

Great Rift

Proposed Wilderness
Draft Environmental
Impact Statement

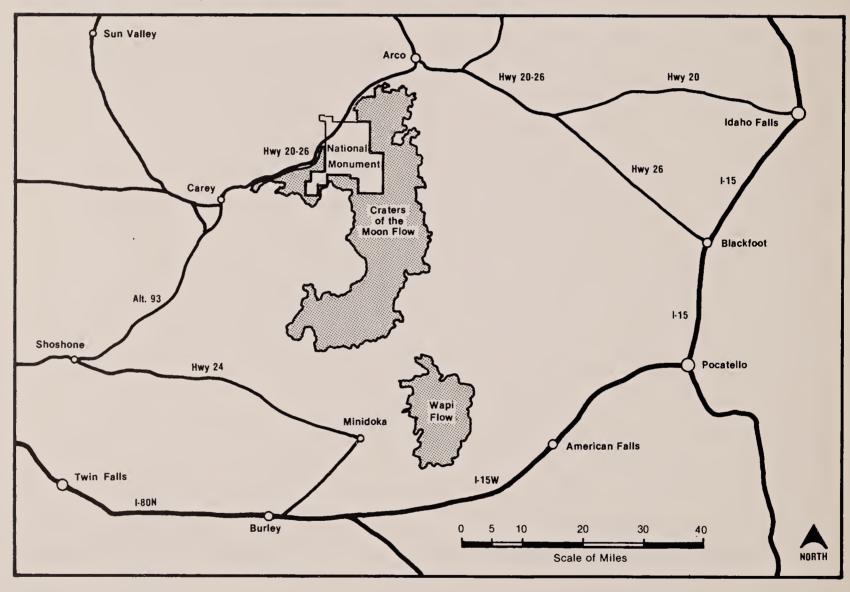
Prepared by Department of Interior Bureau of Land Management Idaho 1980





DENVER, CO BOZZE

Location of Proposed Great Rift Wilderness



Study Area

All photos in this publication provided by BLM.

Front Cover Photo: Upper Photo — Blacktail Butte

Center Photo - Rabbit brush on lava

Lower Photo — Pillar Butte

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DEPARTMENT OF INTERIOR

DRAFT

ENVIRONMENTAL IMPACT STATEMENT

GREAT RIFT WILDERNESS

Prepared by

BUREAU OF LAND MANAGEMENT DEPARTMENT OF THE INTERIOR

DENVER FEDERAL CENTER

DENVER, CO 80225

STATE DIRECTOR, IDAHO STATE OFFICE



GREAT RIFT WILDERNESS ENVIRONMENTAL IMPACT STATEMENT BLAINE, BUTTE, MINIDOKA, AND POWER COUNTIES, IDAHO

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Bureau of Land Management (BLM)

(X) Draft

() Final () Environmental Impact Statement

ABSTRACT: The BLM recommends that the Proposed Great Rift Wilderness Area be designated as part of the National Wilderness Preservation System. The proposed boundary includes 341,000 acres, 18,550 acres of which are State Land.

Alternatives to the proposed action include:

- Wilderness Study Area Alternative Designate an additional 33,400 acres of Public Lands as wilderness.
- . No Action Alternative continue the administration of the Grassland Kipuka as a natural area and continue managing the Craters of the Moon and Wapi lava flows for multiple use.

DATE BY WHICH COMMENTS MUST BE RECEIVED: APR 1 4 1980



SUMMARY

PROPOSED ACTION AND ALTERNATIVES

INTRODUCTION

This EIS discusses the wilderness characteristics of the Grassland Kipuka, Craters of the Moon lava flow and the Wapi lava flow collectively as the Proposed Great Rift Wilderness Area. It analyzes the impacts that would occur if Congress should designate this area into the National Wilderness Preservation System. It also analyzes the impacts of two alternatives to that proposal.

PROPOSED ACTION

The BLM recommends that the Proposed Great Rift Wilderness Area be designated by Congress as part of the National Wilderness Preservation System. The proposed boundary includes 322,450 acres of Public Land and 18,550 acres of State Land in Butte, Blaine, Power and Minidoka Counties (Idaho). The area includes the Grassland Kipuka Natural Area (160 acres) and portions of the Craters of the Moon (267,950 acres) and Wapi (72,890 acres) lava flows. This area is being considered for wilderness as a result of Section 603 of the Federal Land Policy and Management Act (FLPMA, 1976) which requires the Secretary of Interior to conduct a study of all primitive and natural areas for their wilderness potential. The Secretary of the Interior must report his recommendations to the President on the wilderness suitability of these areas by July, 1980.

This Proposed Action would preserve wilderness characteristics on some 341,000 acres. It also would preserve many unique features of this lava flow ecosystem. Commercial enterprises, motor vehicles and motorized equipment, roads, structures and installations would be prohibited.

WILDERNESS STUDY AREA ALTERNATIVE

When the wilderness inventory for the Great Rift was conducted, about 374,400 acres were determined to have wilderness characteristics (Wilderness Study Area). However, when the management suitability was determined, 33,400 of the total acres were recommended as unsuitable for wilderness designation. This WSA alternative proposes to include these 33,400 acres for designation. This alternative is the same as the Proposed Action, except that the additional 33,400 acres would be devoted to wilderness purposes and would be subject to the same prohibited uses as the Proposed Action.

NO ACTION ALTERNATIVE

Under this alternative, no action would be taken to include the Great Rift area (341,000 acres) into the National Wilderness Preservation System. The area would be managed according to the multiple use and sustained yield concepts as prescribed in FLPMA, except on the Grassland Kipuka Natural Area.

Wilderness acreage comparisons for the Proposed Action and alternatives are shown below.

	PROPOSED	WILDERNESS STUDY AREA	NO ACTION	
	ACTION*	ALTERNATIVE*	ALTERNATIVE	
Total	341,000	374,400	0	

^{*}Includes 18,550 acres of State Land.

IMPACT SUMMARY

PROPOSED ACTION (341,000 acres)

The primary benefits of designating the Great Rift area (341,000 acres) as wilderness would be to preserve the wilderness characteristics and the naturalness of the area from man's imprint. In addition, an outstanding opportunity for solitude and for a primitive and unconfined type of recreation would be preserved. Secondary benefits associated with the proposed action would be to preserve a total ecosystem, including unique geologic, soil, vegetative interrelationships. The ecosystems of some 450 kipukas also would be preserved. A kipuka is an island of old lava surrounded, but not covered by, a lava flow.

The adverse impacts would be the loss of the opportunity to mine lava rubble for building stone, and, subject to existing rights, the withdrawal of all forms of appropriations under the mining laws and from disposition under all laws pertaining to mineral leasing. In addition, geothermal exploration within the area would only be allowed subject to a "no surface occupancy" stipulation. Off-road vehicle (ORV) use would be prohibited along with rights-of-way for powerlines, roads, etc.

(WILDERNESS STUDY) AREA ALTERNATIVE

Beneficial impacts would be the same as under the Proposed Action but would apply to the additional 33,400 acres.

Adverse impacts would also be the same but in addition, would prohibit motorized vehicle use on the Wood Road beyond the first kipuka.

NO ACTION ALTERNATIVE

Beneficial impacts resulting from this alternative would be that lava rubble could be sold for use as building stone, and geothermal exploration on the lava flows could occur, particularly on the 4,000 acres presently under lease application. In addition, the 322,450 acres of Public Land would be open for the exploration and development of locatable, leaseable and saleable minerals. Also, rights-of-way could be granted to cross the lava flows, and ORV use could be permitted under existing guidelines.

The principal adverse impacts would be that existing wilderness characteristics could be impacted by lava rubble mining, ORV use, geothermal activity, right-of-way establishment or other human activities.

MAJOR AREAS OF CONTROVERSY

1. Question of the Need for Wilderness

Some Idahoans feel that the state already has enough wilderness (1.5 million acres presently designated and 3.9 million acres under presidential recommendation for wilderness from RARE II, the second roadless area review and evaluation). Some other persons feel that additional wilderness is needed in the state. These opinions for and against increased wilderness in Idaho were brought out quite strongly in the BLM scoping process.

2. Need for Protection

Because of the low visitation and minimal activities on the lava, many persons question whether wilderness protection is necessary. However, other persons say that the area needs to be protected against any possible future impacts to wilderness values.

3. Mining

Until December 31, 1983, the United States mining and mineral leasing laws apply to wildernesses to the same extent as they applied to the area prior to its classification.

Effective January 1, 1984, subject to existing rights, the minerals in land designated as wilderness are withdrawn from all forms of appropriations under the mining laws and from disposition under all laws pertaining to mineral leasing.

4. Geothermal Energy

Geothermal leasing would be allowed within the Proposed Wilderness Area but would be subject to a "no surface occupancy" lease stipulation.

