

Appendix G. Areas of Critical Environmental Concern and Research Natural Areas Report



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1. INTRODUCTION

As part of the process for revising the current resource management plan (RMP) for the Cascade-Siskiyou National Monument (CSNM) (USDI BLM 2008), the interdisciplinary team (IDT) reviewed all Bureau of Land Management (BLM)-administered lands in the planning area to determine whether any internally nominated areas should be considered for designation as areas of critical environmental concern (ACEC). In addition, the BLM sought public comments, nominations, and modifications to existing ACECs during the scoping period. The BLM IDT reviewed all ACEC nominations provided by the public to determine if the proposed areas met the criteria for designation.

The IDT evaluated five existing Research Natural Areas (RNAs) with two different approaches. First, the IDT evaluated the RNAs using the ACEC criteria (refer to section 1.A, Areas of Critical Environmental Concern). Under this approach, the BLM considers RNAs as a sub-type of ACEC. The IDT alternatively developed a different set of criteria to evaluate RNAs (refer to section 1.B, Research Natural Areas). The BLM used this set of criteria to evaluate the RNAs to help identify areas that would provide opportunities for education, research, and collection of baseline data in relatively unaltered natural communities.

The purpose of this report is to summarize the findings of the BLM's evaluations; identify the areas that meet the relevance and importance (R&I) criteria and RNA criteria and that would be considered for ACEC and RNA designation; and identify the areas that do not meet criteria and thus would not be considered further.

A. Areas of Critical Environmental Concern

1. *Authorities and Definition*

An ACEC is defined in Section 103(a) of the Federal Land Policy and Management Act (FLPMA) as “areas within public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important cultural, historic, or scenic values; fish and wildlife resources or other natural systems or processes; or to protect life and safety from natural hazards.”

Special management attention refers to the management prescriptions developed in the preparation of an RMP to protect the important and relevant values of an area from potential effects of actions permitted by the RMP. These management prescriptions are provided in Chapter 2 of the Draft EIS. Alternatives are analyzed in Chapter 3: Affected Environment and Environmental Consequences of the Draft RMP/EIS.

2. *ACEC Designation Process*

There are several steps in the process of designating ACECs. Each of these steps is described in further detail in Section 2, Requirements for ACEC Designation:

- Nomination of areas that may meet the relevance and importance criteria.
- Evaluation of the nominated areas to determine if they meet the criteria.

- Consideration of potential ACECs in alternative management scenarios in the Draft RMP/EIS and Proposed RMP/EIS, and through public comment.
- Designation of ACECs in the Record of Decision approving the RMP.

The BLM allows ACECs to overlap other designations, such as wilderness, wild and scenic rivers, etc. however, management of ACECs, should be thought of independently of these areas (MS-1613, chapter 5). If the management attention provided under another Congressional designation or agency's designation is adequate to protect the resource or value, it is not necessary or appropriate to designate it as an ACEC (MS-1613, chapter 5, sections 1 and 2).

B. Research Natural Areas

1. Authorities and Definition

Research Natural Areas are important because they help preserve and protect unique plant and animal associations, threatened or endangered species, and geologic, soil, or water features. They provide a typical representation of these features, which is crucial for scientific research, conservation efforts, and maintaining biodiversity. RNAs also serve as living laboratories for studying ecosystems and understanding the impacts of human activities on the environment. The BLM designates and manages RNAs to preserve examples of significant ecosystems and provide opportunities for education, research, and collection of baseline data in relatively unaltered natural communities.

Areas established as research natural areas should be of sufficient number and size to adequately provide for scientific study, research, and demonstration purposes (§ 8223.0–6).

2. RNA Designation Process

The criteria below help identify areas that would provide opportunities for education, research, and collection of baseline data in relatively unaltered natural communities. Once an area is identified as an RNA, it is protected and managed to maintain its unique characteristics and ecological value. For this planning effort RNAs must have at least one of the following criteria:

- A typical representation of a common plant or animal association. For example, plant associations representative of the type and that are relatively pristine and of high quality (i.e., little or no evidence of manipulation and largely free of invasive plants).
- An unusual plant or animal association. For example, habitats that are rare, unique, or at environmental extremes or ecological communities that significantly contribute to ecoregional biodiversity.
- A threatened or endangered plant or animal species.
- Ecological communities or plant or animal species likely sensitive to climate change and offer the opportunity to study and monitor the impacts of climate change.
- A typical representation of common geologic, soil, or water features.

- Outstanding or unusual geologic, soil, or water features. For example, geological formations or features, soil types, or water features that are fragile and vulnerable to destruction and can be protected by effective management.
- Sites that contain culturally significant species important to local tribes.

C. Area of Analysis

The analysis area for this report includes all BLM-administered lands in the planning area for the CSNM RMP, as identified by Presidential Proclamation 9564. That includes, at a maximum, 113,506 acres for which the BLM has authority to make land use and management decisions.

