

# **Red Mountain**

*CA-050-132*

## RED MOUNTAIN WILDERNESS STUDY AREA (WSA)

(CA-050-132)

1. THE STUDY AREA — 6,244 acres

The Red Mountain WSA is located in northern Mendocino County, California two miles northeast of Leggett. The WSA includes 6,244 acres of BLM lands, with no State, private or split estate inholdings. It is bounded on the north, south, and west sides by private property, and on the east side by Bureau of Land Management (BLM) land (see Map 1 and Table 1).

The WSA's boundaries are defined by section lines, physiographic features, five miles of cherry-stemmed roads and two mining roads; one road is located in the northeastern portion of the WSA and the other forms the southeast corner of the area. Starting at the northern end of the WSA, next to Hiltabidels Opening, the boundary line extends east for two-thirds of a mile, then south on a mining road for one mile, and east again next to Chimney Rock for nearly three miles. The boundary line then heads south from the headwaters of Cedar Creek for one and one-half miles, turns westerly paralleling Cedar Creek canyon for about five miles and heads north at Section 1 for nearly four miles. At the headwaters of Bridges Creek, the boundary line heads east for one and one-half miles and then north in Section 18 for one-half mile.

Red Mountain and the Cedar Creek drainage dominate the WSA. Elevations range from 1,100 feet at the southwest end of the unit along Cedar Creek to 4,083 feet, less than three miles away at the top of Red Mountain. Terrain is generally steep, consisting of rugged drainages dropping abruptly into Cedar Creek canyon. A small area of fairly gentle slopes is found near the summit of Red Mountain. A zone of reddish soil, comprising 60% of the WSA, occupies the central part of the WSA and contrasts sharply with the surrounding landscape. These unusual soils have resulted in a unique vegetation cover of several species of pine and cypress trees intermixed with a low brush understory. Barren and rocky areas, covering approximately 10% of the WSA, occur on steep slopes above Cedar Creek. The rest of the WSA with more common soils, has a cover of Douglas-fir and mixed evergreen forest typical of the region.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Various suitability recommendations were analyzed in the Draft and Final Arcata Resource Area Red Mountain WSA EIS. Because of the area's small size and concentration of numerous intrusions in the central portion of the WSA, the Final EIS analyzed two alternatives: all-wilderness and no-wilderness. A 242-acre tract of private land, contiguous to both the WSA boundary and a previously isolated 40-acre parcel of public land, was recently acquired by the BLM. This resulted in a total of 282 acres of Federal land adjacent to the WSA boundary. Because of this area's unique soils and special botanical values, it was included for analysis in the Final EIS under Section 202 of FLPMA.

2. RECOMMENDATION AND RATIONALE

0 acres recommended for  
wilderness  
6,244 BLM acres recommended  
for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. This includes the 242 acres of acquired land and the previously isolated 40 acre parcel. The all-wilderness alternative is considered to be the environmentally-preferred alternative as it would result in the least change from the natural environment over the long term. This alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The WSA is recommended nonsuitable for wilderness because it contains a significant amount of critical and strategic minerals (nickel, cobalt and chromium), which outweigh the area's wilderness values. Although the Final Wilderness EIS assumes mining will not occur under either alternative, the mineral deposit, covering the central portion, or 50 percent of the WSA, is one of the largest potential domestic sources in the United States. The option of having this resource available for development, to supply future industrial, military, and civilian needs of the United States outweighs the area's value as wilderness.