REMAINING ISSUES TO BE RESOLVED

STATE LANDS

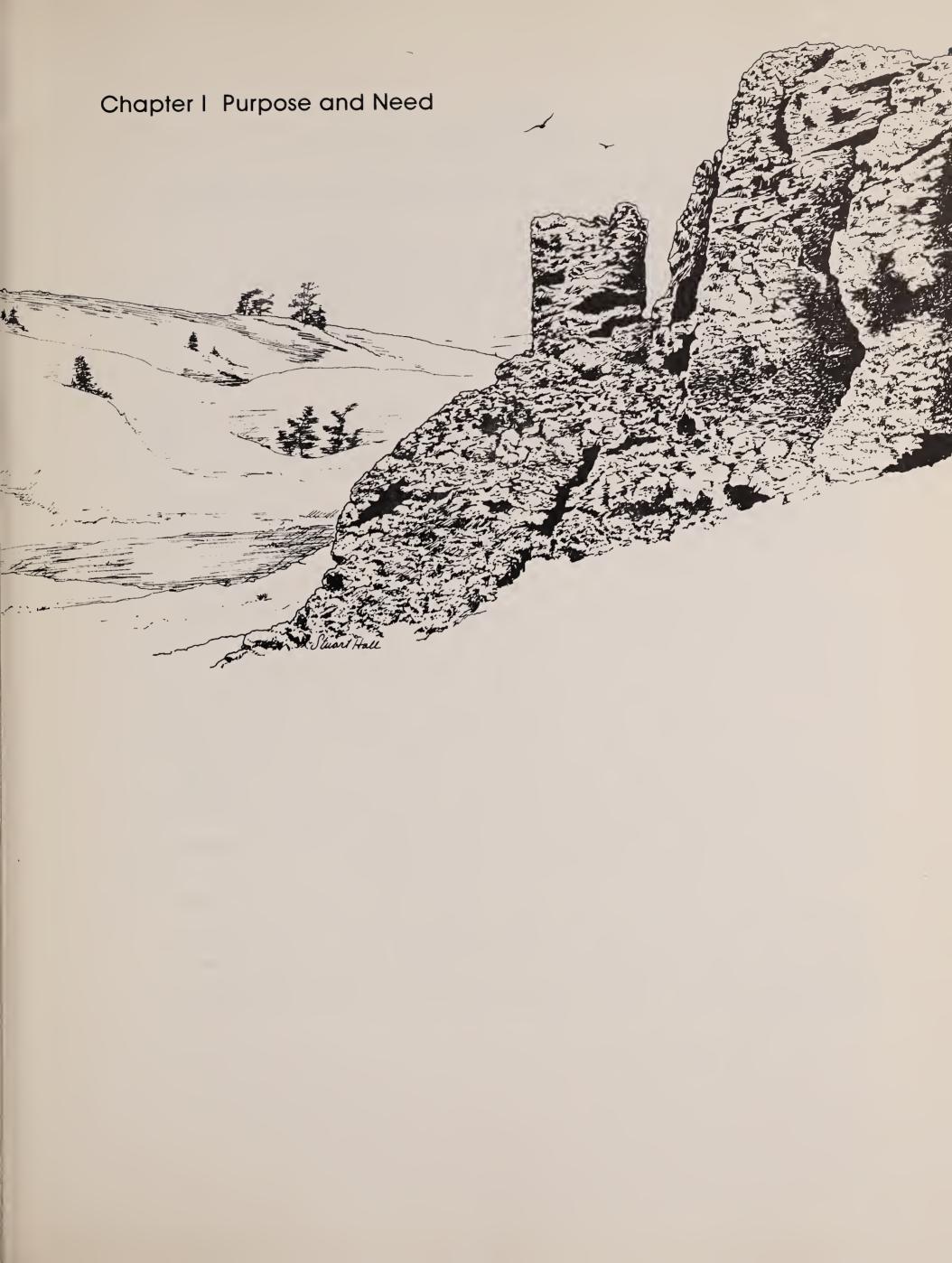
If Congress designates the area as wilderness, BIM would promptly explore action to aquire these lands as allowed under section 5 (a) of the Wilderness Act. Section 5 (a) also stipulates that access to these inholdings be allowed pending possible aquisition.

The Idaho Department of Lands has expressed interest in participating in any exchange or aquisition program as a result of wilderness designation. Their views and recommendations would be considered during the development of any such program.

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CHAPTER I

PURPOSE AND NEED

Section 603 (Appendix 2) of the Federal Land Policy and Management Act (FLPMA, 1976), states

"That the Secretary shall report to the President by July 1, 1980, his recommendations (for wilderness designation) on those areas which the Secretary has prior to November 1, 1975, formally identified as natural or primitive areas. The review required by this subsection shall be conducted in accordance with the procedure specified in Section 3(d) of the Wilderness Act."

The Grassland Kipuka (160 acres of Public Land located 1.5 miles west of Craters of the Moon National Monument) was designated as a Natural Area in 1965. It therefore falls under the purview of the 1980 reporting requirements. BLM's Organic Act Directive (OAD) #79-40 requires simultaneous review and reporting on roadless lands that are contiguous to such previously designated Natural Areas. The Craters of the Moon lava flow is contiguous to the Grassland Kipuka Natural Area and is thus included in this Environmental Impact Statement (EIS).

Both the Craters of the Moon flow (253,010 acres) and the Wapi flow (69,690 acres) were recommended for possible Primitive Area designation when the Big Desert Management Framework Plan was developed (1974). That recommendation led to a contracted study of Primitive Area values which was conductd in 1975-76. Results of the study called for official Primitive Area designation for both flows. However, such designation was halted by Section 603 of FLPMA which mandated a wilderness inventory of all BLM lands. The Wapi flow is also included in this EIS because: it is an integral part of the Great Rift system as studied for Primitive Area designation; it contains the same outstanding wilderness characteristics as the Craters of the Moon flow; ultimately, it would undergo the same wilderness study process of the Craters flow, so including it in this EIS analysis simply accelerates the review and reporting process; and inclusion of the Wapi flow adds several unique features to the proposed Wilderness Area that are not found on the Craters flow.

Therefore, this EIS discusses the wilderness characteristics of the Grassland Kipuka, Craters of the Moon lava flow and the Wapi lava flow collectively as the Great Rift Proposed Wilderness Area. It analyzes the benefits and impacts that would occur if Congress should designate the Proposed Great Rift Wilderness Area as part of the National Wilderness Preservation System. It also analyzes the impacts of two alternatives to that proposal.

BLM conducted an intensive wilderness inventory of the Grassland Kipuka Natural Area and associated roadless lands (Craters of the Moon and Wapi lava flows); solicited public comments on that intensive inventory; and incorporated the inventory data and public comments into the BLM planning system. Through those processes, considerable wilderness values were identified and few resource conflicts were identified.

Part of the solicitation of public comments included a scoping session held May 23, 1979. The purpose of that session was to identify significant issues and alternatives for possible wilderness designation of the Great Rift. Individuals who represented a broad cross section of economic, political, environmental and wilderness interests were invited to the scoping session. Participants were asked to identify issues and alternatives that they felt were significant. They were then asked to rank the significance of each alternative on a scale of 0 to 3: 0 = not significant; 1 = cursory treatment; 2 = significant; 3 = highly significant. The significance rankings for each issue were averaged; those issues averaging 2.0 or higher were considered significant enough to warrant treatment in the EIS.

Issues identified in the scoping session were: (1) Proposed Action and Alternatives - strong consensus that no action is needed to protect the area, and that a much smaller area should be considered; (2) Economic Impacts - concerns about economic impacts to related farm/ranch operations, and impacts to local tourist industry; (3) Social Impacts concern that more emphasis should be placed on farming/ranching needs and less on wilderness, and that access would be limited to those who are able to hike in; (4) Wildlife - concern about impacts on predator control; (5) Recreation/Archaeology - concern about impact of increased use on naturalness and archaeological values, consensus that area has outstanding primitive recreation values, and some concern about safety of recreationists; (6) Lands/Realty -strong concern about State Land exchange issue and some concern about prohibiting rights of way for powerlines, roads, etc.; (7) Minerals - consensus that better inventory data is needed on mineral potential of the area; (8) Range/Grazing strong concern about possible impacts to water hauling for grazing and how much grazing land would be affected; and (9) Education/Aesthetic consensus that the area has high educational and aesthetic values. Although these issues were raised in the scoping session, some of them were not impacted by the proposed action or alternatives and did warrant in depth analysis in the "Environmental Consequence" discussion (Chapter IV).



Chapter II Proposed Action and Alternatives



CHAPTER II

PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION

The BLM recommends that the Proposed Great Rift Wilderness Area be designated by Congress as part of the National Wilderness Preservation System. This area includes that part of the lava flows determined to be suitable for wilderness designation (341,000 acres covering portions of Blaine, Butte, Minidoka and Power Counties, Idaho).

The Federal Land Policy and Management Act of 1976 (FLPMA) requires the Secretary of the Interior to manage all public lands determined to have wilderness characters so as not to impair their suitability for preservation as wilderness, until such time as Congress acts on the recommendations for those lands. The Great Rift Wilderness Study Area will be managed under this provision of FLPMA. Details of this management policy, known as Interim Management, are in the Dec. 12, 1979 report, entitled "Interim Management Policy and Guidelines for Lands Under Wilderness Review."

If Congress designates the Great Rift as a wilderness, a comprehensive wilderness management plan would be developed and implemented. Until such a plan could be developed, the following activities would be specifically prohibited:

"Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area. Wilderness Act, Section 4(c)."

In addition, effective January, 1984, subject to existing rights, the minerals in land designated as wilderness are withdrawn from all forms of appropriations under the mining laws and from disposition under all laws pertaining to mineral leasing (Appendix 1).

Geothermal exploration would be allowed in the proposed wilderness area under a stipulation of "no surface occupancy."

The above prescriptions would be tempered by Sec. 4 (d) (1) of the Wilderness Act which allows "use of aircraft ... where these uses have already become established." The present aerial predator program is controlled by the U.S. Fish and Wildlife Service and would be allowed to continue under this section. Cultural resources would be protected from intentional or inadvertent loss or damage in accordance with the American Antiquities Act, 16 U.S.C. 431 et. seq. and the Archaeological and Historic Preservation Act, 16 U.S.C. 469 et seq.

Objectives

If Congress designates the Great Rift as a Wilderness Area, the following management objectives would guide the development of the comprehensive management plan:

- Protect, enhance and maintain the natural beauty and wilderness character of the land; preserve the unique wildlife and vegetative communities in the isolated kipukas; and allow natural ecological succession for scientific and other study.
- Provide a meaningful and high quality primitive recreation experience through interpretation and information programs, provisions for adequate staging areas and provisions for other important visitor requirements.
- Continue domestic livestock grazing under the Taylor Grazing Act and FLPMA at a level that is consistent with the grazing capacity of the range.

Boundary Proposal

Figure 2-1 depicts the boundary of the Proposed Great Rift Wilderness Area. This boundary includes 322,450 acres of Public Land and 18,550 acres of State Land. Basically, this boundary follows the edge of the two lava flows but excludes the Craters of the Moon National Monument and all private lands. Some areas of desert rangeland which are remote and relatively inaccessible to vehicles, and which pose few management problems, also are included. This boundary includes Public Lands which have the essential qualities of wilderness and have been determined to be suitable for management as wilderness. BLM did not evaluate wilderness qualities of State Lands included in the boundary.

Administration and Management

To achieve the foregoing management objectives, the Comprehensive Wilderness Management Plan would incorporate the specific restrictions described on page 5 and would also provide for the following:

- Resource study and research to monitor and evaluate the condition of each natural element, supplemented with visitor carrying capacity studies to determine a visitor use level that is consistent with protecting wilderness values while maximizing recreation enjoyment;
- Information and interpretation programs to educate visitors and assist them in achieving the maximum enjoyment and benefit from the area without inflicting undue or unnecessary damage to the resource base;
- Minimum support facilities necessary to meet visitor needs and protect the resources of the wilderness area.
- Provision for fire protection with stipulations precluding use of on-the-ground motorized vehicles.

