

Appendicitis Hill Wilderness Study Area

1. The Study Area -- 21,900 acres

The Appendicitis Hill WSA (ID-31-14) is located in Butte County five miles north of Arco, Idaho. The WSA includes 21,900 acres of public land. Inholdings consist of 640 acres of state land (see Table 1). Boundaries are generally private land on the northwest, south of Antelope Creek, and roads and public and private land on the east and south.

Appendicitis Hill lies between Antelope Creek and the Big Lost River drainages and contains several intermittent streams. The area is mountainous with Crawford Peak rising to 8,523 feet, almost 2,900 feet above Antelope Valley. Lower elevation hills are generally rounded, supporting sagebrush and grass. Several canyons contain impressive rock outcrops and caves. High, north-facing slopes support concentrated stands of Douglas-fir. Chokecherry and mountain mahogany can be found on slopes and canyon walls. Stands of aspen and willows grow in Newman and Chokecherry Canyons.

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. Three alternatives were analyzed in the EIS for the Appendicitis Hill WSA: the proposed action (no wilderness) alternative, which is the recommendation of this report; a partial wilderness alternative; and an all wilderness alternative.

2. Recommendation and Rationale

0 acres recommended for wilderness

21,900 acres recommended for nonwilderness

The recommendation for the Appendicitis Hill 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. Although the recommendation is not the environmentally preferable alternative, BLM will 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 Proposal map shows the lands recommended nonsuitable for wilderness designation.

The Appendicitis Hill 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 six miles of dead-end roads have the potential to degrade solitude and visitor perception of naturalness by seeing and hearing motor vehicles within the area. Motor vehicle use and associated impacts are expected to increase. The area also contains 18 miles of vehicle trails that enter the WSA from all sides. These trails are located in the WSA's lowlands and canyons. Natural barriers are lacking to prevent vehicle trespass where use has historically occurred, primarily during the hunting seasons. 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. Eighteen miles of motor vehicle ways enter the WSA from all sides. Along with the ways, there are 14 developed livestock watering sites. Visitors would encounter these human-caused imprints as they travel into 15 of the WSA's canyons.

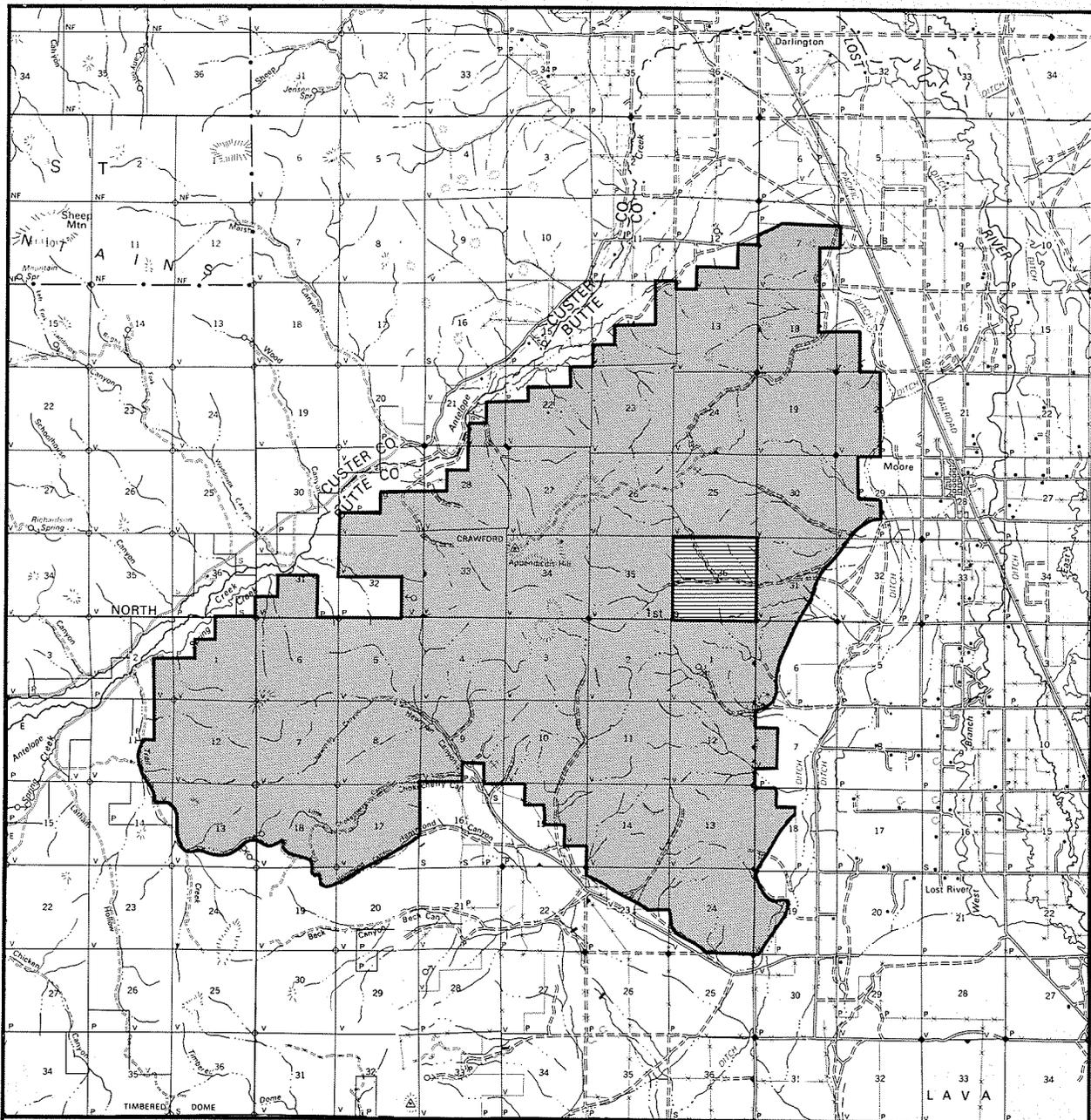
The WSA does not contribute significant solitude and primitive recreation opportunities in an area of Idaho already abundant in wilderness experiences. The WSA's opportunities for solitude and primitive recreation are judged to be less than exemplary. Solitude is available but the area is relatively 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.