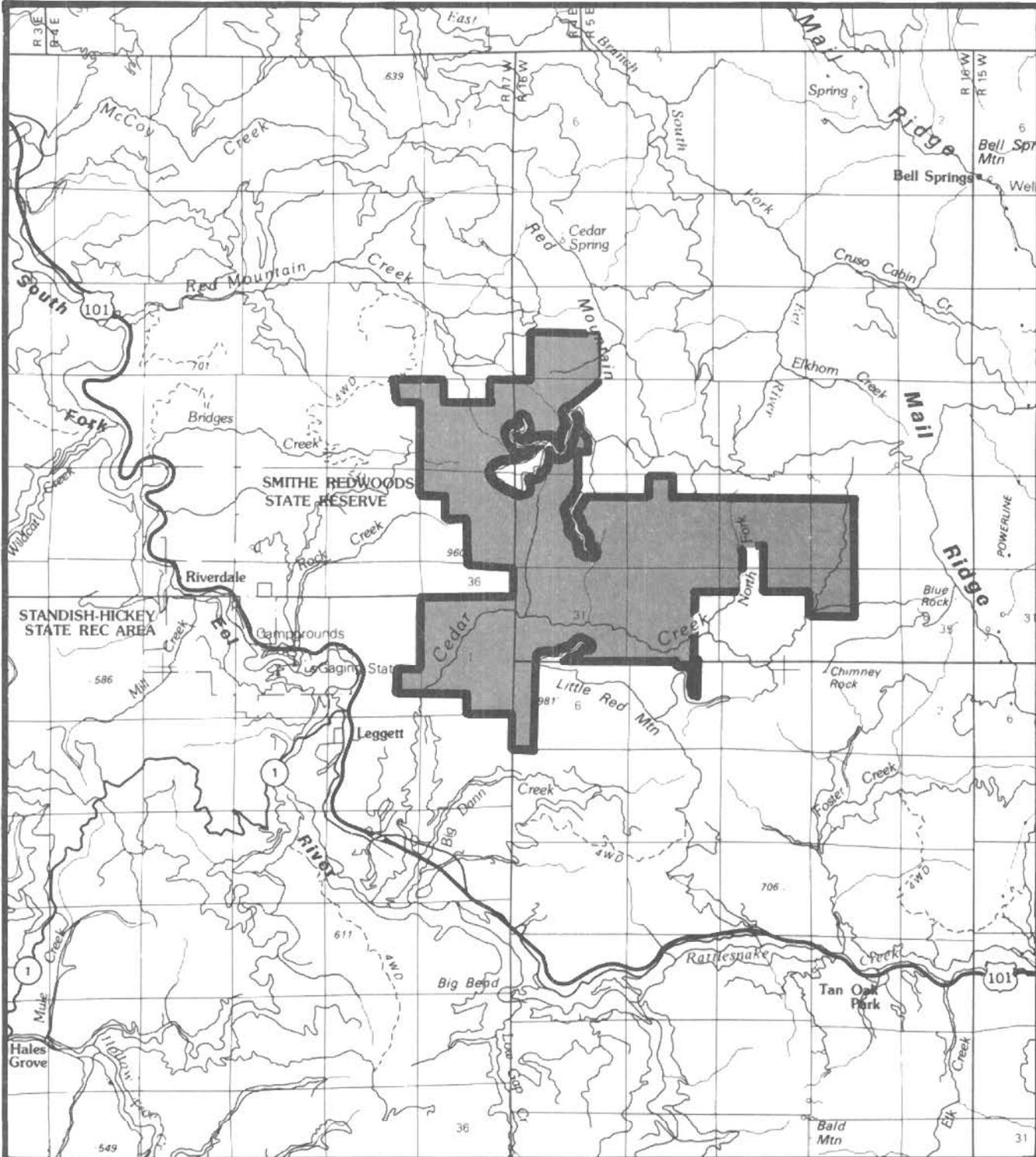
The wilderness values of the area as a whole are of low quality. The five miles of cherry-stem roads and ten miles of four-wheel drive (4WD) access routes that lead to thirty mining test pits, the sparse vegetation, steep and unstable terrain, and the absence of outstanding recreational opportunities reduce the area's wilderness values.

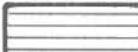
The WSA does possess some significant special features (botanical and wild-life), and although the WSA is recommended nonsuitable, these values would continue to be protected and managed under the current designation as an Area of Critical Environmental Concern (ACEC)/Research Natural Area (RNA).

