

Sand Butte Wilderness Study Area

1. The Study Area -- 20,792 acres

The Sand Butte WSA (ID-57-8) is located in Lincoln County 35 miles northeast of Shoshone, Idaho. The WSA includes 20,792 acres of BLM-administered lands. There are no split estate lands within the WSA (see Table 1). The WSA's boundaries are formed by the following dirt roads: on the west and south by BLM Road 3212, the South Pagari Road and an unnamed nonsystem jeep trail; and on the north and east by BLM Road 3209, the North Pagari Road and an old cat line.

The Sand Butte WSA is generally composed of an older lava flow covered by wind-deposited soils. Although the WSA is relatively flat, the underlying lava flow is exposed in places. In these areas, lava formations such as pressure ridges, blisters and subsidence craters are common.

Sand Butte is the most prominent feature of the WSA. The Butte is an excellent example of a maar crater formed by a violent explosion caused by the rapid generation of steam when erupting magma contacted ground water. The Butte rises rapidly above the surrounding terrain. The cone is surrounded by a ring of ejected volcanic material. A portion of the crater's interior is covered by a broken lava lake. Overall, the cone appears to be a natural sand amphitheater.

Elevations range from 4,250 feet along the WSA's southern boundary to 4,974 feet at the summit of Sand Butte.

Vegetation generally consists of sagebrush interspersed with grasses and forbs. Although some old growth sagebrush may reach heights of six feet, the average canopy is three to four feet high.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and included in the Monument Final Environmental Impact Statement, (EIS) Wilderness, filed in July 1987. Three alternatives were analyzed in the EIS: an enhanced wilderness alternative, which is the recommendation of this report; a no wilderness alternative and an all wilderness alternative.

2. Recommendation and Rationale

22,543 acres recommended for wilderness

0 acres recommended for nonwilderness

The recommendation for the Sand Butte WSA is to designate 22,543 acres as 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 entire 20,792 acres of federal land within the Sand Butte WSA are recommended for wilderness designation. An additional 1,751 acres of the federal lands adjacent to the WSA, but not part of the WSA, are also recommended for wilderness designation because they enhance the manageability of the area as wilderness. With that addition, a total of 22,543 acres are recommended for wilderness.

The wilderness recommendation will also apply to any inholding acreage acquired through purchase or exchange with willing landowners. Two state land inholdings, totaling 1,280 acres, have been identified for acquisition.

Federal lands recommended for wilderness designation within the WSA and adjacent to the WSA are shown on the Sand Butte Proposal map.

The area recommended for wilderness has outstanding wilderness values and exhibits special geological features of scientific and educational value. Designation of the Sand Butte WSA and adjacent suitable federal lands would add landform diversity to the National Wilderness Preservation System (NWPS) in Idaho. The area recommended for designation could be managed as wilderness.

The 22,543 acres recommended for wilderness designation are apparently natural. Human imprints in the area include six vehicle trails and a fence. Small pockets of crested wheatgrass (a non-native plant species) seeded aerially in 1975 occur in the northern part of the WSA. Cheatgrass, a non-native species that invades after wildfires, is also present in the WSA.

The area's large size and remoteness, in combination with the topographic relief provided by a variety of lava formations, offer outstanding opportunities for solitude and primitive recreation. Recreation opportunities include camping, hiking, hunting, sightseeing, photography, spelunking and nature study. The scenic Sand Butte Crater is the primary destination point for visitors to the area.