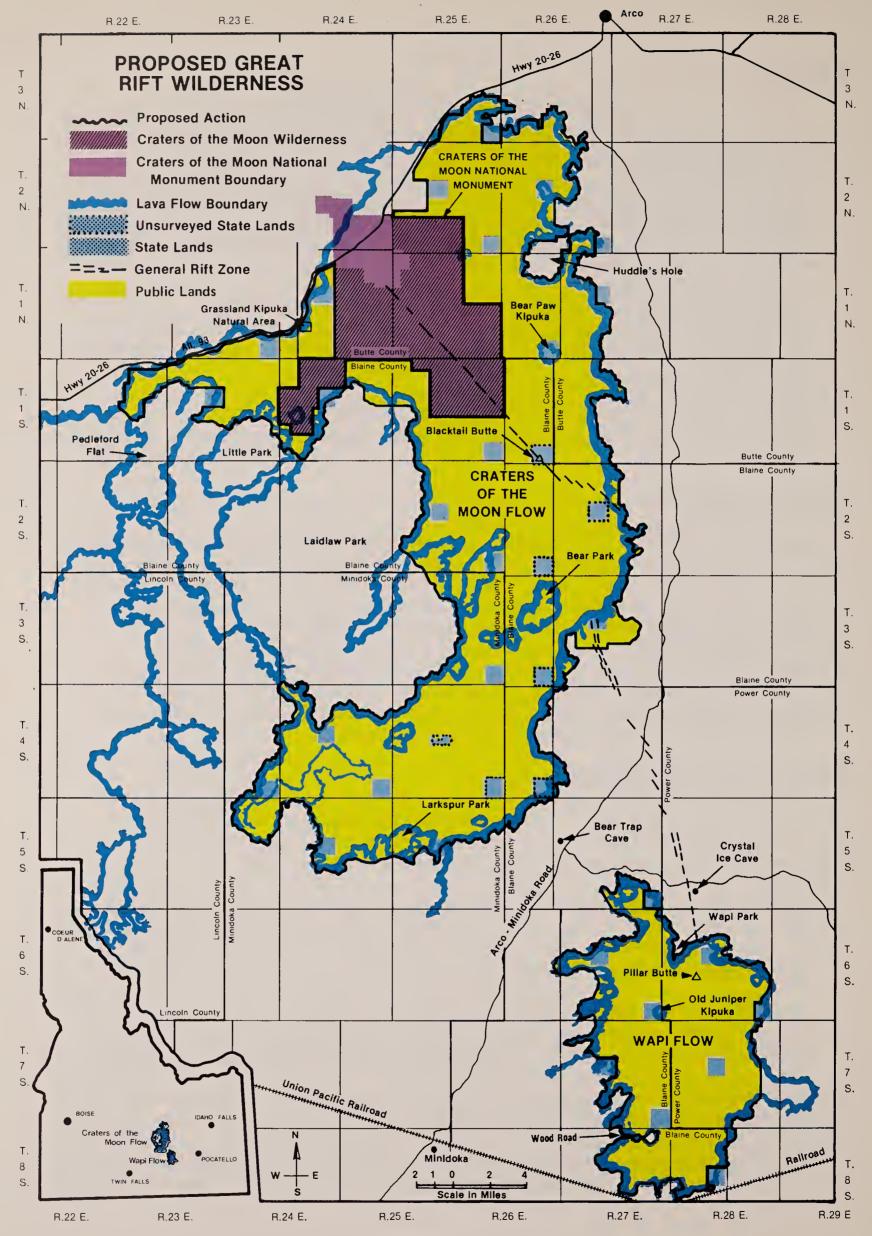


FIGURE 2-1

Successful development and implementation of the management plan would require thorough coordination with other BLM resource activities, federal, state and local governments, and the general public.

WILDERNESS STUDY AREA (WSA) ALTERNATIVE

This alternative would be the same as the Proposed Action except for the addition of 33,400 acres of Public Land. The WSA includes all those lands determined to have wilderness characteristics.

Wilderness Interim Management Policy does apply to the WSA until Congress acts. If Congress were to designate the WSA as part of the National Wilderness Preservation System, a comprehensive Wilderness Management Plan would be developed. Until such a plan could be developed and implemented, the specific prescriptions identified on page 2 would apply.

Objectives

Management objectives would be the same as for the Proposed Action.

Boundary Proposal

Figure 2-2 depicts the boundary of the WSA. This boundary includes 355,850 acres of Public Land and 18,550 acres of State Land. This boundary is the same as for the proposed action, but includes about 33,500 additional acres primarily around the southern portion of the Craters flow and the west side of the Wapi flow.

Administration and Management

To achieve the management objectives, the specific restrictions outlined on page 5 would apply as well as the broad management procedures identified for the Proposed Action. In addition to these provisions, this WSA alternative would require provision for a strong enforcement policy due to the identified difficulty of managing the WSA peripheral areas as wilderness.

NO ACTION ALTERNATIVE

Under this alternative, the Grassland Kipuka would continue to be managed as a Natural Area. Such management would allow most multiple use activities to continue but would prohibit any mineral activity because of the mineral withdrawal on the natural area.

The remainder of the area, 322,290 acres (minus State Lands), would be managed in accordance with the Big Desert Management Framework Plan which calls for managing the volcanic features for their special recreation values. The rest of the proposed wilderness area could be open to multiple uses because no specific management restrictions have been developed.

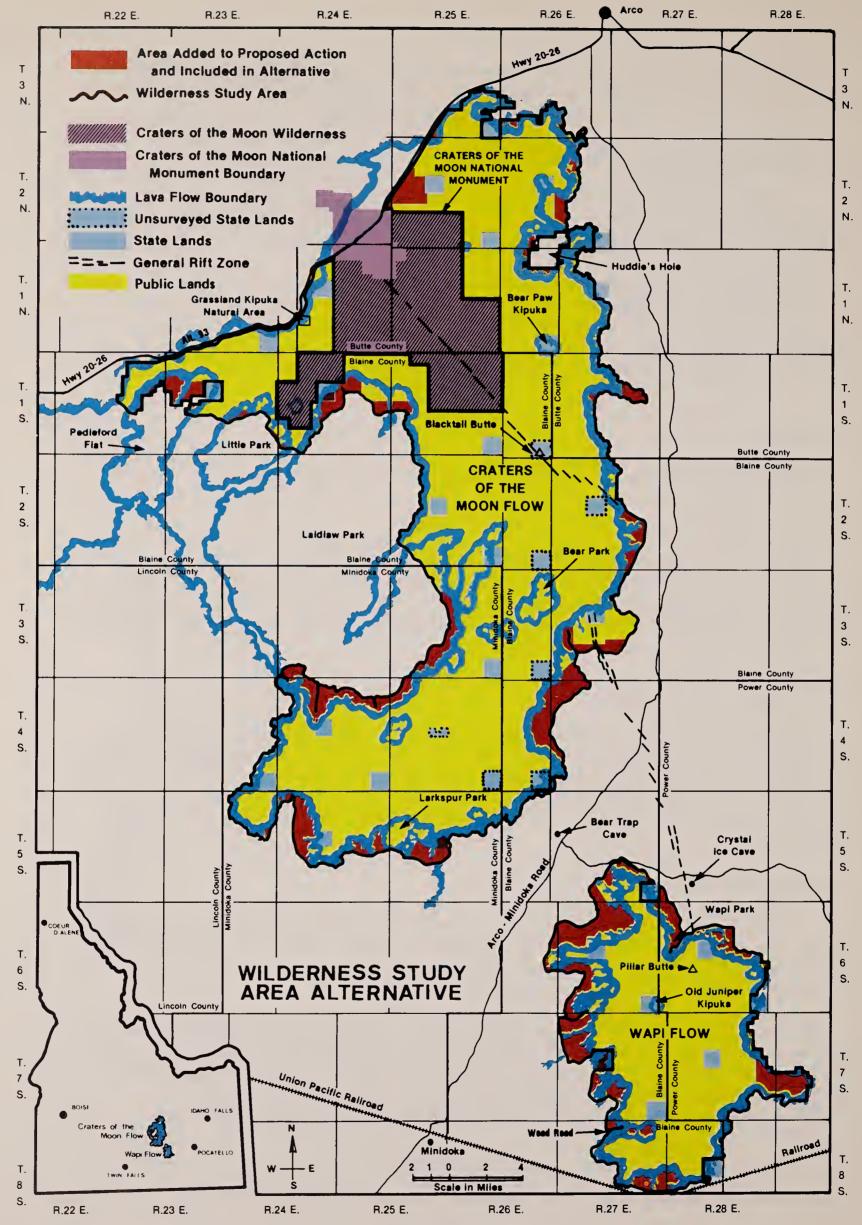


FIGURE 2-2

Idaho Department of Lands would continue to have management authority over State Lands. State Lands on adjacent desert rangeland are leased for livestock grazing. No private lands are involved.

Objectives

Management objectives under this alternative would be to promote multiple use of the land with emphasis on the highest and best uses. Present multiple use management recommendations call for protection of the geologic features and the kipukas. The same protective mandates for cultural resources would apply as under the proposed action.

Boundary Proposal

The Management Framework Plan recommendations would apply to those lands included in the Wilderness Study Area boundary proposal (Figure 2-2, 374,400 acres).

Administration and Management

To achieve the foregoing management objectives, the broad management procedures identified for the proposed action still would apply. However, the specific restrictions listed on page 5 would not apply. Applications for specific uses such as powerline rights of way, mineral patents or leases, etc. would be approved or disapproved based on site-specific environmental assessments.

Table 2-1 presents a comparative analysis of impacts of the Proposed Action and alternative.

OTHER ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

The possibility of excluding the Wapi flow once was considered, but was not included as an alternative in the final analysis. Although these flows are physically separated by 5 miles of desert rangeland, they are both a result of the Great Rift System. They are about the same age but have many important differences which increase the value of retaining both units in the proposed wilderness.

The Wapi flow includes a low shield volcanic cone and vent system that is the youngest and best preserved example of its kind in the Snake River plain. The Craters of the Moon flow extruded from the Great Rift fissures in a very eruptive and fluid fashion, creating lavas that differ significantly from the Wapi lavas in silica, iron, and titanium content. Thus, the Craters flow includes "blue dragon" lavas which are coated with a shiny blue surface (a function of electron exchanges in titanium and iron atoms). Part of the Wapi flow has an iridescent surface but does not have the blue sheen of the Craters flow. The Wapi flow contains several geologic features not found in the Craters flow such as driblet spires, hornitoes and Pillar Butte (the vertical remnant found in the top part of the shield cone). The Wapi flow includes at least one outstanding lava tube cave and many undisturbed kipukas.