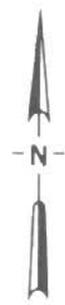
T 58  
HM  
T 24 N  
MDM

T 24 N  
T 23 N

R 17 W R 16 W R 16 W R 15 W



- |   |   |                            |   |              |
|---|---|----------------------------|---|--------------|
|  | NONE  | RECOMMENDED FOR WILDERNESS |  | SPLIT ESTATE |
|  | RECOMMENDED FOR NONWILDERNESS               |                            |  | STATE        |
|  | LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS |                            |  | PRIVATE      |



**Red Mountain  
Proposal  
MAP-1**



050-132  
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

<u>Within Wilderness Study Area</u>		<u>Acres</u>
BLM	(surface and subsurface)	6,244
Split Estate	(BLM surface only)	0
<u>Inholdings</u>		
State		0
Private		0
Total		<u>6,244</u>
<u>Within the Recommended Wilderness Boundary</u>		<u>Acres</u>
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		<u>0</u>
<u>Within the Area Not Recommended for Wilderness</u>		<u>Acres</u>
BLM	(surface and subsurface)	6,244
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		<u>6,244</u>

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: Naturalness has been adversely affected by past and present mining activities. The works of man are noticeable in the area surrounding Red Mountain. Approximately five miles of cherry-stemmed road and ten miles of 4WD access routes are located in this WSA. The access routes revegetate very slowly.

Outside of this impact area, the WSA is generally natural. The inner gorge of Cedar Creek Canyon and the old-growth Douglas-fir forest, for example, are essentially pristine in appearance.

2. Solitude: Because of the size of the WSA, outside noises from vehicle use on adjacent cherry-stemmed mining roads and Highway 101, as well as timber harvest activities on adjoining private property are frequent and detract from one's ability to find secluded places.

At low levels of use, visitors are able to find solitude in the WSA. Opportunities to find secluded places, however, are limited because the steep topography of many south-facing slopes makes access extremely difficult. Those who visit the area tend to frequent the gentler land near the top of Red Mountain or the narrow corridor of Cedar Creek. The open vegetation of the red soil area does not provide exceptional screening, but in the Cedar Creek drainages, the thick vegetation can hide visitors from each other.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: Resources for primitive recreation activities are limited in the WSA. Cedar Creek is the only water feature of any significance. It has a population of small resident rainbow trout that sustains light fishing pressure; however, the creek is a steelhead nursery stream and fishing is not encouraged.

Although hunters make up most of the existing recreation use, the area as a whole has relatively low production potential for game species.

Local residents report that they use the area for hiking, nature study, and general dispersed recreation. The size of the WSA limits total capacity for general public use for such purposes.

4. Special Features: The WSA is recognized for its extraordinary botanical significance. McDonald's rock-cress (Arabis macdonaldiana) is an endangered species. The plant species is found only on Red Mountain, Mendocino County, where it occurs on both public and private land. A recently completed three-year study found that about 80 percent of the known population density of McDonald's rock-cress lies within an approximately two-square mile area in the central portion of the WSA. The species is restricted to soils currently classified as belonging to the Hiltabidel Series, where it is found at 20 small discrete sites. Densities of the species at these localities range from a few plants to several hundred. There are some interesting wildlife species that differ from those in the general region, including mountain lion and black bear.

The WSA also supports the entire known distribution of three other plant species. They are Eriogonum kelloggii (Kellogg's buckwheat), Sedum laxum ssp. eastwoodiae (Red Mountain stonecrop),

and Silene campanulata ssp. campanulata (Red Mountain catchfly) and are considered "candidate species" for Federal listing as threatened or endangered.