2. REQUIREMENTS FOR ACEC DESIGNATION

A. Identifying Potential ACECs

For an area to qualify for ACEC designation, it must undergo a thorough assessment based on the criteria of relevance and importance outlined in FLPMA and 43 CFR 1610.7-2. This involves a comprehensive evaluation and analysis process to determine its eligibility for ACEC status. Additionally, the BLM provides policies and procedures for inventorying, designating, and managing ACECs, described in BLM Manual 1613 and Instruction Memorandum (IM) 2023-013, “Clarification and Interim Guidance for Consideration of Areas of Critical Environmental Concern Designations in Resource Management Plans and Amendments.”

As described in 43 CFR 1610.7-2(b) and BLM Manual 1613, an ACEC possesses significant cultural, historic, or scenic values; fish or wildlife resources (including habitat, communities, or species); natural processes or systems; or natural hazards. In addition, the significance of these values and resources must meet at least one of the following relevance criteria and one (or more) of the following importance criteria to be eligible for designation. Relevance and importance (R&I) are defined as follows:

- **Relevance**—There shall be present a significant historic, cultural, or scenic value, a fish or wildlife resource or other natural system or process, or natural hazard.
- **Importance**—The above-described value, resource, system, process, or hazard shall have substantial significance and value, which generally requires qualities of more than local significance and special worth, consequence, meaning, distinctiveness, or cause for concern. A natural hazard can be important if it is a significant threat to life or property.

1. *Relevance Criteria*

An area meets the ACEC relevance criterion if one or more of the following statements apply:

- Area is of significant cultural, historic, or scenic value (including but not limited to rare or sensitive archaeological resources and religious or cultural resources important to Native Americans).

- Area is a fish or wildlife resource (including but not limited to habitat for endangered, sensitive, or threatened species, or habitat essential for maintaining species diversity).
- Area has a natural process or system (including but not limited to endangered, sensitive, or threatened plant species; rare, endemic, or relict plants or plant communities that are terrestrial, aquatic, or riparian; or rare geological features).
- Area has a natural hazard (including but not limited to areas susceptible to avalanche, dangerous flooding, landslides, unstable soils, seismic activity, or areas containing dangerous cliffs). A hazard caused by human action may meet the relevance criteria if the RMP process determines that it has become part of a natural process.

2. Importance Criteria

The value, resource, system, process, or hazard described in the relevance section must have substantial significance and values to meet the importance criterion. This generally means that the value, resource, system, process, or hazard is characterized by one or more of the following:

- Has more than locally significant qualities, which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource.
- Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change.
- Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA.
- Has qualities that warrant highlighting in order to satisfy public or management concerns about safety and public welfare.
- Poses a significant threat the human life and safety or to property.

3. Instruction Memorandum

BLM IM 2023-013 provides additional program guidance on prioritizing the designation and protection of ACECs through the land use planning process. The IM revises and clarifies existing policy and procedures for the designation of ACECs to ensure that the BLM considers public lands and resources for conservation, where appropriate. The inventory of values, resources, systems, processes, and natural hazards should be kept current to reflect changes in conditions and identify new and emerging resource and other values. When considering whether values meet the criteria for R&I, the BLM evaluated whether these values contribute to landscape intactness, climate resiliency, or habitat connectivity; provide opportunities for conservation and restoration; or support Tribal co-stewardship or traditional and customary uses.

All designated ACECs are considered open for potential co-stewardship with Tribes. All proposed actions within ACECs are analyzed on a project implementation level, and it is required that they are consistent with R&I values, including proposed actions under co-stewardship with federally recognized Tribes. The BLM aims to work collaboratively with Tribal Nations to ensure that the unique cultural, spiritual, and ecological values of these areas are recognized and protected.

4. Special Management Attention

To be designated as an ACEC, an area must require special management attention to protect the important and relevant values. The BLM will determine whether special management is required to protect the relevant and important values given the management direction and objectives in each alternative.

B. Evaluation of Nominations for Relevance and Importance

All ACEC nominations were evaluated by the BLM IDT to determine if they meet the relevance and importance criteria. The results of these evaluations are included in Section 3. When identifying areas to be analyzed in this report, the BLM IDT followed guidance in BLM Manual 1613 and considered:

- Existing ACECs.
- Areas recommended for ACEC consideration (internal and external nominations).
- Areas identified through inventory and monitoring.
- Adjacent designations of other federal and state agencies.

C. Consideration of Potential ACECs

1. Existing ACEC Designations

There are seven ACECs and RNAs in the planning area. Most of these areas were designated in the early 1990s and the newest, Tunnel Creek, was designated in 2005.

