Act*). If any change of use occurs, or is likely to occur, that is not in furtherance of the management objectives for the Rapid River corridor, utilize section 11(b)(1) of the *Wild and Scenic Rivers Act* to provide limited financial or other assistance.

**Lan-G5 for Other HCNRA lands:** Purchase partial interests as the primary means of acquisition when landowners fail to meet the provisions of the Private LURs and if regulation through county ordinances is not effective. Acquire lands needed for recreation purposes in fee, except for those cases where a right-

of-way accomplishes the desired objective. Exchange of lands may be conducted if the exchange results in a more economically viable farm and ranch unit and provides for improved management of HCNRA resources.

**Lan-G6:** Consider issuing permits for special uses (irrigation ditches, fisheries facilities, access, and other miscellaneous uses) on an individual case-by-case basis, provided the use is compatible with Section 7 of the *HCNRA Act* and meets the intent of the goals, objectives, and standards and guidelines in the Forest Plan.

**Lan-G7:** Cooperate with Idaho Power Company and other private and federal energy suppliers to identify appropriate transmission corridors for existing lines and future lines that are the most compatible with the purpose of the *HCNRA Act*. Do not consider new lines or corridors unless present corridors are vacated.

**Lan-G8:** Participate fully in the Federal Energy Regulatory Commission relicensing process for Hells Canyon Complex in cooperation with Idaho Power Company and other local, state, federal, and tribal governments to identify appropriate terms and conditions for relicensing and management of right-of-ways.

# Management Area Direction

## Introduction

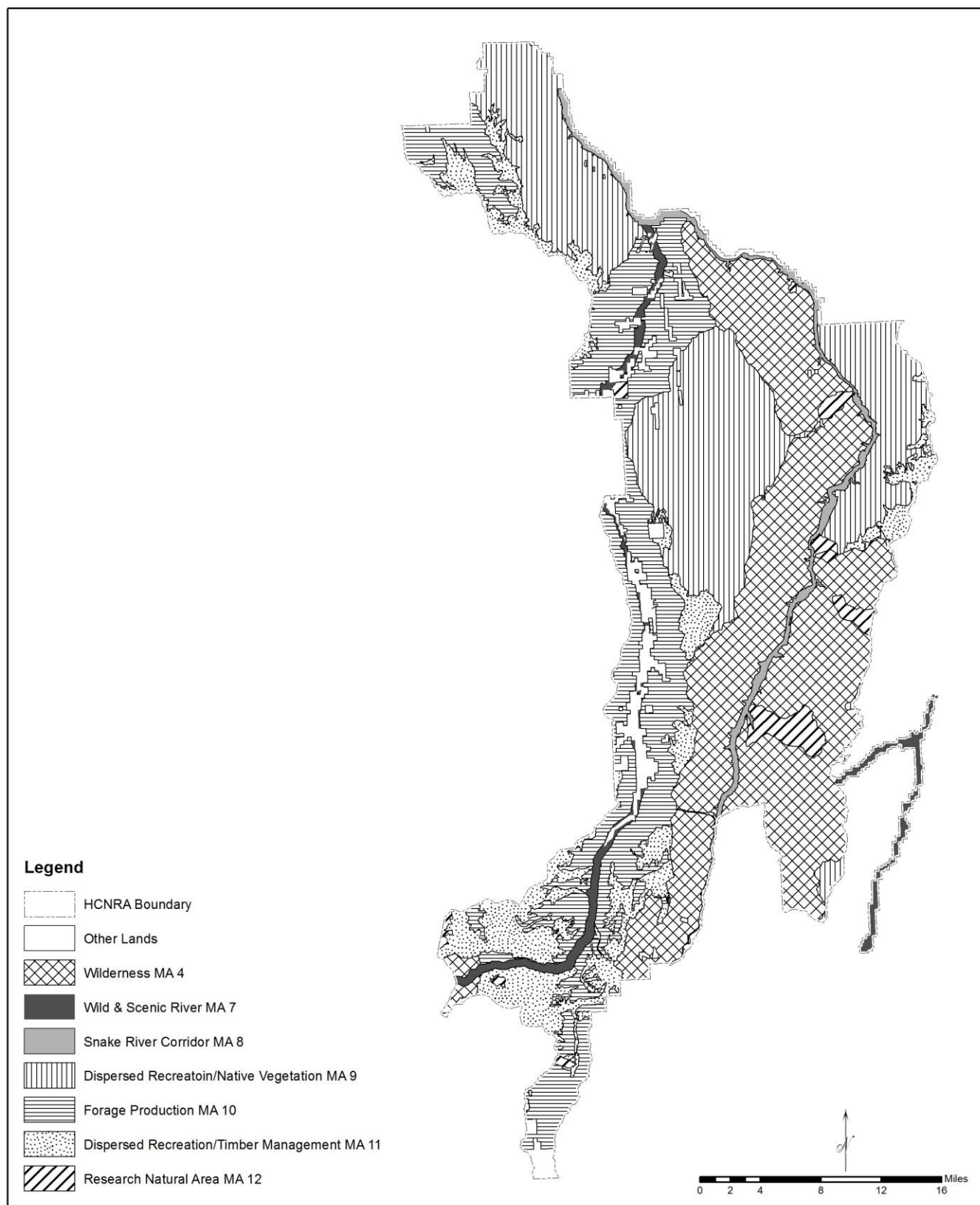
Nine *Forest Plan* management areas provide direction for managing specific areas in the HCNRA. These provide additional direction to help reach management goals and objectives for the multiple resources described in the previous section (**Management Direction by Resource**). The descriptions are from the *Forest Plan*, pgs. 4-63 through 4-66; 4-71 through 4-94. They have been updated to reflect the superseded direction for the HCNRA from *Forest Plan Amendment #29* and to retain the *Forest Plan* direction where it is still applicable (USDA 2003). Acreage values represent National Forest System ownership as of May 2017.

## Management Areas

| <b>Management Area</b>                         | <b>Acres</b>   |
|------------------------------------------------|----------------|
| MA4 – Wilderness                               | 219,384        |
| MA7 – Imnaha and Rapid Wild and Scenic Rivers  | 10,229         |
| MA8 – Wild and Scenic Snake River              | 15,885         |
| MA9 – Dispersed Recreation/Native Vegetation   | 173,260        |
| MA10 – Forage Emphasis                         | 129,477        |
| MA11 – Dispersed Recreation/Timber Management  | 76,483         |
| MA12 – Research Natural Areas                  | 3,155          |
| <b>Total</b>                                   | <b>627,783</b> |
| MA16 – Administrative and Recreation Sites     | not mapped     |
| MA17 – Power Transportation Facility Retention | not mapped     |

Refer to Figure 5 below for a map.

**FIGURE 5. Management Areas**



#### **Management Area 4 – Wilderness:**

The intent of this area is to preserve the wilderness qualities in accordance with the Wilderness Act, the HCNRA Act (establishing the Hells Canyon Wilderness), the Oregon Wilderness Act, and 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 humans, with natural ecological processes (including the natural role of fire) permitted to function with a minimum of human interference.

#### **1990 Land and Resource Management Plan (pages 4-63 through 4-67).**

##### **Direction**

1. **Watershed.** Apply Forest-wide standards and guidelines.
2. **Wildlife.** Wilderness designation precludes most types of wildlife habitat manipulation (see FSM 2300).
3. Permit fish stocking and wildlife reintroduction only where compatible with overall wilderness objectives.
4. Trees will not be sold or cut for nonwilderness purposes except under specific conditions on valid mining claims.
5. **Transportation.** Limit the transportation system within wilderness to trails intended for nonmotorized use.
6. Access by motorized vehicle will normally be limited to emergencies. Entries for other purposes as provided by the Wilderness Act will be handled on a case-by-case basis. Helispot construction will not occur without Regional Forester approval.
7. Design and maintain system trails to Regional trail standards. Selected trails may be abandoned. New trail construction and relocation will be considered for resource protection, visitor safety, and to provide a variety of wilderness experiences.
8. **Range.** Grazing by domestic livestock may occur where established prior to the Wilderness Act. Manage consistent with the Wilderness Act Range improvements (fences, water troughs, ponds, etc.) will be managed as described in FSM 2320.
9. Restrict grazing of livestock and recreational animals, as needed, in areas that receive heavy recreation use.
10. Manage grazing of recreational livestock to prevent site degradation.
11. Identify sensitive riparian ecosystems, such as lakeshores and adjacent terrain and wet meadows, in each allotment management plan. Develop prescriptions, including utilization standards, to maintain or enhance them.
12. **Recreation** Constrain user group sizes, use of recreational livestock, camp site locations, and certain other activities, as needed, to protect resources and wilderness values. This may include closure of some areas to horse traffic, and limiting the number of persons allowed to enter the area if other techniques for controlling resource damage prove unsuccessful.
13. Outfitter guide services will continue.
14. Hold meetings with wilderness user groups and outfitter guide associations as needed to keep

these organizations informed of wilderness management problems.

15. Provide primitive recreation opportunities.

16. **Landscape Management** The visual quality objective is preservation.

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

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

19. **Cultural Resources** Conduct cultural resource inventory within the wilderness using an intuitively-based predictive model designed to provide an inventory of the obvious sites that will likely be affected by wilderness use. Inventory priorities will focus on finding and recording sites threatened by loss or serious deterioration during the next decade.

20. Protect cultural resource sites until evaluated. Priorities will be set for site evaluations. Those that are threatened with loss or deterioration will receive highest priority. Other evaluations will be conducted in order to gain data relevant to the past use of the National Forest. All evaluation work will preserve the wilderness resource.

21. Carry out mitigation efforts on all eligible or listed cultural resources if the management prescription is active removal or benign neglect, according to the National Historic Preservation Act and its implementing regulations. Priorities will be established for the mitigation of effects due to benign neglect based on the imminence of loss or deterioration of the affected resource.

22. Permit research within the wilderness only when it meets the following criteria:

- a) Necessary to support the values set forth in Section 4(b) of the Wilderness Act, or cannot be accomplished outside the wilderness.
- b) Is done in compliance with the preservation ethic for the wilderness resource.

23. Protect the works of humans within the wilderness only when they are

- a) Necessary to support the values set forth in Section 4(b) of the Wilderness Act, or,
- b) Serving administrative purposes as necessary for protection of the wilderness resource (Section 4(c)), or
- c) Essential to cultural resource management.

24. Nominate sites determined to be worthy of preservation and protection to the National Register of Historic Places.

NOTE: Discussion of the wilderness recreation spectrum is found in FSM 2300. Maps of wilderness recreation spectrum are available for review at Wilderness District Offices.

25. On-site interpretation of sites will not be done. Interpretation may be done off-site through brochures and audiovisual programs.

26. **Landownership** Retain all Federal land in Federal ownership and acquire non-federal lands when available.

27. **Minerals.** Designated wilderness is withdrawn from further mineral entry but mining on valid claims that existed prior to December 31, 1983 or establishment of the wilderness (whichever is later) may continue.

28. **Fire** The minimum suppression response for wildfires burning at all **FIL's** is "confine."
29. Consider any unplanned ignitions from natural causes (i.e., lightning) that occur in a designated wilderness to be prescribed fire unless the decision is made to declare it a wildfire. This decision must be made on a case-by-case basis.
30. Give primary consideration to maintenance of wilderness quality during suppression action on wildfires. Evidence of suppression action will be minimized and rehabilitated as discussed in FSM 2462. Suppression techniques will be based upon the guidelines contained in WW-5100-16 and the "light hand tactics" guide.

#### **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. Lands are managed to not diminish the rivers free flow, water quality, and outstandingly remarkable values.

This section provides interim direction for management of those rivers added to the National Wild and Scenic Rivers System by the Omnibus Oregon Wild and Scenic Rivers Act of 1988. As specified by the Wild and Scenic Rivers Act (of 1968), individual management plans will be developed for these rivers. These plans, to be developed through the NEPA process, may include management direction different from what is found in these interim guidelines, necessitating a Forest Plan amendment. This scenic and recreational river corridors of this management area contribute to the Forest's allowable sale quantity.

#### **Direction**

1. Watershed Construction of water impoundments, diversions, straightening, riprapping, and other modification of the waterways will generally not be allowed. Exceptions would include protection of major improvements (such as an existing bridge) and then only to the extent that they do not diminish the values that caused the river to be designated. Instances where any construction activities are permitted are expected to be very rare and of small scale.
2. Wildlife. Apply Forest-wide standards and guidelines.
3. Timber Management. No commercial timber harvest will occur within wild river segments.
4. Permit salvage and scheduled timber harvest within scenic and recreational river segments, consistent with objectives for visual quality and recreation.
5. Range. Permit domestic livestock grazing to continue, consistent with the objectives for individual river segments.
6. Make range management structures visually compatible with river classification.
7. Landownership Retain Federal ownership.
8. Consider acquisition of easements upon, or fee title to, those lands critical to maintaining the characteristics of the river segments.
9. Minerals Formal designation by Congress as a wild river precludes further mineral entry but does not affect valid existing rights.
10. Evaluate proposals for activities in scenic and recreational segments to prevent pollution and unnecessary impairment of scenic quality.
11. Permit no new entry into study rivers pending study completion.

12. Insects and Diseases. Control forests pests in a manner compatible with the intent of the Act and management objectives of contiguous National Forest System lands (FSM 3400).

13. Fire. In order to preserve water quality, retardant and heavy equipment will not normally be used in the proximity of wild rivers. Fire suppression activity along wild and scenic segments should protect the primitive nature of the area when possible.

14. Prescribed fire from planned and unplanned ignitions may be used, consistent with management direction for adjacent management areas.

The minimum acceptable suppression response to wildfires will be "confine" at FIL's 1-2-3, and "contain" for FIL 4 and greater.

15. Transportation. Develop and maintain the transportation system consistent with wild, scenic, and recreational river objectives. Roads crossing or readily visible from *wild* river segments will not be constructed. Roads may occasionally cross or parallel *scenic* river segments provided scenic river values are not significantly compromised. Road construction and maintenance within *recreational* river segments will recognize the high scenic recreation and visual values associated with this classification.

16. Manage trails consistent with the objectives for individual river segments.

17. Off-road vehicle use may be allowed to continue on existing routes. New open routes or areas will not be established.

18. Recreation. Permit only primitive recreation developments within wild river segments Primitive or nonprimitive development may occur along scenic and recreational segments.

19. Maintain existing river access points. No new accesses will be established until management plans for individual rivers are completed.

20. Special use permits for outfitting and guiding may be issued If analysis indicates that use is nearing capacity, a temporary limit may be set, pending development of a management plan.

21. Landscape Management Meet the visual quality objectives of preservation along wild river segments, retention along scenic segments, and partial retention along recreational river segments.

22. Locate utility corridors so as to not be visible from river segments.

### **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 under the *Wild and Scenic Rivers Act*.

#### **Direction**

1. Watershed. Construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project work under the Federal Power Act will not be permitted, except for improvements required or used in connection with the operation and maintenance of projects in existence, or under construction, on the date that the Hells Canyon National Recreation Area was established.

2. Construction of water impoundments, diversions, straightening, riprapping, and other modification of the waterways will generally not be allowed. Exceptions would include protection of major improvements (such as an existing bridge) and then only to the extent that they do not diminish the values that caused the river to be designated and are consistent with the act establishing the Hells Canyon National

Recreation Area (Public Law 94-199). Instances where any construction activities are permitted are expected to be very rare and of small scale.

3. Range Permit livestock grazing to the extent that it is compatible with range and river management objectives.

4. Recreation. Provide over-water semiprimitive motorized recreation opportunities. Over land (off-road) motorized use is prohibited.

5. Landscape Management. The visual quality objective is retention.

6. Timber. No standing trees may be felled (dead or live) except as necessary, in the judgment of the Forest Service, for safety purposes.

7. Transportation. Consider road and trail construction on a case-by-case basis to insure compatibility with wild and scenic river values.

8. Insects and Diseases. Apply Forest-wide standards and guidelines.

9. Wildlife. Apply Forest-wide standards and guidelines.

10. Landownership. Maintain Federal land in Federal ownership.

11. Acquire scenic easements within the river corridor. Land purchase may be required where scenic easements will not meet the direction established in the Wild and Scenic Rivers Act.

12. Minerals. This area is withdrawn from mineral entry.

13. Fire. A fire management action plan will be prepared Suppress all wildfires that threaten life or property.

14. Continue restriction of open fires during fire season.

15. The minimum acceptable suppression response to wildfires is "confine" at FIL's 1-2-3, and "contain" at FIL 4 and greater.

16. Use prescribed fire from unplanned ignitions consistent with management direction of adjacent areas.

17. Concentrate prevention efforts at launch sites and at river camp sites.

18. Conduct all fire management activities consistent with the maintenance of visual qualities as outlined in National Forest Landscape Management, Volume 2.

19. Other. Dead logs or limbs lying on the ground or in the water may be used for campfires except for those that are specifically designated for retention.

#### **Management Area 9 (HCNRA Dispersed Recreation/Native Vegetation):**

In these areas, the intent is 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.

Direction

1. Watershed. Construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project work under the Federal Power Act will not be permitted, except for improvements required or used in connection with the operation and maintenance of projects in existence, or under construction, on the date that the Hells Canyon National Recreation Area was established.
2. Timber. There will be no regulated timber harvest, however, measures necessary to protect timber on other public or private lands from disease or insects are permitted.
3. Transportation. Develop the road system consistent with the transportation needs for the HCNRA as a whole.
4. Prohibit off-road vehicle travel, except for oversnow vehicles, subject to regulation under the Wallowa-Whitman Forest Travel Management Plan.
5. Range. Continue livestock grazing consistent with native vegetation production objectives.
6. Enhance native vegetation through the use of appropriate range management techniques. Management will be designed to favor native vegetation over non-native vegetation.
7. Although no attempt will be made to eradicate non-native species, further introduction will be avoided.
8. Recreation. Provide recreation opportunities as described in the semiprimitive motorized and semiprimitive nonmotorized, and primitive categories of the Recreation Opportunity Spectrum.
9. Landscape Management. Apply Forest-wide standards and guidelines.
10. Insects and Diseases. Emphasize biological methods when necessary to control insects or noxious weeds, although abiotic methods are not prohibited.
11. Landownership. Retain these lands in Federal ownership and acquire the remaining nonfederal lands as directed by Congress.
12. Minerals. This area is withdrawn from mineral entry.
13. Fire. Prescribed fire from planned or unplanned ignitions may be used. Fire suppression activities will be conducted to maintain primitive and semiprimitive recreation opportunities.
14. Use fire, as needed, to provide forage diversity.
15. Minimum acceptable suppression response to wildfires will be "confine" at FIL's 1-2-3 and "contain" at FIL 4 and above.

**Management Area 10 (HCNRA Forage Production):**

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.

**Direction**

1. Watershed. Construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project work under the Federal Power Act will not be permitted, except for improvements required or used in connection with the operation and maintenance of projects in existence, or under construction, on the date that the Hells Canyon National Recreation Area was established.

2. Wildlife. Timber stringers will be managed as old-growth habitat.
3. Timber. Timber will be managed to maintain old-growth. Timber management, using selective harvest methods, may occur when desirable for wildlife habitat improvement, or to improve scenic or recreational values. All timber harvest will be part of the unregulated component of the timber base.
4. Transportation. Apply Forest-wide standards and guidelines.
5. Range. Use any appropriate range management techniques.
6. Structural improvements will utilize native materials or will otherwise be made to blend in with the surrounding landscape.
7. Recreation. Provide both semiprimitive motorized and semiprimitive nonmotorized opportunities.
8. Landscape Management. Apply Forest-wide standards and guidelines.
9. Insects and Diseases. Apply Forest-wide standards and guidelines.
10. Landownership. Retain these lands in Federal ownership and acquire the remaining nonfederal lands as directed by Congress.
11. Minerals. This area is withdrawn from mineral entry.
12. Fire. Use prescribed fire from planned and unplanned ignitions, where appropriate, to maximize forage production in nontimbered areas.
13. In timbered areas being managed for old-growth, fire management direction is the same as in Management Area 15.
14. The minimum acceptable suppression response to wildfires is "confine" at FIL 1-2-3 and "contain" at FIL 4 and above.

**Management Area 11 (HCNRA 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.

**Direction**

1. Watershed Construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project work under the Federal Power Act will not be permitted, except for improvements required or used in connection with the operation and maintenance of projects in existence, or under construction, on the date that the Hells Canyon National Recreation Area was established.
2. Wildlife. Manage snags of all sizes at a level providing habitat for snag-dependent species at 60 percent of optimum.
3. Retain 10 percent of the available commercial forest land in an old-growth condition.

4. Maintain big-game habitat at no less than 60 percent of the optimum potential size and spacing of hiding cover for any one TRI compartment (or area of similar size).

5. Timber. Manage timber using selective harvest systems. Acceptable silvicultural treatments include shelterwood\* harvest, individual tree selection, group selection, sanitation and salvage.

[\* In his appeal decision of April 27, 1984, John Crowell, Jr , Assistant Secretary of Agriculture for Natural Resources and Environment, determined that shelterwood harvest is a type of "selective cutting" as the term is used in PL 94-199.]

6. Permit precommercial and commercial thinnings, with "individuals" thinnings not exceeding two acres.

7. Permit group selection for visual, recreation, wildlife, and tree regeneration purposes with a maximum opening size of two acres although exceptions may be permitted on a case-by-case basis.

8. Provide a representation of five basic successional stages or age classes: grass-forb, shrubseedling, pole-sapling, young timber, and mature timber.

9. Transportation. Timber harvest roads will be the minimum necessary for haul of equipment and logs, consistent with protection of other resources.

10. Timber harvest roads will be closed or left open as indicated by site-specific analysis considering all resources.

11. Skidding across meadows, scablands, and natural openings larger than one acre will rarely occur and will include rehabilitation measures necessary to protect site productivity.

12. Range. All available range management techniques may be used to achieve satisfactory range conditions (desired ecological status).

13. Recreation. Provide roaded natural recreation opportunities.

14. Landscape Management. Apply Forest-wide standards and guidelines.

15. Insects and Diseases. Apply Forest-wide standards and guidelines.

16. Landownership. Retain these lands in Federal ownership and acquire the remaining nonfederal lands as directed or implied by Congress.

17. Minerals. This area is withdrawn from mineral entry.

18. Fire. Prescribed fire from planned and unplanned ignitions may be used for slash disposal, site preparation, and habitat modification to meet recreation or other resource objectives.

19. The minimum acceptable suppression response to wildfires is "confine" at FIL 1-2-3 and "contain" at FIL 4 and above.

#### **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.

#### **1990 Land and Resource Management Plan Direction (Pages 4-83 to 4-85)**

### Description

The objectives for establishing RNA's 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.

RNA's typify important forest, shrubland, grassland, alpine, aquatic, and geologic types and other natural situations that have special and unique characteristics of scientific interest and importance. Activities in RNAs are limited to research, study, observations, monitoring, and kinds of educational activities that are nondestructive and nonmanipulative.

A research natural area establishment report will be prepared for each recommended area. These studies will determine the boundaries of the areas. Until the establishment reports are signed by the Chief of the Forest Service, the areas designated by this plan are recommendations. Proposed RNA's will be protected from uses which would reduce their suitability for RNA designation. The Indian Creek RNA has been established by the Chief. Following establishment, a management plan (approved by the District Ranger) will be developed for each RNA.

Additional RNAs may be proposed during the life of this Plan to fill RNA needs identified in Appendix H to the EIS.

### Direction

1. Watershed. Apply Forest-wide standards and guidelines.
2. Wildlife. Prevent the introduction of non-native species.
3. Timber. Timber harvest will not occur unless for research purposes.
4. Range. Objectives for grazing will be defined in situations where grazing is needed to establish or maintain vegetative communities.
5. In research natural areas where livestock grazing is not part of the management prescription, the Regional Forester and Station Director shall, as appropriate, establish a level of acceptable casual or incidental livestock use that can be tolerated and is consistent with the management prescription for the research natural area.
6. Transportation. Roads and trails will normally be the minimum necessary to provide access for research and education objectives.
7. Off-road vehicle use will be prohibited.
8. Research. Prepare establishment reports and management plans for each proposed RNA. In addition to the one existing research natural area, 18 areas are recommended for addition to the Research Natural Area System:

Lightning Creek  
Alum Beds  
Bob Creek  
West Razz Pond and Razz Lake  
Bills Creek  
Duck Lake  
Government Draw  
Indian Creek (existing RNA)  
Horse Pasture Ridge  
Lake Fork

Pleasant Valley  
Little Granite  
Craig Mountain Lake  
Mt. Joseph  
Vance Knoll  
Pt Prominence  
Basin Creek  
Haystack Rock  
Cougar Meadow  
Pleasant Valley

9. Recreation. Manage these areas to accommodate recreational use similar to the management areas surrounding them.
10. Discourage public recreation use if levels become so high as to be incompatible with the primary objective.
11. Where special orders are needed to limit, restrict, or control specific activities such as camping, seasons of use, or other uses, that are not compatible with the objectives of the research natural area, the Forest Supervisor shall issue orders pursuant to 36 CFR 261, subpart B, to protect an area's features. Any such orders shall incorporate the special closure provisions of 36 CFR 261.53.
12. Landscape Management. Apply Forest-wide standards and guidelines.
13. Landownership. Retain these lands in Federal ownership and acquire private lands as opportunity or need occurs.
14. Minerals. Recommend formally classified RNA's for withdrawal from mineral entry.
15. Fire. Design suppression activities to minimize site disturbance Prescribed fires will be used only in conjunction with approved research projects.
16. The minimum acceptable suppression response will be "confine" at all FILS.
17. Insects and Diseases. The decision on treatment of Forest pests will be made on a case-by-case basis. Where pest management activities are prescribed, they shall be as specific as possible against target organisms and induce minimal impact to other components of the ecosystem.
18. Other. Prohibit the gathering of fuelwood for commercial or home use.

**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.

**Direction**

1. Watershed. Apply Forest-wide standards and guidelines.
2. Wildlife. Manage wildlife habitat consistent with the primary administrative or recreational objectives.
3. Timber. Timber harvest may occur to facilitate recreational, administrative or other uses or for safety reasons.
4. Transportation. Construct roads, parking lots, trails, and aircraft and boat landing facilities as necessary to provide access to the sites or facilitate their use.
5. Manage roads to permit passenger car traffic when sites are open for use.
6. Range. Domestic livestock grazing will not normally be permitted although administrative stock may graze on some administrative sites.
7. Recreation. Permit recreation activity on administrative sites which does not interfere with administrative or other uses for which the site is intended.

8. Interpretation will be through signs and other structures, such as overlooks, decks and guided walks. There may be staff contacts at contact stations, principal attractions and amphitheaters.
9. Manage developed recreation sites according to FSM 2300.
10. Manage recreation residences according to FSM 2700.
11. Provide roaded natural and rural recreation opportunities.
12. Cultural Resources. Apply Forest-wide standards and guidelines.
13. Landscape Management Apply Forest-wide standards and guidelines.
14. Landownership. Retain in Federal ownership as long as administrative use is warranted.
15. Minerals. The sites will not normally be recommended for withdrawal from mineral entry.
16. Fire. The minimum acceptable suppression response is "contain" at all FIL's.
17. Firelines constructed by hand will be favored over machine fireline.
18. Prescribed fire from unplanned ignitions will not be used in this management area.
19. Prescribed fire from planned ignitions may be used to enhance the appearance of some sites or to meet recreation objectives.
20. Facilities. Provide and manage administrative facilities sufficient to accomplish the land and resource management and protection objectives of the Forest.
21. Prepare administrative site development plans for all forest administrative sites. Long-term development and maintenance costs will be a consideration in facilities planning.
22. If, through an environmental analysis, it is determined that additional administrative or recreational sites are needed, additional areas may be added to Management Area 16 sufficient to meet the identified need. This change in land allocation will normally be considered a nonsignificant amendment to this Forest Plan because of the relatively small areas involved.
23. Facilities will be planned, developed, maintained and operated for safe use, support of the Forest resource programs, and cost effectiveness. The construction of new buildings or additions to existing buildings shall comply with approved site development plans.
24. Other. Permits for fuelwood removal will normally not be issued for these sites.
25. Insects and Diseases Prevent insect and disease outbreaks including noxious weeds, with a minimum of disturbance to developments or users. Favor biological and silvicultural treatments.

**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.

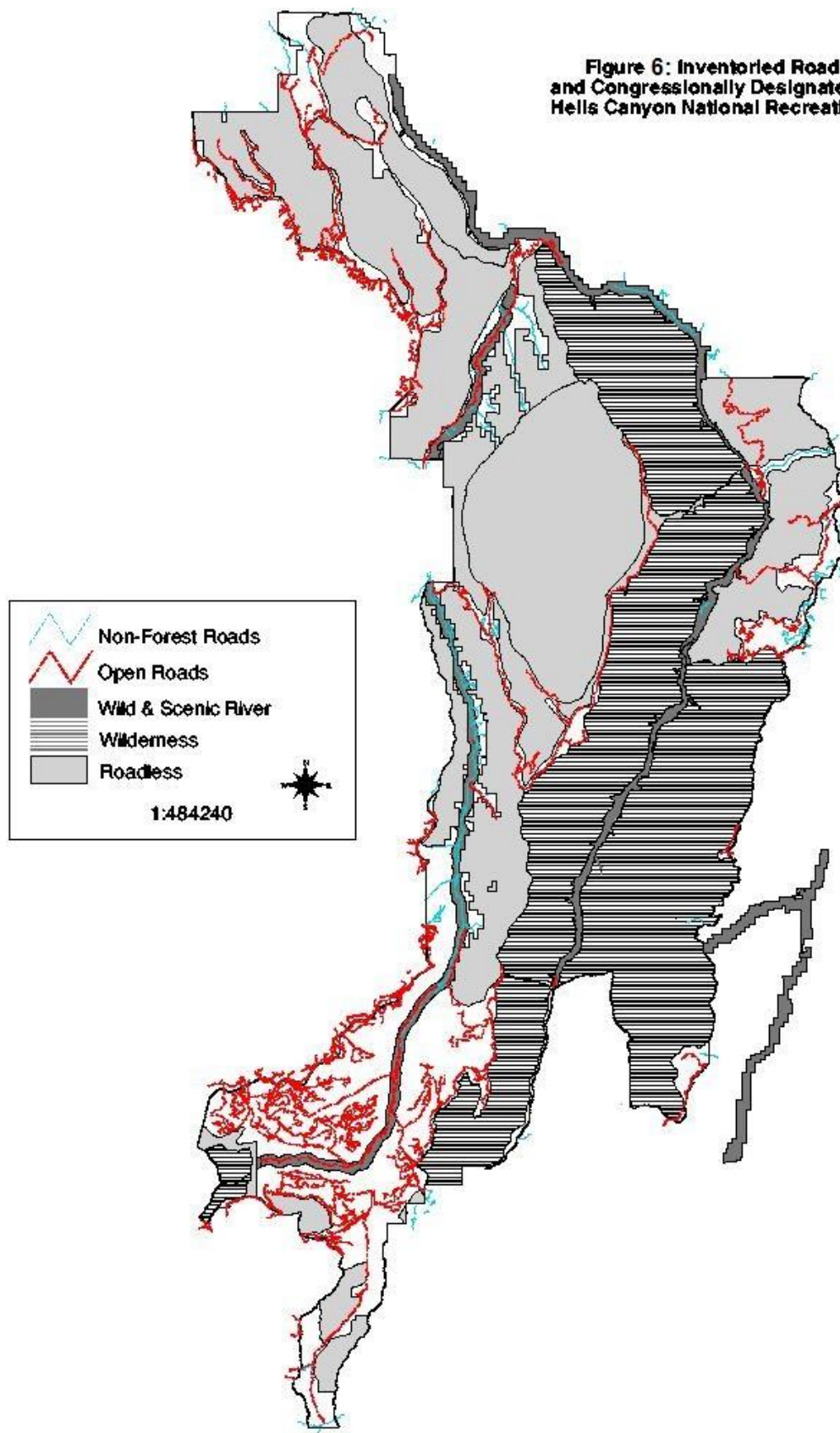
**Direction**

1. Watershed Apply Forest-wide standards and guidelines.

2. Wildlife. Apply Forest-wide standards and guidelines.
3. Timber. To the extent practicable, timber management will be planned as on adjacent lands. Timber harvest from suitable timberlands will contribute to the regulated timber harvest.
4. Transportation. Transportation systems will be designed and maintained primarily for the installation and maintenance of the structures associated with the utility corridor although these systems may also serve to access adjacent areas. When not being used for these purposes, these roads will normally be closed. In all cases, roads will be the minimum needed for their intended purpose.
5. Range. Use of this forage within utility rights-of-way will be directed by the applicable allotment management plan.
6. Landscape Management. Manage these areas as described in National Forest Landscape Management, Volume 2, Chapter 2 (USDA Agriculture Handbook 478).
7. Cultural Resources. Protection of the cultural resource values of the Oregon Trail will take priority over use as a utility corridor.
8. Recreation. Provide roaded modified recreation opportunities.
9. Landownership. Consolidate National Forest ownership where this will result in more efficient management or administration.
10. Minerals. Apply Forest-wide standards and guidelines.
11. Fire. Tailor slash disposal to meet utility corridor needs.
12. The minimum acceptable suppression response is “contain” at all FIL's.
13. Prescribed fire from unplanned ignition will not be used in this management area.
14. Insects and Diseases Apply Forest-wide standards and guidelines.
15. Other. Manage utilities to create the least impact on National Forest resources. Wherever possible, utility rights-of-way will be designated to allow joint use of the rights-of-way.
16. Additional utility rights-of-way or corridors may be identified and approved subject to sitespecific environmental analysis.

**Inventoried Roadless Areas** – Thirteen inventoried roadless areas (44% of the HCNRA) occur wholly or partially within the HCNRA. These areas are 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. Refer to **Figure 6** for a map of the inventoried roadless areas (**approximately 290,158 acres**).

**Figure 6: Inventoried Roadless  
and Congressionally Designated Areas  
Hells Canyon National Recreation Area**



## Management Direction Specific to Recreation Analysis Areas

### Introduction

This section describes the management direction specific to managing recreation opportunities for wilderness and nonwilderness settings by Recreation Analysis Areas while meeting other resource objectives. The first section includes a series of tables with definitions, standards, and guidelines and the second section includes direction specific to each Recreation Analysis Area.

### Management Direction Tables

**Table 13** lists all of the tables that explain in detail the Recreation Opportunity Spectrum (ROS) classes and the seven setting indicators for ROS (access, remoteness, naturalness/visual quality, social encounters, visitor management, visitor impacts and facilities). The tables further describe standards for meeting these indicators, strategies for managing visitor use, and criteria for rating human-caused impacts to landscape character. Road management objectives, maintenance levels and traffic service levels are described to meet access indicators. Facilities development, maintenance and capital improvement levels are described to meet the facilities indicators.

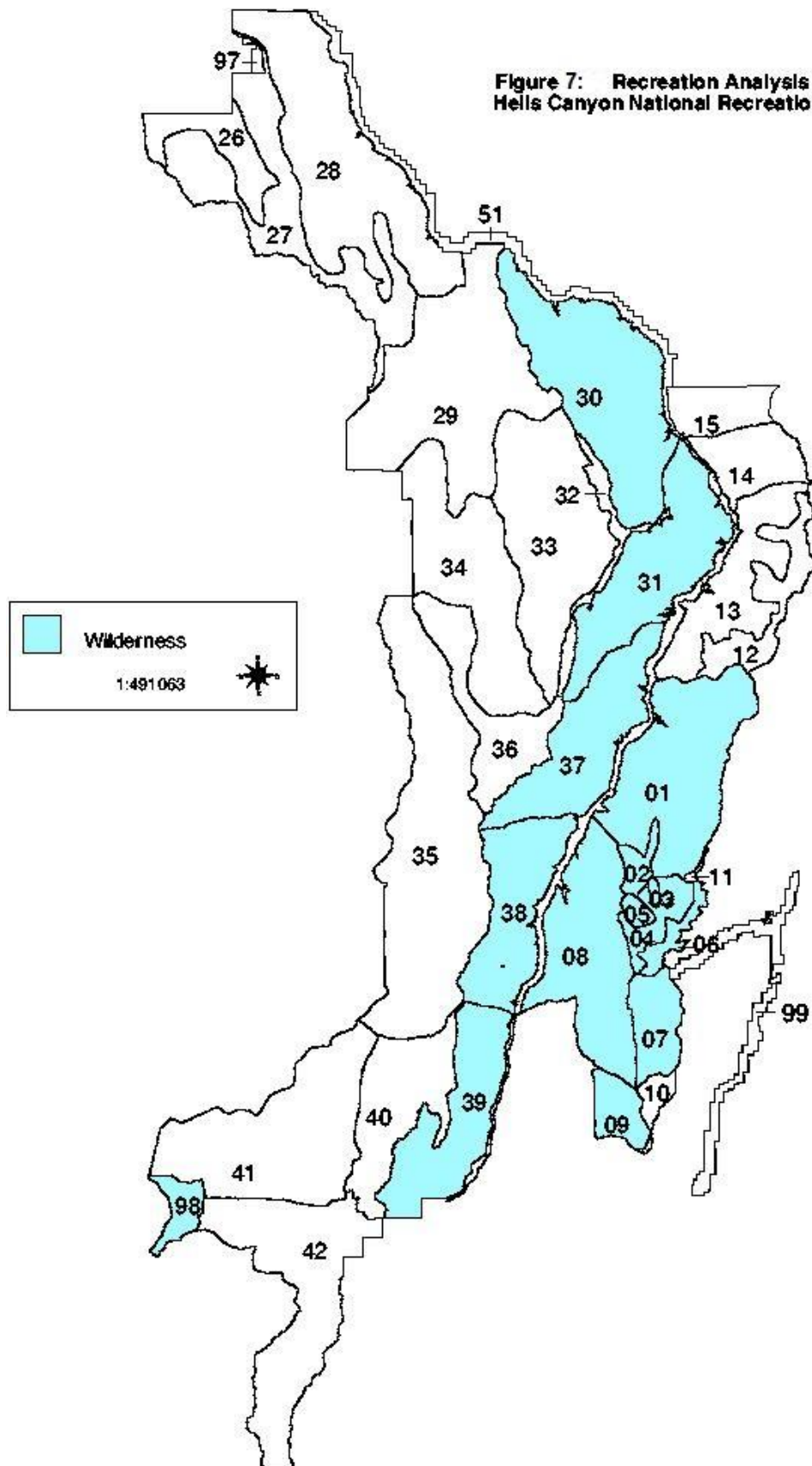
Table 13: List of Tables with Management Direction Specific to Recreation Analysis Areas

| Table | Title                                                                         | Page Number |
|-------|-------------------------------------------------------------------------------|-------------|
| 14    | Recreation Analysis Areas – Wilderness or Nonwilderness                       | xx          |
| 15    | Recreation Opportunity Spectrum (ROS) Settings – Wilderness and Nonwilderness |             |
| 16    | Wilderness and Nonwilderness Setting Indicators                               |             |
| 17    | Standards for Setting Indicators – Hells Canyon Wilderness                    |             |
| 18    | Standards for Setting Indicators – Nonwilderness                              |             |
| 19    | Visitor Management Strategies – Hells Canyon Wilderness                       |             |
| 20    | Visitor Management Strategies – Nonwilderness                                 |             |
| 21    | Criteria for Rating Human-caused Impacts to Landscape Character               |             |
| 22    | Road Management Objectives, Maintenance Levels, and Traffic Service Levels    |             |
| 23    | Facilities Development Levels                                                 |             |
| 24    | Facilities Maintenance Levels                                                 |             |
| 25    | Deferred Maintenance and Capital Improvement Levels                           |             |

**Table 14** lists Recreation Analysis Areas by wilderness and nonwilderness settings. Refer to **Figure 7** for the location of the Recreation Analysis Areas.

Table 14: Recreation Analysis Areas - Wilderness or Nonwilderness

| Area | Name                  | Setting       |
|------|-----------------------|---------------|
| 01   | Sheep Creek           | Wilderness    |
| 02   | Dry Diggins           | Wilderness    |
| 03   | Sheep Lake            | Wilderness    |
| 04   | Seven Devils          | Wilderness    |
| 05   | Baldy Lake            | Wilderness    |
| 06   | East Face             | Wilderness    |
| 07   | Horse Heaven          | Wilderness    |
| 08   | Granite Creek         | Wilderness    |
| 09   | Lakes Basin           | Wilderness    |
| 10   | Black Lake            | Nonwilderness |
| 11   | Windy Saddle          | Nonwilderness |
| 12   | East Rim Loops        | Nonwilderness |
| 13   | Kirkwood              | Nonwilderness |
| 14   | Pittsburg Landing     | Nonwilderness |
| 15   | Big Canyon            | Nonwilderness |
| 26   | Cottonwood            | Nonwilderness |
| 27   | Buckhorn/Cold Springs | Nonwilderness |
| 28   | Jim/Cherry Creek      | Nonwilderness |
| 29   | Lower Imnaha          | Nonwilderness |
| 30   | Tryon/Deep Creek      | Wilderness    |
| 31   | Somers Point          | Wilderness    |
| 32   | Lord Flat             | Nonwilderness |
| 33   | Mormon Flat           | Nonwilderness |
| 34   | Horse Creek           | Nonwilderness |
| 35   | Imnaha                | Nonwilderness |
| 36   | Hat Point             | Nonwilderness |
| 37   | Saddle Creek          | Wilderness    |
| 38   | Lookout Mountain      | Wilderness    |
| 39   | Buck Creek            | Wilderness    |
| 40   | McGraw                | Nonwilderness |
| 41   | Upper Imnaha          | Nonwilderness |
| 42   | North Pine            | Nonwilderness |
| 50   | Wild Snake River      | Nonwilderness |
| 51   | Scenic Snake River    | Nonwilderness |
| 99   | Rapid River           | Nonwilderness |



**Table 15** describes the goals and objectives for the Recreation Opportunity Spectrum (ROS) settings in the Hells Canyon Wilderness (WROS) and nonwilderness (ROS) portions of the HCNRA. The descriptions of the primitive and semi-primitive classes for WROS differ slightly from the ROS descriptions and are not abbreviated as acronyms to avoid confusion.

Table 15: Recreation Opportunity Spectrum (ROS) Settings – Wilderness and Nonwilderness

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WROS                               | Wilderness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pristine                           | Visitation is very limited. Maintaining a natural and unmodified environment is emphasized. 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                          | 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                     | 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 difficult” or “most difficult” standards. |
| ROS                                | Nonwilderness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| SPNM (semi-primitive nonmotorized) | 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)     | 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 the opportunity to use motorized equipment while in the area.                                                                                                                                                                                                                                                                                                                                                                                    |
| RN (roaded natural)                | Provide visitors with an opportunity to meet and enjoy other visitors, balanced with being somewhat isolated from the 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)                          | 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.                                                                                                                                                                                                                                                                                                                                                                  |

**Table 16** describes the setting indicators (Wilderness and nonwilderness) that represent aspects of recreation settings that can be influenced by management.

Table 16: Wilderness and Nonwilderness Setting Indicators

| 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 corresponds 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.                                                                                                                                          |

**Table 17** defines the standards for the setting indicators to meet social and biophysical objectives in the Hells Canyon Wilderness.

Table 17: Standards for Setting Indicators - Hells Canyon Wilderness

| Indicators                                                                                                                              | Pristine                                                                                                                                                                                            | Primitive                                                                                                                                                                                           | Semi-primitive                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                                                                                                                                  | Cross-country. No system trails.                                                                                                                                                                    | Cross-country by system trails. No motorized trails.                                                                                                                                                |                                                                                                                                                                                                                   |
| Remoteness                                                                                                                              | Out of sight and sound of human activity. More than 1½ hour walk to area.                                                                                                                           | Out of sight and sound of human activity 80% of time. 1 ½-hour walk to area.                                                                                                                        | Distant sight and/or sound of human activity. More than ½-hour walk from motorized travel.                                                                                                                        |
| Naturalness/<br>Visual Quality                                                                                                          | Very high scenic integrity.                                                                                                                                                                         |                                                                                                                                                                                                     |                                                                                                                                                                                                                   |
| Social<br>Encounters                                                                                                                    | 80% probability of not more than one encounter per day. No other camps within 500 ft. of any site.                                                                                                  | 80% probability of not more than 7 encounters per day. 80% probability that 0-1 camps are visible.                                                                                                  | 80% probability for not more than 10 encounters per day. Highest use areas on trailheads may be up to 12 encounters per day. 80% probability that 2 or fewer camps are visible.                                   |
| Visitor<br>Management                                                                                                                   | Party size is currently limited to 8 people and social capacity if monitoring indicates a need for change.                                                                                          | 16 head of stock. Adjustments may be made to most standards for water, soil, fish, and                                                                                                              |                                                                                                                                                                                                                   |
|                                                                                                                                         | Visitor control is evident outside Wilderness at trailhead and boundary portals. Wilderness ranger or other personnel presence as necessary.                                                        | Visitor controls are evident outside Wilderness at trailheads and boundary portals. Wilderness ranger or other personnel presence, periodic.                                                        | Visitor controls are evident outside Wilderness at trailheads and boundary portals. Wilderness ranger or personnel presence, moderate.                                                                            |
|                                                                                                                                         | Locate and/or set back campsites from lakes, streams, trails, meadows, and other camps, so standards for water, soil, and fisheries are met and Wilderness conditions are not degraded.             |                                                                                                                                                                                                     |                                                                                                                                                                                                                   |
|                                                                                                                                         | Discourage or prohibit the use of feeds that have not been certified as weed-free. Follow current laws or regulations if more restrictive.                                                          |                                                                                                                                                                                                     |                                                                                                                                                                                                                   |
|                                                                                                                                         | Follow designated areas of operation for outfitters during big-game hunts except for cougar, bear, and sheep.                                                                                       |                                                                                                                                                                                                     |                                                                                                                                                                                                                   |
|                                                                                                                                         | Wilderness Ranger visits to all areas occur at least annually.                                                                                                                                      | Wilderness Ranger visits to all areas occur at least every 2 weeks.                                                                                                                                 | Wilderness Ranger visits to all areas occur at least weekly.                                                                                                                                                      |
|                                                                                                                                         | Risk and challenge paramount.                                                                                                                                                                       | Risk and challenges very important.                                                                                                                                                                 | Risk and challenge important.                                                                                                                                                                                     |
| Visitor Impacts<br>Oregon & Idaho                                                                                                       | Negligible impact. No site hardening.                                                                                                                                                               | Unnoticeable impacts. No site hardening.                                                                                                                                                            | Subtle impacts. Little or no hardening.                                                                                                                                                                           |
|                                                                                                                                         | Vegetation loss does not exceed 225 sq. ft. (15 ft. x 15 ft. area). No loss of trees and fewer than 2 trees with exposed roots per site. 75% of sites may show less than indicated vegetation loss. | Vegetation loss does not exceed 400 sq. ft. (20 ft. x 20 ft. area). No loss of trees and fewer than 4 trees with exposed roots per site. 75% of sites may show less than indicated vegetation loss. | Vegetation loss does not exceed 625 sq. ft. (25 ft. x 25 ft. area). No loss of trees and fewer than 6 trees per site show signs of damage by visitors. 75% of sites may show less than indicated vegetation loss. |
|                                                                                                                                         | Maintain air quality consistent with Class I Airshed. Naturalize most campfire sites.                                                                                                               | Campsites are separated from other camps and set back from trails, meadows, lakes and streams where necessary and indicated by monitoring.                                                          |                                                                                                                                                                                                                   |
|                                                                                                                                         | Campsites are located on forest litter, on durable soil substrate, and within forested areas and other more durable vegetation types.                                                               |                                                                                                                                                                                                     |                                                                                                                                                                                                                   |
|                                                                                                                                         | Grazing is permitted except in camp areas. Hold stock away from lakes, streams, trails, and camp areas.                                                                                             |                                                                                                                                                                                                     |                                                                                                                                                                                                                   |
|                                                                                                                                         | Regulate stock to maintain natural ecosystems, particularly water and riparian vegetation, and to not disrupt the experience of others.                                                             |                                                                                                                                                                                                     |                                                                                                                                                                                                                   |
|                                                                                                                                         | Limit impacts of recreation livestock to the grazing utilization standard.                                                                                                                          |                                                                                                                                                                                                     |                                                                                                                                                                                                                   |
|                                                                                                                                         | Visitor Impacts<br>Idaho Only                                                                                                                                                                       | Manage campfire impacts so natural processes are not affected except at campsites. No loss of trees for campfire fuel; maintain natural conditions.                                                 |                                                                                                                                                                                                                   |
| Dead standing trees left in place except at administration sites. Any falling of trees around such sites is accomplished only by Forest |                                                                                                                                                                                                     |                                                                                                                                                                                                     |                                                                                                                                                                                                                   |

Table 17: Standards for Setting Indicators - Hells Canyon Wilderness

| Indicators | Pristine                                                                                                                                                                                                                                                                         | Primitive                                                                                                                                                                                                     | Semi-primitive                                                                                                           |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
|            | Service personnel. No loss of trees occurs due to other human activity.                                                                                                                                                                                                          |                                                                                                                                                                                                               |                                                                                                                          |
|            |                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                               | Primitive toilets may be provided in extreme cases, but must be located away from water or watercourses.                 |
| Facilities | No facilities. Self-reliance.                                                                                                                                                                                                                                                    |                                                                                                                                                                                                               | Primitive horse-confinement facilities may be provided to confine impacts in heavily used areas on a case-by-case basis. |
| Water      | No degradation of water quality.                                                                                                                                                                                                                                                 | Maintain natural quality of streams and lakes. There will be no measurable degradation of water quality because of human activity except for temporary, transitory changes caused by pass-through activities. |                                                                                                                          |
| Vegetation | Maintain healthy, native vegetation with no long-term (greater than 1 year) modification of plant succession on areas outside of campsites and trails.                                                                                                                           |                                                                                                                                                                                                               |                                                                                                                          |
|            | Manage snags and down vegetation to approximate natural conditions.                                                                                                                                                                                                              | Utilize dead and down vegetation in amounts that can be replaced annually through natural accumulation.                                                                                                       |                                                                                                                          |
|            | Protect endangered, threatened, and sensitive species from human impacts. Maintain viable populations of plant species so that they will not move toward federal list.                                                                                                           |                                                                                                                                                                                                               |                                                                                                                          |
| Air        | Air quality affected by outside sources is maintained to meet federal and state standards and is not degraded by recreation use inside the Wilderness.                                                                                                                           |                                                                                                                                                                                                               |                                                                                                                          |
| Soils      | Downed and standing dead, woody material will be left in place in amounts necessary to provide for sustainable natural soil conditions and wildlife habitat.                                                                                                                     |                                                                                                                                                                                                               |                                                                                                                          |
|            | Collecting and burning of wood in campfires may occur only if natural levels of dead down and standing wood, and soil organic levels are sustainable and for wildlife habitat                                                                                                    |                                                                                                                                                                                                               |                                                                                                                          |
|            | Displacement and erosion of soil resulting from human activity will be limited to a rate that closely approximates the natural process.                                                                                                                                          |                                                                                                                                                                                                               |                                                                                                                          |
|            | Soil compaction does not exceed limits that prevent natural plant establishment and growth.                                                                                                                                                                                      | Soil compaction does not exceed limits that prevent natural plant establishment and growth, except at some campsites, administrative facilities, and within standard trail width.                             |                                                                                                                          |
| Aquatic    | No fish stocking.                                                                                                                                                                                                                                                                | Manage fish stocking in accordance with Forest Service/Oregon Department of Fish and Wildlife/Idaho Fish and Game process agreement on Fisheries Management in Wilderness.                                    |                                                                                                                          |
|            | Maintain natural aquatic habitat and water quality.                                                                                                                                                                                                                              |                                                                                                                                                                                                               |                                                                                                                          |
|            | Manage to allow natural ecological succession to operate freely insofar as it does not endanger significant resources outside Wilderness.                                                                                                                                        |                                                                                                                                                                                                               |                                                                                                                          |
|            | Maintain fish indigenous to the Wilderness, with emphasis on protection of endangered, threatened, sensitive and proposed species (FSM 2600).                                                                                                                                    |                                                                                                                                                                                                               |                                                                                                                          |
|            | Maintain the natural quality of streams and lakes. There will be no measurable degradation of water quality because of human activity, except for temporary, transitory changes caused by pass-through activities.                                                               |                                                                                                                                                                                                               |                                                                                                                          |
|            | Protect riparian areas and habitat from visitor and livestock use alterations.                                                                                                                                                                                                   |                                                                                                                                                                                                               |                                                                                                                          |
| Wildlife   | Visitor use does not decrease habitat effectiveness for any species.                                                                                                                                                                                                             |                                                                                                                                                                                                               |                                                                                                                          |
|            | Leave downed and standing dead, woody material in place in amounts necessary to provide for wildlife habitat and sustain natural soil conditions. Manage habitat to allow natural ecological succession to operate freely, so that the forces of natural selection and survival, |                                                                                                                                                                                                               |                                                                                                                          |

Table 17: Standards for Setting Indicators - Hells Canyon Wilderness

| Indicators | Pristine                                                                                                                                                                                                                                                                                         | Primitive | Semi-primitive |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------|
|            | rather than human activities, determine which and what numbers of wildlife species exist.                                                                                                                                                                                                        |           |                |
|            | Protect wildlife indigenous to the Wilderness from human-caused impacts that could lead to listing as threatened or endangered.                                                                                                                                                                  |           |                |
|            | Provide protection for threatened, endangered, and sensitive species from human-caused impacts. Protect federally listed species where necessary for their perpetuation and to aid in their recovery.                                                                                            |           |                |
|            | Visitor use seldom and only temporarily displaces wildlife species. Visitor use does not displace wildlife from critical areas during critical periods. Protect riparian areas from visitor- and livestock-use alterations.                                                                      |           |                |
|            | Seek Regional Forester approval for predator control programs within Wilderness on a case-by-case basis where control is necessary to protect federally listed, threatened, or endangered species in order to protect public health and safety or to prevent serious loss of domestic livestock. |           |                |

**Table 18** defines the standards for the setting indicators to meet social objectives in the nonwilderness portion of the HCNRA.

Table 18: Standards for Setting Indicators - Nonwilderness

| Indicators                  | SPNM (semi-primitive nonmotorized)                                                                          | SPM (semi-primitive motorized)                                                                                                                                                                                                               | RN (roaded natural)                                                                                                                                                                                      | R (rural)                                                                                                                                                                                                  |
|-----------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                      | Cross-country travel. No motorized trails.                                                                  | Motorized primitive, Traffic Service Level D or motorized trails. Maintenance Level 2. Surface maintenance and treatment may vary from low to high based on desired ROS experience.                                                          | Motorized, controlled. Traffic Service Level B, C, or D. Maintenance Level 2, 3, or 4. Surface maintenance and treatment may vary from low to moderate or high, based on desired ROS experience.         | Full access. Traffic Service Level A and B. Maintenance Level 4 or 5. Surface maintenance and treatment is high based on desired ROS experience.                                                           |
| Remoteness                  | Distant sight and/or sound of human activity. More than ½-hour walk from motorized travel.                  | Distant sight and/or sound of human activity. More than ½-hour walk from any better-than-primitive roads.                                                                                                                                    | Remoteness of little relevance.                                                                                                                                                                          | Remoteness of little relevance.                                                                                                                                                                            |
| Naturalness/ Visual Quality | High to very high scenic integrity.                                                                         | Moderately high to very high scenic integrity.                                                                                                                                                                                               | Moderately high to very high scenic integrity.                                                                                                                                                           | Moderately high to very high scenic integrity.                                                                                                                                                             |
| Social Encounters           | 6-15 parties meet per day. 80% probability that 6 or fewer campsites are visible during the use season.     | 6-15 parties meet per day outside road corridors. 80% probability that 6 or fewer campsites are visible during the use season. In road corridors, ranging between low to moderate (5-10) encounters and moderate to high (10-15) encounters. | Sound encounters are part of the experience. Developed sites and trails moderate to low. In road corridors, ranging between low to moderate (15-60) encounters and moderate to high (60-150) encounters. | Sound encounters are part of the experience. Developed sites are from moderate to high. In road corridors, ranging between low to moderate (150-300) encounters and moderate to high (300-500) encounters. |
| Visitor Management          | Subtle on-site regimentation and control. Limited information facilities. Risk and challenge are important. | Subtle on-site regimentation and control. Limited information facilities. Risk and challenge are important.                                                                                                                                  | On-site regimentation and controls are noticeable but harmonize with the natural environment. Simple information facilities. Risk and challenge not very important.                                      | On-site controls are obvious and numerous but harmonize with the natural environment. Information is available at sites that are more complex. Risk and challenge not important.                           |

|                 |                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                             |                                                                                                                                                                                                                          |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Visitor Impacts | Impacts are not noticeable. No site hardening. Vegetation loss does not exceed 625 sq. ft. (25 x 25 ft. area). 6 trees with exposed roots per site. 75% of sites may show less than indicated vegetation loss. | Impacts are not noticeable. Limited site hardening. Vegetation loss does not exceed 1,000 to 1,500 sq. ft. (31 x 33 ft. or 38 ft. x 39 ft.). 8 trees with exposed roots per site. 75% of sites may show less than indicated vegetation loss. | Impacts are not noticeable. Subtle site hardening. Vegetation loss does not exceed 1,500 to 2,500 sq. ft. 38 x 39 ft. or 50 ft. x 50 ft.). 10 trees with exposed roots per site. 70% of sites may show less than indicated vegetation loss. | Impacts may be noticeable. Site hardening is obvious. Vegetation loss does not exceed 3,000 sq. ft. (54 x 55 ft. area). 12 trees with exposed roots per site. 70% of sites may show less than indicated vegetation loss. |
| Facilities      | No facilities for user comfort. Rustic and rudimentary facilities. For site protection, use native or native-appearing materials only.                                                                         | No facilities for user comfort. Rustic and rudimentary facilities. For site protection, use native or native-appearing materials only.                                                                                                       | Rustic facilities provide some comfort for the user as well as site protection. Use native-appearing materials for facilities with low maintenance requirements. Materials are more refined.                                                | Some facilities designed primarily for user comfort and convenience. Some synthetic but harmonious materials for facilities may be incorporated. Design may be more complex or refined.                                  |

**Table 19** outlines visitor management strategies as guidelines for maintaining the desired experience opportunity levels and conditions for the Hells Canyon Wilderness. Indirect strategies emphasize controlling and maintaining use within wilderness capacity and desired experience opportunity levels through visitor information services and public affair programs. Direct strategies provide additional guidance for preventing site degradation and stabilizing encounter rates through public contact at portals or trailheads. Although the strategies are listed from least restrictive to most restrictive, there is no implication that they must be activated in that order. Managers can use whichever action is appropriate for the conditions and time.