The red soils on Red Mountain are different from almost all the other red soils in the United States because they contain very high content of iron, cobalt, and nickel, and a low content of many nutrient elements needed for plant growth. These soils were first identified in the tropics and were formerly called Laterites, lateritic soils, or Latasols. Now they are classified in the soil order Oxisols if the subsurface Oxic horizon meets several specific criteria. If the oxic horizon is less fully developed, they are classified into oxidic families of other soil orders.

The WSA includes the feeding territory of the endangered peregrine falcon. The golden eagle uses the area on a more regular basis with periodic use by the bald eagle, primarily during winter.

Because of the cumulative importance of these special resource values, the WSA and adjacent BLM land are currently designated an ACEC/RNA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 6,244 acres of the Pacific Forest/California Mixed Evergreen ecosystem. The Red Mountain WSA would add a special ecosystem to the NWPS. The area is ecologically unique because of its extraordinary wealth of unique soils, plants and animals.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	<u>NWPS Areas</u>		<u>Other BLM Studies</u>	
	areas	acres	areas	acres
<u>NATIONWIDE</u>				
Pacific Forest/ California Mixed Evergreen	5	433,107	2	34,431
<u>CALIFORNIA</u>				
Pacific Forest/ California Mixed Evergreen	4	45,074	2	34,431

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers:  
 The WSA is within a five-hour drive of four major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

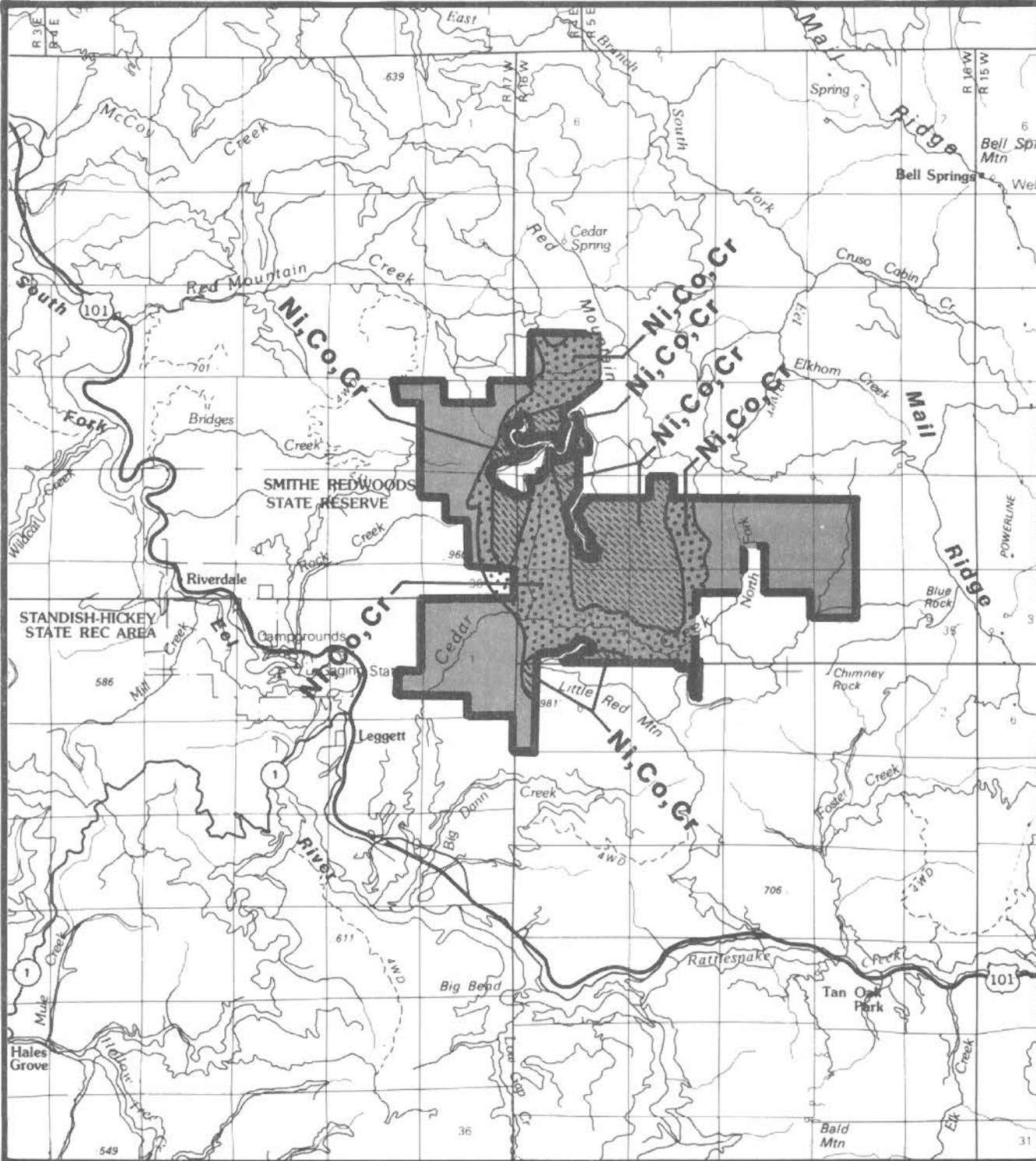
Population Centers	NWPS Acres		Other BLM Studies	
	areas	acres	areas	acres
<u>California</u>				
Redding	14	1,236,503	11	344,633
Santa Rosa-Petaluma	10	888,579	12	134,167
San Francisco-Oakland	39	4,473,002	39	565,614
Vallejo-Napa-Fairfield	44	4,832,667	74	2,100,862