Table G-1. Existing ACEC and RNA designations

Name	Acres	District/Field Office	Designated Values
Jenny Creek RNA/ACEC	269	Northern California/Redding	Fish, wildlife, scenic, cultural, and natural system resources. Fish resources include Jenny Creek red band trout and Jenny Creek sucker habitat. Wildlife resources include nesting bald eagles, peregrine falcons, prairie falcons, river otter, beaver, and western pond turtles. Scenic resources include the Jenny Creek Falls. Cultural resources include traditional Native American Indian use opportunities. Natural systems resources include the Jenny Creek Falls and surrounding vegetation composed of Douglas-fir mixed/ponderosa pine forest, Oregon white oak/western juniper woodlands, chaparral mixed grasslands, rocky cliffs, and talus.
Lost Lake RNA/ACEC	385	Medford/Ashland	Natural systems composed of a landslide-dammed lake and a low-elevation lake with a marshy shore, surrounded by mature conifer forest. It also includes habitat for northwestern pond turtles, and native fish species

Name	Acres	District/Field Office	Designated Values
Moon Prairie ACEC	26	Medford/Ashland	Natural systems composed of old-growth Douglas-fir, white fir, sugar pine, and Pacific yew in a section of the west Cascades with little residual old-growth forest.
Old Baldy RNA/ACEC	521	Medford/Ashland Lakeview/Klamath Falls	Natural systems composed of two ecosystem elements in the West Cascades Ecoregion: (1) Chaparral dominated by chinquapin and manzanita and (2) High-elevation white fir with Shasta red fir, mountain hemlock, Pacific silver fir, and western white pine.
Oregon Gulch RNA	1,047	Medford/Ashland	Natural systems composed of two ecosystem elements in the Klamath Mountains Ecoregion: (1) Douglas-fir/ponderosa pine forest with poison oak, hairy snowberry, or Piper Oregon grape understory and (2) white fir moderately dry forest with baldhip rose, hairy snowberry, and star flower understory.
Scotch Creek RNA	1,797	Medford/Ashland	Natural systems composed of ecosystem elements in the Klamath Mountains Ecoregion: birchleaf mountain mahogany-ceanothus-rosaceous mixed chaparral. The site is also habitat for the bureau sensitive plant species, Greene's mariposa lily, and the federally listed plant species, Gentner's fritillary.
Tunnel Creek ACEC	79	Lakeview/Klamath Falls	Wildlife values composed of populations of the federally threatened Oregon spotted frog (<i>Rana pretiosa</i>); and natural systems composed of relic wetland, riparian plant communities, and the hydrologic processes that support those communities.

2. Internal Nominations

The BLM currently manages the Mariposa Lily Botanical Area as a special area for the purpose of protecting the rare and endemic Greene’s mariposa lily. The Mariposa Lily Botanical Area was first designated under the Medford District RMP (USDI BLM 1995), then carried forward in the 2008 CSNM RMP (USDI BLM 2008). It is internally nominated as a potential ACEC to provide more consistent management of the special area in compliance with current BLM policy.

Table G-2. Internal nominations

Name	Acres	District/Field Office	Nominated Values
Mariposa Lily Botanical Area	239	Medford/Ashland	Natural systems composed of an oak savanna prairie with high native grass and forb cover. This habitat is home to two Bureau Sensitive Species, Greene’s mariposa lily (<i>Calochortus greenei</i>) and Detling’s microseris (<i>Microseris lanciniata</i> ssp. <i>detlingii</i>).

3. External Nominations

Four external ACEC nominations were identified in the public scoping comments. Some public comments did not include maps or clear delineations of the nominated area. Some public comments did not include detailed descriptions of the nominated values, or indications of how they may meet ACEC criteria.

Table G-3. External nominations

Name	Acres	District/Field Office	Nominated Values
Buck Prairie	None Provided – Assume 25 acres	Medford/Ashland	Meadow complexes
Cottonwood Glades	None Provided – Assume 115 acres	Medford/Ashland	Meadow complexes
Mariposa Preserve Wildlife Crossing	None Provided – Assume 598 acres	No location provided – Assume the area that encompasses the existing Mariposa Lily Botanical Area and areas that extend from the western border of the Monument to the east across Interstate 5 and Old Highway 99 (near and between Mile Post 1 and Mile Post 2).	Habitat connectivity for large ungulate species such as elk, black-tailed deer, black bear, cougar, Pacific fisher, American marten, mountain quail, ringtail.
Priority Wildlife Connectivity Areas	None Provided – Assume 20,012 acres	No location provided – Assume Statewide Wildlife Connectivity Areas on BLM-administered lands	Large areas that represent and connect the highest-value habitat for facilitating species movement.

3. EVALUATIONS FOR EXISTING AND NOMINATED ACECs AND RNAs

A. Jenny Creek RNA

The Jenny Creek RNA ACEC is an existing ACEC located in Siskiyou County within the BLM Redding District Office, California State Office. It was evaluated and approved as an ACEC in 1993, prior to the designation of the CSNM. There are 269 acres within the ACEC. The Jenny Creek RNA ACEC is an internal nomination, being re-evaluated for the CSNM RMP.