Treatment of mule deer winter range habitat with mechanized equipment is necessary. Winter habitat in this area is limited and stable and healthy populations depend on adequate forage. The mechanical treatment of forage species will help maintain good deer populations.

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.

BLM recognizes that the Appendicitis Hill WSA possesses the minimum characteristics to qualify 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.

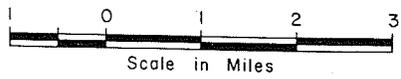


T. 6 N.
 T. 5 N.
 T. 5 N.
 T. 4 N.

R. 24 E. | R. 25 E.

R. 25 E. | R. 26 E.

- | | | | |
|---|---|---|--------------|
|  | RECOMMENDED FOR WILDERNESS |  | SPLIT ESTATE |
|  | RECOMMENDED FOR NONWILDERNESS |  | STATE |
|  | LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS |  | PRIVATE |



**ID-31-14
 APPENDICITIS HILL
 PROPOSAL**

NOVEMBER 1988

**Table 1 -- Land Status and Acreage Summary of the Study Area
APPENDICITIS HILL WSA**

Within Wilderness Study Area

BLM (surface and subsurface)	21,900
Split Estate (BLM surface only)	0
Inholdings (state, private)	640
Total	22,540

Within the Recommended Wilderness Boundary

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

Within the Area Not Recommended for Wilderness

BLM	21,900
Split Estate	0
Total BLM Land Not Recommended for Wilderness	21,900
Inholdings (state, private)	640

3. Criteria Considered in Developing the Wilderness Recommendations

Wilderness Characteristics

A. Naturalness

The Appendicitis Hill WSA is essentially natural in appearance but has numerous human-caused imprints. The most apparent changes to the WSA's natural character are vehicle roads and trails and livestock watering sites. Three dead-end road sections penetrate three of the WSA's canyons from one to four miles. Another 18 miles of vehicle trails follow canyon bottoms, traverse ridges and lead to peaks in the area. The vehicle trails are mostly used to maintain 14 livestock water developments and manage grazing use. Visitors would encounter these human-caused imprints as they travel into 15 of the WSA's canyons. 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

Within the Appendicitis Hill WSA there exists outstanding opportunities for solitude. The steep topography, numerous canyons and variety of vegetation screens visitors from each other. However, influences outside the WSA's boundary have an affect on the quality of solitude. These influences include vehicle travel on the dead-end roads, views of agricultural activity and vehicle traffic along the northwestern and southwestern boundary.

C. Primitive and Unconfined Recreation

Outstanding primitive and unconfined recreational opportunities in the WSA include hiking, backpacking, hunting, wildlife observation, photography, climbing and sightseeing. The steep and rugged terrain makes these recreational activities challenging. Both day and overnight trips can be taken among the canyons, peaks and other points of interest. Scenic views of the surrounding mountain ranges, valley floors and lava plain are excellent from the WSA's high ridges and peaks.

Primitive recreation opportunities are present but 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

There are no special feature in the Appendicitis Hill WSA.

