

# White Knob Mountains Wilderness Study Area

## 1. The Study Area -- 9,950 acres

The White Knob Mountains WSA (ID-31-17) is located in Butte County ten miles north of Arco, Idaho. The WSA includes 9,950 acres of public land. No inholdings are present within the WSA (see Table 1). Boundaries are generally the Challis National Forest on the west and north, the Waddoups Canyon road on the north and northeast and private and state land subdivisions on the east, south and southwest.

The WSA is characterized by foothill and mountainous terrain with the highest point rising 2,000 feet above Antelope Valley to an elevation of 7,955 feet. Several well-defined drainages with southward orientations feed Cherry and Antelope Creeks. While the majority of the area supports a sagebrush-bunchgrass complex, scattered and concentrated stands of Douglas-fir occur at higher elevations. Mountain mahogany is often found between the sage-to-Douglas-fir transition or on the tops and slopes of lower hills with cooler aspects. Several pockets of aspen and willow surround moist spring areas in upper Waddoups Canyon.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Big Lost Management Framework Plan/Pahsimeroi Environmental Impact Statement (EIS) filed in September 1986. Two alternatives were analyzed in the EIS for the White Knob Mountains WSA: the proposed action (no wilderness) alternative, which is the recommendation of this report; and an all wilderness alternative.

## 2. Recommendation and Rationale

0 acres recommended for wilderness

9,950 acres recommended for nonwilderness

The recommendation for the White Knob Mountains WSA is to release the area for uses other than wilderness. The environmentally preferable alternative is the all wilderness alternative. It would cause the least change from the natural environment over the long term. The recommendation would use all practical means to avoid or minimize adverse environmental impacts. Existing regulations, BLM policy and the Big Lost Management Framework Plan will guide the use of the land to mitigate impacts. The Appendicitis Hill WSA Proposal map shows the lands recommended nonsuitable for wilderness designation.

The White Knob Mountains WSA is not recommended for wilderness designation for the following reasons:

Certain conditions adversely affect BLM's ability to manage this area as wilderness over the long term. The two miles of the Waddoups Canyon Road that penetrate to the center of the area have the potential to lower solitude and visitor perception of naturalness by seeing and hearing motor vehicles within the area. Solitude and primitive recreation opportunities, although considered outstanding, can be found on many other nearby areas. Six vehicle trails enter and penetrate the WSA from one to two miles. Natural barriers are lacking to prevent vehicle trespass where use has historically occurred, primarily during hunting season. Even with signing, patrols and public education, vehicle trespass is expected because of the area's remote location and distance from administrative personnel. Under these conditions it would be difficult, but not impossible, for BLM to maintain the WSA's wilderness values.

There are numerous site-specific impacts on naturalness. Impacts include numerous unimproved vehicle ways and livestock watering sites. Six miles of motor vehicle ways enter the WSA. Along with the ways, there are five developed livestock watering sites. Visitors would encounter these human-caused imprints as they travel into four of the WSA's canyons.