Table 19: Visitor Management Strategies - Hells Canyon Wilderness

| Indirect Strategies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 - Information Dispersal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2 - Physical Alterations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p>Strengthen communication between the various levels of the Forest Service and chambers of commerce to assure common goals in wilderness management and use, including agreement on if, how, and when to promote the HCNRA.</p> <p>Improve education and written messages to assure accurate portrayal of wilderness resources and provide visitors with realistic expectations.</p> <p>Increase public contact at wilderness portals during periods of high use to educate and inform users of wilderness conditions and user regulations. Ask people to accept the area on its own terms.</p> <p>Inform visitors of disadvantages of problem areas and/or advantages of alternative areas.</p> <p>Encourage use outside peak use periods to avoid overcrowding and enhance visitor experience. Encourage use of low use areas outside wilderness (or the HCNRA) that provide a similar experience.</p> | <p>Make access to wilderness portals and problem areas more difficult by maintaining travel corridors to a lower standard.</p> <p>Manage trailheads and trails at a low level and inform public of their managed condition to control use and impact.</p> <p>Remove problems such as litter, human waste, and unauthorized facilities to prevent further degradation at the impacted area.</p> <p>Eliminate campsites or attractants in problem areas to prevent overuse and resource impacts.</p> <p>Locate or relocate campsites to durable areas to eliminate or prevent impact to the resource.</p> <p>Shield high use sites from continued impact by providing facilities such as temporary high lines, permanent high lines, and tent pads, focusing on resource protection, not visitor comfort and convenience.</p> |

Table 19: Visitor Management Strategies - Hells Canyon Wilderness

|                                                                                                                                                                                                                                                                       |                                                                                                                                                      |                                                                                                                                                                                                                 |                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Modify visitor behavior by implementing a comprehensive education program to encourage and enhance wilderness ethic.                                                                                                                                                  |                                                                                                                                                      | Require visitor registration or mandatory, nonrestrictive permit system.                                                                                                                                        |                                                                                                  |
| Direct Strategies                                                                                                                                                                                                                                                     |                                                                                                                                                      |                                                                                                                                                                                                                 |                                                                                                  |
| 1 - Zoning                                                                                                                                                                                                                                                            | 2 - Rationing Use Intensity                                                                                                                          | 3 - Restricting Activities                                                                                                                                                                                      | 4 - Enforcement                                                                                  |
| Establish the total overnight use carrying capacity for the entire wilderness, complete a campsite inventory, use forest plan direction to identify acceptable campsites, and estimate the total acceptable amount of use based on occupancy of acceptable campsites. | Require visitor registration or mandatory, restrictive permit system to monitor use and signal additional need for changes in management activities. | Discourage, limit, or prohibit use of problem areas to prevent additional resource damage. Rehabilitation of excessive impacts around sites could be done concurrently while limiting use to a designated area. | Inform visitors about appropriate wilderness uses.                                               |
| Segregate user types, horse users/hikers, to alleviate incompatible uses and make better use of available areas and space.                                                                                                                                            | Encourage or permit use on certain designated campsites and/or locations to maintain site integrity and prevent resource damage.                     | Establish different skill and/or equipment requirements to minimize impacting practices or equipment use.                                                                                                       | Implement an intensive enforcement policy.                                                       |
| Discourage or prohibit stock in specific areas to protect resource from degradation.                                                                                                                                                                                  | Concentrate use on sites through design, site hardening, and information to limit resource impacts.                                                  | Encourage or require a length of stay limit at specific sites to prevent overuse and resource damage.                                                                                                           | Consider using current research and proven management techniques to correct identified problems. |
|                                                                                                                                                                                                                                                                       | Require permits for periods of high use, or high use impact potential, to control numbers and limit impact.                                          | Discourage or prohibit use when impact potential is high.                                                                                                                                                       |                                                                                                  |
|                                                                                                                                                                                                                                                                       |                                                                                                                                                      | Discourage or prohibit particularly damaging practices and/or equipment.                                                                                                                                        |                                                                                                  |
|                                                                                                                                                                                                                                                                       |                                                                                                                                                      | Encourage or require smaller party size and/or limit stock numbers to limit resource degradation and improve experience level.                                                                                  |                                                                                                  |
|                                                                                                                                                                                                                                                                       |                                                                                                                                                      | Discourage or prohibit overnight use in specific areas to reduce resource impacts.                                                                                                                              |                                                                                                  |
|                                                                                                                                                                                                                                                                       |                                                                                                                                                      | Limit length of stay in entire wilderness to reduce resource impacts and improve experience opportunities.                                                                                                      |                                                                                                  |
|                                                                                                                                                                                                                                                                       |                                                                                                                                                      | Limit number of visitors to entire wilderness to reduce resource                                                                                                                                                |                                                                                                  |

Table 19: Visitor Management Strategies - Hells Canyon Wilderness

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  |  | <p>impacts and improved experience.</p> <p>Implement entry permit system.<br/>Implement area closures if necessary and appropriate to limit or correct impacts from camping, grazing, or other associated activities.</p> <p>Assign camps and time periods of use as necessary and appropriate for the area.</p> <p>Require "set backs" as necessary and appropriate from lakes, streams, or trails for camping, camp fires, and grazing. Distances may range from 100 feet to 1/4 mile.</p> |  |
|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

**Table 20** outlines visitor management strategies as guidelines for correcting adverse impacts to developed and dispersed recreation sites. Indirect strategies emphasize controlling and maintaining use within the capacity and desired ROS. Direct strategies provide additional guidance for preventing site degradation and stabilizing encounter rates through public contact at portals or trailheads. Although the strategies are listed from least restrictive to most restrictive, managers can use whichever action is appropriate for the conditions and time.

Table 20: Visitor Management Strategies - Nonwilderness

| Indirect Strategies                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 - Information Dispersal                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2 - Physical Alterations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3 - Economic Constraints                                                                                                                                                                                                                                                                                                                                                                    |
| <p>Strengthen communications between the various levels of the Forest Service and local chambers of commerce to assure common goals in area management and use, including agreement on if, how, and when to promote the HCNRA.</p> <p>Improve education and information messages to assure accurate portrayal of area amenities and provide visitor with realistic expectations.</p> <p>Locate hosts at campgrounds for a direct source of information about use, regulations and conditions.</p> | <p>Limit development of high standard roads to maintain the amount of primitive rustic experience and control access.</p> <p>Avoid over-development of all camping sites to assure maintenance of desired ROS settings.</p> <p>Implement subtle site hardening techniques to direct use and control impact. Methods employed may include strategic placement of natural-appearing barriers and deliberate site design to define access parking, use patterns, and control overcrowding.</p> <p>Plant or encourage vegetation that discourages passage to control pedestrian impacts. Use plants</p> | <p>Reduce services offered but increase fees for use.</p> <p>Encourage policy and law changes to allow a fee to be required for all dispersed camping. Implementation can be accomplished through a system similar to the Golden Age Pass.</p> <p>Require an entry permit on portions of the HCNRA, such as the Seven Devils area in the Hells Canyon Wilderness, to manage use levels.</p> |

Table 20: Visitor Management Strategies - Nonwilderness

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Post more information at dispersed sites to educate and inform user of area conditions and user regulations.</p> <p>Increase on-site public contact during periods of heavy use to educate and inform user of area conditions and user regulations.</p> <p>Suggest to people that they might want to visit less-occupied areas, such as little-used portions of the HCNRA, other districts, or private developments. Methods to accomplish this may be the use of signing and interpretation to direct users to alternative sites with similar experiences.</p> <p>Support, through rural community assistance or similar programs, developments on private land where they meet the intent of the <i>HCNRA Act</i> and <i>Public LURs</i> (36 CFR 292, Subpart F), and do not violate outstandingly remarkable values, where applicable.</p> | <p>to screen campsites from traffic routes and each other to improve privacy and make better use of limited space.</p> <p>In dispersed sites, implement less subtle site hardening to direct and control use. This may include fire rings, stock handling facilities, sanitation facilities, meat poles, and designated parking.</p> <p>Control camping use through loop systems within the campground. Open loops only when necessary to meet public demand. Rehabilitate all existing campgrounds within existing standards and capacity limits.</p> <p>Use site enlargement/redesign of campgrounds to maintain use in designated areas and reduce impacts to nearby off-site areas. Develop more, smaller camps with more distance between units (this may be part of redesign). This helps to maintain the experience level and reduce impacts to other off-site areas.</p> <p>Use private concessionaires for services associated with developed camping to maintain opportunities.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Direct Strategies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 1 - Zoning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2 - Physical Alterations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3 - Economic Constraints                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>Separate day and overnight users to provide better utilization of available facilities.</p> <p>Separate user groups (such as horse, ATV, hiker) in an attempt to alleviate incompatible uses and better utilize available areas and space.</p> <p>Designate day and overnight dispersed sites to provide better utilization of available dispersed areas.</p> <p>Implement site limitation, such as one or two cars per site, to reduce impact and numbers in one location.</p>                                                                                                                                                                                                                                                                                                                                                               | <p>Implement more restrictive stay limits for campgrounds and dispersed sites to provide better utilization of limited area and facilities.</p> <p>Restrict party size to provide better utilization of space, improve experience level, and reduce impacts.</p> <p>Resolve issues of incompatible uses, such as conflicts between hikers, bikers, and horse users.</p> <p>Restrict camping practices and techniques to those that do not create impacts.</p> <p>Prohibit use at times when resources are vulnerable</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>Monitor conditions and use at developed and dispersed sites to assure management maintains ROS settings and desired future condition.</p> <p>Increase surveillance of all recreation and use activities to assure compliance with regulation and protection of resource.</p> <p>Increase law enforcement program and impose fines to eliminate improper use activities as well as provide for safety and security.</p> |

Table 20: Visitor Management Strategies - Nonwilderness

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                          |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--|
| <p>Control number of users and associated impacts by limiting access to dispersed sites and areas.</p> <p>Close, remove, and/or rehabilitate undesirable sites. Relocate to more desirable, more manageable location while maintaining desired ROS settings.</p> <p>Close campgrounds during the off-season to provide a period of nonuse.</p> <p>Rest and/or rotate use in campground loops during use season to provide a period of nonuse.</p> <p>Rest and/or rotate dispersed sites to provide a period of nonuse.</p> <p>Designate and reserve dispersed sites to control use numbers and reduce user impacts.</p> <p>Implement a reservation-only system for all camping and overnight use, both developed and dispersed, to control use numbers and off-site impacts.</p> | <p>to damage. Designate use periods.</p> |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--|

**Table 21** defines guidelines for acceptable levels of human-caused impacts to the landscape character of the HCNRA. The ratings correspond to the "Naturalness/Visual Quality" setting indicators for each Recreation Analysis Area.

Table 21: Criteria for Rating Human-caused Impacts to Landscape Character

| Human-caused Deviations | Very High Integrity    | High Integrity                               | Moderate Integrity                     | Low Integrity                             | Very Low Integrity                    | Unacceptably Low Integrity |
|-------------------------|------------------------|----------------------------------------------|----------------------------------------|-------------------------------------------|---------------------------------------|----------------------------|
| Vegetation Management   |                        |                                              |                                        |                                           |                                       |                            |
| Log Landings            | None                   | Complete rehabilitation                      | Rehabilitation of 80%                  | Rehabilitation of 60 to 80%               | Rehabilitation of less than 60%       | No rehabilitation          |
| Skid Trails             | None                   | Complete rehabilitation with contour grading | Rehabilitation and 80% contour grading | Rehabilitation and 60-80% contour grading | Rehabilitation and no contour grading | No rehabilitation          |
| Amount of Contiguous    | Vehicular travel – 300 | Vehicular travel – 300                       | Vehicular travel – ¼ to                | Vehicular travel – ½ to                   | Vehicular travel – 2 to               | Vehicular travel –         |

Table 21: Criteria for Rating Human-caused Impacts to Landscape Character

| Human-caused Deviations                                  | Very High Integrity                     | High Integrity                                                                                   | Moderate Integrity                                                                  | Low Integrity                                                                          | Very Low Integrity                                                                         | Unacceptably Low Integrity                                                       |
|----------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Foreground Disturbance                                   | ft. or less<br><br>Hiking – tree length | ft. to ¼ mile<br><br>Hiking – less than 300 ft.                                                  | ½ mile<br><br>Hiking – 300-500 ft.                                                  | 2 miles<br><br>Hiking – 500-800 ft.                                                    | 3 miles<br><br>Hiking – 800-1,200 ft.                                                      | more than 3 miles<br><br>Hiking – Greater than 1,200 ft.                         |
| Stump Height and Slash Cleanup                           | None                                    | 6" or less stump height and 90% slash cleanup                                                    | 6-12" stump height and 60-80% slash cleanup                                         | 12" stump height and 60-80% slash cleanup                                              | 12" or greater stump height and 40-60% slash cleanup                                       | 12" or greater stump height and 40% or less slash clean up                       |
| Road Decommissioning                                     | Complete re-contouring, re-vegetation   | Re-contouring of areas visible from travel ways, re-vegetation, roadbed scarification or ripping | Roadbed scarification or ripping, re-vegetation                                     | Roadbed scarification or ripping, re-vegetation of areas visible from travel ways      | Roadbed scarification or ripping, re-vegetation of areas visible from arterial travel ways | No rehabilitation                                                                |
| Fire Line                                                | Complete re-contouring                  | Re-contouring of 90%                                                                             | Re-contouring of areas visible from travel ways                                     | Re-contouring of areas visible from arterial travel ways                               | Re-contouring of areas visible in foreground areas off travel ways                         | No rehabilitation                                                                |
| <b>Recreation Management</b>                             |                                         |                                                                                                  |                                                                                     |                                                                                        |                                                                                            |                                                                                  |
| Dispersed Recreation Sites                               | None                                    | Fire rings, woodpile<br><br>Vehicle impact: 0 to 240 sq. ft.                                     | Fire rings, woodpiles<br><br>Vehicle impact: 240 to 1,000 sq. ft.                   | Fire rings, woodpiles, meat poles, corrals<br><br>Vehicle impact: 800 to 1,500 sq. ft. | Fire rings, woodpiles, meat poles, corrals<br><br>Vehicle impact: 1,500 to 2,500 sq. ft.   | Fire rings, woodpiles, meat poles, corrals<br><br>Vehicle impact: 3,000+ sq. ft. |
| Developed Recreation Sites and Administrative Facilities | None                                    | Development level: Consistent with ROS<br><br>Design style: Timeless and consistent              | Development level: Consistent with ROS<br><br>Design style: Timeless and consistent | Development level: Consistent with ROS                                                 | Development level: Consistent with ROS                                                     | Development level: Consistent with ROS                                           |
| Signage                                                  | None                                    | Maintenance condition: High<br><br>Roads: Low profile                                            | Maintenance condition: Moderate<br><br>Roads: Low profile, striped                  | Maintenance condition: Low<br><br>Roads: High profile, striped                         | Maintenance condition: Very Low<br><br>Roads: High profile, striped                        | Maintenance condition: None<br><br>Roads: Large cuts and fills, striped          |
| Corrals and Handling Facilities                          | None                                    | Corrals: Wood<br>Less than 150 sq. ft. per 100 acres                                             | Corrals: Metal, no paint<br>150 to 300 sq. ft. per 100 acres                        | Corrals: Metal, no paint<br>300 to 600 sq. ft. per 100 acres                           | Corrals: Metal, paint<br>600 to 1200 sq. ft. per 100 acres                                 | Corrals: Metal, contrasting color<br>1,200+ sq. ft. per 100 acres                |
| Concentrated Impacts                                     | None                                    | 150 sq. ft. per 100 acres                                                                        | 150 to 300 sq. ft. per 100 acres                                                    | 300 to 600 sq. ft. per 100 acres                                                       | 600 to 1,200 sq. ft. per 100 acres                                                         | 1,200+ sq. ft. per 100 acres                                                     |

Table 21: Criteria for Rating Human-caused Impacts to Landscape Character

| Human-caused Deviations              | Very High Integrity | High Integrity                                                     | Moderate Integrity                                           | Low Integrity                                      | Very Low Integrity                                             | Unacceptably Low Integrity                                                   |
|--------------------------------------|---------------------|--------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------|
| Storage Structures                   | None                | Rustic appearance, no contrasting colors, wood                     | Rustic appearance, no contrasting colors, wood/metal roofing | Steel siding, roofing, contrasting colors          | Steel siding, roofing, contrasting colors, high profile        | Steel siding, roofing, contrasting color, high profile, numerous             |
| Watering/Feeding Facilities          | None                | Facility blends with natural elements                              | Facility is evident but does not contrast                    | Facility contrasts in color                        | Facility is prominent, contrasts in color                      | Facility blocks views of value attributes, is prominent, contrasts in color  |
| <b>Wildlife Management</b>           |                     |                                                                    |                                                              |                                                    |                                                                |                                                                              |
| Corrals/Feeding, Watering Facilities | None                | Corrals: Wood 150 sq. ft. per mile                                 | Corrals: Wood or steel, noncontrasting; 400 sq. ft. per mile | Corrals: Contrasting 400+ sq. ft. per mile         | Corrals: Contrasting, prominent position 400+ sq. ft. per mile | Corrals: Contrasting, prominent position, blocks view, 400+ sq. ft. per mile |
| Bird/Bat Houses                      | None                | Wood, less than 10% seen from road or trail, less than 12 per acre | Wood, 10-20% seen from road or trail, 12 to 20 per acre      | Wood, 20-30% seen from road or trail, 20+ per acre | 30-40% seen from road or trail, 20+ per acre                   | 40%+ seen from road or trail, 20+ per acre                                   |
| <b>Fisheries Management</b>          |                     |                                                                    |                                                              |                                                    |                                                                |                                                                              |
| Fish Traps and Related Facilities    | None                | Blends with natural elements                                       | Evident but does not contrast                                | Contrasts in color                                 | Contrasts in color, prominent position                         | Contrasts in color, prominent position, blocks valued views                  |
| Fish Weirs, Hatcheries               | None                | Blends with natural elements                                       | Evident but does not contrast                                | Contrasts in color                                 | Contrasts in color, prominent position                         | Contrasts in color, prominent position, blocks valued views                  |
| Fish Acclimation Facilities          | None                | Blends with natural elements                                       | Evident but does not contrast                                | Contrasts in color                                 | Contrasts in color, prominent position                         | Contrasts in color, prominent position                                       |

**Table 22** displays the road management objectives and corresponding maintenance and traffic service levels to meet the Access setting indicator for the ROS classification. Refer to the **Glossary** under “roads” for further definitions related to access.

Table 22: Road Management Objectives, Maintenance Levels, and Traffic Service Levels

| Semi-primitive nonmotorized (SPNM)                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Semi-primitive nonmotorized roads provide hiking or equestrian passage on closed or decommissioned roads. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |
| SPNM                                                                                                      | Maintenance Level 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Maintenance Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Traffic Service Level-None           |
| Most areas do not have developed roads.                                                                   | <p>Assigned to intermittent service roads during the times they are closed to vehicular traffic. Closure periods must exceed 1 year. Basic custodial maintenance is performed to keep damage to adjacent resources to acceptable levels and to perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are "prohibit" and "eliminate."</p> <p>Roads may be of any type, class, or construction standard and may be managed at any other maintenance level during the time they are open for traffic. However, while being maintained at Level 1, they are closed to vehicular traffic, subject to prohibitions and restrictions, and may be available and suitable for nonmotorized users.</p> | <p>Road condition surveys, evaluation, and monitoring of maintenance needs. Activities include limited equipment operation, opening closed roads, manual cleaning of drainage structures, and vegetation management that stabilizes or reduces erosion. Repairs are scheduled and completed within funding limitations when critical resource damage is reported.</p> <p>Roadway activities, including blading, clearing logs, and noncritical repairs that can be delayed are accomplished when the road is placed in active status.</p> | All motorized traffic is prohibited. |
| Semi-primitive motorized (SPM)                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |

Generally used for four-wheel drive, logging, or ranching activities. Passenger-car use is discouraged by entrance conditions or signage. Users can expect SPM roads where there are no attractions such as viewpoints or trailheads.

| Low-level SPM                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Maintenance Level 2                                                                                                                                                                                                                                                                                                                                                                                                                         | Maintenance Activities                                                                                                                                                                                                                                                                                                                                                            | Traffic Service Level D                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Native surface roads suitable for high-clearance vehicles but not passenger cars or vehicles towing trailers. Users may need to back vehicles for long distances when meeting oncoming traffic.</p> <p>Maintenance activities usually occur every 5 years or when resource needs are identified. Roads are allowed to "brush in" and users are responsible for removing trees blocking the road. Ruts and potholes are accepted if they do not contribute to sediment loading.</p> | <p>Assigned to roads open for use by high-clearance vehicles. Providing access for passenger cars is not a consideration. Traffic is normally minor, usually consisting of administrative, permitted, dispersed recreation, and/or other specialized uses. Log haul may occur.</p> <p>Appropriate traffic management strategies are either to discourage or prohibit passenger cars or to accept or discourage high-clearance vehicles.</p> | <p>Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement.</p> <p>Drainage function and soil stabilization are of prime importance. Many roads in this category have grass in the travel way. User comfort is not a consideration.</p> | <p>Flow is slow and may be blocked by an activity. Two-way traffic is difficult and may require backing up. Road surface is rough and irregular. Travel with low-clearance vehicles is difficult. Not designed for mixed traffic.</p> |
| High-level SPM                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Maintenance Level 2                                                                                                                                                                                                                                                                                                                                                                                                                         | Maintenance Activities                                                                                                                                                                                                                                                                                                                                                            | Traffic Service Level C                                                                                                                                                                                                               |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Corresponds to a single-lane native-surface road or road surfaced with spot rock, strip rock, or pit-run material suitable for high-clearance vehicles. The road may have infrequent turnouts.</p> <p>Pit-run material is applied to the road surface, but is not grid rolled, leaving a rough, rocky surface that drains well and discourages passenger car use. User maintenance is the same as for the low-end SPM. This standard meets resource and safety needs and is the minimum standard for accessing attractions such as viewpoints or trailheads. Maintaining current road alignment, road-surface type, and corridor width are emphasized.</p> | <p>Assigned to roads open for use by high-clearance vehicles. Providing access for passenger cars is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur at this level.</p> <p>Appropriate traffic-management strategies are to “discourage” or “prohibit” passenger cars or to “accept” or “discourage” high-clearance vehicles.</p> | <p>Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement.</p> <p>Drainage function and soil stabilization are of prime importance. Many roads in this category have grass in the travel way. User comfort is not a consideration.</p> | <p>Flow interrupted by limited passing facilities. Some vehicles will have difficulty negotiating certain segments. Design speeds are generally low. May not be stable under all traffic or weather conditions. Use and traffic volumes are limited.</p> |
| <p>Roaded Natural (RN)</p> <p>Provide safe access for passenger cars. Maintenance activities generally occur annually or every two years, depending on funding and need. FS clears these roads of brush and logs. Surface maintenance increases at higher levels. Because of increased speeds, turnouts are needed more frequently. Open local roads and some collector roads within RN are managed for high-clearance vehicles. In such cases, use road-maintenance standards for SPM.</p>                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                          |
| Low-level RN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Maintenance Level 3                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Maintenance Activities                                                                                                                                                                                                                                                                                                                                                            | Traffic Service Level C                                                                                                                                                                                                                                  |

|                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Corresponds to a road-surface type of either native or base course. Pit-run material is processed to provide a rough but suitable service for passenger cars. Dust increases during dry conditions, and the road provides good resource protection when wet. | Assigned to open roads maintained for travel by prudent drivers in standard passenger cars. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low-speed, single-lane, with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Appropriate traffic management strategies are "encourage" or "accept." "Discourage" or "prohibit" strategies may be applied for certain classes of vehicles or users.                  | Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement.<br><br>Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads. | Flow interrupted by limited passing facilities. Some vehicles will have difficulty negotiating certain segments. Design speeds are generally low. May not be stable under all traffic or weather conditions. Use and traffic volumes are limited. |
| Medium-level RN                                                                                                                                                                                                                                              | Maintenance Level 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Maintenance Activities                                                                                                                                                                                                                                                                                                                                                 | Traffic Service Level C                                                                                                                                                                                                                           |
| Corresponds to a road-surface type of crushed aggregate, maintained for passenger cars. Usually maintained annually, surfaces may "washboard" and become dusty with increased use.                                                                           | Assigned to open roads that are maintained for travel by prudent drivers in standard passenger cars. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low-speed, single-lane, with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Appropriate traffic management strategies are either "encourage" or "accept." "Discourage" or "prohibit" strategies may be employed for certain classes of vehicles or users. | Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement.<br><br>Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads. | Flow interrupted by limited passing facilities. Some vehicles will have difficulty negotiating certain segments. Design speeds are generally low. May not be stable under all traffic or weather conditions. Use and traffic volumes are limited. |
|                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                        | Traffic Service Level B                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                        | Congested during heavy traffic, with slower speeds and periodic dust. Provides service to traffic with any legal-size load or vehicle.                                                                                                            |
| High-level RN                                                                                                                                                                                                                                                | Maintenance Level 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Maintenance Activities                                                                                                                                                                                                                                                                                                                                                 | Traffic Service Level B                                                                                                                                                                                                                           |

|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Corresponds to a road-surface type of an aggregate that has been dust abated or treated with soil or silicone stabilizers or asphalt emulsions. A dust-free, smooth surface for passenger cars is the desired product. This standard is often applied to provide double-lane access to attractions such as viewpoints or campgrounds. | Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double-lane and aggregate-surfaced. However, some roads may be single-lane. Some roads may be paved and/or dust-abated. The most appropriate traffic-management strategy is "encourage." However, the "prohibit" strategy may apply to specific classes of vehicles or users at certain times. | Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement. Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads.                                                    | Congested during heavy traffic, with slower speeds and periodic dust. Provides service to traffic with any legal-size load or vehicle. |
| Rural (R)                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                        |
| Rural roads provide the highest standard of road. These arterial roads provide the main access to the HCNRA but generally lack the speeds and alignment provided by state highways.                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                        |
| Rural                                                                                                                                                                                                                                                                                                                                 | Maintenance Level 5                                                                                                                                                                                                                                                                                                                                                                                                       | Maintenance Activities                                                                                                                                                                                                                                                                                                                                                                                             | Traffic Service Level A                                                                                                                |
| Double-lane with a road-surface treatment and generally 24 feet wide. Has center striping and often stripes marking the shoulders.                                                                                                                                                                                                    | Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double-lane and paved. Some may be aggregate-surfaced and dust-abated. The appropriate traffic management strategy is "encourage."                                                                                                                                                                                 | Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement. Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads. All Level 5 roads have permanent (paved) surfaces. | Free-flowing, mixed traffic with stable and smooth road surface. Provides service to all traffic with safety at 25–35 mph.             |

**Table 23** displays the facilities development levels that specify the amount and scale of modification allowed at a site to meet the Facilities setting indicator for each Recreation Analysis Area.

Table 23: Facilities Development Levels

| Level | Description                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.            |
| 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. |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
| 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.                                                                          |

**Table 24** displays the facilities maintenance levels that specify the type of maintenance allowed at a site to meet the Facilities setting indicator for each Recreation Analysis Area.

Table 24: Facilities Maintenance Levels

| Level | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | Abate major health or safety hazards. Applies to all administrative facilities no longer needed. Occupancy is not allowed. Facilities waiting retirement. Do not use or abandon.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2     | Maintain until retirement. All types of facilities, particularly sheds, and storage buildings. Infrequent human use. Facilities needed next 3-5 years. Maintain only to extend life until retirement. Normal health and safety inspections required. Identified health and safety hazards must be abated.                                                                                                                                                                                                                                                                                                |
| 3     | Keep operational. Types of facilities include minor offices (nonpublic) ships, warehouses, seasonal quarters, and nonpublic areas. (Offices and workspaces that are occupied frequently or continuously due to need but should be replaced. Other support structures have infrequent or no human use.) All systems and components are kept operational. Repair critical-service interruptions within 24 hours and non-critical within 2 weeks. Appearance is neat, pleasing, and of good quality. Maintain to extend life 10-15 years or until retirement. Normal safety inspections; abate all hazards. |
| 4     | Repair critical-service interruptions. Types of facilities include major, actively used facilities with high employee use and less than 50 visitors per day, and operations centers, crew quarters, and employee quarters. Service is the same as Level 3, except critical service is repaired within 24 hours, non-critical within 5 days. Maintain to extend life to 20+ years. Normal safety inspections; abate all hazards.                                                                                                                                                                          |
| 5     | Highest-quality/like-new. Types of facilities include major offices and suburban offices, visitor centers, and major laboratories; similar to Level 4, except greater than 50 visitors/day. Highest quality materials and workmanship are used. Continual maintenance by custodial staffing. Normal safety inspections; abate all hazards.                                                                                                                                                                                                                                                               |

In some cases, maintenance has been deferred and not performed or has been delayed to a future period. These facilities may need to be rehabilitated, replaced, or decommissioned. Other facilities may require some type of capital improvement such as an expansion or an upgrade. **Table 25** describes the extent of actions allowed at an existing site or a new site to meet the Facilities setting indicator for each Recreation Analysis Area. Refer to the **Glossary** for further definitions related to facilities.

Table 25: Deferred Maintenance and Capital Improvement Levels

| Level          | Description                                                                                                                                                                                                                                      |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rehabilitation | Renovation or restoration of an existing fixed asset or any of its components in order to restore the functionality or life of the asset. Because there is no significant expansion or change of purpose for the fixed asset, the work primarily |

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | addresses deferred maintenance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Custodial             | Replacement of nonfunctional site elements or facilities with in-kind materials or structures. Location, design, and configuration remain constant. Accessibility standards, where possible, are compatible with designated ROS settings.                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Replacement (Level A) | Total or scheduled replacement of all existing facilities with new facilities. Location and configuration remain constant; design and construction materials are simple, durable, and cost efficient. The overall goal is to maintain a rustic appearance while reducing the operation and maintenance costs of the facility. Some adjustment may be made in unit size and parking accommodations. Accessibility standards would be compatible with the designated ROS settings.                                                                                                                                                                                                  |
| Replacement (Level B) | The same as Replacement (Level A) with the following exception: Design configuration and location may change slightly to accommodate ecological or environmental concerns. Increased capacity could result even though the general location and area of the campground is the same.                                                                                                                                                                                                                                                                                                                                                                                               |
| Decommission          | Demolition, dismantling, removal, obliteration and/or disposal of a deteriorated or otherwise unneeded asset or component, including necessary cleanup work. This action eliminates the deferred maintenance needs for the fixed asset. Portions of an asset or component may remain if they do not cause problems nor require maintenance.                                                                                                                                                                                                                                                                                                                                       |
| Alteration            | Capital improvement to change the function of an existing fixed asset. The capacity or size of the fixed asset is not significantly changed. Deferred maintenance of the original fixed asset may be reduced or eliminated by an alteration.                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Expansion             | Capital improvement to increase the capacity or size of an existing fixed asset to serve needs different from or significantly greater than those originally intended.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Upgrade               | Total redesign and construction of a camping facility. Location may change considerably depending on ecological, environmental, or social concerns. The overall goal would be to maintain a rustic appearance but promote designs and materials that would result in lower operation and maintenance costs. Some campground classifications may change to the next higher level but none would exceed a Development Level 4 for this planning period. Accessibility standards would be appropriate to the designated ROS. A change in design standards has the potential to move the ROS to a higher development setting although that is not the intent of upgrading a facility. |
| New Construction      | The erection, construction, installation, or assembly of a new fixed asset. The design and construction of the new facility would meet the designated ROS settings, ecological, environmental concerns, and accessibility standards. Design standards have the potential to move the ROS to the next higher development setting although it is not the intent of the new facility to effect such a change.                                                                                                                                                                                                                                                                        |

## Recreation Analysis Areas

The Recreation Analysis Areas (33) identify areas with similar use patterns and opportunities and provide a logical system for managing recreation objectives, comparing environmental effects, analyzing program effectiveness, monitoring, and serve as reference areas for maintaining recreation use and other related information.

This section provides management direction for each of the WROS and ROS setting indicators (access, remoteness, naturalness/visual quality, social encounters, visitor management, visitor impact, and facilities) within individual Recreation Analysis Areas.

Refer to **Table 14** for a complete list of Recreation Analysis Area by wilderness and nonwilderness, **Tables 15 through 25** for related definitions and direction, and **Figure 7** for a map of their locations.

### 01 Sheep Creek

|                            |                                                                                                                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified in the <i>HCNRA Trail Management Plan</i> (USDA 1994).          |
| Remoteness                 | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.                                                                                                                        |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                             |
| Social Encounters          | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.                                                                                                                        |
| Visitor Management         | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.<br><b>Standard:</b> Heritage interpretation theme is prehistoric settlement.                                           |
| Visitor Impact             | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.                                                                                                                        |
| Facilities                 | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.<br><b>Standard:</b> No facilities within this Recreation Analysis Area. |

### 02 Dry Diggins

|                            |                                                                                                                                                                                                  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified in the <i>HCNRA Trail Management Plan</i> (USDA 1994). |
| Remoteness                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                               |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                         |
| Social Encounters          | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations                                                                                                                |
| Visitor Management         | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                         |
| Visitor Impact             | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                               |
| Facilities                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.                                                                |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name           | Type of Site   | M A | Type of Structure | Number | Site Plan | Objective                          | Development Level | Maintenance Level | Fire Priority |
|---------------------|----------------|-----|-------------------|--------|-----------|------------------------------------|-------------------|-------------------|---------------|
| Dry Diggins Lookout | Administrative | 4   | Fire Lookout      | 1      | N         | Old lookout, currently not in use. | 1                 | 1                 | 5             |

|                |          |   |         |   |   |                |                                                                                 |   |
|----------------|----------|---|---------|---|---|----------------|---------------------------------------------------------------------------------|---|
| Hibbs Cow Camp | Historic | 4 | Chimney | 1 | N | Historic ruins | Determine eligibility for historic register. Disposition dependent on findings. | 5 |
|----------------|----------|---|---------|---|---|----------------|---------------------------------------------------------------------------------|---|

### 03 Sheep Lake

|                            |                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified on the <i>HCNRA Trail Management Plan</i> (USDA 1994).          |
| Remoteness                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                  |
| Social Encounters          | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Visitor Management         | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                                  |
| Visitor Impact             | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Facilities                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.<br><b>Standard:</b> No facilities within this Recreation Analysis Area. |

### 04 Seven Devils

|                            |                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified on the <i>HCNRA Trail Management Plan</i> (USDA 1994).          |
| Remoteness                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                  |
| Social Encounters          | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Visitor Management         | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                                  |
| Visitor Impact             | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Facilities                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.<br><b>Standard:</b> No facilities within this Recreation Analysis Area. |

### 05 Baldy Lake

|                            |                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified on the <i>HCNRA Trail Management Plan</i> (USDA 1994).          |
| Remoteness                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                  |
| Social Encounters          | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Visitor Management         | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                                  |
| Visitor Impact             | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Facilities                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.<br><b>Standard:</b> No facilities within this Recreation Analysis Area. |

## 06 East Face

|                            |                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified on the <i>HCNRA Trail Management Plan</i> (USDA 1994).          |
| Remoteness                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                  |
| Social Encounters          | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Visitor Management         | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                                  |
| Visitor Impact             | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Facilities                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.<br><b>Standard:</b> No facilities within this Recreation Analysis Area. |

## 07 Horse Heaven

|                            |                                                                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified on the <i>HCNRA Trail Management Plan</i> (USDA 1994). |
| Remoteness                 | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.                                                                                                                |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                    |
| Social Encounters          | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.                                                                                                                |
| Visitor Management         | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                          |
| Visitor Impact             | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.                                                                                                                |
| Facilities                 | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.                                                                 |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name          | Type of Site             | M A | Type of Structure | Number | Site Plan | Objective                                                                                                                                         | Development Level | Maintenance Level | Fire Priority |
|--------------------|--------------------------|-----|-------------------|--------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Horse Heaven Cabin | Administrative/ Historic | 4   | Cabin             | 1      | N         | Administrative use for operational support and safety of employees. Use is associated with horse pasture. Listed on National Register of Historic | 1                 | 2                 | 1             |

|           |          |   |                  |   |   |                |                                                                                |   |
|-----------|----------|---|------------------|---|---|----------------|--------------------------------------------------------------------------------|---|
|           |          |   |                  |   |   | Places.        |                                                                                |   |
| Mill Site | Historic | 4 | House/Small Barn | 1 | N | Historic Ruins | Determine eligibility for historic register. Disposition dependent on findings | 5 |
| Mines     | Historic | 4 | Ruins            | 1 | N | Historic Ruins | Determine eligibility for historic register. Disposition dependent on findings | 5 |

### 08 Granite Creek

|                            |                                                                                                                                                                                                                     |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified on the <i>HCNRA Trail Management Plan</i> (USDA 1994).         |
| Remoteness                 | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.                                                                                                                       |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                            |
| Social Encounters          | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.                                                                                                                       |
| Visitor Management         | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.<br><b>Standard:</b> Heritage interpretation theme is prehistoric settlement.                                          |
| Visitor Impact             | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.                                                                                                                       |
| Facilities                 | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.<br><b>Standard:</b> No facilities within this Recreation Analysis Area. |

### 09 Lakes Basin

|                            |                                                                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for pristine, primitive, and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified on the <i>HCNRA Trail Management Plan</i> (USDA 1994). |
| Remoteness                 | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.                                                                                                                |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                    |
| Social Encounters          | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.                                                                                                                |
| Visitor Management         | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                          |
| Visitor Impact             | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.                                                                                                                |
| Facilities                 | <b>Objective:</b> Manage for pristine, primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.                                                                 |

Refer to **07 Horse Heaven** for facilities direction.

### 10 Black Lake

|                            |                                                                                                                                                                                                                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage roads for high-level SPM.<br><b>Standard:</b> Maintain Forest Roads 112 and 112a at Maintenance Level 2-D.<br><b>Standard:</b> Maintain current alignment and corridor except provide for additional turnouts for safety on narrow passage ways.<br><b>Guideline:</b> Emphasize drainage improvement. |
| Remoteness                 | <b>Objective:</b> Manage for SPM and SPNM ROS designations.                                                                                                                                                                                                                                                                    |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for a very high scenic integrity.                                                                                                                                                                                                                                                                     |
| Social Encounters          | <b>Objective:</b> Manage for SPM and SPNM ROS designations.<br><b>Standard:</b> Manage road encounters for low to moderate SPM encounters.                                                                                                                                                                                     |
| Visitor Management         | <b>Objective:</b> Manage for SPM and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is historic mining.                                                                                                                                                                                             |
| Visitor Impact             | <b>Objective:</b> Manage for SPM and SPNM ROS designations.                                                                                                                                                                                                                                                                    |
| Facilities                 | <b>Objective:</b> Manage Black Lake Campground and trailhead as RN developed site                                                                                                                                                                                                                                              |

within the surrounding SPM ROS designated area.

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name                            | Type of Site | M A     | Type of Structure | Number | Site Plan | Objective                       | Development Level | Maintenance Level | Fire Priority |
|--------------------------------------|--------------|---------|-------------------|--------|-----------|---------------------------------|-------------------|-------------------|---------------|
| Black Lake Camp-ground and Trailhead | Recreation   | 16 in 9 | Toilet            | 1      | N         | Public Campground and Trailhead | 2                 | 3                 | 2             |

### 11 Windy Saddle

|                            |                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|
| Access                     | <b>Objective:</b> Manage roads for low-level RN<br><b>Standard:</b> Maintain Forest Road 517 at Maintenance Level 3-C.<br><b>Standard:</b> Allow minor improvements to provide access for low clearance vehicles.<br><b>Standard:</b> Emphasize additional turnouts and grid-rolled native surface and removal of rock protrusions. |  |  |  |  |  |  |  |  |
| Remoteness                 | <b>Objective:</b> Manage for RN ROS designation.                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |
| Social Encounters          | <b>Objective:</b> Manage for RN ROS designation.<br><b>Standard:</b> Manage road encounters for low to moderate RN encounters.                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |
| Visitor Management         | <b>Objective:</b> Manage for RN ROS designation.<br><b>Guideline:</b> Heritage interpretation theme is Forest Service fire management, and self-discovery.                                                                                                                                                                          |  |  |  |  |  |  |  |  |
| Visitor Impact             | <b>Objective:</b> Manage for RN ROS designation.                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |
| Facilities                 | <b>Objective:</b> Manage for RN ROS designation.                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name                        | Type of Site | M A     | Type of Structure   | Number | Site Plan | Objective             | Development Level | Maintenance Level | Fire Priority |
|----------------------------------|--------------|---------|---------------------|--------|-----------|-----------------------|-------------------|-------------------|---------------|
| Heavens Gate Trailhead           | Recreation   | 16 in 9 | Toilet              | 1      | N         | Access                | 1                 | 3                 | 1             |
| Windy Saddle Camp-ground Complex | Recreation   | 16 in 9 | Campground/ Toilets | 1      | N         | Public Campground     | 1                 | 3                 | 1             |
| Windy Saddle                     | Recreation   | 16 in   | Hitching rails/     | 1      | N         | Public use, Trailhead | 2                 | 3                 | 1             |

|                            |                               |         |                    |   |   |                                                                                                                                     |   |                               |   |
|----------------------------|-------------------------------|---------|--------------------|---|---|-------------------------------------------------------------------------------------------------------------------------------------|---|-------------------------------|---|
| Trailhead                  |                               | 9       | Trailhead          |   |   |                                                                                                                                     |   |                               |   |
| Seven Devils Camp-ground   | Recreation                    | 16 in 9 | Campground         | 2 | N | Public Campground                                                                                                                   | 3 | 3                             | 1 |
| Heavens Gate Lookout       | Recreation And Administrative | 16 in 9 | Lookout and Toilet | 2 | N | Administrative use and communication facility for operational support and employee safety. Facility is integral to fire activities. | 2 | 3                             | 1 |
| Seven Devils Guard Station | Administrative/Historic       | 16 in 9 | Complex            | 4 | N | Administrative use associated with employee operations and horse pasture.                                                           | 2 | 3 Maintain historic integrity | 1 |

## 12 East Rim Loops

|                            |                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage Forest Roads 2060 and 1819 for low-level RN. Manage Forest Road 420 for high-level SPM. Manage remaining roads for mixture of high and low-level SPM.<br><b>Standard:</b> Maintain Forest Roads 2060 and 1819 at Maintenance Level 3-C. Maintain Forest Road 420 at Maintenance Level 2-D<br><b>Standard:</b> Emphasize additional turnouts, spot rocking, and grid-rolled surface |
| Remoteness                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                            |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                                                                                         |
| Social Encounters          | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Standard:</b> Manage RN road encounters for low to moderate encounters. Manage SPM road encounters for low to moderate encounters.                                                                                                                                                                                                   |
| Visitor Management         | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                                                                                                                                                                                                                                                      |
| Visitor Impact             | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                            |
| Facilities                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                            |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name              | Type of Site | M A     | Type of Structure | Number | Site Plan | Objective   | Development Level | Maintenance Level | Fire Priority |
|------------------------|--------------|---------|-------------------|--------|-----------|-------------|-------------------|-------------------|---------------|
| Low Saddle Forest Camp | Recreation   | 16 in 9 | New site          | 0      | N         | Forest Camp | 2                 | 3                 | 1             |

|                         |                         |         |             |   |   |                                          |                                                                                 |   |   |
|-------------------------|-------------------------|---------|-------------|---|---|------------------------------------------|---------------------------------------------------------------------------------|---|---|
| Low Saddle Trailhead    | Recreation              | 16 in 9 | Toilet      | 1 | N | Public Trailhead                         | 2                                                                               | 3 | 1 |
| Low Saddle Viewpoint    | Recreation              | 16 in 9 | New site    | 0 | N | Viewpoint                                | 2                                                                               | 3 | 1 |
| Sawpit Saddle Trailhead | Recreation              | 16 in 9 | Signs       | 1 | N | Public Trailhead                         | 1                                                                               | 3 | 1 |
| Sawpit Saddle Viewpoint | Recreation              | 16 in 9 | New site    | 0 | N | Viewpoint                                | 1                                                                               | 3 | 1 |
| Cold Springs Cow Camp   | Administrative/Historic | 9       | Log Cabin   | 1 | N | Historic Structures                      | Determine eligibility for historic register. Disposition dependent on findings. |   | 2 |
| Dixon Homestead         | Administrative/Historic | 9       | Cabin/Bar n | 2 | N | Historic Structures                      | Determine eligibility for historic register. Disposition dependent on findings. |   | 2 |
| Kirkwood Cow Camp       | Historic                | 9       | Cabin       | 1 | N | Historic ruin/Special Use Permit (Range) | Determine eligibility for historic register. Disposition dependent on findings. |   | 2 |

### 13 Kirkwood

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <p><b>Objective:</b> Manage Kirkwood Road (Forest Road 2062-132) for low-level SPM. Manage Kirkwood Road (Forest Road 2062-132) to allow motorized access while protecting fish concerns.</p> <p><b>Standard:</b> Maintain Kirkwood Road to meet Maintenance Level 2-D.</p> <p><b>Standard:</b> Emphasize correction of drainage problems for resource protection.</p> <p><b>Standard:</b> 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<sup>st</sup> through June 30<sup>th</sup> each year to motorized vehicles and mechanical equipment. Close road with a gate.</p> |
| Remoteness                 | <b>Objective:</b> Manage for SPM and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Social Encounters          | <p><b>Objective:</b> Manage for SPM and SPNM ROS designations.</p> <p><b>Standard:</b> Manage road encounters for low to moderate SPM encounters.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Visitor Management         | <p><b>Objective:</b> Manage for SPM and SPNM ROS designations.</p> <p><b>Guideline:</b> Heritage interpretation theme is historic ranching and prehistoric settlement.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Visitor Impact             | <b>Objective:</b> Manage for SPM and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Facilities                 | <p><b>Objective:</b> Manage for SPM and SPNM ROS designations.</p> <p><b>Standard:</b> No facilities within this Recreation Analysis Area.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

### 14 Pittsburg Landing

|                            |                                                                                                                                                                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <p><b>Objective:</b> Manage Forest Road 493 in its current condition for high-level RN. Manage other existing roads for low-level SPM.</p> <p><b>Standard:</b> Maintain Forest Road 493 at Maintenance Level 4-B. Maintain other roads at Maintenance Level 2-D.</p> |
| Remoteness                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                     |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for moderate scenic integrity.                                                                                                                                                                                                              |

|                    |                                                                                                                                                                                                            |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Social Encounters  | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Standard:</b> Manage RN road encounters for moderate to high encounters. Manage SPM road encounters for low to moderate encounters. |
| Visitor Management | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is prehistoric settlement, homesteading, and historic ranching.                        |
| Visitor Impact     | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                           |
| Facilities         | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Standard:</b> Manage vehicular use outside of developed sites as SPM ROS designations.                                              |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name      | Type of Site   | M A     | Type of Structure | Number | Site Plan | Objective                                                                                                                      | Development Level | Maintenance Level | Fire Priority |
|----------------|----------------|---------|-------------------|--------|-----------|--------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Circle C Ranch | Administrative | 16 in 9 | Complex           | 9      | N         | Operational support and crew safety. Historic structures. Facility is integral in management activities for Pittsburg Landing. | 3                 | 3                 | 2             |

### 15 Big Canyon

|                            |                                                                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage Big Canyon Creek Trail #1805 to Big Canyon Creek for low-level SPM for four-wheel-drive vehicles. Beyond Big Canyon Creek, manage for trail bikes and all-terrain vehicles less than 50 inches wide only.<br><b>Standard:</b> Maintain roads at Maintenance Level 2-D. |
| Remoteness                 | <b>Objective:</b> Manage for SPM and SPNM ROS designations.                                                                                                                                                                                                                                     |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                             |
| Social Encounters          | <b>Objective:</b> Manage for SPM and SPNM ROS designations.<br><b>Standard:</b> Manage SPM road encounters for low encounters.                                                                                                                                                                  |
| Visitor Management         | <b>Objective:</b> Manage for SPM and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                                                                                                                                               |
| Visitor Impact             | <b>Objective:</b> Manage for SPM and SPNM ROS designations.                                                                                                                                                                                                                                     |
| Facilities                 | <b>Objective:</b> Manage for SPM and SPNM ROS designations.                                                                                                                                                                                                                                     |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name            | Type of Site | M A | Type of Structure | Number | Site Plan | Objective           | Development Level                                                               | Maintenance Level | Fire Priority |
|----------------------|--------------|-----|-------------------|--------|-----------|---------------------|---------------------------------------------------------------------------------|-------------------|---------------|
| Big Canyon (Walters) | Historic     | 9   | Residence         | 1      | N         | Historic structures | Determine eligibility for historic register. Disposition dependent on findings. |                   | 2             |

## 26 Cottonwood

|                            |                                                                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Maintain nonmotorized; trail access only, except for one mile of open road on the extreme northwest boundary of the Recreation Analysis Area to private land. |
| Remoteness                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for moderate scenic integrity.                                                                                                                         |
| Social Encounters          | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                |
| Visitor Management         | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is prehistoric settlement.                                  |
| Visitor Impact             | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                |
| Facilities                 | <b>Objective:</b> Manage for RN and SPNM ROS designations.<br><b>Standard:</b> No facilities within this Recreation Analysis Area.                                              |

## 27 Buckhorn/Cold Springs

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage Forest Road 46 for medium-level RN.<br><b>Objective:</b> Manage Cold Springs Road (Forest Road 4680) for medium-level RN except manage the last 10 miles of Cold Spring Road (Forest Road 4680) on the north end for high-level SPM.<br><b>Standard:</b> Maintain Forest Road 4680 at Maintenance Level 2-C.<br><b>Standard:</b> 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 45-595 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 road closure with signs.<br><b>Standard:</b> Emphasize grid-rolled surface on roads not managed as SPM and manage drainage on all roads. |
| Remoteness                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Social Encounters          | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Standard:</b> Manage RN part of Forest Road 46 for moderate to high RN encounters. Manage RN part of Cold Springs Road (Forest Road 4680) and Buckhorn Lookout Road (Forest Road 780) for low to moderate RN encounters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Visitor Management         | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is historic American Indian.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Visitor Impact             | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Facilities                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name                | Type of Site        | M A      | Type of Structure | Number | Site Plan | Objective                                                                                                               | Development Level                                                               | Maintenance Level | Fire Priority |
|--------------------------|---------------------|----------|-------------------|--------|-----------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------|---------------|
| Buckhorn Campground      | Recreation          | 16 in 11 | Toilet            | 1      | N         | Public campground adjacent to Forest Road 46                                                                            | 1                                                                               | 3                 | 1             |
| Cemetery Trailhead       | Recreation          | 16 in 11 | Sign              | 1      | N         | Public Trailhead                                                                                                        | 1                                                                               | 3                 | 3             |
| Dead-horse Trailhead     | Recreation          | 16 in 11 | Sign              | 1      | N         | Public Trailhead                                                                                                        | 1                                                                               | 3                 | 2             |
| Dougherty Campground     | Recreation          | 16 in 11 | Toilet            | 2      | N         | Public Campground adjacent to Forest Road 46                                                                            | 2                                                                               | 3                 | 1             |
| Buckhorn Electronic Site | Administrative      | 16 in 11 | Tower             | 1      | N         | Electronic repeater for Forest Service use only. Facility is integral to management activities and safety of employees. | 1                                                                               | 5                 | 1             |
| Buckhorn Lookout         | Recreation/Historic | 16 in 11 | Lookout           | 2      | N         | Interpretive use and possible rental. Facility is in need of repair and currently unusable. Garage is excess.           | 2 (day use only interpretive facilities)                                        | 3                 | 1             |
| Buckhorn                 | Historic            | 11       | Complex           | 3      | N         | Historic structures                                                                                                     | Determine eligibility for historic register. Disposition dependent on findings. |                   | 1             |
| Poe Cabin                | Historic            | 11       | Cabin             | 1      | N         | Historic structures                                                                                                     | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |

## 28 Jim Creek/Cherry Creek

|        |                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access | <p><b>Objective:</b> Maintain current access. Manage the Jim Creek Road (Forest Road 4680-250) and Cache Creek Road (Forest Road 4680-500) for administrative use only for low-level SPM.</p> <p><b>Standard:</b> Maintain Jim Creek and Cache Creek Roads (Forest Roads 4680-250 and 4680-500) to meet Maintenance Level 2-D.</p> <p><b>Standard:</b> Emphasize correction of drainage problems for resource protection.</p> |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                            |                                                                                                                                                                                                      |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remoteness                 | <b>Objective:</b> Manage for RN and SPM ROS designations associated with Cold Springs Road (Forest Road 4680) influence.                                                                             |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                  |
| Social Encounters          | <b>Objective:</b> Manage for RN, SPM and SPNM ROS designations.<br><b>Standard:</b> Manage RN encounters for moderate to high encounters. Manage SPM road encounters for low to moderate encounters. |
| Visitor Management         | <b>Objective:</b> Manage for RN and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is prehistoric settlement.                                                             |
| Visitor Impact             | <b>Objective:</b> Manage for RN, SPM and SPNM ROS designations.                                                                                                                                      |
| Facilities                 | <b>Objective:</b> Manage for RN, SPM and SPNM ROS designations.                                                                                                                                      |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name          | Type of Site                | M<br>A        | Type of Structure | Number | Site Plan | Objective                                                                                                                    | Development Level                                                               | Maintenance Level | Fire Priority |
|--------------------|-----------------------------|---------------|-------------------|--------|-----------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------|---------------|
| Cherry Creek Ranch | Administrative              | 16            | Complex           | 3      | N         | Administrative use for operational support and crew safety. Horse pasture. Facility is integral to horse management program. | 1                                                                               | 2                 | 2             |
| Jim Creek          | Administrative/<br>Historic | 16<br>in<br>9 | Complex           | 7      | N         | Administrative use for operational support and crew safety. Horse pasture. Facility is integral to horse management program. | 1                                                                               | 3                 | 2             |
| Jim Creek Butte    | Administrative              | 16<br>in<br>9 | Electronic Site   | 1      | N         | Electronic Repeater                                                                                                          | 1                                                                               | 5                 | 2             |
| Baldwin Cabin      | Historic                    | 9             | Cabin             | 1      | N         | Historic structures                                                                                                          | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |
| Bim Place Cabin    | Historic                    | 9             | Cabin             | 1      | N         | Historic structures                                                                                                          | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |
| Davis              | Historic                    | 9             | Cabin             | 1      | N         | Historic                                                                                                                     | Determine eligibility for                                                       |                   | 5             |

|       |  |  |  |  |            |                                                       |  |
|-------|--|--|--|--|------------|-------------------------------------------------------|--|
| Cabin |  |  |  |  | structures | historic register. Disposition dependent on findings. |  |
|-------|--|--|--|--|------------|-------------------------------------------------------|--|

## 29 Lower Imnaha

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Maintain current access and experience levels.<br><b>Objective:</b> Manage Dug Bar Road (Forest Road 4260) from Fence Creek to Cow Creek for medium-level RN, and from Cow Creek to Dug Bar for low-level RN.<br><b>Objective:</b> Manage Forest Road 880 to Indian Village trailhead for high-level SPM.<br><b>Objective:</b> Manage remaining roads for high and low-level SPM.<br><b>Standard:</b> Maintain Dug Bar Road (Forest Road 4260) at Maintenance Level 3-C.<br><b>Standard:</b> Maintain Forest Road 880 at Maintenance Level 2-C.<br><b>Standard:</b> Maintain remaining roads at Maintenance Level 2-D.<br><b>Standard:</b> Emphasize turnouts and drainage.<br><b>Standard:</b> Emphasize pit run only on slick spots from Fence Creek to Cow Creek. |
| Remoteness                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Social Encounters          | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Standard:</b> Manage Dug Bar Road (Forest Road 4260) for low to moderate RN encounters.<br><b>Standard:</b> Manage SPM road encounters for low to moderate SPM encounters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Visitor Management         | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is prehistoric settlement and historic ranching.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Visitor Impact             | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Facilities                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Objective:</b> Manage Dug Bar in conjunction with Nez Perce National Historic Park (USDA 1997).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name        | Type of Site   | M<br>A         | Type of<br>Structure | Number | Site Plan | Objective                                                                                                                    | Development Level | Maintenance Level | Fire Priority |
|------------------|----------------|----------------|----------------------|--------|-----------|------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Cow Creek        | Recreation     | 16<br>in<br>10 | Toilet               | 1      | N         | Dispersed camping and Trailhead                                                                                              | 2                 | 3                 | 1             |
| Dug Bar          | Recreation     | 16<br>in<br>8  | Toilet               | 1      | N         | Access to Snake River. Rustic development per the <i>Wild and Scenic Snake River Recreation Management Plan</i> (USDA 1999). | 2                 | 3                 | 1             |
| Summit Ridge End | Administrative | 4              | Bunkhouse            | 1      | N         | Operation and Support                                                                                                        | 1                 | 1                 | 5             |
| Tully Creek      | Recreation     | 16<br>in       | Sign                 |        | N         | Public Trailhead                                                                                                             | 1                 | 3                 | 3             |

| Site Name                 | Type of Site   | M A      | Type of Structure | Number | Site Plan | Objective                                                                                                                                    | Development Level | Maintenance Level | Fire Priority |
|---------------------------|----------------|----------|-------------------|--------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Trailhead                 |                | 10       |                   |        |           |                                                                                                                                              |                   |                   |               |
| Thorn Creek Guard Station | Administrative | 16 in 10 | Complex           | 6      | Y         | Operation and support. Some Interagency use. Temporary use by Nez Perce Tribe. Horse pasture. Facility is integral in management activities. | 1                 | 3                 | 1             |

### 30 Tryon/Deep Creek

|                            |                                                                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified in the <i>HCNRA Trail Management Plan</i> (USDA 1994). |
| Remoteness                 | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.                                                                                                               |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                |
| Social Encounters          | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.                                                                                                               |
| Visitor Management         | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is prehistoric settlement and historic ranching.           |
| Visitor Impact             | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.                                                                                                               |
| Facilities                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                      |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name         | Type of Site   | M A     | Type of Structure | Number | Site Plan | Objective                                                                                              | Development Level | Maintenance Level | Fire Priority |
|-------------------|----------------|---------|-------------------|--------|-----------|--------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Tryon Creek Ranch | Administrative | 16 in 4 | Complex           | 4      | N         | Administrative use for operational support and employee safety. Use is associated with horse pastures. | 1                 | 2                 | 5             |

| Site Name       | Type of Site           | M A | Type of Structure | Number | Site Plan | Objective                                                                                                                                                      | Development Level                                                               | Maintenance Level | Fire Priority |
|-----------------|------------------------|-----|-------------------|--------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------|---------------|
|                 |                        |     |                   |        |           | Best example of homestead era on bench lands in the canyon. Minimal development per <i>Wild and Scenic Snake River Recreation Management Plan</i> (USDA 1999). |                                                                                 |                   |               |
| Palace          | Administrative (Range) | 4   | Metal shed        | 1      | N         | Manage in conjunction with permitted livestock grazing.                                                                                                        | 1                                                                               | 1 (3 if occupied) | 5             |
| Teaser Mountain | Administrative (Range) | 4   | Metal shed        | 1      | N         | Manage in conjunction with permitted livestock grazing.                                                                                                        | 1                                                                               | 1 (3 if occupied) | 5             |
| Deep Creek      | Historic               | 4   | Complex           | 6      | N         | Historic structures                                                                                                                                            | Determine eligibility for historic register. Disposition dependent on findings. |                   | 3             |
| Dorrance Ranch  | Historic               | 4   | Complex           | 4      | N         | Historic structures                                                                                                                                            | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |
| Hog Creek       | Historic               | 4   | Shed              | 1      | N         | Historic structures                                                                                                                                            | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |
| Little Deep     | Historic               | 4   | Shed              | 1      | N         | Historic structures                                                                                                                                            | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |
| Lone Pine Creek | Historic               | 4   | Shed              | 1      | N         | Historic structures                                                                                                                                            | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |
| Lower Dug Creek | Historic               | 4   | Shed              | 1      | N         | Historic structures                                                                                                                                            | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |
| Somers          | Historic               | 4   | Shed              | 1      | N         | Historic structures                                                                                                                                            | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |
| Thorny Gulch    | Historic               | 4   | Shed              | 1      | N         | Historic structures                                                                                                                                            | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |
| Upper           | Historic               | 4   | Cabin             | 1      | N         | Historic                                                                                                                                                       | Determine eligibility for                                                       |                   | 5             |

| Site Name       | Type of Site | M A | Type of Structure | Number | Site Plan | Objective           | Development Level                                                               | Maintenance Level | Fire Priority |
|-----------------|--------------|-----|-------------------|--------|-----------|---------------------|---------------------------------------------------------------------------------|-------------------|---------------|
| Cat Creek       |              |     |                   |        |           | structures          | historic register. Disposition dependent on findings.                           |                   |               |
| Upper Dug Creek | Historic     | 4   | Cabin             | 1      | N         | Historic structures | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |

### 31 Somers Point

|                            |                                                                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified in the <i>HCNRA Trail Management Plan</i> (USDA 1994). |
| Remoteness                 | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.                                                                                                               |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                |
| Social Encounters          | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.                                                                                                               |
| Visitor Management         | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                         |
| Visitor Impact             | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.                                                                                                               |
| Facilities                 | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.                                                                |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name      | Type of Site         | M A | Type of Structure | Number | Site Plan | Objective                                                                                                  | Development Level                                                               | Maintenance Level | Fire Priority |
|----------------|----------------------|-----|-------------------|--------|-----------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------|---------------|
| Wisenor Place  | Administrative Range | 4   | Housing           | 1      | N         | Administrative use for operational support and safety of employees. Use is associated with horse pastures. | 1                                                                               | 3                 | 1             |
| Kneeland Place | Historic             | 4   | Cabin             | 1      | N         | Historic structures                                                                                        | Determine eligibility for historic register. Disposition dependent on findings. |                   | 5             |