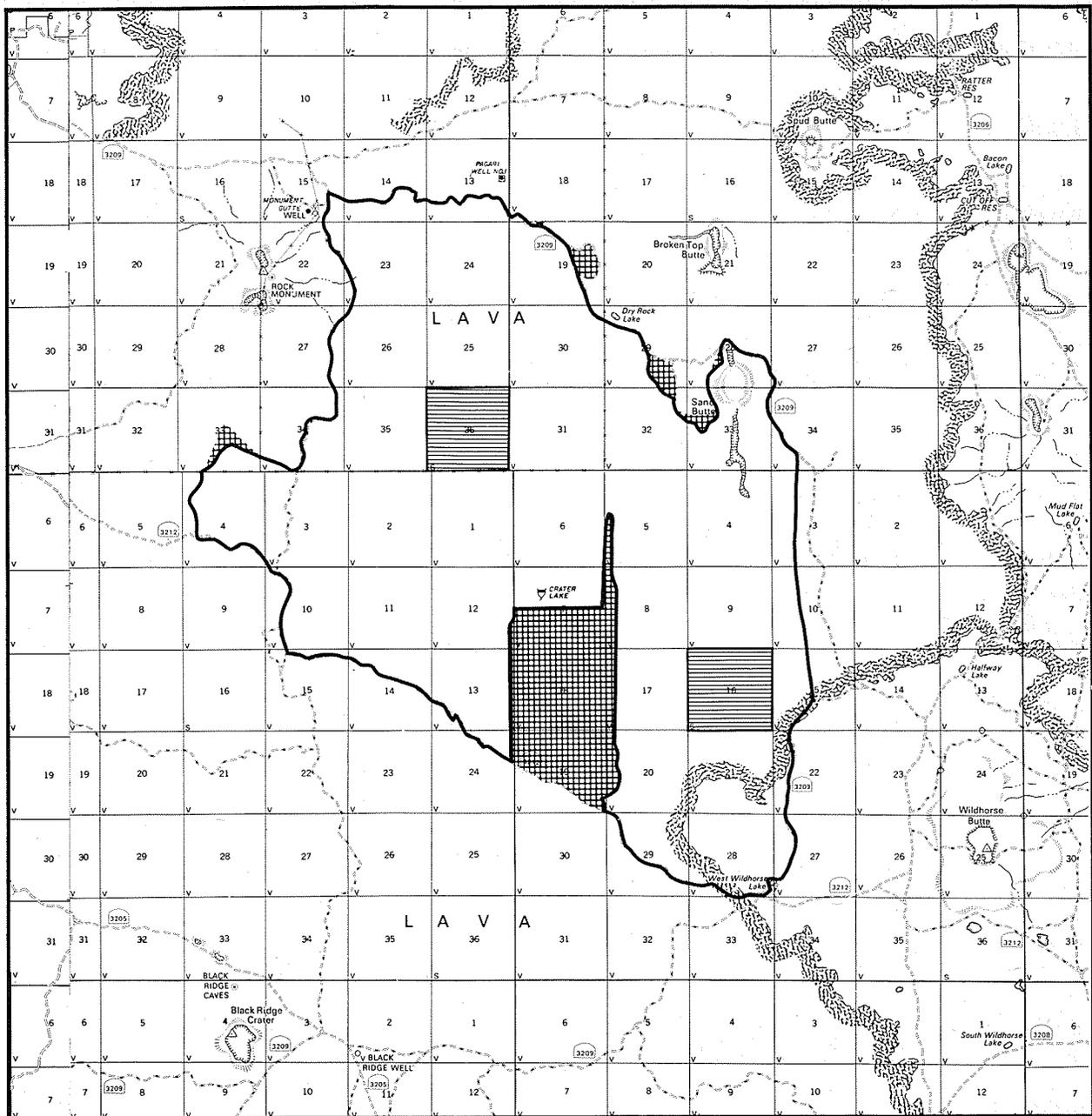
Sand Butte is a unique formation among the many other volcanic cones on the Snake River Plain. The steep-sided, deep, symmetrical crater bowl is an excellent example of a maar crater. As such, it is of scientific and educational interest.

The Intermountain Sagebrush Province/Sagebrush Steppe Ecosystem (3130-49) is the ecosystem represented in the area recommended as wilderness. In Idaho, this Bailey-Kuchler classification ecosystem is already represented in the NWPS by the Craters of the Moon Wilderness administered by the National Park Service (NPS). The Craters of the Moon Wilderness includes many excellent examples of Snake River plain volcanism and desert lava flow ecosystem. However, the Craters of the Moon Wilderness does not include a good example of a maar crater. Designation of the Sand Butte area would add landform diversity to the NWPS in Idaho.

