ENVIRONMENTAL ASSESSMENT

Bunchgrass Meadows Research Natural Area Establishment and Forest Plan Amendment

USDA Forest Service
Colville National Forest
Sullivan Lake Ranger District
Pend Oreille County, Washington

Proposed Action

The proposed action is to establish a 711.4-acre (287.9-hectare) Bunchgrass Meadows Research Natural Area (RNA) and to manage it according to the direction provided in the Land and Resource Management Plan (Forest Plan) for the Colville National Forest (pages 4-89 to 4-91). Information and analysis is also provided in the Final Environmental Impact Statement (FEIS) of the Forest Plan (page III-133), to which this analysis is tiered.

A 642-acre (260-hectare) Bunchgrass Meadows proposed RNA was identified in the Forest Plan to be managed according to direction provided in the Forest Plan. The Record of Decision for the Forest Plan recommended establishment of all proposed RNAs. The FEIS states that the RNA Committee recommends acquiring an adjoining 155-acre (63-hectare) private parcel. This property was acquired in 1989. As directed in FSM 4063.1, the boundaries of the RNA were enlarged to 797 acres (323 hectares) in order to protect the integrity of the RNA.

In 1996 after discussions with the ranger district, the boundary was changed to parallel Road 1935 at a distance of 50 feet from the center-line of the roadway keeping the road outside of the RNA boundary to better protect the RNA. The surveyed boundary of Bunchgrass Meadows RNA encompasses an area of 711.4 acres (287.9 hectares). The proposed action, formal designation of the 711.4 acres (287.9 hectares) RNA by the Regional Forester, would amend the Forest Plan.

Forest Plan direction is that a recommendation be made to the USDI Bureau of Land Management (BLM) for withdrawal of the RNA from mineral entry (page 4-90). BLM makes the withdrawal decision after prescribed agency and public review. Should the lands be withdrawn, no new mining claims could be established. Existing claims could not be developed without a determination that valid existing rights had been established within each claim at the time of withdrawal.

Purpose and Need for Action

The purpose of establishing the Bunchgrass Meadows RNA is to contribute to a series of RNA's designated to "illustrate adequately or typify for research or education purposes, the important forest and range types in each forest region, as well as other plant communities that have special or unique characteristics of scientific interest and importance" (36 CFR 251.23).

A primary consideration in the selection of RNAs is the presence of multiple elements. Bunchgrass Meadows RNA contains three ecological communities, two sensitive plant species (Photo 1), and habitat for 12 threatened, endangered or sensitive animals or fish:

I. Terrestrial Ecosystems (WDNR 2005)
    a. subalpine fir/beargrass forest
    b. subalpine fir/Cascades azalea woodland
II. Wetland and Aquatic Ecosystems (WDNR 2005)
    a. subalpine sphagnum bog
III. Sensitive Plant Species (USDA FS 2004b; WDNR 2006 and 2006a)
    a. meadow pussytoes (*Antennaria corymbosa*)
    b. beaked sedge (*Carex rostrata*)
IV. Threatened, Endangered and Sensitive Animal Species (USDA FS 2004a)
    a. Endangered
        1. woodland caribou (*Rangifer tarandus caribou*)
    b. Threatened
        1. Canada lynx (*Lynx canadensis*)
        2. bull trout (*Salvelinus confluentus*)
        3. grizzly bear (*Ursus arctos)*
    c. Sensitive
        1. gray wolf (*Canis lupus*)
        2. Townsend's big-eared bat (*Corynorthinus townsendii*)
        3. American peregrine falcon (*Falco peregrinus anatum*)
        4. wolverine (*Gulo gulo luteus*)
        5. northern bald eagle (*Haliaeetus leucocephalus*)
        6. fisher (*Martes pennanti*)
        7. redband trout (*Onchorhynchus mykiss*)
        8. great gray owl (*Strix nebulosa*)

An evaluation by the Regional RNA Committee, pursuant to direction in Forest Service Manual 4063.04b, of the need for RNA's identified these types as suitable and desirable for inclusion in the national network. Establishment of the Bunchgrass Meadows RNA provides long-term protection and recognition of these types.