Table G-4. Jenny Creek RNA

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Fish	Jenny Creek red band trout and Jenny Creek sucker	Yes	Yes	Scientists estimate that the Jenny Creek Falls have acted as a natural barrier to fish passage for five million years. The resulting genetic isolation led to the expression of the dwarf form that eventually became the Jenny Creek Sucker, the only such population of Klamath Small-Scale Suckers known to exist.
Wildlife	Nesting bald eagles, peregrine falcons, prairie falcons, river otter, beaver, and western pond turtles	Yes	No	This area does not meet importance criteria because the wildlife species noted are not unique to this location. The area does not provide habitat that is of more than local significance.
Scenic	Jenny Creek Falls	Yes	No	The Scenic values within the Jenny Creek ACEC do not meet the importance criteria for an ACEC. The scenery of Jenny Creek falls is not any more distinctive than other waterfalls in the region and it doesn't have any special qualities that make it sensitive or unique.
Cultural	Traditional Native American Indian use opportunities	Yes	No	Cultural sites do exist but that the importance of those sites may not be any different from the sites along Skookum Creek or other creeks within the Monument.
Natural Systems	Douglas-fir mixed/ponderosa pine forest, Oregon white oak/western juniper woodlands, chaparral mixed grasslands, rocky	Yes	Yes	The identified natural system is an outstanding example of multiple native ecological elements that are relatively undisturbed and whose present conditions have been primarily formed by non-human processes. Such natural systems

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
	cliffs and talus, and riparian woodlands.			contain important scientific values and may serve as controls or baselines for further research. The area is both unique and more than locally significant for its ability to serve within a regional network of sites for studying and developing approaches to conservation that meet diverse human and ecological needs, including managing for climate change.

Summary and Recommendation

The evaluated area contains relevant and important values that may require special management and should be considered as a potential ACEC. The relevant and important fish values are composed of unique and irreplaceable habitat for the Jenny Creek red band trout and Jenny Creek sucker. The relevant and important natural systems are composed of the more than locally significant Jenny Creek Falls and surrounding Douglas-fir mixed/ponderosa pine forest, Oregon white oak/western juniper woodlands, chaparral mixed grasslands, rocky cliffs and talus, and riparian woodlands. Special management considerations may include maintain reference conditions by minimizing human disturbance and allowing natural processes to dominate. If management actions that interfere with natural processes are necessary, such as the removal of invasive species to maintain native or sensitive species, these manipulations should simulate natural processes and focus on restoring ecological functions rather than a desired end-state or stage.

B. Lost Lake RNA

The Lost Lake RNA ACEC is an existing ACEC located in Jackson County within the BLM Medford District Office, Oregon/Washington (OR/WA) State Office. It was evaluated and approved as an ACEC in 2016. There are 385 acres within the ACEC. The Lost Creek RNA ACEC is an internal nomination, being re-evaluated for the CSNM RMP.

Table G-5. Lost Lake RNA

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Fish	Native fish species	Yes	Yes	Lost Lake is a rare example of a landslide-formed lake in the area that supports native fish populations.
Wildlife	Western pond turtles	Yes	Yes	Lost Lake is a rare naturally formed lake within what is otherwise a high-gradient system. As such it provides uniquely high-quality habitat for northwestern pond turtles. While northwestern pond turtles occur across the landscape, the overall population is likely sustained through the existence of water bodies such as this one that provide far greater reproductive potential than the many miles of forested streams.
Natural Systems	A landslide-dammed and low-elevation lake with a marshy shore, surrounded by mature conifer forest	Yes	Yes	The identified natural system is an outstanding example of multiple native ecological elements that are relatively undisturbed and whose present conditions have been primarily formed by non-human processes. Such natural systems contain important scientific values and may serve as controls or baselines for further research. The area is both unique and more than locally significant for its ability to serve within a regional network of sites for studying and developing approaches to conservation that meet diverse human and ecological needs, including managing for climate change.

Summary and Recommendation

The evaluated area contains relevant and important values that may require special management and should be considered as a potential ACEC. The relevant and important fish values are composed unique habitat for native fish species. The relevant and important wildlife values are composed of exemplary habitat for northwestern pond turtles. The relevant and important natural systems are composed of the more than locally significant landslide-dammed Lost Lake and its surrounding aquatic beds, marshy shore, and mixed conifer forest. Special management considerations may include maintain reference conditions by minimizing human disturbance and allowing natural processes to dominate. If management actions that interfere with natural processes are necessary, such as the removal of invasive species to maintain native or sensitive

species, these manipulations should simulate natural processes and focus on restoring ecological functions rather than a desired end-state or stage.

C. Moon Prairie ACEC

The Moon Prairie ACEC is in Jackson County, within the BLM Medford District Office, OR/WA State Office. It was evaluated and approved as an ACEC in 2016. There are 26 acres within the ACEC. The Moon Prairie ACEC is an internal nomination, being re-evaluated for the CSNM RMP.

Table G-6. Moon Prairie ACEC

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Natural Systems	A reference stand of late-successional, multi-layered stand of Douglas-fir and white fir with Pacific yew, ponderosa pine and sugar pine.	Yes	Yes	The composition, seral condition, and overall lack of human disturbance makes this plant community rare and relictual in Southwestern Oregon.