Designation of the adjacent 1,751 acre parcel of federal land as wilderness would enhance manageability. The addition of the parcel creates a more easily recognized southern boundary, thereby reducing the potential for inadvertent unauthorized off-road vehicle use in the designated area.

Conflicts with existing resource uses are limited in the Sand Butte WSA. Existing grazing management activities in the recommended area would continue. Sheep camp related vehicle use on ways would impact opportunities for solitude and primitive recreation. However, because less than ten percent of the designated area would be affected over a limited time period (April through mid-June every year), the impact would be negligible.

The enhanced wilderness alternative would have an adverse impact on the implementation of proposed rangeland development projects and levels of grazing use. Wilderness management restrictions would preclude construction of a proposed pipeline project, stock water well and access road.



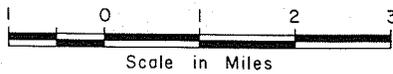
T. 3 S.
T. 4 S.

T. 4 S.
T. 5 S.

R. 21 E. | R. 22 E.

R. 22 E. | R. 23

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



**ID-57-8
SAND BUTTE
PROPOSAL**

APRIL 1988

**Table 1 -- Land Status and Acreage Summary of the Study Area
SAND BUTTE WSA**

Within Wilderness Study Area

BLM (surface and subsurface)	20,792
Split Estate (BLM surface only)	0
Inholdings (state, private)	1,280
Total	22,072

Within the Recommended Wilderness Boundary

BLM (within WSA)	20,792
BLM (outside WSA)	1,751
Split Estate (within WSA)	0
Split Estate (outside WSA)	0
Total BLM Land Recommended for Wilderness	22,543
Inholdings (state, private)	1,280
State land (outside WSA)	0

Within the Area Not Recommended for Wilderness

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

3. Criteria Considered in Developing the Wilderness Recommendations

Wilderness Characteristics

A. Naturalness

The Sand Butte WSA is natural in appearance. The majority of the WSA is unaffected by human impacts. Six vehicle trails, totaling approximately 7.5 miles, are located within the WSA. The trails are two-track with vegetation growing in the middle so visual impacts are minimal.

Several small pockets of crested wheatgrass, totaling 160 acres, exist on the WSA's southern boundary. The aerial seedings have irregular edges and blend well with surrounding vegetation. Cheatgrass, a non-native species that invades after wildfires, also affects the naturalness of the WSA. A 6.75-mile fence is the third development within the WSA. The steel post and barbed-wire fence is visible up to 100 yards in some places.

B. Solitude

The WSA provides outstanding opportunities for solitude. The area's topographic variety, vegetation, remoteness, size and proximity to the Raven's Eye WSA combine to provide numerous outstanding opportunities for solitude.

A boundary road surrounds the WSA. Vehicles on this road are visible from the fringe of the WSA. The boundary road and its traffic can also be seen or heard from the WSA's higher elevations. The impact of the road is insignificant in the area as a whole.

C. Primitive and Unconfined Recreation

The Sand Butte WSA provides a variety of recreation opportunities. The rugged volcanic features and desert environment of the WSA provide outstanding opportunities for camping, hiking, hunting, sightseeing, photography, spelunking and nature study. These types of recreation uses are estimated at less than 100 visitor days annually. The combination of rugged terrain and lack of water or designation spots probably accounts for the low visitor use figures. Visitation to the area usually occurs in the spring and fall.

D. Special Features

The area provides good opportunities for geologic study. Sand Butte is an outstanding example of a maar crater which was formed from the rapid generation of steam when ground water was contacted by erupting magma. It is one of the few maar craters on the entire Snake River Plain and perhaps the best example of this type of feature. The crater has a surrounding rim constructed of material ejected from the crater. The crater is a notable landmark because of its prominence and unique appearance relative to the surrounding landscape.