The Bunchgrass Meadows area was identified in the Forest Plan as a proposed RNA based on the relatively undisturbed conditions of these types in the area in 1987 and 1988. Forest Plan comments received from interested and affected members of the public supported establishment of an RNA in the area. Bunchgrass Meadows was determined at that time to provide the most appropriate site for inclusion in the national network for protection of the types identified above. Designation of future RNAs for protection of this type was considered during Forest Plan development (p. II-117). Since the Forest Plan was released in 1988, site conditions and public concerns have been reviewed; no important changes have occurred.

<u>Decisions to be Made</u>
Decisions to be made as a result of this environmental analysis are:

- Whether or not to formally establish the Bunchgrass Meadows Research Natural Area, amend the Forest Plan thus changing the designation from "proposed RNA" to "established RNA," and making minor modifications to the Management Area 4 boundaries to coincide with the RNA boundary.

- Weather or not to request that the Bunchgrass Meadow be withdrawn from mineral entry.

Public Involvement

Bunchgrass Meadows, was identified in the Forest Plan as a proposed RNA based on the relatively undisturbed conditions in the area in 1988. Comments on the Forest Plan received from interested and affected members of the public supported establishment of the RNA. At that time, a proposed Bunchgrass Meadows RNA provided the most appropriate site of a mid-elevation sphagnum bog for inclusion in the national RNA network.

Scoping began with the 1988 Forest Plan. A scoping letter was mailed to the public in 1993. The Bunchgrass Meadows RNA proposal has been listed in the quarterly Schedule of Proposed Actions since spring, 1993. The issues brought forth are described and discussed below.

Because site conditions have not changed appreciably since 1993 and issues were adequately identified at that time, it is unlikely that public concerns have changed, with the exception that OHV (Off-Highway Vehicle) use has increased across the Colville National Forest. Therefore, with addition of the OHV issue, additional formal scoping is not deemed necessary.

Issues

Issue Statement	Discussion	Issue Disposition
1. RNA establishment may reduce access for berry picking.	RNA establishment would not result in closure of any roads that are not already closed, and the RNA would not be closed to people picking berries.	This is not a significant issue because berry picking would not affect the wetland values the RNA is designed to protect, and would not be restricted by RNA establishment.
2. RNA establishment may limit horseback riding.	RNA establishment would not result in any reduction in road or trail access, and the RNA would not be closed to people riding horses.	This is not a significant issue because horseback riding would not be restricted by RNA establishment.
3. RNA establishment may eliminate ungroomed snowmobile trail access or off-road OHV use of the area.	The RNA area, which is Management Area 4 in the Forest Plan, already has a decision in place (Forest Plan Record of Decision, 12/29/1988) that closed the RNA area to off-road vehicle use. While formal establishment of the RNA may result in increased enforcement efforts, the decision to close the area to off-road vehicle travel is not a result of this proposal.	This is not a significant issue because closure to off-groomed-trail snowmobile use or off-road OHV travel is not a result of RNA establishment.

Issue Statement	Discussion	Issue Disposition
4, RNA establishment may restrict access to the SNOTEL facility.	The SNOTEL site is currently accessed via a user-created vehicle route (wheel tracks) between Road 1935 and the SNOTEL facility. The Natural Resources Conservation Service needs occasional vehicle access to the site for maintenance purposes during the summer, and snowmobile access for occasional snow course readings during the winter. Snowmobile access could be restricted to the existing vehicle route without adversely affecting the use of the SNOTEL facility.	This is not a significant issue because occasional low impact use by the Natural Resources Conservation Service for SNOTEL purposes (as is presently occurring) would continue to be allowed.
5. RNA establishment and subsequent withdrawal from mineral entry would eliminate mineral exploration and development in the RNA area.	There are no known patented mining claims within the RNA, nor is there any evidence of mineral exploration or development in or adjacent to the area. There are abandoned mining claims near the northeast corner of the RNA, but there is no record of any mineral exploration on these claims. The potential for salable minerals is considered low.	This is not a significant issue because potential for future mineral-related activity is low.