Summary and Recommendation

The evaluated area contains relevant and important values that may require special management and should be considered as a potential ACEC. This is a reference stand of late-successional, multi-layered Douglas-fir and white fir with Pacific yew, ponderosa pine, and sugar pine. While the stand may not have been logged, the species mix indicates that the site may have been historically managed by Indigenous people. Douglas-fir and white fir will eventually displace California black oak, ponderosa pine and sugar pine. Prescribed burning may be needed to maintain the presence of these three species. The composition, seral condition, and overall lack of human disturbance makes this plant community rare. It also inhabits a much smaller geographic area than it did in the past, often because of environmental change in Southwestern Oregon

D. Old Baldy RNA

The Old Baldy RNA ACEC is in both the Jackson and Klamath Counties, within the BLM Medford and Lakeview District Offices, OR/WA State Office. It was evaluated and approved as an ACEC in 2016. There are 521 total acres: 166 acres in the Medford District and 355 acres in the Klamath Falls District. The Old Baldy RNA ACEC is an internal nomination, being re-evaluated for the CSNM RMP.

Table G-7. Old Baldy RNA

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Natural Systems	Ecosystem elements in the West Cascades Ecoregion: (1) Chaparral dominated by chinquapin and manzanita and (2) High-elevation white fir with Shasta red fir, mountain hemlock, Pacific silver fir, and western white pine	Yes	Yes	The identified natural system is an outstanding example of multiple native ecological elements that are relatively undisturbed and whose present conditions have been primarily formed by non-human processes. Such natural systems contain important scientific values and may serve as controls or baselines for further research. The area is both unique and more than locally significant for its ability to serve within a regional network of sites for studying and developing approaches to conservation that meet diverse human and ecological needs, including managing for climate change.

Summary and Recommendation

The evaluated area contains relevant and important values that may require special management and should be considered as a potential ACEC. The relevant and important natural systems are composed of more than locally significant (1) chaparral dominated by chinquapin and manzanita and (2) high-elevation white fir with Shasta red fir, and western white pine ecosystems with high ecological integrity. Special management considerations may include maintain reference conditions by minimizing human disturbance and allowing natural processes to dominate. If management actions that interfere with natural processes are necessary, such as the removal of invasive species to maintain native or sensitive species, these manipulations should simulate natural processes and focus on restoring ecological functions rather than a desired end-state or stage.

E. Oregon Gulch RNA

The Oregon Gulch RNA is in Jackson County, within the BLM Medford District Office, OR/WA State Office. It was evaluated and approved as an RNA first in the 1995 Medford District RMP and again in 2008. There are 1,047 acres within the RNA. The Oregon Gulch RNA is an internal nomination, being re-evaluated for the CSNM RMP.

Table G-8. Oregon Gulch RNA

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Natural Systems	Ecosystem elements in the Klamath Mountains Ecoregion: (1) Douglas-fir/ponderosa pine forest with poison oak, hairy snowberry, or Piper Oregon grape understory and (2) white fir moderately dry forest with baldhip rose, hairy snowberry, and star flower understory.	Yes	Yes	The identified natural system is an outstanding example of multiple native ecological elements that are relatively undisturbed and whose present conditions have been primarily formed by non-human processes. Such natural systems contain important scientific values and may serve as controls or baselines for further research. The area is both unique and more than locally significant for its ability to serve within a regional network of sites for studying and developing approaches to conservation that meet diverse human and ecological needs, including managing for climate change.

Summary and Recommendation

The evaluated area contains relevant and important values that may require special management and should be considered as a potential ACEC. The relevant and important natural systems are composed of more than locally significant (1) Douglas-fir/ponderosa pine forest with poison oak, hairy snowberry, or Piper Oregon grape understory and (2) white fir moderately dry forest with baldhip rose, hairy snowberry, and star flower understory. The site also includes populations of and habitat for rare and sensitive plant species Greene's mariposa lily, Gentner's fritillary, Bolander's sunflower, Slender nemacladus, California chicory, slender-flowered evening primrose Howell's false-caraway, Bellinger's meadowfoam, the moss *Schistidium cinclidondoteum*, and coastal lip fern. Special management considerations may include maintain reference conditions by minimizing human disturbance and allowing natural processes to dominate. If management actions that interfere with natural processes are necessary, such as the removal of invasive species to maintain native or sensitive species, these manipulations should simulate natural processes and focus on restoring ecological functions rather than a desired end-state or stage.

F. Scotch Creek RNA

The Scotch Creek RNA is in Jackson County, within the BLM Medford District Office, OR/WA State Office. It was evaluated and approved as an RNA in 2008. There are 1,797 acres within the RNA. The Scotch Creek RNA is an internal nomination, being re-evaluated for the CSNM RMP.

Table G-9. Scotch Creek RNA

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Natural Systems	Ecosystem elements in the Klamath Mountains Ecoregion: birchleaf mountain mahogany-ceanothus-rosaceous mixed chaparral. The site is also habitat for the bureau sensitive plant species, Greene's mariposa lily, and the federally listed plant species, Gentner's fritillary.	Yes	Yes	The identified natural system is an outstanding example of multiple native ecological elements that are relatively undisturbed and whose present conditions have been primarily formed by non-human processes. Such natural systems contain important scientific values and may serve as controls or baselines for further research. The area is both unique and more than locally significant for its ability to serve within a regional network of sites for studying and developing approaches to conservation that meet diverse human and ecological needs, including managing for climate change.