		WILDERNESS STUDY	NO ACTION
RESOURCE VEGETATION	PROPOSED ACTION Natural ecological	AREA ALTERNATIVE Natural ecological	ALTERNATIVE Some 440 kipukas
	succession would continue on the lava	succession would continue on the lava	Would probably not be grazed because of
	flows (325,000 acres)	flows (325,000 acres)	small size and in-
COLLC	and some 440 kipukas.	and some 440 kipukas.	accessibility.
SOILS	Soil development would continue under	Soil development would continue under	Undisturbed soils in the kipukas would
	natural process in	natural conditions in	still remain for
GEOLOGY	the kipukas. Geologic features on	the kipukas. Geologic features on	future studies. The geologic features
0101001	the lava flows would	the lava flows would	would not receive any
	remain in an unim- paired condition for	remain in an unim- paired condition for	more impacts than
	scientific and recre-	scientific and recre-	presently occurring and this is insigni-
CHITTIDAL	ational use.	ational use.	ficant.
CULTURAL RESOURCES	Enhance protection and promote manage-	Enhance protection and promote manage-	Recreationists could remove some artifacts
	ment of cultural	ment of cultural	but this has not
	resources.	resources.	occurred in the past. Cultural remains
			would still be
WILDERNESS	Enhancement, protec-	Enhancement, protec-	Protected by law. Area would not be
RESOURCES	tion, and preserva-	tion, and preserva-	specifically managed
	tion of wilderness characteristics on	tion of wilderness characteristics on	for wilderness values or for their preser-
	some 341,000 acres.	some 374,400 acres.	vation. Present
			wilderness values
			would probably not change.
LIVESTOCK GRAZING	Ensure continued	Ensure continued	None
GRAZING	grazing for 60 livestock permittees.	grazing for 105 livestock permittees.	
MINERALS	Lava rubble would not be sold on 680 acres,	Lava rubble would not	Wilderness values could be lost by lava
	geothermal explora-	be sold on 840 acres, geothermal explora-	rubble collection and
	tion under no surface occupancy. ORV use	tion under no surface occupancy. ORV use	geothermal activity. Collection of lava
	would be prohibited.	would be prohibited	rubble and geothermal
		and also the use of the Wood Road for	exploration could occur.
		access to kipukas.	
RECREATION	Opportunities for solitude and a primi-	Opportunities for solitude and a primi-	Opportunities for solitude and a primi-
	tive or unconfined	tive or unconfined	tive or unconfined
	type of recreation would be optimized.	type of recreation would be optimized.	type of recreation could be lost. ORV
	would be optimized.	would be optimized.	use, although small
RIGHTS OF	Transmission lines	Transmission lines	could be allowed. Transmission lines
WAY	across the proposed	across the proposed	could be constructed
	wilderness boundary would be prohibited.	wilderness boundary would be prohibited.	on the lava flows which could leave
	would be promibiled.	would be promibiled.	man's imprint.
			Access to a kipuka,
			via the Wood Road, would continue.
SOCIAL ATTITUDES	The attitude of	The attitude of	The attitude of those
ATTTUDES	people who favor or oppose wilderness	people who favor or oppose wilderness	who favor or oppose wilderness would not
	designation would not	designation would not	change.
ECONOMICS	change. Livestock operations	change. Livestock operations	None
	would continue at	would continue at	
	present levels.	present levels.	

Cultural artifacts found in several kipukas add to the cultural information available in the Craters flow as well as for the Snake River Plains. The Wapi flow adds vegetative diversity to the wilderness unit.

Because the inclusion of both flows allows a more complete geologic, cultural and ecologic wilderness unit, this alternative was not considered. Also, as mentioned under "Purpose and Need," the Wapi flow ultimately would have to undergo the same study and reporting process; including it in this EIS analysis simply accelerates that process and eliminates possible delays and duplication of efforts.

INTERRELATIONSHIPS

National Park Service (NPS) - The NPS has jurisdiction of the Craters of the Moon National Monument adjacent to the Great Rift Wilderness proposal (see Figure 2-1). BLM exercises continuous coordination of information and management policies with the NPS.

Fish and Wildlife Service (FWS) - No endangered species are known to occur in the proposed wilderness area. Section 7 of the Endangered Species Act requires consultation with the FWS whenever any action could affect an endangered species or its habitat. This consultation was initiated September 28, 1979 so that FWS would be notified of BLM's proposal. According to the FWS, no threatened, endangered, or sensitive species are known to exist on the lava flows. However, one species of beetle is under review as a candidate species for the endangered status.

FWS also has predator control responsibility in the area under agreement with the BLM. Aerial predator control by FWS would continue to be allowed in accordance with Sec. 4 (d) (l) of the Wilderness Act.

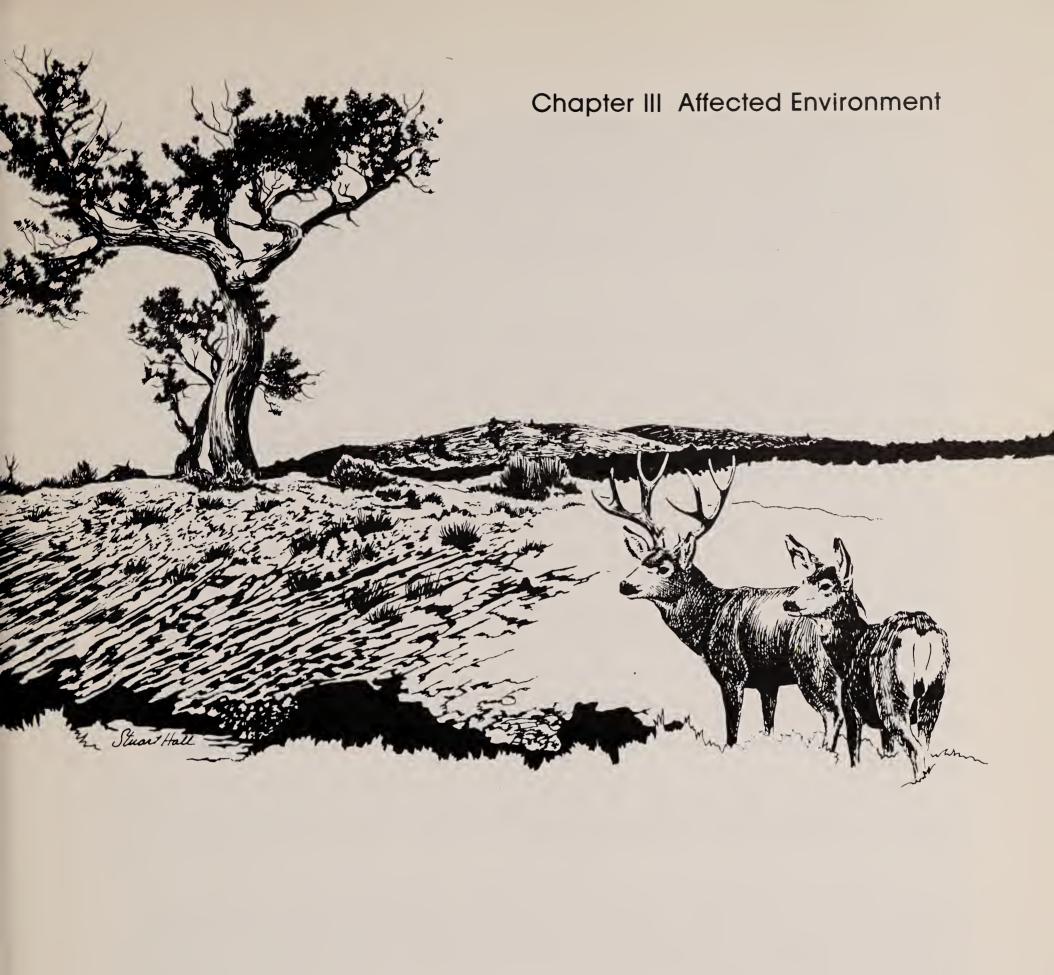
Idaho Department of Lands (IDL) - The IDL has requested that if Congress designates the Great Rift as a Wilderness Area, State Lands included in the boundary "be scheduled for exchange at the earliest opportunity" (IDL, 1979). In accordance with this IDL policy, BLM recommends that State Lands included in the boundary be acquired, through exchange or otherwise, at the earliest opportunity, should Congress designate the Great Rift as a Wilderness Area.

Butte, Blaine, Power and Minidoka Counties - County commissioners for these counties were contacted in October, 1979 to discuss the proposal. The county commissioners in Blaine, Butte, and Power County have no objection to a wilderness designation as long as it does not have an adverse affect on local income. The commissioners in Minidoka County are opposed to wilderness designation.

State Historic Preservation Officer and State Archaeologist - The SHPO and State Archeologist both were contacted on September 28, and November 11, 1979. BLM advised them that 14 cultural sites had been identified within the Proposed Action boundary but that none of those sites were included in the National Register of Historic Places. BLM furnished them with maps depicting those 14 sites during December, 1979.

Idaho Power Company - At one time, Idaho Power was considering a transmission line route for the Borah to Midpoint 500 kv ac line that would cross over the southern part of the Wapi lava flow. This segment would be 14 miles long with 7 miles crossing the lava. After working with BLM personnel from the Shoshone District, Idaho Power decided to propose another route that would not cross the lava because of the proposed wilderness classification. The new proposed route would be 16 miles long and would not be within the proposed wilderness boundary.

U.S. Bureau of Mines and Geological Survey - As required by FLPMA (Appendix 2) the Geological Survey conducted a mineral survey of the lavas flow during 1979. In addition, during 1979, the Bureau of Mines determined the value of minerals on the lava flows.



CHAPTER III

EFFECTED ENVIRONMENT

The description of the effected environment in this chapter is for the WSA or 374,400 acres. In this way the proposed action, (341,000 acres) and the two alternatives will be described.

General Description

The Proposed Great Rift Wilderness Area is characterized by thousands of acres of lava dotted with occasional buttes and kipukas. The harsh, barren landscape is interrupted by sparse vegetation and fissures in the earth's surface (Greeley and King, 1977). The fissures, a series of aligned vents and discontinuous fractures extending from the Craters of the Moon National Monument southeast to the Wapi flow, are commonly called the Great Rift (Figure 3-1).

The semi-arid climate is hot and dry in the summer and very cold in the winter. Annual precipitation is about 10 to 14 inches and falls mainly in the winter and spring. Wind blows out of the southwest throughout the year but is usually more intense in the spring. Air quality of the area has never been measured, but appears to be good. The prevailing southwest air currents provide good air drainage. The area was designated Class II (see Glossary) as a result of the Clean Air Act Amendments of 1977.