Alternatives

Alternative A, Proposed Action

Alternative A would designate a 711.4-acre (287.9-hectare) area as the Bunchgrass Meadows RNA. The Forest Plan included an area of 642 acres (260 hectares) for Bunchgrass Meadows with the intent of acquiring an additional 155-acre (63-hectare) private parcel from Burlington Northern (page 4-33). This land was acquired in 1989 and is described in the attached Establishment Record. The portion of the acquired area suitable for inclusion in the RNA was allocated to Management Area 4. This alternative would provide long-term protection for the area. The area would be recommended for withdrawal from mineral entry.

Management of the RNA is included in the Forest Plan (pages 4-89 to 4-91). It prohibits off-road vehicle use, scheduled timber harvest including salvage and/or firewood harvest, the issuing of special use permits and rights-of-way grants, and new physical improvements for recreation.

Road access in the Bunchgrass Meadows RNA was identified as an issue though scoping. The designation of Bunchgrass Meadows as an RNA would not restrict use of Road 1935. The Forest Plan (page 4-33) states that a protection system will be developed for Bunchgrass Meadows, which includes barriers and use restrictions. Off-road vehicles previously gained access to the meadows by the spur Road 1935050, but in 1993 Road 1935050 was decommissioned and boulders were placed at the end of it to prevent access. In 2007 36 CFR 261.50(a) and 36 CFR 261.56 were designated to restricted off road and trail use by motorized vehicles.

The existing Special Use Permit with the Natural Resources Conservation Service to operate and maintain a SNOTEL site at Bunchgrass Meadows would continue. Access to the site (by the permit holder only) would continue to be with snowmobiles in the winter season, and by foot from Forest Road 1935 in the snow-free season.

Alternative B, No Action

This alternative would continue management according to direction in the Forest Plan (pages 4-89 to 4-91) for proposed RNAs until the Forest Plan is revised. Only short-term protection of the area, dependent on the life of the Forest Plan, would be provided. In the short-term, management of the area would be the same as in Alternative A. The environmental consequences of Alternative B, the "No Action" alternative, are described in the FEIS for Colville National Forest Plan (page, IV-135).

Differences between the Alternatives

Alternative A (Establish RNA)	Alternative B (No Action - Do not establish RNA)
Purpose and Need:	
Bunchgrass Meadows RNA would be established. Forest community types of subalpine fir/Cascades azalea woodland, subalpine fir/beargrass forest, grand fir/big huckleberry forest, mid-elevation permanent pond, and mid-elevation sphagnum bog would contribute to the series of RNA's designated to "illustrate adequately or typify for research or education purposes, the important forest and range types in each forest region, as well as other plant communities that have special or unique characteristics of scientific interest and importance.	Bunchgrass Meadows RNA would not be established. Forest community types of subalpine fir/Cascades azalea woodland, subalpine fir/beargrass forest, grand fir/big huckleberry forest, mid-elevation permanent pond, and mid-elevation sphagnum bog would not contribute to the series of RNA's.
Issues:	
Access for berry picking would not be affected under either alternative.	
Opportunity for horseback riding would not be affected under either alternative	
Enforcement efforts to restrict off-trail snowmobile or off-road vehicle use may be increased.	Enforcement efforts to restrict off-trail snowmobile or off-road vehicle use would not be increased solely as a result of RNA establishment. (However, enforcement efforts may increase for reasons not related to the RNA.)
NRCS access to the SNOTEL facility will not be affected under either alternative.	
The request would be made to withdraw 711 acres (287.9 hectares) from mineral entry.	The request would not be made to withdraw the area from mineral entry.

Existing Conditions and Environmental Effects

Recreation

Existing Condition: The Bunchgrass Meadows RNA does not contain any developed trails or developed recreational facilities. The area is used occasionally for dispersed recreational activities such as berry picking, hiking, horseback riding, wildlife viewing, hunting, etc.