### 32 Lord Flat

|        |                                                                                                                                                                                                                                                                                                          |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access | <b>Objective:</b> Manage Lord Flat Trail #1774 for existing low-level SPM condition. Manage Grassy Knoll and Parliament Springs spur trails as SPM.<br><b>Standard:</b> Maintain Lord Flat Trail #1774 as a primitive, native surface track for high-clearance vehicles travel only. Emphasize drainage. |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | <b>Standard:</b> Seasonally close approximately 15 miles of trail at Warnock Corral Trailhead from 3 days prior to archery season to then of antlerless elk season (late August to late November) to motorized vehicles. Post the trail closed with signs.<br><b>Objective:</b> Manage Lord Flat backcountry airstrip as open to commercial, private, and administrative use. No regularly scheduled landings. |
| Remoteness                 | <b>Objective:</b> Manage for SPM ROS designation.                                                                                                                                                                                                                                                                                                                                                              |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                                                                                            |
| Social Encounters          | <b>Objective:</b> Manage for SPM ROS designation.<br><b>Standard:</b> Manage road encounters low for moderate SPM encounters.                                                                                                                                                                                                                                                                                  |
| Visitor Management         | <b>Objective:</b> Manage for SPM ROS designation.<br><b>Guideline:</b> Heritage interpretation theme is historic ranching.                                                                                                                                                                                                                                                                                     |
| Visitor Impact             | <b>Objective:</b> Manage for SPM ROS designation.                                                                                                                                                                                                                                                                                                                                                              |
| Facilities                 | <b>Objective:</b> Manage for SPM ROS designation.                                                                                                                                                                                                                                                                                                                                                              |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name         | Type of Site   | M A     | Type of Structure   | Number | Site Plan | Objective                                                                                                             | Development Level | Maintenance Level | Fire Priority |
|-------------------|----------------|---------|---------------------|--------|-----------|-----------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Dorrance Cow Camp | Administrative | 16 in 9 | Complex             | 3      | Y         | Administrative use is integral for operational support and safety of employees. Use is associated with horse pasture. | 2                 | 3                 | 1             |
| Somers Point      | Administrative | 16 in 9 | Electronic repeater | 1      | N         | Facility is integral in management activities and safety of employees.                                                | 1                 | 5                 | 1             |

### 33 Mormon Flat

|                            |                                                                                                                          |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Maintain current access and experience levels for SPNM.                                                |
| Remoteness                 | <b>Objective:</b> Manage for SPNM ROS designation.                                                                       |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                 |
| Social Encounters          | <b>Objective:</b> Manage for SPNM ROS designation.                                                                       |
| Visitor Management         | <b>Objective:</b> Manage for SPNM ROS designation.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery. |
| Visitor Impact             | <b>Objective:</b> Manage for SPNM ROS designation.                                                                       |
| Facilities                 | <b>Objective:</b> Manage for SPNM ROS designation.                                                                       |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name            | Type of Site | M A | Type of Structure | Number | Site Plan | Objective           | Development Level                                                               | Maintenance Level | Fire Priority |
|----------------------|--------------|-----|-------------------|--------|-----------|---------------------|---------------------------------------------------------------------------------|-------------------|---------------|
| Little Lightning     | Historic     | 9   | Bunkhouse         | 1      | N         | Historic structures | Determine eligibility for historic register. Disposition dependent on findings. |                   | 2             |
| Mormon Guard Station | Historic     | 9   | Guard Station     | 1      | N         | Historic structures | Determine eligibility for historic register. Disposition dependent on findings. |                   | 2             |

### 34 Horse Creek

|                            |                                                                                                                          |  |  |  |  |  |  |  |  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|
| Access                     | <b>Objective:</b> Maintain current access and experience levels for SPNM.                                                |  |  |  |  |  |  |  |  |
| Remoteness                 | <b>Objective:</b> Manage for SPNM ROS designation.                                                                       |  |  |  |  |  |  |  |  |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                 |  |  |  |  |  |  |  |  |
| Social Encounters          | <b>Objective:</b> Manage for SPNM ROS designation.                                                                       |  |  |  |  |  |  |  |  |
| Visitor Management         | <b>Objective:</b> Manage for SPNM ROS designation.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery. |  |  |  |  |  |  |  |  |
| Visitor Impact             | <b>Objective:</b> Manage for SPNM ROS designation.                                                                       |  |  |  |  |  |  |  |  |
| Facilities                 | <b>Objective:</b> Manage for SPNM ROS designation.                                                                       |  |  |  |  |  |  |  |  |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name         | Type of Site | M A | Type of Structure | Number | Site Plan | Objective           | Development Level                                                              | Maintenance Level | Fire Priority |
|-------------------|--------------|-----|-------------------|--------|-----------|---------------------|--------------------------------------------------------------------------------|-------------------|---------------|
| Horse Creek Scale | Historic     | 9   | Bunkhouse         | 1      | N         | Historic structures | Determine eligibility for historic register. Disposition dependent on findings |                   | 2             |

### 35 Imnaha

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage Imnaha Road (Forest Road 3955) for high-level RN.<br><b>Objective:</b> Manage Freezeout Saddle Road (Forest Road 4230) and Forest Road 3935 for medium-level RN.<br><b>Objective:</b> Manage remaining roads for mixture of high and low-level SPM. Maintain current access and experience levels.<br><b>Standard:</b> Maintain Hells Canyon Scenic Byway System designation on Forest Road 3955.<br><b>Standard:</b> Maintain Forest Road 3955 at Maintenance Level 4-B and Forest Roads 4230 and 3935 at Maintenance Level 3-B.<br><b>Standard:</b> Maintain remaining roads at existing mixture of Maintenance Level 2-D.<br><b>Standard:</b> Emphasize turnouts, drainage, and safety on Freezeout Road (Forest Road 4230). Obtain additional right-of-way. |
| Remoteness                 | <b>Objective:</b> Manage for R, RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for moderate scenic integrity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Social Encounters          | <b>Objective:</b> Manage for R, RN, SPM, and SPNM ROS designations.<br><b>Standard:</b> Manage R, RN, and SPM road encounters for low to moderate encounters by ROS designation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Visitor Management         | <b>Objective:</b> Manage for R, RN, SPM, and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Visitor Impact             | <b>Objective:</b> Manage for R, RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Facilities                 | <b>Objective:</b> Manage for R, RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name                | Type of Site                | M A      | Type of Structure | Number | Site Plan | Objective                                                                                                                                                                         | Development Level | Maintenance Level | Fire Priority |
|--------------------------|-----------------------------|----------|-------------------|--------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Crazyman Creek Trailhead | Recreation                  | 16 in 10 | New site          | 0      | N         | Public trailhead                                                                                                                                                                  | 3                 | 3                 | 1             |
| Freezeout Trailhead      | Recreation                  | 16 in 10 | Toilet            | 1      | Y         | Public trailhead                                                                                                                                                                  | 1                 | 3                 | 1             |
| College Creek            | Administrative/<br>Historic | 16 in 10 | Complex           | 6      | Y         | Historic structures. Operation and support. Horse pasture. Listed on National Register of Historic Places. Facility is integral in management activities and safety of employees. | 4                 | 3                 | 1             |

| Site Name        | Type of Site   | M A      | Type of Structure | Number | Site Plan | Objective                                                              | Development Level                                                              | Maintenance Level | Fire Priority |
|------------------|----------------|----------|-------------------|--------|-----------|------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------|---------------|
|                  |                |          |                   |        |           | Serves as housing for employees. Constructed by CCC.                   |                                                                                |                   |               |
| Lookout Mountain | Administrative | 16 in 11 | Electronic site   | 1      | N         | Facility is integral in management activities and safety of employees. | 1                                                                              | 5                 | 1             |
| Chalk Creek      | Historic       | 10       | Shed              | 1      | N         | Historic structure                                                     | Determine eligibility for historic register. Disposition dependent on findings |                   | 3             |
| Marks Cabin      | Historic       | 10       | Cabin             | 1      | N         | Historic structure                                                     | Determine eligibility for historic register. Disposition dependent on findings |                   | 1             |

### 36 Hat Point

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <p><b>Objective:</b> Manage Hat Point Road (Forest Road 4240) for the existing condition medium-level RN.</p> <p><b>Objective:</b> Manage other open roads at existing mixture of high and low-level SPM with current maintenance levels, surface, and alignment.</p> <p><b>Objective:</b> Manage Forest Road 4340-315 from Forest Road 4240-345 to Warnock Corral for high-level SPM.</p> <p><b>Standard:</b> Maintain Forest Road 4240 and 4340-315 at Maintenance Level 3-B.</p> <p><b>Standard:</b> Maintain roads at existing mixture of Maintenance Level 2-D.</p> <p><b>Standard:</b> Emphasize drainage and grid-rolled surface in Warnock section of Forest Road 4340-315.</p> <p><b>Standard:</b> Maintain seasonal closure on Hat Point Road (Forest Road 4240) from early winter to spring to prevent resource damage on wet soils.</p> <p><b>Objective:</b> Manage Memaloose backcountry airstrip as open for commercial, private, and administrative use. No regularly scheduled landings.</p> |
| Remoteness                 | <p><b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.</p> <p><b>Objective:</b> Manage for SPM along road between Forest Road 4240-345 and Warnock Corral.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Social Encounters          | <p><b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.</p> <p><b>Standard:</b> Manage RN road encounters for low to moderate encounters. Manage SPM road encounters for low to moderate encounters.</p> <p><b>Standard:</b> Manage Warnock Corral Road encounters for low to moderate RN encounters.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Visitor Management         | <p><b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.</p> <p><b>Guideline:</b> Heritage interpretation theme is Forest Service fire management, and history.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Visitor Impact             | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Facilities                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name                             | Type of Site             | M A      | Type of Structure | Number | Site Plan | Objective                                                                                                 | Development Level | Maintenance Level | Fire Priority |
|---------------------------------------|--------------------------|----------|-------------------|--------|-----------|-----------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Fivemile Viewpoint                    | Recreation               | 16 in 10 | Toilet            | 1      | Y         | Public viewpoint                                                                                          | 1                 | 3                 | 2             |
| Granny View Viewpoint                 | Recreation               | 16 in 10 | Decks and toilets | 4      | Y         | Interpretive site                                                                                         | 1                 | 3                 | 1             |
| Hat Point Picnic Area                 | Recreation               | 16 in 9  | Complex           |        | Y         | Day use area. Picnic area below lookout contains historic elements                                        | 1                 | 3                 | 2             |
| Hat Point Trailhead                   | Recreation               | 16 in 9  | Signs             |        | Y         | Public trailhead and interpretive site.                                                                   | 1                 | 3                 | 2             |
| Horse Creek Observation               | Recreation               | 16 in 9  | Signs             |        | Y         | Interpretive site                                                                                         | 1                 | 3                 | 2             |
| Sacajawea Campground                  | Recreation               | 16 in 9  | Toilet            | 1      | N         | Public campground                                                                                         | 2                 | 3                 | 2             |
| Saddle Creek Overlook and Picnic Area | Recreation               | 16 in 9  | Vault toilets     | 2      | N         | Tent camping only                                                                                         | 2                 | 3                 | 1             |
| Warnock Corral Trailhead              | Recreation               | 16 in 9  | Toilet            | 1      | N         | Public trailhead                                                                                          | 3                 | 3                 | 2             |
| Hat Point Lookout                     | Administrative/ Historic | 16 in 9  | Complex           | 5      | N         | Historic structures                                                                                       | 1                 | 3                 | 1             |
| Mema-loose (new)                      | Administrative           | 16 in 9  | Complex           | 9      | N         | Operation, fire support, permittee operation and support. Horse pasture, facility used in fire emergency. | 2                 | 3                 | 2             |
| Mema-                                 | Administrative           | 16       | Cabin             | 7      | Y         | Operation,                                                                                                | 2                 | 3                 | 1             |

| Site Name   | Type of Site | M A   | Type of Structure | Number | Site Plan | Objective                       | Development Level                                                              | Maintenance Level | Fire Priority |
|-------------|--------------|-------|-------------------|--------|-----------|---------------------------------|--------------------------------------------------------------------------------|-------------------|---------------|
| loose (old) | e            | in 11 |                   |        |           | support, safety, horse pasture. |                                                                                |                   |               |
| Cayuse      | Historic     | 10    | Complex           | 6      | N         | Historic structures             | Determine eligibility for historic register. Disposition dependent on findings |                   | 1             |

### 37 Saddle Creek

|                            |                                                                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified in the <i>HCNRA Trail Management Plan</i> (USDA 1994). |
| Remoteness                 | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.                                                                                                               |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high scenic integrity.                                                                                                                                                |
| Social Encounters          | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.                                                                                                               |
| Visitor Management         | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery.                                         |
| Visitor Impact             | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.                                                                                                               |
| Facilities                 | <b>Objective:</b> Manage for pristine, primitive, semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.                                                                |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name   | Type of Site   | M A | Type of Structure | Number | Site Plan | Objective                                                        | Development Level                                                              | Maintenance Level | Fire Priority |
|-------------|----------------|-----|-------------------|--------|-----------|------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------|---------------|
| The Troughs | Administrative | 4   | Bunkhouse         | 1      | N         | Historic structure. Manage in conjunction with livestock grazing | 1                                                                              | 3                 | 5             |
| Log Creek   | Historic       | 4   | Cabin             | 1      | N         | Historic structure                                               | Determine eligibility for historic register. Disposition dependent on findings |                   | 5             |

### 38 Lookout Mountain

|                            |                                                                                                                                                                                                                                                                                                  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified in the <i>HCNRA Trail Management Plan</i> (USDA 1994).<br><b>Standard:</b> Maintain trail access to Copper Creek Trailhead on land managed by the BLM. |
| Remoteness                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                                                                                                               |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high and high scenic integrity.                                                                                                                                                                                                                                |

|                    |                                                                                                                                                                                                           |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Social Encounters  | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Visitor Management | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery                                                   |
| Visitor Impact     | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                        |
| Facilities         | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.<br><b>Standard:</b> No facilities within this Recreation Analysis Area. |

### 39 Buck Creek

|                            |                                                                                                                                                                                                                                                                                                  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Standard:</b> Maintain trail access as specified in the <i>HCNRA Trail Management Plan</i> (USDA 1994).<br><b>Standard:</b> Maintain trail access to Copper Creek Trailhead on land managed by the BLM. |
| Remoteness                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                                                                                                               |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high and high scenic integrity.                                                                                                                                                                                                                                |
| Social Encounters          | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                                                                                                               |
| Visitor Management         | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Guideline:</b> Heritage interpretation theme is self-discovery                                                                                                                                          |
| Visitor Impact             | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.                                                                                                                                                                                                               |
| Facilities                 | <b>Objective:</b> Manage for primitive and semi-primitive wilderness designations.<br><b>Objective:</b> Manage for self-reliance.<br><b>Standard:</b> No facilities within this Recreation Analysis Area.                                                                                        |

### 40 McGraw

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage Forest Road 39 for intrinsic values for the All-American Road, Hells Canyon Scenic Byway System, and Oregon State Scenic Byway System.<br><b>Objective:</b> Manage Forest Road 3965 to Hells Canyon Overlook for high-level RN with hardened surface. Manage Forest Road 3965 from McGraw Complex to PO Saddle for low-level RN. Manage Forest Road 3965-320 from PO Saddle to Saulsberry Saddle for low-level SPM.<br><b>Objective:</b> Manage other roads for existing mixture of high and low-level SPM.<br><b>Standard:</b> Maintain Forest Road 39 and Forest Road 3965 to Hells Canyon Overlook at Maintenance Level 5-A. Maintain Forest Road 3965 from Hells Canyon Overlook to PO Saddle at Maintenance Level 3-C. Maintain Forest Road 3965 from PO Saddle to Saulsberry Saddle at Maintenance Level 2-D. Maintain other roads at existing mixture of Maintenance Level 2-D.<br><b>Standard:</b> Seasonally close approximately 2 ½ miles of road 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 <sup>th</sup> ). Road closed with existing gate.<br><b>Standard:</b> Emphasize drainage for resource protection. |
| Remoteness                 | <b>Objective:</b> Manage for RN and SPM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Social Encounters          | <b>Objective:</b> Manage for RN and SPM ROS designations.<br><b>Standard:</b> Manage Hells Canyon Overlook to PO Saddle for low RN encounters and from PO Saddle to the Hells Canyon Wilderness boundary for low SPM encounters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Visitor Management         | <b>Objective:</b> Manage for RN and SPM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is prehistoric settlement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

|                |                                                           |
|----------------|-----------------------------------------------------------|
| Visitor Impact | <b>Objective:</b> Manage for RN and SPM ROS designations. |
| Facilities     | <b>Objective:</b> Manage for RN and SPM ROS designations. |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name                | Type of Site                | M<br>A   | Type of<br>Structure | Number | Site Plan | Objective                                                          | Development Level | Maintenance Level | Fire Priority |
|--------------------------|-----------------------------|----------|----------------------|--------|-----------|--------------------------------------------------------------------|-------------------|-------------------|---------------|
| Buck Creek Trailhead     | Recreation                  | 16 in 11 | Toilet               | 1      | Y         | Public trailhead                                                   | 3                 | 3                 | 1             |
| Crazyman Upper Trailhead | Recreation                  | 16 in 11 | Trailhead            | 1      | Y         | Public trailhead                                                   | 2                 | 3                 | 1             |
| Hells Canyon Overlook    | Recreation                  | 16 in 11 | Toilets              | 2      | Y         | Interpretive site                                                  | 4                 | 4                 | 1             |
| PO Saddle Trailhead      | Recreation                  | 16 in 11 | Toilets              | 2      | Y         | Public trailhead                                                   | 3                 | 3                 | 1             |
| McGraw Lookout           | Administrative/<br>Historic | 16 in 11 | Lookout and toilet   | 2      | N         | Occasional fire support. Winter cabin rental. Historical structure | 2                 | 1                 | 1             |

#### 41 Upper Imnaha

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <p><b>Objective:</b> Manage Forest Road 39 for intrinsic values for the All-American Road, Hells Canyon Scenic Byway System, and Oregon State Scenic Byway System.</p> <p><b>Objective:</b> Manage arterial Forest Road 39 and collector Forest Road 3960 to Indian Crossing for high-level RN. Manage collector Forest Roads 3930, 3935, and 3955 for medium-level RN. Manage Forest Road 3950 and 3925 for high-level SPM. Manage remaining open roads for existing mixture of high and low-level SPM.</p> <p><b>Objective:</b> Manage open roads at existing maintenance levels, surface, and alignment.</p> <p><b>Standard:</b> Maintain Forest Road 39 at Maintenance Level 5-A. Maintain Forest Road 3960 at Maintenance Level 4-B. Maintain Forest Roads 3930, 3935, and 3955 at Maintenance Level 3-B. Maintain Forest Road 3950 and Forest Road 3925 at Maintenance Level 2-D. Maintain remaining open roads at existing mixture of Maintenance Level 2-D.</p> |
| Remoteness                 | <b>Objective:</b> Manage for R and RN ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Social Encounters          | <p><b>Objective:</b> Manage for R and RN ROS designations.</p> <p><b>Standard:</b> Manage R road encounters for low to moderate encounters. Manage RN road encounters on Forest Road 39 for moderate to high encounters. Manage all other RN encounters for low to moderate encounters. Manage SPM road encounters for moderate to high encounters.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Visitor Management         | <p><b>Objective:</b> Manage for R and RN ROS designations.</p> <p><b>Guideline:</b> Heritage interpretation theme is historic American Indian.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

|                |                                                                                                                                                                                                                                                                                                                          |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Visitor Impact | <b>Objective:</b> Manage for R and RN ROS designations.                                                                                                                                                                                                                                                                  |
| Facilities     | <b>Objective:</b> Manage for R and RN ROS designations.<br><b>Objective:</b> Manage all areas other than developed sites within riparian habitat conservation areas for dispersed, nonmotorized day-use only.<br><b>Standard:</b> Provide for dispersed camping outside riparian habitat conservation areas and meadows. |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name                               | Type of Site            | M<br>A   | Type of<br>Structure | Number | Site Plan | Objective                                                                                                | Development Level | Maintenance Level | Fire Priority |
|-----------------------------------------|-------------------------|----------|----------------------|--------|-----------|----------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Black-horse Camp-ground                 | Recreation              | 16 in 11 | Toilets              | 6      | N         | Public campground                                                                                        | 3                 | 3                 | 1             |
| Coverdale Camp-ground                   | Recreation              | 16 in 11 | Toilets              | 1      | N         | Public campground                                                                                        | 3                 | 3                 | 1             |
| Evergreen Camp-ground                   | Recreation              | 16 in 11 | Toilets              | 2      | N         | Public campground                                                                                        | 3                 | 3                 | 1             |
| Hidden Camp-ground                      | Recreation              | 16 in 11 | Toilets              | 2      | N         | Public campground                                                                                        | 3                 | 3                 | 1             |
| Indian Crossing Camp-ground & Trailhead | Recreation              | 16 in 11 | Toilets              | 4      | Y         | Public campground                                                                                        | 3                 | 3                 | 1             |
| Lick Creek Camp-ground                  | Recreation              | 16 in 11 | Toilets              | 4      | N         | Public campground                                                                                        | 3                 | 3                 | 1             |
| Lick Creek Trailhead                    | Recreation              | 16 in 10 | Sign                 | 1      | N         | Public campground                                                                                        | 1                 | 3                 | 1             |
| Ollokot Camp-ground                     | Recreation              | 16 in 11 | Toilets              | 4      | N         | Public campground                                                                                        | 3                 | 3                 | 1             |
| Coverdale Guard Station                 | Recreation/<br>Historic | 16 in 11 | Bunkhouse            | 2      | N         | Operation and support. MOU with snowmobile club for safety. Campground host and info center. Facility is | 2                 | 3                 | 1             |

| Site Name                 | Type of Site            | M A      | Type of Structure | Number | Site Plan | Objective                                                                                                                                   | Development Level | Maintenance Level | Fire Priority |
|---------------------------|-------------------------|----------|-------------------|--------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
|                           |                         |          |                   |        |           | used as warming hut. Building needs improvement and toilet.                                                                                 |                   |                   |               |
| Lick Creek Guard Station  | Administrative/Historic | 16 in 10 | Complex           | 7      | N         | Historic structures. Operation and support. Safety. Fire station. Horse pasture.                                                            | 4                 | 3                 | 1             |
| Ollokot – Dry Creek Cabin | Administrative          | 16 in 10 | Cabin             | 1      | N         | Operation and support. Custodial. Facility is integral in management activities and safety of employees. Reduces travel time to work sites. | 3                 | 3                 | 1             |

#### 42 North Pine

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access                     | <b>Objective:</b> Manage Forest Road 39 and Forest Road 3900-750 to meet high-level RN and Forest Road 66 for medium-level RN.<br><b>Objective:</b> Manage remaining open roads at existing maintenance levels, surface, and alignment to meet high and low-level SPM.<br><b>Standard:</b> Maintain Forest Roads 39 at Maintenance Level 5-A. Maintain 3900-750 at Maintenance Level 4-B. Maintain Forest Road 66 at Maintenance Level 3-B.<br><b>Standard:</b> Maintain remaining roads at existing mixture of Maintenance Level 2-D.<br><b>Standard:</b> Emphasize safety and drainage. |
| Remoteness                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for high scenic integrity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Social Encounters          | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Standard:</b> Manage RN road encounters on Forest Road 39 for moderate to high encounters. Manage all other RN encounters for low to moderate. Manage SPM road encounters for moderate to high encounters.                                                                                                                                                                                                                                                                                                         |
| Visitor Management         | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.<br><b>Guideline:</b> Heritage interpretation theme is prehistoric settlement.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Visitor Impact             | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Facilities                 | <b>Objective:</b> Manage for RN, SPM, and SPNM ROS designations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name                          | Type of Site | M A      | Type of Structure | Number | Site Plan | Objective                       | Development Level | Maintenance Level | Fire Priority |
|------------------------------------|--------------|----------|-------------------|--------|-----------|---------------------------------|-------------------|-------------------|---------------|
| Duck Lake Camp-ground & Trailhead  | Recreation   | 16 in 11 | Toilet            | 1      | N         | Public campground               | 1                 | 3                 | 1             |
| Lake Fork Camp-ground & Trailhead  | Recreation   | 16 in 10 | Toilet            | 4      | N         | Public campground and trailhead | 3                 | 3                 | 1             |
| North Pine Rest Area               | Recreation   | 16 in 11 | Vault toilets     | 2      | Y         | Day use area                    | 3                 | 3                 | 1             |
| Twin Lakes Camp-ground & Trailhead | Recreation   | 16 in 11 | Toilets           | 2      | N         | Public campground and trailhead | 3                 | 3                 | 1             |

## 50 Wild Snake River

The following table describes the management direction for facilities the Wild Snake River corridor. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority. For additional management direction specific to the Wild Snake River Recreation Analysis Area, refer to *Wild and Scenic Snake River Recreation Management Plan* (USDA 1999).

| Site Name                           | Type of Site                  | M A     | Type of Structure | Number | Site Plan | Objective                                                                                                                                                                                                             | Development Level | Maintenance Level | Fire Priority |
|-------------------------------------|-------------------------------|---------|-------------------|--------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Hells Canyon Launch Recreation Site | Recreation and Administrative | 16 in 8 | Complex           | 4      | Y         | Site provides health and sanitation facilities and recreation convenience. Facility is integral to management activities on the river. Manage per <i>Wild and Scenic Snake River Recreation Management Plan</i> (USDA | 5                 | 4                 | 1             |

| Site Name               | Type of Site                            | M A     | Type of Structure | Number | Site Plan | Objective                                                                                                                                                                                                                                               | Development Level                                                               | Maintenance Level | Fire Priority |
|-------------------------|-----------------------------------------|---------|-------------------|--------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------|---------------|
|                         |                                         |         |                   |        |           | 1999).                                                                                                                                                                                                                                                  |                                                                                 |                   |               |
| Kirby Creek             | Recreation/ Historic                    | 8       | Cabin             | 1      |           | Historic ruins                                                                                                                                                                                                                                          | Determine eligibility for historic register. Disposition dependent on findings. |                   | 2             |
| Kirkwood Historic Ranch | Recreation, Administrative and Historic | 16 in 8 | Complex           | 8      |           | Historical structures. Operation and support visitor information. Horse pasture. Facility is integral to interpretation in river corridor. Rustic facilities development per <i>Wild and Scenic Snake River Recreation Management Plan</i> (USDA 1999). | 4                                                                               | 3                 | 1             |
| Salt Creek              | Administrative/ Historic                | 16 in 8 | Complex           | 3      | N         | Operation and support. Safety. Horse pasture. Best example of double cabin dog trot style construction in HCNRA. Minimal facilities development per <i>Wild and Scenic Snake River Recreation Management Plan</i> (USDA 1999).                          | 2                                                                               | 3                 | 1             |
| Sand Creek              | Administrative                          | 16 in 8 | Cabin             | 1      | N         | Minimal facilities development per <i>Wild and Scenic</i>                                                                                                                                                                                               | 1                                                                               | 3                 | 2             |

| Site Name              | Type of Site                | M A     | Type of Structure     | Number | Site Plan | Objective                                                                                                                                                                                                                        | Development Level                                                              | Maintenance Level | Fire Priority |
|------------------------|-----------------------------|---------|-----------------------|--------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------|---------------|
|                        |                             |         |                       |        |           | Snake River Recreation Management Plan (USDA 1999).                                                                                                                                                                              |                                                                                |                   |               |
| Sheep Creek            | Administrative/<br>Historic | 16 in 8 |                       | 4      | N         | Facility is integral to special use opportunity and maintenance of the custodial maintenance Manage with Granger-Thye permit. Minimal development per <i>Wild and Scenic Snake River Recreation Management Plan</i> (USDA 1999). | 3                                                                              | 3                 | 2             |
| Temperance Creek Ranch | Administrative/<br>Historic | 16 in 8 | Complex               | 8      | N         | Operation and support. Horse pasture. Facility could be integral to special use opportunity. Facilities accommodate operations per <i>Wild and Scenic Snake River Recreation Management Plan</i> (USDA 1999).                    | 3                                                                              | 3                 | 2             |
| Bernard Creek          | Historic                    | 8       | Root cellar and cabin | 2      | N         | Historic ruins, restored cabin                                                                                                                                                                                                   | Listed in Historic register                                                    |                   | 1             |
| Bills Creek            | Historic                    | 8       | Cabin                 | 1      | N         | Historic ruins                                                                                                                                                                                                                   | Determine eligibility for historic register. Disposition dependent on findings |                   | 2             |
| Big Bar                | Historic                    | 8       | Cabin                 | 1      | N         | Historic ruins                                                                                                                                                                                                                   | Determine eligibility for                                                      |                   | 3             |

| Site Name               | Type of Site | M A | Type of Structure | Number | Site Plan | Objective           | Development Level                                                              | Maintenance Level | Fire Priority |
|-------------------------|--------------|-----|-------------------|--------|-----------|---------------------|--------------------------------------------------------------------------------|-------------------|---------------|
|                         |              |     |                   |        |           |                     | historic register. Disposition dependent on findings                           |                   |               |
| Caribou Creek           | Historic     | 8   | Rock cabin        | 1      | N         | Historic ruins      | Determine eligibility for historic register. Disposition dependent on findings |                   | 2             |
| Carter Mansion and Barn | Historic     | 8   | Complex           | 2      | N         | Historic structures | Determine eligibility for historic register. Disposition dependent on findings |                   | 1             |
| Johnson Bar             | Historic     | 8   | Cabin             | 1      | N         | Historic ruins      | Determine eligibility for historic register. Disposition dependent on findings |                   | 2             |
| Meyers Creek            | Historic     | 8   | Complex           | 2      | N         | Historic ruins      | Determine eligibility for historic register. Disposition dependent on findings |                   | 5             |
| Sluice Creek            | Historic     | 8   | Bunkhouse         | 1      | N         | Historic structure  | Determine eligibility for historic register. Disposition dependent on findings |                   | 2             |
| Bench Camp              | Historic     | 8   | Cabin             | 1      | N         | Historic structure  | Determine eligibility for historic register. Disposition dependent on findings |                   | 5             |
| Winchester Mine         | Historic     | 4   | Complex           | 1      | N         | Historic structure  | Determine eligibility for historic register. Disposition dependent on findings |                   | 5             |
| Battle Creek            | Historic     | 8   | Cabin             | 1      | N         | Historic structure  | Determine eligibility for historic register. Disposition dependent on findings |                   | 2             |

## 51 Scenic Snake River

The following table describes the management direction for facilities the Wild Snake River corridor. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority. For additional management direction specific to the Wild Snake River Recreation Analysis Area, refer to *Wild and Scenic Snake River Recreation Management Plan* (USDA 1999).

| Site Name                               | Type of Site | M A     | Type of Structure | Number | Site Plan | Objective                                                                                                    | Development Level | Maintenance Level | Fire Priority |
|-----------------------------------------|--------------|---------|-------------------|--------|-----------|--------------------------------------------------------------------------------------------------------------|-------------------|-------------------|---------------|
| Pittsburg Launch, Landing & Camp-ground | Recreation   | 16 in 8 | Complex           | 6      | Y         | Provide visitor comfort, health, sanitation facilities and recreation convenience per <i>Wild and Scenic</i> | 4                 | 3                 | 1             |

|                                           |                          |         |         |    |   |                                                                                                                                                                                                                           |   |   |   |
|-------------------------------------------|--------------------------|---------|---------|----|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|
|                                           |                          |         |         |    |   | <i>Snake River Recreation Management Plan (USDA 1999).</i>                                                                                                                                                                |   |   |   |
| Pittsburg Landing Camp-ground & Trailhead | Recreation               | 16 in 8 | Toilets | 2  | Y | Public campground per Wild and Scenic Snake River Recreation Management Plan (USDA 1999).                                                                                                                                 | 4 | 3 | 1 |
| Circle C Ranch                            | Administrative           | 16 in 8 | Complex |    | N | Operation and support. Safety. Minimal development per <i>Wild and Scenic Snake River Recreation Management Plan (USDA 1999).</i>                                                                                         | 4 | 3 | 1 |
| Pittsburg Landing Admin. Site (Oregon)    | Administrative/ Historic | 16 in 8 | Complex | 5  | N | Operation and support. Safety. Horse pasture. Facility is important in the management of the river and Oregon uplands. Minimal development per <i>Wild and Scenic Snake River Recreation Management Plan (USDA 1999).</i> | 4 | 3 | 1 |
| Dug Bar                                   | Administrative/ Historic | 16 in 8 | Complex | 12 | N | Operation and support. Permittee support. Horse pasture. Historical structures. Trailhead. Rustic development per <i>Wild and</i>                                                                                         | 4 | 3 | 1 |

|                     |                         |         |         |   |   |                                                                                                                                                                                                 |                                                                                |                                     |   |
|---------------------|-------------------------|---------|---------|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------|---|
|                     |                         |         |         |   |   | <i>Scenic Snake River Recreation Management Plan (USDA 1999).</i>                                                                                                                               |                                                                                |                                     |   |
| Cache Creek Ranch   | Administrative/Historic | 16 in 8 | Complex | 9 | Y | Operation and support. River portal. Interpretation Horse pasture. Self-issue permit station. Rustic development per <i>Wild and Scenic Snake River Recreation Management Plan (USDA 1999).</i> | 3                                                                              | 3                                   | 1 |
| Copper Creek Resort | Recreation              | 16 in 8 | Complex | 2 | N | Provide visitor comfort, health and sanitation and recreation convenience per <i>Wild and Scenic Snake River Recreation Management Plan (USDA 1999).</i> Operate with special use permit.       | 4                                                                              | 3 - Forest Service<br>5 - Permittee | 1 |
| Camp Creek          | Historic                | 8       | Shed    | 1 | N | Historic structure                                                                                                                                                                              | Determine eligibility for historic register. Disposition dependent on findings |                                     | 2 |
| Cat Creek           | Historic                | 8       | Complex | 2 | N | Historic structures                                                                                                                                                                             | Determine eligibility for historic register. Disposition dependent on findings |                                     | 2 |
| Christmas Creek     | Historic/Recreation     | 8       | Complex | 9 | N | Historic structures                                                                                                                                                                             | Determine eligibility for historic register. Disposition dependent on findings |                                     | 1 |
| Coon Hollow Cabin   | Historic                | 8       | Cabin   | 1 | N | Historic structure                                                                                                                                                                              | Determine eligibility for historic register. Disposition dependent on findings |                                     | 3 |
| Eureka              | Historic                | 9       | Cabin   | 1 | N | Historic structure                                                                                                                                                                              | Determine eligibility for historic register. Disposition dependent on findings |                                     | 5 |
| Jones Creek         | Historic                | 8       | Cabin   | 1 | N | Historic ruins                                                                                                                                                                                  | Determine eligibility for historic register. Disposition                       |                                     | 5 |

|                    |          |   |       |   |   |                |                                                                                |   |
|--------------------|----------|---|-------|---|---|----------------|--------------------------------------------------------------------------------|---|
|                    |          |   |       |   |   |                | dependent on findings                                                          |   |
| Somers Creek Mouth | Historic | 8 | Cabin | 1 | N | Historic ruins | Determine eligibility for historic register. Disposition dependent on findings | 2 |

#### 99 Rapid River

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
| Access                     | <b>Objective:</b> Manage Forest Road 2114 in existing alignment and corridor for high-level SPM.<br><b>Objective:</b> Manage trails to allow nonmotorized use and motorized crossings of the corridor.<br><b>Standard:</b> Maintain Forest Road 2114 at Maintenance Level 2-D.<br><b>Standard:</b> Maintain trails to meet regional or forest standard for Nez Perce and Payette National Forests.<br><b>Standard:</b> Emphasize drainage improvement.                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |  |
| Remoteness                 | <b>Objective:</b> Manage for SPM in the first 1/3-mile of the corridor then SPNM ROS designations. Manage for SPNM for all areas within the corridor except allow for motorized crossings at two designated locations where the North Star Trail enters the corridor to where the Black Lake Fork leaves the corridor.(Trail #s 183/188 and 184/362) on the Payette National Forest.                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |
| Naturalness/Visual Quality | <b>Objective:</b> Manage for very high ecological landscapes integrity.<br><b>Standard:</b> Maintain scenery throughout the Wild and Scenic corridor as an outstandingly remarkable value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |
| Social Encounters          | <b>Objective:</b> Manage area for SPM and SPNM ROS designations.<br><b>Standard:</b> Manage road encounters for low to moderate SPM encounters. Manage area for SPNM ROS designation except for two designated motorized crossings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |
| Visitor Management         | <b>Objective:</b> Manage for SPM and SPNM ROS designations.<br><b>Standard:</b> Assure adherence to designated trail crossings.<br><b>Objective:</b> Emphasize outstandingly remarkable values in visitor management activities to assure protection and enhancement of their values.<br><b>Standard:</b> Provide adequate signs at trailheads and major trail junctions for information and guidance. Install interpretive signs as needed, to highlight management objectives, cultural sites, and points of interest.<br><b>Guideline:</b> Heritage interpretation theme is prehistoric settlement and traditional use.<br><b>Guideline:</b> Provide for safe crossings of the river corridor for hikers, bikers and horse back riders consistent with other resource objectives. |  |  |  |  |  |  |
| Visitor Impact             | <b>Objective:</b> Manage for SPM and SPNM ROS designations.<br><b>Standard:</b> Locate all campsites at least 100 feet from any water source, and toilets as necessary at heavy use sites at least 200 feet from any water source.<br><b>Standard:</b> Minimize risk of escaped campfires by fireproofing sites and minimizing facilities.                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |
| Facilities                 | <b>Objective:</b> Manage bridge, parking, and trail facilities in accordance with regional standards or forest standard for Nez Perce and Payette National Forests.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |

The following table describes the management direction for facilities in this Recreation Analysis Area. Refer to **Tables 23 and 24** for development and maintenance levels and **Table 8** for a description of the fire suppression priority.

| Site Name    | Type of Site | M A | Type of Structure | Number | Site Plan | Objective           | Development Level                                                              | Maintenance Level | Fire Priority |
|--------------|--------------|-----|-------------------|--------|-----------|---------------------|--------------------------------------------------------------------------------|-------------------|---------------|
| McCrea Cabin | Historic     | 7   | Cabin             | 7      | N         | Historic structures | Determine eligibility for historic register. Disposition dependent on findings |                   | 5             |

# Monitoring and Evaluation

## Introduction

This section briefly describes the purpose and strategy for monitoring and evaluation in the HCNRA.

## Purpose

The purpose of monitoring and evaluation is to determine if planned activities have been implemented according to goals, objectives, standards and guidelines and determine if the management direction is effective in achieving the goals and objectives. Evaluation of the information may lead to adaptations in management activities or changes in management direction to meet the desired conditions.

Various activities will be monitored to provide an evaluation of the effect of management activities upon the HCNRA environment. Evaluations will measure compliance in achieving the goals and objectives of the *Forest Plan* and meeting the intent of the enabling legislation. Based upon an evaluation of the monitoring results, the planning team may recommend to the Forest Supervisor changes to the management direction for the HCNRA. Monitoring and evaluation efforts for the HCNRA will specifically:

- Define clear monitoring questions directly related to goals, objectives, standards and guidelines defined in **Management Direction By Resource**
- Focus on significant issues needing further information or identify needs for change in direction
- Assess critical mitigation measures
- Evaluate new management techniques and key assumptions
- Review actions with high risks to environmental values and reduce uncertainty
- Determine if changes are needed to the management direction for the HCNRA

## Strategy

The strategy for monitoring and evaluation in the HCNRA supplements Forest Service and other cooperative efforts related to the *Forest Plan*, biological opinions, interagency monitoring, or other ongoing efforts. This approach relies on these efforts to the extent possible to evaluate whether management direction is achieving the HCNRA goals and objectives.

The strategy identifies additional monitoring of items specifically for the HCNRA focusing on the effectiveness of the management direction to ensure compatibility with meeting the intent of the *HCNRA Act* and management goals. In some cases, data collected for one item may also be used to answer multiple questions. This approach allows for flexibility to change methods as better protocols are developed or to adapt to new information.

The strategy is outlined below in terms of management direction, methods, units of measure, threshold of variability, frequency, costs, responsibility and monitoring items.

### Management Direction

**Mon-O1:** Monitor and evaluate activities and outputs, to ensure activities conform to the goals, objectives, standards and guidelines of this plan.

**Mon-S1:** Project-planning decision documents will disclose applicable monitoring elements and identify those monitoring elements required before, during and following project implementation.

**Mon-G1:** Actively pursue cooperative agreements for monitoring and inventory with HCNRA users, organizations, and the Nez Perce Tribe.

## Methods

- Use existing regional, national standardized protocols and data sets to provide consistency.
- Develop new protocols with technical and scientific staff to provide systematic approaches.
- Allow flexibility for changing to new methodologies and techniques with increased knowledge.
- Collect data from site-specific project activities, field inventories, surveys, or other assessments to avoid duplication and improve efficiency.

## Units of Measure

- Use quantitative or qualitative key indicators that can be measured or estimated to answer the question.
- Use a systems framework of biological, physical, social and economic core data elements to provide early warning of need for change or further study.
- Accommodate a variety of scales (subwatershed, watershed, subbasin, basin) to compile data.

## Threshold of Variability

- Focus on degree of change to provide indication of need **for further evaluation**

## Frequency

- Allow flexibility in timing of monitoring efforts (ex. annually, every 3-5 years, etc.) to coincide with other data collection, assessments, and cooperative efforts

## Costs Estimates

- Use small scale, inexpensive, and realistic methods to the extent possible
- Identify cost-effective measures within realistic budget expectations
- Collaborate with other agencies, partners and potential collaborators to share the workload and build credibility and trust
- Costs would vary based on the methods, units of measure, threshold of variability, and frequency

## Monitoring Responsibility

- Monitoring items may be prioritized with other monitoring items as needed to focus on issues of concern

## Monitoring Items

**Table 26** identifies the key items to be monitored to ensure compatibility with the intent of the *HCNRA Act* and the management goals.

Table 26: Monitoring Items

| Purpose of Monitoring                                                                                                                                                                                                                      | Unit of Measure                                                                       | Threshold of Variability                                     | Frequency                              | Monitoring Responsibility                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------|----------------------------------------------------------|
| Recreation Settings, Experiences, and Opportunities                                                                                                                                                                                        |                                                                                       |                                                              |                                        |                                                          |
| Determine if social and biophysical setting indicators for ROS and WROS settings are adequate to enhance the public experience while remaining compatible with other <i>HCNRA Act</i> objectives and the maintenance of ecological values. | ROS and WRS setting indicators<br><br>Other program monitoring and evaluation results | Any deviation from planned or anticipated setting indicators | 2-3 Recreation Analysis Areas per year | Recreation, Natural Resources, and Fire Program Managers |
| Scenery                                                                                                                                                                                                                                    |                                                                                       |                                                              |                                        |                                                          |

|                                                                                                                                                                                                                        |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------|
| Determine if scenic integrity and ecological landscape character objectives are being met in each RAA.                                                                                                                 | Percent area remaining inconsistent at end of the planning decade                                                    | Percent increase in management actions or developments not consistent with naturalness setting or the architectural design guides and standards | 2-3 Recreation Analysis Areas per year; and 2 watershed groups/year | Landscape Architect                 |
| <b>Heritage Resources</b>                                                                                                                                                                                              |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
| Determine if representative archeological and historic sites (unevaluated or significant) are being protected.                                                                                                         | Surface disturbance, removal or alteration of structural elements, artifacts, or the physical environment or setting | Failure to adequately protect any significant heritage resource property or unevaluated site                                                    | Annual compilation of data                                          | Heritage Resource Program Manager   |
| Determine if the heritage program is providing the oversight under Section 106 and the public benefit under Section 110 of the <i>National Historic Preservation Act</i> .                                             |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
| <b>Wild and Scenic Rivers – Rapid River</b>                                                                                                                                                                            |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
| Determine if water quality is meeting water quality standards to enable rapid detection of any adverse changes.                                                                                                        | Stream surveys                                                                                                       | Failure to adequately protect water quality                                                                                                     | Annually                                                            | Hydrology Staff                     |
| <b>Federal Trust Responsibilities</b>                                                                                                                                                                                  |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
| Determine if trust responsibilities are being met and if treaty-reserved resources are being sustained for future generations.                                                                                         | Government-to-government consultation                                                                                | Failure to adequately protect and provide for treaty rights                                                                                     | Annually                                                            | Area Ranger                         |
| <b>Forested Vegetation</b>                                                                                                                                                                                             |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
| Determine if forested vegetation within watersheds (5 <sup>th</sup> code hydrologic units) is within or moving towards historic range of variability for structural stages within associated biophysical environments. | Percentage of acres within HRV by watershed                                                                          | Significant increases in percentages outside of HRV                                                                                             | 5 years                                                             | Silviculture Staff                  |
| <b>Grassland Vegetation</b>                                                                                                                                                                                            |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
| Determine if grassland vegetation and soils is moving in an upward trend toward satisfactory conditions. Determine if grasslands are moving toward the potential natural community.                                    | Number of benchmark condition and trend sites                                                                        | Benchmark sites with downward trend or unsatisfactory condition                                                                                 | 5 years                                                             | Range Program Manager               |
| <b>Biologically Unique Species, Habitats, and Ecosystems</b>                                                                                                                                                           |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
| Determine if biologically unique species, habitats, and ecosystems are being identified, protected, and maintained or an upward trend.                                                                                 | Habitat inventory; condition and trend of habitats                                                                   | Management induced change in inventory                                                                                                          | 5 years                                                             | Botany and Ecology Program Managers |
| <b>Research Natural Areas</b>                                                                                                                                                                                          |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
| Determine if values for which Research Natural Areas (existing and proposed) were selected are being maintained                                                                                                        | Acres impacted                                                                                                       | If standards and guidelines are not implemented and effective                                                                                   | 5 years                                                             | Botany and Ecology Program Managers |
| <b>Air Quality</b>                                                                                                                                                                                                     |                                                                                                                      |                                                                                                                                                 |                                                                     |                                     |
| Determine if the Class I Airshed (Hells Canyon Wilderness) and rare atmospheric                                                                                                                                        | Selected lichen community and                                                                                        | Failure to comply with <i>Clean Air Act</i>                                                                                                     | Every other year                                                    | Air Resource Manager                |

|                                                                                                 |                                                 |                                                 |                  |                |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|------------------|----------------|
| habitats and air quality related values are being protected.                                    | chemical analysis                               | and Section 7<br><i>HCNRA Act</i><br>objectives |                  |                |
| <b>Wildlife Habitat</b>                                                                         |                                                 |                                                 |                  |                |
| Determine if open road densities and seasonal road closures are protecting terrestrial species. | Compare alternative direction to implementation | Failure to meet road closure goals or timelines | Every other year | Wildlife Staff |

# **Glossary**



# Glossary

Many definitions in this glossary are from the sources listed below. Numbers in parentheses at the ends of definitions indicate which source. Some definitions are not specifically referenced but are in general use within the Forest Service. Terms adequately defined in general dictionaries are not necessarily included, though some of those that are less well known are included for the convenience of the reader. Words that are used in definitions and also defined elsewhere in the glossary are typed in bold print.

## Partial Source List

1. National Forest Management Act Regulations (36 CFR 219).
2. Regional Guide for the Pacific Northwest Region (USDA 1984).
3. *Dictionary of Forestry Terms* (Society of American Forests 1971).
4. Wildland Planning Glossary (USDA 1976).
5. Wildlife Habitats in Managed Forests, the Blue Mountains of Oregon and Washington (Thomas et al 1979).
6. Forest Service Manual or Forest Service Handbook.
7. A Glossary of Terms Used in Range Management, Second Edition (Society for Range Management 1974).
9. Interior Columbia Basin Ecosystem Management Project DEIS (USDA 1997).
10. Wallowa–Whitman National Forest Land and Resource Management Plan (USDA 1990).
11. Interior Columbia Basin Ecosystem Management Project SDEIS (USDA 2000).
12. Interior Columbia Basin Ecosystem Management Project FEIS (USDA 2000).
13. A Dictionary of Ecology, Evolution, and Systematics (Cambridge University Press 1982).
14. Webster's 7th Dictionary
15. HCNRA Public Land Use Regulations (36 CFR 292.41)
16. HCNRA Private Land Use Regulations (36 CFR 292.21)

## Definitions

**A horizons** – Mineral horizons that formed at the surface or below an O horizon, that exhibit obliteration of all or much of the original rock structure, and that show one or more of the following: 1) an accumulation of humified organic matter intimately mixed with the mineral fraction and not dominated by properties characteristic of E or B horizons; or 2) properties resulting from cultivation, pasturing, or similar kinds of disturbance (USDA. 1993, p. 119).

**Accipiter species** – Birds of prey that feed on other birds. Examples are sharp-shinned hawks, Cooper's hawk, and goshawk.

Active restoration – Refer to Restoration.

**Activity duration** – The length of time (in hours and/or tenths of hours) that an average visitor may spend participating in a single recreation activity during a 24-hour day (6).

**Activity occasion** – One individual participating in one recreation activity during any reasonable portion(s) or all of one day (24 hours) upon a system–identified developed site or general forest area (6).

**Administrative site** – Areas such as work centers, fire lookouts, permitted ranch headquarters, seed orchards, and other areas that are occupied or used by the Forest Service (FS) during the administration of work associated with National Forest System (NFS) lands.

**Adaptive management** – A type of natural resource management in which decisions are made as part of an ongoing process. Adaptive management involves planning, implementing, monitoring, evaluating, and incorporating new knowledge into management approaches based on scientific findings and the needs of society. Results are used to modify future management methods and policy (12).

**Administrative unit** – A management area such as the Wallowa-Whitman National Forest (WWNF), under the administration of one line officer. FS line officers include district rangers and forest supervisors (12).

**Aircraft** – Devices that are used or intended to be used for flight in the air and, when used in air traffic control terminology, may include the flight crew. For use in the HCNRA, the definition is limited to fixed or rotary wing devices only (6).

**Air pollutant** – Any substance in air that could, if in high enough concentration, harm humans, animals, vegetation, or material. Air pollutants may include almost any natural or artificial matter capable of being airborne, in the form of solid particles, liquid droplets, gases, or a combination of these (12).

**Air quality** – The composition of air with respect to quantities of pollution therein, used most frequently in connection with standards of maximum acceptable pollutant concentrations (12).

**Airstrips** – Refer to Backcountry airstrips.

**Allocation** – Refer to Resource allocation.

**Allotment (grazing)** – Area designated for the use of a certain number and kind of livestock grazing for a prescribed period (12).

**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 (6).

**Allowable sale quantity (ASQ)** – On a national forest, the quantity of timber that may be sold from a designated area covered by the *Forest Plan* for a specific period of time (10).

**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'.

**Alternative** – One of several policies, plans, or projects proposed for decision-making. In an EIS, one of a number of possible options for responding to the purpose and need for action (2, 6, 12).

**Amenity** – Resource use, object, feature, quality, or experience that is pleasing to the mind or senses; typically refers to values for which monetary values are not or cannot be established, such as scenic or wilderness values (12).

**Anadromous fish** – Fish that hatch in fresh water, migrate to the ocean, mature there, and return to fresh water to reproduce; for example, salmon and steelhead (12).

**Analysis file** – A file containing records of the scoping and analysis processes conducted during the preparation of a NEPA document. The file is typically stored at the FS office from which a final decision is issued.

**Animal unit** – One mature cow of approximately 1,000 pounds, either dry or with calf up to 6 months of age, or the equivalent (one horse, five domestic sheep). This concept is based on a standardized amount of forage consumed (12).

**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). Refer to **Head month**.

**Anthropogenic** – Caused or produced through the agency of man; the scientific study of the origin of man (13).

**Aquatic** – Pertaining to water (12).

**Archaeological sites** – Sites containing relics, artifacts, and other evidence of past human cultures including historic properties as defined by the *National Historic Preservation Act* (16).

**Assessment** – The collection, integration, examination, and evaluation of information and values (12).

Authorized grazing – Refer to Grazing permit.

**Authorized officer** – FS line officer who has been delegated the authority to take certain actions pursuant to the provisions of the *HCNRA Act* (15).

**Avian** – Related to birds.

**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 (6).

**Basal area** – The cross-sectional area of the trunk of a tree or stand of trees at breast height (4.5 ft.).

**Basalt** – A “finely” or “fine” grained, dark, dense volcanic rock (12).

**Basin (river)** – 1) In general, the area of land that drains water, sediment, and dissolved materials to a common point along a stream channel. River basins are composed of large river systems; 2) in this FEIS, the term refers to the equivalent of a 3rd-field hydrologic unit code, an area of about nine million acres, such as the Snake River Basin (12).

**Base camp** – Base of operations; complete camp for pack/saddle stock and people.

**Benches** – Mid-elevation flat or gently sloping sites. Grazing and homesteading/ranching activities were concentrated in these areas, which were also used by American Indians for pasturing livestock. Benches from 2,000 to 4,500 feet generally have potential to support the bunchgrass associations described for the lower and mid-position slopes. Cheatgrass brome, Kentucky bluegrass, and an assortment of annual and perennial forbs (including some noxious weeds) dominate much of the benchland, some of which was severely disturbed by early farming and ranching activities.

**Benchlands** – A long, narrow, relatively level or gently inclined strip or platform of land, earth, or rock bounded by steeper slopes above and below and formed by differential erosion of rocks of varying resistance, by a change of base-level erosion, or by mass wasting or faulting processes; a small terrace or step-like ledge breaking the continuity of a slope; eroded bedrock surface between valley walls (Haskins et al 1996).

**Best management practices (BMPs)** – A practice or combination of practices that is determined by a state (or designated area-wide planning agency) after problem assessment; examination of alternative practices; and appropriate public participation to be the most effective, practicable means (including technological, economic, and institutional considerations) of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals (FR Volume 40, No. 230, 11/28/75).

**Biological soil crust** – Thin crust of living organisms on or just below the soil surface composed of dense, low-growing community of various combinations of algae, mosses, liverworts, cyanobacteria (blue-green algae), micro fungi, bacteria, and lichens; and provide important components of grassland, shrub-steppe, and subalpine habitats. Also referred to as microbiotic crust (12).

**Biologically unique** – As expressed in Section 7(3) of the *HCNRA Act*, is defined here as biological features and peculiarities (as opposed to physical) 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. These areas or sites encompass rare and endemic plant species, rare combinations of aquatic, terrestrial, and atmosphere habitats; and rare combinations of outstanding and diverse ecosystems and parts of ecosystem associated therewith. Refer to **Appendix D, Biologically Unique Criteria**, for descriptions of these features.

**Biophysical** – The combination or grouping of biological and physical components in an ecosystem (12).

**Biophysical environment** – A combination of plant communities and environmental conditions based on plant species and parameters of temperature and moisture.

**Biotic** – Living (12).

**Biomass** – Dry weight of organic matter in plants and animals in an ecosystem, both above and below ground (12).

**Boreal** – Pertaining to cool or cold temperature regions of the northern hemisphere; the northern coniferous zone (13).

**Bottoms** – The lowest hydrologic points in the canyons, including some flats and gentle toe-slope sites immediately above the actual bottom. These areas have been and continue to be grazed by domestic livestock and big game during fall, winter, and spring; historically, many were grazed by American Indian livestock. Although most of these areas probably supported bluebunch wheatgrass as the potential natural herbaceous vegetation, farming practices on the more level terraces and heavy grazing pressure around the turn of the century on the more accessible slopes caused a conversion to cheatgrass brome, Sand dropseed, or other less desirable species. On steeper slopes and less accessible sites, the potential native vegetation usually dominates.

**Bridge** – A road or trail structure, including supports, erected over a depression or an obstruction, such as water, a road, a trail, or railway, and having a deck for carrying traffic or other loads.

**Broad scale** – A large, regional area, such as an entire river basin and typically a multi-state area (12).

**Browse** – That part of leaf and twig growth of shrubs, woody vines, and trees available for animal consumption (7).

**Bureau of Land Management (BLM)** – An agency within the U.S. Department of the Interior with land management responsibility for the public domain lands.

**Candidate species** – Plant and animal species that may be proposed for listing as endangered or threatened in the future, in the opinion of the U.S. Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration (NOAA)-Fisheries (12).

**Canopy** – In a forest, the branches from the uppermost layer of trees; on rangeland, the vertical projection downward of the aerial portion of vegetation (12).

**Canopy closure** – The amount of ground surface shaded by tree canopies as seen from above. Used to describe how open or dense a stand of trees is, often expressed in 10 percent increments (12).

**Capability** – The potential of an area of land to produce resources, supply goods and services, and to allow resource uses under an assumed set of management practices at given levels of management intensity. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology, as well as the application of management practices such as silviculture or protection from fire, insects, and disease (1).

**Capable** – The potential of an area of land to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and at a given level of management intensity.

**Capital investment** – An input that increases the stock of natural or man-made resources (assets) needed to maintain or increase the flow of outputs in the future. Benefits resulting from capital investments are normally recouped in excess of one year; activities that create or improve capital assets to obtain benefits occurring during several planning periods (6).

**Carrying capacity** – The number of animals or plants that can be maintained over a specific period of time on a specified amount of land without damage to either the organisms or the habitat (12).

**Ceded lands** – Lands that American Indian tribes ceded to the United States by treaty in exchange for reservation of specific land and resource rights, annuities, and other promises in the treaties (12).

**Channel (stream)** – The deepest part of a stream or riverbed through which the main current of water flows (12).

**Class I airshed** – Under the *Clean Air Act* amendments, all international parks, national parks larger than 6,000 acres, and national wilderness areas larger than 5,000 acres which existed on August 7, 1977. This class provides the most protection to pristine lands by severely limiting the amount of additional air pollution that can be added to these areas (12).

**Climax** – The final or mature stage in secondary plant succession that persists for an indefinite period of time if no major disturbances occur.

**Coarse woody material** – Pieces of woody material derived from tree limbs, boles, and roots in various stages of decay, having a diameter of at least three inches (6).

**Code of Federal Regulations (CFR)** – A codification of the general and permanent rules published in the Federal Register (FR) by the executive departments and agencies of the federal government (1).

**Collaboration** – Working together; to cooperate willingly with an agency or instrumentality with which one is not immediately connected (12).

**Colluvium** – Unconsolidated earth material deposited on or at the base of steep slopes by mass wasting (direct gravitational action) and local unconcentrated runoff.

**Commercial forest lands** – Land that is producing or is capable of producing crops of industrial wood: 1) has not been withdrawn by Congress, the Secretary of Agriculture, or the Chief of the FS; 2) land where existing technology and knowledge is available to ensure timber production without irreversible damage to soil productivity or watershed conditions; and 3) land where existing technology and knowledge, as reflected in current research and experience, provides reasonable assurance that adequate restocking can be obtained within five years after final harvesting (9).

**Commercial land** – Land within the HCNRA developed for commercial purposes as of June 13, 1994 and which is assigned to the commercial land category in 36 CFR 292.22 of the *Public LURs* (16).

**Commercial thinning** – Commercial thinning is designed to improve the health and vigor, increase resilience, enhance shrub/forb layer diversity, move stands from a seral/structural stage above the historic range of variability (HRV) to another seral/structural stage which the HRV analysis shows to be deficit by accelerating development of large pole- and small tree-sized material, and reduce the potential risk of major, stand-replacing disturbance events such as fire, disease and insect infestations, and thereby protect and enhance ecosystem health and restoration. Residual densities would be chosen to maintain wildlife habitat requirements, optimize stand vigor and health, meet landscape character goals and scenic integrity objectives, and allow for the future function of natural fire.

**Compaction** – Making soil hard and dense and decreasing its ability to support vegetation because the soil can hold less water and air and because roots have trouble penetrating the soil (12).