Diversity in the National Wilderness Preservation System

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

Wilderness designation of the Sand Butte WSA would add an ecosystem presently represented in the National Wilderness Preservation System (NWPS). This ecosystem is represented by one area with 30,245 acres. There are 11 other BLM areas in the state under study with this ecosystem. This information is summarized in Table 2.

TABLE 2

Ecosystem Representation

Bailey-Kuchler Classification		<u>NWPS Areas</u>		<u>Other BLM Studies</u>	
		areas	acres	areas	acres
Intermountain Province	Sagebrush				
				<u>NATIONWIDE</u>	
Desert-Vegetation Absent Ecosystem	Largely	1	0,245	12	870,403
				<u>IDAHO</u>	
Desert-Vegetation Absent Ecosystem	Largely	1	30,245	11	646,687
				<u>NEVADA</u>	
Desert-Vegetation Absent Ecosystem	Largely	0	0	1	223,716

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

The Sand Butte 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 centers.

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

The Sand Butte WSA would not contribute to balancing the geographic distribution of areas within the NWPS. The NPS-administered Craters of the Moon Wilderness (43,243 acres) is 20 miles to the northwest. The lava flow wilderness values within the Craters of the Moon Wilderness are superior in every respect to those of the Sand Butte WSA, with the exception of the excellent example of a maar crater. Sand Butte is the best opportunity in the region to include a maar crater in the wilderness system.

Manageability

The Sand Butte WSA can reasonably be managed as wilderness to preserve values now present in the area. Conflicts with existing resource uses are limited.

Continuation of existing livestock operations in the same manner and degree represents a minor manageability conflict. Sheep camp related vehicle use on vehicle trails in the WSA would impact opportunities for solitude and primitive recreation. However, the vehicle use would affect less than ten percent of the WSA for a limited time during the year (April through mid-June) so the impact is not significant.

There are two state inholdings, totaling 1,280 acres, in the WSA. The two sections are presently used solely for grazing. There is no vehicle access to the parcels. Based on the USGS/Bureau of Mines mineral reports for the area, mineral development on the state sections is not anticipated. The two parcels have been identified for acquisition through an exchange with the state.

The Raven's Eye WSA lies adjacent and to the north, separated from the Sand Butte WSA by a road. This 67,110 acre WSA has similar high-quality wilderness values and is also recommended suitable for wilderness designation. The proximity of this WSA enhances the manageability of the Sand Butte WSA.

The configuration of the southern boundary of the Sand Butte WSA presents another minor manageability problem. The boundary of the 1,751 acre parcel of non-WSA land that protrudes into the WSA does not conform to any easily recognizable topographic features. Off-road vehicles could easily stray across the WSA boundary in this area. Inclusion of the non-WSA parcel into the designated wilderness would enhance manageability. Moving the southern boundary to a well-defined and well-signed road would reduce the potential for unauthorized vehicle use in the designated wilderness.

Energy and Minerals Resource Values

The Sand Butte WSA has zero petroleum potential (Miller 1983), is classified as not prospectively valuable for geothermal resources (BLM 1985), and has low potential for locatable and saleable minerals.

The mineral estates in the WSA are in federal ownership and are open to mineral entry. There are no mining claims or mineral leases within the WSA.

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 4
Comparative Summary of the Impacts by Alternative
WSA ID-57-8 (SAND BUTTE)