The area, including the RNA area, is occasionally used for OHV and snowmobile riding. The RNA area, which is Management Area 4 in the Forest Plan, has a decision in place (Forest Plan Record of Decision, 12/29/1988) that closed the RNA area to off-road vehicle use. Illegal motorized access is gained through the unmaintained road to the Natural Resources Conservation Service (NRCS) SNOTEL weather station. The only reason for the road is for NRCS use, so access control measures to limit use of the road to the NRCS will be taken.

Effects of Alternative A or B: Neither alternative would result in closure of any roads that are not already closed. The RNA would not be closed to people picking berries, hiking, riding horses, viewing wildlife, hunting, or any other low-impact dispersed recreational activity. Formal establishment of the RNA (Alternative A) may result in increased enforcement efforts to restrict use of the RNA to OHVs and snowmobiles.

Mining

The environmental consequences of Alternative A, with regards to mining, are described in the FEIS for Colville National Forest (pages III-136, IV-86 and IV-87.). This alternative would result (subject to BLM's decision) in the withdrawal of 711.4 acres (287.9 hectares) of land having low potential for uranium and tungsten from mineral entry. Except for possible valid existing rights, there would be no risk for direct or indirect impacts from mineral exploration and development within the RNA.

For Alternative B, no additional acreages would be withdrawn. The basin would remain open to mineral entry. Potential mineral exploration or development in these areas offers a very low risk of indirect impacts to the meadow and its features.

Invasive Plants

The RNA is for the most part free of invasive plants, however Road 1935 on the periphery of the RNA is an avenue for their introduction. Restricting OHV use from the meadow should prevent direct invasive seed transport to the RNA.

Fish, Wildlife and Sensitive Plants

Management for Threatened, Endangered and Sensitive wildlife within the Selkirk Mountains Ecosystem is directed toward providing suitable habitat conditions and the necessary seclusion needed for these species to survive. Although the RNA is a small area, the improved seclusion and habitat protection provided in this area would contribute positively to other efforts (i.e. road

closures) to reduce encounters between humans and these wildlife species within the general area. Habitat improvement is generally not appropriate in RNAs. In regard to the Woodland Caribou Guidelines, the management of Bunchgrass Meadows as a RNA is consistent with the management of woodland caribou habitat.

No federally threatened, endangered or proposed plant species are known or suspected to occur with the RNA. Establishment and management of this area as a RNA would provide a high level of protection for the sensitive plant species occurring there.

Range Management

The LeClerc Allotment is adjacent to the RNA; however, the RNA is not currently within the bounds of the grazing allotment, and there are no permitted livestock in the Bunchgrass Meadows area. Grazing is not a tool to maintain the vegetative communities at Bunchgrass Meadows. Any problems concerning trespassing cattle will be quickly corrected and the situation monitored. The current permit holder is responsive to moving the cattle when they trespass. Because grazing is not currently permitted within the Bunchgrass Meadows area, formal establishment of the RNA would not affect livestock grazing.

Special Use Permits

An existing special use permit issued on September 9, 2003 to the Natural Resources Conservation Service (NRCS) authorizes the operation and maintenance of a SNOTEL site at Bunchgrass Meadows. This SNOTEL site provides research data. The USDA Natural Resources Conservation Service (NRCS) has maintained this permanent snowcourse and SNOTEL site within Bunchgrass Meadows RNA Since 1936. The purpose of the authorized activity is "making snow surveys and related measurements pursuant to the Memorandum of Agreement effective October 1, 1988, between the USDA - Soil Conservation Service (Oregon and Washington State Offices) and USDA - Forest Service (Region 6); Ref. Forest Service Manual 1541.1, R6 supplement 1500-906, August 1, 1990." Although the Forest Plan states that Special Use Permits are not to be issued in Management Area 4, it also states that the Forest Service will protect cooperative snow courses, as required by current agreement with the NRCS.