**Compatible** – Capable of existing together in harmony (14).

**Comprehensive management plan (CMP)** – The document that establishes the array, levels, and manner of resource uses within the HCNRA. It is incorporated as a part of the *Forest Plan* (15).

**Congressionally classified and congressionally designated areas** – Areas that require congressional enactment for their establishment such as wildernesses, wild and scenic rivers, and recreation areas.

**Condemnation** – The acquisition of lands or interests therein by the Secretary of Agriculture without the consent of the owner. In the case of the *HCNRA Act*, condemnation is a limited authority that may be exercised by the Secretary only in the event that a standard or standards set forth herein (*Private LURs*) are violated for all private land categories except mining lands. Where mining lands are involved, the Secretary may exercise his or her condemnation authority notwithstanding the fact that the mining landowner has complied with the relevant standards of this *Private LURs* standard (16).

**Connectivity** – The arrangement of habitats that allows organisms and ecological processes to move across the landscape; patches of similar habitats are either close together or linked by corridors of appropriate vegetation. The opposite of fragmentation (12).

**Conservation easement** – The right to control the use of land in order to protect aesthetic values for the purposes of the *HCNRA Act*, but shall not be acquired without the consent of the owner to preclude the continuation of any farming or pastoral use exercised by the owner as of the date of the enactment of the *HCNRA Act*. Also referred to as a scenic easement (15, 16).

**Conservation strategy or agreement** – Plans to remove or reduce threats to candidate and sensitive species of plants and animals so that a listing as threatened or endangered is unnecessary (12).

**Consultation** – 1) An active, affirmative process that (a) identifies issues and seeks input from appropriate American Indian governments, community groups, and individuals; and (b) considers their interests as a necessary and integral part of the FS's decision-making process; 2) the federal government has a legal obligation to consult with American Indian tribes. This legal obligation is based in such laws as the *Native American Graves Protection and Repatriation Act*, the *American Indian Religious Freedom Act*, and numerous other executive orders and statutes. This legal responsibility is, through consultation, to consider Indian interests and account for those interests in the decision; 3) the term also refers to a requirement under Section 7 of the *Endangered Species Act (ESA)* for federal agencies to consult with the USFWS and/or NOAA-Fisheries with regard to federal actions that may affect listed threatened and endangered species or critical habitat (12).

**Cooperate** – To act jointly or work with another or others; operate jointly; common effort or labor.

**Corridor (landscape)** – Landscape elements that connect similar patches of habitat through an area with different characteristics. For example, streamside vegetation may create a corridor of willows and hardwoods between meadows or through a forest (12).

**Corvids** – Birds from the family corvidae, which includes jays, magpies, and crows (*Birds of North America* 1978).

**Council on Environmental Quality (CEQ)** – An advisory council to the President established by the *National Environmental Policy Act (NEPA)* of 1969. The council reviews federal programs for their effects on the environment, conducts environmental studies, and advises the President on environmental matters (abstracted from NEPA as amended).

**Cover** – 1) Trees, shrubs, rocks, or other landscape features that allow an animal to conceal itself partly or fully; 2) the area of ground covered by plants of one or more species (12).

**Cover type** – A vegetation classification depicting a genus, species, group of species, or life form of tree, shrub, grass, or sedge of an area (12).

**Criteria pollutants** – Air pollutants designated by the Environmental Protection Agency (EPA) as potentially harmful and for which ambient air standards have been set to protect the public health and welfare. The criteria pollutants are carbon monoxide, sulfur dioxide, particulate matter, nitrogen dioxide, ozone, hydrocarbons, and lead (12).

**Crown** – The part of a tree containing live foliage; treetops (12).

**Culture** – The ideals, values, and beliefs that members of a society share to interpret experience and generate behavior that is reflected by their work and thought (Haviland 1999).

**Cultural resources** – Historic and archaeological resources. Refer to **Heritage resources** (15).

**Cumulative effects or impacts** – Cumulative effects or impacts are the impacts on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Effects and impact are synonymous (40 CFR 1508.7).

**Current direction** – The existing direction in approved management plans; continuation of existing policies, standards and guidelines; current budget updated for changing costs over time; and, to the extent possible, production of current levels and mixes of resource outputs (12).

**Decreaser plant species** – Range management usage. Plant species of the original vegetation that decrease in relative amount with continued overuse (4).

**Deflation** – When the site matrix (i.e., the soil that surrounds the artifacts) is eroded away by wind, water, mechanical (e.g., animal, machine) and the site is compressed into itself.

**Density (stand)** – The number of trees growing in a given area, usually expressed in terms of trees per acre (12).

**Desired future condition (DFC)** – A portrayal of the land or resource condition that is expected to result if goals and objectives are fully achieved (1).

**Despoliation** – The act of despoiling or condition of being despoiled.

**Developed recreation** – Recreation that requires facilities that in turn result in concentrated use of an area; for example, a campground. Examples of developed recreation areas are campgrounds and ski areas; facilities in these areas might include roads, parking lots, picnic tables, toilets, drinking water, ski lifts, and buildings (12).

**Developed site** – Facility provided for developed recreation use. Refer to **Facilities**.

Diameter breast height (DBH) – 4.5 feet from the ground.

**Direct effects** – Impacts on the environment caused by the action and occur at the same time and place (12).

**Disclimax** – A vegetation community that is maintained at an earlier seral stage by continuing disturbance (i.e., fire and grazing).

**Disjunct plants** – Populations that are separated geographically from the main distribution of a species. Plants with disjunct populations in the HCNRA are biologically unique because they are not found again for dozens to over one hundred miles outside of the HCNRA. Disjunct populations are thus rare in this portion of their distribution. Refer to **Appendix D, Biologically Unique Criteria**, for more information.

**Dispersed campsites** – Primitive sites typically used for overnight, dispersed recreation (12).

**Dispersed recreation** – Recreation that does not occur in a developed recreation site; for example, hunting or backpacking (12).

**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 (10).

**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 (11).

**Diversity** – The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan (1, 2).

**Draft environmental impact statement (DEIS)** – The draft statement of predicted environmental effects that is required for major federal actions, such as revising a land–use plan under Section 102 of NEPA, and released to the public and other agencies for comment and review (6).

**Dude ranching** – A business oriented primarily towards furnishing small groups with an outdoor recreational and educational experience associated with ranching activities and perpetuating the purposes for which the HCNRA was established. Dude ranching is subservient to the primarily recognized ranching operation (16).

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

**Eastside Screens** – Regional Forester's Amendment #1, Interim management direction establishing riparian, ecosystem, and wildlife standards for timber sales on National Forest System lands in eastern Oregon and Washington (USDA 1994)

**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 (12).

**Ecological landscape integrity** – Measure of the sustainability of forested areas and, thus, the longevity of the desired landscape character.

**Ecological processes** – The flow and cycling of energy, materials, and organisms in an ecosystem. Examples of ecosystem processes include the carbon and hydrologic cycles, terrestrial and aquatic food webs, and plant succession, among others (12).

**Ecological status** – The degree of departure of current vegetation from the potential natural vegetation, or potential natural community often synonymous with "seral stage" (6).

**Economic efficiency** – Producing goods and services in areas best suited for that production based on natural biophysical advantage or an area's ability to best serve regional demands of people (12).

Economic impacts –

- **Direct economic impact** – Effects caused directly by forest product harvest or processing or by forest uses (6).
- **Indirect economic impact** – Effects that occur when supporting industries sell goods or services to directly affected industries (6).
- **Induced economic impact** – Effects that occur when employees or owners of directly or indirectly affected industries spend their income within the economy (6).

**Economy** – System of production, distribution, and consumption of economic goods (12).

**Ecosystem** – A complete, interacting system of living organisms and the land and water that make up their environment; the home places of all living things, including humans (12).

**Ecosystem management** – The use of an ecological approach to achieve multiple-use management of public lands by blending the needs of people and environmental values in such a way that lands represent diverse, healthy, productive, and sustainable ecosystems (12).

**Ecosystem function (processes)** – The major process of ecosystems that regulate or influence the structure, composition, and pattern. These include nutrient cycles, energy flows, trophic levels (food chains), diversity patterns in time/space development and evolution, cybernetics (control), hydrologic cycles and weathering processes (2).

**Ecosystem health** – A condition where the parts and functions of an ecosystem are sustained over time and where the system's capacity for self-repair is maintained, such that goals for uses, values, and services of the ecosystem are met (12).

**Edge** – An area where plant communities meet or where successional stages or vegetation conditions within the plant communities come together (2).

**Effects** – Environmental changes resulting from an action. Included are direct effects, which are caused by the action and occur at the same time and place, and indirect effects, which are caused by the action and are later in time or further removed in distance, but which are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts as used in the FEIS are synonymous. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic quality, historic, cultural, economic, social, or healthy effects, whether direct, indirect, or cumulative. Effects may also include those resulting from actions that may have both beneficial and detrimental effects even if on balance the agency believes that the effects will be beneficial (40 CFR 1508.8, 2).

**Embeddedness** – The degree that larger streambed particles (boulders, rubble, or gravel) are surrounded or covered by finer particle sizes such as fine sediment (Rhodes et al 1994).

**Emission** – A release of air contaminants into the outdoor atmosphere (12).

**Endangered species** – Any species of animal or plant that is in danger of extinction throughout all or a significant portion of its range. Plant or animal species are identified by the Secretary of the Interior as endangered in accordance with the *ESA*.

**Endemic organism** – A taxonomic category (e.g., genus, species, variety) whose natural occurrence is confined to a certain region and whose distribution is relatively limited (4).

**Endemic plants** – Plants restricted to 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). Refer to **Appendix D, Biologically Unique Criteria**.

**Endemic species** – Plants or animals that occur naturally in a certain region and whose distribution is relatively limited to a particular locality. "Endemism" is the occurrence of endemic species in an area. Refer to endemic organism (12).

**Environment** – The combination of external physical, biological, social, and cultural conditions affecting the growth and development of organisms and the nature of an individual or community (12).

**Environmental analysis (EA)** – A comprehensive evaluation of actions and their predictable short- and long-term environmental effects, which include physical, biological, economic, social, and environmental design factors and their interactions (2).

**Environmental impact statement (EIS)** – A statement of the environmental effects of a proposed action and alternatives to it. It is required for major federal actions under Section 102 of NEPA, and released to the public and other agencies for comment and review. It is a formal document that must follow the requirements of NEPA, the CEQ, and guidelines and directives of the agency responsible for the project proposal. A Draft EIS is released to the public and other agencies for review and comment. A Final EIS is issued after consideration of public comments. A Record of Decision (ROD) is based on the information and analysis in the Final EIS (4, 12).

**Erosion** – The wearing away of the land surface by running water, wind, ice, gravity, or other geological activities; can be accelerated or intensified by human activities that reduce the stability of slopes or soils (12).

**Essential Fish Habitat (EFH)** – Those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. “Waters” include aquatic areas and their associated physical, chemical and biological properties. “Substrate” includes sediment underlying the waters. “Necessary” means the habitat required to support a sustainable fishery and the managed species’ contribution to a healthy ecosystem. “Spawning, breeding, feeding, or growth to maturity” covers all habitat types utilized by a species throughout its life cycle. Additional habitat designation for chinook salmon in the HCNRA resulting from a 1996 amendment to the *Magnuson-Stevens Fishery Management and Conservation Act*, as amended by the *Sustainable Fisheries Act of 1996* (PL 104-267, NOAA-Fisheries <http://swr.nmfs.noaa.gov/hcd/efhqaca.htm>).

**Evaluation** – An essential companion activity to monitoring; the tool for translating data gathered by monitoring into useful information that could result in change or adaptive management (10).

**Evolutionary significant units (ESU)** – The minimal unit of conservation management, the smallest population unit that can receive federal protection under the *ESA*. An ESU is a set of populations that is morphologically and genetically distinct from other similar populations or a set of populations with a distinct evolutionary history (<http://darwin.eeb.uconn.edu/eeb310/lecture-notes/systematics/systematicsl3.html>).

**Extirpate** – When an entire population has been wiped out or eliminated from a large geographic area (14).

**Existing uses** – Those uses of or developments to private land as of the date of enactment of the *HCNRA Act*, December 31, 1975 (16).

**Exotic** – A plant or animal species introduced from a distant place; not native to the area.

**Extinction** – Complete disappearance of a species from the earth (12).

**Extirpation** – Loss of populations from all or part of a species’ range within a specified area (12).

**Facility** – A single or contiguous group of improvements that exists to shelter or to support FS programs. The term may be used in either a broad or narrow context; for example, a facility may be a ranger station compound, lookout tower, leased office, work center, separate housing area, visitor center, research laboratory, recreation complex, utility system, or telecommunications site.

**Facilities capital improvement** – Construction, installation or assembly of a new fixed asset, or the significant alteration, expansion, or extension of an existing fixed asset to accommodate a change of purpose.

- **Alteration** – Work to change the function of an existing fixed asset. The capacity or size of the fixed asset is not significantly changed. Deferred maintenance of the original fixed asset may be reduced or eliminated by an alteration.
- **Expansion** – Increasing the capacity or size of an existing fixed asset to serve needs different from or significantly greater than those originally intended.
- **Upgrade** – Total redesign and construction of a camping facility. Location may change considerably depending on ecological, environmental, or social concerns. The overall goal would be to maintain a rustic appearance but promote designs and materials that would result in lower operation and maintenance costs. Some campground classifications may change to the next higher level but none would exceed a Level 4 site development for this planning period. Accessibility standards would be appropriate to the designated Recreation Opportunity Spectrum (ROS). A change in design standards

has the potential to move the ROS to a higher development setting although that is not the intent of upgrading a facility.

- **New construction** – The erection, construction, installation, or assembly of a new fixed asset. The design and construction of the new facility would meet the designated ROS settings, ecological, environmental concerns, and accessibility standards. Design standards have the potential to move the ROS to the next higher development setting although it is not the intent of the new facility to effect such a change.

**Facilities development levels** – Specify the amount and scale of modification allowed at a site to meet the Facilities setting indicator for each Recreation Analysis Area (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.

**Facilities maintenance (annual)** – Work performed to maintain serviceability, or repair failures during the year in which they occur. Includes preventive and/or cyclic maintenance performed in the year in which it is scheduled to occur. Unscheduled or catastrophic failures of components or assets may need repaired as a part of annual maintenance.

- **Preventive maintenance** – Scheduled servicing, repairs, inspections, adjustments, and replacement of parts that result in fewer breakdowns and fewer premature replacements, and help achieve the expected life of the fixed asset. Inspections are a critical part of preventive maintenance as they provide the information for scheduling maintenance and evaluating its effectiveness.

- **Repair** – Work to restore a damaged, broken, or worn-out fixed asset, component, or item of equipment to normal operating condition. Repairs may be done as annual maintenance or deferred maintenance activities.

**Facilities maintenance (deferred)** – Work that was not performed when it should have been or when it was scheduled and has been delayed to a future period. Deferred maintenance includes actions not taken to comply with codes for health and safety, accessibility, environmental factors and other compliance requirements or applicable standards. To reduce or eliminate deferred maintenance, rehabilitation or replacement may be necessary.

- **Rehabilitation** – Renovation or restoration of an existing fixed asset or any of its components in order to restore the functionality or life of the asset. Because there is no significant expansion or change of purpose for the fixed asset, the work primarily addresses deferred maintenance.
- **Replacement** – Substitution or exchange of an existing fixed asset or component with one having essentially the same capacity and purpose.
- **Custodial** – Replacement of nonfunctional site elements or facilities with in-kind materials or structures. Location, design, and configuration remain constant. Accessibility standards, where possible, are compatible with designated ROS settings.
- **Level A** – Total or scheduled replacement of all existing facilities with new facilities. Location and configuration remain constant; design and construction materials are simple, durable, and cost efficient. The overall goal is to maintain a rustic appearance while reducing the operation and maintenance costs of the facility. Some adjustment may be made in unit size and parking accommodations. Accessibility standards would be compatible with the designated ROS settings.
- **Level B** – The same as Level A with the following exception: Design configuration and location may change slightly to accommodate ecological or environmental concerns. Increased capacity could result even though the general location and area of the campground is the same.
- **Decommission** – Demolition, dismantling, removal, obliteration, and/or disposal of a deteriorated or otherwise unneeded asset or component, including necessary cleanup work. This action eliminates the deferred maintenance needs for the fixed asset. Portions of an asset or component may remain if they do not cause problems nor require maintenance.

**Facilities maintenance levels** – Specify the work performed annually to prevent breakdowns in facilities or to maintain serviceability of assets. Maintenance levels describe the type of type of work allowed at a site to meet the Facilities setting indicator for each RAA.

- **Maintenance Level 1** – Abate major health or safety hazards. Applies to all administrative facilities no longer needed. Occupancy is not allowed. Facilities waiting retirement. Do not use or abandon.
- **Maintenance Level 2** – Maintain until retirement. All types of facilities, particularly sheds, and storage buildings. Infrequent human use. Facilities needed next 3-5 years. Maintain only to extend life until retirement. Normal health and safety inspections required. Identified health and safety hazards must be abated.
- **Maintenance Level 3** – Keep operational. Types of facilities include minor offices (nonpublic), ships, warehouses, seasonal quarters, and nonpublic areas. (Offices and workspaces that are occupied frequently or continuously due to need but should be replaced. Other support structures have infrequent or no human use.) All systems and components are kept operational. Repair critical-service interruptions within 24 hours and noncritical within 2 weeks. Appearance is neat, pleasing, and of good quality. Maintain to extend life 10-15 years or until retirement. Normal safety inspections; abate all hazards.
- **Maintenance Level 4** – Repair critical-service interruptions. Types of facilities include major, actively used facilities with high employee use and less than 50 visitors per day, and operations centers, crew quarters, and employee quarters. Service is the same as Level 3, except critical service is repaired within

24 hours, noncritical within 5 days. Maintain to extend life to 20+ years. Normal safety inspections; abate all hazards.

- **Maintenance Level 5** – Highest-quality/like-new. Types of facilities include major offices and suburban offices, visitor centers, and major laboratories; similar to Level 4, except greater than 50 visitors/day. Highest quality materials and workmanship are used. Continual maintenance by custodial staffing. Normal safety inspections; abate all hazards.

**Fauna** – The vertebrate and invertebrate animals of an area or region (12).

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

**Farm/forest/grazing lands** – Those lands used for farm, forest, and grazing purposes, for maintaining watershed as fish and wildlife habitat, or for providing outdoor recreational activities. All such lands are assigned to the Farm/Forest/Grazing land category in 36 CFR 292.22 of the *Private LURs* (16).

**Farm/forest/grazing use** – Any traditional agricultural, silvicultural, or livestock management use or combination thereof on farm/forest/grazing lands within the HCNRA. This includes, but is not limited to, true farming, growing and harvesting timber, grazing of livestock, horticultural use, animal husbandry use, horse, cattle, and sheep ranching, and preparation and storage of the products raised on farm/forest/grazing land for on-site use or for disposal by marketing or otherwise. Farm/forest/grazing uses may also consist of uses related, to, and in furtherance of, the protection of fish and wildlife habitat, and the pursuit of recreational activities (16).

**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 National Forest System 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.

**Felids** – Referring to the taxonomic family of Felidae or cats.

**Final environmental impact statement (FEIS)** – The final version of the statement of environmental effects required for major federal actions under Section 102 of NEPA. It is a revision of the draft environmental impact statement to include public and agency responses to the draft (4).

**Fine organic matter** - Plant litter, duff, and woody material less than 3 inches in diameter (6).

**Fines (riparian)** – Fines refer to soil particle size, or fine sediment, usually < 0.2mm in diameter (sand, silt, and clay) that is eroded from hill slopes or roads into streams and streambeds. An overabundance of fine streambed material can have detrimental affects on aquatic organisms and fish (Rhodes et al 1994).

**Fine scale** – A single landscape, such as a watershed or subwatershed (12).

**Fire-dependent systems** – Forests, grasslands, and other ecosystems historically composed of species of plants that evolved with and are maintained by fire regimes (12).

Fire cycle, fire frequency – Refer to Fire return interval (12).

**Fire independent system** – Forests, grasslands, and other ecosystems whose primary natural disturbances historically, were decomposition, wind throw, flooding, or other disturbances other than fire (12).

**Fire intensity** – Areas of relatively homogenous burn effects related as low, moderate, or high as defined in Burned Area Emergency Rehabilitation Handbook, FSM 2509.13 Section 23.31.

- **Low fire intensity** – Soil surface litter and humus have not been destroyed by fire. Root crowns and surface roots will resprout. Potential surface erosion has not changed because of fire.
- **Moderate fire intensity** – On up to 40 percent of the area, the soil surface litter and humus have been destroyed by fire and the A horizon has had intense heating. Crusting of the soil surface produces accelerated erosion. Intensively burned areas may be water repellent. Root crowns and surface roots of grasses in the intensively burned area are dead and will not resprout.
- **High fire intensity** – On 40 percent or more of the area, the soil surface litter and humus have been destroyed by fire and the A horizon has had intense heating. Crusting of the soil surface produces accelerated erosion. Intensively burned areas may be water repellent. Root crowns and surface roots of grasses in the intensively burned area are dead and will not resprout.

**Fire-intolerant** – Species of plants that do not grow well with, or die from, the effects of too much fire. Generally, these are shade-tolerant species (12).

**Fire management plans** – A strategic plan that defines a program to manage wildland and prescribed fires and documents the fire management program in the approved land use plan. The plan is supplemented by operational plans for preparedness, dispatch, prescribed fire, and prevention (USDA 1998).

**Fire refugia patches** – Persistent landscape elements that are rarely impacted directly by the disturbance affecting the surrounding area (Camp 1995)

**Fire regime** – The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, and seasonality of fire (12).

**Fire return interval** – The average time between fires in a given area (12).

**Fire-tolerant** – Species of plants that can withstand a certain frequency and intensity of fire. Generally, these are shade-intolerant species (12).

**Fledgling** – A young bird that has acquired the feathers necessary for flight (14).

**Floodplain** – The lowland and relatively flat areas joining inland and coastal waters including debris cones and flood-prone areas of off-shore islands, including at a minimum, that area subject to a one percent (100-year recurrence) or greater chance of flooding in any given year (*Executive Order 11988, Section 6c*).

**Forb** – Broad-leaved, herbaceous, nongrasslike plant species other than true grasses, sedges, and non-woody plants; fleshy leafed plants; having little or no woody material.

**Forage** – All browse and herbaceous foods that are available to grazing animals. It may be grazed or harvested for feeding. Refer to **Rangeland vegetation** (7).

**Forested vegetation structure** – HRV analysis for this programmatic level document is based on consolidating forested structural stages into four broad groups: 1) very early, 2) early, 3) early to late middle, and 4) late to old.

- **Very early** – New plants - trees, shrubs, and herbs - grow from seeds, sprouts, advanced regeneration, and other mechanisms injected into the growing space by the death of the previous overstory. They can invade a disturbed area for a few years or for many decades before the growing space is occupied and the stand enters the stem-exclusion stage of development (early stage).
- The age range of this period of development is when the first invading stems rapidly occupy the growing space and exclude later arriving plants is narrow. Narrow age ranges occur where sites are productive and where species and regeneration mechanisms promote rapid early growth. Broad age ranges develop if the initiates grow slowly and, subsequently, delay the stem-exclusion stage of development. Inherently poor sites may prolong the initiation phase of development. Due to shallow soils, drought, heterotrophic pressures, etc. on a considerable percentage of sites on the eastside, the stand initiation stage may last up to 30 or more years.

- **Early** – After the available growing space is fully reoccupied, new individual plants do not readily become established. Those plants with a competitive advantage in size or growth pattern are able to expand into the growing space occupied by other plants, reducing their growth rate or eliminating them. The shaded forest floor becomes devoid of living plants and consists of dead leaves, twigs, and stems. The stem-exclusion stage of development is reached at an earlier age on a good site than on poor sites. Unmanaged stands on the eastside may not enter into the stem-exclusion stage of development until the age of 60-80 years. Thinning will delay the onset of the next phase of stand development – stem re-initiation. Managed stands maintained at 55-70 percent of normal stocking for the given age and site will fully occupy the site and inhibit the establishment of a new substrata. Stands displaying good phenotypic characteristics will respond to release and fully occupy the site at ages approaching 120 years.
- **Early/late-mid** – As the overstory grows older, the forest floor substrata, consisting of species capable of establishing in low light intensity/high shade begins to develop. Minor disturbances that selectively kill the overstory create available growing space for the establishment of waves of advanced reproduction. Partial overstory removals would emulate natural minor disturbances. The character of stands in the early middle stage of stand development is dominated by the relatively healthy overwood. Two or more cohorts (age classes) of trees are present. Overstory trees may be poles or small to medium in diameter. Understory trees may consist of seedlings, saplings, or poles.
- **Late/old** – Understory species can be found in all canopy layers. Overstory vigor begins to decline, as does tolerance to native pathogens and insects. In the late stage, the understory has become the dominant cover and the overstory is beginning to decline and collapse. In the old stage all of the relic (pioneering) trees have died and stands consist entirely of trees that grew from beneath. Late- to old growth structure will vary widely according to forest type, climate, site conditions, and disturbance regime. However, in general, late-old seral stages could reflect any one of the following structures depending on environmental influences.
  1. Multistratum without large trees: in this structure, the overstory canopy is discontinuous. Two or more canopy layers are present. Large trees are uncommon in the overstory. Horizontal and vertical stand structures and tree sizes are diverse. The stand composition may be a mix of seedlings, saplings, poles, or small/medium diameter trees.
  2. Multistratum with large trees: In this structure, medium and large-diameter trees dominate the discontinuous overstory canopy. Two or more canopy layers are present in which trees of all diameter classes may be present. Horizontal and vertical stand structure and tree sizes are diverse.
  3. Single stratum with large trees: a single-canopy stratum consisting of medium to large-sized trees dominates the stand structure. One or more cohorts of trees may be present. An understory may be absent or consist of sparse or clumpy seedlings or saplings. Grasses, forbs, or shrubs may be present in the understory.

**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.

**Forest fragmentation** – The breakup of a large land area into smaller patches isolated by areas converted to a different land type (10).

**Forest Plan (Land and Resource Management Plan)** – A document that guides natural resource management and establishes standards and guidelines for a national forest; required by the *National Forest Management Act* (12).

**Forest roads** – As defined in Title 23, Section 101 of the United States Code (23 USC 101), any road wholly or partly within, or adjacent to, and serving the NFS and which is necessary for the protection, administration, and utilization of the NFS System and the use and development of its resources.

**Forest Service Handbook (FSH)** – Directives that provide detailed instructions on how to proceed with a specialized phase of a program or activity (6).

**Forest Service Manual (FSM)** – A system of manuals that provides direction for FS activities.

**Forest transportation facility** – A classified road, designated trail, or designated airfield, including bridges, culverts, parking lots, log transfer facilities, safety devices and other transportation network appurtenances under FS jurisdiction that is wholly or partially within or adjacent to NFS lands (36 CFR 212.1).

**Forest transportation system management** – The planning, inventory, analysis, classification, record keeping, scheduling, construction, reconstruction, maintenance, decommissioning, and other operations undertaken to achieve environmentally sound, safe, cost-effective access for use, protection, administration, and management of NFS lands.

**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 (12).

**Fuel** – Plants, both living and dead, and woody vegetative materials capable of burning.

**Fuel ladder** – Vegetative structures or conditions such as low-growing tree branches, shrubs, or smaller trees that allow fire to move vertically from a surface fire to a crown fire (12).

**Fuel load** – The dry weight of combustible materials per unit area; usually expressed as tons per acre (12).

**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 tabulated by Rothermel (1972) and Albini (1976). 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).

**Functioning-at-risk** – Riparian-wetland areas that are in functional condition but an existing soil, water, or vegetation attribute makes them susceptible to degradation (USDA 1993, p. 4).

**Geographic Information System (GIS)** – An information processing technology to input, store, manipulate, analyze, and display data; a system of computer maps with corresponding site-specific information that can be combined electronically to provide reports and maps (12).

**Goals** – Concise statements that describe a desired condition to be achieved sometime in the future (36 CFR 219.3) with respect to resource programs and management activities. All goal statements perpetuate the intent of the HCNRA Act and the *Public and Private LURs*, and form the principal basis from which objectives are developed to shape the implementation of those programs and activities. Examples of broad programs and activities include the provision and/or protection of recreation opportunities, wildlife habitat, heritage resources, and transportation systems (1).

**Government-to-government consultation** – The active and continuous process of contacting tribal leadership, soliciting their participation, involvement, comments, concerns, contributions, and traditional knowledge that will assist the agency in making informed decisions in planning, managing and decision-making actions.

**Graminoid** – Grasses and grass-like plants such as sedges and rushes.

**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).

- **Late** – The potential natural (native species) community perennial bunchgrasses dominate with bare ground subordinate to other surface cover (rock, gravel, microbiotic crusts, litter).
- **Mid** – Native perennial forbs and grasses co-dominate with the potential natural (native species) community perennial bunchgrasses. Bare ground is subordinate or equivalent to other surface features (rock, gravel, microbiotic crusts, litter).

- **Early** – Native perennial forbs and other native grasses dominate over the potential natural (native species) community perennial bunchgrasses. Bare ground is equivalent to or greater in cover than other surface features (rock, gravel, microbiotic crusts, litter).
- **Very early (disclimax)** – Potential natural (native species) community perennial bunchgrasses are present on less than 5 percent of the stand. Bare ground is greater in cover than other surface features (rock, gravel, microbiotic crusts, litter).

**Grazing** – The consumption of standing forage by livestock or wildlife (7).

**Grazing permit** – Document authorizing livestock to use NFS lands or other lands under FS control for livestock production (6).

**Ground fire** – A fire that burns the organic material in the soil layer and the decayed material or peat below the ground surface (12).

**Guidelines** – Discretionary measures that are preferable or advisable that may be incorporated into projects and programs. They provide management options for adapting projects and programs to current physical, biological, social, economic, technical, and legal conditions. Examples of guidelines include strategies to manage visitor use using suggested technical publications, recommendations to consider using traditional equipment at cultivated sites, and considering fall burning to protect areas with biological crusts (1).

**Guiding** – Providing services or assistance (such as supervision, protection, education, training, packing, touring, subsistence, interpretation, or other assistance to individuals or groups in their pursuit of a natural resource-based outdoor activity) for pecuniary remuneration or other gain. The term “guide” includes the holder’s employees, agents, and instructors. “Pecuniary remuneration” means monetary reward (Washington Office Amendment 2709.11-95-11, 41-53C).

**Habitat** – A place that provides seasonal or year-round food, water, shelter, and other environmental conditions for an organism, community, or population of plants or animals (12).

**Habitat type** – A group of plant communities having similar habitat relationships (12).

**Harvest** – 1) Felling and removal of trees from the forest; and 2) removal of game animals or fish from a population, typically by hunting or fishing (12).

**Harvestable/harvestability** – In this FEIS, with regard to American Indian tribes, refers to a population of plants or animals that is self-sustaining and capable of producing a dependable harvest annually to meet spiritual, cultural, subsistence, and commercial needs (12).

**Hazardous substance** – Any material so classified under the Comprehensive Environmental Response, *Compensation and Liability Act of 1980*, as amended (16).

**Head month** – One month’s use and occupancy of the range by one animal. For grazing fee purpose, it is a month’s use and occupancy of range by one weaned or adult cow with or without calf, bull, steer, heifer, horse, burro, or mule, or 5 sheep or goats. Refer to **Animal unit month** (6).

**Headwaters** – Beginning of a watershed; unbranched tributaries of a stream (12).

**Hells Canyon Complex (HCC)** – A three dam hydroelectric project owned by Idaho Power Company (IPC) and located at the upstream end of the Wild and Scenic Snake River. The Hells Canyon Complex is comprised of the following dams and their associated reservoirs: Brownlee Dam, Oxbow Dam, and Hells Canyon Dam.

**Hells Canyon National Recreation Area (HCNRA) Act** – The Act of December 31, 1975, as amended (PL 94-199, 89 Statute 117), which established the Hells Canyon National Recreation Area (15).

**Herbaceous** – Green and leaf-like in appearance or texture; includes grasses, grass-like plants, and forbs, with little, or no woody component (12).

**Herbivore** – An animal that subsists on plants or plant materials, either primarily or entirely (12).

**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.

**Hibernaculum** – Shelter occupied during the winter by an animal in a torpid or resting state (14).

**Himeq'isnimeweélepe or pik'uúnen** – Nez Perce Indian word for Snake River.

**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.

**Historic site** – Site associated with the history, tradition, or cultural heritage of national, state, or local interest, and of enough significance to merit preservation or restoration (4).

Human-caused disturbance – Refer to Disturbance.

**Hydrologic** – Refers to the properties, distribution, and effects of water. “Hydrology” refers to the broad science of the waters of the earth—their occurrence, circulation, distribution, chemical and physical properties, and their reaction with the environment (12).

**Hydrologic function** – The behavioral characteristics of a watershed described in terms of ability to sustain favorable conditions of water flow. Favorable conditions of water flow are defined in terms of water quality, quantity, and timing (6).

**Hydrologic unit code (HUC)** – A hierarchical coding system developed by the U.S. Geological Survey to identify geographic boundaries of watersheds of various sizes (12).

Impacts – Refer to Effects.

**IMPLAN** – A computer-based system used by the FS for constructing input-output models to measure economic input. The system includes a database for all counties in the United States and a set of computer programs to retrieve data and perform the computational tasks for input-output analysis (6).

**Implement** – To carry out (12).

**Increaser plant species (increaser)** – Range management usage. Plant species of the original vegetation that increase in relative amount, at least for a time, under overuse (4).

Indicator species – Refer to Management indicator species.

**Indirect effects** – Impacts on the environments that are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable (12).

**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.

**Intellectual property** – Original creative work manifested in a tangible form that can be legally protected, for example, by a patent, trademark, or copyright.

**Instream flow** – Flow of water in its natural setting (as opposed to waters diverted for ‘off-stream’ uses such as industry or agriculture). Instream flow levels provided for environmental reasons enhance or maintain the habitat for riparian and aquatic life, with timing and quantities of flow characteristic of the natural setting (12).

**Integrated weed management** – An interdisciplinary pest management approach for selecting methods for preventing, containing, and controlling noxious weeds in coordination with other resource management activities to achieve optimum management goals and objectives. Methods include: education, preventive measures, herbicide use, cultural, physical or mechanical methods, biological control agents, and general land management practices, such as manipulation of livestock or wildlife grazing strategies that accomplish vegetation management objectives (6).

**Interagency** – Involving the FS, BLM, USFWS, NOAA-Fisheries, and/or other federal agencies (12).

**Intermittent stream** – A stream that flows only at certain times of the year when it receives water from other streams or from surface sources such as melting snow (12).

**Intrusives (rocks)** – Rocks having been forced between preexisting rocks or rock layers while in a molten or plastic condition (14).

**Invader plant species (Invader, weed species)** – Range management usage. Plant species that were absent in undisturbed portions of the original vegetation and will invade under disturbance or continued overuse (4).

**Invasion (plant)** – The movement of a plant species into a new area outside its former range (12).

**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.

**Inventoried Roadless Areas** – Those areas identified in the *Forest Plan* and listed on a set of inventoried roadless area maps, contained in *Forest Service Roadless Area Conservation, Final Environmental Impact Statement, Volume 2*, (USDA 2000), which are held at the Washington Office of the FS, or any update, correction, or revision of those maps (6).

**Invertebrate** – Small animals that lack a backbone or spinal column. Spiders, insects, and worms are examples of invertebrates (12).

**‘Iptiqiyuúse** – Nez Perce Indian word for spearing.

**Irretrievable commitment** – A term that applies to losses of production or commitment of renewable natural resources. For example, while an area is used as a ski area, some or all of the timber production there is “irretrievably” lost. If the ski area closes, timber production could resume; therefore, the loss of timber production during the time the area is devoted to skiing is irretrievable but not irreversible, because it is possible for timber production to resume if the area is no longer used as a ski area (12).

**Irreversible commitment** – A term that applies to nonrenewable resources, such as minerals and archaeological sites. Losses of these resources cannot be reversed. Irreversible effects can also refer to effects of actions on resources that can be renewed only after a very long period, such as the loss of soil productivity (12).

**Issue** – A point, matter of controversy, dispute, question of public discussion, or general concern over resource management activities or land uses to be addressed or decided through the planning process. To be considered a “significant” environmental impact statement issue, it must be well defined, relevant to the proposed action, and within the ability of the agency to address through alternative management strategies (2, 12).

**Key area** – A portion of range which because of its location, grazing or browsing value, and/or uses, serves as an indicative sample of range conditions, trend, or degree of use seasonally (6).

**Ladder fuels** – See fuel ladder.

**Lamtaama** – Nez Perce Indian word for White Bird band of the Nez Perce Tribe.

**Landform** – An area of land that is defined by its particular combination of bedrock and soils, erosion processes, and climatic influences.

**Landscape** – All the natural features such as grasslands, hills, forest, and water, which distinguish one part of the earth's surface from another part; usually that portion of land which the eye can comprehend in a single view, including all its natural characteristics (12).

**Landscape character** – Identifiable image made by particular attributes, qualities, and traits of a landscape (17).

**Landscape structure** – The mix and distribution of stand or patch sizes across a given area of land. Patch sizes, shapes, and distributions are a reflection of the major disturbance regimes operating on the landscape (12).

**Land-use allocation** – The commitment of a given area of land or a resource to one or more specific uses – for example, to campgrounds or wilderness (4).

**Late spring season** – Late spring is defined as that period when the key perennial cool season forage plant growth is still occurring but soil moisture is beginning to limit growth. Livestock removal is not planned to occur during the time when assurance can be made that essentially full regrowth would occur.

**Late/old structure** – Forest stands whose structural development incorporates the elements of the late and the old structural stages. The understory species can be found in all canopy layers. Overstory vigor begins to decline, as does tolerance to native pathogens and insects. In the late stage, the understory has become the dominant cover and the overstory is beginning to decline and collapse. In the old stage, stands in which all of the relic (pioneering) trees have died and which consist entirely of trees that grew from beneath. These structural stages may or may not contain the various characteristics sometimes identified with “old growth.” Refer to **Forested vegetation structure**.

**Lawyala** – Nez Perce Indian word for gaffs.

**Lethal (stand-replacing) fires** – Fires that result in stand replacement of the existing forested vegetation. Mortality levels are very high at all canopy levels within the stand. In forests, fires in which less than 20 percent of the basal area or less than 10 percent of the canopy cover remains; in rangelands, fires in which most of the shrub overstory or encroaching trees are killed (12).

**Lichens** – Organisms made up of specific algae and fungi, forming identifiable crusts on soil, rocks, tree bark, and other surfaces. Lichens are primary producers in ecosystems; they contribute living material and nutrients, enrich the soil and increase soil moisture-holding capacity, and serve as food sources for certain animals. Lichens are slow growing and sensitive to chemical and physical disturbances (12).

**Likely future proposal** – Ongoing programs and discrete projects to accomplish the management objectives to support the goals for the planning area. Examples of ongoing programs include visitor education, resource inventory, facility maintenance, and use monitoring. Examples of discrete projects include campground development, wildlife introduction, prescribed burning, and road decommissioning.

**Lithic scatters** – Prehistoric sites consisting of stone tools and waste chips or flakes. Lithic scatters may be surface only or have depth.

**Litter** – The uppermost layer of organic debris on the soil surface, which is essentially the freshly fallen or slightly decomposed vegetation material such as stems, leaves, twigs, and fruits.

**Limits of acceptable change (LAC)** – Process for establishing acceptable resource and social conditions while defining desired future conditions for wilderness or recreation settings that can be measured and managed (USDA 1992).

**Loess** – Fine grained wind-deposited material predominantly of silt-size particles

**Long term** – Generally refers to a period longer than 10 years up to 100 years (12).

**Lower montane** – A terrestrial community that generally is found in drier and warmer environments than the montane terrestrial community. The lower montane community supports a unique clustering of wildlife species (12).

**Lower slopes** – Sites located below the structural bench level of the Snake-Imnaha canyons. This does not include lower slopes located in the montane; they are in the ridge top category. Some of these areas have been and continue to be grazed by big game during fall, winter, and spring; historically, many were grazed by American Indian livestock. Lower slope positions (1,500 to 3,000 feet) generally contain bunchgrass communities. Warm, dry slopes most often contain bluebunch wheatgrass/Sandberg's bluegrass communities while aspects that are more northerly occasionally have bluebunch wheatgrass and/or Idaho fescue communities. Cheatgrass is a common invader of areas that have been impacted by natural or human-caused factors although it is also capable of occurring in mid- to late seral or good condition grasslands. Douglas fir grows on the sheltered north slopes. Low elevation south slopes, such as along the lower Imnaha River, support needlegrass associations and park-like stands of ponderosa pine. Sand dropseed and/or red three-awn sometimes dominate early seral stages of the bluebunch wheatgrass/Sandberg's bluegrass types.

**Mainstem** – The main channel of the river in a river basin, as opposed to the streams and smaller rivers that feed into it (12).

**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 (12).

**Management area (MA)** – An area with similar management objectives and a common management prescription, as prescribed by the *Forest Plan* (1, 6).

**Management direction** – A statement of goals and objectives, management prescriptions, and associated standards and guidelines for attaining them (12).

**Management indicator species** – A species selected because its welfare is presumed to be an indicator of the welfare of other species using the same habitat. A species whose condition can be used to assess the impacts of management actions on a particular area (5).

**Maximum Manageable Area (MMA)** – The firm limits of management capability to accommodate the social, political, and resource impacts of a wildland fire. Once established as part of an approved plan, the general impact area is fixed and not subject to change. MMAs can be developed as part of the fire management plan and described as a fire management area. They can also develop as part of the planning and implementation of management actions after a fire has ignited (USDA 1998).

**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 (15).

**Merchantable timber** – Timber that can be bought or sold (12).

**Mesic** – Pertaining to conditions of moderate moisture or water supply; used of organisms occupying moist habitats.

**Microbiotic crust** – Thin crust of living organisms on or just below the soil surface, composed of lichens, mosses, algae, fungi, cyanobacteria, and bacteria. Also referred to as biological soil crust (12).

**Microclimate** – The climatic conditions within a small habitat such as: a tree stump, under a boulder, in the space between grasses, or on the side of a slope (12).

**Migration corridor** – The habitat pathway an animal uses to move from one place to another (12).

**Minimum impact suppression tactics (MIST)** – A set of guidelines prescribing safety, fire line procedures, tools, and equipment that has the least impact on the environment during suppression and mop-up phases of fire (USDA and USDI 2003).

**Mining** – Any activity related to the discovery, extraction, and exploration of minerals under the *Mining Act of 1872*, 30 USC, 22 *et seq*, and the *Mineral Leasing Act of 1920*, 30 USC, 191 *et seq*, through the use of, among other things, hydraulic equipment, pans, ground sluicing, sluice boxes, rockers, or suction dredges (15).

**Mining claim** – A particular parcel of public land, valuable for a specific mineral deposit or deposits, for which an individual has asserted a right of possession. The right is for developing and extracting a discovered mineral deposit (6).

**Mining lands** – Lands primarily used for mining purposes as of June 13, 1994 and which are assigned to the mining land category in 36 CFR 292.22 of the *Private LURs* (16).

**Minerals materials** – A collective term used to describe petrified wood, and common varieties of sand, gravel, stone, pumice, pumicite, cinders, clay, and other similar materials. Common varieties do not include deposits of those materials that are valuable because of some property giving them distinct and special value (6).

**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)

**Mixed fire severity** – These fire regimes will have the greatest toll on thinner barked and/or young age classes within the stand. Low intensity fires within the stand will favor overstory fire-resistant species (ponderosa pine, western larch, and Douglas fir). Crown fire potential does exist depending on stand structures and age classes of different stand cohorts of any available ladder fuels. If it occurs, the result will favor the return to grass and forbs.

**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 (12).

**Montane** – A terrestrial community that generally is found in moderate (ponderosa pine) and subalpine terrestrial communities. Montane communities are generally moister than lower montane and warmer than subalpine communities, and support a unique clustering of wildlife species.

**Mosaic** – A pattern of vegetation in which two or more kinds of communities are interspersed in patches, such as clumps of shrubs with grassland between (12).

**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 (15).

**Motorized river craft** – Any boat capable of being mechanically propelled by propeller(s) or jet pump(s) upstream through rapids (15).

**Múlpeí** – Nez Perce Indian word for Little Salmon River.

**Multiple-use management** – The management philosophy articulated by the *Multiple Use Sustained Yield Act of 1960*. This law provides that the renewable resources of the national forests are to be managed in the combination that best meets the needs of the American people. It further stipulates that the FS is to make judicious use of the land for some or all of these resources and related services over areas large enough to ensure that sufficient latitude exists to subsequently adjust management in conformity with changing needs and conditions (12).

**Mycorrhizae** – The symbiotic relationship between certain fungi and the roots of certain plants, especially trees; important for plants to take nutrients from soil (12).

**Nacó'x** – Nez Perce Indian word for salmon.

**Naco'óxkuus** – Nez Perce Indian word for the lower part of the Salmon River.

**National ambient air quality standards (NAAQSs)** – Standards set by the Federal Environmental Protection Agency for the maximum levels of air pollutants that can exist in the outdoor air without unacceptable effects on human health or the public welfare (12).

**National Environmental Policy Act (NEPA)** – An act to declare a national policy which will encourage productive and enjoyable harmony between humankind and the environment, to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, to enrich the understanding of the ecological systems and natural resources important to the nation, and to establish a Council on Environmental Quality.

**National Forest Land and Resource Management Plan (Forest Plan)** – A Plan which "...shall provide for multiple use and sustained yield of goods and services from the NFS in a way that maximizes long-term net public benefits in an environmentally sound manner" (1).

**National Forest Management Act (NFMA)** – A law passed in 1976 as an amendment to the *Forest and Rangeland Renewable Resources Planning Act*, requiring the preparation of forest plans and the preparation of regulations to guide that development.

**National Forest System (NFS)** – The NFS consists of units of federally-managed forest, range, and related lands throughout the United States and its territories, united into a nationally significant system dedicated to the long-term benefit for present and future generations. The NFS includes all NFS lands reserved or withdrawn from the public domain of the United States, all NFS lands acquired through purchase, exchange, donations, or other means, the National Grasslands and land utilization projects administered under Title III of the *Bankhead-Jones Farm Tenant Act* (50 Stat. 525, 7 USC 1010–1012), and other lands, waters, interests therein which are administered by the FS or are designated for administration through the FS as part of the system (*Forest and Rangeland Renewable Resources Planning Act*).

**National Forest System road** – A classified forest road under the jurisdiction of the FS. The term "National Forest System roads" is synonymous with the term "forest development roads" as used in 23 USC 205.

**National Recreation Trail** – Trails designated by the Secretary of the Interior or the Secretary of Agriculture as part of the national system of trails authorized by the *National Trails System Act*. National recreation trails provide a variety of outdoor recreation uses.

**National Register of Historic Places** – A listing (maintained by the U.S. National Park Service) of areas that have been designated as being of historical significance. The Register includes places of local and state significance as well as those of value to the Nation (4).

**Native species** – Species that normally live and thrive in a particular ecosystem.

**Near natural rates of recovery** – Rates not exceeding condition thresholds and meeting standards for forage and browse utilization.

**Neotropical** – Those species of birds that winter regularly south of the Tropic of Cancer (23½ ° north) and summer in the United States and Canada (USDA 1992).

**Nimiipuu** – Nez Perce Indian word for Nez Perce.

**Nimiputimpt** – Nez Perce Indian word for Nez Perce Language.

**No-action alternative** – The most likely condition expected to exist in the future if current management direction were to continue unchanged (12).

**Nonfunctional** – Riparian-wetland areas that clearly are not providing adequate vegetation, landform, or lard wood debris to dissipate stream energy associate with high flows and thus are not reducing erosion, improving water quality, etc. The absence of certain physical attributes, such as a floodplain where one should be, is an indicator of nonfunctioning conditions (*Process for Assessing Proper Functioning Condition*, USDA BLM, TR 1737-9, 1993, p. 4).

**Nonlethal fire** – Fires that consist of low intensity underburns with limited single tree or group torching. Fire related mortality to the dominant-fire resistant species is slow, but occurs because of this type of localized fire behavior. In forests, fires in which more than 70 percent of the basal area or more than 90 percent of the canopy cover survives; in rangelands, fires in which more than 90 percent of the vegetative cover survives (implies that fire is occurring in an herbaceous-dominated community).

**Nonpoint source pollution** – Pollution whose source is general rather than specific in location; the sources of the pollutant discharge are dispersed, not well defined or constant. Examples include sediments from logging activities and runoff from agricultural chemicals. It is widely used in reference to agricultural and related pollutants– such as production of sediments by logging operations, agricultural pesticide applications, or automobile exhaust pollution (4, 12).

**Nonsystem road** – Refer to National Forest System road.

**Nontreaty bands** – The five bands of Nez Perce whose traditional homes lay outside the reduced reservation boundaries described in the *Treaty of 1863*.

**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 (10).

**Nutrient cycling** – Ecological processes in which nutrients and elements such as carbon, phosphorous, nitrogen, calcium, and others, circulate among animals, plants, soils, and air (11).

**Objective** – Focused statements that describe the incremental progress expected to take place to meet goals (desired conditions) over a ten-year planning period with respect to estimated quantities of services and accomplishments (*Forest and Rangeland Renewable Resources Planning Act*). Objectives identify specific opportunities and likely future proposals in terms of ongoing programs and discrete projects to support the goals for the planning area. Examples of ongoing programs include visitor education, resource inventory, facility maintenance, and use monitoring. Examples of discrete projects include campground development, wildlife introduction, prescribed burning, and road decommissioning (1).

**Off-highway or off-road vehicle** – Refer to All-terrain vehicle (ATV).

**Old growth** – Ecosystems distinguished by old trees and related structural attributes. Old growth encompasses the later stages of stand development that typically differ from earlier stages in a variety of characteristics that may include tree size, accumulation of large woody material, number of canopy layers, species composition, and ecosystem function. The Pacific Northwest Region of the FS defines old growth in terms of dominant species, site productivity, number of canopy layers, diameter, number of trees, tree age, tree decadence, number and size of standing dead trees, and number and size of down woody material (10).

**Ongoing actions** – Those actions that have been implemented, or have contracts awarded or permits issued. Refer to **New actions** (12).

**Operational plan** – A document approved by the Forest Supervisor which specifies at the project level, implementation of the management direction established in the *Forest Plan* (4).

**Other lands** – All NFS lands in the HCNRA except for Wild and Scenic Rivers and wilderness lands (15).

**Outdoor recreation activities** – Activities such as camping, picnicking, rafting, boating, hiking, rock climbing, fishing, hunting, horseback riding, and the viewing of wildlife or scenery (16).

**Outfitting** – Providing through rental or livery any saddle or pack animal, vehicle or boat, tents or camping gear, or similar supplies or equipment, for pecuniary remuneration or other gain. The term “guide” includes the holder’s employees, agents, and instructors. “Pecuniary remuneration” means monetary reward (Washington Office Amendment 2709.11-95-11, 41-53C).

**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.

**Overgrazing** – Consumption of rangeland grass by grazing animals to the point that it cannot be renewed, or can be only slowly renewed, because of damage to the root system (12).

**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 (6).

**Over-snow vehicle play areas** – Area for use by snowmobiles.

**Overstory** – Portion of the trees, in a forest or in a forested stand of more than one story, forming the upper or uppermost canopy.

**Overwinter** – To keep livestock or plants alive through the winter by sheltering them, or to be kept alive in this way.

**Overwood** – Trees that make up the upper layer of the forest canopy.

**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 (15).

**Parcel** – Contiguous tax lots under one ownership. For the purposes of the *Private LURs*, rights-of-way do not divide parcels into smaller units (16).

**Particulate emissions (PMs)** – Solid particles or liquid droplets that can be suspended or carried in the air, or released as air contaminants into the outdoor atmosphere (9).  $PM_{10}$  – Particulate matter that measures 10 micrometers in diameter or less, a size considered small enough to invade the alveolar regions of the lung.  $PM_{10}$  is one of the six pollutants for which there are NAAQSS.  $PM_{25}$  – Particulate matter that measures 2.5 micrometers in diameter or less (12).

**Partition** – The division of land into lots, and which, under county planning ordinances, is identified by a map, drawing, or writing which contains the descriptions, locations, specifications, and dedications for roads, utilities, etc. and which has been properly filed with the County Recorder (16).

**Passerines** – Small or medium-sized perching songbirds; more than half of all birds belong to this group.

**Passive management** – Allowing nature to restore (heal) the natural balance between erosion/deposition, hydrologic, and vegetation processes by removing identified adversely affecting agents.

**Pathogen** – An agent such as a fungus, virus, or bacterium that causes disease (12).

**Pattern** – The spatial arrangement of landscape elements (patches, corridors, matrix) that determines the function of a landscape as an ecological system (12).

**Permittee (livestock)** – Any entity that has been issued a grazing permit (6).

**Persons-at-one-time (PAOTs)** – The number of people that can occupy a developed site or dispersed area at any time based on the level of access, terrain features, number of people each site is designed for, managed use seasons, patterns of use, and average lengths of stay.

**Petroglyph** – An ancient line drawing or carving on rock.

**Pe'xeliit kú·s** – Nez Perce Indian word for Big Payette Lake.

**Pictograph** – A picture representing a word or idea; a record in hieroglyphic symbols which is painted versus carved. Refer to **Petroglyph**.

**Pik'uúnen or himeq'isnimeweélepe** – Nez Perce Indian word for Snake River.

**Pileated** – Ornithology – having a crest along the top of a bird's head, extending from the base of the bill to the nape, as in pileated woodpecker.

**Planning criteria** – Criteria prepared to guide the planning process. Criteria applied to collection and use of inventory data and information, analysis of the management situation, and the design, formulation, and evaluation of alternatives (1).

**Planning period** – In this FEIS, generally depicts conditions in the analysis area representative of the period over the next decade between 2003 and 2013 (12).

**Plant associations** – A plant community of definite plant composition, having a similar overall appearance, growing in a uniform habitat that can reproduce its vegetative components in perpetuity barring disturbance (Johnson and Simon 1987).

**Plant communities** – any grouping of plants that have some structural similarity (Johnson and Simon 1987).

**Plateau** – Any comparatively flat area of great extent and elevation; specifically an extensive land region considerably more elevated above the adjacent country; it is commonly limited on at least one side by an abrupt descent (6).

**Point source pollution** – Pollution that comes from a single identifiable source such as a smokestack, a sewer, or a pipe (12).

**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 development (6).

**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.

**Precommercial thinning (PCT)** – Precommercial thinning is designed to improve the health and vigor, increase resilience, enhance shrub/forb layer diversity, move stands from a seral/structural stage above HRV to another seral/structural stage which the HRV analysis shows to be deficit by accelerating development of sapling to small pole-sized material, and promote stand differentiation in stands otherwise displaying poor differentiation and thereby protect and enhance ecosystem health and restoration by reducing risk of fire and disease or insect infestations. Stand differentiation is a condition where individual tree dominance is expressed, rather than overall stand stagnation. Stands which differentiate would maintain a higher level of growth and vigor, and a greater resistance to damaging agents such as insects, disease, fire, snow, and wind damage. Site-specific

prescriptions would be developed to be compatible with recreation, scenery, and wildlife objectives. As much as possible, within the context of maintaining structural stages at historic range of variability levels, maximum treatment areas for both commercial and precommercial thinning proposals would be limited to achieve the standard of maintaining big game cover on summer range at 60 percent of potential.

**Preferred alternative** – The alternative identified in an environmental impact statement that has been initially selected by the agency as the most acceptable resolution to the problems identified in the purpose and need (12).

**Prehistoric site** – An area that contains important evidence and remains of the life and activities of early societies that did not record their history.

**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.

**Prescription** – A management pathway to achieve a desired objective(s).

**Primitive recreation** – Those types of recreation activities associated with unroaded land, for example: hiking, backpacking, and cross-country travel (4).

**Private land** – Land not in federal, state, or local government ownership (16).

**Proper functioning condition (PFC)** – Riparian and wetland areas achieve proper functioning condition when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows. This thereby reduces erosion and improves water quality; filters sediment, captures bedload, and aids floodplain development; improve flood-water retention and ground water recharge; develops root masses that stabilize stream banks against cutting action; develops diverse ponding and channel characteristics to provide the habitat and water depths, duration, and temperature necessary for aquatic vertebrate and invertebrate production, waterfowl breeding, and other issues; and supports greater biodiversity. The functioning condition of riparian and wetland areas is a result of the interaction among geology, soil, water and vegetation (USDA 1993, p. 4).

**Project** – An organized effort to achieve an objective identified by location, timing, activities, outputs, effects, and time period and responsibilities for executions (6).

**Proposed action** – A proposal by a federal agency to authorize, recommend, or implement an action (12).

**Proposed uses** – Those uses of or development to a private land parcel within the HCNRA initiated after June 13, 1994 (16).

**Public roads** – Any road or street under the jurisdiction of and maintained by a public authority and open to public travel (23 USC. 101(a)).

**Qapqapa’ál** – Nez Perce Indian word for Boise River.

**Qualitative** – Traits or characteristics that relate to quality and cannot be measured with numbers (12).

**Quality of life** – Refers to the satisfaction people feel for the places where they live (or may visit) and for the places they occupy as part of that experience (12).

**Quantitative** – Traits or characteristics that can be measured with numbers (12).

**Range forage condition** – The current composition or productivity of rangeland relative to what that rangeland is capable of producing as a potential natural community, and often synonymous with forage condition (6).

**Range analysis** – The systematic interpretation, analysis, and evaluation of data for rangeland resource management planning. It provides ecological and other information for overall forestland and resource management planning and allotment management planning (6).

**Rangeland (range)** – Land on which the native vegetation is predominately grasses, grass-like plants, forbs or shrubs suitable for grazing or browsing use. Forested sites and nonforested sites providing forage and habitat for domestic and wild herbivores are included (6).

**Rangeland resources** – The physical and biotic resources of rangeland ecosystems (6).

**Rangeland resource inventory** – The systematic acquisition of inventory data that characterizes the vegetation, soil, and other rangeland resources.

**Rangeland vegetation** – Vegetation on all land with rangeland resource objectives or rangeland resource values, including riparian areas. Generally, the focus is on land supporting grass or grass-like plants, forbs, or shrubs during one or more ecological stages. Forested and nonforested sites providing forage and habitat for wild and domestic animal species are included (6).

**Ranger** – The HCNRA Area Ranger, WWNF, with offices located in Enterprise, Oregon; Riggins, Idaho; and Clarkston, Washington; except for the Rapid Wild and Scenic River where the term refers to the Salmon River District Ranger at the Slate Creek Ranger Station, Nez Perce National Forest, located in White Bird, Idaho (16).

**Raptors** – Predatory birds, such as falcons, hawks, eagles, or owls.

**Rare combinations of aquatic, terrestrial and atmospheric habitats** – Principally reflect physical environmental features of the landscape that are produced from a unique combination of soils, climate, precipitation, and aspect. Refer to **Appendix D, Biologically Unique Criteria**, for a complete description.

**Rare combinations of outstanding and diverse ecosystems** – Rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated therewith are represented by plant associations and plant community types that are biologically unique to the HCNRA. The plant associations and plant community types chosen to represent rare combinations of outstanding and diverse ecosystems are botanically and ecologically unique within the HCNRA because they occur in the HCNRA and nowhere else, are found in limited amounts within the HCNRA, or may be relatively abundant within the HCNRA but limited in their distribution in the three neighboring ecoregions (Columbia Basin, Northern Rocky Mountains, Northern Great Basin). A feature has limited distribution in the three neighboring ecoregions if its distribution or extent is substantially less than its extent within the HCNRA. Refer to **Appendix D, Biologically Unique Criteria**, for a complete description.

**Rare plants** – Plants that are federally listed as threatened, endangered, or proposed for federal listing; FS Sensitive for Regions 1, 4, and 6, or disjunct species. This includes plants considered rare both globally (G1, G2, G3) or within states (S1, S2 or S3). Refer to **Appendix D, Biologically Unique Criteria**, for a complete description.