Summary and Recommendation

The evaluated area contains relevant and important values that may require special management and should be considered as a potential ACEC. The relevant and important natural systems are composed of composed of more than locally significant birch-leaf mountain mahogany-ceanothus-rosaceous mixed chaparral ecosystems with high ecological integrity. This includes populations of and habitat for the federally listed Genter’s fritillaria and the bureau special status plants, Greene's mariposa lily, California milk-vetch and Gambel’s dwarf milk-vetch, clustered lady’s slipper, California plumseed, and the coastal lip fern moss. Special management considerations may include maintain reference conditions by minimizing human disturbance and allowing natural processes to dominate. If management actions that interfere with natural processes are necessary, such as the removal of invasive species to maintain native or sensitive species, these manipulations should simulate natural processes and focus on restoring ecological functions rather than a desired end-state or stage.

G. Tunnel Creek ACEC

The Tunnel Creek ACEC is in Klamath County, within the BLM Lakeview District Office, OR/WA State Office. It was evaluated and approved as an ACEC in 2012. There are 79 acres within the ACEC. The Tunnel Creek ACEC is an internal nomination, being re-evaluated for the CSNM RMP.

Table G-10. Tunnel Creek RNA

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Wildlife	Populations of the federally threatened Oregon spotted frog (<i>Rana pretiosa</i>)	Yes	Yes	The Tunnel Creek population of Oregon spotted frogs represents one of the most southerly and most westerly extant locations of this Federally listed species. As such, its genetic composition is very likely distinct from the larger populations of this species to the north. Preservation of distinct genetic lineages of rare organisms is more important than ever under the threat of climatic changes being observed globally. For these reasons, the wildlife values are more than locally significant.
Natural Systems	Relic wetland, riparian plant communities, and the hydrologic processes that support those communities	Yes	Yes	The Tunnel Creek area supports a complex of wetland plant communities and associated processes. These wetland processes occur within a southern Oregon landscape where similar habitats have been converted to pasture grasses and other uses. The riparian and wetland processes are subsequently unique in the province

Summary and Recommendation

The evaluated area contains relevant and important values that may require special management and should be considered as a potential ACEC. The relevant and important wildlife values are composed of more than locally significant habitat for the Oregon spotted frog (*Rana pretiosa*) population. The relevant and important natural systems are composed of a complex of wetland communities and associated hydrologic processes. Special management considerations may include restricting cattle from the sensitive wetland habitat and managing for hydrological functions and wetland processes through riparian vegetation treatments, beaver habitat enhancement, and native meadow restoration.

I. Mariposa Lily ACEC

The Mariposa Lily ACEC is in Jackson County, within the BLM Medford District Office, OR/WA State Office. It was nominated internally to highlight an area where special management attention may be needed to protect and prevent irreparable damage to the relevant and important resource values of a natural process or system. There are 239 acres within the area.

Table G-11. Mariposa Lily ACEC

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Natural Systems	Oak savanna prairie with high native grass and forb cover, home to two Bureau Sensitive Species, Greene’s mariposa lily (<i>Calochortus greenei</i>) and Detling’s microseris (<i>Microseris lanciniata</i> ssp. <i>detlingii</i>).	Yes	Yes	The area provides a core, relatively undisturbed reference area that contains large populations of Greene’s mariposa lily. This is a rare and endemic species found in open shrub/Oregon white oak woodlands along the California-Oregon border and south into the Shasta Valley. Much of this species viability has been reduced in low and mid elevations due to rural development, livestock grazing, and noxious weed invasion. As such, the area is both exemplary and rare for its remaining populations of and habitat for this endemic species.

Summary and Recommendation

The evaluated area contains relevant and important values that may require special management and should be considered as a potential ACEC. The relevant and important natural systems are composed of the rare and exemplary oak savanna with core populations of native species such as the Bureau Sensitive Species Green’s mariposa lily and Detlings microseris. Special management considerations may include restoration of native grass and forb components, and the removal of the invasive yellow star thistle, which threatens to displace the native and endemic plants. This area may also be fire dependent and the application of prescribed fire may be needed to maintain health and vigor of oaks, native herbaceous species, and the mariposa lily. It may also need to include restrictions on vehicular activity and heavy equipment, including during fire suppression.

J. Buck Prairie

An external party nominated the Buck Prairie area but did not provide a map or otherwise specify the area for consideration. The BLM is interpreting this public comment to encompass approximately 25 acres within the BLM Medford District Office, OR/WA State Office. It is not currently designated as an ACEC.

Table G-12. Buck Prairie ACEC

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Natural Systems	Meadow complexes	No	No	While these meadow complexes provide habitat for aquatic and wildlife species within the Monument, there is not enough information provided to make an evaluation.