ISSUE TOPICS	PROPOSED ACTION (ENHANCED WILDERNESS ALTERNATIVE)	NO WILDERNESS ALTERNATIVE	ALL WILDERNESS ALTERNATIVE
Impacts on Wilderness Values	<p>All wilderness values would receive long-term Congressional protection. Wilderness values would be maintained on all 22,543 acres recommended suitable for designation. All wilderness values would benefit slightly from the elimination of recreational ORV use. Acquisition of 1,200 acres of state land inholdings would enhance natural values and opportunities for solitude. Sheep camp related vehicle access would adversely affect opportunities for solitude and primitive recreation from April through mid-June in less than 10% of the WSA.</p> <p>Restrictions on fire management could result in larger wildfires increasing the potential for the spread of cheatgrass.</p>	<p>Surface disturbance associated with construction of new range developments in the WSA (1.75 miles of pipeline, 2 troughs, a well and 1.8 miles of road) would degrade apparent naturalness. Vehicle use to inspect and maintain range developments and to haul and service sheep camps would degrade opportunities for solitude and primitive recreation in the spring and fall. Recreational ORV use would degrade all wilderness values.</p> <p>Low-use vehicle trails would be maintained by ORV travel with the possibility of being expanded slightly. However, increase in visitor use is projected above current levels and impacts would be confined to the existing trails.</p> <p>Surface-disturbing fire suppression activities would moderately degrade apparent naturalness.</p>	<p>All wilderness values would receive long-term Congressional protection. Wilderness values would be maintained on all 20,792 acres of the Sand Butte WSA. All wilderness values would benefit slightly from the elimination of recreational ORV use. Acquisition of 1,280 acres of state land inholdings would enhance natural values and opportunities for solitude. Sheep camp related vehicle access would adversely affect opportunities for solitude and primitive recreation from April through mid-June in approximately 10% of the WSA.</p> <p>Restrictions on fire management could result in larger wildfires increasing the potential for the spread of cheatgrass.</p>
Impacts on Recreational ORV and Hunting Use	<p>Recreational ORV use of less than 500 visitor days would be foregone annually. The impacts of shifting this use to other public lands would be negligible. Vehicle access for hunters would not be allowed.</p>	<p>There would be no impact on recreational ORV and hunting use.</p>	<p>Recreational ORV use of less than 500 visitor days would be foregone annually. The impacts of shifting this use to other public lands would be negligible. Vehicle access for hunters would not be allowed.</p>
Impacts on Livestock Grazing Operations (continued next page)	<p>Existing cattle and sheep grazing practices would continue. The overall level of active grazing preference would decrease 422 AUMs or 15.2%. A 1.75-mile pipeline with troughs and a stock water well and access road would be built outside the boundaries of the area recommended suitable.</p>	<p>Existing cattle and sheep grazing practices would continue. The overall level of grazing use would decrease 101 AUMs or 3.9%. Vehicle use to inspect and maintain a 6.75-mile allotment boundary fence would continue. A 1.75-mile pipeline with troughs and livestock water well and access road would be built.</p>	<p>Existing cattle and sheep grazing practices would continue. The overall level of active grazing preference would decrease 404 AUMs or 15.8%. Inspection of a 6.75-mile allotment boundary fence would be on foot or horseback with motorized vehicle support for repairs. A 1.75-mile pipeline with troughs and a stock water well and access road would be built outside the WSA boundaries.</p>
Impacts on Fire Management	<p>Full suppression including use of pumper trucks, helicopters and bulldozers within the area would not occur.</p>	<p>There would be no impact on fire management.</p>	<p>Full suppression including use of pumper trucks, helicopters and bulldozers within the WSA would not occur.</p>

Local Social and Economic Considerations

Designation of the area as wilderness would have no or minimal effect on the local social and economic situation.

Summary of WSA-Specific Public Comments

Public involvement occurred throughout the wilderness review process.

During public review of the Draft EIS, thirteen comments supporting wilderness designation were received. Nine of these comments contained no supporting reasons for their position. The four comments with supporting reasons cited the area's unique opportunities, natural values, diversity and manageability. No comments opposing wilderness designation were received.

The U.S. Department of Energy, Bureau of Reclamation, U.S. Fish and Wildlife Service, National Park Service, U.S. Department of Transportation, Environmental Protection Agency, the State of Idaho's Department of Fish and Game, Department of Health and Welfare, Department of Lands, Transportation Department, Department of Water Resources and Idaho State Historical Society commented on the Draft EIS. None of their comments specifically addressed the Sand Butte WSA.