**Record of decision (ROD)** – An official document separate from, but associated, with a final environmental impact statement in which a deciding official identifies all alternatives, and specifies which were environmentally

preferable, states the decision, and states whether all practicable means to avoid environmental harm from the alternative have been adopted, and if not, why not (40 CFR 1505.2).

**Recovery plans** - A plan for the survival and conservation of species listed under *ESA*. The *ESA* [Section 4(f)] requires that recovery plans contain: 1) objectives, measurable goals for delisting; 2) a comprehensive list of the actions necessary to achieve the delisting goals; and 3) an estimate of the cost and time required to carry out those actions. In addition, NOAA Recovery Planning Guidelines suggest that recovery plans include an assessment of the factors that led to population declines and/or which are impeding recovery. Finally, it is important that the plans include a comprehensive monitoring and evaluation program for gauging the effectiveness of recovery measures and overall progress toward recovery (USDI 1988).

**Recreation** – Leisure time activity such as swimming, picnicking, boating, hunting, and fishing (FR 38 (174:24803)).

- **Recreation, developed** – Recreation that requires facilities that, in turn, result in concentrated use of an area. Examples of developed recreation areas are campgrounds and ski areas; facilities in these areas might include roads, parking lots, picnic tables, toilets, drinking water, ski lifts, and buildings (2).
- **Recreation, dispersed** – A general term referring to recreation use outside developed recreation sites; this includes activities such as scenic driving, hiking, backpacking, hunting, fishing, snowmobiling, horseback riding, cross-country skiing, and recreation in primitive environments (2).

**Recreation analysis area (RAA)** – Areas on the HCNRA with similar recreation use patterns and opportunities. All land, including wilderness, has been assigned to an RAA.

**Recreation opportunity** – The availability of choices for users to participate in the recreational activities they prefer within the settings they prefer.

**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.

- **Semi-primitive nonmotorized (SPNM)** – 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.
- **Semi-primitive motorized (SPM)** – 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 an opportunity to use motorized equipment while in the area.
- **Roaded natural (RN)** – Provide visitors with an opportunity to meet and enjoy other visitors and to 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 semi-primitive and primitive settings is not present. Both motorized and nonmotorized forms of recreation take place. All overnight and day-use facilities occur in this setting.
- **Rural (R)** – Provide visitors with a high probability of meeting and enjoying others. Convenience in access to, and use of, sites are important. Challenge, risk, and testing of skills are relatively unimportant, except for some specific activities such as downhill skiing.

**Recreation Opportunity Spectrum (ROS) Setting Indicators** – Seven setting indicators represent aspects of recreation settings that can be influenced by management (FSM 2310.3).

- **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** – 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** – 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** – 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** – 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** – 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** – 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.

**Recreation visit** – An entry of one person to a recreation site or area of land or water for the purpose of participating in one or more recreation activities for an unspecified period (6).

**Recreation visitor hour** – The presence of one or more persons on a NFS developed site or general forest area for the purpose of participating in one or more recreation activities during the continuous, intermittent, or simultaneous periods of time aggregating 60 minutes (6).

**Recreation visitor day (RVD)** – One person recreating for 12 hours or 12 persons recreating for one hour, or an equivalent combinations of use and users (6).

**Recreational capacity** – The number of people that can take advantage of the recreation opportunity at any one time without substantially diminishing the quality of the experience or the biophysical resources (2).

**Recreational facilities** – Facilities associated with or required for outdoor recreational activities and includes, but are not limited to, parks, campgrounds, hunting and fishing lodges, and interpretive displays (16).

**Recreational section** – Refer to Wild and Scenic River.

**Redd** – Nest in gravel of stream bottom where fish deposit eggs.

**Reforestation** – Treatments or activities that help to regenerate stands of trees after disturbances such as timber harvest or wildfire. Typically, reforestation activities include preparing soil, controlling pests, and planting seeds or seedlings (12).

**Refugia** – Areas that have not been exposed to great environmental changes and disturbances undergone by the region as a whole; refugia provide conditions suitable for survival of species that may be declining elsewhere (12).

**Regeneration** – The process of establishing new plant seedlings, whether by natural means or artificial measures (planting) (12).

**Regulations** – Generally refers to the CFR, Title 36, Chapter II, which covers management of the FS (2).

**Rehabilitate** – To repair and protect certain aspects of a system so that essential structures and functions are recovered, even though the overall system may not be exactly as it was before (12).

**Relic** – Persistent remnants of formerly widespread fauna or flora species existing in certain isolated areas or habitats. The existence of an organism or species in an otherwise extinct taxon (phylum, order, family, genus, or species) from an earlier time that has survived in an environment that has undergone considerable change (13).

**Research Natural Area (RNA)** – An area set aside by a public or private agency specifically to preserve a representative sample of an ecological community, primarily for scientific and educational purposes. In USDA FS usage, Research Natural Areas are areas designated to ensure representative samples of as many of the major naturally-occurring plant communities as possible (4).

**Resident fish** – Fish that spend their entire life in freshwater; examples include bull trout and westslope cutthroat trout (12).

**Residential lands** – Lands within the HCNRA developed for residential purposes as of June 13, 1994 and which are assigned to the Residential land category in 36 CFR 292.22 of the *Private LURs* (16).

**Resource** – Anything which is beneficial or useful – be it animal, vegetable, mineral, a location, a labor force, a view, an experience, etc. Resources, in the context of land use planning, thus vary from such commodities as timber and minerals to such amenities as scenery, scenic viewpoints, or recreation opportunities (4).

**Resource Advisory Council (RAC)** – RACs were established by the BLM, under the *Federal Advisory Committee Act* to provide a forum for nonfederal partners to engage in discussion with agency managers regarding management of federal lands.

**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) (8, 10).

**Resource allocation** – The action of apportioning the supply of a resource to specific uses or to particular persons or organizations (4).

**Revetment** – A stabilizing or reinforcing structure used to support an embankment.

**Ridge tops** – Mid to lower elevation (above 3,000 ft with < 35% slope) mountain ridges such as Memaloose, Buckhorn, Experiment Creek Point, and Summit Ridge. Ridge top grasslands are bluebunch wheatgrass/Sandberg's bluegrass or, occasionally, Idaho fescue/bluebunch wheatgrass, and Idaho fescue/prairie junegrass (high elevation) communities, most of which are in mid-seral or later stages. Interspersed on shallow soil scablands are communities of bluebunch wheatgrass associated with plants such as various buckwheats or buckwheat associated with Sandberg's bluegrass.

**Ridge tops-montane** – Higher elevation ridge tops (< 3,000 ft with > 35% slope) such as: Sour Apple Flat, Monument Ridge, Grave Point, and Grassy Knoll. It is expected that these areas had a longer fire interval than lower elevation ridges and were greater attractants for native ungulates due to extensive forests (edge effect) near grassland ridges. These grasslands are varied, and intermingled with shrublands and forested areas. They

contain Idaho fescue in association with bluebunch wheatgrass, or elk sedge, or Hood's sedge. These communities trend toward intermixes of pinegrass and elk sedge as fringe tree density increases.

**Riparian area** – Areas with distinctive soils and vegetation between a stream or other body of water and the adjacent upland area. It includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation (10).

**Riparian Habitat Conservation Areas (RHCAs)** – Portions of watershed where riparian-dependent resources receive primary emphasis and management activities are subject to specific standards and guidelines. RHCAs 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 (10).

**Riparian management objectives (RMOs)** – Quantifiable measures of stream and streamside conditions that define good fish habitat, and serve as indicators against which attainment, or progress toward attainment, of the riparian goals will be measured (10).

**Riverine** – On or near the banks of a river; riparian.

**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).

- **Classified Roads** – Roads wholly or partially within or adjacent to NFS lands that are determined to be needed for long-term motor vehicle access, including State roads, county roads, privately owned roads, NFS roads, and other roads authorized by the FS (36 CFR 212.1).
- **Temporary Roads** – Roads authorized by contract, permit, lease, other written authorization, or emergency operation not intended to be a part of the forest transportation system and not necessary for long-term resource management (36 CFR 212.1).
- **Unclassified Roads** – Roads on NFS lands that are not managed as part of the forest transportation system, such as unplanned roads, abandoned travel ways, and off-road vehicle tracks that have not been designated and managed as a trail; and those roads that were once under permit or other authorization and were not decommissioned upon the termination of the authorization (36 CFR 212.1).

**Road, closed** – A road with all use suspended year-long by an active form of facility management utilizing regulations and appropriate enforcement to secure and ensure user compliance with closure.

**New road construction** – Activity that results in the addition of forest classified or temporary road miles (36 CFR 212.1).

New construction activities may include vegetation clearing and grubbing, earthwork, drainage installation, instream activities, pit development or expansion, surfacing (including paving), and aggregate placement.

**Road decommissioning** – Activities that result in the stabilization and restoration of unneeded roads to a more natural state (36 CFR 212.1, FSM 7703). Road decommissioning activities include revegetation, recontouring, water barring, roadbed scarification or ripping, culvert removal, berm construction, and side cast pullback.

**Road maintenance** – The ongoing upkeep of a road necessary to retain or restore the road to the approved road management objective (FSM 7712.3).

**Road maintenance levels** – Maintenance levels define the level of service provided by, and maintenance required for, a specific road. Maintenance levels must be consistent with road management objectives and maintenance criteria. Roads assigned to maintenance levels 2-5 are either constant service roads or intermittent service roads during the time they are open to traffic.

- **Maintenance Level 1** – Assigned to intermittent service roads during the times they are closed to vehicular traffic. The closure period must exceed 1 year. Basic custodial maintenance is performed to keep damage to adjacent resources to acceptable levels and to perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are "prohibit" and "eliminate."

- Roads receiving Level 1 maintenance may be of any type, class, or construction standard, and may be managed at any other maintenance level during the time they are open for traffic. However, while being maintained at Level 1, they are closed to vehicular traffic, subject to prohibitions and restrictions, and may be available and suitable for nonmotorized users.
- Level 1 maintenance activities include road condition surveys, evaluation, and monitoring of maintenance needs. Activities include limited equipment operation, opening closed roads, manual cleaning of drainage structures, and vegetation management that stabilizes or reduces erosion. Repairs are scheduled and completed within funding limitations when critical resource damage is reported.
- Roadway activities including blading, clearing logs, and noncritical repairs that can be delayed are accomplished when the road is placed in an active status.
- **Maintenance Level 2** – Assigned to roads open for use by high-clearance vehicles. Providing access for passenger cars is not a consideration. Traffic is normally minor, usually consisting of administrative, permitted, dispersed recreation, and/or other specialized uses. Log haul may occur. Appropriate traffic management strategies are either to discourage or prohibit passenger cars or to accept or discourage high-clearance vehicles.
- Level 2 maintenance activities include roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance and surface replacement. Drainage function and soil stabilization are of prime importance. Many roads in this category have grass in the travel way. User comfort is not a consideration.
- **Maintenance Level 3** – Assigned to roads open and maintained for travel by a prudent drivers in standard passenger cars. User comfort and convenience are not considered priorities.
- Roads in this maintenance level are typically low-speed, single-lane, with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Appropriate traffic management strategies are "encourage" or "accept." "Discourage" or "prohibit" strategies may be employed for certain classes of vehicles or users.
- Level 3 maintenance activities include roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance and surface replacement. Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads.
- **Maintenance Level 4** – Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double-lane and aggregate-surfaced. However, some roads may be single-lane. Some roads may be paved and/or dust abated. The most appropriate traffic-management strategy is "encourage." However, the "prohibit" strategy may apply to specific classes of vehicles or users at certain times.
- Level 4 maintenance activities include roadside brushing, hazard tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance and surface replacement. Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads.
- **Maintenance Level 5** – Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved. Some may be aggregate-surfaced and dust-abated. The appropriate traffic management strategy is "encourage."
- Level 5 maintenance activities include roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, logging out, slide and slip cleanup and repair, sign maintenance and surfacing replacement. Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads. All of the Level 5 roads on the Forest have a permanent (paved) surface.

**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.

- **Semi-primitive nonmotorized (SPNM)** – Most semi-primitive nonmotorized areas do not have developed roads. All motorized traffic is prohibited. Semi-primitive nonmotorized roads provide hiking or equestrian trails on closed or decommissioned roads.
- **Semi-primitive motorized (SPM)** – Semi-primitive motorized roads are generally used for four-wheel drive, logging, or ranching activities. Passenger-car use is discouraged by entrance conditions or signage. Users can expect SPM roads where there are no attractions such as viewpoints or trailheads.
- **Low-level SPM** – Native surface roads suitable for high-clearance vehicles but not passenger cars or vehicles towing trailers. Users may need to back vehicles for long distances when meeting oncoming traffic. Maintenance activities occur usually every five years or when resource needs are identified. Roads are allowed to "brush in" and users are responsible for removing trees blocking the road. Ruts and potholes are accepted if they do not contribute to sediment loading. Corresponds to road Maintenance Level 2 and Traffic Service Level D (abbreviated: 2-D).
- **High-level SPM** – Single-lane native surface road or road surfaced with spot rock, strip rock or pit run material suitable for high-clearance vehicles. The road may have infrequent turnouts. Pit run material is applied to the road surface, but is not grid rolled, leaving a rough, rocky surface that drains well and discourages passenger car use. User maintenance is the same as for the low-level SPM. This standard meets resource and safety needs and is the minimum standard for accessing attractions such as viewpoints or trailheads. Maintaining current road alignment, road surface type, and corridor width are emphasized. Corresponds to road Maintenance Level 2 and Traffic Service Level C (abbreviated: 2-C).
- **Roaded natural (RN)** – Roaded natural roads provide safe access for passenger cars. Maintenance activities generally occur annually or every two years, depending on funding and need. FS clears these roads of brush and logs. Surface maintenance increases at higher levels. Because of increased speeds, turnouts are needed more frequently. Open local roads and some collector roads within RN are managed for high-clearance vehicles. In such cases, road-maintenance standards defined for SPM would be used.
- **Low-level RN** – Road-surface type of either native or base course. Pit-run material is processed to provide a rough but suitable service for passenger cars. Dust increases during dry conditions, and the road provides good resource protection when wet. Corresponds to road Maintenance Level 3 and Traffic Service Level C (abbreviated: 3-C).
- **Medium-level RN** – Road-surface type of crushed aggregate, maintained for passenger cars. Usually maintained annually, surfaces may "washboard" and become dusty with increased use. Corresponds to road Maintenance Level 3 and Traffic Service Level C or B (abbreviated: 3-C or 3-B).
- **High-level RN** – Road-surface type of an aggregate that has been dust-abated or treated with soil or silicone stabilizers, or asphalt emulsions. A dust-free, smooth surface for passenger cars is the desired product. This standard is often applied to provide double-lane access to attractions such as viewpoints or campgrounds. Corresponds to road Maintenance Level 4 and Traffic Service Level B or A (abbreviated: 4-B or 4-A).
- **Rural (R)** – Rural is generally the highest standard of road. These arterial roads provide the main access to the HCNRA but generally lack the speeds and alignment provided by state highways. Roads are double-lane with a road-surface treatment and generally 24 feet wide. The road has center striping and

often stripes marking the shoulders. Corresponds to a road Maintenance Level 5 and Traffic Service Level A (abbreviated: 5-A).

**Road, open** – A road that has no use restrictions or regulations imposed and is available for use by vehicles at any time during the year.

**Road reconstruction** – Activity that results in improvement or realignment of an existing classified road as defined below. Reconstruction activities may include vegetation clearing and grubbing, earthwork, drainage installation, instream activities, surfacing (including paving), and aggregate placement.

- **Road improvement** – Activity that results in an increase of an existing road's traffic service level, expands its capacity, or changes its original design function.
- **Road realignment** – Activity that results in a new location of an existing road or portions of an existing road and treatment of the old roadway (36 CFR 212.1).

**Road restoration** – Road restoration activities are commensurate with the assigned maintenance level and include storm proofing, bridge replacement, installation of drainage dips and water bars, culvert installation and upgrade, surface shaping, and draining, surface material processing. Refer to **Road Maintenance**.

**Road spur** – A dead-end road, usually with a length of 0.5 miles or less.

**Roads subject to the Highway Safety Act** – NFS roads open to use by the public for standard passenger cars. This includes roads with access restricted on a seasonal basis and roads closed during extreme weather conditions or for emergencies, but which are otherwise open for general public use.

Road surface types –

- **Asphalt/Concrete** – A well-graded aggregate and asphalt cement.
- **Aggregate** – Stone, slag, gravel, or any other hard, inert, mineral material meeting certain specified quality requirements for use in a road pavement or surfacing structure.
- **Chip seal** – A road surface treatment consisting of one or more spray applications of asphalt followed immediately by an application of aggregate (chips) on a paved surface.
- **Grid-rolled** – Aggregate consisting of native materials of a quality that can be taken directly from a given source, without crushing or screening, and broken down to a specified maximum dimension on the road by grid-rolling.
- **Paved** – One or more bituminous bound layers of aggregate placed on a prepared road foundation.
- **Pit run** – Aggregate consisting of native materials from a given source with a maximum size and grading suitable for placing directly on a road without crushing or screening.
- **Native surface** – A road surface consisting of soil or aggregate materials naturally existing at the road location.
- **Spot rock** – Aggregate placed on a road as a pavement or surfacing structure in designated areas that are not continuous throughout the entire length of the road.
- **Strip rock** – Aggregate placed on a road as a surfacing structure in designated areas or portions of a road greater than 200 feet in length but not continuous throughout the entire length of the road.
- **Surface treated** – One or more applications of asphalt or other processed or natural materials to a road surface to provide traction, abate dust, protect, or renew the surface without increasing pavement structural capacity. Surface treatment is commensurate with existing surface.

**Runoff (surface)** – Fresh water from precipitation and melting ice that flows on the earth's surface into nearby streams, lakes, wetlands, and reservoirs (12).

**Salmonids** – Fishes of the family Salmonidae, including salmon, trout, chars, whitefish, ciscoes, and grayling (12).

**Salvage** – Harvest of trees that are dead, dying, or deteriorating due to fire, wind, insect or other damage, or disease (12).

**Salvage cutting** – Salvage cuttings are made for the primary purpose of removing trees that have been or are in imminent danger of being killed or damaged by injurious agents other than competition between trees. Damage to forests from fungi, insects, fire, wind, and other agents occurs almost continuously. The goals of salvage cutting may be to: 1) provide space vacancies that may be claimed by younger and more vigorous trees of desirable species to increase stand resilience or move stands from a seral/structural stage above HRV to another seral/structural stage which the HRV analysis shows to be deficit; 2) reduce extremely heavy dead wood fuel loadings and thereby reduce the negative impacts of high intensity fire that may damage soils, watersheds, long-term site productivity potential, and air quality; 3) remove damaged, dying, or dead tree considered hazardous to forest users or facilities and improvements or access routes.

**Sanitation cutting** – Sanitation cuttings involve the elimination of trees that have been attacked or appear in imminent danger of attack by dangerous insects and fungi in order to prevent these pests from spreading to other trees. Sanitation cuttings differ from other forms of salvage cuttings only to the extent that they are combined with or represent precautions to reduce the spread of damaging organisms to the residual stands. They may also be undertaken in anticipation of attack in attempts to forestall the establishment of damaging organisms. They can be and usually are combined with salvage cuttings.

**Saqáanma** – Nez Perce Indian word for the Gorge People of the Wallowa Band.

**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.

**Savannah** – The transitional biome between grassland and desert or desert and rainforest, typically having drought resistant vegetation dominated by grasses with scattered tall trees.

**Scabland** – A region characterized by elevated tracts of rocky ground with little or no soil cover.

**Scale** – 1) The level of resolution under consideration (for example, broad scale or fine scale); 2) the ratio of length on a map to true length (12).

**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).

**Scenic class** – Scenic class indicates the importance or value of a particular landscape determined by constituent information (17).

Scenic easement – Refer to Conservation easement

**Scenic integrity** – Scenic integrity is a measure of the degree to which a landscape is visually perceived to be "complete." It is used to describe an existing situation, an objective for management, or desired future conditions (17).

- **Very high scenic integrity** – scenery with fully intact landscape features and scenic compositions presenting the optimal landscape character in complete harmony, with very minute, if any, scenic discordance. Due to the optimal scenic integrity of the physical, biological, and cultural features in these scenic compositions, the landscape character and sense of place are expressed at the highest possible level. Very high scenic integrity is most compatible with wilderness, backcountry, biophysical, or cultural preserves, and other special classification areas.
- **High scenic integrity** – scenery with whole or nearly intact landscape features and scenic compositions that present the optimal landscape character completely or nearly in full, and contain scenic discordances that are not evident.
- **Moderately high scenic integrity** – scenery with slightly altered landscape features and compositions in which the valued landscape character is the dominant scenic impression, yet minor discordance is apparent, but visually subordinate. The "moderate" level of scenic integrity in the Scenery Management Handbook has been split into two categories to reflect more accurately the scenic conditions on the HCNRA.
- **Moderately low scenic integrity** – scenery with altered landscape features and compositions that display a beginning dominance of valued landscape character expression and readily noticeable discordance.
- **Low scenic integrity** – scenery with obviously altered landscape features and compositions that dominate yet still express some aspects of valued landscape character. The scenic harmony of the valued landscape character is seriously fragmented and barely restorable within reasonable periods and resource expenditures.
- **Very low scenic integrity** – scenery with extremely altered landscape features and composition that no longer sustain significant aspects of valued landscape character. The scenic harmony of the optimal landscape character does not exist and its restoration may be impossible if not unrealistic.

Scenic river areas – Refer to Wild and Scenic River.

Scenic section – Refer to Wild and Scenic River.

**Scoping process** – A part of the NEPA process; the early stages of preparation of an environmental impact statement, early and open activities used to solicit public opinion, receive comments and suggestions, and determine the scope and significance of the issues to be considered in the development and analysis of a range of actions, alternatives, and impacts to be considered. Scoping may involve public meetings, telephone conversations, mailings, letters, or other contacts (40 CFR 1501.7).

**Screening** – The reduction or elimination of the visual impact of any structure or land modification as seen from any public travel route within the HCNRA (16).

**Seélwe** – Nez Perce Indian word for Selway River.

**Sediment** – Solid materials, both mineral and organic, in suspension or transported by water, gravity, ice, or air; may be moved and deposited away from their original position and eventually will settle to the bottom (12).

**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 (15).

**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.

**Self-reliance** – Reliance on one's own capabilities, judgment, or resources through application of outdoor skills in an environment that offers a high degree of risk and challenge.

**Sensitive species** – Plant or animal species identified by a Regional Forester for which population viability is a concern either: 1) because of significant current or predicted downward trends in population numbers or density; or 2) because of significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution. Those species that have appeared in the FR as proposed for classification or are under consideration for official listing as endangered or threatened species, that are on an official state list, or that are recognized by the Regional Forester as needing special management to prevent placement on federal or state lists (2, 12).

**Seral** – Refers to the stages that plant communities go through during the progression in structure and composition over time. Development stages have characteristic structure and plant species composition. In a forest, for, example, early seral refers to seeding or sapling growth stages; mid seral refers to pole or medium saw timber growth stages; and mature or late seral forest refers to mature and old growth stages. Refer to **forested vegetation structure** (10, 12).

**Seral stage** – The developmental phase of a forest stand or rangeland with characteristic structure and plant species composition (12).

**Service day** – One person on NFS lands for any portion of a 24-hour day. Used to report outfitter and guide use. One service day = two RVDs (6).

**Shade-intolerant** – Species of plants that do not grow well in or die from the effects of too much shade. Generally, these are fire-tolerant species (12).

**Shade-tolerant** – Species of plants that can develop and grow in the shade of other plants. Generally, these are fire-intolerant species (12).

**Short-term** – Generally refers to a period of 10 years or less (12).

**Silviculture** – The practice of manipulating the establishment, composition, structure, growth, and rate of succession of forests to accomplish specific objectives and meet desired future conditions.

**Sink habitat** – Habitat in such conditions that result in a negative or declining population growth for a particular species (10).

**Site** – A specific location of an activity or project, such as a campground, a lake, or a stand of trees to be harvested (12).

**Social trails** – Unofficial trails created by the public to access other recreation sites or points of interest.

**Society** – A group of people who have a common homeland, are interdependent, and share a common culture (6).

**Soil** – The earth material that has been so modified and acted upon by physical, chemical, and biological agents that it will support rooted plants (12).

**Soil function** – The characteristic physical and biological activity of soils that influences productivity, capability, and resiliency (6).

**Soil productivity** – The capacity of a soil to produce plant growth, due to the soil's chemical, physical, and biological properties (such as depth, temperature, water-holding capacity, and mineral, nutrient, and organic matter content) (11).

**Soil stability** – 1) Mass stability of the soil profile or resistance to mass failure; 2) stability of the soil surface with respect to accelerated sheet, rill, and gully erosion processes (6).

**Soil surveys** – All soil surveys are made by examining, describing, and classifying soils in the field and delineating their areas on maps. The map scale for field mapping must be large enough to allow areas of minimum size to be delineated legibly. Recognition of the different soil survey levels is helpful for communicating about soil surveys and maps, even though the levels cannot be sharply separated from each other. The order of a survey is consequence of field procedures, the minimum size of delineation, and the kinds of map units that are used.

- **Order I surveys** – for very intensive land uses requiring very detailed information about soils, generally in small areas. The information can be used in planning for irrigation, drainage, truck crops, citrus or other specialty crops, experimental plots, individual building sites, and other uses that require a detailed and very precise knowledge of the soils and their variability.
- **Order II surveys** – for intensive land uses that require detailed information about soil resources for making predictions of suitability for use and of treatment needs. The information can be used in planning for general agriculture, construction, urban development, and similar uses that require precise knowledge of the soils and their variability.
- **Order III surveys** – for land uses that do not require precise knowledge of small areas or detailed soils information. Such survey areas are usually dominated by a single land use and have few subordinate uses. The information can be used in planning for range, forest, recreational areas, and in community planning.
- **Order IV surveys** – for extensive land uses that need general soil information for broad statements concerning land–use potential and general land management. The information can be used in locating, comparing, and selecting suitable areas for major kinds of land use, in regional land–use planning, and in selecting areas for more intensive study and investigation.
- **Order V surveys** – to collect soils information in very large areas at a level of detail suitable for planning regional land use and interpreting information at a high level of generalization. The primary use of this information is selection of areas for more intensive study.

**Solid waste** – Discarded solid waste materials resulting from mining, industrial, commercial, agricultural, silvicultural, and community activities. Does not include domestic sewage or pollutants such as silt, or dissolved materials in irrigation return flows (16).

**Source habitat** – Habitat in such conditions that result in a positive or increasing population growth for a particular species. Those characteristics of vegetation that support long-term wildlife species persistence, or characteristics of vegetation that contribute to stable or positive population growth for a species in a specified area and time. Source habitats are described using dominant vegetation cover type and structural stage combinations that can be estimated reliably at the 247-acre (100-hectare) patch scale. Various combinations of these cover type–structural stages make up the source habitats for the terrestrial species discussed in this FEIS, and provide the range of vegetation conditions required by these species for food, reproduction, and other needs (Wisdom et al 2000).

**Spatial** – Related to or having the nature of space (12).

**Special use authorization** – a permit, term permit lease, or easement which allows occupancy, use, rights, or privileges of NFS lands (36 CFR 251.51).

**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.

**Species** – A population or series of populations of organisms that can interbreed freely with each other but not with members of other species; “spp.” is the abbreviation signifying multiple species (12).

**Sprouter** – Flora capable of vegetative reproduction from roots or stems.

**Stand** – A stand is a spatially continuous group of trees and associated vegetation having similar structures and growing under similar soil and climactic conditions (Oliver and Larson 1990).

**Stand composition** – The vegetative species that make up the stand (12).

**Stand density** – Refers to the number of trees growing in a given area, usually expressed in trees per acre (12).

**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).

**Standards** – Mandatory measures that place limitations on management activities to ensure compliance with applicable laws and regulations or to limit the discretion authority in making decision on projects. Standards are limited to those actions that are within the authority and ability of the agency to meet or enforce. They establish procedures, set thresholds, constrain activities, prescribe remedies, and define penalties. Examples of standards include density for road systems, cover for elk herds, buffers for riparian areas, and levels of social encounters for recreation experience (1).

**Standards and guidelines** – Principles specifying conditions or levels of environmental quality to be achieved (10).

**Stream classes** – Classification of streams based on the present and foreseeable uses made of the water and the potential effects of on-site changes in downstream uses. Four classes are defined as:

- **Class I** – Perennial or intermittent streams that: provide a source of water for domestic use; are used by large numbers of anadromous fish or significant sports fish for spawning, rearing, or migration; and/or are major tributaries to the other Class I streams.
- **Class II** – Perennial or intermittent streams that: are used by fish for spawning, rearing, or migration; and/or may be tributaries to Class I streams or other Class II streams.
- **Class III** – Other perennial streams not meeting higher-class criteria.
- **Class IV** – Other intermittent streams not meeting higher class criteria (6).

**Stringers** – Relatively narrow areas suitable to be occupied by forested plant associations within a landscape that is otherwise unsuitable due to site or environmental factors.

**Structure** – 1) Any permanent building or facility, or part thereof such as barns, outhouses, residences, and storage sheds including transmission line systems, substations, commercial radio transmitters, relays or repeater stations, antennas, and other electronic sites and associated structures; or 2) the size and arrangement of vegetation, both vertically and horizontally (12, 16).

**Structural stage** – A stage of development of a vegetation community that is classified on the dominant processes of growth, development, competition, and mortality (12).

**Subalpine** – A terrestrial community that generally is found in harsher environments than the montane terrestrial community. Subalpine communities are generally colder than montane and support a unique clustering of wildlife species (12).

**Subbasin** – A drainage area of approximately 800,000 to 1,000,000 acres, equivalent to a 4<sup>th</sup> field HUC (10).

**Subnivean** – Under the snow.

**Subsistence** – Customary and traditional uses of wild renewable resources (plants and animals) for food, shelter, fuel, clothing, tools, etc. (12).

**Subwatershed** – A drainage area of approximately 20,000 acres, equivalent to a 6<sup>th</sup>-field HUC (12 digit). Hierarchically, subwatersheds (6<sup>th</sup> field HUC) are contained within watersheds (5<sup>th</sup> field HUC, which in turn are contained within a subbasin (4<sup>th</sup> field HUC) (10).

**Succession** – A predictable process of changes in structure and composition of plants and animal communities over time. Conditions of the prior plant community or successional stage create conditions that are favorable for the establishment of the next stage. The different stages in succession are often referred to as seral stages (10).

**Suitability (suitable)** – The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices (6, 15).

**Surface fire** – A fire that burns surface litter, dead woody fuels, other loose debris on the forest floor, and some small vegetation without significant movement into the overstory, usually with a flame less than a few feet high (12).

**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.

**Talus** – A slope formed by the accumulation of rock debris at the base of a cliff (14).

**Tamaánma** – Nez Perce Indian word for the Looking Glass band of the Nez Perce Tribe.

**Terrane** – Distinct section of Earth's crust: a section of Earth's crust that is defined by clear fault boundaries, with stratigraphic and structural properties that distinguish it from adjacent rocks. Also, called terrain.

**Teqilpíse lipí** – Nez Perce Indian word for dip nets.

**Terrestrial** – Pertaining to the land (12).

**Thermal cover** – Cover used by animals to protect them against weather (12).

**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 (12).

**Threatened species** – Species listed under the *ESA* that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range (12).

**Tiering** – Refers to the coverage of general matters in broader environmental impact statements (such as the *Forest Plan*) with subsequent narrower statements or environmental analyses (such as the CMP, or ultimately, site-specific statements) incorporating, by reference, the general discussions and concentrating solely on the issues specific to the statement subsequently prepared (40 CFR 1508.28).

**Tííweni'cpe tííwe** – Nez Perce Indian word for Boulder Creek.

**Total maximum daily load (TMDLs)** – A calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the waterbody can be used for the purposes the state has designated. The calculation must also account for seasonal variation in water quality. The *Clean Water Act*, Section 303, establishes the water quality standards and TMDL programs (EPA website <http://www.epa.gov/owow/tmdl/intro.html#definition>)

**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.

**Traffic service level** – Describes the significant characteristics and operating conditions of a road (FSH 7709.56, Ch.4)

- **Level A** – Free-flowing, mixed traffic with stable and smooth road surface. Provides service to all traffic with safety at 25–35 mph.
- **Level B** – Congested during heavy traffic, with slower speeds and periodic dust. Provides service to traffic with any legal-size load or vehicle.
- **Level C** – Flow interrupted by limited passing facilities. Some vehicles will have difficulty negotiating certain segments. Design speeds are generally low. May not be stable under all traffic or weather conditions. Use and traffic volumes are limited.
- **Level D** – Flow is slow and may be blocked by an activity. Two-way traffic is difficult and may require backing. Road surface is rough and irregular. Travel with low clearance vehicles is difficult. Type of road not designated for mixed traffic.

**Transportation facility jurisdiction** – The legal right to control or regulate use of a transportation facility derived from fee title, an easement, an agreement, or other similar method. While jurisdiction requires authority, it does not necessarily reflect ownership.

**Travel route** – A route, such as a county or NFS road or river or trail, that is open for use by members of the public (16).

**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. Refer to **Appendix A** for the complete text of the *Treaty of 1855*.

**Treaty resource** – A resource associated with the language in a specific treaty, usually interpreted to include collections or association of species; not limited to a single species. For example: “fish” may include all fish species (some treaties included rights to erect temporary houses for curing fish); “roots and berries” may include a wide variety of plants that will encompass the nature of the plants as they were used historically; grasses are necessarily included for the treaty reserved right to graze cattle or livestock. Hunting rights may include all species of animals hunted in historic and prehistoric times. As these apply to the FS, they are public natural resources on NFS lands, to which American Indian tribes have reserved certain rights for taking or gathering.

**Tree decadence** – Trees per acre with spiked or deformed tops, bole, or root decay.

**Trend** – As used to define range conditions, the direction of change in range or forage condition or in ecological status (6).

**Tribe** – Term used to designate any American Indian tribe, band, nation, or other organized group or community (including any Alaska Native village or regional or village corporation as defined in or established pursuant to the *Alaska Native Claims Settlement Act*) which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians (12).

**Trophic** – Nourishment, pertaining to nutrition; used to indicate the mode of nutrition of an organism or nutrient utilized (13).

**Trust resource** – A resource or property that constitutes a corpus or object of trust that is held in trust status by another (trustee) on behalf of a beneficiary. A trustee is usually a governmental entity (Secretary of the Interior) who is assigned a trust duty to care for resources that are for the exclusive use and benefit of Indian tribes and/or their members. A beneficiary may be an Indian tribe or individual tribal member, who has property being held in trust status, for example: land, money, timber, or any Indian-owned asset.

**Underburning** – A type of prescribed fire that burns ground vegetation and ladder fuels on the surface under a live tree overstory to meet specific management and/or resource objectives.

**Understory** – Lower vegetation in a forest, the small trees and other woody species/shrubs growing under a more-or-less continuous cover of branches and foliage formed collectively by the taller adjacent trees and other woody growth.

**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 (12).

**Uneven-aged management (group selection)** – The group selection variant of uneven-aged management is designed to facilitate the establishment of shade intolerant species, reduce damage to the residual stand, and lengthen the cyclic entry period. The opening created under the group selection prescription would often be no larger than one to two tree heights (as influenced by aspect and slope) so as not to lose the site protection afforded by the surrounding trees. Size, shape, and location of groups should be designed to achieve landscape character goals and scenic integrity objectives.

**Uneven-aged management (single-tree selection)** – This silvicultural system is intended to perpetuate uneven-aged stands composed of intermingled trees of differing ages, species, and sizes. Individually selected trees are removed to maintain a desired range of tree sizes over a prescribed distribution. Cyclic entries designed to control the structure and species composition and provide the openings necessary for establishment and growth of the continuously occurring regeneration are a function of the site quality and resource considerations.

**Ungulates** – Hoofed, plant-eating mammals such as elk, deer, and cattle (12).

**Upland** – The portion of the landscape above the valley floor or stream (12).

**Unroaded area** – Portion of the NFS that does not contain classified roads. Refer to **Road**.

**Unsuitable range** – Areas of land that should not be used by livestock because of unstable soils (6).

**Unwanted wildland fire** – A human or naturally-caused fire that does not meet land management objectives. Refer to **wildland fire** (12).

**Upper slope** – Located below the plateau top (e.g., Snake-Imnaha flat-top ridges) and above Snake and Imnaha canyon benches. This does not include the upper slopes of ridges falling below the structural bench level in the canyons. Grasslands are limited to south aspects and shallow soil ridge tops, horizontal scabland stringers in basaltic rim-controlled landscapes, or the plateau edge. Bluebunch wheatgrass often occurs with shallow soil scabland plants such as various buckwheats.

**Valid existing right** – Mining claims that existed as of December 31, 1975, may continue to be held and worked subject to valid existing rights determinations and regulations at 36 CFR 228 (A). All other mineral rights in the

HCNRA were withdrawn from location, entry, or patent of minerals under the federal mining laws and from disposition under all laws pertaining to mineral leasing.

**Valid existing rights determination** – If any significant surface disturbance is proposed in a plan of operation, a valid rights determination will be completed for the claim before the plan is processed (36 CFR 228 (A)). If the claim owner cannot prove that the claim had a discovery of a valuable mineral at the date of the *HCNRA Act* (December 31, 1975), the plan will not be accepted and the claim will be contested.

**Vascular plants** – Plants that have specialized tissues which conduct nutrients, water, and sugars, along with other specialized parts such as roots, stems, and reproductive structures. Vascular plants include flowering plants, ferns, shrubs, grasses, trees, and many others (12).

**Vector** – An organism that carries or transmits a pathogenic agent from one host to another.

**Vertebrate** – An animal with a backbone; mammals, fishes, birds, reptiles, and amphibians are vertebrates (12).

**Viability** – In general, viability means the ability of a population of a plant or animal species to persist for some specified time into the future.

**Viable population** – A population that is regarded as having the estimated numbers and distribution of reproductive individuals to ensure that its continued existence is well distributed in the project area (12).

**Water right** – A right to use surface water or ground water evidenced by a court decree or by a permit or certificate approved by the state water resources department. Statutory exempt uses of surface water and ground water are not water rights, nor are time-limited licenses. A perfected water right is defined by applicant name, source, purpose, amount (quantity, rate and duty), season of use, priority date, point of diversion, place of use, and certificate number.

**Watershed** – 1) The region draining into a river, river system or body of water; or (2) subdivisions within a subbasin, which generally range in size from 40,000 to 250,000 acres; the fifth level (10-digit) in the hydrologic hierarchy (*Federal Standards for Delineation of Hydrologic Unit Boundaries*, Dec. 2000).

**Watershed Condition Classes** – Watersheds are rated as Class 1, 2, or 3.

- **Class 1 Condition** – Watersheds exhibit high geomorphic, hydrologic, and biotic integrity relative to their natural potential condition. Drainage network is generally stable. Physical, chemical, and biological conditions suggest that soil, aquatic, and riparian systems are predominantly functional in terms of supporting beneficial uses.
- **Class 2 Condition** – Watersheds exhibit moderate geomorphic, hydrologic, and biotic integrity relative to their natural potential condition. Portions of the watershed may exhibit an unstable drainage network. Physical, chemical, and biological conditions suggest that soil, aquatic, and riparian systems are at risk in being able to support beneficial uses.
- **Class 3 Condition** – Watersheds exhibit low geomorphic, hydrologic, and biotic integrity relative to their natural potential condition. A majority of the drainage network may be unstable. Physical, chemical, and biological conditions suggest that soil, aquatic, and riparian systems do not support beneficial uses.

**Waw' ama'mayq'áal** – Nez Perce Indian word for August.

**Weed** – A plant considered undesirable, unattractive, or troublesome, usually introduced and growing without intentional cultivation (12).

**Wetlands** – Those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances do or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds (*Executive Order 11990, Section 7c*).

**Wild and Scenic River (WSR)** – Those rivers or sections of rivers designated as such by congressional action under the *Wild and Scenic Rivers Act of 1968*, as supplemented and amended. The segments of the Snake, Rapid, and Imnaha Rivers designated as components of the National Wild and Scenic Rivers System and any other river or segment thereof in the HCNRA hereafter designated. Wild and Scenic Rivers include all NFS lands within the designated Wild and Scenic River corridor (15). Within this document the following classifications are used:

- **Wild river areas** – Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.
- **Scenic river areas** – Those rivers or sections of rivers that are free of impoundments, with watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
- **Study river areas** – Those rivers formally designated by Congress to be studied under Sections 5(a) and 5(b) of the *Wild and Scenic Rivers Act*.

**Wilderness** – Areas designated by congressional action under *the Wilderness Act of 1964*. Wilderness is defined as undeveloped federal land retaining its primeval character and influence without permanent improvements or human habitation. Wildernesses are protected and managed to preserve their natural conditions, which generally appear to have been affected primarily by the forces of nature with the imprint of human activity substantially unnoticeable; have outstanding opportunities for solitude or a primitive and unconfined type of recreation; are of sufficient size to make practical their preservation, enjoyment, and use in an unimpaired condition; and may contain features of scientific, educational, scenic, or historical value as well as ecologic and geologic interest (2).

**Wilderness lands** – The Hells Canyon Wilderness, that portion of the Eagle Cap Wilderness in the HCNRA, and any other wilderness in the HCNRA hereafter designated as components of the National Wilderness Preservation System (15).

**Wilderness Recreation Opportunity Spectrum (WROS)** – The WROS system was developed in conjunction with the Recreation Opportunity System (ROS). The terminology is similar, although settings are described in terms of pristine, primitive, and semi-primitive settings for wilderness. The descriptions of the primitive and semi-primitive settings for WROS differ slightly from the ROS descriptions and, to avoid confusion with ROS settings, are not abbreviated as acronyms.

- **Pristine** – Visitation is very limited. Maintaining a natural and unmodified environment is emphasized. 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** – 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** – 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 difficult” or “most difficult” standards.

**Wildfire** – Refer to Unwanted wildland fire.

**Wildland** – A nonurban, natural area that contains uncultivated land, timber, range, watershed, brush or grassland.

**Wildland fire** – Any nonstructure fire, other than prescribed fire, that occurs in the wildland. This term encompasses fires previously called both wildfires and prescribed natural fires (USDA 1998).

**Wildland fire situation analysis (WFSa)** – A decision-making process that evaluates alternative management strategies against selected safety, environmental, social, economic, political, and resource management objectives (USDA 1998).

**Wildland fire suppression** – An appropriate management response to wildland fire that results in curtailment of fire spread and eliminates all identified threats from the particular fire. All wildland fire suppression activities provide for firefighter and public safety as the highest consideration, but minimize loss of resource values, economic expenditures, and/or the use of critical firefighting resources (USDA 1998).

**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 pre-stated resource management objectives in predefined geographic areas outlined in fire management plans (USDA 1998).

**Wildlife fish user day** – Recreation related to the consumptive and nonconsumptive wildlife and fish activities that aggregate into 12 visitor hours (6).

**Wind throw** – Trees blown over by the wind.

**Wiwíceenime wiwíce** – Nez Perce Indian word for Clearwater River.

**Wy-Kan-Ush-Mi-Wa-Kish-Wit** – Nez Perce Indian word for Spirit of the Salmon.

**Xeric** – Very dry region or climate; tolerating or adapted to dry conditions. Dry soil moisture regime. Some moisture is present but does not occur at optimum levels for plant growth. Irrigation or summer fallow is often necessary for crop production (3, 12).

**Xuyeélp** – Nez Perce Indian word for Columbia River.

**Yáwwinma** – Nez Perce Indian word for Rapid River.

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## **Appendix A**

### **Principal Legislation**

# Appendix A - Principal Legislation

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# Hells Canyon National Recreation Area Act

# Hells Canyon National Recreation Area Act

Public Law 94-199  
94th Congress, S. 322  
December 31, 1975

## An Act

To establish the Hells Canyon National Recreation Area in the States of Oregon and Idaho, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That (a) to assure that the natural beauty, and historical and archeological values of the Hells Canyon area and the seventy-one mile segment of the Snake River between Hells Canyon Dam and the Oregon-Washington border, together with portions of certain of its tributaries and adjacent lands, are preserved for this and future generations, and that the recreational and ecologic values and public enjoyment of the area are thereby enhanced, there is hereby established the Hells Canyon National Recreation Area.

(b) The Hells Canyon National Recreation Area (hereinafter referred to as the "recreation area"), which includes the Hells Canyon Wilderness (hereinafter referred to as the "wilderness"), the components of the Wild and Scenic Rivers System designated in section 3 of this Act, and the wilderness study areas designated in subsections 8(d) of this Act, shall comprise the lands and waters generally depicted on the map entitled "Hells Canyon National Recreation Area," dated May 1978 (P.L. 95-625), which shall be on file and available for public inspection in the office of the Chief, Forest Service, United States Department of Agriculture. The Secretary of Agriculture (hereinafter referred to as "the Secretary"), shall, as soon as practicable, but no later than eighteen months after the date of enactment of this Act, publish a detailed boundary description of the recreation area, the wilderness study areas designated in subsection 8(d) of this Act and the wilderness established in section 2 of this Act to the Federal Register.

Sec. 2. (a) The lands depicted as the "Hells Canyon Wilderness" on the map referred to in subsection 1(b) of this Act are hereby designated as wilderness.

(b) The wilderness designated by this Act shall be administered by the Secretary in accordance with the provisions of this Act or in accordance with the provisions of the Wilderness Act (78 Stat. 890), whichever is the more restrictive, except that any reference in such provisions of the Wilderness Act to the effective date of that Act shall be deemed to be a reference to the effective date of this Act. The provisions of section 9(b) and section 11 of this Act shall apply to the wilderness. The Secretary shall make such boundary revisions to the wilderness as may be necessary due to the exercise of his authority under subsection 3(b) of this Act.

Sec. 3. (a) Subsection 3(a) of the Wild and Scenic Rivers Act (82 Stat. 906) is hereby amended by adding at the end thereof the following clauses:

"(11) Rapid River, Idaho. The segment from the headwaters of the main stem to the national forest boundary and the segment of the West Fork from the wilderness boundary downstream to the confluence with the main stem, as a wild river.

"(12) Snake, Idaho and Oregon. The segment from Hells Canyon Dam downstream to Pittsburgh Landing, as a wild river; and the segment from Pittsburgh Landing downstream to an eastward extension of the north boundary of section 1, township 5 north, range 47 east, Willamette meridian as a scenic river."

(b) The segments of the Snake River and the Rapid River designated as wild or scenic river areas by this Act shall be administered by the Secretary in accordance with the provisions of the Wild and Scenic Rivers Act (82 Stat. 906), as amended and the Secretary shall establish boundaries of the Snake River segments thereof in accordance with subsection 3(b) of that Act: Provided, That the Secretary shall

Hells Canyon  
National Recreation  
Area, Oregon-Idaho.  
Establishment.  
16 USC 460gg.

Publication in the  
Federal Register.

Hells Canyon  
Wilderness  
designation.  
16 USC 460gg-1.

16 USC 1131 note.

16 USC 1274.

16 USC 1274 note.  
16 USC 1274.

establish a corridor  
along the segments  
of the Rapid River

and may not undertake or permit to be undertaken activities on adjacent public lands which would impair the water quality of the Rapid River segment: *Provided further*, That the Secretary is authorized to make such minor boundary revisions in the corridors as he deems necessary for the provision of such facilities as are permitted under the applicable provisions of the Wild and Scenic Rivers Act (82 Stat. 906).

16 USC 460gg-2.

Sec. 4. (a) Notwithstanding any other provision of law, or any authorization heretofore given pursuant to law, the Federal Power Commission may not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project work under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791a et seq.), within the recreation area: *Provided*, That the provisions of the Federal Power Act (41 Stat. 1063) shall continue to apply to any project (as defined in such act), and all of the facilities and improvements required or used in connection with the operation and maintenance of said project, in existence within the recreation area which project is already constructed or under construction on the date of enactment of this Act.

16 USC 791a.

(b) No department or agency of the United States may assist by loan, grant, license, or otherwise the construction of any water resource facility within the recreation area which the Secretary determines would have a direct and adverse effect on the values for which the waters of the area are protected.

16 USC 1276.

Sec. 5. (a) Section 5 (a) of the Act of October 2, 1968 (82 Stat. 906), as amended, is further amended by adding the following new paragraph:

"(57) Snake, Washington, Oregon, and Idaho: the segment from an eastward extension of the north boundary of section 1, township 5 north, range 47 east, Willamette meridian, downstream to the town of Asotin, Washington."

Asotin Dam,  
deauthorization.  
16 USC 460gg-3.

(b) The Asotin Dam, authorized under the provisions of the Flood Control Act of 1962 (76 Stat. 1173), is hereby deauthorized.

Sec. 6. (a) No provision of the Wild and Scenic Rivers Act (82 Stat. 906), nor of this Act, nor any guidelines, rules, or regulations issued hereunder, shall in any way limit, restrict, or conflict with present and future use of the waters of the Snake River and its tributaries upstream from the boundaries of the Hells Canyon National Recreation Area created hereby, for beneficial uses, whether consumptive or nonconsumptive, now or hereafter existing, including, but not limited to, domestic, municipal, stockwater, irrigation, mining, power, or industrial uses.

(b) No flow requirements of any kind may be imposed on the waters of the Snake River below Hells Canyon Dam under the provisions of the Wild and Scenic Rivers Act (82 Stat. 906), of this Act, or any guidelines, rules, or regulations adopted pursuant thereto.

Administration.  
16 USC 460gg-4.

Sec. 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 this Act.

Sec. 8. (a) Within five years from the date of enactment of this Act the Secretary shall develop and submit to the Committees on Interior and Insular Affairs of the United States Senate and House of Representatives a comprehensive management plan for the recreation area which shall provide for a broad range of land uses and recreation opportunities.

(b) In the development of such plan, the Secretary shall consider the historic, archeological, and paleontological resources within the recreation area which offer significant opportunities for anthropological research. The Secretary shall inventory such resources and may recommend such areas as he deems suitable for listing in the National Register of Historic Places. The Secretary's comprehensive plan shall include recommendations for future protection and controlled research use of all such resources.

(c) The Secretary shall, as a part of his comprehensive planning process, conduct a detailed study of the need for, and alternative routes of, scenic roads and other means of transit to and within the recreation area. In conducting such study the Secretary shall consider the alternative for upgrading existing roads and shall, in particular, study the need for and alternative routes of roads or other means of transit providing access to scenic views of and from the Western rim of Hells Canyon.

(d) The Secretary shall review, as to their suitability or unsuitability for preservation as wilderness, the areas generally depicted on the map referred to in section 1 of this Act as the "Lord Flat-Somers Point Plateau Wilderness Study Area," and the "West Side Reservoir Face Wilderness Study Area," and the "Mountain Sheep Wilderness Study Area," and report his findings to the President. The Secretary shall complete his review and the President shall, within five years from the date of enactment of this Act, advise the United States Senate and House of Representatives of his recommendations with respect to the designation of lands within such area as wilderness. In conducting his review, the Secretary shall comply with the provisions of section 3(d) of the Wilderness Act and shall give public notice at least sixty days in advance of any hearing or other public meeting concerning the wilderness study area. The Secretary shall administer all Federal lands within the study areas so as not to preclude their possible future designation by the Congress as wilderness. Nothing contained herein shall limit the President in proposing, as part of this recommendation to Congress, the designation as wilderness of any additional area within the recreation area, which is predominately of wilderness value.

(e) In conducting the reviews and preparing the comprehensive management plan, required by this section, the Secretary shall provide for full public participation and shall consider the views of all interested agencies, organizations, and individuals including but not limited to, the Nez Perce Tribe of Indians, and the States of Idaho, Oregon, and Washington. The Secretaries or Directors of all Federal departments, agencies, and commissions having a relevant expertise are hereby authorized and directed to cooperate with the Secretary in his review and to make such studies as the Secretary may request on a cost-reimbursable basis.

(f) Such activities as are as compatible with the provisions of this Act, but not limited to, timber harvesting by selective cutting, mining, and grazing may continue during development of the comprehensive management plan, at current levels of activity and in areas of such activity at the time of enactment of this Act. Further, in development of the management plan, the Secretary shall give full consideration to continuation of these ongoing activities in their respective areas.

Management plan, submittal to congressional committees.  
16 USC 460gg-5.

Scenic roads, study.

Wilderness suitability review, report to President.

Recommendations to Congress.

Public Notice of Meetings.

16 US 1132.

Sec. 9. (a) The Secretary is authorized to acquire such lands or interests in land (including, but not limited to, scenic easements) as he deems necessary to accomplish the purposes of this Act by purchase with donated or appropriated funds with the consent of the owner, donation, or exchange.

(b) The Secretary is further authorized to acquire by purchase with donated or appropriated funds such lands or interests in lands without the consent of the owner only if (1) he deems that all reasonable efforts to acquire such lands or interests therein by negotiation have failed, and (2) the total acreage of all other lands within the recreation area to which he has acquired fee simple title or, lesser interests therein without the consent of the owner is less than 5 per centum of the total acreage which is privately owned within the recreation area on the date of enactment of this Act *Provided*, That the Secretary may acquire scenic easements in lands without the consent of the owner and without restriction to such 5 per centum limitation: *Provided further*, That the Secretary may only acquire scenic easements in lands without the consent of the owner after the date of publication of the regulations required by section 10 of this Act when he determines that such lands are being used, or are in imminent danger of being used, in a manner incompatible with such regulations.

Scenic Easements.

(c) Any land or interest in land owned by the State of Oregon or any of its political subdivisions may be acquired only by donation. Any land or interest in land owned by the State of Idaho or any of its political subdivisions may be acquired only by donation or exchange.

"Scenic Easements"

(d) As used in this Act the term "scenic easement" means the right to control the use of land in order to protect esthetic values for the purposes of this Act, but shall not preclude the continuation of any farming or pastoral use exercised by the owner as of the date of enactment of this Act.

(e) The Secretary shall give prompt and careful consideration to any offer made by a person owning land within the recreation area to sell such land to the United States. The Secretary shall specifically consider any hardship to such person which might result from an undue delay in acquiring his property.

(f) In exercising his authority to acquire property by exchange, the Secretary may accept title to any non-Federal property, or interests therein, located within the recreation area and, notwithstanding any other provision of law, he may convey in exchange therefore any federally owned property within the same State which he classifies as suitable for exchange and which is under his administrative jurisdiction: *Provided*, That the values of the properties so exchanged shall be approximately equal, or if they are not approximately equal, they shall be equalized by the payment of cash to the grantor or to the United States as the circumstances require. In the exercise of his exchange authority, the Secretary may utilize authorities and procedures available to him in connection with exchanges of national forest lands.

(g) Notwithstanding any other provision of law, the Secretary is authorized to acquire mineral interests in lands within the recreation area, with or without the consent of the owner. Upon acquisition of any such interest, the lands and/or minerals covered by such interest are by this Act withdrawn from entry or appropriation under the United States mining laws and from disposition under all laws pertaining to mineral leasing and all amendments thereto.

(h) Notwithstanding any other provision of law, any Federal property located within the recreation area may, with the concurrence of the agency having custody thereof, be transferred without consideration to the administrative jurisdiction of the Secretary for use by him in carrying out the purposes of this Act. Lands Acquired by the Secretary or transferred to his administrative jurisdiction within the recreation area shall become parts of the national forest within or adjacent to which they are located.

Rules and  
Regulations.  
16 USC 460gg-7.

Sec. 10. The Secretary shall promulgate, and may amend, such rules and regulations, as he deems necessary to accomplish the purposes of this Act. Such rules and regulations shall include, but are not limited to –

(a) standards for the use and development of privately owned property within the recreation area, which rules or regulations the Secretary may, to the

extent he deems advisable, implement with the authorities delegated to him in section 9 of this Act, and which may differ among the various parcels of land within the recreation area;

(b) standards and guidelines to insure the full protection and preservation of the historic, archeological, and paleontological resources in the recreation area;

(c) provision for the control of the use of motorized and mechanical equipment for transportation over, or alteration of, the surface of any Federal land within the recreation area;

(d) provision for the control of the use and number of motorized and nonmotorized river craft: *Provided*, That the use of such craft is hereby recognized as a valid use of the Snake River within the recreation area; and

(e) standards for 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 this Act.

16 USC 460gg-8.

16 USC 1133.

Sec. 11. Notwithstanding the provisions of section 4(d) (2) of the Wilderness Act and subject to valid existing rights, all Federal lands located in the recreation area are hereby withdrawn from all forms of location, entry, and patent under the mining laws of the United States, and from disposition under all laws pertaining to mineral leasing and all amendments thereto.

Hunting and Fishing.

16 USC 460gg-9.

Sec. 12. The Secretary shall permit hunting and fishing on lands and waters under his jurisdiction within the boundaries of the recreation area in accordance with applicable laws of the United States and the States wherein the land and waters are located, except that the Secretary may designate zones where, and establish periods when, no hunting or fishing shall be permitted for reasons for public safety, administration, or public use and enjoyment. Except in emergencies, any regulations of the Secretary pursuant to this section shall be put into effect only after consultation with the appropriate State fish and game department.

Traditional and valid uses.

16 USC 460gg-10.

Civil and Criminal jurisdiction.

16 USC 460gg-11.

Sec. 14. Nothing in this Act shall diminish, enlarge, or modify any right of the States of Idaho, Oregon, or any political subdivisions thereof, to exercise civil and criminal jurisdiction within the recreation area or of rights to tax persons, corporations, franchises, or property, including mineral or other interests, in or on lands or waters within the recreation area.

16 USC 460gg-12.

Sec. 15. The Secretary may cooperate with other Federal agencies, with State and local public agencies, and with private individuals and agencies in the development and operation of facilities and services in the area in furtherance of the purposes of this Act, including, but not limited to, restoration and maintenance of the historic setting and background of towns and settlements within the recreation area.

Appropriation authorization.

16 USC 460gg-13.

Sec. 16. (a) There is hereby authorized to be appropriated the sum of not more than \$10,000,000 for the acquisition of lands and interests in lands within the recreation area.

(b) There is hereby authorized to be appropriated the sum of not more than \$10,000,000 for the development of recreation facilities within the recreation area.

(c) There is hereby authorized to be appropriated the sum of not more than \$1,500,000 for the inventory, identification, development, and protection of the historic and archeological sites described in section 5 of this Act.

Separability.

16 USC 460gg note.

Sec. 17. If any provision of this Act is declared to be invalid, such declaration shall not affect the validity of any other provision hereof.

Approved December 31, 1975.

#### LEGISLATIVE HISTORY:

HOUSE REPORT No. 94-607 accompanying H. R. 30 (Comm. on Interior and Insular Affairs). SENATE REPORT No. 94-153 (Comm. on Interior and Insular Affairs). CONGRESSIONAL RECORD, Vol. 121 (1975):

June 2, considered and passed Senate.  
Nov. 18, considered and passed House, amended, in lieu of H. R. 30.  
Dec. 12, Senate concurred in House amendment with amendments.  
Dec. 19, House concurred in Senate amendments.

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# Land Use Regulations

Note: This section is the legislation that is referred to as "Private Land Use Regulations.

Subpart E-Hells Canyon National  
Recreation Area-Private Lands

AUTHORITY: 89 Stat. 1117; 16 USC. 460gg-460gg-13.

SOURCE: 59 FR 30497. June 13, 1994, unless otherwise noted.

§ 292.20 Purpose and scope.

(a) *Purpose.* The Act establishing the Hells Canyon National Recreation Area (hereafter referred to as HCNRA) (16 USC 460gg-460gg-13) encourages the retention of traditional and valid uses of private land within the HCNRA, such as ranching, grazing, farming, timber harvesting, and the occupation of homes and lands associated therewith, as they existed at the time the HCNRA was established on December 31, 1975. To this end, the Act directs the Secretary of Agriculture to promulgate regulations establishing standards for the use and development of private land within the HCNRA and grants the Secretary limited condemnation authority to address situations where the standards are not met. The purpose of this subpart is to establish standards that would guide the Secretary's consideration of the use of the limited condemnation authority granted by the Act.