Few water sources exist in the area, but some water can be found during certain times of the year in crevices and depressions in the lava where precipitation collects. These intermittent pools are used by birds and animals.

Most noises in the proposed wilderness area are natural...winds, insects, wildlife, etc. Sporadic interruptions occur from aircraft and from a railroad south of the Wapi flow.

Roads circumventing the area are mostly unimproved dirt roads. Highway 20-26, which forms most of the northwest boundary of the proposed wilderness, is paved. The road to Crystal Ice Caves (just outside the northeast boundary of the Wapi flow) is not paved but receives more maintenance than other dirt roads.

The proposed Great Rift wilderness area encompasses pristine lands within Butte, Blaine, Power and Minidoka Counties. County comprehensive land-use plans, for Blaine, Power and Minidoka Counties favor such uses as grazing, farming, and open space. Butte County does not have a comprehensive plan.

Vegetation - The lava flows and kipukas show a full range of ecological

succession from the pioneer plants such as lichens and mosses to the highly diversified plant communities on the kipukas, most of which are in climax (or highest) stage (Figure 3-2, Crawford, 1978). Over 300 plant species occur in the area. The type and density of vegetation varies widely depending on the availability of soil (Anderson and Lovejoy, 1979).

The kipukas are one of the most unique features of the lava formations (Figure 3-3). Over 450 kipukas are found on the lava flows varying in size from less than one acre to over 2,200. These kipukas offer the visitor a unique opportunity to observe climax vegetative communities and to compare them with nearby desert rangeland vegetation. No more than 10 of the kipukas have been grazed by domestic livestock. Although some of the kipukas have been visited by recreationists, the visitation levels are so low that the vegetation has not been affected.

Sagebrush and grasses are abundant on the older lava flows and the surrounding desert rangeland where the soils are deep and well developed. Rabbitbrush, bitterbrush, certain buckwheats, and phlox also occur in this association. Native grasses include bluegrass, wheatgrass, squirreltail, and needlegrass. Juniper occurs in several locations: in older lava flows; on the southern Craters flow; and on much of the Wapi flow (Figure 3-4). Limber pine grows on the northern Craters flow. The ecotone (a transition strip of vegetation between two communities) between limber pine and juniper occurs between Blacktail Butte and the National Monument. This ecotone normally occurs only in montane regions and is thus an unusual feature for the lava flows (Urban, 1979). Quaking aspen occurs along the lava's edge in several locations on both flows.

No threatened, endangered, or sensitive plant species are known to occur within the proposed boundary (FWS, 1979).

Soils - Bare lava rock dominates most of the landscape (Figure 3-5). Soil deposits vary widely over the area. Where basalt rock occurs, soil is found only in the crevices. Where decomposed cinders provide parent material, vegetation growth occurs. Only the kipukas and surrounding desert rangelands have deep, well formed soils.

The U.S. Soil Conservation Service has conducted 10 years of research (1958-1967) on three kipukas located on the northeast corner of the Wapi flow. That research focused on soil-vegetal relationships on these so-called "relict areas". This research included a soil inventory on each of the kipukas (SCS, 1979).

Geology - Prinz (1970) redesignated the Great Rift as the Idaho Rift System and divided the system into several rift sets (Greeley and King, 1977). One of those rift sets retains the name Great Rift, which has been used to label the Proposed Wilderness Area. The Great Rift is thought to be the longest and deepest rift system in the United States (approximately

65 miles long and at least 800 feet deep in some locations).

The lava flows include two types of lava referred to as pahoehoe (pa-hoy-hoy) and aa (ah ah). The pahoehoe flows have wrinkled surfaces which formed when the lava's cool crust was dragged into rope-like folds by the hot liquid mass moving beneath (Figure 3-5). In contrast, aa lava is a rough mass of lava blocks which have either been floated along on a pasty lava mass or pushed along the edges (Figure 3-6).

The lava surface evidences: hundreds of craters and lava bombs; one major and numerous minor lava tubes; six spatter and cinder cones; at least three driblet spires and two hornitoes; and various other lava features (Figures 3-7 to 3-10). Coloration of the rock and cinders varies from black to gray and red, to shiny blue ("blue dragon" lava); lichens add yellow, orange, and green to the lava colors; trees and shrubs add greenery; and from May to October, flowering shrubs and forbs create a wide color contrast (Figure 3-11).

Animal Life - Mule deer, antelope, coyotes, and rabbits are the most frequently sighted mammals of the 26 species that occur in the area. Mule deer and antelope populations are low.

Sage grouse and mourning doves frequent the area (Figure 3-12). The doves are present only during spring and summer seasons. The exact population of sage grouse on the lavas is not known, but sage grouse droppings are very common both in the kipukas and on the lava surface. Sightings of non-game birds have identified about 140 species in the lava plain area (Anderson and Lovejoy, 1979). Raptors are often seen over high points on the lava such as Pillar and Blacktail Butte.

Presently, wildlife populations are not significantly affected by human activities. Some sage grouse hunting occurs but is very limited.

No known threatened, endangered, or sensitive animals occur in the proposed wilderness boundary. However, a sub-species of blind beetles (Glacicavicola bathyscioides) is known to occur on the lava flows. This sub-species is under review by the FWS for recognition as a "candidate species" for endangered listing (FWS, 1979).

Cultural Resources - Intensive surveys of selected areas within the Great Rift Wilderness were performed by contract (Franzen, 1979) and BLM personnel in 1979. Fourteen prehistoric sites were recorded within the wilderness area. Another sixteen prehistoric sites were recorded in the study area outside the wilderness area. Most of these sites are surface lithic scatters consisting of numerous, small obsidian waste flakes and projectile points. Pottery shards, small hand-sized grindstones and quarzite scrapers were found in some scatters. Caves, rockshelters and rock structures (hunting blinds) also were recorded.



Fig. 3-1 Blacktail Butte and vents and fractures lie along the main rift zone. The Pioneer

Mountains are to the northwest.

Fig. 3-3 Kipukas, Hawaiian for "windows", are vegetated islands of older lava surrounded by younger lava.



Fig. 3-2 Climax vegetation in Bear Paw Kipuka shows flowering balsam root.





Fig. 3-5 Ropey pahoehoe lava with blue dragon surface supports vegetation in shallow cracks where soil collects.

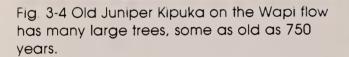


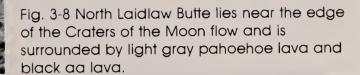


Fig. 3-6 Aa lava wears down hiker's boots as well as ankles.





Fig. 3-7 Pillar Butte, a low shield cone, is the source of the most recent lava on the Wapi flow.



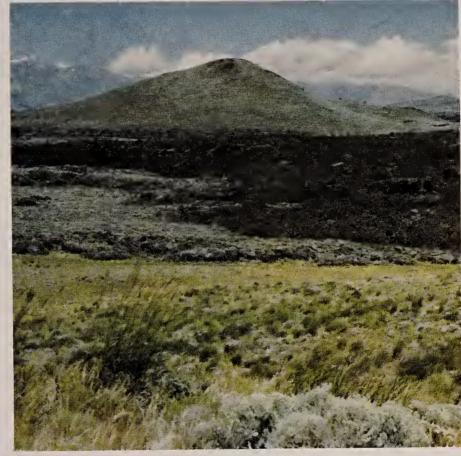


Fig. 3-9 A hiker studies a hornito from the edge of a collapsed lava tube.





Fig. 3-10 Recreationists stand at the entrance to a lava tube cave.

Fig. 3-11 Penstemon blooms among blue dragon lava.



Fig. 3-12 Mourning doves nest on the lava near a water source.

No single one of the 14 sites found in the wilderness area appears to be eligible for nomination to the National Register of Historic Places. However, it is possible that these sites could be combined with the 16 sites recorded in the study area for nomination to the National Register as an archaeological district.

All of the sites in the wilderness area are in good condition. A few sites have been damaged by unauthorized surface collecting, but diagnostic artifacts were present at most of the sites. None of the documented caves or rockshelters within the wilderness have been vandalized. The condition of these sites makes them valuable for comparison to sites in other areas outside the wilderness area which have been damaged by livestock trampling, surface collecting and ORV use.

Wilderness Values - BLM personnel inventoried the Great Rift Wilderness Study Area using procedures outlined in Step 4 of BLM's Wilderness Inventory Handbook (BLM, 1978). That intensive inventory revealed that these lands meet the criteria established in Section 2 (c) of the Wilderness Act of 1964:

"A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."

The area presently is being managed so as not to impair its wilderness suitability until Congress designates it as wilderness or removes it from consideration as wilderness.

Livestock Grazing - Approximately 6,000 acres within the Proposed Wilderness Area are grazed by domestic livestock. These acres support about 380 sheep animal unit months (AUMs) and 600 cattle AUMs used by 60 ranchers. The grazed lands are located mainly at the edge of the lavas on the desert rangeland and used primarily as spring and fall range for cattle and sheep. At present, aerial predator control on the lava edges is done by the FWS. Water for livestock must be hauled from six existing wells over some 100 miles of dirt roads. The range survey for this area,

completed in September, 1979, indicated that these desert rangelands have not been impacted significantly by livestock use. Subsequent grazing EIS's on the area around the proposed Great Rift wilderness area will address wilderness characteristics.

Minerals - During 1979, the U.S. Geological Survey (Kuntz, 1979) conducted a mineral survey and the U.S. Bureau of Mines (Ridenour, 1979) determined the mineral values on the lava flows. Approximately 840 acres of lava rubble, which is popular for use as building stone, occur on the two lava flows (Ridenour, 1979; Figure 3-1). This lava is classified as a saleable mineral, but very little of it has been removed for building construction because of poor access and distance from markets. Other lava flows such as Hells Half Acre, Cedar Butte and the Black Butte flow have been used more extensively for material extraction.

No known natural gas, oil or mineral deposits occur in the area (Ridenour; Kuntz, et.al., 1979). At present, 13,600 acres at the northern end of the Craters of the Moon flow are under geothermal lease applications (4,000 acres of which are in the proposed wilderness area, Figure 3-13). To date, no drilling has occurred in the leased area.

Recreation - Some trail bike and four wheel drive use occurs within the proposed boundary on the lava edges, but the full extent of such use is not known. In the southwest area of the Wapi flow, the Wood Road provides access to four kipukas and is utilized by recreationists. Visitor use around the Wood Road has not been monitored.