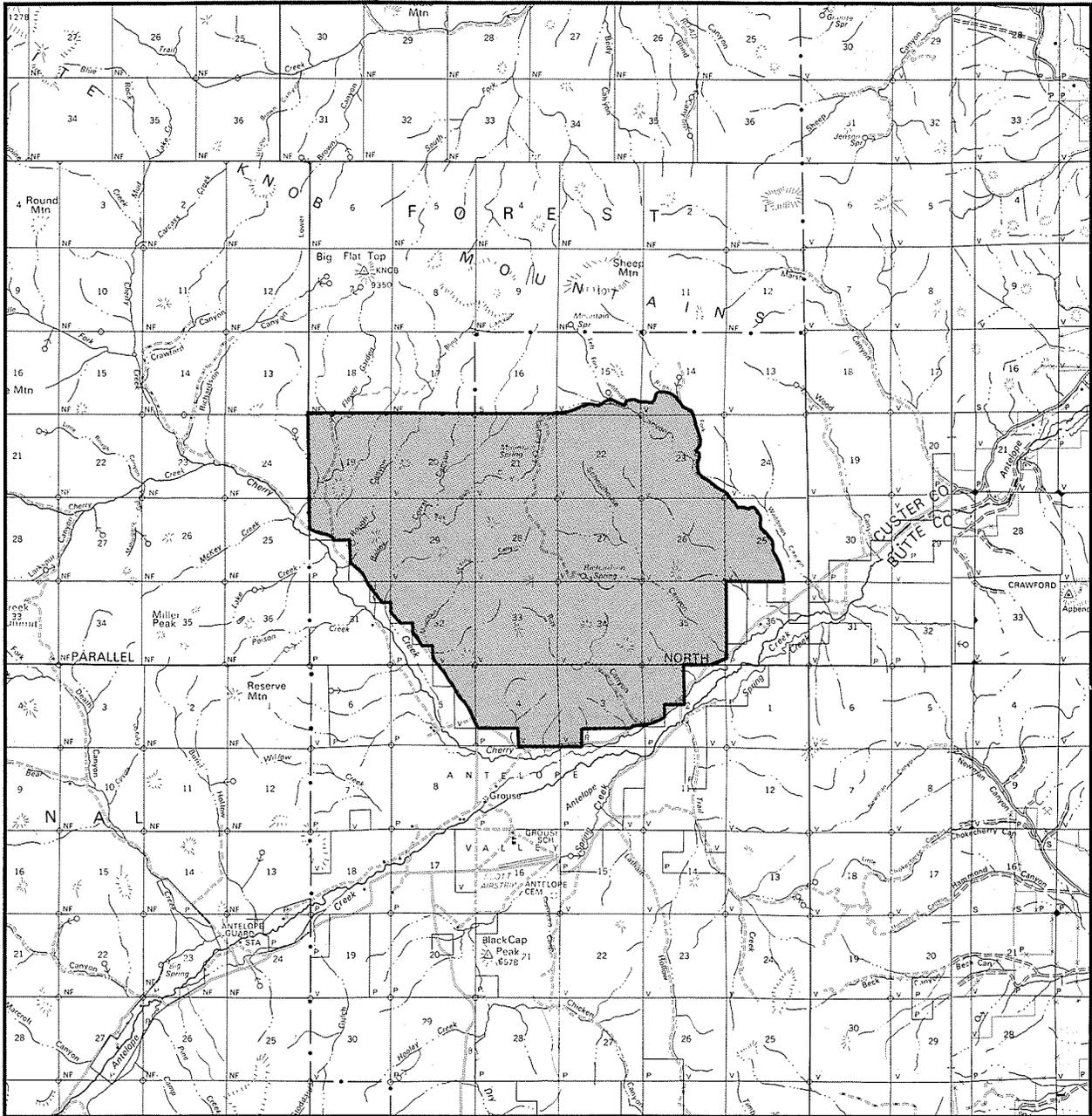
The WSA does not contribute significant solitude and primitive recreation opportunities in an area of Idaho already abundant in wilderness experiences. The WSA's opportunities for solitude and primitive recreation are judged to be less than exemplary. Solitude is available but the area is relatively small and will be impacted by vehicle traffic on dead-end roads within the WSA. Primitive recreation opportunities are present but the area lacks significant physical features that attract wilderness users. Other roadless areas and designated wilderness in the nearby mountain ranges offer similar primitive opportunities but are more attractive to recreationists. They include over four million acres of designated wilderness in six areas and more than 400,000 acres in five roadless areas. The roadless areas are located in central Idaho where the WSA is situated.

Motorized recreation use will continue on existing roads and trails and will occur primarily during hunting season. The use amounts to approximately 50 visitor days annually.

The White Knob Mountains WSA possesses the minimum characteristics for wilderness study but difficulties in wilderness management and the trade-offs with other resource uses outweigh the benefits of wilderness designation.

This area has high wildlife values for wintering deer and elk herds. Improvements necessary to enhance wildlife habitat would not be compatible with wilderness values and would not be allowed.

The natural values of White Knob Mountains WSA include scenic mountain and canyon landscapes and existing motorized and nonmotorized recreation uses such as hunting, hiking, sightseeing and camping. These values would be protected through visual management objectives to retain the existing landscape, off-road vehicle designations that restrict motorized use to existing roads and trails, and objectives to maintain and improve big game habitat. These decisions are now pending the wilderness decision and are found in the Big Lost Management Framework Plan.