(b) *Scope.* The regulations in this subpart establish standards applicable to all private property within the boundaries of the HCNRA, including that within the boundaries of the Rapid, Snake, and Imnaha Wild and Scenic Rivers and the Hells Canyon Wilderness. The regulations in this subpart do not operate to restrict the use and development of private property; rather, they serve to inform the landowner of those uses that are compatible with purposes for which the HCNRA was established. Uses not compatible with these standards could result in the Secretary acquiring land or interests therein without a landowner's consent.

The regulations in this subpart, in and of themselves, do not effect a taking of private property, including valid, existing water rights, nor do the standards established in this subpart limit or restrict a private landowner's property use that is compatible with the purposes of the Act. The Responsible Official may use the regulations in this subpart solely to determine whether private land uses or developments are compatible with the purposes and direction of the Act and, if not, to determine whether the Secretary should consider initiating condemnation proceedings to acquire land or scenic easements.

§ 292.21 Definitions.

For the purposes of this subpart, the following terms are defined:

*Act* refers to the act of December 31, 1975, which established the Hells Canyon National Recreation Area (89 Stat. 1117; 16 U.S.C. 460gg-460gg-13).

*Archaeological sites* are those sites containing relics, artifacts, and other evidence of past human cultures including historic properties as defined by the National Historic Preservation Act.

*Commercial land* is land within the HCNRA developed for commercial purposes as of June 13, 1994 and which is assigned to the commercial land category (292.22).

*Condemnation* is the acquisition of lands or interests therein by the Secretary without the consent of the owner. In the case of the Act, condemnation is a limited authority that may be exercised by the Secretary only in the event that a standard or standards set forth herein are violated for all private land categories except mining lands. Where mining lands are involved, the Secretary may exercise his or her condemnation authority notwithstanding the fact that the mining land owner has complied with the relevant standards of this section.

*Conservation easement* or *Scenic easement* as defined in Section 9(d) of the Act "means the right to control the use of land in order to protect aesthetic values for the purposes of this Act, but shall not be acquired without the consent of the owner to preclude the continuation of any farming or pastoral use exercised by the owner as of the date of enactment of this Act."

*Dude ranching* is a business oriented primarily towards furnishing small groups with an outdoor recreational and educational experience associated with ranching activities and perpetuates the purposes for which the HCNRA was established. Dude ranching is subservient to the primarily recognized ranching operation.

*Existing uses* are those uses of or developments to private land as of the date of enactment of the Act on December 31, 1975.

*Farm/Forest/Grazing lands* are those lands used for farm, forest, and grazing purposes, for maintaining watersheds as fish and wildlife habitat, or for providing outdoor recreational activities. All such lands are assigned to the Farm/Forest/Grazing land category in § 292.22.

*Farm/Forest/Grazing Use* is any traditional agricultural, silvicultural, or livestock management use or combination thereof on farm/forest/grazing lands within the HCNRA. This includes, but is not limited to, truck farming and harvesting of timber, grazing of livestock, horticultural use, animal husbandry use, horse, cattle, and sheep ranching, and preparation and storage of the products raised on farm/forest/grazing land for on-site use or for disposal by marketing or otherwise. Farm/forest/grazing uses may also consist of uses related to and in furtherance of the protection of watersheds, maintenance of fish and wildlife habitat, and the pursuit of recreational activities.

*Hazardous substance* includes any material so classified under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. 9601 et seq.).

*Mining lands* are lands primarily used for mining purposes as of June 13, 1994 and which are assigned to the mining land category in § 292.22.

*Outdoor recreational activities* are activities such as camping, picnicking, rafting, boating, hiking, rock climbing, fishing, hunting, horseback riding, and the viewing of wildlife or scenery.

*Parcel* as used in this subpart refers to contiguous tax lots under one ownership. For the purposes of this subpart, rights-of way do not divide parcels into smaller units.

*Partition* is the division of land into lots, and which, under county planning ordinances, is identified by a map, drawing, or writing which contains the descriptions, locations, specifications, and dedications for roads, utilities, etc. and which has been properly filed with the County recorder.

*Private land* is land not in federal, state, or local government ownership.

*Proposed uses* are those uses of or development to a private land parcel within the HCNRA initiated after June 13, 1994.

*Ranger* is the HCNRA Area Ranger, Wallowa-Whitman National Forest, with offices located in Enterprise, Oregon, Riggins, Idaho, and Clarkston, Washington, except for the Rapid Wild and Scenic River where the term refers to the Salmon River District Ranger, Nez Perce National Forest, located in Whitebird, Idaho.

*Recreational facilities* are facilities associated with or required for outdoor recreational activities and include, but are not limited to, parks, campgrounds, hunting and fishing lodges, and interpretive displays.

*Residential lands* are lands within the HCNRA developed for residential purposes as of June 13, 1994 and which are assigned to the Residential land category in § 292.22.

*Scenic Easement*. See Conservation Easement.

*Screening* is the reduction or elimination of the visual impact of any structure or land modification as seen from any public travel route within the HCNRA.

*Solid waste* is discarded solid materials resulting from mining, industrial, commercial, agricultural, silvicultural, and community activities. This term does not include domestic sewage or pollutants such as silt or dissolved materials in irrigation return flows.

*Structure* is any permanent building or facility, or part thereof such as barns, outhouses, residences and storage sheds. This includes electric transmission line systems, substations, commercial radio transmitters, relays or repeater stations, antennas, and other electronic sites and associated structures.

*Traditional uses* are 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.

*Travel route* is a route, such as a county or National Forest system road or river or trail, that is open for use by members of the general public.

#### § 292.22 Land category assignments.

(a) *Land categories*. (1) All privately owned lands within the HCNRA are to be assigned to one of the following four land categories:

- (i) Farm/forest/grazing land.
- (ii) Mining land.
- (iii) Residential land.
- (iv) Commercial land.

(2) Not later than August 12, 1994, a map or maps displaying the privately owned lands within the HCNRA and the land categories to which they have been assigned must be on file and available for public inspection at the Ranger's office. The Ranger shall give notice of the availability of this map or maps in the local newspapers of record.

(b) *Changes in land category assignment.* Lands assigned to the Commercial, Residential, or Mining category may be reclassified as farm/forest/grazing land so long as the intended use or development is consistent with the standards in §292.23 and the Ranger has given public notice of the proposed change in the local newspaper of record and has notified adjacent landowners and the affected county government at least 30 days prior to any decision on the proposed change.

#### § 292.23 Standards of compatible land use and development.

Private land use that conforms to the standards of this section is deemed to be compatible with the purpose for which the HCNRA was established.

(a) *Standards applicable to all private lands.* As of June 13, 1994, the use and development of private lands in all land categories within the HCNRA is deemed compatible with the purposes for which the HCNRA was established, if the use and development of such lands meets the following standards:

(1) Use and development conforms to applicable local, state, and federal environmental, natural resource, cultural resource, and land use development law.

(2) All new or replacement structures are screened and/or constructed of materials that blend with the natural environment, except where structures typify the architectural style and materials of a significant historic era such as pre-World War II. Screening is not required, however, for new or replacement structures that are associated with an existing, unscreened structure or structures that were not screened at the time this rule became effective.

(3) No public or commercial solid waste disposal sites or hazardous substance disposal sites are located on private lands within the HCNRA.

(4) All new or replacement utility lines are placed underground where ground conditions and topography permit. This standard does not prevent or impair routine maintenance of utility lines or related structures in existence prior to June 13, 1994.

(5) No new or replacement structures are developed within the boundaries of the Hells Canyon Wilderness, provided that existing structures may be repaired and/or maintained.

(6) Significant historic, archaeological, or paleontologic sites are protected.

(7) Sites used for the extraction of common mineral materials, such as gravel, for construction and maintenance purposes on all except designated mining lands, are screened where possible, and are not in excess of 2 acres in size.

(8) New recreational facilities enhance and are compatible with the purpose of the Act.

(b) *Farm/forest/grazing lands standards.* The following additional standards are applicable to farm/forest/grazing lands:

(1) Except as otherwise provided in this paragraph, the minimum lot size for residential development is 160 acres. Only residences associated with farm/forest/grazing uses may be developed. Partitions of less than 160 acres may be made to provide for the continuation of existing commercial agriculture, but such partitions may not be developed for residential use. Lots of less than 160 acres existing on June 13, 1994, with residences permanently affixed to a foundation or basement, are considered to be in compliance.

(2) Structures are limited to those necessary to conduct farm/forest/grazing use.

(3) Dude ranching is permitted provided it is compatible with the purpose and direction of the Act and is part of a recognized ranching operation.

(4) New or replacement structures for farm/forest/grazing use are not closer than 25 feet from a property line or 55 feet from the center line of a travel route.

(c) *Mining Lands.* (1) The following standards are applicable to mining lands:

(i) The owner of mining lands must consult with the Ranger concerning proposed mineral development activities prior to submitting a plan of operations to the relevant state or federal agencies.

(ii) Operations comply with Federal and State mining, air quality, water quality, hazardous waste, water disposal and reclamation standards.

(iii) The type and number of structures, including but not limited to residences associated with the mining activity, are limited to the minimum necessary for the use and development of the mining lands.

(iv) No new structures are located closer than 25 feet from a property line or 55 feet from the center line of a travel route.

(v) Mining lands are not partitioned.

(2) Notwithstanding compliance with the standards of paragraph (c)(1) of this section, the Secretary may acquire mineral interests in the HCNRA without the consent of the owner, if the Secretary deems this necessary to meet the purposes for which the HCNRA was established.

#### § 292.24 Determination of compliance and noncompliance.

(a) *Compliance*. Landowners may request a determination by the Forest Service as to whether an existing or a proposed use or development complies with the relevant standards set out in this subpart.

(1) Requests for a determination of compliance must be made in writing to the Ranger and include the following information:

(i) The current land category to which the land is assigned (§ 292.23);

(ii) The use of development that exists or that is proposed for the property;

(iii) A statement as to whether a change in the land category assignment will be necessary to accommodate the proposed use or development;

(iv) The timeframe for implementing the proposed use or development; and

(v) A statement as to how the proposed use or development satisfies the relevant standards of §292.23 of this subpart.

(2) The Ranger shall review the request and notify the landowner in writing within 45 days whether the existing or proposed use or development is in compliance with § 292.23 of this subpart. The Ranger may extend the time for making a compliance determination by 30 days if additional information is needed.

(b) *Noncompliance*. (1) In the event that the Forest Service determines that an existing or proposed use of development is not in compliance with the standards of § 292.23 of this subpart, the Ranger shall give the landowner written notice of the manner and nature of noncompliance. To the extent practicable, the notice will include suggestions for achieving compliance. The notice also must include a statement that the violation of a standard or standards and the failure to cure such violation may result in the initiation of condemnation proceedings by the Secretary.

(2) The Forest Service may initiate a noncompliance determination on its own without having first received a landowner request.

(c) *Written petition*. The landowner may file a written petition with the Forest Supervisor for a review of a decision of compliance or noncompliance. The Forest Supervisor shall render a decision within 30 days of the receipt of the petition. A decision by the Forest Supervisor constitutes the final administrative determination by the Department of Agriculture. Petitions of decisions on lands within the Rapid River Wild and Scenic River Corridor should be addressed to the Forest Supervisor, Nez Perce National Forest, Route 2, P.O. Box 475, Grangeville, Idaho 83450. All other petitions should be addressed to the Forest Supervisor, Wallowa-Whitman National Forest, P.O. Box 907, Baker City, Oregon 97814.

#### § 292.25 Information requirements.

The information required by § 292.24 of this subpart in order for a landowner to obtain a determination of compliance constitutes an information requirement as defined in the Paperwork Reduction Act (44 U.S.C. 3507) and has been approved for use by the Office of Management and Budget and assigned control number 0596-0135.

Note: This section is the legislation that is referred to as "Public Land Use Regulations.

Subpart F-Hells Canyon National  
Recreation Area-Federal Lands

AUTHORITY: 16 U.S.C. 460gg-7.

SOURCE: 59 FR 36882, July 19, 1994, unless otherwise noted.

§ 292.40 Purpose and scope.

(a) *Purpose.* The rules of this subpart establish standards and guidelines for the protection and preservation of historic, archeological, and paleontological resources, the use of motorized and mechanical equipment, the use of motorized and non-motorized rivercraft, and the management, utilization, and disposal of natural resources by timber harvesting, mining and grazing on National Forest System lands that comprise the Hells Canyon National Recreation Area located in the Wallowa-Whitman, Nez Perce, and Payette National Forests in the States of Idaho and Oregon as established by the Act of December 31, 1975, as amended (89 Stat. 1117, 16 U.S.C. 460gg et seq.).

(b) *Scope.* Management of National Forest System lands within the Hells Canyon National Recreation Area is subject to all laws, rules, and regulations applicable to the national Forest System, except as otherwise provided in this subpart. In the event of a conflict of inconsistency between rules of this subpart and other rules within this title, the rules of this subpart shall take precedence to the extent permitted by law.

§ 292.41 Definitions.

Special terms used in this subpart are defined as follows:

"Act" means the Act of December 31, 1975, as amended (Pub. L. 94-199, 89 Stat. 1117) which established the Hells Canyon National Recreation Area.

"Authorized Officer" is a Forest Service line officer who has been delegated the authority to take certain actions pursuant to the provisions of this subpart.

"Comprehensive Management Plan" is the document that establishes the array, levels, and manner of resource uses within the HCNRA. It is incorporated as part of the Wallowa-Whitman National Forest Land and Resource Management Plan.

"Cultural resources" means historic and archeological resources.

"HCNRA" is the abbreviation for the Hells Canyon National Recreation Area.

"Mechanical equipment" means 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 non-motorized rivercraft which is defined separately herein, wheelchairs, or other similar devices used solely to assist persons with disabilities.

"Mining" means any activity related to the discovery, extraction and exploitation of minerals under the Mining Act of 1872, 30 U.S.C. 22 *et seq.*, and the Mineral Leasing Act of 1920, 30 U.S.C. 181 *et seq.*, through the use of, among other things, hydraulic equipment, pans, ground sluicing, sluice boxes, rockers, or suction dredges.

"Motorized equipment" means any machine powered by a nonliving source. This term does not include motorized rivercraft which is defined separately herein or small, handheld devices such as flashlights, shavers, wristwatches, and Geiger counters.

"Motorized rivercraft" means any boat capable of being mechanically propelled by propeller(s) or jet pump(s) upstream through rapids.

"Non-Motorized rivercraft" means any boat which is not a motorized rivercraft.

"Other lands" means all National Forest System lands in the HCNRA except for Wild and Scenic Rivers and Wilderness Lands.

"Paleontological resources" means any remains, trace, or imprint of a plant or animal that has been preserved in the Earth's crust prior to the Holocene epoch.

"Selective cutting" means single tree or group selection cutting and 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.

"Suitable" means it is appropriate to apply certain resource management practices to a particular area of land, as determined by an ecological and environmental analysis of the land. A unit of land may be suitable for a variety of individual or combined management practices.

"*Wild and Scenic Rivers*" means the segments of the Snake, Rapid, and Imnaha Rivers designated as components of the National Wild and Scenic Rivers System and any other river or segment thereof in the HCNRA hereafter designated. Wild and Scenic Rivers include all National Forest System lands within the designated Wild and Scenic River corridor.

"*Wilderness lands*" means the Hells Canyon Wilderness, that portion of the Eagle Cap Wilderness in the HCNRA, and any other wilderness in the HCNRA hereafter designated as components of the National Wilderness Preservation System.

#### § 292.42 Management standards and guidelines.

(a) In addition to existing statutory and regulatory authority governing administration of National Forest System lands and resources, the standards and guidelines in § § 292.43 to 292.48 of this subpart prescribe the scope and extent of certain activities that may occur in the HCNRA. These standards and guidelines are consistent with the overall objective of administering the HCNRA to preserve its natural beauty, historical and archaeological values and enhance its recreational and ecological values and the public's enjoyment. The standards and guidelines may vary depending on whether the land where the proposed activity is contemplated is within the Wilderness Lands, Wild and Scenic Rivers, or the Other Lands.

(b) The standards and guidelines of this subpart govern the previous programmatic direction in the Comprehensive Management Plan that has been incorporated into the Wallowa-Whitman National Forest Land and Resource Management Plan. Site specific environmental analysis may be required even in those situations where a use or activity is permissible under the standards and guidelines set forth in this subpart.

(c) The standards and guidelines of this subpart may be enforced by the authorized officer pursuant to 36 CFR part 261.

#### § 292.43 Protection and preservation of cultural and paleontological resources.

(a) Other Lands and Wild and Scenic Rivers. The following standards and guidelines of this section apply to the protection and preservation of cultural and paleontological resources on the Other Lands and the Wild and Scenic Rivers in the HCNRA:

(1) The primary objective of managing cultural resources is the protection of the resource from damage or destruction. To the extent consistent with protection, cultural resources may also be managed for scientific research, public education and enjoyment. Where interpretation of these sites for public benefit and knowledge is developed, it shall be compatible with the protection of cultural resources.

(2) The authorized officer shall establish priorities for management emphasis and protection of cultural resources based, in part, on whether the appropriate State Historic Preservation Office has concurred with the Forest Service's determination that a cultural resource is significant.

(3) Significant cultural resources are to be protected on-site, unless the authorized officer determines that offsite protection is preferable because adequate protection cannot be provided on-site, the resource is already adequately represented and protected on-site elsewhere, protection on-site is not consistent with the administration of Wilderness Lands, or for other good cause shown. Information about significant cultural resources shall be documented.

(4) The primary objective of managing paleontological resources is scientific research. Paleontological resources may only be disturbed or removed in conjunction with scientific research and only upon the issuance of prior written authorization of the disturbance or removal activity.

(b) *Wilderness Lands*. The following standards and guidelines apply to the protection and preservation of cultural and paleontological resources in the Wilderness Lands category of the HCNRA.

(1) The standards and guidelines for Other Lands and Wild and Scenic Rivers in paragraph (a) of this section also apply to Wilderness Lands.

(2) Public education and information activities concerning cultural resources on Wilderness Lands may not be offered or established inside Wilderness Lands.

(3) New trails and relocations of existing trails may not be developed for the sole purpose of providing public access to cultural resource sites on Wilderness Lands.

#### § 292.44 Use of motorized and mechanical equipment.

The standards and guidelines of this section apply to the use of motorized and mechanical equipment in the HCNRA. These standards and guidelines shall not be construed to impair or preclude use of such equipment in the Forest Service's administration of the HCNRA; authorized scientific and other research activities within the HCNRA; timber harvesting, mining, or grazing activities as authorized in § § 292.46-292.48 of this subpart;

responses by the Forest Service or any other Federal, state, or local agency to public health or safety emergencies; or access to private inholdings within the HCNRA.

(a) *Other Lands*. The following standards and guidelines apply to the use of motorized and mechanical equipment in the Other Lands category of the HCNRA.

(1) Motorized and mechanical equipment may be used on designated Forest Service roads, trails, and airstrips subject to terms and conditions deemed necessary by the authorized officer for the safe use of such facilities.

(2) The use of motorized and mechanical equipment is prohibited off of designated Forest Service roads, trails, and airstrips unless authorized by the authorized officer subject to terms and conditions deemed necessary by the authorized officer for the safe use of such equipment and to ensure that its use is compatible with the Act.

(b) *Wild and Scenic Rivers*. The following standards and guidelines apply to the use of motorized and mechanical equipment in the Wild and Scenic Rivers category in the HCNRA.

(1) The use of motorized and mechanical equipment on designated Forest Service roads, trails and airstrips is permissible on wild and scenic river segments classified "scenic" or "recreational" subject to terms and conditions necessary for safe use of such equipment and to ensure its use is compatible with the Wild and Scenic Rivers Act.

(2) The use of motorized and mechanical equipment on designated Forest Service roads, trails, and airstrips is prohibited on wild and scenic river segments classified "wild" except as provided for by the authorized officer upon a determination that such use is necessary for the administration of the river or to protect and enhance the values for which river was designated.

(c) *Wilderness Lands*. Except as provided for in Sections 4 (c) and (d) of the Wilderness Act and regulations at 36 CFR parts 261 and 293, the use of motorized and mechanical equipment is prohibited on Wilderness Lands.

#### § 292.45 Use of motorized and non-motorized rivercraft.

The standards and guidelines of this section apply to the use of motorized and non-motorized rivercraft on rivers within the HCNRA.

(a) The use of non-motorized rivercraft may be permitted subject to restrictions on size, type of craft, numbers, duration, seasons, or other matters which may be deemed by the authorized officer to be necessary to ensure the safe use and enjoyment of the rivers: Provided, that where wild and scenic rivers are concerned, the authorized officer may impose such additional terms and conditions as may be necessary to protect and enhance the values for which the river was designated.

(b) The use of motorized rivercraft is prohibited except on the Snake River and that portion of the Salmon River in the HCNRA administered by the Forest Service where such activity may be permitted subject to restrictions on size, type of craft, numbers, noise limits, duration, seasons or other matters which may be deemed by the authorized officer necessary for the safe use and enjoyment of the rivers: Provided, that where wild and scenic rivers are involved, the authorized officer may impose such additional terms and conditions as may be necessary to protect and enhance the values for which the river was designated.

(c) The use of motorized and non-motorized rivercraft is subject to all federal and state boating registration and safety laws.

(d) The Use of motorized or non-motorized rivercraft on the Snake River and that portion of the Salmon River in the HCNRA administered by the Forest Service requires prior written authorization from the authorized officer.

(e) In authorizing the use of motorized and non-motorized rivercraft on the Snake River, the authorized officer must reasonably accommodate both private and commercial users of each type of rivercraft.

(f) In authorizing the use of motorized and non-motorized rivercraft on the Snake River, the authorized officer must ensure that the carrying capacity of the river is not exceeded.

(g) In authorizing the use of motorized and non-motorized rivercraft on the Snake River, the authorized officer shall seek to minimize, where practicable, conflicts between motorized and non-motorized rivercraft users and between both types of rivercraft users and all other users of the river.

#### § 292.46 Timber harvesting activities.

(a) *Other Lands*. The standards and guidelines of this section apply to timber harvesting activities in the Other Lands category of the HCNRA.

(1) Timber maybe 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 or insect infestation.

(2) Where authorized, trees may be harvested by selective cuttings. Openings created by the timber harvesting activity must be limited in size and number to the minimum necessary to accomplish the purpose of the harvest, and must blend with the natural landscape to the extent practicable.

(b) *Wild and Scenic Rivers*. The following standards and guidelines apply to timber harvesting activities in the Wild and Scenic Rivers category of the HCNRA.

(1) Timber may be harvested on river segments classified "scenic" or "recreational" to protect and enhance the values for which the river was designated.

(2) Timber may be harvested on river segments classified "wild" only when necessary to provide for recreational facilities such as trails, to reduce the risk of hazard trees, or to respond to natural events provided that the activity is consistent with the Wild and Scenic Rivers Act.

(3) Where authorized, timber harvesting activities on wild and scenic rivers may be conducted in accordance with and using the same methods as prescribed in section (a)(2) above.

(c) *Wilderness Lands*. Except as provided for in Sections 4 (c) and (d) of the Wilderness Act and regulations at 36 CFR part 293, timber harvesting is prohibited on Wilderness Lands.

#### § 292.47 Mining activities.

(a) *Other Lands*. The standards and guidelines of this section apply to mining activities in the Other Lands category of the HCNRA.

(1) All mining activities are prohibited subject to valid existing rights as of December 31, 1975.

(2) The impact of mining activities including, but not limited to, drilling and the development of ingress and egress routes, must be minimized and directed away from Wilderness Lands and Wild and Scenic Rivers to the extent practicable.

(3) Mineral materials including, but not limited to common varieties of gravel, sand, or stone, may be used only within the HCNRA for the purpose of construction and maintenance of facilities including, but not limited to, roads, airfields, trails, and recreation developments.

(4) Sources of mineral materials should be located outside the HCNRA. Sources for mineral materials that may be used to benefit the HCNRA may be located inside the HCNRA if the cost of obtaining the materials outside the HCNRA adds significantly to the costs of the materials, or the transportation of mineral materials from outside the HCNRA presents a safety hazard. When mineral materials are obtained from inside the HCNRA, the environmental effects at the source of extraction must be mitigated by site reclamation upon the termination of the extraction activity. Site reclamation may include contouring the land, re-establishing vegetation, and other measures deemed appropriate by the authorized officer to blend the site into the surrounding environment to the extent practicable. The HCNRA shall not be the source of mineral materials for use outside the HCNRA for projects that do not directly benefit the HCNRA.

(b) *Wilderness Lands and Wild and Scenic Rivers*. The standards and guidelines of this section apply to mining activities in the Wilderness Lands and Wild and Scenic Rivers categories of the HCNRA.

(1) The standards and guidelines for Other Lands in paragraphs (a)(1) and (2) of this section also apply to Wilderness Lands and Wild and Scenic Rivers.

(2) Extraction of mineral materials is prohibited on Wilderness Lands and Wild and Scenic Rivers subject to valid existing rights.

#### § 292.48 Grazing activities.

The following standards and guidelines apply to domestic livestock grazing activities on Other Lands, Wild and Scenic Rivers, and Wilderness Lands in the HCNRA.

(a) Grazing may be authorized only on rangeland determined by the authorized officer to be suitable for grazing and meeting or moving towards satisfactory condition and meeting the conditions described in paragraph (b) of this section.

(b) Where domestic livestock grazing is incompatible with the protection, restoration, or maintenance of fish and wildlife or their habitats; public outdoor recreation; conservation of scenic, wilderness, and scientific values; rare combinations of outstanding ecosystems, or the protection and enhancement of the values for which a wild and scenic river was designated, the livestock use shall be modified as necessary to eliminate or avoid the incompatibility. In the event an incompatibility persists after the modification or modification is not feasible, the livestock use shall be terminated.

(c) Range improvements must be designed and located to minimize their impact on scenic, cultural, fish and wildlife, and other resources in the HCNRA.

(d) The authorization of grazing use, through a grazing permit, must provide for terms and conditions which protect and conserve riparian areas.

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## Wilderness Act

Act of September 3, 1964,

(P.L. 88-577, 78 Stat. 890; 16 U.S.C. 1 1 21 (note), 1 1 31-1136)

**Sec 1.** This Act may be cited as the "Wilderness Act" (16 U.S.C. 1 1 21 (note))

Purpose

**Sec. 2. (a)** In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as "wilderness areas", and these shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness; and no Federal lands shall be designated as "wilderness areas" except as provided for in this chapter or by a subsequent Act.

**(b)** The inclusion of an area in the National Wilderness Preservation System notwithstanding, the area shall continue to be managed by the Department and agency having jurisdiction thereover immediately before its inclusion in the National Wilderness Preservation System unless otherwise provided by Act of Congress. No appropriation shall be available for the payment of expenses or salaries for the administration of the National Wilderness Preservation System as a separate unit nor shall any appropriations be available for additional personnel stated as being required solely for the purpose of managing or administering areas solely because they are included within the National Wilderness Preservation System.

**(c)** A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of underdeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Previously Classified Areas

**Sec. 3 (a)** All areas within the national forests classified at least 30 days before September 3, 1964 by the Secretary of Agriculture or the Chief of the Forest Service as "wilderness", "wild", or "canoe" are hereby designated as wilderness areas. The Secretary of Agriculture shall -

(1) Within one year after September 3, 1964, file a map and legal description of each wilderness area with the Interior and Insular Affairs Committees of the United States Senate and the House of Representatives, and such descriptions shall have the same force and effect as if included in this chapter: Provided, however, That correction of clerical and typographical errors in such legal descriptions and maps may be made.

(2) Maintain, available to the public, records pertaining to said wilderness areas, including maps and legal descriptions, copies of regulations governing them, copies of public notices of, and reports submitted to Congress regarding pending additions, eliminations, or modifications. Maps, legal descriptions, and regulations pertaining to wilderness areas within their respective jurisdictions also shall be available to the public in the offices of regional foresters, national forest supervisors, and forest rangers.

**(b)** The Secretary of Agriculture shall, within ten years after September 3, 1964, review, as to its suitability or nonsuitability for preservation as wilderness, each area in the national forests classified on September 3, 1964 by the Secretary of Agriculture or the Chief of the Forest Service as "primitive" and report his findings to the President. The President shall advise the United States Senate and House of Representatives of his recommendations with respect to the designation as "wilderness" or other reclassification of each area on which review has been completed, together with maps and a definition of boundaries. Such advice shall be given with respect to not less than one-third of all the areas now classified as "primitive" within three years after September 3, 1964, not less than two-thirds within seven years after September 3, 1964, and the remaining areas within ten years after September 3, 1964. Each recommendation of the President for designation as "wilderness" shall become effective only if so provided by an Act of Congress. Areas classified as "primitive" on September 3, 1964

shall continue to be administered under the rules and regulations affecting such areas on September 3, 1964 until Congress has determined otherwise. Any such area may be increased in size by the President at the time he submits his recommendations to the Congress by not more than five thousand acres with no more than one thousand two hundred and eighty acres of such increase in any one compact unit; if it is proposed to increase the size of any such area by more than five thousand acres or by more than one thousand two hundred and eighty acres in any one compact unit the increase in size shall not become effective until acted upon by Congress.

Nothing herein contained shall limit the President in proposing, as part of his recommendations to Congress, the alteration of existing boundaries of primitive areas or recommending the addition of any contiguous area of national forest lands predominantly of wilderness value. Notwithstanding any other provisions of this chapter, the Secretary of Agriculture may complete his review and delete such area as may be necessary, but not to exceed seven thousand acres, from the southern tip of the Gore Range-Eagles Nest Primitive Area, Colorado, if the Secretary determines that such action is in the public interest.

**(c)** Within ten years after September 3, 1964 the Secretary of the Interior shall review every roadless area of five thousand contiguous acres or more in the national parks, monuments and other units of the national park system and every such area of, and every roadless island within the national wildlife refuges and game ranges, under his jurisdiction on September 3, 1964 and shall report to the President his recommendation as to the suitability or nonsuitability of each such area or island for preservation as wilderness. The President shall advise the President of the Senate and the Speaker of the House of Representatives of his recommendation with respect to the designation as wilderness of each such area or island on which review has been completed, together with a map thereof and a definition of its boundaries. Such advice shall be given with respect to not less than one-third of the areas and islands to be reviewed under this subsection within three years after September 3, 1964, not less than two-thirds within seven years of September 3, 1964 and the remainder within ten years of September 3, 1964. A recommendation of the President for designation as wilderness shall become effective only if so provided by an Act of Congress. Nothing contained herein shall, by implication or otherwise, be construed to lessen the present statutory authority of the Secretary of the Interior with respect to the maintenance of roadless areas within units of the national park system.

**(d) (1)** The Secretary of Agriculture and the Secretary of the Interior shall, prior to submitting any recommendations to the President with respect to the suitability of any area for preservation as wilderness -  
(A) give such public notice of the proposed action as they deem appropriate, including publication in the Federal Register and in a newspaper having general circulation in the area or areas in the vicinity of the affected land;  
(B) hold a public hearing or hearings at a location or locations convenient to the area affected. The hearings shall be announced through such means as the respective Secretaries involved deem appropriate, including notices in the Federal Register and in newspapers of general circulation in the area: Provided, That if the lands involved are located in more than one State, at least one hearing shall be held in each State in which a portion of the land lies;  
(C) at least thirty days before the date of a hearing advise the Governor of each State and the governing board of each county, or in Alaska the borough, in which the lands are located, and Federal departments and agencies concerned, and invite such officials and Federal agencies to submit their views on the proposed action at the hearing or by no later than thirty days following the date of the hearing.

(2) Any views submitted to the appropriate Secretary under the provisions of (1) of this subsection with respect to any area shall be included with any recommendations to the President and to Congress with respect to such area.

**(e)** Any modification or adjustment of boundaries of any wilderness area shall be recommended by the appropriate Secretary after public notice of such proposal and public hearing or hearings as provided in subsection (d) of this section. The proposed modification or adjustment shall then be recommended with map and description thereof to the President. The President shall advise the United States Senate and the House of Representatives of his recommendations with respect to such modification or adjustment and such recommendations shall become effective only in the same manner as provided for in subsections (b) and (c) of this section.

#### Limitations of Use and Activities

**Sec. 4. (a)** The purposes of this chapter are hereby declared to be within and supplemental to the purposes for which national forests and units of the national park and national wildlife refuge systems are established and administered and -

**(1)** Nothing in this chapter shall be deemed to be in interference with the purpose for which national forests are established as set forth in the Act of June 4, 1897 (30 Stat. 11), and the Multiple-Use Sustained-Yield Act of June 12, 1960 (74 Stat. 215) (16 U.S.C. 528-531).

**(2)** Nothing in this chapter shall modify the restrictions and provisions of the Shipstead-Nolan Act (Public Law 539, Seventy-first Congress, July 10, 1930; 46 Stat. 1020), the Thye-Blatnik Act (Public Law 733, Eightieth Congress, June 22, 1948; 62 Stat. 568), and the Humphrey-Thye-Blatnik-Andresen Act (Public Law 607, Eighty-Fourth Congress, June 22, 1956; 70 Stat. 326), as applying to the Superior National Forest or the regulations of the Secretary of Agriculture.

**(3)** Nothing in this chapter shall modify the statutory authority under which units of the national park system are created. Further, the designation of any area of any park, monument, or other unit of the national park system as a wilderness area pursuant to this chapter shall in no manner lower the standards evolved for the use and preservation of such park, monument, or other unit of the national park system in accordance with sections 1, 2, 3, and 4 of this title, the statutory authority under which the area was created, or any other Act of Congress which might pertain to or affect such area, including, but not limited to, the Act of June 8, 1906 (34 Stat. 225; 16 U.S.C. 432 et seq.); section 3(2) of the Federal Power Act (16 U.S.C. 796(2)); and the Act of August 21, 1935 (49 Stat. 666; 16 U.S.C. 461 et seq.).

**(b)** Except as otherwise provided in this chapter, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise provided in this chapter, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.

**(c)** Except as specifically provided for in this chapter, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this chapter and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.

**(d)** The following special provisions are hereby made:

(1) Within wilderness areas designated by this chapter the use of aircraft or motorboats, where these uses have already become established, may be permitted to continue subject to such restrictions as the Secretary of Agriculture deems desirable. In addition, such measures may be taken as may be necessary in the control of fire, insects, and diseases, subject to such conditions as the Secretary deems desirable.

(2) Nothing in this chapter shall prevent within national forest wilderness areas any activity, including prospecting, for the purpose of gathering information about mineral or other resources, if such activity is carried on in a manner compatible with the preservation of the wilderness environment. Furthermore, in accordance with such program as the Secretary of the Interior shall develop and conduct in consultation with the Secretary of Agriculture, such areas shall be surveyed on a planned, recurring basis consistent with the concept of wilderness preservation by the United States Geological Survey and the United States Bureau of Mines to determine the mineral values, if any, that may be present; and the results of such surveys shall be made available to the public and submitted to the President and Congress.

(3) Notwithstanding any other provisions of this chapter, until midnight December 31, 1983, the United States mining laws and all laws pertaining to mineral leasing shall, to the same extent as applicable prior to September 3, 1964, extend to those national forest lands designated by this chapter as "wilderness areas"; subject, however, to such reasonable regulations governing ingress and egress as may be prescribed by the Secretary of Agriculture consistent with the use of the land for mineral location and development and exploration, drilling, and production, and use of land for transmission lines, waterlines, telephone lines, or facilities necessary in exploring, drilling, producing, mining, and processing operations, including where essential the use of mechanized ground or air equipment and restoration as near as practicable of the surface of the land disturbed in performing prospecting, location, and, in oil and gas leasing, discovery work, exploration, drilling, and production, as soon as they have served their purpose. Mining locations lying within the boundaries of said wilderness areas shall be held and used solely for mining or processing operations and uses reasonably incident thereto; and hereafter, subject to valid existing rights, all patents issued under the mining laws of the United States affecting national forest lands designated by this chapter as wilderness areas shall convey title to the mineral deposits within the claim, together with the right to cut and use so much of the mature timber therefrom as may be needed in the extraction, removal, and beneficiation of the mineral deposits, if needed timber is not otherwise reasonably available, and if the timber is cut under sound principles of forest management as defined by the national forest rules and regulations, but each such patent shall reserve to the United States all title in or to the surface of the lands and products thereof, and no use of the surface of the claim or the resources therefrom not reasonably required for carrying on mining or prospecting shall be allowed except as otherwise expressly provided in this chapter: Provided, That, unless hereafter specifically authorized, no patent within wilderness areas designated by this chapter shall issue after December 31, 1983, except for the valid claims existing on or before December 31, 1983. Mining claims located after September 3, 1964, within the boundaries of wilderness areas designated by this chapter shall create no rights in excess of those rights which may be patented under the provisions of this subsection. Mineral leases, permits, and licenses covering lands within national forest wilderness areas designated by this chapter shall contain such reasonable stipulations as may be prescribed by the Secretary of Agriculture for the protection of the wilderness character of the land consistent with the use of the land for the purposes for which they are leased, permitted, or licensed. Subject to valid rights then existing, effective January

1, 1984, the minerals in lands designated by this chapter as wilderness areas are withdrawn from all forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral leasing and all amendments thereto.

(4) Within wilderness areas in the national forests designated by this chapter, (1) the President may, within a specific area and in accordance with such regulations as he may deem desirable, authorize prospecting for water resources, the establishment and maintenance of reservoirs, water-conservation works, power projects, transmission lines, and other facilities needed in the public interest, including the road construction and maintenance essential to development and use thereof, upon his determination that such use or uses in the specific area will better serve the interests of the United States and the people thereof than will its denial; and (2) the grazing of livestock, where established prior to September 3, 1964, shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of Agriculture.

(5) Commercial services may be performed within the wilderness areas designated by this chapter to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.

(6) Nothing in this chapter shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

(7) Nothing in this chapter shall be construed as affecting the jurisdiction or responsibilities of the several States with respect to wildlife and fish in the national forests.

#### Rights of Non-Forest Lands Ownership

**Sec. 5. (a)** In any case where State-owned or privately owned land is completely surrounded by national forest lands within areas designated by this chapter as wilderness, such State or private owner shall be given such rights as may be necessary to assure adequate access to such State-owned or privately owned land by such State or private owner and their successors in interest, or the State-owned land or privately owned land shall be exchanged for federally owned land in the same State of approximately equal value under authorities available to the Secretary of Agriculture: Provided, however, That the United States shall not transfer to a State or private owner any mineral interests unless the State or private owner relinquishes or causes to be relinquished to the United States the mineral interest in the surrounded land.

**(b)** In any case where valid mining claims or other valid occupancies are wholly within a designated national forest wilderness area, the Secretary of Agriculture shall, by reasonable regulations consistent with the preservation of the area as wilderness, permit ingress and egress to such surrounded areas by means which have been or are being customarily enjoyed with respect to other such areas similarly situated.

**(c)** Subject to the appropriation of funds by Congress, the Secretary of Agriculture is authorized to acquire privately owned land within the perimeter of any area designated by this chapter as wilderness if (1) the owner concurs in such acquisition or (2) the acquisition is specifically authorized by Congress.

#### Gifts and Donations

**Sec. 6. (a)** The Secretary of Agriculture may accept gifts or bequests of land within wilderness areas designated by this chapter for preservation as wilderness. The Secretary of Agriculture may also accept gifts or bequests of land adjacent to wilderness areas designated by this chapter for preservation as wilderness if he has given sixty days advance notice thereof to the President of the Senate and the Speaker of the House of Representatives. Land accepted by the Secretary of Agriculture under this section shall become part of the wilderness area involved. Regulations with regard to any such land may be in accordance with such agreements, consistent with the policy of this chapter, as are made at the time of such gift, or such conditions, consistent with such policy, as may be included in, and accepted with, such bequest.

**(b)** Authorization to accept private contributions and gifts The Secretary of Agriculture or the Secretary of the Interior is authorized to accept private contributions and gifts to be used to further the purposes of this chapter.

#### Report to Congress

**Sec. 7.** At the opening of each session of Congress, the Secretaries of Agriculture and Interior shall jointly report to the President for transmission to Congress on the status of the wilderness system, including a list and descriptions of the areas in the system, regulations in effect, and other pertinent information, together with any recommendations they may care to make. (16 U.S.C. 11 36)

## Wild and Scenic Rivers Act

<sup>1</sup>An Act

To provide for a National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that

SEC. 1. (a) This Act; may be cited as the "Wild and Scenic Rivers Act".

(b) It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

(c) The purpose of this Act is to implement this policy by instituting a national wild and scenic rivers system, by designating the initial components of that system and by prescribing the methods by which and standards according to which additional components may be added to the system from time to time.

SEC. 2 (a) The national wild and scenic rivers system shall comprise rivers (i) that are authorized for inclusion therein by Act of Congress, or (ii) that are designated as wild, scenic or recreational rivers by or pursuant to an act of the legislature of the State or States through which they flow, that are to be permanently administered as wild, scenic or recreational rivers by an agency or political subdivision of the State or States concerned, that are found by the Secretary of the Interior, upon application of the Governor of the State or the Governors of the States concerned, or a person or persons thereunto duly appointed by him or them, to meet the criteria established in this Act and such criteria supplementary thereto as he may prescribe, and that are approved by him for inclusion in the system... Upon receipt of an application under clause (ii) of this subsection, the Secretary shall notify the Federal Energy Regulatory Commission and publish such application in the Federal Register. Each river designated under clause (ii) shall be administered by the State or political subdivision thereof without expense to the United States other than for administration and management of federally owned lands. For purposes of the preceding sentence, amounts made available to any State or political subdivision under the Land and Water Conservation Act of 1965 or any other provision of law shall not be treated as an expense to the United States. Nothing in this subsection shall be construed to provide for the transfer to, or administration by, a State or local authority of any federally owned lands which are within the boundaries of any river included within the system under clause (ii).

b) A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in Section 1, subsection (b) of this Act. Every wild, scenic or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the national wild and scenic rivers system and, if included, shall be classified, designated, administered as one of the following:

(1) Wild river areas - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

(2) Scenic river areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

(3) Recreational river areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

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<sup>1</sup> The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) consists of Public Law 90-542 (October 2, 1968) as amended. P.L. 99-590 (October 30, 1986) was the last Act that added generic amendments to the Act.

SEC. 3 (A) The following rivers and the land adjacent thereto are hereby designated as components of the national wild and scenic rivers system:

(Designation language for individual W&S rivers) (116 listed)

(b) The agency charged with the administration of each component of the national wild and scenic rivers system designated by subsection (a) of this section shall, within one year from the date of designation of such component under subsection (a) (except where a different date is provided in subsection (a)) establish detailed boundaries therefore; which boundaries shall include an average of not more than 320 acres of land per miles measured from the ordinary high water mark on both sides of the river); determine which of the classes outlined in section 2, subsection (b), of this Act best fit the river or its various segments. Notice of the availability of the boundaries and classification, and of subsequent boundary amendments shall be published in the Federal Register and shall not become effective until ninety days after they have been forwarded to the President of the Senate and the Speaker of the House of Representatives.

(c) Maps of all boundaries and descriptions of the classifications of the designated river segments, and subsequent boundary amendments to such boundaries, shall be available for public inspection in the offices of the administering agency in the District of Columbia and in locations convenient to the designated river.

(d) (1) For rivers designated on or after January 1, 1986, the Federal agency charged with the administration of each component on the National Wild and Scenic Rivers System shall prepare a comprehensive management plan for such river segment to provide for the protection of the river values. The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act. The plan shall be coordinated with and may be incorporated into resource management planning for affected adjacent Federal lands. The plan shall be prepared, after consultation with State and local governments and the interested public within three full fiscal years after the date of designation. Notice of the completion and availability of such plans shall be published in the Federal Register.

(2) For rivers designated before January 1, 1986, all boundaries, classifications, and plans shall be reviewed for conformity within the requirements of this subsection within 10 years through regular agency planning processes.

SEC. 4 (a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture, or, in appropriate cases, the two Secretaries jointly shall study and submit to the President reports on the suitability or nonsuitability for addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system. The President shall report to the Congress his recommendations and proposals with respect to the designation of each such river or section thereof under this Act.... In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers (i) with respect to which there is the greatest likelihood of developments which, if undertaken, would render the rivers unsuitable for inclusion in the national wild and scenic rivers system, and (ii) which possess the greatest proportion of private lands within their areas. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.).

Each report, including maps and illustrations, shall show among other things the area included within the report; the characteristics which do or do not make the area a worthy addition to the system; the current status of land ownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which it is proposed the area, should it be added to the system, be administered; the extent to which it is proposed that such administration, including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary land and interests in land and of administering the area, should it be added to the system. Each such report shall be printed as a Senate or House document.

(b) Before submitting any such report to the President and the Congress, copies of the proposed report shall, unless it was prepared jointly by the Secretary of the Interior and the Secretary of Agriculture, be submitted by the Secretary of the Interior to the Secretary of Agriculture or by the Secretary of Agriculture to the Secretary of the Interior, as the case may be, and to the Secretary of the Army, the Chairman of the Federal Power Commission, the head of any other affected Federal department or agency and, unless the lands proposed to be included in the area are already owned by the United States or have already been authorized for acquisition by Act of Congress, the Governor of the State or States in which they are located or an officer designated by the Governor to receive the same. Any recommendations or comments on the proposal which the said officials furnish the Secretary or Secretaries who prepared the report within ninety days of the date on which the report is submitted to them, together with the Secretary's or Secretaries' comments thereon, shall be included with the transmittal to the President and the Congress.

(c) Before approving or disapproving for inclusion in the national wild and scenic rivers system any river designated as a wild, scenic or recreational river by or pursuant to an act of a State legislature, the Secretary of the Interior shall submit the proposal to the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Federal Power Commission, and the head of any other affected Federal department or agency and shall evaluate and give due weight to any recommendations or comments which the said officials furnish him within ninety days of the date of which it is submitted to them. If he approves the proposed inclusion, he shall publish notice thereof in the Federal Register.

(d) The boundaries of any river proposed in section 5(a) of this Act for potential addition to the National Wild and Scenic Rivers System shall generally comprise that area measured within one-quarter mile from the ordinary highwater mark on each side of the river. In the case of any designated river, prior to publication of boundaries pursuant to section 3(b) of this Act, the boundaries also shall comprise the same area. This subsection shall not be construed to limit the possible scope of the study report to address areas which may lie more than one-quarter mile from the ordinary high water mark on each side of the river.

SEC. 5. (a) The following rivers are hereby designated for potential addition to the national wild and scenic river system:

(designation language for individual W&S study rivers)

(b)(4) For the purposes of conducting the studies of rivers named in subsection (a) there are authorized to be appropriated such sums as necessary..

(c) The study of any of said rivers shall be pursued in as close cooperation with appropriate agencies of the affected State and its political subdivisions as possible, shall be carried on jointly with such agencies if request for such joint study is made by the State, and shall include a determination of the degree to which the State or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national wild and scenic rivers system.

(d)(1) In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potentials. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all Federal agencies as potential alternative uses of the water and related land resources involved.

(2) The Congress finds that the Secretary of the Interior, in preparing the Nationwide Rivers Inventory as a specific study for possible additions to the National Wild and Scenic Rivers System, identified the Upper Klamath River from below the John Boyle Dam to the Oregon-California State line. The Secretary, acting through the Bureau of Land Management, is authorized under this subsection to complete a study of the eligibility of such segment for potential addition to the National Wild and Scenic Rivers System. Such study shall be completed, and a report containing the results of the study shall be submitted to Congress by April 1, 1990. Nothing in this paragraph shall affect the authority or responsibilities of any other Federal agency with respect to activities or action on this segment and its immediate environment.

SEC. 6. (a) (1) The Secretary of the Interior and the Secretary of Agriculture are each authorized to acquire lands and interests in land within the authorized boundaries of any component of the national wild and scenic rivers system designated in section 3 of this Act, or hereafter designated for inclusion in the system by Act of Congress, which is administered by him, but he shall not acquire fee title to an average of more than 100 acres per mile on both sides of the river. Lands owned by a State may be acquired only by donation or by exchange in accordance with subsection (d) of this section. Lands owned by an Indian tribe or a political subdivision of a State may not be acquired without the consent of the appropriate governing body thereof as long as the Indian tribe or political subdivision is following a plan for management and protection of the lands which the Secretary finds protects the land and assures its use for purposes consistent with this Act. Money appropriated for Federal purposes from the land water conservation fund shall, without prejudice to the use of appropriations from other sources, be available to Federal departments and agencies for the acquisition of property for the purposes of this Act.

(2) When a tract of land lies partially within and partially outside the boundaries of a component of the National Wild and Scenic System, the appropriate Secretary may, with the consent of the land owners for the portion outside of the boundaries, acquire the entire tract. The land or interest therein so acquired outside the boundaries shall not be counted against the average one-hundred-acre-per-mile fee title limitation of subsection (a)(1). The lands or interests therein outside such boundaries, shall be disposed of, consistent with existing authorities of law, by sale, lease, or exchange.

(b). If 50 per centum or more of the entire acreage outside the ordinary high water mark on both sides of the river within a federally administered wild, scenic or recreational river area is owned in fee title by the United States, by the State or States within which it lies, or by political subdivisions of those States, neither Secretary shall acquire fee title to any lands by condemnation under authority of this Act. Nothing contained in this section, however, shall preclude the use of condemnation when necessary to clear title or to acquire scenic easements or such other easements as are reasonably necessary to give the public access to the river and to permit its members to traverse the length of the area or of selected segments thereof.

(c) Neither the Secretary of the Interior nor the Secretary of Agriculture may acquire lands by condemnation, for the purpose of including such lands in any national wild, scenic or recreational river area, if such lands are located within any incorporated city, village, or borough which has in force and applicable to such lands a duly adopted, valid zoning ordinance that conforms with the purposes of this Act. In order to carry out the provisions of this subsection, the appropriate Secretary shall issue guidelines, specifying standards for local zoning ordinances, which are consistent with the purposes of this Act. The standards specified in such guidelines shall have the object of (A) prohibiting new commercial or industrial uses other than commercial or industrial uses which are consistent with the purposes of this Act, and (B) the protection of the bank lands by means of acreage, frontage, and setback requirements on development.

(d) The appropriate Secretary is authorized to accept title to non-Federal property within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress and, in exchange therefor, convey to the grantor any federally owned property which is under his jurisdiction within the State in which the component lies and which he classifies as suitable for exchange or other disposal. The values of the properties so exchanged either shall be approximately equal or, if they are not approximately equal, shall be equalized by the payment of cash to the grantor or the Secretary as the circumstances require.

(e) The head of any Federal department or agency having administrative jurisdiction over any lands or interests in land within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress is authorized to transfer to the appropriate Secretary jurisdiction over such lands for administration in accordance with the provision of this Act. Lands acquired by or transferred to the Secretary of Agriculture for the purposes of this Act within or adjacent to a national forest shall upon such acquisition or transfer become national forest lands.

(f) The appropriate Secretary is authorized to accept donations of land and interests in land, funds, and other property for use in connection with his administration of the national wild and scenic rivers system.

(g) (1) Any owner or owners (hereinafter in this subsection referred to as "owner") of improved property on the date of its acquisition, may retain for themselves and their successors or assigns a right of use and occupancy of the improved property for noncommercial residential purposes for a definite term not to exceed twenty-five years or, in lieu thereof, for a term ending at the death of the owner, or the death of his spouse, or the death of either or both of them. The owner shall elect the term to be reserved. The appropriate Secretary shall pay to the owner the fair market value of the property on the date of such acquisition less the fair market value on such date retained by the owner.

(2) A right of use and occupancy retained pursuant to this subsection shall be subject to termination whenever the appropriate Secretary is given reasonable cause to find that such use and occupancy is being exercised in a manner which conflicts with the purposes of this Act. In event of such a finding, the Secretary shall tender to the holder of that right an amount equal to the fair market value of that portion of the right which remains unexpired on the date of termination. Such right of use or occupancy shall terminate by operation of law upon tender of the fair market price.

(3) The term improved property, as used in this Act, means a detached, one-family dwelling (hereinafter referred to as "dwelling"), the construction of which was begun before January 1, 1967, (except where a different date is specifically provided by law with respect to any particular river), together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the appropriate Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures accessory to the dwelling which are situated on the land so designated.

SEC. 7. (a) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791 a et seq.) on or directly affecting any river which is designated in section 3 of this Act as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which

such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation of a river as a component of the National Wild and Scenic Rivers System. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration, or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior or the Secretary of Agriculture, as the case may be, in writing of its intention so to do at least sixty day in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would effect the component and the values to be protected by it under this Act.

(b) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended on or directly affecting any river which is listed in section 5, subsection (a), of this Act, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river might be designated, as determined by the Secretary charged responsible for its study or approval –

(i) during the ten-year period following enactment of this Act or for a three complete fiscal year period following any Act of Congress designating any river for potential addition to the national wild and scenic rivers system, whichever is later, unless, prior to the expiration of the relevant period, the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, on the basis of study, determine that such river should not be included in the national wild and scenic river system and notify the Committees on Interior and Insular Affairs of the United States Congress, in writing, including a copy of the study upon which the determination was made, at least one hundred and eighty days while Congress is in session prior to publishing notice to that effect in the Federal Register: *Provided*, That if any Act designating any river or rivers for potential addition to the national wild and scenic river system provides a period for the study or studies which exceeds such three complete fiscal year period the period provided for in such Act shall be substituted for the three complete fiscal year period in the provisions of this clause (i); and

(ii) during such interim period from the date a report is due and the time a report is actually submitted to Congress; and

(ii) during such additional period thereafter as, in the case of any river the report for which is submitted to the President and the Congress for inclusion in the national wild and scenic rivers system, is necessary for congressional consideration thereof or, in the case of any river recommended to the Secretary of the Interior under section 2(a) (ii) of this Act, is necessary for the Secretary's consideration thereof, which additional period, however, shall not exceed three years in the first case and one year in the second.

Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a potential wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or diminish the scenic, recreational, and fish and wildlife values present in the potential wild, scenic or recreational river area on the date of designation of a river for study as provided by section 5 of this Act. No department or agency of the United States shall, during the periods hereinbefore specified, recommend authorization of any water resources project on any such river or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture in writing of its intention so to do at least sixty days in advance of doing so and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would affect the component and the values to be protected by it under this Act.

(c) The Federal Power Commission and all other Federal agencies shall, promptly upon enactment of this Act, inform the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, of any proceedings, studies, or other activities within their jurisdiction which are now in progress and which affect or may affect any of the rivers specified in section 5, subsection (a), of this Act. They shall likewise inform him of any such proceedings, studies, or other activities which are hereafter commenced or resumed before they are commenced or resumed.

(d) Nothing in this section with respect to the making of a loan or grant shall apply to grants made under the Land and Water Conservation Act of 1965 (78 Stat. 897; 16 U.S.C. 4601-5 et seq.).

SEC. 8. (a) All public lands within the authorized boundaries of any component of the national wild and scenic rivers system which is designated in section 3 of this Act or which is hereafter designated for inclusion in that

system are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States. This subsection shall not be construed to limit the authorities granted in section 6(d) or 14A of this Act.

(b) All public lands which constitute the bed or bank, or are within one-quarter mile of the bank, of any river which is listed in section 5, subsection (a), of this Act are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States for the periods specified in section 7, subsection (b), of this Act....

SEC. 9. (a) Nothing in this Act shall affect the applicability of the United States mining and mineral leasing laws within components of the national wild and scenic rivers system except that –

- (i) all prospecting, mining operations, and other activities on mining claims which, in the case of a component of the system designated in section 3 of this Act, have not heretofore been perfected or which, in the case of a component hereafter designated pursuant to this Act or any other Act of Congress, are not perfected before its inclusion in the system and all mining operations and other activities under a mineral lease, license, or permit issued or renewed after inclusion of a component in the system shall be subject to such regulations as the Secretary of the Interior or, in the case of national forest lands, the Secretary of Agriculture may prescribe to effectuate the purposes of this Act;
- (ii) subject to valid existing rights, the perfection of, or issuance of a patent to, any mining claim affecting lands within the system shall confer or convey a right or title only to the mineral deposits and such rights only to the use of the surface and the surface resources as are reasonably required to carrying on prospecting or mining operations and are consistent with such regulations as may be prescribed by the Secretary of the Interior or, in the case of national forest lands, by the Secretary of Agriculture; and
- (iii) subject to valid existing rights, the minerals in Federal lands which are part of the system and constitute the bed or bank or are situated within one-quarter mile of the bank of any river designated a wild river under this Act or any subsequent Act are hereby withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto.

Regulations issued pursuant to paragraphs (i) and (ii) of this subsection shall, among other things, provide safeguards against pollution of the river involved and unnecessary impairment of the scenery within the components in question.

(b) The minerals in any Federal lands which constitute the bed or bank or are situated within one-quarter mile of the bank of any river which is listed in section 5, subsection (a) of this Act are hereby withdrawn from all forms of appropriation under the mining laws during the periods specified in section 7, subsection (b) of this Act. Nothing contained in this subsection shall be construed to forbid prospecting or the issuance of leases, licenses, and permits under the mineral leasing laws subject to such conditions as the Secretary of the Interior and, in the case of national forest lands, the Secretary of Agriculture find appropriate to safeguard the area in the event it is subsequently included in the system....

SEC. 10 (a) Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

(b) Any portion of a component of the national wild and scenic rivers system that is within the national wilderness preservation system, as established by or pursuant to the Act of September 3, 1964 (78 Stat. 890; 16 U.S.C., ch. 23), shall be subject to the provision of both the Wilderness Act and this Act with respect to preservation of such river and its immediate environment, and in case of conflict between the provisions of these Acts the more restrictive provisions shall apply.

(c) Any component of the national wild and scenic rivers system that is administered by the Secretary of the Interior through the National Park Service shall become a part of the national park system, and any such component that is administered by the Secretary through the Fish and Wildlife Service shall become a part of the national wildlife refuge system. The lands involved shall be subject to the provisions of this Act and the Acts under which the national park system or national wildlife refuge system, as the case may be, is administered, and in the case of conflict between the provisions of these Acts, the more restrictive provisions shall apply. The Secretary of the Interior, in his administration of any component of the national wild and scenic rivers system, may utilize such general statutory authorities relating to areas of the national park system and such general statutory authorities otherwise available to him for recreation and preservation purposes and for the conservation and management of natural resources as he deems appropriate to carry out the purposes of this Act.

(d) The Secretary of Agriculture, in his administration of any component of the national wild and scenic rivers system area, may utilize the general statutory authorities relating to the national forest in such manner as he deems appropriate to carry out the purposes of this Act.

(e) The Federal agency charged with the administration of any component of the national wild and scenic rivers system may enter into written cooperative agreements with the Governor of a State, the head of any State agency, or the appropriate official of a political subdivision of a State for State or local governmental participation in the administration of the component. The States and their political subdivisions shall be encouraged to cooperate in the planning and administration of components of the system which include or adjoin State- or County-owned lands.

SEC. 11. (a) The Secretary of the Interior shall encourage and assist the States to consider, in formulating and carrying out their comprehensive statewide outdoor recreation plans and proposals for financing assistance for State and local projects submitted pursuant to the Land and Water Conservation Fund Act of 1965 (78 Stat. 897), needs and opportunities for establishing State and local wild, scenic and recreational river areas.

(b) (1) The Secretary of the Interior, the Secretary of Agriculture, or the head of any Federal agency, shall assist, advise, and cooperate with States or their political subdivisions, landowners, private organizations, or individuals to plan, protect, and manage river resources. Such assistance, advice, and cooperation may be through written agreements or otherwise. This authority applies within or outside a federally administered area and applies to rivers which are components of the Wild and Scenic Rivers System and to other rivers. Any agreement under this section may include provisions for limited financial or other assistance to encourage participation in the acquisition, protection and management of river resources.

(2) Whenever appropriate in furtherance of this Act, the Secretary of Agriculture and the Secretary of the Interior are authorized and encouraged to utilize the following:

(A) For activities on federally owned land, the Volunteers in the Parks Act of 1969 (16 U.S.C. 18g-j) and the Volunteers in the Forest Act of 1972 (16 U.S.C. 558a-558d).