3. Balancing the geographic distribution of wilderness areas: This WSA is within 50 air miles of three designated wilderness areas. They are the North Fork Wilderness, the Chancelulla Wilderness and the Yolla Bolly-Middle Eel Wilderness, managed by the Forest Service. The King Range WSA, recommended for partial-wilderness, and the Chemise Mountain WSA, recommended all-wilderness, are also within 50 air miles.

### C. Manageability

The WSA is manageable as wilderness, but because of the area's size and configuration, and presence of mining claims which may have grandfathered, valid, existing rights covering nearly half the area, it may be difficult to maintain the area's marginal wilderness values. Several mining roads cherry-stem the northern part of the WSA from private property and from other roads that form its boundary. Keeping vehicles out of this part of the WSA is difficult, especially when the mining claimant's annual assessment work includes road maintenance. Visitor use management would involve attempts to physically screen the sights and sounds of unnatural activities by encouraging hikers to use the Cedar Creek canyon and nearby 810-acre, old-growth, Douglas-fir forest. The abundance of trees and steep slopes would help confine visitor's viewsheds and reduce nearby noise levels. Opportunities for solitude could decline as the number of visitors increase in this area. This is not likely to occur as primitive recreational opportunities are essentially non-existent. One can hike from one end of the WSA to the other in four hours.

In the event mining did occur, it would be almost, if not impossible, to prevent these low quality wilderness values from being impaired in the short-term throughout the northern half of the WSA because of the extensive area needed for an open bench mining operation. Over 1,000 acres could undergo significant disturbance as a result of the mining



T5S  
HM  
T24N  
MDM

T24N  
T23N

R17W R16W R16W R15W

- NONE Recommended for Wilderness
- Recommended for Non Wilderness
- Land outside WSA Recommended for Wilderness
- Split Estate
- State
- Private

- Explanation**
- High Potential for the Occurrence of Energy and/or Non-energy Minerals
  - Moderate Potential for the Occurrence of Energy and/or Non-energy Minerals
  - M** Moderate Mineral Potential Location in a High Mineral Potential Area
  - H** High Mineral Potential Location in a Moderate Mineral Potential Area

- Commodity Symbols**
- Co** Cobalt
  - Cr** Chromium
  - Ni** Nickel



**Red Mountain  
Mineral Resource Potential**



**Map-2  
050-132**

and processing plant facilities. The unique botanical values that make this WSA so important could also be adversely impacted as their locations are virtually coincident with the mineralized zone.