No general visitor use information is available for the area either. At Craters of the Moon National Monument, which has 43,243 acres under wilderness designation, use figures have been recorded. This data indicates that "use figures from 1971 to 1979 are felt to be too small to indicate an appreciable increase in use due to wilderness classification" (NPS, 1979). In 1978, the monument had 349,000 visitors and only 132 of them stayed overnight in the wilderness area. Contacts with people who have visited the Great Rift outside the National Monument boundaries indicate that visitor use is light. Several factors could account for the light visitor use; remoteness, poor accessibility, lack of awareness of the area, hostile environmental conditions, and lack of exposure to the existing wilderness values.

In relation to the visitor use on the wilderness area in the Monument, the Park Service has indicated that, "It is not felt that there had been any noticeable increase in damage to the resource or the environment due to wilderness classification" (NPS, 1979).

Rights-of-Way - Idaho Power is planning to construct a 500 kv transmisison line from Borah to Midpoint (66 miles). One of the proposed alternative routes would cross the southern part of the Wapi flow. This route would

Geothermal Lease Application Area

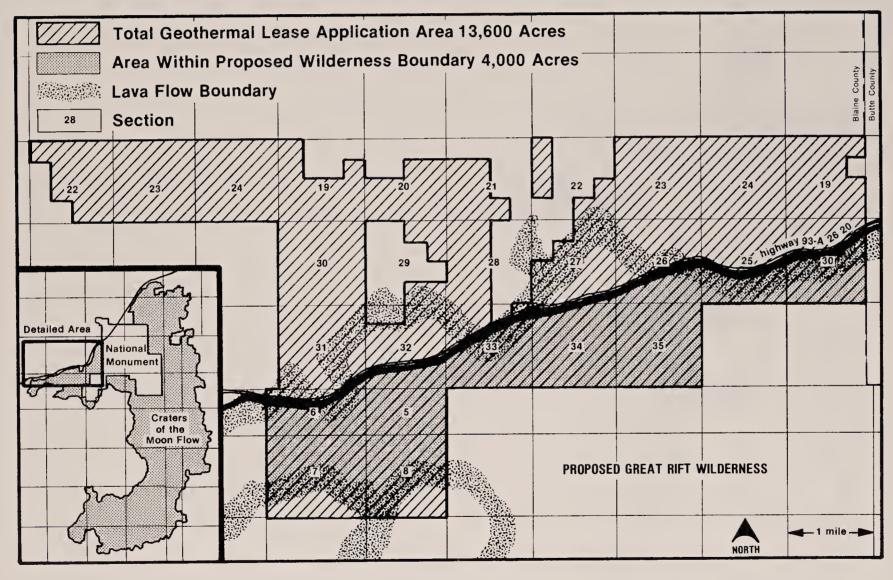


FIGURE 3-13

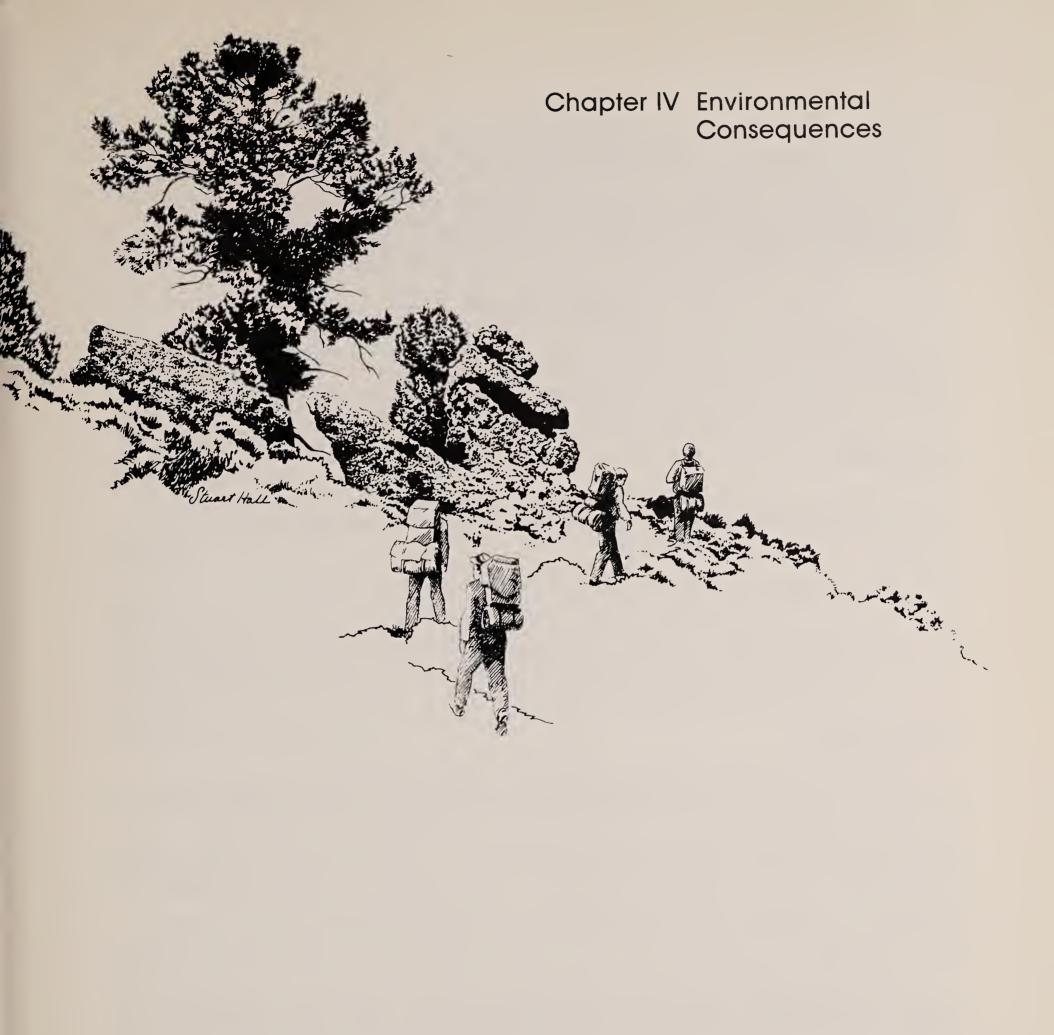
involve about 14 miles of transmission line, seven miles of which would be on the lava flow and in the proposed wilderness boundary.

Social Attitudes - Local and regional attitudes on designation for this area vary widely. Many persons are polarized in either a pro- or anti-wilderness position in general. Wilderness proponents say that wilderness designation is the only way the area will be protected from other uses which would degrade the natural conditions. Wilderness opponents say that the area is a de facto wilderness already because of the hostile environment.

Livestock operators question the need for including any non-lava areas in the proposal. They are concerned that livestock grazing would be curtailed because of the need to use vehicles for water hauling.

Mineral industry representatives questioned the need for a wilderness designation but did not comment that minerals would be affected by the designation.

Economics - The area immediately surrounding the Great Rift is rural and sparsely populated including ranches, farms and small communities (less than 2,500 people). No industries are located in the Proposed Wilderness Area. The grazing permittees are the only user group that has an economic dependence on the effected Public Land.



CHAPTER IV

ENVIRONMENTAL CONSEQUENCES

This chapter analyzes the significant environmental impacts that could result from the proposed Great Rift wilderness area and two alternatives. No significant impacts to climate, air quality, topography, water resources, access, land use plans, controls and constraints would occur.

PROPOSED ACTION

The proposed action recommends designation of the Great Rift as part of the National Wilderness Preservation System. Lands within the proposed boundary would be devoted to educational, historical, recreational, scenic and scientific uses for future generations.

ASSUMPTIONS

The following assumptions were made to facilitate the impact analysis and to adhere to BLM policy for measuring the effects of the proposed action.

- 1. The BLM will have the funding and personnel to manage the Proposed Wilderness Area.
- 2. A very minimal increase in visitor use would occur as a result of the proposed action (based on the experience at Craters of the Moon National Monument).

Impact Summary

The primary benefits of designating the Great Rift area as wilderness would be to preserve the wilderness characteristics and the naturalness of the area from man's work. In addition, an outstanding opportunity for solitude and for a primitive and unconfined type of recreation would be preserved. Secondary impacts associated with the proposed action would be to preserve a total ecosystem, including unique geologic, soil, vegetative interrelationships. Also the ecosystems of some 450 kipukas would be preserved. A kipuka is an island of old lava surrounded, but not covered by a lava flow.

The adverse impacts would be the loss of the opportunity to mine lava rubble for building stone, and, subject to existing rights, the withdrawal of all forms of appropriations under the mining laws and from disposition under all laws pertaining to mineral leasing. In addition, geothermal exploration within the area would only be allowed subject to a "no surface occupancy" stipulation. Off-road vehicle use would be prohibited along with rights-of-way for powerlines, roads, etc.

IMPACT ANALYSIS

Vegetation - The existing vegetation pattern on about 325,000 acres of lava -- having a full range of ecological succession from pioneer plants to highly diversified plant communities -- would be maintained. Undisturbed, climax plant communities in over 440 kipukas (10,000 acres) would be maintained. These kipukas are representative of native range plant associations, and because of their relative inaccessibility and small size, they have not been affected by domestic grazing or fire control. They are thus ideal comparative study areas. Thus, the kipukas would be preserved for scientific study in the future.

About ten kipukas have been grazed by domestic livestock. This grazing has not had any significant impacts on the vegetation, but these kipukas do offer the opportunity for comparative study with the ungrazed kipukas. Livestock grazing would continue to be allowed on 6,000 acres within the proposed boundary.

In conclusion, impacts to vegetation would be minimal and would be consistent with protection and enhancement of recreation, educational and scientific values.

Soils - The undisturbed soils in the 440 pristine kipukas offer an opportunity for comparison with the soils that have been disturbed by human influences. As discussed in Chapter III, three of those undisturbed kipukas have been inventoried by the SCS. The soil description resulting from that inventory can be used for comparison with other soils. Wilderness designation would ensure that present soil processes could continue undisturbed.

In conclusion, impacts to soils would be preservation of the soils in the kipukas under natural conditions for future study.

Geology - The dramatic Great Rift System and its associated unique lava features would be preserved in an unimpaired condition for scientific and recreational uses.

Recent planetary exploration has demonstrated that volcanism has played and continues to play an important role in the topography of other planets. At this time, "Studies of terrestrial volcanoes are the only means of gaining some insight into extraterrestrial volcanology until more complete exploration is feasible" (Greeley and King, 1977). The volcanic features of the Great Rift would be preseved for comparative planetary studies in the future.