The Forest Plan states that research facilities installed within RNAs will blend with the natural surroundings. The snowcourse is marked only by a limited number of metal signs which are not readily apparent to visitors to the meadows. The SNOTEL site is located on the eastern edge of the meadows and is masked by trees along the meadow.

Access for the two scheduled winter visits is by over snow machines (i.e. snowmobile, snowcat) on Road 1935 to the SNOTEL site, while the one scheduled summer visit is accessed by vehicle on Road 1935, then by foot and ATV to the site. An approximately 200-yard (183 meter) “wheel track” trail connects Road 1935 to the SNOTEL site.

Under both Alternatives A and B, the Special Use Permit for the SNOTEL site would continue, and access to the site would continue to be as described above. Therefore, neither alternative would have any effect on the Special Use Permit with the NRCS.

A military training permit was issued by the Colville National Forest in 1966 and terminated in 1986, when a Memorandum of Understanding was signed. The Memorandum of Understanding was closed in 1990, when a supplement was signed. It was in effect until December 31, 2000. Bunchgrass Meadows RNA is no longer within the permit area for the Air Force Survival School. Training areas that were located on the east side of the Pend Oreille River were dropped due to threatened and endangered wildlife concerns in the permit issued March 23, 2001.

Other Resources (soil, water, heritage, fuels and fire suppression, visual quality)

The establishment of this RNA would have no negative effects on the resources of soil, water, heritage, fuels and fire suppression, or visual quality.

Effects Summary

There are no adverse irreversible or irretrievable environmental effects. There are no significant cumulative effects of establishing the RNA. In addition, the management protection proposed for the RNA is expected to conserve and maintain the basic soil and water resources of the area through the lack of disturbance. Bunchgrass Meadows is the headwaters of Harvey Creek, a major subwatershed of the Sullivan Creek watershed.

Possible outcomes of selecting Alternative B would include resubmitting the RNA for establishment at a later date, or another proposed area with similar forest and range types would be submitted in the future in order to include these types in the national network. There are no significant cumulative effects of this alternative. There is a low potential that management activities in the higher portion of the basin could negatively impact the meadow and the features of interest.

<u>Agencies and Persons Consulted</u>

Agency personnel consulted in designing and analysis of this project include:

Kathy Ahlenslager, Forest Botanist
Paula Barreras, retired Forest Geologist
Tim Bertram, former Sullivan Lake Ranger District Wildlife Biologist
Jay Berube, retired Forest Ecologist
Travis Fletcher, Range Specialist
Nancy Glines, Soil Scientist
Bud Kovalchik, retired Area Ecologist
Rodney Lentz, Area Mining Geologist
Daniel Mattson, retired Forest Archaeologist
Jim McGowan, Forest Wildlife Biologist
Penny Miller, former Information Assistant, now Rocky Mountain Research Station Program Assistant
Jim Parker, Forest Environmental Coordinator
Connie Smith, former Forest Environmental Coordinator, now Region 3 Appeals Assistant
Bert Wasson, retired Forest Hydrologist

Agencies and tribes consulted on this project include:

- Big Bend Economic Development Council
- Colville Tribal Council
- Idaho Panhandle National Forest
- Natural Resources Conservation Service
- Okanogan-Wenatchee National Forest
- Spokane Tribal Council
- U.S Bureau of Land Management
- U.S. Environmental Protection Agency
- U.S Fish and Wildlife Service
- Washington Department of Natural Resource, Natural Heritage Program
- Washington State Department of Wildlife

Individuals that commented on this project include:

- Mike Borysewicz
- Duane Dipert
- Tim Hays
- Jack Knosbruck
- Gayle McKellar
- Katie May Mogen
- William Riley
- Tom Rogers
- Curt Soper, the Nature Conservancy
- William Steele
- A.K. Stirling
- Karen Sullens, Backcountry Horsemen of Washington
- James Taylor
- Maurice Vial
- Joe Walicki, Washington Wilderness Coalition
- John Walker, Colville Driftriders Snowmobiling Club
- Clint Watkins