Special management attention is afforded the area through implementation of the Red Mountain ACEC/RNA Management Plan and the Endangered Species Act.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary suitability recommendation: The Geologic-Energy-Minerals (G-E-M) Report prepared in 1983 for the Red Mountain G-E-M Resource Area (GRA) identified the central two-thirds of the WSA from north to south as having a high or moderate potential for the occurrence of nickel, cobalt and chromite resources, metals determined by the Federal Emergency Management Agency as both strategic and critical (Map 2). The eastern, northwestern and southwestern parts of the WSA have a low potential for the occurrence of these and all other metallic mineral resources. The WSA also has a low potential for the occurrence of uranium, thorium, nonmetallic mineral resources, oil and gas. There are no mineral material sites in the area, nor are there any sodium or potassium leases.
2. Summary of significant new mineral resource data collected since the nonsuitability recommendation, which should be considered in the final recommendation: BIM records, as of January 1988, show that there are 28 lode claims and 29 placer claims in the WSA. Information gained from G-E-M reports and the U.S. Bureau of Mines (1983) indicates the WSA and adjacent private lands contain roughly 30 to 40 million tons of laterite averaging 0.79 percent nickel, 0.06 percent cobalt and 1.42 percent chromium. All U.S. proven nickel reserves total about 360,000 tons in lateritic material containing 0.8 percent to 1.3 percent nickel. All of these reserves are in deposits at the Riddle, Oregon mine, which closed down in 1982 as a result of global economics.

Table 4 - Mining Claims

TYPE	NO.			ACRES		
	SUITABLE	NONSUIT.	TOTAL	SUITABLE	NONSUIT.	TOTAL
Mining Claims						
Lode	0	28	28	0	560	560
Placer	0	29	29	0	1,160	1,160
Mill Sites	0	0	0	0	0	0
Total	0	57	57	0	1,720	1,720

E. Impacts on Resources

The following comparative impact table summarizes the effects on pertinent resources for all the alternatives considered, including designation or nondesignation of the entire area as wilderness.

Table 5 - Comparative Summary of the Impacts by Alternative

Issue	Proposed Action (No-Wilderness/No Action - RNA/ACEC Designation Remains)	All-Wilderness Alternative
Wilderness Values	None of the area would receive the special legislative protection provided by wilderness designation. The area as a whole will not be impaired, but there will be localized areas (totaling less than 1 percent of the WSA) where naturalness and opportunities for solitude will be impaired. Annual mineral assessment work and fire suppression activities will be the main source of negative impacts. Positive impacts will result from reseeding endangered plants and restricting the use of OHVs and mechanical equipment.	The wilderness values within the WSA and some adjacent lands would receive the special legislative protection provided by wilderness designation. Impacts to wilderness values would be similar to those described for the Proposed Action, mainly because annual mineral assessment work would continue, but impacts would be less severe because there would be less use of vehicles and mechanized equipment.
<u>Arabis</u> <u>macdonaldiana</u> and Three "Candidate Plant Species"	All four of the plant species of concern receive net minor positive impacts. Benefits from artificial seeding, prescribed burning, and various means of protection from physical harm will be partially counterbalanced by impacts from mineral assessment, fire suppression, and authorized access.	Net benefits to all four plant species of concern would be slightly greater than under the Proposed Action (minor to moderate) because of reduced vehicle use.
Unique Vegetation Communities	The old-growth Douglas fir, Sargent cypress, McNab cypress, and two bogs will receive net minor benefits from increased protection under the Proposed Action. Impacts from mineral assessment and fire suppression activities will be counterbalanced by benefits from land acquisition and reduced fire hazard.	Net benefits to the four unique vegetation communities would be slightly greater than under the Proposed Action (minor) because of reduced vehicle use.
Steelhead Fishery	There will be moderate positive impacts on the steelhead fishery from habitat improvements in Cedar Creek. Negative impacts from siltation from such activities as mining assessment will be mostly unnoticeable and will be counterbalanced by beneficial impacts from such activities as land acquisition and ranger patrols.	Impacts on the steelhead fishery would be the same as described for the Proposed Action, except that there would be slightly less siltation because of reduced vehicle use.
Drinking Water	There will be no measurable impact on drinking water supplies.	Impacts on drinking water supplies would be the same as under the Proposed Action, except that there would be slightly less contamination because there would be less erosion.