Summary and Recommendation

The evaluated area does not contain enough information to determine relevant and important values. While there are meadow complexes that provide habitat for aquatic and wildlife species in the area, there is not enough information provided to make an evaluation. The area should not be considered as a potential ACEC.

K. Cottonwood Glades

An external party nominated the Cottonwood Glades area but did not provide a map or otherwise specify the area for consideration. The BLM is interpreting this public comment to encompass approximately 115 acres within the BLM Medford District Office, OR/WA State Office. It is not currently designated as an ACEC.

Table G-13. Cottonwood Glades ACEC

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Fish	Native fish	Yes	Yes	Cottonwood Glades is located at the top of the Keene Creek sub-watershed. The meadow system captures, stores, and releases water that maintains perennial stream flows which support a population of native trout located ~ 0.1 miles below the southern extent of the meadow. Cottonwood/Keene Creek is the only perennial tributary system to Hyatt Lake known to support populations of native trout.
Natural Systems	Meadow complexes	Yes	Yes	The Cottonwood Glades fen is an important and unique meadow type created by the consistent spring complex flow. Based on known information, this meadow/slope fen is the largest in the area. The unique

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
				soil type in this meadow supports unique vegetation communities not found readily in the surrounding areas. A spring fen complex of this size is a significant resource in Southwestern Oregon, which give it a distinctive importance compared to other meadows in the region. The extensive nature of the spring complex and fen soils at Cottonwood Glades make it extremely fragile, irreplaceable, exemplary, unique, and very vulnerable to adverse change.

Summary and Recommendation

The evaluated area contains relevant and important values that may require special management and should be considered as a potential ACEC. The relevant and important fish values are unknown. The relevant and important natural systems are composed of a meadow, spring complex and fen soils. Special management considerations may include restricting cattle from the area and restricting motorized and non-motorized vehicular use.

L. Mariposa Preserve Wildlife Crossing

An external party nominated the Mariposa Preserve Wildlife Crossing area. The comment indicated that the area encompasses the existing Mariposa Lily Botanical Area but extends from the western border of the Monument to the east across Interstate 5 and Old Highway 99. The BLM is interpreting this public comment to encompass approximately 598 acres within the BLM Medford District Office, OR/WA State Office. The area is not currently designated as an ACEC.

Table G-14. Mariposa Preserve Wildlife Crossing ACEC

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Wildlife	Habitat connectivity for large ungulate species such as elk and black-tailed deer, and for black bear, cougar, Pacific fisher, American marten, mountain quail, ringtail.	Yes	No	The area provides habitat that facilitates movement of a wide variety of wildlife species between the Cascade Mountains to the east and the Siskiyou Mountains to the west. Movement occurs in both directions. Other locations between this site and the city of Ashland to the north also provide for this connectivity. Thus, this site does not provide an entirely unique connectivity point. The proposed location is unlikely to be critical to the survival of any particular species at the species distribution, regional, national, or international scale.

Summary and Recommendation

This nominated ACEC is an expansion of the Mariposa Lily ACEC (see Section 3.8 Mariposa Lily ACEC). While the BLM determined the Mariposa Lily ACEC (239 acres), the additional 359 acres in this proposed ACEC does not contain relevant and important values that may require special management. Therefore, these 359 acres should not be considered as a potential ACEC.

M. Priority Wildlife Connectivity areas

An external party nominated Priority Wildlife Connectivity Areas, as mapped by the Oregon Department of Fish and Wildlife. These maps show several Priority Wildlife Connectivity Areas within the Monument, such as between two Soda Mountain Wilderness locations. The BLM is interpreting this public comment to encompass approximately 20,012 acres within the planning area. The area is not currently designated as an ACEC.

Table G-15. Priority Wildlife Connectivity Areas ACEC

Value Category	Value Description	Meets Relevance Criteria	Meets Importance Criteria	Evaluation Rationale
Wildlife	Large areas that represent and connect the highest-value habitat for facilitating species movement.	Yes	No	These areas do not meet importance criteria. While these habitat corridors are important for the movement of a variety of wildlife species they are not “fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change.” This is due in part to their relatively expansive acreage extent, their distribution across the landscape, and the protections afforded these areas by their inclusion in the CSNM.

Summary and Recommendation

The evaluated area does not contain relevant and important values that may require special management. The area should not be considered as a potential ACEC.

4. EVALUATIONS FOR EXISTING RNAs USING STANDALONE RNA CRITERIA

RNAs serve as living laboratories for studying ecosystems and understanding the impacts of human activities on the environment. The definition of an RNA means an area that is established and maintained for the primary purpose of research and education. The purpose of an RNA is to provide procedures for the management and protection of public lands having natural characteristics that are unusual or that are of scientific or other special interest. Areas established as research natural areas should be of sufficient number and size to adequately provide for scientific study, research, and demonstration purposes (§ 8223.0–6).