(B) For activities on all other lands, section 6 of the Land and Water Conservation Fund Act of 1965 (relating to the development of statewide comprehensive outdoor recreation plans).

(3) For purposes of this subsection, the appropriate Secretary or the head of any Federal agency may utilize and make available Federal facilities, equipment, tools, and technical assistance to volunteers and volunteer organizations, subject to such limitations and restrictions as the appropriate Secretary or the head of any Federal agency deem necessary or desirable.

(4) No permit or other authorization provided for under provision of any other Federal law shall be conditioned on the existence of any agreement provided for in this section.

SEC. 12 (a) The Secretary of the Interior, the Secretary of Agriculture, and the head of any other Federal department or agency having jurisdiction over any lands which include, border upon, or are adjacent to, any river included within the National Wild and Scenic Rivers System or under consideration for such inclusion in accordance with section 2(a)(ii), 3(a), or 5(a), shall take such action respecting management policies, regulations, contracts, plans, affecting such lands, following the date of enactment of this sentence, as may be necessary to protect such rivers in accordance with the purposes of this Act. Such Secretary or other department or agency head shall, where appropriate, enter into written cooperative agreements with the appropriate State or local official for the planning, administration, and management of Federal lands which are within the boundaries of any rivers which approval has been granted under section 2(a)(ii). Particular attention shall be given to scheduled timber harvesting, road construction, and similar activities which might be contrary to the purposes of this Act.

(b) Nothing in this section shall be construed to abrogate any existing rights, privileges, or contracts affecting Federal lands held by any private party without the consent of said party.

(c) The head of any agency administering a component of the national wild and scenic rivers system shall cooperate with the Administrator, Environmental Protection Agency and with the appropriate State water pollution control agencies for the purpose of eliminating or diminishing the pollution of waters of the river.

SEC. 13 (a) Nothing in this Act shall affect the jurisdiction or responsibilities of the States with respect to fish and wildlife. Hunting and fishing shall be permitted on lands and waters administered as parts of the system under applicable State and Federal laws and regulations unless, in the case of hunting, those lands or waters are within a national park or monument. The administering Secretary may, however, designate zones where, and establish periods when, no hunting is permitted for reasons of public safety, administration, or public use and enjoyment and shall issue appropriate regulations after consultation with the wildlife a agency of the State or States affected.

(b) The jurisdiction of the States and the United States over waters of any stream included in a national wild, scenic or recreational river area shall be determined by established principles of law. Under the provisions of this Act, any taking by the United States of a water right which is vested under either State or Federal law at the time

such river is included in the national wild and scenic rivers system shall entitle the owner thereof to just compensation. Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

(c) Designation of any stream or portion thereof as a national wild, scenic or recreational river area shall not be construed as a reservation of the waters of such streams for purposes other than those specified in this Act, or in quantities greater than necessary to accomplish these purposes.

(d) The jurisdiction of the States over waters of any stream included in a national wild, scenic or recreational river area shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purposes of this Act or its administration.

(e) Nothing contained in this Act shall be construed to alter, amend, repeal, interpret, modify, or be in conflict with any interstate compact made by any States which contain any portion of the national wild and scenic rivers system.

(f) Nothing in this Act shall affect existing rights of any State, including the right of access, with respect to the beds of navigable streams, tributaries, or rivers (or segments thereof) located in a national wild, scenic or recreational river area.

(g) The Secretary of the Interior or the Secretary of Agriculture, as the case may be, may grant easements and right-of-way upon, over, under, across, or through any component of the national wild and scenic rivers system in accordance with the laws applicable to the national park system and the national forest system, respectively: Provided, That any conditions precedent to granting such easements and rights-of-way shall be related to the policy and purpose of this Act.

SEC. 14 (a) The claim and allowance of the value of an easement as a charitable contribution under section 170 and title 26, United States Code, or as a gift under section 2522 of said title shall constitute an agreement by the donor on behalf of himself, his heirs, and assigns that, if the terms of the instrument creating the easement are violated, the donee or the United States may acquire the servient estate of its fair market value as of the time the easement was donated minus the value of the easement claimed and allowed as a charitable contribution or gift.

SEC. 14A. (a) Where appropriate in the discretion of the Secretary, he may lease federally owned land (or any interest therein) which is within the boundaries of any component of the National Wild and Scenic Rivers system and which has been acquired by the Secretary under this Act. Such lease shall be subject to such restrictive covenants as may be necessary to carry out the purposes of this Act.

(b) Any land to be leased by the Secretary under this section shall be offered first for such lease to the person who owned such land immediately before its acquisition by the United States.

SEC. 15...(applies to components of NW & S Rivers Alaska)

SEC. 16. As used in this Act, the term –

(a) “River” means a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, creeks, runs, kills, rills, and small lakes.

(b) “Free-flowing,” as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: *Provided*, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.

(c) “Scenic easement” means the right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the wild and scenic rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area, but such control shall not affect, without the owners consent, any regular use exercised prior to the acquisition of the easement. For any designated wild and scenic river, the appropriate Secretary shall treat the acquisition of fee title with the reservation of regular existing uses to the owner as a scenic easement for the purposes of this Act. Such an acquisition shall not constitute fee title ownership for purposes of section 6(b).

SEC. 17....(Appropriation language for specific rivers)>

Selected Laws Amending or Related to the Wild and Scenic Rivers Act:

92-560

93-621

94-199  
94-486  
95-87  
96-312  
96-487  
99-590  
99-663  
100-33  
100-150  
100-412  
100-552  
100-534  
100-557  
100-605  
100-633  
100-677  
101-175  
101-612  
101-628

## **Treaty with the Nez Perces, 1855**

## Treaty with the Nez Perces, 1855.

Ratified Mar.  
8, 1859.  
Proclaimed  
Apr. 29, 1859.

*Articles of agreement and convention made and concluded at the treaty ground, Camp Stevens, in the Walla - Walla Valley, this eleventh day of June, in the year one thousand eight hundred and fifty-five, by and between Isaac I. Stevens, governor and superintendent of Indian affairs for the Territory of Washington, and Joel Palmer, superintendent of Indian affairs for Oregon Territory, on the part of the United States, and the undersigned chiefs, head-men, and delegates of the Nez Percé tribe of Indians occupying lands lying partly in Oregon and partly in Washington Territories, between the Cascade and Bitter Root Mountains, on behalf of, and acting for said tribe, and being duly authorized thereto by them, it being understood that Superintendent Isaac I. Stevens assumes to treat only with those of the above-named tribe of Indians residing within the Territory of Washington, and Superintendent Palmer with those residing exclusively in Oregon Territory.*

ARTICLE 1. The said Nez Percé tribe of Indians hereby cede, relinquish and convey to the United States all their right, title, and interest in and to the country occupied or claimed by them, bounded and described as follows, to wit: Commencing at the source of the Wo-na-ne-she or southern tributary of the Palouse River; thence down that river to the main Palouse; thence in a southerly direction to the Snake River, at the mouth of the Tucanon River; thence up the Tucanon to its source in the Blue Mountains; thence southerly along the ridge of the Blue Mountains; thence to a point on Grand Ronde River, midway between Grand Ronde and the mouth of the Woll-low-how River; thence along the divide between the waters of the Woll-low-how and Powder River; thence to the crossing of Snake River, at the mouth of Powder River; thence to the Salmon River, fifty miles above the place known [as] the "crossing of the Salmon River;" thence due north to the summit of the Bitter Root Mountains; thence along the crest of the Bitter Root Mountains to the place of beginning.

Cessation of  
lands to the  
United States.

Boundaries.

ARTICLE 2. There is, however, reserved from the lands above ceded for the use and occupation of the said tribe, and as a general reservation for other friendly tribes and bands of Indians in Washington Territory, not to exceed the present numbers of the Spokane, Walla-Walla, Cayuse, and Umatilla tribes and bands of Indians, the tract of land included within the following boundaries, to wit: Commencing where the Moh ha-na-she or southern tributary of the Palouse River flows from the spurs of the Bitter Root Mountains; thence down said tributary to the mouth of the Ti-nat-pan-up Creek; thence southerly to the crossing of the Snake River ten miles below the mouth of the Al-po-wa-wi River; thence to the source of the Al-po-wa-wi River in the Blue Mountains; thence along the crest of the Blue Mountains; thence to the crossing of the Grand Ronde River, midway between the Grand Ronde and the mouth of the Woll-low-how River; thence along the divide between the waters of the Woll-low-how and Powder Rivers; thence to the crossing of the Snake River fifteen miles below the mouth of the Powder River; thence to the Salmon River above the crossing; thence by the spurs of the Bitter Root Mountains to the place of beginning.

Reservation.

Boundaries.

All which tract shall be set apart, and, so far as necessary, surveyed and marked out for the exclusive use and benefit of said tribe as an Indian reservation; nor shall any white man, excepting those in the employment of the Indian Department, be permitted to reside upon the said reservation without permission of the tribe and the superintendent and agent; and the said tribe agrees to remove to and settle upon the same within one year after the ratification of this treaty. In the mean time it shall be lawful for them to reside upon any ground not in the actual claim and occupation of citizens of the United States, and upon any ground claimed or occupied, if with the permission of the owner or claimant, guarantying, however, the right to all citizens of the United States to enter upon and occupy as settlers any lands not actually occupied and cultivated by said Indians at this time, and not included in the reservation above named. And provided that any substantial improvement heretofore made by any Indian, such as fields enclosed and cultivated, and houses erected upon the lands hereby ceded, and which he may be compelled to abandon in consequence of this treaty, shall be valued under the direction

Reservation  
to be set  
apart, and  
Indians to  
settle thereon.  
Whites not to  
reside thereon  
without, etc.

of the President of the United States, and payment made therefor in money, or improvements of an equal value be made for said Indian upon the reservation, and no Indian will be required to abandon the improvements aforesaid, now occupied by him, until their value in money or improvements of equal value shall be furnished him as aforesaid.

Improvements  
to be paid  
for by the  
United States.

June 11, 1855.  
12 Stats..957

ARTICLE 3. And provided that, if necessary for the public convenience, roads may be run through the said reservation, and, on the other hand, the right of way, with free access from the same to the nearest public highway, is secured to them, as also the right, in common with citizens of the United States, to travel upon all public highways. The use of the Clear Water and other streams flowing through the reservation is also secured to citizens of the United States for rafting purposes, and as public highways.

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.

Roads may be made.

ARTICLE 4. In consideration of the above cession, the United States agree to pay to the said tribe in addition to the goods and provisions distributed to them at the time of signing this treaty, the sum of two hundred thousand dollars, in the following manner, that is to say, sixty thousand dollars, to be expended under the direction of the President of the United States, the first year after the ratification of this treaty, in providing for their removal to the reserve, breaking up and fencing farms, building houses, supplying them with provisions and a suitable outfit, and for such other objects as he may deem necessary, and the remainder in annuities, as follows: for the first five years after the ratification of this treaty, ten thousand dollars each year, commencing September 1, 1856; for the next five years, eight thousand dollars each year; for the next five years, six thousand each year, and for the next five years, four thousand dollars each year.

Privileges secured to Indians.

All which said sums of money shall be applied to the use and benefit of the said Indians, under the direction of the President of the United States, who may from time to time determine, at his discretion, upon what beneficial objects to expend the same for them. And the superintendent of Indian affairs, or other proper officer, shall each year inform the President of the wishes of the Indians in relation thereto.

ARTICLE 5. The United States further agree to establish, at suitable points within said reservation, within one year after the ratification hereof, two schools, erecting the necessary buildings, keeping the same in repair, and providing them with furniture, books, and stationery, one of which shall be an agricultural and industrial school, to be located at the agency, and to be free to the children of said tribe, and to employ one superintendent of teaching and two teachers; to build two blacksmiths' shops, to one of which shall be attached a tin-shop and to the other a gunsmith's shop; one carpenter's shop, one wagon and plough maker's shop, and to keep the same in repair, and furnished with the necessary tools; to employ one superintendent of farming and two farmers, two blacksmiths, one tinner, one gunsmith, one carpenter, one wagon and plough maker, for the instruction of the Indians in trades, and to assist them in the same; to erect one saw-mill and one flouring-mill, keeping the same in repair, and furnished with the necessary tools and fixtures, and to employ two millers; to erect a hospital, keeping the same in repair, and provided with the necessary medicines and furniture, and to employ a physician; and to erect, keep in repair, and provide with the necessary furniture the buildings required for the accommodation of the said employees. The said buildings and establishments to be maintained and kept in repair as aforesaid, and the employees to be kept in service for the period of twenty years.

Payments, how to be applied.

The United States to establish schools, etc.

To build mechanics' shops, etc.

And in view of the fact that the head chief of the tribe is expected, and will be called upon, to perform many services of a public character, occupying much of his time, the United States further agrees to pay to the Nez Percé tribe five hundred dollars per year for the term of twenty years, after the ratification hereof, as a salary for such person as the tribe may select to be its head chief. To build for him, at a suitable point on the reservation, a comfortable house, and properly furnish the same, and to plough and fence for his use ten acres of land. The said salary to be paid to, and the said house to be occupied by, such head chief so long as he may be elected to that position by his tribe, and no longer.

Sawmill. Hospital.

Salary to head chief; house, etc.

And all the expenditures and expenses contemplated in this fifth article of this treaty shall be defrayed by the United States, and shall not be deducted from the annuities agreed to be paid to said tribe, nor shall the cost of transporting the goods for the annuity-payments be a charge upon the annuities, but shall be defrayed by the United States.

Reservation may be surveyed into lots and assigned to individuals or families.

ARTICLE 6. The President may from time to time, at his discretion, cause the whole, or such portions of such reservation as he may think proper, to be surveyed into lots, and assign the same to such individuals or families of the said tribe as are willing to avail themselves of the privilege, and will locate on the same as a permanent home, on the same terms and subject to the same regulations as are provided in the sixth article of the treaty with the Omahas in the year 1854,

so far as the same may be applicable.

ARTICLE 7. The annuities of the aforesaid tribe shall not be taken to pay the debts of individuals.

ARTICLE 8. The aforesaid tribe acknowledge their dependence upon the Government of the United States, and promise to be friendly with all citizens thereof, and pledge themselves to commit no depredations on the property of such citizens; and should any one or more of them violate this pledge, and the fact be satisfactorily proved before the agent, the property taken shall be returned, or in default thereof, or if injured or destroyed, compensation may be made by the Government out of the annuities. Nor will they make war on any other tribe except in self-defense, but will submit all matters of difference between them and the other Indians to the Government of the United States, or its agent, for decision, and abide thereby; and if any of the said Indians commit any depredations on any other Indians within the Territory of Washington, the same rule shall prevail as that prescribed in this article in cases of depredations against citizens. And the said tribe agrees not to shelter or conceal offenders against the laws of the United States, but to deliver them up to the authorities for trial.

ARTICLE 9. The Nez Percés desire to exclude from their reservation the use of ardent spirits, and to prevent their people from drinking the same; and therefore it is provided that any Indian belonging to said tribe who is guilty of bringing liquor into said reservation, or who drinks liquor, may have his or her proportion of the annuities withheld from him or her for such time as the President may determine.

ARTICLE 10. The Nez Percé Indians having expressed in council a desire that William Craig should continue to live with them, he having uniformly shown himself their friend, it is further agreed that the tract of land now occupied by him, and described in his notice to the register and receiver of the land-office of the Territory of Washington, on the fourth day of June last, shall not be considered a part of the reservation provided for in this treaty, except that it shall be subject in common with the lands of the reservation to the operations of the intercourse act.

ARTICLE 11. This treaty shall be obligatory upon the contracting parties as soon as the same shall be ratified by the President and Senate of the United States.

In testimony whereof, the said Isaac I. Stevens, governor and superintendent of Indian affairs for the Territory of Washington, and Joel Palmer, superintendent of Indian affairs for Oregon Territory, and the chiefs, headmen, and delegates of the aforesaid Nez Percé tribe of Indians, have hereunto set their hands and seals, at the place, and on the day and year hereinbefore written.

Isaac I. Stevens, [L. S.]  
Governor and Superintendent Washington Territory.  
Joel Palmer, [L. S.]  
Superintendent Indian Affairs.

Aleiya, or Lawyer, Head-chief of,  
the Nez Percés  
Appushwa-hite, or Looking-glass, his x mark.  
Joseph, his x mark.  
James, his x mark.  
Red Wolf, his x mark.  
Timothy, his x mark.  
U-ute-sin-male-cun, his x mark.  
Spotted Eage, his x mark.  
Stoop-toop-nin or Cut-hair, his x mark.  
Tah-moh-moh-kin, his x mark.

[L. S.]  
[L. S.]  
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[L. S.]

Tippelanecbupooh, his x mark.  
Hah-hah-stilpilp, his x mark.  
Cool-cool-shua-nin, his x mark.  
Silish, his x mark.  
Toh-toh-molewit, his x mark.  
Tuky-in-lik-it, his x mark.  
Te-hole-hole-soot, his x mark.  
Ish-coh-tim, his x mark.  
Wee-as-cus, his x mark.  
Hah-hah-stoore-tee, his x mark.  
Eee-maht-sin-pooh, his x mark.  
Kay-kay-mass, his x mark.

[L. S.]  
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Annuities not  
to pay debts  
of individuals.

Tribes to  
preserve  
friendly  
relations

To pay for  
depredations.

Not to make  
war except in  
self-defense.

Offenders to  
be delivered  
up.

Annuities may  
be withheld  
from those  
who drink  
ardent spirits.

Land of  
William Craig.

When treaty  
to take effect

# Appendix B Summary of Existing Management Direction

## Introduction

This appendix presents a summary of the management direction for the HCNRA. **Table B-1** lists the compilation of existing direction applied to management of activities in the HCNRA to meet the intent of the *HCNRA Act*. All activities in the HCNRA are managed in compliance with this direction.

Table B-1: Summary of Existing Management Direction for the HCNRA

| Date          | Scope | Reference | Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------|-------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 1981      | HCNRA | N/A       | Rescinded record of decision for the Hells Canyon National Recreation Area comprehensive management plan (USDA 1981). Signed by Chief R. Max Peterson, adopted Alternative C as the management plan. ROD was withdrawn for reconsideration due to 21 appeals filed and replaced by new ROD April 1982.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| April 1982    | HCNRA | CMP       | Hells Canyon National Recreation Area comprehensive management plan (USDA 1982, as amended by appeal decisions in 1983 and 1984). Signed by Chief R. Max Peterson, adopted Alternative C with modifications and clarifications to levels of power and float boating on the Snake River, allowances for continued use of existing transmission lines and identification of appropriate future corridors, modifications to MA 9 (Dispersed Recreation/Native Vegetation) to allow necessary actions to protect timber and other vegetation on private and public lands, allowances for continued motorized use of Kirkwood Road to the Kirkwood Historic Ranch, maintenance of livestock grazing on Idaho portion of the HCNRA, and establishment of permit system in the Wilderness and limits party size to 8 people and 16 head of stock. |
| April 1983    | HCNRA | CMP       | Assistant Secretary Crowell's appeal decision on Hells Canyon National Recreation Area comprehensive management plan for Snake River boating (USDA 1983). Decision on five appeals related to Snake River boating rendered by John B. Crowell, Assistant Secretary, U.S. Department of Agriculture, Natural Resources and Environment. Decision changes Alternative C by establishing a use season from the Friday prior to Memorial Day to September 15, does not limit on number of daily trips by powerboats, does not impose equipment or experience standards for private powerboat operators, establishes a campsite reservation system, and increases float party size from 25 to 30 people.                                                                                                                                        |
| June 1983     | HCNRA | CMP       | Assistant Secretary Crowell's implementation decision on Hells Canyon National Recreation Area comprehensive management plan for Big Bar airfield (USDA 1983). Implements the portion of the management plan that allows aircraft landings in the Snake Wild River corridor at Big Bar. Defers decision on other appeals to April 1984 decision.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| December 1983 | HCNRA | CMP       | HCNRA CMP revised Snake River recreation management to incorporate 1982 and 1983 decisions described previously.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Date          | Scope    | Reference    | Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------|----------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| April 1984    | HCNRA    | CMP          | Assistant Secretary Crowell's appeal decision on Hells Canyon National Recreation Area comprehensive management plan for remaining appeals (USDA 1984). Decision on appeals rendered by John B. Crowell, Assistant Secretary, U.S. Department of Agriculture, Natural Resources and Environment. Sustains 1982 ROD with modifications permitting silvicultural treatments in MA 11 (Dispersed Recreation/Timber Management), changes flood plain definitions and standards for private land use regulations, and establishes provisions for revising or amending the plan. |
| June 1987     | HCNRA    | CMP          | Timber management direction within the HCNRA forage allocation. Forest Supervisor concurrence with April 1987 process definition that considered original intent. "Manage timber stands ... as old growth." Activity must be for an old growth purpose, or, beyond question, of benefit to recreation, scenic, or wildlife values. Individual stands must pass the test rather than broad areas of the forage allocation.                                                                                                                                                  |
| December 1988 | Region 6 | Veg EIS      | Managing competing and unwanted vegetation (USDA 1988). Establishes policy and direction for subsequent site-specific environmental analysis and requirements that apply to all vegetation management activities in the Pacific Northwest Region.                                                                                                                                                                                                                                                                                                                          |
| August 1989   | WWNF     | Tepee EIS    | Tepee Butte recovery project (USDA 1989). Prescribes fire recovery efforts directed toward vegetation management, recreation and visual resource enhancement, and wildlife habitat improvement.                                                                                                                                                                                                                                                                                                                                                                            |
| April 1990    | WWNF     | Forest Plan  | Wallowa-Whitman National Forest land and resource management plan (USDA 1990). The <i>Forest Plan</i> establishes general management direction for 10-15 years and replaces all previous resource management plans with the exception of the HCNRA Comprehensive Management Plan, which is incorporated by reference into the <i>Forest Plan</i> without modification.                                                                                                                                                                                                     |
| March 1991    | WWNF     | AMP Schedule | <i>Forest Plan</i> amendment #1: Allotment management planning schedule (USDA 1991). Replaces an old schedule and makes changes in the plan document to bring it in line with the Record of Decision.                                                                                                                                                                                                                                                                                                                                                                      |
| March 1992    | Region 6 | Veg EIS Am.  | Amendment to 1988 Managing competing and unwanted vegetation (USDA 1992). This amendment removes gender-specific mitigation measures, adds new mitigation measures to avert potential risks to human health.                                                                                                                                                                                                                                                                                                                                                               |
| April 1992    | WWNF     | INWM Plan    | <i>Forest Plan</i> amendment #4: Integrated noxious weed management plan (USDA 1992). Changes standards and guidelines to provide a process for implementing a long-term integrated weed management program for the WWNF.                                                                                                                                                                                                                                                                                                                                                  |
| August 1992   | WWNF     | Snake LAC    | <i>Forest Plan</i> amendment # 5: Limits of acceptable change recreation management plan for Snake River (USDA 1992). Incorporates a definition of valid motorized and nonmotorized river craft, incorporates a definition of invalid types of motorized and nonmotorized river craft, includes a review process for validity of new and different types of water craft, and allocates the Cache Creek area (purchased in June 1991) to MA 9 (Dispersed Recreation/Native Vegetation): 6,549 acres and MA 16 (Administrative and Recreation Sites): 7 acres.               |

| Date          | Scope                                    | Reference            | Title                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------|------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| January 1993  | WWNF                                     | Imnaha WSR Plan      | <i>Forest Plan</i> amendment #6: Imnaha Wild and Scenic River management plan (USDA 1993). Amends the Forest Plan to incorporate management direction for the Imnaha Wild and Scenic River.                                                                                                                                                                                                                                     |
| February 1994 | WWNF                                     | Prescribed Fire Plan | <i>Forest Plan</i> amendment #9: Prescribed natural fire in Hells Canyon National Recreation Area (USDA 1994). Adds implementing direction to the Forest Plan for the use of prescribed fire within Wilderness.                                                                                                                                                                                                                 |
| May 1994      | Region 6                                 | Eastside Screens     | Regional Forester's amendment #1/ <i>Forest Plan</i> amendment #14: Interim management direction establishing riparian, ecosystem, and wildlife standards for timber sales on eastside forests (USDA 1994). Continuation of interim management direction establishing riparian, ecosystem, and wildlife standards for timber sales on nine eastside forests in the Pacific Northwest Region.                                    |
| June 1994     | Nez Perce, Payette & WW National Forests | PACFISH LOC          | Letter of concurrence on interim standards and guidelines for managing anadromous fish-producing areas in eastern Oregon and Washington, Idaho and portions of California (USDI 1994). Consultation for bald eagle, grizzly bear, gray wolf, and MacFarlane's four-o'clock.                                                                                                                                                     |
| June 1994     | Nez Perce, Payette & WW National Forests | Private LURs         | Private land use regulations (USDA 1994). Establishes standards applicable to all private property within the boundaries of the HCNRA, including that within the boundaries of the Rapid, Snake, and Imnaha Wild and Scenic Rivers and the Hells Canyon Wilderness and serves to inform landowners of uses compatible with the HCNRA Act.                                                                                       |
| July 1994     | Nez Perce, Payette & WW National Forests | Public LURs          | Public land use regulations (USDA 1994). Establishes standards and guidelines for the protection and preservation of historic, archaeological, and paleontological resources; the use of motorized equipment; the use of motorized and nonmotorized river craft; and the management, utilization, and disposal of natural resources by timber harvesting, mining, and grazing on National Forest System lands within the HCNRA. |
| October 1994  | WWNF                                     | Snake River Plan     | <i>Forest Plan</i> amendment #12: Wild and Scenic Snake River recreation management plan (USDA 1994). Establishes direction for the Wild and Scenic Snake River corridor. Modified by appeal decisions for outfitter and guides (USDA 1996). New management plan was issued in 1999 (USDA 1999).                                                                                                                                |
| January 1995  | Nez Perce, Payette & WWNF                | PACFISH BO           | Biological opinion for implementation of interim strategies for managing anadromous fish-producing areas in eastern Oregon and Washington, Idaho, and portions of California (USDC 1995). Consultation for Snake River spring/summer chinook, Snake River fall chinook, and Snake River sockeye salmon.                                                                                                                         |
| February 1995 | Region 6                                 | 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). Management direction for slowing the degradation and beginning the restoration of aquatic and riparian ecosystems for anadromous fish.                                                                                         |
| March 1995    | Nez Perce, Payette & WW                  | Salmon BO            | Biological opinion for salmon on land and resource management plans for the Boise, Challis, Nez Perce, Payette, Salmon, Sawtooth, Umatilla, and Wallowa-Whitman National Forests (USDC 1995). Consultation for Snake River spring/summer                                                                                                                                                                                        |

| Date           | Scope                                    | Reference             | Title                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | National Forests                         |                       | chinook, Snake River fall chinook, and Snake River sockeye salmon.                                                                                                                                                                                                                                                                                                                                  |
| June 1995      | Region 6                                 | Eastside Screens      | Regional Forester's amendment #2: Revised interim standards for timber sales on eastside forests (USDA 1995). Replaces Regional Forester amendment #1 (USDA 1994). Revision and clarification of vegetative structural stages and wildlife standards in the Interim management direction establishing riparian, ecosystem, and wildlife standards for timber sales on Eastside forests (USDA 1994). |
| July 1995      | Region 1, 4, 6                           | INFISH                | Regional Forester's amendment #4: Inland native fish strategy (USDA 1995).                                                                                                                                                                                                                                                                                                                          |
| August 1995    | WWNF                                     | Sheep Decision        | Proposal to terminate domestic sheep grazing on portions of the Hells Canyon National Recreation Area (USDA 1995). Decision eliminates domestic sheep grazing in three grazing allotments in order to protect bighorn sheep herds from contact with domestic sheep and eliminate the risk of transfer of diseases from domestic to wild sheep.                                                      |
| November 1995  | WWNF                                     | Fuelwood Program      | Forest fuelwood program (USDA 1995). Provides direction for the forest fuelwood program that considers the values of standing and downed dead wood materials to the forest ecosystem and the public and provides consistency in management of the program.                                                                                                                                          |
| February 1996  | WWNF                                     | Overlook II           | Hells Canyon Overlook II (USDA 1996). Authorizes the improvement of three existing trailheads and the closure of 73 miles of primitive roads near the west rim of Hells Canyon.                                                                                                                                                                                                                     |
| September 1996 | WWNF                                     | Snake River Plan      | <i>Forest Plan</i> amendment #20: Wild and Scenic Snake River outfitters (USDA 1996). Provides direction to proceed with implementation of proposed outfitter and guide use allocations and operational limitations. A new plan, Wild and Scenic Snake River recreation management plan (USDA 1999) was issued in 1999 to replace the plan issued in 1994.                                          |
| October 1996   | Nez Perce, Payette & WW National Forests | PACFISH BO (extended) | Letter extending the 1995 Biological opinion on interim standards and guidelines for managing anadromous fish-producing areas in Eastern Oregon and Washington, Idaho, and portions of California (USDC 1996). Consultation for Snake River spring/summer chinook, Snake River fall chinook, and Snake River sockeye salmon.                                                                        |
| June 1998      | Nez Perce, Payette & WW National Forests | Steelhead BO          | Biological opinion for effects of continued implementation of Forest Service land and resource management plans (USDC 1998) affecting listed steelhead, salmon, and designated critical habitat in the Upper Columbia River and Snake River basins. Consultation for Snake River steelhead, Upper Columbia steelhead, Snake River spring/summer chinook, and Snake River fall chinook.              |
| August 1998    | Nez Perce, Payette & WW National Forests | Bull trout BO         | Biological opinion for the effects to bull trout from the continued implementation of land and resource management plans and resource management plans as amended by PACFISH and INFISH (USDI 1998). Consultation on Columbia River bull trout, Klamath River bull trout.                                                                                                                           |
| October 2000   | Nez Perce, Payette & WW                  | Lynx BO               | Biological opinion on the effects of the national forest land and resource management plans on Canada lynx in the contiguous United States (USDI 2000) in accordance with Section 7 of the ESA. Consultation on Canada lynx.                                                                                                                                                                        |

| Date      | Scope                                    | Reference        | Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------|------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | National Forests                         |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| July 2003 | Nez Perce, Payette & WW National Forests | CMP (as amended) | This <i>Comprehensive Management Plan</i> (CMP) documents the amended programmatic management direction for the Hells Canyon National Recreation Area (HCNRA) selected from Alternative E-modified in the <i>Record of Decision</i> (USDA 2003). It replaces or supplements the previous CMP (USDA 1982), and supplements or modifies the <i>Land and Resource Management Plan</i> (Forest Plan) direction for the Wallowa-Whitman National Forest (WWNF). This new CMP along with the existing <i>Forest Plan</i> direction (as amended) provides the management direction for all of the HCNRA, including those portions managed by the Nez Perce and Payette National Forests in Idaho. |

# Appendix C Outfitter and Guide Evaluation Criteria For New or Expanded Use

## Introduction

Applicants for new uses or additional use from existing permits will be required to demonstrate a need for the service based on evaluation criteria and management need.

## Evaluation Criteria

The following criteria may be used to evaluate a new outfitter/guide application, or to modify a current outfitter/guide operation. Not all criteria would have to be fully met for an operation to continue or be considered.

1. What unique skills does the applicant offer to provide this recreation opportunity to the public?

- A portion of the public, for a variety of reasons, does not have the skills and knowledge necessary to participate in, or experience some of the opportunities available in the area. Neither do they want to spend the money or time to purchase and maintain the necessary specialized equipment.
- The skills required are so unique that an outfitter is almost a prerequisite if this segment of the public is to have any opportunity to participate in and enjoy certain activities. The public, especially nonresidents, need the outfitter's knowledge of the recreational resource and activity in order to enjoy the area in a manner that reduces resource demand and user conflicts. This includes where and how to best access and travel through an area.

2. How does the proposed activity reduce resource demands and use conflicts?

3. How does the proposal enhance access and travel through the areas?

- An outfitter's skills and equipment provide a reasonable level of safety for the participants. Outfitters provide a high measure of safety because they are more experienced.

4. How does the proposed activity protect, enhance, and assure the safety of activity participants?

5. How does the proposed activity enhance special management objectives and issues prevalent in the HCNRA?

- Americans with Disabilities Act
- Threatened, endangered, proposed and sensitive species
- Environmental education
- Heritage resources
- Interpretation
- Fire
- Other management objectives

Outfitter assistance may better ensure special management objectives are met and/or issues are resolved. Examples include providing recreational opportunities for the handicapped, protecting fragile resources, providing environmental education and interpretive information concerning historical and prehistoric protection and activities.

6. How does the proposal promote:

- Diversity
- Use by nontraditional user groups

- Use by nontraditional user groups of the Hells Canyon Wilderness

Outfitter and guide operations and activities promote acceptance of diversity including use of the Hells Canyon Wilderness by nontraditional user groups.

7. How would the proposed activity aid FS officials in monitoring:

- Resource conditions
- Guided public use
- Nonguided public use
- User conflicts
- Experience levels

Field observations; monitoring of resource conditions specified in annual operating plans; surveys of guided and nonguided public to determine resource concerns, user conflicts, and experience levels; show that outfitter and guide operations and activities are consistent with HCNRA management objectives.

8. Explain how the proposed activity is consistent with WROS, ROS, and HCNRA management objectives for the Hells Canyon Wilderness and nonwilderness settings.

9. How would the proposed activity promote wilderness skills, no trace camping techniques, and heritage resource protection?

10. How would the proposed activity focus on specific resource conditions found only in Hells Canyon Wilderness of the HCNRA?

11. How would the proposed activity provide educational experiences that would focus or teach visitors to use techniques and or equipment to minimize resource impacts?

12. Demonstrate how the proposal is dependant on National Forest System land for its operation both in wilderness and nonwilderness. Permit applications will be evaluated against opportunities to provide the proposed service on private land or other public lands.

13. More criteria may be added as directed by the Forest Officer in charge to more clearly define the intent and benefits of the proposal.

## Management Need

Management need is not determined by public market demand or by a prospective outfitter or guide's desire for a permit. The agency determines the need based on mission, goals, objectives, and resource capability; and makes outfitter and guide allocations to attain those goals and objectives by area based on resource capability.

The requirement to assess the need for outfitting and guiding services before issuing special use permits for outfitting and guiding operations is established in the following:

- The *Wilderness Act of 1964* (Public Law 88-577), which states: "Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas."
- The *Code of Federal Regulations*, 36 CFR 251.54 (i), which states in part: "An authorized officer may deny issuance of an authorization for all other special uses if that officer determines: (1) The proposed use would be inconsistent with the purposes for which the lands are managed, or with other uses; or (2) The proposed use would be in the public interest."
- *FSM 2323.12*, which states in part: "Consistent with management of wilderness, permit outfitter and guide operations where they are necessary to help segments of the public use and enjoy wilderness areas for recreational or other wilderness purposes."
- *FSM 2323.13g*, which states in part: "Address the need for and role of outfitters and guides in the Forest Plan. The plan must address the type, numbers and amount of recreational use that is allocated to outfitter

guides. Ensure that outfitters provide their service to the public in a manner that is compatible with use by other wilderness visitors and that maintains the wilderness resource."

- *FSM 2323.14*, which states in part: "Plan and manage public use of wilderness in such a manner that preserves the wilderness character of the area. Provide for the limiting and distribution of visitor use according to periodic estimates of capacity in the *Forest Plan*."
- *FSM 2323.38*, which states in part: "*The Wilderness Act* requires managers to search for a balance between preserving the wilderness resource, by protecting natural ecological processes that can cause plant and animal populations, or ranges, to change, while at the same time making the resource available for visitor use and enjoyment. To do both, it may be necessary at times to limit visitor use to ensure that human influence does not impair natural wildlife or fish populations or their habitat."
- *FSM 2712.2*, which states in part: "When careful multiple use or functional planning indicates a concession opportunity is available and there is a demonstrated public need for the service, make every effort to obtain the best qualified permittee as well as an equitable return to the United States."
- *FSM 2721.53*, which states in part: "Require all private parties conducting outfitter-guide activities on national forest land to have a Special Use Authorization."
- *FSH 2709.11, Section 41.53f*, which states in part: "Outfitting and guiding permits may be issued when one or more of the following occurs: (1) An increased allocation, capacity or public need is identified through the forest planning process," and "Issue and administer special use permits for outfitter-guide activities to: 1. Meet general public recreation service needs identified through forest land and resource management planning."
- *Wallowa-Whitman National Forest Land and Resource Management Plan* which states in part: "Authorize and permit outfitter and guide operations where *FSM 2720* criteria are met and when supported by an environmental analysis," and "Outfitter guide services will continue."

## Appendix D Biologically Unique Criteria

# Appendix D Biologically Unique Criteria

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## Introduction

This section clarifies the rationale for defining biologically unique resources and the categories of biologically unique resources to meet the intent of Section 7(3) of the HCNRA Act. Section 7(3) specifies:

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.

## Biologically Unique

The HCNRA lies at the junction of three major ecoregions: the Columbia Basin, the Northern Rocky Mountains, and Northern Great Basin. As such, it contains biological features and peculiarities that reflect characteristics taken from those ecoregions.

“Biologically unique,” as expressed in Section 7(3) of the *HCNRA Act*, is defined here as biological features and peculiarities (as opposed to physical) that are;

- Limited in distribution solely or principally to the HCNRA; or
- Limited in distribution within the HCNRA, but may be relatively common within the neighboring ecoregions; or
- Relatively abundant in the HCNRA, but limited in distribution within the three neighboring ecoregions.

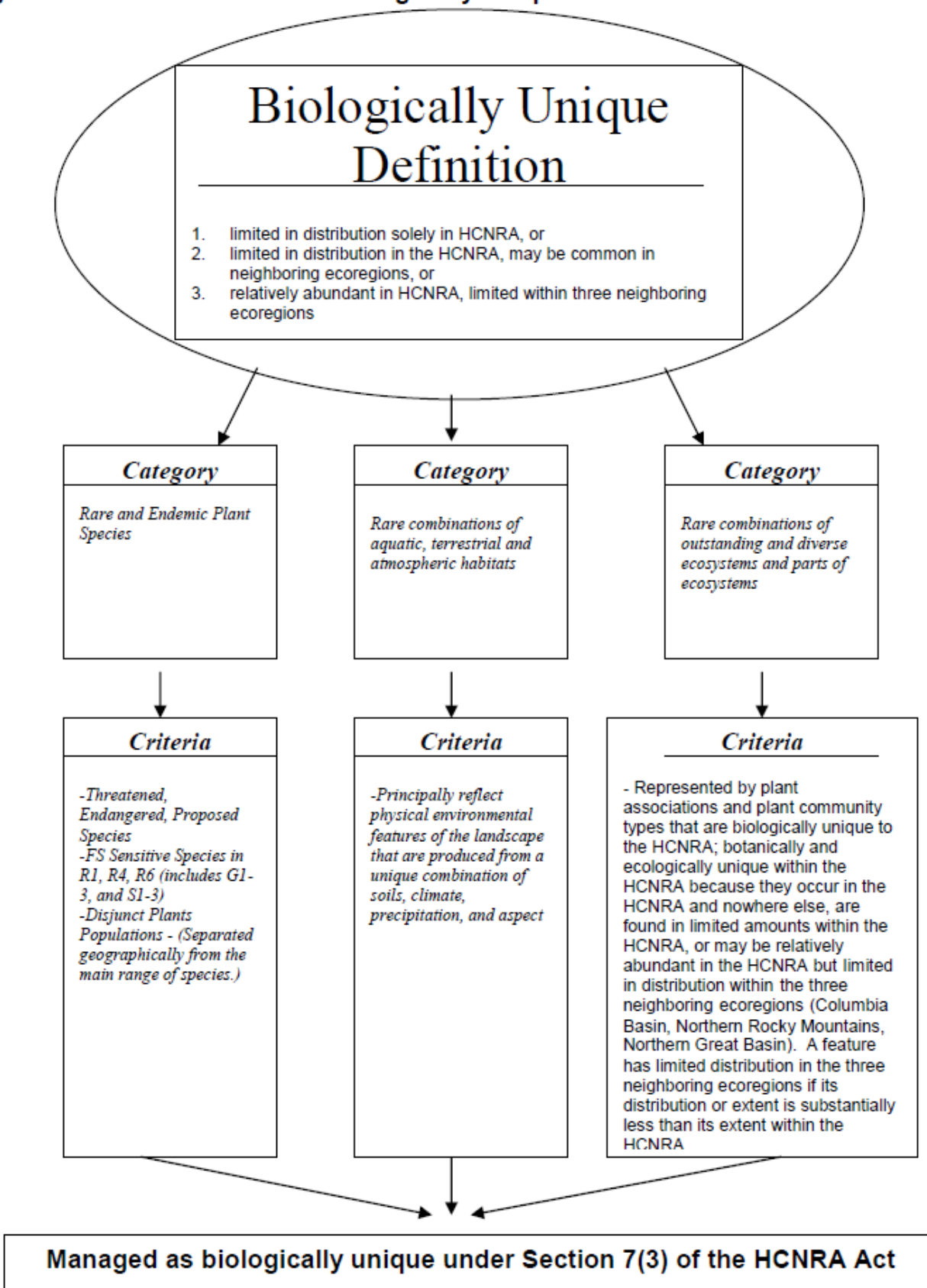
The *HCNRA Act* includes, but does not limit to defining biologically unique features and peculiarities to rare and endemic plants; rare combinations of aquatic, terrestrial and atmospheric habitats; and the rare combinations of outstanding and diverse ecosystems. Disjunct plants, which are plant populations separated geographically from the main range of a species, meet the definition of biologically unique, and thus are also considered a biologically unique feature.

The following categories were derived to describe those “features and peculiarities” responsive to Section 7(3) of the *HCNRA Act* that are biologically unique and for which the management direction in the plan applies.

- Rare and endemic plant species
- Rare combinations of aquatic, terrestrial and atmospheric habitats
- Rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated therewith

The criteria for how species or habitats were determined for each of the biologically unique categories are discussed in more detail below. **Figure D-1** illustrates the determination of biologically unique features and peculiarities for the HCNRA.

**Figure D-1: Determination of Biologically Unique Features and Peculiarities**



# Rare and Endemic Plant Species

## Concept of Rarity

Rabinowitz (1981) explored the concept of rarity and noted that rarity is influenced by geographic range, habitat specificity, and local population size. The rarest species have very narrow ranges, occupy specialized habitats, and exhibit small local population sizes. Rarity can be contrasted with endangerment. Endangerment refers to factors, or threats, that may make a species vulnerable to extirpation or extinction. These threats usually have a human origin, such as development that degrades or eliminates a species' habitat. Criteria for rarity can be applied at different scales: throughout a species' range or to a specific geographic area, such as a state or an ecological province. Probably every species on earth is rare somewhere in its range. Often this occurs at a species periphery (Morse 1996).

Therefore, it is necessary to distinguish species that are rare globally from those that are rare in a local geographic area, as in a state or ecological province, even though they may be common elsewhere. Rare plants have low abundance or small range sizes (Gaston 1994, Morse 1996). That is, there are few of them or they are found in only a few places.

## Rarity in the HCNRA

As related to Section 7(3) of the *HCNRA Act*, the scope of rarity here includes plants that are

- Rare range-wide (globally), or
- Rare within the states of Oregon or Idaho.

## Rare Plant Species on National Forest System Lands

The FS Sensitive species policy is designed to account for species considered rare at both the global scale and within a given state. The principal objectives of the sensitive species program are to:

- Ensure that species do not become threatened or endangered because of FS actions.
- Assist states in achieving their goals for the conservation of endemic species.
- Avoid or minimize impacts to species whose viability has been identified as a concern.
- Review programs and activities, as part of the National Environmental Policy Act projects, through a biological evaluation to determine their potential effect on sensitive species.

The FS accomplishes these objectives first by developing a list of sensitive species for each Region. Sensitive species are defined as "those plant and animal species, identified by a Regional Forester, for which population viability is a concern, as evidenced by:

- Significant current or predicted downward trends in population numbers or density.
- Significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution (FSM 2670.5)

The FS in Regions 1, 4, and 6 (R-1, 4, and 6) relies mainly on Association of Biodiversity Information (ABI) rankings of plants to determine which plants to designate as sensitive species. The ABI and Natural Heritage Network ranks rare, threatened, or endangered species throughout the world. Devised by The Nature Conservancy, the system is now maintained by ABI in cooperation with state Natural Heritage Programs or Conservation Data Centers in all 50 states (plus four Canadian provinces and 13 Latin American nations.)

On a scale of 1-5, with 1 being the rarest or imperiled and 5 being demonstrably widespread, abundant, and stable, the ranks are based mainly on the number of known occurrences, but also consider threats, sensitivity, and the area occupied by a species. Definitions for these ranks follow (State of Oregon, Natural Heritage Program 2001).

1. Critically imperiled because of extreme rarity or because of factors making it vulnerable to extinction, typically with five or fewer occurrences.

2. Imperiled because of rarity or other factors demonstrably make it vulnerable to extinction or extirpation, typically with 6-20 occurrences.
3. Rare, uncommon, or threatened, but not immediately imperiled, typically with 21-100 occurrences.
4. Not rare and apparently secure, but with cause for long-term concern, usually with more than 100 occurrences.
5. Demonstrably widespread, abundant, and secure.

These ranks can be applied at three different scales:

- Global (G),
- National (N), or
- State-wide in the United States (S)

The ABI evaluates species by applying the ranking criteria to each scale factor, and then assigns a determination of rarity such as G1, G2, or G3; N1, N2, or N3, or S1, S2, or S3. Although some species may be more common on a global or national scale (G4, G5, N4, N5) they may be vulnerable or rare within state (S1, S2 or S3.) An example is the northern twayblade (*Listera borealis*), which is found from Alaska across Canada, south to the Northern Rocky Mountains of the U.S., and barely reaches into Oregon in Wallowa County. This species is ranked G4, S1.

#### Rare Plant Species in the HCNRA

Because the HCNRA overlies two states and three FS Regions (R-1, 4, and 6), the Regional Forester's sensitive species lists were used to determine which plants are considered rare in the HCNRA. These lists are developed to include all species that are rare range-wide or, if threats to a species' distribution and viability are known, rare within a state, even though it may be common in other areas.

The FS sensitive species program in R-1, 4, and 6 includes plants considered rare both globally (G1, G2, or G3) and within individual states (S1, S2, and S3) (Robert W. Williams Letter to Forest Supervisors, May 13, 1999; R-1 Task Product 1997). These regions differ slightly in addressing factors that place a species at risk of extinction or extirpation.

In R-6, G1-G3 and S1-S2 ranked species are designated sensitive without using further criteria. However, species ranked S3 are assessed using six additional factors (abundance, range, trend, protection, threat, and fragility). If significant concerns for viability arise among these factors, then the species is designated sensitive. In R-1, species with documented threats or inherent vulnerability are identified first and then are screened using the ABI G1-G3 and S1-S3 ranks. Those species with either risks or vulnerability that are G1-G3 or S1-S3 are designated sensitive.

#### Determination

Based on these rankings, plant species that meet the combinations of rarity and the scale listed in **Table D-1** are considered within the definition of rarity for the HCNRA:

Table D-1: Criteria for Rare Plant Species in the HCNRA

| ABI Rank | Rarity Criteria                                                                                                                                                                                                                                                                                                                                                | Global Scale (G) | State Scale (S) |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|
| 1        | Critically imperiled because of extreme rarity or because of factors making it vulnerable to extinction, typically with 5 or fewer occurrences.                                                                                                                                                                                                                | HCNRA Rare       | HCNRA Rare      |
| 2        | Imperiled because of rarity or other factors demonstrably make it vulnerable to extinction or extirpation, typically with 6-20 occurrences.                                                                                                                                                                                                                    | HCNRA Rare       | HCNRA Rare      |
| 3        | Rare, uncommon, or threatened, but not immediately imperiled, typically with 21-100 occurrences. Consideration of additional factors: <ul style="list-style-type: none"> <li>abundance, range, trend, protection, threat, and fragility.</li> </ul> If significant concerns for viability arise among these factors, then the species is designated sensitive. | HCNRA Rare       | HCNRA Rare      |
| 4        | Not rare and apparently secure, but with cause for long-term concern, usually with more than 100 occurrences.                                                                                                                                                                                                                                                  | Not Rare         | Not Rare        |
| 5        | Demonstrably widespread, abundant, and secure.                                                                                                                                                                                                                                                                                                                 | Not Rare         | Not Rare        |

MacFarlane's four-o'clock (*Mirabilis macfarlanei*) is a good example of a rare plant species in the HCNRA. It is globally rare (G2) because it is found in a few localities in the Salmon River, Snake River, and Imnaha River canyons. Any potentially new plants discovered need to meet these criteria to be considered rare under the *HCNRA Act*.

#### Endemic Plants Definition

Plants whose natural distribution is limited to a certain geographic area are endemic to that area. Plants endemic to a relatively large area, e.g. eastern Oregon, are called regional endemics. Plants that have a narrow, restricted geographic range, e.g. one small mountain range or a river canyon, such as Hells Canyon, are called local endemics (Croft et al 1997). Section 7(3) of the *HCNRA Act* clearly indicates to consider plants endemic to the HCNRA, particularly Hells Canyon. Plants endemic to the HCNRA are those species confined to this area, i.e. they are found here and nowhere else. Plants restricted mainly to the HCNRA are considered local endemics (Croft et al 1997).

Because plant distribution does not account for artificial administrative boundaries, the list of endemic plants includes some species that inhabit an area slightly larger than the HCNRA; that is, small portions of their range extend beyond the administrative boundary of the HCNRA. Due to the similarity of habitats, some endemic plants found in the Snake River canyon may also be found farther up the Salmon River upstream from the HCNRA boundary. However, because these plants are restricted mainly to the HCNRA, they are endemic to the HCNRA. The area of endemism for the HCNRA is 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 tributaries to these river reaches.

#### Determination

To determine which plants were endemic, distribution records examined from the Oregon Natural Heritage Program and the Idaho Conservation Data Center. Local experts were also consulted to determine plant species that meet the definition of endemic to the HCNRA.

Refer to **Table D-2** for a complete list of rare and endemic plant species in the HCNRA. The list is expected to be dynamic according to the changes made in the federal listings by USFWS, and the Regional Forester's lists for Regions R-1, 4, and 6. This list reflects the most current information for plants meeting the criteria for rare and endemic as described above. Any potentially new plants discovered need to meet these criteria to be considered a rare and endemic plant species under the *HCNRA Act*.

## Disjunct Plants Definition

Plant populations that are separated geographically are disjunct from the main distribution of a species. Plants with disjunct populations in the HCNRA are biologically unique because outside of the HCNRA, they are not found again for dozens to over one hundred miles. Disjunct plants are accordingly rare in this portion of their distribution.

### Determination

To determine which plants were disjunct, distribution records obtained from the Oregon Natural Heritage Program and the Idaho Conservation Data Center. Local experts also were consulted to determine plant species that meet the definition of disjunct for the HCNRA.

Refer to **Table D-2** for a complete list of disjunct plant species in the HCNRA. Any potentially new plants discovered need to meet these criteria to be considered disjunct under the HCNRA Act.

### Description of Rare and Endemic Plant Species

**Table D-2** reflects the most current information for plants meeting the criteria for rare and endemic (including disjunct species) as described above. The list is expected to be dynamic according to the changes made in the federal listings by the USFWS, the Regional Forester's lists for Regions 1, 4, and 6; or based on the discovery of new endemic or disjunct plants.