T. 6 N.

T. 5 N.

T. 5 N.

T. 4 N.

R. 23 E.

R. 24 E.

R. 24 E.

R. 25 E.



RECOMMENDED FOR WILDERNESS



SPLIT ESTATE



RECOMMENDED FOR NONWILDERNESS



STATE



LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS



PRIVATE



Scale in Miles



**ID-31-17  
WHITE KNOB MOUNTAINS  
PROPOSAL**

NOVEMBER 1988

**Table 1 -- Land Status and Acreage Summary of the Study Area  
WHITE KNOB MOUNTAINS WSA**

**Within Wilderness Study Area**

BLM (surface and subsurface)	9,950
Split Estate (BLM surface only)	0
Inholdings (state, private)	0
<b>Total</b>	<b>9,950</b>

**Within the Recommended Wilderness Boundary**

BLM (within WSA)	0
BLM (outside WSA)	0
Split Estate (within WSA)	0
Split Estate (outside WSA)	0
<b>Total BLM Land Recommended for Wilderness</b>	<b>0</b>
Inholdings (state, private)	0
State land (outside WSA)	0

**Within the Area Not Recommended for Wilderness**

BLM	9,950
Split Estate	0
<b>Total BLM Land Not Recommended for Wilderness</b>	<b>9,950</b>
Inholdings (state, private)	0

### **3. Criteria Considered in Developing the Wilderness Recommendations**

#### **Wilderness Characteristics**

##### **A. Naturalness**

The White Knob Mountains WSA contains human-caused imprints but essentially retains its natural character. The most apparent changes to the WSA's natural character are vehicle roads and trails and reservoirs. The WSA's good topographic screening tends to decrease the effect of the impacts; however, most of the impacts are concentrated along routes a wilderness visitor would normally travel.

##### **B. Solitude**

Outstanding opportunities for solitude exist within the White Knob Mountains WSA. However, similar opportunities exist in many nearby areas. While steep topography, numerous canyons and variety of tall vegetation screens visitors from each other, outside influences such as motorized vehicle disturbances along cherry-stem roads and outside the area have an affect on the quality of solitude.

##### **C. Primitive and Unconfined Recreation**

Primitive and unconfined recreational opportunities qualified the area for further study but are not considered to merit inclusion in the National Wilderness Preservation System. Opportunities exist in the WSA for hiking, backpacking, hunting, wildlife observation, photography, climbing and sightseeing.

The area lacks significant physical features that attract wilderness users. Other roadless areas and designated wilderness in nearby mountain ranges offer similar primitive opportunities but are more attractive to recreationists. They include over four million acres of designated wilderness in six areas and more than 400,000 acres in five roadless areas. The roadless areas are located in central Idaho where the WSA is situated.

##### **D. Special Features**

Wildlife habitat is the area's most important special feature. Habitat for mule deer and elk is present within the WSA but is not unusual or more important than that on nearby lands.

## Diversity in the National Wilderness Preservation System

### A. Assessing the Diversity of Natural Systems and Features as Represented by Ecosystems

The White Knob Mountains WSA is located in the Rocky Mountain Forest Province/Sagebrush Steppe Ecosystem. Wilderness designation of this WSA would not add a new ecosystem to the National Wilderness Preservation System (NWPS). This ecosystem is represented by four designated areas with 76,129 acres. There are eight other BLM study areas in the state under study with this ecosystem. This information is summarized on Table 2.

**TABLE 2**

#### Ecosystem Representation

Bailey-Kuchler Classification	<u>NWPS Areas</u>		<u>Other BLM Studies</u>	
	areas	acres	areas	acres
Rocky Mountain Forest Province				
	<u>NATIONWIDE</u>			
Sagebrush Steppe Ecosystem	4	76,129	23	247,843
	<u>IDAHO</u>			
Sagebrush Steppe Ecosystem	0	0	8	162,710

**B. Expanding the Opportunities for Solitude or Primitive Recreation  
Within a Day's Driving Time (Five Hours) of Major Population Centers**

The White Knob Mountain WSA is within a five-hour drive from Boise, Idaho. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population center.

**Table 3**

**Wilderness Opportunities for Residents  
of Major Population Centers**

Population Centers	<u>NWPS Areas</u>		<u>Other BLM Studies</u>	
	areas	acres	areas	acres
Boise, Idaho	16	4,741,570	141	5,374,250

## **C. Balancing the Geographic Distribution of Wilderness Areas**

Idaho has the largest wilderness area in the contiguous 48 states, the 2.2 million acre Frank Church - River of No Return Wilderness. Designation of White Knob Mountains WSA would not help balance geographic distribution of wilderness.

### **Manageability**

Effective wilderness Management of the WSA would be difficult. There are seven vehicle access points that enter the area on the west, south and east. Access routes or vehicle trails extend into the WSA from one to two miles. Closing these trails would be difficult because natural barriers for blocking access are lacking.