Table 5 - Comparative Summary of the Impacts by Alternative

Issue	Proposed Action (No-Wilderness/No Action - RNA/AOEC Designations Remain)	All-Wilderness Alternative
Unique Soils	There will be only minor, localized disturbance of the unique soils; as a whole they will not be affected.	Impacts on unique soils would be the same as under the Proposed Action, except that there would be slightly less soil disturbance because of reduced vehicle use.
Mining	The Proposed Action will have no impact on the potential for mining within the WSA. Mineral assessment work will be made slightly more costly and less convenient, but the difference will not be enough to change the amount of assessment work done.	Impacts on mining would be the same as under the Proposed Action except that there would be the inconvenience of no vehicular access.
Peregrine Falcon	The Proposed Action will have no measurable impact on the endangered peregrine falcon.	There would be virtually no impacts on the endangered peregrine falcon.
Available Wildlife Habitat	Although there will be minor positive and negative impacts to wildlife habitat, no changes significant enough to affect wildlife populations will occur.	Impacts on available wildlife habitat would be essentially the same as under the Proposed Action, except that there would be even less disturbance because of the prohibition against vehicular use.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Positions expressed by the general public and most interest groups strongly favored wilderness designation while most government entities concurred with the non-wilderness recommendation. Virtually all of the comments referred to the value of the minerals, questioned the use of the term "valid mining claims", or demanded a resolution of the mining issue. Of the 149 comments received during the wilderness inventory, most of the comments dealing with specific inventory criteria agreed with the Bureau's designation of Red Mountain as a WSA. Comments on the protection and importance of salmon fisheries habitat, timber production, rare plants, and mining potential were deferred as study phase considerations. Of the 275 comments received for the purpose of identifying issues and alternatives (scoping), 214 favored wilderness, six opposed wilderness, and 55 did not take a position on wilderness.

A formal public hearing was held on October 12, 1983, in Redway, California. A total of 179 comments, both oral and written, were received during the 90-day public comment period for the Red Mountain DEIS. Seventy-two percent of the comments received favored wilderness designation, four percent supported the ACEC/RNA designation and four percent opposed wilderness. The Ukiah District Advisory Council voted unanimously for the non-wilderness recommendation.

United States Congressman Douglas H. Bosco recommended that no timber harvesting occur if the non-wilderness recommendation is selected by Congress. California State Assemblyman Dan Hauser favored the all-wilderness alternative and recommended that BLM conduct validity examinations on the mining claims.

The Mendocino County Board of Supervisors favored non-wilderness, but were against BLM's plan to harvest timber within the ACEC boundary. They reiterated a statement in the Mendocino County General Plan, i.e., "No permits for large-scale mining of the Red Mountains shall be issued by the County." The California Department of Water Resources favored temporary selection of the Bureau's non-wilderness recommendation because the Department feels the Draft EIS contains insufficient watershed data to select an alternative that would best protect on-site and downstream water resources. The Resources Agency of California offered no comment. The California Department of Fish and Game requested that BLM recognize the value of maintaining habitat for anadromous fish. The Environmental Protection Agency classified the Draft EIS as category LO-1 (Lack of Objections - Adequate EIS). Concerns were expressed by the U.S. Fish and Wildlife Service that herbicide spraying on adjacent private lands could adversely affect Arabis populations. The U.S. Dept. of Air Force supported wilderness designation, in general, provided that no restrictions are placed on essential military overflights.