Table D-2: Rare and Endemic Plant Species in the HCNRA

| Plant Species                                  | Federal <sup>1</sup><br>Status | Forest Service <sup>2</sup><br>Sensitive Species |             |             | Doc <sup>3</sup> | Habitat <sup>4</sup> |
|------------------------------------------------|--------------------------------|--------------------------------------------------|-------------|-------------|------------------|----------------------|
|                                                |                                | Region<br>6                                      | Region<br>4 | Region<br>1 |                  |                      |
| Threatened, Endangered, or Proposed Species    |                                |                                                  |             |             |                  |                      |
| Howellia aquatilis                             | LT                             | X                                                | X           | X           |                  | R                    |
| Mirabilis macfarlanei                          | LT                             | X                                                | X           | X           | X                | G                    |
| Silene spaldingii                              | LT                             | X                                                | X           | X           |                  | G                    |
| Spiranthes diluvialis                          | LT                             |                                                  | X           |             |                  | R                    |
| Thelypodium howellii var.<br>spectabilis       | LT                             |                                                  |             |             |                  | R, G                 |
| Candidate Species                              |                                |                                                  |             |             |                  |                      |
| Botrychium lineare                             |                                | X                                                |             |             |                  | R, MWM               |
| Sensitive Species                              |                                |                                                  |             |             |                  |                      |
| Adiantum aleuticum                             |                                |                                                  | X           |             |                  | RCB, R               |
| Achnatherum<br>wallowaensis                    |                                | X                                                |             |             | X                | L                    |
| Allium madidum                                 |                                |                                                  | X           |             |                  | MWM                  |
| Allium tolmeii var.<br>persimile               |                                |                                                  | X           |             | X                | L                    |
| Allotropa virgata                              |                                |                                                  | X           | X           |                  | CF                   |
| Arabis hastatula                               |                                | X                                                |             |             | X                | RCB                  |
| Astragalus paysonii                            |                                |                                                  | X           | X           |                  | CF                   |
| Astragalus vexilliflexus<br>var. vexilliflexus |                                |                                                  | X           |             |                  | G                    |
| Blechnum spicant                               |                                |                                                  |             | X           |                  | CF                   |
| Botrychium ascendens                           |                                | X                                                |             | X           |                  | R, MWM               |
| Botrychium campestre                           |                                | X                                                |             |             |                  | R, MWM               |
| Botrychium crenulatum                          |                                | X                                                |             | X           |                  | R, MWM               |
| Botrychium fenestratum                         |                                | X                                                |             |             |                  | R, MWM               |
| Botrychium lanceolatum                         |                                | X                                                |             | X           |                  | R, MWM               |
| Botrychium lunaria                             |                                | X                                                |             |             |                  | R, MWM               |

| Plant Species                                              | Federal <sup>1</sup><br>Status | Forest Service <sup>2</sup><br>Sensitive Species |             |             | Doc <sup>3</sup> | Habitat <sup>4</sup> |
|------------------------------------------------------------|--------------------------------|--------------------------------------------------|-------------|-------------|------------------|----------------------|
|                                                            |                                | Region<br>6                                      | Region<br>4 | Region<br>1 |                  |                      |
| <i>Botrychium minganense</i>                               |                                | X                                                |             | X           |                  | R, MWM               |
| <i>Botrychium montanum</i>                                 |                                | X                                                |             | X           |                  | R, MWM               |
| <i>Botrychium paradoxum</i>                                |                                | X                                                |             | X           |                  | R, MWM               |
| <i>Botrychium pedunculatum</i>                             |                                | X                                                |             | X           |                  | R, MWM               |
| <i>Botrychium pinnatum</i>                                 |                                | X                                                |             | X           |                  | R, MWM               |
| <i>Botrychium simplex</i>                                  |                                |                                                  |             | X           | X                | R, MWM               |
| <i>Bryum calobryoides</i>                                  |                                |                                                  | X           |             |                  | CF                   |
| <i>Buxbaumia aphylla</i>                                   |                                |                                                  |             | X           |                  | CF                   |
| <i>Buxbaumia piperi</i>                                    |                                |                                                  | X           |             |                  | CF                   |
| <i>Buxbaumia viridis</i>                                   |                                |                                                  | X           | X           |                  | CF                   |
| <i>Calamagrostis tweedyi</i>                               |                                |                                                  | X           |             |                  | CF, G                |
| <i>Calochortus longebarbatus</i> var. <i>longebarbatus</i> |                                | X                                                |             |             |                  | R, MWM               |
| <i>Calochortus macrocarpus</i> var. <i>maculosus</i>       |                                | X                                                |             |             | X                | G                    |
| <i>Calochortus nitidus</i>                                 |                                | X                                                | X           | X           | X                | G                    |
| <i>Camassia cusickii</i>                                   |                                |                                                  | X           |             | X                | R                    |
| <i>Cardamine constancei</i>                                |                                |                                                  |             | X           |                  | CF                   |
| <i>Carex aenea</i>                                         |                                |                                                  | X           |             |                  | MWM, R               |
| <i>Carex atrata</i> var. <i>atrosquama</i>                 |                                | X                                                |             |             |                  | MWM, A               |
| <i>Carex backii</i>                                        |                                | X                                                |             |             |                  | R                    |
| <i>Carex buxbaumii</i>                                     |                                |                                                  | X           | X           |                  | MWM                  |
| <i>Carex dioica</i> var. <i>gynocrates</i>                 |                                | X                                                |             |             |                  | R                    |
| <i>Carex flava</i>                                         |                                |                                                  |             | X           |                  | MWM                  |
| <i>Carex flava</i> var. <i>rustica</i>                     |                                |                                                  |             |             | X                | R, MWM               |
| <i>Carex hendersonii</i>                                   |                                |                                                  |             | X           |                  | G                    |
| <i>Carex hystericina</i>                                   |                                | X                                                |             |             | X                | MWM, R               |
| <i>Carex interior</i>                                      |                                | X                                                |             |             | X                | MWM, R               |
| <i>Carex livida</i>                                        |                                |                                                  | X           |             |                  | MWM                  |
| <i>Carex nardina</i>                                       |                                | X                                                |             |             |                  | A                    |
| <i>Carex norvegica</i>                                     |                                | X                                                |             |             |                  | A, MWM, R            |
| <i>Carex nova</i>                                          |                                | X                                                |             |             |                  | A, MWM               |
| <i>Carex parryana</i>                                      |                                | X                                                |             |             |                  | MWM                  |
| <i>Carex paupercula</i>                                    |                                |                                                  |             | X           |                  | MWM                  |
| <i>Carex scirpoidea</i> var. <i>stenochlaena</i>           |                                | X                                                |             |             |                  | MWM                  |
| <i>Carex stenophylla</i>                                   |                                | X                                                |             |             |                  | G, MWM               |
| <i>Carex stramineiformis</i>                               |                                |                                                  | X           |             |                  | A, RCB               |
| <i>Castilleja fraternal</i>                                |                                | X                                                |             |             |                  | A, RCB, MWM, R       |
| <i>Castilleja rubida</i>                                   |                                | X                                                |             |             |                  | RCB, A               |
| <i>Ceanothus prostratus</i> ssp. <i>Prostratus</i>         |                                |                                                  | X           |             |                  | CF                   |
| <i>Cetraria subalpina</i>                                  |                                |                                                  |             | X           |                  | CF                   |
| <i>Chrysothamnus nauseosus</i>                             |                                |                                                  | X           |             |                  | RCB                  |
| <i>Cicuta bulbifera</i>                                    |                                | X                                                | X           |             |                  | R                    |
| <i>Cornus nuttallii</i>                                    |                                |                                                  |             | X           |                  | CF                   |
| <i>Crepis bakeri</i> ssp. <i>idahoensis</i>                |                                |                                                  | X           |             |                  | G                    |
| <i>Cypripedium fasciculatum</i>                            |                                | X                                                | X           | X           |                  | CF, R                |

| Plant Species                                                       | Federal <sup>1</sup><br>Status | Forest Service <sup>2</sup><br>Sensitive Species |             |             | Doc <sup>3</sup> | Habitat <sup>4</sup> |
|---------------------------------------------------------------------|--------------------------------|--------------------------------------------------|-------------|-------------|------------------|----------------------|
|                                                                     |                                | Region<br>6                                      | Region<br>4 | Region<br>1 |                  |                      |
| <i>Dasynotus daubenmirei</i>                                        |                                |                                                  |             | X           |                  | CF                   |
| <i>Diphasiastrum complanatum</i> =<br><i>Lycopodium complanatum</i> |                                | X                                                |             |             |                  | CF, R                |
| <i>Douglasia idahoensis</i>                                         |                                |                                                  | X           | X           |                  | CF,                  |
| <i>Epipactis gigantea</i>                                           |                                |                                                  | X           | X           | X                | R                    |
| <i>Erigeron disparipilus</i>                                        |                                | X                                                |             |             | X                | L                    |
| <i>Erigeron engelmanni</i> var.<br><i>davisii</i>                   |                                | X                                                |             |             | X                | G, RCB               |
| <i>Hackelia davisii</i>                                             |                                |                                                  | X           |             |                  | RCB                  |
| <i>Halimolobos perplexa</i> var.<br><i>perplexa</i>                 |                                | X                                                | X           | X           | X                | G                    |
| <i>Haplopappus hirtus</i> var.<br><i>sonchifolius</i>               |                                |                                                  |             | X           | X                | MWM                  |
| <i>Haplopappus insecticuriis</i>                                    |                                |                                                  | X           |             |                  | G                    |
| <i>Haplopappus radiatus</i> =<br><i>Pyrrocoma radiata</i>           |                                |                                                  | X           |             |                  | G                    |
| <i>Helodium blandowii</i>                                           |                                |                                                  | X           |             |                  | MWM                  |
| <i>Hookeria lucens</i>                                              |                                |                                                  |             | X           |                  | CF, R,               |
| <i>Kobresia bellardii</i>                                           |                                | X                                                |             |             |                  | A                    |
| <i>Kobresia simpliciuscula</i>                                      |                                | X                                                |             |             |                  | MWM, R               |
| <i>Leptodactylon pungens</i><br>ssp. <i>hazeliae</i>                |                                | X                                                | X           |             | X                | G, RCB               |
| <i>Lewisia kelloggii</i>                                            |                                |                                                  | X           |             |                  | A                    |
| <i>Listeria borealis</i>                                            |                                | X                                                |             |             |                  | CF                   |
| <i>Lobaria scrobiculata</i>                                         |                                |                                                  | X           |             |                  | RCB                  |
| <i>Lomatium erythrocarpum</i>                                       |                                | X                                                |             |             |                  | A                    |
| <i>Lomatium greenmanii</i>                                          |                                | X                                                |             |             |                  | A                    |
| <i>Lomatium ravenii</i>                                             |                                | X                                                |             |             |                  | L                    |
| <i>Lomatium salmoniflorum</i>                                       |                                | X                                                | X           | X           |                  | G                    |
| <i>Mimulus ampliatus</i>                                            |                                |                                                  |             | X           |                  | R                    |
| <i>Mimulus clivicola</i>                                            |                                | X                                                | X           | X           | X                | G                    |
| <i>Mimulus hymenophyllus</i>                                        |                                | X                                                |             |             | X                | R, RCB               |
| <i>Pellaea bridgesii</i>                                            |                                | X                                                |             |             |                  | RCB                  |
| <i>Pentagramma triangularis</i>                                     |                                |                                                  |             | X           | X                | RCB                  |
| <i>Peraphyllum ramosissimum</i>                                     |                                |                                                  | X           |             |                  | G                    |
| <i>Phacelia minutissima</i>                                         |                                | X                                                | X           |             | X                | MWM,                 |
| <i>Phlox multiflora</i>                                             |                                | X                                                |             |             |                  | G, RCB               |
| <i>Platanthera obtusata</i>                                         |                                | X                                                |             |             |                  | MWM                  |
| <i>Pleuropogon oregonus</i>                                         |                                | X                                                |             |             |                  | R, MWM               |
| <i>Primula cusickiana</i>                                           |                                | X                                                |             |             | X                | R, L                 |
| <i>Ranunculus oresterus</i>                                         |                                | X                                                |             |             |                  | MWM                  |
| <i>Rhizomnium nudum</i>                                             |                                |                                                  |             | X           |                  | CF                   |
| <i>Rhynchospora alba</i>                                            |                                |                                                  | X           | X           |                  | MWM                  |
| <i>Ribes wolfii</i>                                                 |                                |                                                  | X           |             |                  | CF                   |
| <i>Rorippa columbiae</i>                                            |                                | X                                                |             |             |                  | R                    |
| <i>Rubus bartonianus</i>                                            |                                | X                                                | X           |             | X                | R, RCB               |
| <i>Salix farriae</i>                                                |                                | X                                                |             |             |                  | MWM, R               |
| <i>Salix glauca</i>                                                 |                                |                                                  | X           |             |                  | A                    |
| <i>Sanicula graveolens</i>                                          |                                |                                                  | X           |             |                  | G                    |
| <i>Saxifraga adscendens</i> var.<br><i>oregonensis</i>              |                                | X                                                |             |             |                  | RCB, A               |

| Plant Species                                           | Federal <sup>1</sup><br>Status | Forest Service <sup>2</sup><br>Sensitive Species |             |             | Doc <sup>3</sup> | Habitat <sup>4</sup> |
|---------------------------------------------------------|--------------------------------|--------------------------------------------------|-------------|-------------|------------------|----------------------|
|                                                         |                                | Region<br>6                                      | Region<br>4 | Region<br>1 |                  |                      |
| <i>Saxifraga bryophora</i> var. <i>tobiasiae</i>        |                                |                                                  | X           |             |                  | RCB                  |
| <i>Saxifraga tolmiei</i> var. <i>ledifolia</i>          |                                |                                                  | X           |             |                  | CF, A                |
| <i>Scheuchzeria palustris</i>                           |                                |                                                  | X           |             |                  | MWM                  |
| <i>Sedum borschii</i>                                   |                                |                                                  | X           |             |                  | RCB                  |
| <i>Senecio dimorphophyllus</i>                          |                                | X                                                |             |             |                  | MWM, A               |
| <i>Sphagnum mendocinum</i>                              |                                |                                                  |             | X           |                  | MWM                  |
| <i>Stylocline filaginea</i>                             |                                |                                                  | X           |             |                  | G                    |
| <i>Suksdorfia violacea</i>                              |                                | X                                                |             |             |                  | RCB                  |
| <i>Syntheris platycarpa</i>                             |                                |                                                  |             | X           |                  | CF                   |
| <i>Thalictrum alpinum</i> var. <i>hebetum</i>           |                                | X                                                |             |             |                  | MWM                  |
| <i>Thelypodium eucosmum</i>                             |                                | X                                                |             |             |                  | G                    |
| <i>Tofieldia glutinosa</i> var. <i>absona</i>           |                                |                                                  | X           |             |                  | MWM                  |
| <i>Townsendia montana</i>                               |                                | X                                                |             |             |                  | A                    |
| <i>Townsendia parryi</i>                                |                                | X                                                |             |             |                  | A                    |
| <i>Triantha occidentalis</i> ssp. <i>Brevistyla</i>     |                                |                                                  | X           |             |                  | MWM, R               |
| <i>Trifolium douglassii</i>                             |                                | X                                                |             |             |                  | G, MWM               |
| <i>Trifolium longipes</i> ssp. <i>multipedunculatum</i> |                                |                                                  | X           |             |                  | G, MWM               |
| <i>Trollius laxus</i> var. <i>albiflorus</i>            |                                | X                                                |             |             | X                | MWM, R               |
| <i>Waldsteinia idahoensis</i>                           |                                |                                                  |             | X           |                  | CF                   |
| <b>Endemic Species</b>                                  |                                |                                                  |             |             |                  |                      |
| <i>Arabis crucisetosa</i>                               |                                |                                                  |             |             | X                | MWM                  |
| <i>Astragalus vallis</i>                                |                                |                                                  |             |             | X                | G                    |
| <i>Frasera albicaulis</i> var. <i>idahoensis</i>        |                                |                                                  |             |             | X                | G                    |
| <i>Lomatium rollinsii</i>                               |                                |                                                  |             |             | X                | G                    |
| <i>Lomatium serpentinum</i>                             |                                |                                                  |             |             |                  | G                    |
| <i>Nemophila kirtleyi</i>                               |                                |                                                  |             |             | X                | CF                   |
| <i>Penstemon elegantulus</i>                            |                                |                                                  |             |             | X                | G                    |
| <i>Phlox colubrina</i>                                  |                                |                                                  |             |             | X                | G, RCB               |
| <i>Ribes cereum</i> var. <i>colubrinum</i>              |                                |                                                  |             |             | X                | R                    |
| <b>Disjunct Species</b>                                 |                                |                                                  |             |             |                  |                      |
| <i>Allium geyeri</i> var. <i>geyeri</i>                 |                                |                                                  |             |             | X                | MWM, R               |
| <i>Bupleurum americanum</i>                             |                                |                                                  |             |             | X                | A                    |
| <i>Carex limosa</i>                                     |                                |                                                  |             |             | X                | MWM                  |
| <i>Cryptogramma stelleri</i>                            |                                |                                                  |             |             | X                | RCB                  |
| <i>Drosera anglica</i>                                  |                                |                                                  |             |             | X                | MWM                  |
| <i>Geum rossii</i> var. <i>turbinatum</i>               |                                |                                                  |             |             | X                | RCB                  |
| <i>Pediocactus simpsonii</i> var. <i>robustior</i>      |                                |                                                  |             |             | X                | G                    |
| <i>Potentilla palustre</i>                              |                                |                                                  |             |             | X                | MWM                  |
| <i>Xerophyllum tenax</i>                                |                                |                                                  |             |             | X                | CF, A-MWM            |

<sup>1</sup>. Federal Status. LT- Listed Threatened as defined by the Endangered Species Act of 1973.

<sup>2</sup>. Region 6 Regional Forester's Sensitive Species List. Applies to all Hells Canyon land in Oregon (June 10, 1991) updated by April 1999 listing.

Region 4 Regional Forester's Sensitive Species List. Applies to all land on the Payette National Forest in Idaho that is administered by the HCNRA (November 1995).

Region 1 Regional Forester's Sensitive Species List. Applies to all land on the Nez Perce National Forest in Idaho that is administered by the HCNRA (March 12, 1999).

<sup>3</sup>. Doc - Documented in the HCNRA. Indicates that the species has been documented in the HCNRA.

<sup>4</sup>. Habitat: A=Alpine; CF = Coniferous Forest; G = Grassland; L = Lithosol; MWM = Moist and Wet Meadows; R = Riparian Areas; RCB = Rock Outcrops, Cliffs, and Bluffs.

## 1- Rare Combinations of Aquatic, Terrestrial, and Atmospheric Habitats

## 2- Definition

Rare combinations of aquatic, terrestrial, and atmospheric habitats are habitats that may have biological significance within the HCNRA. Though these habitats may be common elsewhere, within the HCNRA they are limited. These habitats were identified to represent rare combinations of aquatic, terrestrial, and atmospheric habitats because they 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 were not selected to provide specifically for fish and wildlife habitat. Fish and wildlife habitat are provided protection under Section 7(4) of the HCNRA Act. Refer to the section with **Management Direction By Resource** for Riparian/Aquatic Habitat and Water Quality, and Wildlife Habitat.

## Determination

- 3- A team of resource professionals selected these habitats based on their biological uniqueness in the HCNRA using the definition described previously in the HCNRA. These habitats include wet cliffs, natural caves, cliffs and talus slopes, natural salt licks, river beaches, springs, seeps and other wetland areas. Refer to the following section for a complete description of rare combinations of aquatic, terrestrial, and atmospheric habitats in the HCNRA. Any potentially new rare combinations discovered need to meet these criteria to be considered biologically unique under the *HCNRA Act*.

## Description of Rare Combinations of Aquatic, Terrestrial, and Atmospheric Habitats

### Wet Cliffs

Perennial water emerges from cracks, seeps, or springs that cascade down rock faces of wet cliffs. This habitat supports several species of plants that are found nowhere else in the HCNRA. The membrane leaved money flower (*Mimulus hymenophyllus*) is a local endemic species that is found in this habitat type. It is on the Region 6 sensitive plant list. A second monkey flower (*Mimulus patulus*) is another, more common, local endemic found in these areas. Oregon bolandra (*Bolandra oregana*) grows on wet cliffs in the HCNRA and in the Columbia Gorge.

## **Natural Caves**

Natural caves, as defined by the Federal Cave Resources Protection Act of 1988 (16 USC 4300 - 4309, 102 Stat. 4546; Public Law 100-691), are abundant throughout the HCNRA. Cave types vary from rock shelters (common among basalt flows and rims), solution tubes in limestone formations, and fault-block and talus caves where lithic breakdown has occurred. There are also occasional "tree-cast" and superceded stream caves within and between basalt flows. All caves include significant biological resources and commonly include archaeological and/or paleontological values.

The Federal Cave Resources Protection Act directs evaluation, analysis, and monitoring for all caves, sinkholes, and other unique geological features. The Forest Plan (USDA 1990) includes 16 caves, all within the HCNRA, on the national significant caves list.

### **4- Cliffs and Talus Slopes**

Cliffs and talus slopes can be found throughout the HCNRA. Talus slopes are steep rocky areas, often below cliffs, that support only sparse vegetation. Cliffs and talus slopes provide habitat to some rare and endemic plants. By their nature, cliffs are fairly free from the affects of most management actions that occur in the HCNRA. Talus slopes are subject to direct effects from road construction, road maintenance, or could be quarried as a source of rock material.

## **Natural Salt Licks**

Natural salt licks are found scattered throughout the lower to mid-elevations of the Snake and Imnaha River canyons. They are normally associated with mineral deposits occurring with volcanic ash. Wild ungulates have used these areas as sources for salt, as have domestic livestock.

## **River Beaches**

Sandbars, river terraces, and other fluvial and alluvial features are considered a basic resource in the Snake River. Fluvial and alluvial features formed through the complex interactions of geology, flows, sediment availability, and river hydraulics. Sediment deposition creates unique habitats within the river system, often linking terrestrial and aquatic resources. Sandbars, river terraces, gravel bars, and cobble bars provide spawning and rearing habitat for aquatic species, substrate for riparian vegetation, sites of cultural significance, popular recreation areas, and in-channel sediment storage.

The Hells Canyon Complex has altered flow and interrupted sediment processes within the mainstem Snake River. Historically, the upstream reaches of the Snake River and its tributaries provided sediment for the development and maintenance of fluvial and alluvial features within Hells Canyon. Clear water releases from Hells Canyon complex dams are reducing the abundance, size, and spatial distribution of fluvial and alluvial features, including beaches, within Hells Canyon.

## **Springs, Seeps, and Other Wetland Areas**

Springs, seeps, and other wetland areas are found throughout the HCNRA. Their importance to the HCNRA is related to the relatively unique microhabitats that they provide, and the relatively large diversity of species that can be found growing in association with the available water. A number of these sites have been developed as water sources for homesteads, livestock, and irrigation.

# Rare Combinations of Outstanding and Diverse Ecosystems and Parts of Ecosystems

## Definition

Rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated therewith are represented by plant associations and plant community types that are biologically unique to the HCNRA. The plant associations and plant community types chosen to represent rare combinations of outstanding and diverse ecosystems are botanically and ecologically unique within the HCNRA because they occur in the HCNRA and nowhere else, are found in limited amounts within the HCNRA, or may be relatively abundant within the HCNRA but limited in their distribution in the three neighboring ecoregions (Columbia Basin, Northern Rocky Mountains, Northern Great Basin). A feature has limited distribution in the three neighboring ecoregions if its distribution or extent is substantially less than its extent within the HCNRA.

Plant associations and plant community types provide useful measures of the ecological integrity of ecosystem components. The explicit management of biologically unique rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated therewith, as expressed in the **Management Direction By Resource** section is an example of a fine-filter component of ecosystem management. The coarse-filter components of ecosystem management are exemplified by the Forested, Grasslands, and Forest Understory management direction which address common ecosystem attributes represented by common vegetation types. The rare combinations of outstanding and diverse ecosystems represented by biologically unique plant associations and plant community types described below are managed through the fine-filter strategy of ecosystem management. The CMP provides direction for managing ecosystems using both fine-filter and coarse-filter ecosystem management strategies.

## Determination

For the HCNRA, these plant associations and community types are classified and described in *Plant Associations of the Wallowa-Snake Province* (Johnson and Simon 1987). From among these, the Region 6 Area 3 plant ecologist, Charles G. Johnson, selected those plant communities and plant associations in the HCNRA that met the criteria for biologically unique, based on his extensive knowledge and professional experience of over 25 years of work classifying plant associations and communities, and monitoring sites to study the effect of disturbance factors (primarily fires, grazing, flood events, landslides) on plant succession.

This selection of plant associations and community types was then compared to *intrinsically rare* habitat types that were identified in the *ICBEMP Analysis of Vascular Plants* (Croft et al 1997). Intrinsically rare habitat types are naturally restricted due to a unique set of environmental attributes as opposed to managed rare which is a result of human caused activities (Croft et al 1997). Many of the habitat types shown to be intrinsically rare in the ICBEMP study area do not occur in the HCNRA. Some of the plant associations and community types that were found to be biologically unique in the HCNRA also were identified as intrinsically rare in the *Analysis of Vascular Plants*.

Refer to the following section for a complete description of rare combinations of outstanding and diverse ecosystems and parts of ecosystems in the HCNRA. Any potentially new rare combinations discovered need to meet these criteria to be considered biologically unique under the *HCNRA Act*.

## Description of Rare Combinations of Outstanding and Diverse Ecosystems

### Bluebunch Wheatgrass/Wyeth's Buckwheat Plant Association

This type characterizes the highest elevation extension of communities in the bluebunch wheatgrass series. It occurs in the Idaho fescue zone, but on soils having minor loss influence. The AGSP/ERHE type is dominated in late and mid seral stages by bluebunch wheatgrass and Wyeth's buckwheat (ERHE) on steep canyon slopes. Sandberg's bluegrass is largely replaced by two grasses not generally found in the other grassland vegetation of the HCNRA – pine bluegrass (POSC) and oniongrass (MEBU). This type has an appearance of bunchgrasses

with buckwheat clumps and forb-free interspaces. Perennial forbs are few with yarrow (ACMIL), white-stemmed fraseria (FRAL2), Blue Mountain penstemon (PEVE), and lupine (LUCA) most frequently encountered. Bare ground, gravel, and rock averaged almost 50 percent in late seral communities.

This grassland plant association is restricted to the Lonesome Summit and North Pine Creek vicinity. Sites are confined to moderately-steep to steep, southeast-to-southwest facing inter-rims of convex to slightly undulating micro-relief at mid to upper third slope positions. Typical soils on which this association is found are skeletal with surface rock often exceeding 50 percent total cover.

This plant association is unknown from other plants of the Pacific Northwest. A similar kind of community is known from the North Fork of the Clearwater in Idaho but has not been described or classified. Since it is endemic to the HCNRA in a relatively limited area, it is included in this listing of outstanding and diverse ecosystems.

### **Douglas' Buckwheat-Sandberg's Bluegrass Plant Community Type**

Shallow soil ridgetop communities dominated by Douglas' buckwheat (ERDO) with Sandberg's bluegrass (POSA3) define this plant community type. Perennial forbs usually associated with these communities are stonecrops (SEST, SELA2), biscuitroots (LOLE, LOCO2), big-head clover (TRMA), lovely penstemon (PEEL), sticky phlox (PHVI3), Holboell's rockcress (ARHO), hoary balsamroot BAIN), and Snake River daisy (ERDI4). As with many buckwheat communities, the ERDO/POSA3 type may be a product of past soil loss resulting from overgrazing and subsequent soil and wind erosion. With disturbance, erosion pavement and bare ground increase with a marked decline in moss cover. Forbs tending to increase are pussytoes, biscuitroots, bighead cover, lovely penstemon, and sticky phlox.

Shallow soil ridge top scablands dominated by Douglas' buckwheat with Sandberg's bluegrass define this plant community type. This plant community may be a product of past soil loss resulting from overgrazing and subsequent soil and wind erosion. The community is limited in extent and is located on Cold Springs Ridge.

Although Daubenmire (1970) classified a Douglas' buckwheat-Sandberg's bluegrass habitat type in central Washington, its plant composition was significantly different. These communities in northern Wallowa County are restricted to broad ridges trending toward the Grande Ronde canyon. It appears to be restricted to higher bunchgrass ridge tops where higher precipitation is available. Since it is restricted to a few ridge tops in the HCNRA, it warrants listing as an outstanding and diverse ecosystem.

### **Bitterbrush/Bluebunch Wheatgrass Plant Association**

Bitterbrush occurs with bluebunch wheatgrass on canyon sites that are too low in elevation to support Idaho fescue in the extreme south-eastern flank of the Wallowa Mountains. Late seral stands are dominated by a bluebunch wheatgrass-bitterbrush savannah where bitterbrush covers 20 percent of the area. Associated are Sandberg's bluegrass, arrowleaf balsamroot, and fern-leaved lomatium (LODIE). Endemics to this type are shrubby bedstraw (GAMU) and bulbous bluegrass (POBU). With degradation, bluebunch wheatgrass declines, as bare ground and rock/gravel coverage increases. Increasing perennials are Sandberg's bluegrass, arrowleaf balsamroot and lomatiums (LOTR, LODIE).

Bitterbrush occurs with bluebunch wheatgrass on canyon shrubland sites that are too low in elevation to support Idaho fescue in the extreme southeastern flank of the Wallows. This association is limited in extent within the HCNRA but is common in the lower North Pine Creek vicinity. Site locations are usually rocky inter-rims at the mid to upper third of slopes, but occasionally are on ridge brows or lower slopes.

Bitterbrush is found in the Wallows at the upper limits of its ecological range and can maintain its upper elevation dominance on sites that are loess-free and with southerly aspects. Although this plant association is known from elsewhere in the Pacific Northwest, it represents a limited occurrence in HCNRA and is also rare in northeastern Oregon.

## **Buckwheat/Oregon Bladderpod Plant Association**

The ERIOG/PHOR plant association is found as isolated small communities on limited and unique substrates. Two species of buckwheat (*Eriogonum strictum* var. *proliferum* and *Eriogonum microthecum*) populate hydrothermally altered basaltic outcroppings found sporadically in the lower Imnaha and Snake River Canyons where this type is restricted. These outcroppings are easily weathered and generally contain a talus cone. Spatial patterns develop between the associated plants. Plants demonstrating specific affinity to these sites are: desert evening primrose (OECA2), Oregon bladderpod (PHOR), western prairie-clover (PEOR4), fuzzy tongue penstemon (PEER), pallid milkweed (ASCR), and hoary chaenactis (CHDO). Other species commonly found are: prickly pear (OPPO), bristly cyrtanthera (CRIN3), hairy golden-aster (CHVI2), varied-leaf phacelia (PHHE), hairy milkvetch (ASIN2), yarrow (ACMIL), bluebunch wheatgrass (AGSP), and cheatgrass (BRTE).

This plant association is found as isolated small stands on limited and unique substrates. The type is restricted to hydrothermally altered basalt outcroppings found only in the lower Imnaha River and on ridges separating Horse, Lightning, and Cow Creeks (Vallier 1998).

The substrate is one of shifting pea gravel on steep slopes with a high erosive potential. Since there is little to entice ungulates onto these sites, they retain an erosion pavement that helps the perennial plants establish. The association is interesting botanically with six species demonstrating an affinity to these plant associations. Since these sites are extremely limited in occurrence within the Snake-Imnaha canyon lands, this community warrants special recognition.

## **Sand Dropseed Plant Association**

This type is characterized by communities on the sandy river terraces and alluvial bars where sand dropseed (SPCR) is considered climax. In these communities, sand dropseed dominates as the only perennial bunchgrass in mid seral stands. Cheatgrass (BRTE) and Japanese brome (BRJA) are usually always thyme leaf sandwort (ARSE), and filaree (ERCI) are the most frequently encountered. Other plants that are restricted to warm, low elevation habitats often occurring with sand dropseed are: moth mullein (VEBL), blazing star (MELA2), ground-cherry (PHLO2), and white-stemmed globemallow (SPMU).

Early seral sand dropseed communities are usually invaded by red three awn (ARLO3), goatweed (HYPE), and prickly pear (OPPO) with reduced dropseed coverage. Annual brome coverage is nearly double that of mid seral communities. Annual forbs that are most commonly associated include thyme leaf sandwort (ARSE), blue forget-me-not (MYMI), filaree (ERCI), and small flowered crane's bill (gepu). Bare ground, rock, and gravel exposure increase with disturbance. Moss coverage declines with the site degradation.

This association is characterized by communities on the sandy river terraces and alluvial bars where sand dropseed is considered climax. The species is native within these specific locations and at the northern extent of its range ecologically. Bill's Creek Research Natural Area (RNA) was proposed to highlight a particularly homogeneous community of sand dropseed in a setting where the species is believed to have initiated its increase in the Snake River canyons.

This community is also found on those native bunchgrass sites (i.e., bluebunch wheatgrass) where early spring grazing had damaged the bluebunch wheatgrass (a cool season species) and favored the invasion or increase in sand dropseed (a warm season species). The species is more commonly found in the desert southwest and Great Plains. It reaches its northern extension in the Pacific Northwest in the Snake River canyon.

Since sites supporting sand dropseed communities on river terraces, alluvial fans, and sandbars are relatively limited, the sand dropseed communities that are considered potential natural vegetation along the river corridor merit special recognition.

## **Wallowa Lewisia Rim Plant Community Type**

The Wallowa bitterroot or lewisia sporadically occupies the upper canyon rims and ridge brows of the Snake River Canyon and adjacent canyons in Oregon. It is prolific on stable, rocky walls and peaks of the Seven Devils. Lewisia co-exists with shrubby penstemon (PEFRS) on the rim tops. Sandberg's bluegrass (POSA3), onespoke oatgrass (DUAN), stonecrop (SELA2), and scabland fleabane (ERBL) are typical scabland associates while bluebunch wheatgrass and Idaho fescue occur as opportunists from adjacent FEID-KOCR grasslands. Other

prominent plants associated are yarrow (ACMIL), hoary balsamroot (BAIN), Cous biscuitroot (LOCO2), and Blue Mountain penstemon (PEVE). As adjacent deeper-soil bunchgrass sites are overgrazed, lewisia may invade from its rocky habitat.

The stands sampled all occurred at ridgetop or ridgebrow locations in Oregon (Grizzly, Morgan, Jackey, and Deadhorse Ridges). Elevations ranged from 5,000 to 6,500 feet on these sites. The species also clings to rim palisade walls. Other observed communities of lewisia in the Seven Devils ranged from 6,000 to 9,000 feet where the species appeared to be more common as either a reflection of substrate affinities, cooler-moister condition, or by virtue of its geographical setting closer to the center of its range.

The Wallowa bitterroot (lewisia) sporadically occupies the upper canyon rims and ridge brows of the Snake River Canyon. It is prolific on stable, rocky walls and peaks of the Seven Devils. These communities occupy a narrow ecological niche in a very restricted area within the HCNRA. The Wallowa bitterroot is good representative of a showy endemic in the HCNRA.

### **Subalpine Fir/Fool's Huckleberry Plant Association**

This moist site community is dominated by an Engelmann spruce overstory on steep, north slopes and gentle benches where moisture is retained throughout the summer drought period. Subalpine fir is often codominant in the overstory, but always dominates the reproduction in the understory layer. Lodgepole pine is a frequent overstory component as a decadent old-growth member.

Fool's huckleberry (MEFE), a tall shrub, dominates the undergrowth (mean cover: 63 percent) with true huckleberries (VAME, VASC) always associated beneath fool's huckleberry. Sitka alder is often present on these mesic sites. The shrub cover is so dense that other plants are often unable to compete and persist. Only rattlesnake plantain (GOOB), sidebells pyrola (PYSE) and prince's pine (CHUM) are frequently found occurring beneath the shrubbery.

This association is restricted to mesic, cold site locations at higher elevations in the Seven Devils and above the head of Lightning Creek north of Memaloose.

Although fool's huckleberry is abundant in the northern Rockies, it barely reaches the forests of the Snake River Canyon separating Oregon and Idaho. Due to its rare occurrence in the HCNRA it warrants listing as an outstanding and diverse ecosystem.

### **Ponderosa Pine/Idaho Fescue and Ponderosa Pine/Bluebunch Wheatgrass Plant Associations**

Ponderosa pine totally dominates as the only tree species able to persist in the PIPO/FEID type. Shrubs are essentially absent, but common snowberry and rose do occur in limited amounts. Idaho fescue (FEID), bluebunch wheatgrass (AGSP), and prairie junegrass (KOCR), are the dominant understory species in the type. The most common forbs are lupine (LUPIN), and yarrow (ACMIL).

The PIPO/AGSP community is very dry with trees occurring in a savannah over bluebunch wheatgrass-dominated steppe. Ponderosa pine totally dominates as the only tree species able to persist in the PIPO/AGSP type. Shrubs are absent except for occasional dry-site opportunists (serviceberry, mountain-mahogany, squaw currant). Bluebunch wheatgrass and pine bluegrass (POSC) dominate the understory with cheatgrass usually associated in areas where ungulates have churned the soil beneath the old-growth trees. Idaho fescue is absent as it is unable to persist on these drier sites. Yarrow and lupines are the only common forbs regularly associated.

Both of these plant associations are uncommon in the HCNRA. Most of the ponderosa pine-dominated communities are successional to Douglas fir. These associations occur on substrates that are too harsh for fir potential. The Little Granite RNA was proposed in part to encompass known locations of these associations.

Although ponderosa pine/bunchgrass communities with Idaho fescue and bluebunch wheatgrass potentials are found throughout the inland Pacific Northwest, sites which are too warm and too dry for fir establishment are limited in the HCNRA. Therefore, these restricted communities are worthy of being included as outstanding and diverse ecosystems to the HCNRA.

### **Quaking Aspen Plant Community Type**

Quaking aspen communities are rare in the HCNRA, and occur in relatively small, scattered clones. Their presence is generally associated with meadows or areas within conifer stands where subsurface moisture is present throughout most of the growing season. Grassland management, forested vegetation management, and fire can all influence the propagation and survival of aspen communities.

Quaking aspen stands are infrequent in the Wallowa-Snake Province. Clones are generally limited to fringes around meadows or as islands in ridge top grasslands where subsurface moisture is available throughout most of the growing season. Cattle and big game generally favor these stands. Mature stands are generally in decadent condition because of old age, disease, overshadowing, crowding from encroaching conifers, and a general lack of vegetative reproduction due to browsing of root sprouts by ungulate wildlife species and domestic livestock. Aspen is an early-seral, pioneer species that is propagated by root suckering after disturbances like fire or removal of mature stems. Maturation of root sprouts to older age classes most often requires some protection from grazing ungulates. Due to the relatively limited extent of occurrence, quaking aspen community types warrant being included as outstanding and diverse ecosystems to the HCNRA.

### **Netleaf Hackberry/Bluebunch Wheatgrass Plant Association**

The hackberry communities of the Wallowa-Snake Province are generally found at lower slope positions in deep canyons, occupying see page lines on river terraces, and along riparian margins. Bluebunch wheatgrass is commonly associated as are annual bromes. Cheatgrass (BRTE), cleavers (GAAP), shading animals have disturbed the ground. Common associated tend to be some of the most drought-tolerant plants of the canyon lands (i.e., hairy golden aster (CHVI2) shaggy fleabane (ERPU), prickly pear (OPPO), and moth mullein (VEBL) Poison ivy (RHRA) occurs frequently with this community where it can tap deep moisture reserves. In more disturbed communities, skullcap (SCAN), yarrow (ACMIL), cheatgrass (BRTE), and common yellow sweet clover (MEOF) may form weedy patches.

### **Giant Wildrye Plant Community Type**

Giant wildrye occurs at lower elevations along riparian stream courses on colluvial or alluvial terraces. These stands are usually very dense with wildrye often dominating to the exclusion of other plants. Miner's lettuce (MOPE) is always associated. Disturbance of stands show weediness by cleavers (GAAP), white top (*Cardaria* sp.), and annual bromes.

Wildrye sites are usually gently sloping and below 3,000 foot elevation in canyon bottoms. They occur as riparian stringers or patches at toe of slope positions on deep, fine-textured soils.

Many giant wildrye sites in the Snake River Canyon and its tributary canyons have been overgrazed resulting in the presence of only relic clumps of the species. These giant wildrye bottoms were once much more extensive in the canyon land bottoms. Heavy overgrazing by sheep as well as intensive haying of the native stands has reduced them to relict status in many places. Giant wildrye was extensively cut for hay in the early settlement days. Giant wildrye is very susceptible to grazing and mowing below eight inches. Cattle grazing in the winter often prefer this species following softening of its harsh herbage from fall and winter storms. In many canyon bottoms, the most preferred grass species (i.e., bluebunch wheatgrass of Idaho fescue) were lost to overgrazing resulting in greater dependence on once abundant giant wildrye stands. In these situations, the succulent new spring growth of giant wildrye may have been more highly sought after by livestock with injurious results for the plant.

Giant wildrye plants can regularly be found at the base of talus slopes, on pit house sites and along fence rows. However, communities dominated by giant wildrye are scarce throughout Hells Canyon NRA. Past overgrazing has reduced stands of the grass to relict status. As the wildrye is overgrazed, annual plants invade and become prominent (i.e.- bedstraw (*Galium aparine*), miners lettuce (*Montia perfoliata*) and annual bromes.

The larger stands existing in Hells Canyon are small in comparison to those found today. Prior to Euro-American settlement and subsequent overgrazing by livestock, giant wildrye bottoms were much more extensive where drainages cross benchlands and river terraces.

The most prominent stand of giant wildrye remaining in the HCNRA is located along Pleasant Valley Creek in the proposed Pleasant Valley RNA.

## Spiny Green-bush/Bluebunch Wheatgrass Plant Association

The GLNE/AGSP type is found exclusively on rock outcrops and canyon rims and occurs as small isolated shrub groupings in a vegetation complex with bunchgrass communities. Spiny green-bush (GLNE) occupies the fractures of the rimrock with bluebunch wheatgrass (AGSP) occurring more commonly on deeper soil areas between rims. Bluebunch wheatgrass, varleaf phacelia, and shaggy fleabane are generally present in late seral stages. Annual bromes (BRBR, BRTE) field chickweed, and yarrow, commonly occurs. Prickly pear is opportunistic on shallow soil sites of the rim rest while the whorled penstemon (PETR), occupies crevices of the rim face. Mosses are high in cover (mean: 19 percent) as is bedrock, rock, and gravel (mean: 50 percent).

Spiny green-bush communities occupy steep slopes where rock outcrops dominate into an almost continuous palisade of bedrock. These are extremely harsh sites for plant growth. The leaves are inconspicuous as a strategy for survival. The HCNRA communities are confined to the Snake River Canyon at low elevations (2,000-3,000 feet). The shrub occupies rock outcrop fractures that define its distribution across the slope. Bedrock outcrops regularly above 25 percent and up to 40 percent. The hot, dry microenvironment limits perennial plants associated with the shrub. Bluebunch wheatgrass, whorled penstemon (*Penstemon triphyllus*) and shaggy fleabane (*Erigeron pumilus*) are the most common associates. The Alum Beds RNA contains excellent stands of this association.

## Curleaf Mountain-Mahogany Plant Community Type

Bluebunch wheatgrass is the most commonly occurring plant beneath Snake River Canyon mountain-mahogany stands. Other common associates in late seral and mid degradation, bluebunch wheatgrass declines as annual bromes increase.

Three elevation levels were sampled where mountain-mahogany occurs. At the lower elevations (900-1,000 feet), the species was encountered only on toe slopes and river bar sites north of Mountain sheep Creek in association with netleaf hackberry and serviceberry. Snake River phlox and field chickweed occurred regularly with bluebunch wheatgrass beneath the shrubs. At mid-elevation (2,000-4,000 feet) the stands of mountain-mahogany generally occurred on rim outcrops with an affinity for limestone. Here, spiny green-bush (GLNE) and Snake River phlox (PHCO2) were often associated. At the highest elevations (5,000-6,000 feet), mountain snowberry (SYOR), syringa (PHLE2), and oceanspray (HODI) often occurred with mountain-mahogany. On these more moist sites, Idaho fescue (FEID) and bluebunch wheatgrass (AGSP) were associated along with other fescue series members – Wyeth's buckwheat, arrowleaf balsamroot, and fern-leaved biscuitroot. Wyeth's buckwheat and elk sedge form mats on colluvial exposures at these higher elevations.

Curleaf mountain-mahogany is widespread in the southern Blue Mountains. However, it is extremely limited in occurrence in the HCNRA. Its distribution was found at three elevations in differing environmental and topographic settings. At upper elevations (5,000-6,000 feet) it is associated with mountain snowberry (*Symphoricarpos oreophilus*), Idaho fescue (*Festuca idahoensis*) and bluebunch wheatgrass. At mid-elevations (2,000-4,000 feet) it is found as a rim and outcrop community with an affinity for limestone. At the lowest elevations (900-1,000 feet) it can be sporadically found on river terraces and toe slopes north of Mountain Sheep Creek where it associates with hackberry (*Celtis reticulata*) and bluebunch wheatgrass.

Stands are restricted to sites where outcroppings or talus provide sanctuary from fire mortality and where abundant vernal moisture is found deep in the fissures to sustain the shrub on these harsh, hot, dry outcroppings. The outcroppings of the Pittsburg Formation (Vallier 1974) occur on both sides of the Snake River Canyon from Wildhorse Butte to Grave Point in Idaho and from Pittsburg Creek to Pleasant Valley Creek in Oregon. This is one of the areas of greatest concentration for mountain-mahogany communities in HCNRA. The Pleasant Valley RNA contains representative stands of this type on the Pittsburg Formation.

## Mountain Big Sagebrush/Idaho Fescue Plant Association

The mountain big sagebrush/Idaho fescue plant association is separated topographically into a steep slope type found at higher elevations in the Wallowa and Seven Devils Mountains and a gentle ridgetop type at moderate elevations across the dissected plateau tops of the HCNRA.

ARTRV/FEID (seep, high) – In late seral stands Idaho fescue is the principal associate with mountain big sagebrush. With degradation, fescue declines while the following plants increase: mountain brome (BRCA), Hood's sedge (CAHO), Wyeth's buckwheat (ARHE), yarrow (ACMIL), and groundsel (SEIN). Heavy site deterioration results in dramatic increases by tailcup lupine (LUCA) and Wyeth's buckwheat (ERHE).

Past sheep grazing and use has eliminated many of these subalpine-montane sagebrush communities. In highly disturbed communities, Wyeth's buckwheat, mountain brome, yarrow, and golden buckwheat (ERFL) often replace the Idaho fescue. However, Hood's sedge tends to remain intact on moist concavities and deeper soil areas with Idaho fescue.

This high elevation type occurs on shallow gravelly soils from 7,700 to 7,900 feet in elevation, and on southwesterly aspects. Slopes average 40 percent. Total herbaceous production from two sampled sites ranged from 200 to 600 lbs./acre (dry wt.).

The occurrence of this shrub/bunchgrass community in the HCNRA is limited. Communities occur on the northern extremities of HCNRA where broad ridgetops consist of Columbia River basalts with loessal soils derived from the Columbia River basin. It is here that limited stands occur. Daubenmire (1970) recognized these stands as disjunct edaphic climax populations that are relict from a hypsithermal period when climates were more conducive for more widespread, contiguous stands in the area. Today's population is centered on Cold Springs Ridge in the Downey Saddle and Grasshopper Ridge vicinity north of the Frog Pond.

A second area of occurrence in the HCNRA is in the Seven Devils Mountains. Here stands are restricted to southerly and westerly aspects on steep mountainous slopes at 8,000 feet. In the Blue and Wallowa Mountains outside the HCNRA this same plant association is commonly found. The unique character of these HCNRA communities occurs in their disjunct nature as outliers in the Seven Devils and on the southern edge of the Palouse Region.

### **Slender Sedge Plant Community**

This community has been found in only one location within the entire Blue Mountain province. It is located on a floating sphagnum bog on Duck Lake (which is within the Duck Lake RNA). The next closest locations are on the east slopes of the Cascades. Growing within the community are other vascular plant species that are also rare within HCNRA and the Blue Mountain province, mud sedge (*Carex limosa*), sundew (*Drosera anglica*), Purple cinquefoil (*Potentilla palustris*), Northern mannagrass, *Glyceria borealis*, and bog buckbean (*Menyanthes trifoliata*). Twin Lakes and some other small nearby ponds also have *Drosera* and *Menyanthes* and perhaps some of these other species.

### **Features and Peculiarities Considered, but not included as Biologically Unique**

Other features and peculiarities were evaluated in terms of meeting the determination of biologically unique under Section 7(3) of the *HCNRA Act* as outlined in **Figure D-1**.

The *HCNRA Act* specifies preservation of species with respect to rare and endemic plant species. Regional endemic plants and edge of range plants, whether common or rare, and plants that are widespread but rare were considered because they are limited in distribution to the Blue Mountains and western Idaho or the edge of their range extends to the HCNRA. The rare regional endemics, rare edge of range, and widespread but rare plants are encompassed by the FS sensitive species list and are considered biologically unique under the Rare and Endemic Plant Species category as described above. Common regional endemics or common edge of range plants were not included because they do not meet the criteria specified for this category.

*Managed Rare*<sup>1</sup> habitats - which are the result of human-caused activities - as described in the *Analysis of Vascular Plants* (Croft et al 1997) that may be present in the HCNRA were not considered biologically unique. These habitats are managed through the direction for Forested Vegetation, Grasslands, and Forest Understory in the **Management Direction By Resource** section.

Terrestrial and aquatic species were also evaluated. There are no terrestrial or aquatic species 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 categories and criteria as described above in **Figure D-1**. These species, however, will continue to be protected under Section 7(4) of the *HCNRA Act* that specifies protection of

fish and wildlife habitat. Management direction for federally listed species and other terrestrial and aquatic habitat is located in **Management Direction By Resource** under Wildlife Habitat and Riparian/Aquatic Habitat and Water Quality to meet the intent of the *HCNRA Act*.

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) were considered. Only a portion of the riparian and other wetland vegetation within the HCNRA has been sampled and none has been classified. Neither of these habitat types meets the definition of biologically unique, categories, and criteria as described in **Figure D-1**. Management direction for these habitats is provided under Section 7(4) of the HCNRA Act, which provides for the protection of fish and wildlife habitat. Management direction for other terrestrial, aquatic and atmospheric habitats is provided under Wildlife Habitat, Riparian/Aquatic Habitat and Water Quality, and Air Quality as described in the **Management Direction By Resource** section.

Other species such as insects, pollinators, amphibians, carnivores, and fungi were evaluated, but were determined not to be biologically unique as described in **Figure D-1**. However, the 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 in **Management Direction By Resource** to protect these species and their associated habitat.

The following plant communities or plant associations were considered, but were not included because they did not meet the definition of biologically unique as described in **Figure D-1**.

- Green fescue-Hood's sedge plant community type
- Bluebunch wheatgrass/prickly pear communities
- Talus garland plant community type
- Smooth sumac/bluebunch wheatgrass plant association.

Refer to the sections above for a complete list and description of rare and endemic plant species including disjunct plant species; rare combinations of aquatic, terrestrial, and atmospheric habitats; rare and outstanding and diverse ecosystems and parts of ecosystems in the HCNRA.

#### Consideration of New Features and Peculiarities

To be considered biologically unique under the HCNRA Act, any future discoveries of potentially new species, habitats, or ecosystems will be evaluated using the determination process outlined in **Figure D-1** using the biologically unique definition in conjunction with the categories and criteria as specified previously.

If a new discovery meets this determination process, the feature or peculiarity will be managed under the direction provided for Biologically Unique Species, Habitats, and Ecosystems in the **Management Direction By Resource** section. If it does not meet these criteria, it will be considered for protection under the other management direction provided for wildlife habitat, riparian/aquatic habitat and water quality, air quality, soils, vegetation and other management direction to meet the intent of the *HCNRA Act*.

## Appendix E Facilities With Water Rights Or Water Developments

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# Appendix E Facilities With Water Rights Or Water Developments

## Introduction

Water rights and water developments information for facilities in the HCNRA are displayed in **Table E-1** (Oregon) and **Table E-2** (Idaho) below. Note that Oregon Administrative Rules are listed as OAR and Idaho Snake River Basin Adjudication is listed as MA 8/BA in the comments column.

Table E-1: Facilities with Water Rights or Water Developments - Oregon

| Site Name                                | Type* | Status** | Land Status~ | Type of Water Right, Filing Needs                                 | Comments                                                                                                                                    |
|------------------------------------------|-------|----------|--------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 3C Spring                                | H     | M        | R            | Reserved right (stock, human consumption) for administrative uses | Unquantified; surface water right needed for recreation uses; possible location: SE SE Section 22, or NW SW Section 23, T.01S, R.49E        |
| Blackhorse Campground                    | H     | M        | R            | Certificate 54761 (domestic)                                      | 0.0012 cfs                                                                                                                                  |
| Buck Creek Trailhead (Buck Creek Spring) | H     | M        | R            | Reserved right (stock, human consumption) for administrative uses | Unquantified; surface water right needed for recreation uses; possible location: NE SW Section 24, T.04S, R.48E in Crazyman Creek Watershed |
| Buckhorn Lookout                         | H     | M        | R/ER         | Surface water (domestic) if Certificate 14743 does not apply      | Lookout moved from Section 34 to section 9, still on R land; Buckhorn Spring located on ER land.                                            |
| Buckhorn Campground, fire camps          |       | M        | ER           | Certificate 14743 (domestic)                                      | Part of 0.05 cfs                                                                                                                            |
| Cemetery Ridge Lookout                   | H     | A        | R            | Certificate 14743 (domestic)                                      | Part of 0.05 cfs; abandoned lookout                                                                                                         |
| Cache Creek Ranch                        | H     | M        | P            | Certificate 35042 (domestic)                                      | 0.01 cfs (Source: Cache Creek Ranch Spring), Transfer T-7427                                                                                |
| Stream diversion                         | S     | M        | P            | Certificate 35042 (irrigation)                                    | 1.07 cfs; 42.7 acres (Source: Cache Creek), Transfer T-7427                                                                                 |
| Stream diversion                         | S     | U        | P            | Certificate 35042 (irrigation)                                    | 0.54 cfs; 21.6 acres (Source: Garden Creeks); Transfer T-7427                                                                               |
| Cache Creek Ranch                        | R     | M        | P            | Certificate 71522 (storage)                                       | 0.25 acre-foot; repair flood damage                                                                                                         |
| Cat Creek                                | H     |          | P-1911       | Vested right or surface water-status unknown                      |                                                                                                                                             |

Table E-1: Facilities with Water Rights or Water Developments - Oregon

| Site Name                 | Type*  | Status** | Land Status~ | Type of Water Right, Filing Needs                                         | Comments                                                                                                                       |
|---------------------------|--------|----------|--------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Cayuse                    | H      | M        | R            | Surface water (domestic stock) for livestock permit                       | Used by livestock permittees; existing reserved right (domestic stock) for administrative uses.                                |
| Chalk Cherry shed         | H      |          | P            | Vested right or surface water-status unknown                              |                                                                                                                                |
| Cherry Creek Ranch        | S      | M        | P-1900       | Vested right or surface water-status unknown                              | Diverted from Makin Creek                                                                                                      |
| Christmas Creek           | H      |          | P-1920       | Vested right or surface water-status unknown                              | Not maintained since 1987                                                                                                      |
| Cold Springs Cow Camp     | H      | M        | R            | Reserved right (stock, human consumption) for administrative uses.        | Cabin burned down in 1988 wildfire; did not rebuild; no longer used as summer residence for livestock permittee                |
| College Creek             | H      | M        | R            | Certificate 13539 (domestic)                                              | 0.02 cfs includes irrigation of lawn                                                                                           |
| Copper Creek Resort       | H      | M        | R            | Permit S-49119 (domestic & irrigation)                                    | 0.007 cfs dom; 0.016 irrigation; perfect right                                                                                 |
| Coverdale Campground      | H      | M        | R            | Certificate 13417 (domestic)                                              | 0.05 cfs                                                                                                                       |
| Deer Creek Ranch          | H      |          | P-1908       | Vested right or surface water-status unknown                              |                                                                                                                                |
| Dorrance Ranch            | H      | M        | P            | Vested right or surface water-status unknown                              |                                                                                                                                |
| Dougherty Campground      | H      | M        | R            | Reserved right for administrative uses; surface water (human consumption) |                                                                                                                                |
| Dry Creek Cabin (Ollokot) | H      | M        | R            | Reserved right (domestic, stock)                                          | Unquantified                                                                                                                   |
| Dug Bar                   | H      | M        | P            | Certificate 41478 (irrigation)                                            | 0.62 cfs; 25 acres (Source: Snake River)                                                                                       |
| Dug Bar Ranch House       | H-1920 | M        | P-1889       | Vested right or surface water-status unknown                              | Spring developed in 1920; used by livestock permittee.                                                                         |
| Emergency Cow Camp        | H      | M        | R            | Vested right or surface water-status unknown                              | Existing reserved right (domestic, stock) for administrative uses. SW NW Section 32, T.01S, R.49E; Building, spring and trough |
| Evergreen Campground      | H      | M        | R            | Certificate 12493 (domestic)                                              | 0.01 cfs                                                                                                                       |
| Campground and            | H      |          | R            | Certificate 14744 (domestic)                                              | 0.05 cfs; status unknown (T05.S,                                                                                               |

Table E-1: Facilities with Water Rights or Water Developments - Oregon

| Site Name                                           | Type* | Status** | Land Status~ | Type of Water Right, Filing Needs                                 | Comments                                                                                                                                                                     |
|-----------------------------------------------------|-------|----------|--------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fire Camp near Evergreen Campground                 |       |          |              |                                                                   | R47.E, Section 20)                                                                                                                                                           |
| Freezeout Creek Trailhead (Freezeout Saddle Spring) | H     | M        | R            | Reserved right (stock, human consumption) for administrative uses | Unquantified; surface water right needed for recreation uses; possible location: SE NE Section 24, T.02S, R.48E                                                              |
| Funk Ranch                                          | H     | M        | P-1911       | Vested right or surface water-status unknown                      | Stone spring house                                                                                                                                                           |
| Hidden Campground                                   | H     | M        | R            | Certificate 54763 (domestic)                                      | 0.0008 cfs                                                                                                                                                                   |
| Horse Creek Scale                                   | H     | M        | R            | Surface water (domestic, stock) for livestock permit              | Used by livestock permittees; Existing reserved right (human consumption, stock) for administrative uses. Cabin: SE SE Section 16, T.01S, R.49E. Spring SE NE of Section 16. |
| Indian Crossing Campground                          | W     | M        | R            | exempt groundwater use (domestic)                                 | 15,000 gpd under OAR 690-340-010(1)                                                                                                                                          |
| Jimmy Creek Ranch                                   | H     | M        | P-1913       | Vested right or surface water-status unknown                      |                                                                                                                                                                              |
| Kneeland Place                                      | H     | M        | P-1919       | Vested right or surface water-status unknown                      | Rock basin on spring; spring house burned in 1996 wildfire.                                                                                                                  |
| Lake Fork Campground                                | W     | M        | R            | exempt groundwater use (domestic)                                 | 15,000 gpd under OAR 690-340-010(1)                                                                                                                                          |
| Lick Creek Campground                               | H     | M        | R            | Certificate 54762 (domestic)                                      | 0.0009 cfs                                                                                                                                                                   |
| Lick Creek Guard Station                            | H     | M        | R            | Certificate 13987 (domestic)                                      | 0.01 cfs                                                                                                                                                                     |
| Lick Creek Wayside (Wallowa Loop Spring)            | H     | M        | R            | Surface water permit (human consumption) for recreation           | Existing reserved right for administrative uses; NW NW Section 6, T.05S, R.46E.                                                                                              |
| Lookout Mountain                                    | H     | M        | R            | Certificate 14284 (domestic)                                      | 0.005 cfs; abandoned lookout; spring used by recreationists                                                                                                                  |
| Dorrance Ranch                                      | H     | M        | R            | Reserved right (domestic stock) for administrative uses.          | No longer used as summer residence by livestock permittee.                                                                                                                   |
| Marks Cabin (new)                                   | H     | M        | P-1913       | Vested right or surface water-status unknown                      | Used by livestock permittee                                                                                                                                                  |

Table E-1: Facilities with Water Rights or Water Developments - Oregon

| Site Name                                                | Type* | Status** | Land Status~ | Type of Water Right, Filing Needs                                 | Comments                                                                                                         |
|----------------------------------------------------------|-------|----------|--------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| McGraw Lookout                                           | H     | M        | R            | Certificate 14498 (domestic)                                      | 0.01 cfs; active lookout, spring used by recreationists.                                                         |
| Memaloose (New)                                          | H     | M        | R            | Reserved right (domestic, stock)                                  | Unquantified                                                                                                     |
| Memaloose (Old)                                          | W     | M        | R            | Reserved right (domestic)                                         | Unquantified; most water is hauled from new AS; old water line from new AS to old AS will be reconstructed.      |
| Mikes Cabin Cutoff Trailhead (Mikes Cabin Cutoff Spring) | H     | M        | R            | Reserved right (stock, human consumption) for administrative uses | Unquantified; surface water right needed for recreation uses; possible location: SW SW Section 21, T.02N, R.50E. |
| Mormon Guard Station                                     | H     | U        | R            | Reserved right (domestic, stock)                                  | Unquantified; spring location uncertain; may be same as old lookout.                                             |
| Mormon Lookout                                           | H     |          | R            | Certificate 13428 (domestic)                                      | 0.005 cfs; (spring location: NE NE Section31, T02.N, R50.E); abandoned lookout                                   |
| Nesbit Butte Lookout                                     | H     | M        | R            | Certificate 14020 (domestic)                                      | 0.005 cfs; abandoned lookout; spring used by recreationists                                                      |
| North Pine Rest Area                                     | H     | M        | R            | Certificate 54537) (drinking)                                     | 0.5 gpm                                                                                                          |
| Ollokot Campground                                       | W     | M        | R            | exempt groundwater use (domestic)                                 | 15,000 gpd under OAR 690-340-010(1)                                                                              |
| Pittsburg Landing Administrative Site (Oregon)           | H     | M        | A-1917       | Surface water (domestic, stock, lawn, irrigation)                 | No data to support vested site.                                                                                  |
| PO Saddle Trailhead (PO Saddle Spring)                   | H     | M        | R            | Reserved right (stock, human consumption) for administrative uses | Unquantified; surface water right needed for recreation uses; possible location: NE SW Section 12, T.04S, R.48E  |
| Sacajawea Campground                                     | H     | M        | R            | Certificate 39469 (domestic)                                      | 0.01 cfs                                                                                                         |
| Sacajawea Campground                                     | H     | M        |              | Certificate 14529 (domestic)                                      | 0.03 cfs                                                                                                         |
| Salt Creek                                               | S     | M        | A- 1913      | Vested right or surface water-status unknown                      |                                                                                                                  |
| Schaffer Springs Cabin                                   | H     | U        | R            | Reserved right (stock, human consumption)                         | Unquantified                                                                                                     |
| Somers Point                                             | H     | M        | R            | Reserved right (stock, human                                      | Unquantified; surface water right                                                                                |

Table E-1: Facilities with Water Rights or Water Developments - Oregon

| Site Name                                | Type*  | Status** | Land Status~ | Type of Water Right, Filing Needs                    | Comments                                                                      |
|------------------------------------------|--------|----------|--------------|------------------------------------------------------|-------------------------------------------------------------------------------|
| Dispersed Campsite (Somers Point Spring) |        |          |              | consumption) for administrative uses                 | needed for recreation uses; possible location: SW SW Section 25, T.02N, R.50E |
| Somers Creek Mouth                       | S      | A        | A            | None Needed                                          | Facility burned in 1996 wildfire                                              |
| Temperance Creek Ranch                   | B/S    | M        | P            | Permit S-48828 (domestic & irrigation)               | 0.001 cfs dom; 1.35 cfs irrigation; perfect right                             |
| Stream diversion                         | S-1887 | M        | P-1904+      | Vested right confirmed (domestic, irrigation, stock) | Historically about 5.4 cfs for irrigation of about 80 acres                   |
| Thorn Creek Guard Station                | W      | M        | R            | Exempt groundwater use (domestic, stock)             | 15,000 gpd under OAR 690-340-010(1)                                           |
| Thorn Creek Guard Station                | S      | M        | R            | Certificate 9293 (irrigation)                        | 0.03 cfs; 5.2 acres (source: Thorn Creek)                                     |
| Thorn Creek Guard Station                | S      | A        | R            | Certificate 9293 (domestic)                          | Replaced by well                                                              |
| Thorny Gulch Ranch                       | H      | U        | A- 1907+     | Vested right or surface water-status unknown         | Little known about water development                                          |
| Tryon Creek Ranch                        | R      | M        | P            | Certificate 79674 (storage)                          | 0.06 acre-foot                                                                |
|                                          | H      | M        | A-1906+      | Vested right or surface water-status unknown         |                                                                               |

Table E-2: Facilities with Water Rights or Water Developments - Idaho

| Site Name                     | Type* | Status** | Land Status~ | Type of Water Right, Filing Needs              | Comments                                                           |
|-------------------------------|-------|----------|--------------|------------------------------------------------|--------------------------------------------------------------------|
| Circle C Ranch House          | W     | M        | P            | Permit 79-7199 (domestic, stock)               | MA 8/BA; (source: horizontal well)                                 |
| Circle C Ranch House          | S     | M        | P            | Claim 79-10543 (lawn and garden irrigation)    | MA 8/BA; (source: Kurry Ceek)                                      |
| Circle C Ranch                | S     |          | P            | Permit 79-2002 (irrigation)                    | MA 8/BA; 0.9cfs, 45 acres; (source: West Creek)                    |
| Circle C Ranch                | S     |          | P            | Permit 79-2002 and Claim 79-10579 (irrigation) | MA 8/BA; 0.32 cfs, 16 acres; (source: Johnson Spring)              |
| Cow Creek                     | H     | M        | R            | Claim 79-XXXX (domestic, stock)                | MA 8/BA- unknown                                                   |
| Kirkwood Historic Ranch       | S     | M        | P            | Claim 79-10566                                 | MA 8/BA;                                                           |
| Pittsburg Launch, Landing and | H     | M        | P            | Claim 79-10579, License 79-2002 (domestic)     | MA 8/BA; (source: 79-10579 Lower Landing Spring) (source: 70-2002: |

Table E-2: Facilities with Water Rights or Water Developments - Idaho

| Site Name                  | Type* | Status** | Land Status~ | Type of Water Right, Filing Needs          | Comments                         |
|----------------------------|-------|----------|--------------|--------------------------------------------|----------------------------------|
| Campground                 |       |          |              |                                            | Johnson Spring)                  |
| Pittsburgh Campground      | H     | M        | P            | Claim 79-10579, License 79-2002 (domestic) | MA 8/BA;                         |
| Pittsburgh Campground      | S     | M        | P            | Permit 79-7202                             | MA 8/BA; 0.11 cfs, 6 acres       |
| Seven Devils Guard Station | H     | M        | R            | Claim 7- (domestic)                        | MA 8/BA;                         |
| Seven Devils Guard Station | H     | M        | R            | Claim 7- (stock)                           | MA 8/BA;                         |
| Sheep Creek                | S     | M        | P            | Claim 79-10616 (domestic)                  | MA 8/BA; 0.1 cfs                 |
| Sheep Creek                | S     | M        | P            | Claim 79-10617 (irrigation)                | MA 8/BA; 0.09 cfs, unknown acres |
| Well                       | W     |          |              | Claim 79-10656 (domestic-recreation)       | MA 8/BA                          |
| Heavens Gate Lookout       |       |          | R            | Claim 79-(domestic)                        | MA 8/BA- unknown                 |
| Horse Heaven               |       |          | R            | Claim 79- (domestic, stock)                | MA 8/BA- unknown                 |
| Lower Saddle Trailhead     | H     | M        | R            | Claim 79- (stock)                          | MA 8/BA- unknown                 |
| Sawpit Trailhead           | H     | M        | R            | Claim 79- (stock)                          | MA 8/BA- unknown                 |

\* Development Type: B = buried collection system; H = headbox at spring source; N = no development; P = pump; R = reservoir; S = stream diversion; W = well (horizontal or vertical); date is when water development and use began

\*\* Development Status: M = maintained; U = unmaintained; ? = status unknown; A = use abandoned

~ Land Status: ER = exchange reserved (no reserved water rights); P = purchased (no reserved water rights); R = reserved (reserve water rights); date is when property pass from federal ownership and relates to potential for vested water right

Note: Federal reserved water right claims may also be developed for the same and/or other water uses. These sites could be included in Table C-4B, but were not, to avoid duplication of site names between the two tables.