Diversity in the National Wilderness Preservation System

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

The Appendicitis Hill 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 Appendicitis Hill 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 Appendicitis Hill WSA would not help balance geographic distribution of wilderness.

Manageability

Certain conditions interfere with BLM's ability to manage this area as wilderness over the long term. The six miles of dead-end roads have the potential to degrade solitude and visitor perception of naturalness by seeing and hearing motor vehicles within the area. The area also contains 18 miles of vehicle trails that enter the WSA from all sides. These trails are located in the WSA's lowlands and canyons and are accessible to motor vehicle use. Natural barriers are lacking to prevent vehicle trespass where use has occurred primarily during hunting season. Even with signing, patrols and public education, vehicle trespass is expected because the area's remote location and distance from administrative personnel. Under these conditions it would be difficult for BLM to maintain the WSA's wilderness values. A boundary adjustment to improve manageability was considered but was not found to be feasible. Changes in the WSA's boundary would not improve wilderness manageability without significantly decreasing the area's size and integrity. A change would be difficult or impossible to recognize unless a fence were constructed along the boundary.

If the WSA is designated wilderness, the State of Idaho has indicated a willingness to exchange the 640 acre state section for lands outside the WSA. This exchange would maintain the integrity of the area and enhance manageability.

Energy and Minerals Resource Values

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

The Appendicitis Hill WSA has been classified as having moderate favorability for oil and gas. The basis of this classification is the structural setting of the WSA, which includes 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. 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. The low rating is assigned because of the low level of detail of published geologic mapping and the lack of geochemical and geophysical data. Within the WSA, there are three mineral occurrences. They consist of prospect pits or shafts. The mineral content of these occurrences is unknown.

Lastly, the WSA is classified as having moderate favorability for common varieties of limestone with potential for building stone and aggregate production. There are 11 known occurrences of sand and gravel on the border of or just outside the WSA. Use of these areas as sources of sand and gravel is primarily for county road maintenance.

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 Appendicitis Hill WSA area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative
WSA ID-31-14 (APPENDICITIS HILL)

ENVIRONMENTAL ISSUES	PROPOSED ACTION (NO WILDERNESS ALTERNATIVE)	PARTIAL WILDERNESS ALTERNATIVE	ALL WILDERNESS ALTERNATIVE
Impacts on Wilderness Values	Naturalness and solitude lost or impaired on 1,515 acres in short term; long-term loss or impairment on 1,315 acres. No legal protection of wilderness values on 21,900 acres.	Wilderness values retained on 13,670 acres. No legal protection on 8,230 acres but no development or impairing use is anticipated on this portion. Impacts to solitude and naturalness would not occur on 1,315 acres.	Wilderness values retained on 21,900 acres. Impacts to solitude and naturalness would not occur on 1,315 acres.
Impacts to Energy and Mineral Development	No Impact.	Subject to valid existing rights on 13,670 acres of oil and gas leases, the WSA would be withdrawn from location and leasing. Because of moderate potential for occurrence of energy or mineral resources, minor impacts are anticipated.	Subject to valid existing rights on 21,900 acres of oil and gas leases, the WSA would be withdrawn from location and leasing. Because of moderate potential for occurrence of energy or mineral resources, minor impacts are anticipated.
Impacts to Motorized Recreation Use	No Impact. Vehicle use limited to existing roads and trails.	Motorized recreation use, amounting to 15 visitor days, would be foregone annually. Insignificant impact due to similar or superior opportunities on nearby public land. Vehicle use limited to existing roads and trails on 8,230 acres.	50 visitor days annually displaced from 13,670 acres closed to ORVs. Insignificant impact due to similar or superior opportunities on nearby public land.
Impacts to Timber Harvest and Management	No Impact. 300 acres of Douglas-fir commercially thinned; logging on remaining 570 acres unlikely in foreseeable future.	325 MBF harvest foregone. Logging on remaining 570 acres of commercial forest also foregone but sales are unlikely in the foreseeable future.	325 MBF harvest foregone. Logging on remaining 570 acres of commercial forest also foregone but sales are unlikely in the foreseeable future.
Impacts to Mule Deer Habitat Improvement	No Impact. 500 acres of winter range improved by mechanically thinning decadent mountain mahogany. Population increased by 30% (360 deer).	500 acres of winter range improvement foregone. Long-term reduction of mule deer population by as much as 30% (360 deer).	500 acres of winter range improvement foregone. Long-term reduction of mule deer population by as much as 30% (360 deer).

Local Social and Economic Considerations

No significant social effects would occur as a result of wilderness designation of the Appendicitis Hill 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 Appendicitis Hill 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 not 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.