Cultural Resources - Fourteen cultural sites have been identified within the proposed boundary. Surface lithic scatters, caves, rockshelters and wind breaks have been identified. Although they are protected under the Antiquities Act of 1906 and the National Historic Preservation Act of 1966, and the Archaeological Resources Protection Act of 1979, wilderness designation would ensure the identification and preservation of these sites. The prohibition against motorized vehicles would add an extra layer of protection for cultural sites.

In conclusion, wilderness designation would have positive effects on cultural sites by prohibiting motorized vehicle use.

<u>Wilderness Resources</u> - The wilderness characteristics of size, naturalness, outstanding opportunities for solitude or primitive and unconfined recreation, and a variety of supplemental values would be preserved in the long term.

In conclusion, wilderness values would be preserved.

Livestock Grazing - The proposed action would allow domestic grazing to continue and would not affect present grazing privileges (980 AUMs). None of the six wells or 100 miles of road used for hauling water to livestock are within the boundary for the proposed Great Rift wilderness area. As a result, no present livestock operations based on water hauling to livestock would be affected. Aerial predator control by the FWS along the lava's edge would continue as at present.

In conclusion, the proposed action would continue the existing situation for domestic livestock.

Minerals - Geothermal leasing would be allowed within the proposed boundary with lease stipulation for "no surface occupancy". Presently 4,000 acres under geothermal lease application are within the northwestern part of the proposed boundary. As previously discussed, this acreage is about 30% of a total of 13,600 acres under geothermal lease application. Current drilling interest is focused north of U. S. Highway 20-26 which is not in the proposed wilderness boundary.

Lava rubble which is used as building stone would not be sold on some 680 acres within the wilderness boundary. The loss of this acreage for lava rubble collection would not affect the building stone industry because about 20,000 acres of lava flows would still be available for lava rubble outside the boundary.

No known oil and gas reserves or other mineral deposits occur on the lava flows (Ridenour, 1979 and Kuntz, 1979). Effective January 1, 1984, subject to existing rights, the minerals in land designated as wilderness are withdrawn from all forms of appropriations under the mining laws and from disposition under all laws pertaining to mineral leasing.

In conclusion, wilderness designation probably would mean that no geothermal exploration would occur and that lava rubble would not be collected.

Recreation - As discussed previously, the Park Service is experiencing little visitor use in the Craters of the Moon wilderness area adjacent to the proposed Great Rift wilderness area. As a result of the Park Service

experience, the increase in visitor use on the Great Rift probably would not be measurable. Unique geologic, ecologic and scenic values associated with the lava flows would be protected, enhancing primitive and unconfined recreational opportunities. Minimal ORV use is occurring on the lava flows. Wilderness designation would prohibit this ORV use.

In conclusion, primitive and unconfined recreation opportunities would be optimized. Any ORV use in the area would be prohibited.

<u>Rights-of-Way</u> - Wilderness designation would render the Idaho Power alternative route over the Wapi flow as an unviable alternative for their project. Other subsequent rights of way applications also would be denied.

Social Attitudes - Persons who feel that the Area needs to be designated as wilderness to preserve the natural conditions would be pleased by a wilderness designation.

Those persons who feel that Idaho already has enough wilderness or who feel that a "wilderness acreage cap" should be placed on the federal agencies studying wilderness areas would be displeased by designation. Many persons question the need for designation because the area is a defacto wilderness due to its hostile environment. These persons would feel that wilderness designation would be a waste of time and money.

In conclusion, wilderness designation probably would not alter any of these social attitudes.

Economics - As discussed earlier, livestock grazing is the only known economic use of the Public Lands within the proposed boundary. Because stocking levels and ranch operations would not be affected by the proposed action, no economic impacts would occur. Because the increase in visitor use would be small, the income generated from recreation would not be significant.

UNAVOIDABLE ADVERSE IMPACTS

Exploration for geothermal resources on areas presently under lease application could occur only without surface occupancy. Lava rubble collection on 680 acres would not be permitted. Effective January 1, 1984, subject to existing rights, the minerals in the lands designated as wilderness will be withdrawn from all forms of appropriations under the mining laws and from disposition under all laws pertaining to mineral leasing. ORV use would be prohibited. The attitude of people who oppose wilderness designation for the area would remain the same. The opportunity for right-of-way across the Proposed Wilderness Area would be prohibited.

RELATIONSHIP BETWEEN LOCAL SHORT TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE OF LONG TERM PRODUCTIVITY

Designation of the Great Rift as wilderness would ensure the long term productivity of ecosystems on the lava flows and in the kipukas and would maintain the present wilderness values.

Effective January 1, 1984, subject to existing rights, the minerals in land designated as wilderness will be withdrawn from all forms of appropriations under the mining laws and from disposition under all laws pertaining to mineral leasing. Geothermal leasing probably would not occur and lava rubble would not be collected within the proposed wilderness area.

Over the long term: natural ecological succession on the lava flows and in the kipukas would continue; opportunities for solitude or a primitive or unconfined type of recreation would be preserved; unique geologic formations associated with lava formations would be protected and preserved; the opportunity for comparative study in kipukas would be preserved for future generations.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Wilderness designation would mandate that existing wilderness values on 341,000 acres would be preserved. No irretrievable loss of resources would occur.

WILDERNESS STUDY AREA ALTERNATIVE

This alternative calls for wilderness designation of the entire 374,400 acres determined to have wilderness characteristics including 33,400 acres of Public Land that were determined to be unsuitable for management as wilderness.

ASSUMPTIONS

Same as for the Proposed Action.

IMPACT SUMMARY

Same as for the Proposed Action.

IMPACT ANALYSIS

The only difference between the Proposed Action and this Alternative is the addition of 33,400 acres. This section will discuss the additional impacts that would occur by designating the 33,400 acres as wilderness.

 $\frac{\text{Access}}{\text{(Figure 2-2)}}$. Several existing roads either approach or border these

areas. Proximity of the roads and lack of a defined boundary would make these areas extremely difficult to protect from inadvertent or intentional vehicle use.

<u>Livestock Grazing</u> - Domestic livestock grazing occurs on about 32,500 acres of the additional 33,400 acres. This acreage supports 2,390 sheep AUMs and 2,484 cattle AUMs used by 105 permittees. This alternative would not affect this present level of use nor modes of operation.

Minerals - Lava rubble would not be sold on 160 acres located within the additional (USBM, 1979) 33,400 acres after 1984. However, this action would not affect the building stone industry because adequate supply sources are available elsewhere.

There are no known oil and gas reserves or other minerals in this additional acreage (USBM, 1979).

Recreation - The Wood Road, which provides access to four kipukas, is located on the southwestern part of the Wapi flow which is within the additional 33,400 acre area. A few persons use this road to get to the kipukas for recreational purposes. If the area is designated as wilderness, the road would be closed at the first lava crossing, allowing motorized access to only one of the four kipukas.

UNAVOIDABLE ADVERSE IMPACTS

Opportunities for lava rubble collection on 160 acres located within the additional 33,400 acres would be lost. Inadvertent and intentional motorized vehicle use could occur on the additional acreage because of its proximity to existing roads.

RELATIONSHIP BETWEEN LOCAL SHORT TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE OF LONG TERM PRODUCTIVITY

Same as for the proposed action.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Same as for the proposed action.

NO ACTION ALTERNATIVE

Under this alternative, no action would occur to designate the Great Rift Area as part of the National Wilderness Preservation System. The area would be managed according to the principles of multiple use and sustained yield concept as prescribed in FLPMA except on the Grassland Kipuka Natural Area.

ASSUMPTIONS

None

IMPACT SUMMARY

Benefits resulting from this alternative would be that lava rubble could be sold for use as building stone and geothermal exploration on the lava flows, particularly on the 4,000 acres presently under lease application. In addition, the 322,450 acres of Public Land would be open for exploration and development of locatable, leaseable and saleable minerals. Also, rights-of-way could be granted to cross the lava flows and ORV use would be permitted under existing guidelines.

The principal adverse impacts would be that existing wilderness characteristics could be impacted by lava rubble, mining, ORV use, geothermal activity, right-of-way establishment or other human activities.

IMPACT ANALYSIS

The 440 kipukas which are not currently grazed, would not be grazed in the future under this alternative because of their small size and inaccessibility. Livestock grazing still would occur on those kipukas presently grazed, and recreation use still would occur on several kipukas via access by the Wood Road. The undisturbed soils in the kipukas would remain undisturbed and would be available for comparison studies.

The unique geologic features of the lava flows would not experience significant impacts. Some of these features could be removed by recreationists, but to date, this has not occurred. Cultural remains at 14 sites still would be protected under current laws. Although recreationists could remove some remains at these sites, such removal has not occurred to any significant degree in the past and would not be expected to change.

Under the multiple use management, the Great Rift area would not be specifically managed to preserve wilderness characteristics for these values. However, the Great Rift has been managed under multiple use for a number of years, and wilderness values have not been damaged, nor have human imprints become noticeable. At this time, making reliable predictions about possible impacts to wilderness values is impossible.

Geothermal leasing could occur on 341,000 acres. To date, only 4,000 acres of the Area have geothermal lease applications pending. No real interest in exploring for geothermal resources has occurred except for these existing lease applications. If exploration were to occur, human imprints would be left on the area which could reduce or eliminate wilderness values. However, the possibility of geothermal exploration is highly speculative at this time. Future multiple use management plans could exclude the area from geothermal activities by constraints to

protect resource values. Lava rubble could be sold for building stone on 680 acres of the lava flows. However, because of the small acreage involved compared to other available sources, use of these acres for lava rubble collection is highly unlikely.

Opportunities for solitude or a primitive and unconfined type of recreation still would be available on most of the area. ORV use could reduce the opportunity for solitude. Any geothermal activity also would reduce the opportunity for solitude. At present, the number of acres that could be impacted by these activities and the subsequent loss of opportunity for solitude or a primitive and unconfined type of recreation is not known. However, in the past the area has retained its solitude and primitive and unconfined recreation resources. Transmission lines could be constructed on the lava flows which would leave human imprints on the landscape.

The social attitudes of those who favor and those who oppose wilderness designation would remain basically the same.

UNAVOIDABLE ADVERSE IMPACTS

The unavoidable impacts associated with this alternative would be the potential loss of existing wilderness values associated with ORV use and mineral activity. The degree to which the wilderness values would be impacted is not known, nor is it known how much of the 340,992 acres classed as having wilderness suitability would be affected. Geothermal exploration and lava rubble collection could occur, but it is impossible to predict if these activities would or would not occur.