Over 60 percent of the WSA is bordered by private, state and U.S. Forest Service lands. These boundaries are difficult to physically locate and define on the ground which would lead to uses that would not be compatible with wilderness management. The Waddoups Canyon Road forms most of the WSA's eastern boundary and nearly bisects the WSA. The presence of vehicles on the road limits BLM's ability to maintain high quality opportunities for solitude. It would also be difficult to restrict vehicles to the road surface because of the general openness of the WSA's interior lands. Therefore, it would be difficult to effectively manage the WSA as wilderness over the long term.

### **Energy and Minerals Resource Values**

A Geology, Energy and Mineral (GEM) assessment report was prepared for the White Knob Mountains WSA in 1983 (Geoexplorers International, Inc., 1983). Conclusions from the report are:

The White Knob Mountains WSA has been classified as having moderate favorability for oil and gas. The basis of this classification is the structural setting of the WSA including excellent potential for the development of traps, indications of subsurface structures from private geophysical data, the presence of potential hydrocarbon sources and reservoir beds in the stratigraphic section and a favorable thermal history of the source rocks. All of the WSA except the southernmost portion is covered by oil and gas leases granted after 1976 or by lease application. All of the WSA is classified as being unfavorable for geothermal resources. This is based on analogy with similar areas within the Idaho Basin and Range geothermal province. Negative factors include generally high elevations and an absence of major faults or lineaments.

All of the WSA is classified as having low favorability for other leasable resources including phosphate, bitumen and asphalt. The lack of known occurrences and the generally unfavorable geologic environment of the WSA leads to the low classification.

The WSA is rated low-to-moderate favorability for metallic metals including lead, zinc, silver and copper. Two groups of lode mining claims held involve lands within the eastern portion of the WSA. Of the twelve total claims, only one prospect has been developed. Assay work done in 1981 revealed silver, copper and titanium.

Lastly, the WSA is classified as having moderate favorability for common varieties of limestone. The dominance of carbonate rocks in the stratigraphic section provides the basis of this classification.

## **Impacts on Resources**

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

**Table 4**  
**Comparative Summary of the Impacts by Alternative**  
**WSA ID-31-17 (WHITE KNOB MOUNTAINS)**

ENVIRONMENTAL ISSUES	PROPOSED ACTION (NO WILDERNESS ALTERNATIVE)	ALL WILDERNESS ALTERNATIVE
Impacts on Wilderness Values	Naturalness and solitude lost or impaired on 980 acres. No legal protection of wilderness values on 9,950 acres.	Wilderness values retained on 9,950 acres. Impacts to solitude and naturalness would not occur on 980 acres.
Impacts to Energy and Mineral Development	No Impact. There are 9,950 acres open to mineral entry and leasing.	Subject to valid existing rights on 9,950 acres of oil and gas leases, the WSA would be withdrawn from location and leasing. Withdrawal will not impact exploration because of low potential. Wilderness designation would require validity exam on locatable mineral claims.
Impacts to Motorized Recreation Use	No Impact.	Motorized recreation use, amounting to 50 visitor days, would be foregone annually both in the short and long term. Impacts of shifting this use to other public lands would be negligible.

## **Local Social and Economic Considerations**

Wilderness designation would create a minor favorable economic impact because of increased recreation. No significant social effects would occur as a result of wilderness designation of the White Knob Mountains WSA.

## **Summary of WSA-Specific Public Comments**

BLM's wilderness inventory and study were conducted with extensive public participation and public involvement was an important consideration in making wilderness recommendations. BLM solicited public involvement in the study phase through scoping meetings, a 90-day public comment period and two formal hearings on the Big Lost/Pahsimeroi Draft Wilderness EIS. Comments received during the inventory period and EIS scoping efforts were used to develop significant study issues and various alternatives for the ultimate management of those lands found to have wilderness value.

Wilderness was not an issue in the original Big Lost MFP and was not a subject of comments. No comments received during the wilderness inventory were deferred for consideration during the study.

Twelve written comments were received during the Draft EIS comment period that mentioned the White Knob Mountains WSA. Nine comments supported more wilderness than recommended, while three comments indicated a preference for the proposed action of no wilderness.

Seven government agencies provided written responses to the Draft EIS. The Idaho Department of Fish and Game and Idaho Historical Society indicated they had no comment. The U.S. Geological Survey, Federal Aviation Administration, Environmental Protection Agency and the Department of Energy commented that they had no objection to the proposed action (no wilderness) for the WSA. The Idaho Air National Guard did support the proposed action and stated that 1,368 low-level training flights were flown in the vicinity of the WSA. The Guard feels that these missions have a significant impact on solitude in the area and wilderness designation could subject current available airspace to possible reduction which it opposes.