Once an area is identified as an RNA, it is protected and managed to maintain its unique characteristics and ecological value. The standalone criteria for an RNA (must meet one, not all) include:

- A typical representation of a common plant or animal association. For example, plant associations representative of the type and that are relatively pristine and of high quality (i.e., little or no evidence of manipulation and largely free of invasive plants).
- An unusual plant or animal association. For example, habitats that are rare, unique, or at environmental extremes or ecological communities that significantly contribute to ecoregional biodiversity.
- A threatened or endangered plant or animal species.
- Ecological communities or plant or animal species likely sensitive to climate change and offer the opportunity to study and monitor the impacts of climate change.

- A typical representation of common geologic, soil, or water features.
- Outstanding or unusual geologic, soil, or water features. For example, geological formations or features, soil types, or water features that are fragile and vulnerable to destruction and can be protected by effective management.
- Sites that contain culturally significant species important to local tribes.

A. Jenny Creek RNA

For a description of the Jenny Creek RNA see (Section 3.1 Jenny Creek RNA). The Jenny Creek RNA meets six of the seven criteria (see Table 17. RNAs Evaluated with RNA Stand Alone Criteria).

B. Lost Lake RNA

For a description of the Lost Lake RNA see (Section 3.2 Lost Lake RNA). The Lost Lake RNA meets five of the seven criteria (see Table 17. RNAs Evaluated with RNA Stand Alone Criteria).

C. Old Baldy RNA

For a description of the Old Baldy RNA see (Section 3.3 Old Baldy RNA). The Old Baldy RNA meets two of the seven criteria (see Table 17. RNAs Evaluated with RNA Stand Alone Criteria).

D. Oregon Gulch RNA

For a description of the Oregon Gulch RNA see (Section 3.4 Oregon Gulch RNA). The Oregon Gulch RNA meets three of the seven (see Table 17. RNAs Evaluated with RNA Stand Alone Criteria).

E. Scotch Creek RNA

For a description of the Scotch Creek RNA see (Section 3.5 Scotch Creek RNA). The Scotch Creek RNA meets three of the seven criteria (see Table 17. RNAs Evaluated with RNA Stand Alone Criteria).

5. SUMMARY OF FINDINGS

This chapter summarizes the findings of the ACEC and RNA evaluations. Nine nominations were evaluated and found to meet both the relevance and importance criteria for further consideration as ACEC designations. Three nominations were evaluated and not found to meet the relevance and importance criteria. Five RNAs evaluated with the stand-alone RNA criteria were found to meet the criteria.

Table G-16. ACEC/RNAs evaluated with ACEC criteria

Area Name	Acres	ACEC/RNA Status	Meets Relevance and Importance Criteria	R&I Value Categories
Jenny Creek	269	Existing	Yes	Fish; Natural Systems
Lost Lake	385	Existing	Yes	Fish; Wildlife; Natural Systems
Mariposa Lily	239	Nomination	Yes	Natural Systems
Moon Prairie	26	Existing	Yes	Natural Systems
Old Baldy	521	Existing	Yes	Natural Systems
Oregon Gulch	1047	Existing	Yes	Natural Systems
Scotch Creek	1797	Existing	Yes	Natural Systems
Tunnel Creek	79	Existing	Yes	Wildlife; Natural Systems
Cottonwood Glades	115	Nomination	Yes	Fish; Natural Systems
Mariposa Preserve Wildlife Crossing	598	Nomination	No	-
Priority Wildlife Connectivity Areas	20,012	Nomination	No	-
Buck Prairie	25	Nomination	No	-

Table G-17. RNAs evaluated with RNA standalone criteria

Area Name	Acres	Representative example of common plant/animal association	Unusual plant/animal association, contributes significantly to biodiversity	T&E Species	Ecological communities or plant or animal species likely sensitive to climate change	Representative example of geologic, soil, or water features	Outstanding or unusual geologic, soil, or water features	Sites that contain culturally significant species important to local tribes
Jenny Creek	269	X	X	<u>X</u>	X	X	X	
Lost Lake	385	X	X		X	X	X	
Old Baldy	521		<u>X</u>		X			
Oregon Gulch	1047	<u>X</u>	<u>X</u>		X			
Scotch Creek	1797	X	<u>X</u>	<u>X</u>	X			

6. LIST OF PREPARERS

Name	Title	Role
Brian Amstutz	Planning and Management Analyst	Lead
Nikki Haskett	CSNM RMP Project Manager	Lead
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Tim Montfort	Hydrologist	Evaluator
Brian Long	Recreation Specialist	Evaluator
Steve Godwin	Wildlife Biologist	Evaluator
Lisa Rice	Archeologist	Evaluator
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Keli Kuykendall	ESP Enrollee, Ecologist	Evaluator
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Madeline Campbell	Silviculturist	Evaluator
Jena Volpe	Fire Ecologist	Evaluator
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Natasha Braziel	Planning Specialist	Evaluator
Matt McClintock	Soil Scientist	Evaluator
Kerry Johnston	Botanist	Evaluator
Stephen Hayner	Wildlife Biologist	Evaluator
Nate Goodwine	Silviculturist	Evaluator

7. REFERENCES

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