Nez Perce–Clearwater National Forests
Forest Plan Assessment

17.0 Research Natural Areas

June 2014

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2.0 Research Natural Areas

This assessment includes information about existing research natural areas (RNAs) in the plan area as well as information about the potential need and opportunity for additional RNAs. RNAs are permanently established to maintain areas of natural ecosystems and areas of special ecological significance. These protective designations attempt to maintain natural ecosystem components and processes and are cooperatively identified and managed with the USDA Forest Service Rocky Mountain Research Station. These areas form a long-term network of ecological reserves established as baseline areas for non-manipulative research, education, and the maintenance of biodiversity. RNAs are administratively designated by the regional forester with station director concurrence.

2.1 Existing Information

- Representativeness assessment of research natural areas on National Forest System lands in Idaho (Rust 2000)
- Research natural areas of the Northern Region: Status and needs assessment (Chadde et al. 1996)
- Research natural areas on National Forest System lands in Idaho, Montana, Nevada, Utah, and western Wyoming: A guidebook for scientists, managers, and educators (Evenden et al. 2001)
- 36 CFR 219.25 Special Designations
- FSM 4063—Research Natural Areas
- FSH 1909.12—Land Management Planning Handbook, Chapter 20
- Organic Administration Act of June 4, 1897 (16 U.S.C. 477–482, 551)
- Clearwater National Forest Plan (USDA Forest Service 1987a)
- Nez Perce National Forest Plan (USDA Forest Service 1987b)

2.2 Informing the Assessment

This section of the assessment addresses available information regarding the RNAs. The Organic Administration Act of June 4, 1897, authorizes the Secretary of Agriculture to designate RNAs. Special Designation (36 CFR 219.25) advises that forest planning shall provide for the establishment of RNAs. Areas of important forest, shrubland, grassland, alpine, aquatic, and geologic types that have special or unique characteristics of scientific interest and importance will be identified as lands needed to complete the national RNA network.

Per the Land Management Planning Rule (April 2012), the Forest Service shall provide for the diversity of plant and animal communities within the Forest Service authority and consistent with the inherent capability of the plan area. The Forest Service will also maintain or restore ecosystem integrity and diversity.

The objectives of designating RNAs (FSM 4063.02) support this rule by the following:

- Maintaining a wide spectrum of high-quality representative areas that represent the major forms of variability found in forest, shrubland, grassland, alpine, and natural situations

that have scientific interest and importance that, in combination, form a national network of ecological areas for research, education, and maintenance of biological diversity.

- Preserving and maintaining genetic diversity, including threatened, endangered, and sensitive species.
- Protecting against human-caused environmental disruptions.
- Serving as reference areas for the study of natural ecological processes including disturbance.
- Providing onsite and extension educational activities.
- Serving as baseline areas for measuring long-term ecological changes.
- Serving as control areas for comparing results from manipulative research.
- Monitoring effects of resource management techniques and practices.

2.2.1 *Current Condition*

Potential RNA designation could be based upon local knowledge of vegetation types or identified rare elements and features. Priorities for designation would likely range from moderate to high for such designations. Rust (2000) listed several Artemisia, Salix, and Cercocapus associations, among others, that are underrepresented on physiographic units partially included on the Nez Perce–Clearwater National Forests. Local assessment and fieldwork is needed to determine the suitability of inclusion of these features within potential RNA designation.

2.3 Trends and Drivers

Formal establishment of three proposed RNAs (Table 17-1) is needed on the planning unit. Future designation requires that the specific land types or ecosystems identified in the assessments are either not currently represented or minimally represented within the existing RNAs (Table 17-2). In addition, representations of rare elements or features identified through local knowledge also contribute to designation. Research and monitoring is the primary use of RNAs, with 55 research projects underway cited in (Evenden et al. 2001), while informal and unreported educational uses by a variety of groups are believed to be several times this number.

2.4 Information Needs

The recommendations provided in both Chadde et al. (1996) and Rust (2000) need to be thoroughly reviewed to reconcile conflicting assessments and prioritize associations as far as what is possible or appropriate on the ground concerning future designations. This will require a closer review of the documents and a long-term field review and assessment followed by appropriate decisions. Given time and resource limitations, most of this effort will necessarily come after completion of the Forest Plan. Additionally, a review of specific needs concerning the Bull Run RNA expansion and adjustment of the Lochsa RNA boundary must be assessed and determined.

Table 17-1. Currently designated or proposed Research Natural Areas (RNAs)

RNA	Designated	Proposed	Acres[a]
Clearwater Unit			
Aquarius	●		3,900
Bald Mountain	●		365
Bull Run Creek	●		373
Chateau Falls	●		200
Dutch Creek	●		303
Fenn Mountain		●	600
Four-Bit Creek	●		392
Grave Peak	●		360
Lochsa River	●		1,490
Rhodes Peak		●	310
Sneakfoot Meadow	●		1,965
Steep Lakes	●		784
Upper Hemlock Creek		●	1,945
Nez Perce Unit			
Elk Creek	●		6,984
Fish Lake	●		760
Moose Meadow Creek	●		1,000
No Business Creek	●		1,360
O'Hara Creek	●		7,000
Square Mountain Creek	●		709
Upper Newsome Creek	●		1,201
Warm Springs Creek	●		530
Nez Perce Unit—Administered by the Wallowa-Whitman National Forest			
Alum Beds		●	1,445
Bill's Creek		●	28
Lightning Creek		●	2,134
Little Granite Creek	●		6,264

[a]Acre values are taken from the establishment reports with the exception of those administered by the Wallowa-Whitman National Forest, which are from the Pacific Northwest Interagency Natural Area Network website.

Table 17-2. Vegetative associations currently unrepresented (Chadde et al. 1996)

Target Association	Priority
Clearwater Unit	
Thuja plicata/Dryopteris	Moderate
Tsuga heterophylla/Oplopanax horridum	Moderate
Tsuga mertensiana/Clintonia uniflora	High
Tsuga mertensiana/Streptopus amplexifolius	Moderate
Eleocharis pauciflora	Moderate
Nez Perce Unit	
Abies grandis/Adiantum pedatum	Moderate
Abies grandis/Coptis occidentalis	Moderate
Abies grandis/Taxus brevifolia	High
Abies lasiocarpa/Coptis occidentalis	Moderate
Pinus contorta/Vaccinium scoparium	Moderate
Pseudotsuga menziesii/Vaccinium cespitosum	High
Deschampsia cespitosa	Moderate
Festuca idahoensis/Symphoricarpos albus	Moderate
Agropyron spicatum/Opuntia polyacantha	Moderate
Minor Types—Locate Within Designated or Proposed RNAs	
Abies grandis/Adiantum pedatum	Low
Abies lasiocarpa/Caltha biflora	Low
Pinus contorta/Vaccinium occidentale	Low
Pinus contorta/Vaccinium cespitosum	Low
Thuja plicata/Equisetum	Low
Thuja plicata/Physocarpus malvaceous	Low
Tsuga heterophuylla/Adiantum pedatum	Low
Alluvial shrubland types (willow)	Low

2.5 Literature Cited

Chadde. S. W., S. F. Kimball, A. G. Evenden. 1996. Research natural areas of the Northern Region: status and needs assessment. Unpublished Report on file with U.S. Department of Agriculture. Missoula, MT: U.S. Department of Agriculture Forest Service, Northern Region. 179 p.

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