RELATIONSHIP BETWEEN LOCAL SHORT TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE OF LONG TERM PRODUCTIVITY

ORV use and possible geothermal exploration and lava rubble collection could reduce the wilderness values over the long term.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Geothermal exploration and lava rubble collection, if they occurred, would represent an irretrievable commitment of wilderness values. This loss would occur because human imprints would remain and would thus reduce wilderness values. However, these activities would only be expected to occur on about 4,680 acres.





CHAPTER V

CONSULTATION AND COORDINATION

October, 1973 - Idaho Mining Association expressed no interest in the mineral values of either lava flow.

1974 Big Desert Management Framework Plan (MFP) recommended Primitive Area classification for both lava flows to "protect the scenic, scientific and wilderness values of the volcanic landscape". Public meetings were held to discuss the MFP.

1975/1976 Wilderness Institute studied the area under contract with BLM for Primitive Area designation. Five public meetings were held to present the proposal and obtain public comments.

October 23 and 24, 1978 - BLM personnel took the Washington Office Wilderness Society Representative on a field tour of the Great Rift.

April, 1979 - BLM personnel informally consulted with Idaho Department of Fish and Game to identify wildlife values and problems within the study area boundary.

January 9, 1979 - BLM presented slide show on Great Rift to Idaho Falls Exchange Club.

January 11, 1979 - BLM presented slide show on Great Rift to Idaho Farm Bureau.

February 15, 1979 - BLM presented slide show on Great Rift to Federal Executive Council.

March 15 - May 15, 1979 - Public comment period to gather input on the BLM State Director's decision to continue study on the Great Rift as a Wilderness Study Area. Several public meetings were held.

April, 1979 - Dept. of Energy was contacted about the geothermal potential of lands within the study boundary. BLM periodically checks on the information coming from a deep drill test site on the Idaho National Engineering Laboratory grounds.

April, 1979 - Letters and explanatory material were sent to various interest groups and individuals, federal agencies, state and local agencies, and congressional delegations inviting them to the Scoping Session to assist in identifying issues to be addressed in the EIS.

May 3, 1979 - Federal Register notice of BLM's intent to prepare an environmental impact statement on the Great Rift proposed wilderness area and announcement of the Scoping Meeting.

May, 1979 - News release distributed announcing intent to prepare the Great Rift EIS.

May 23, 1979 - District personnel conducted a Scoping Meeting on the Great Rift EIS to identify significant issues and problems.

June 9-10, 1979 - BLM personnel conducted a field tour of the Great Rift for representatives from the Wilderness Society, Sierra Club, Audubon Society, Idaho Environmental Council and Idaho Conservation League.

Throughout 1979 - BLM personnel have kept Idaho Department of Lands (IDL) informed of wilderness program.

June 14, 1979 - IDL communicated its wilderness policy to BLM.

Summer, 1979 - Idaho State University prepared a study of the kipukas in the Great Rift to fulfill a contract with the BLM (preliminary report submitted in August, 1979; final report due August, 1980).

September 13, 1979 - BLM presented slide show on the Great Rift to the Idaho Falls Chapter of Idaho Conservation League.

October, 1979 - County commissioners for Blaine, Butte, Minidoka, and Power counties were contacted to discuss any problems with the Great Rift Wilderness proposal.

October 28 and November 9, 1979 - BLM personnel conducted informal consultations with U.S. Fish and Wildlife Service on threatened and endangered plants and animals. No threatened or endangered species were identified, but a candidate for the "sensitive" list is known to be located in the study area.

October 28 and November 9, 1979 - BLM personnel met with the State Historic Preservation Officer and the State Archaeologist. After reviewing cultural site reports, the SHPO and archaeologist indicated that they had no concerns over negative impacts of the proposed action.

October, 1979 - District Wilderness Coordinators served as consultants for an article featuring the Great Rift, which appeared in the Federation of Western Outdoor Club's publication in November, 1979.

October 1978 to November 1979 - BLM personnel have consulted informally with Craters of the Moon National Monument personnel on a continuing basis.

COORDINATION IN THE REVIEW OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

Comments on the draft EIS will be requested from the following agencies and interest groups.

Federal Agencies

DEPARTMENT OF ENERGY

DEPARTMENT OF INTERIOR

Fish and Wildlife Service

Geological Survey

Bonneville Power Administration

Heritage Conservation & Recreation Service

National Park Service

Natural Resource Library

DEPARTMENT OF AGRICULTURE
Soil Conservation Service

ENVIRONMENTAL PROTECTION AGENCY

State Agencies

State Clearinghouse
Dept. of Health, Welfare and Environmental Services
Idaho Bureau of Mines and Geology
Idaho Dept. of Fish & Game
Idaho Dept. of Highways
Idaho Dept. of Public Lands
Idaho Dept. of Water Resources
Idaho Div. of Tourism and Industrial Development
Idaho Office of Energy
Idaho Parks and Recreation Dept.
State Historic Preservation Officer
University of Idaho Extension Service

Local Agencies

Blaine County Planning Commission
Butte County Commissioners
Butte County Planning Commission
Minidoka County Commissioners
Minidoka County Planning Commission
Power County Planning Commission
Power County Planning Commission
East Central Idaho Planning and Development Association
Arco Mayor
Burley Mayor
Idaho Falls Mayor
Rupert Mayor

Elected Officials

Federal

Senator Frank Church Senator James McClure Congressman George Hansen Congressman Steve Symms

State Senators	District
Bell, John J. Bilyeu, Charles E. Egbert, Richard A. Leese, James Merril, Warren Israel VanEngelen, Dean Watkins, Dane	21 35 31 34 27 26 30
State Representatives	
Anton, Steve Barlow, W. Rusty Bateman, Linden B. Chatburn, J. Vard Gould, Gary H. Hale, Ernest A. Horsch, Dwight W.	21 35 31 26 34 26 35
Kearnes, Elaine	30
Parks, Raymond G. Paxman, Gary L. McDermott, Particia L.	27 30 34
Neibaur, Mack Wm. Sessions, John O.	21 31 27
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Public Service Organizations

Idaho Power Company
Lost River Electric
Utah Power & Light
Public Lands Council
Idaho Public Utilities Commission
National Advisory Council on Historic Preservation

Other Organizations

Big Desert Grazing Permittees Boise State University Coalition to Save the Snake District Multiple Use Council Federation of Western Outdoors Clubs Idaho Conservation League Idaho Environmental Council Idaho Falls Alpine Club Idaho Falls Gem & Mineral Society Idaho State University Idaho Wildlife Federation Independent Petroleum Association of America League of Women Voters Magic Valley Trail Machines Minidoka Grazing Permittees National Outdoor Coalition Public Lands Committee of Idaho Association of Counties Resource Association of Alaska Sierra Club Snake River Audubon Society Snake River Conservation Research Center Sun Valley Center for the Arts and Humanities University of Idaho Wild Horse Grazing Permittees Wilderness Institute Wilderness Society

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APPENDIX I

MINERAL LEASES AND CLAIMS IN RELATION TO THE FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976

(P.L. 94-579)

AND THE WILDERNESS ACT OF 1964

(P.L. 88-577)

Until December 31, 1983, the United States mining laws and all laws pertaining to mineral leasing apply to wildernesses to the same extent as they applied to the area prior to its classification.

Effective January 1, 1984, subject to existing rights, the minerals in land designated as wilderness are withdrawn from all forms of appropriations under the mining laws and from disposition under all laws pertaining to mineral leasing.

The Wilderness Act recognizes the rights of minerals claimant under existing mining laws and allows for prospecting and mining in wildernesses while still recognizing the wilderness resource.

The authority to permit prospecting or mining for minerals not subject to location and entry within a wilderness area is discretionary with the Secretary of the Interior. Authority to give a favorable recommendation to lease in wilderness is reserved to the Secretary of Interior. The Secretary will not normally recommend mineral leases or permits in wildernesses or primitive areas unless directional drilling or other methods can be used which will avoid any invasion of the surface.

SECTION 603(c) FEDERAL LAND POLICY
AND MANAGEMENT ACT OF 1976
(P.L. 94-579)

During the period of review of such area and until Congress has determined otherwise, the Secretary shall continue to manage such lands according to his authority under this Act and other applicable law in a manner so as not to impair the suitability of such areas for preservation as wilderness, subject, however, to the continuation of existing mining and grazing uses and mineral leasing in the manner and degree in which the same was being conducted on the date of approval of this Act: Provided, That, in managing the public lands the Secretary shall by regulation or otherwise take any action required to prevent unnecessary or undue degradation of the lands and their resources or to afford environmental protection. Unless previously withdrawn from appropriation under the mining laws, such lands shall continue to be subject to such appropriation during the period of review unless withdrawn by the Secretary under the procdures of section 204 of this Act for reasons other than preservation of their wilderness character. Once an area has been designated for preservation as wilderness, the provisions of the Wilderness Act which

apply to national forest wilderness areas shall apply with respect to the administration and use of such designated area, including mineral surveys required by section 4(d) (2) of the Wilderness Act, and mineral development, access exchange of lands, and ingress and egress for mining claimants and occupants.

SECTION 4(d) (2) OF THE WILDERNESS ACT OF 1964 (P.L. 88-577)

Nothing in this Act shall prevent within national forest wilderness areas any activity, including prospecting, for the purpose of gathering information about mineral or other resources, if such activity is carried on in a manner compatible with the preservation of the wilderness environment. Furthermore, in accordance with such program as the Secretary of Agriculture, such areas shall be surveyed on a planned, recurring basis consistent with the concept of wilderness preservation by the Geological Survey and the Bureau of Mines to determine the mineral values, if any, available to the public and submitted to the President and Congress.

Mineral leases, claims, etc. Notwithstanding any other provisions of this Act, until midnight December 31, 1983, the United States mining laws and all laws pertaining to mineral leasing shall, to the same extent as applicable prior to the effective date of this Act, extend to those national forest lands designated by this Act as "wilderness areas"; subject, however, to such reasonable regulations governing ingress and egress as may be prescribed by the Secretary of Agriculture consistent with the use of the land for mineral location and development and exploration, drilling, and production, and use of land for transmission lines, waterlines, telephone lines, or facilities necessary in exploring, drilling, producing, mining, and processing operations, including where essential the use of mechanized ground or air equipment and restoration as near as practicable of the surface of the land disturbed in performing prospecting, location, and, in oil and gas leasing, discovery work, exploration, drilling, and production, as soon as they have served their purpose. Mining locations lying within the boundaries of said wilderness areas shall be held and used solely for mining or processing operations and uses reasonably incident thereto; and hereafter, subject to valid existing rights, all patents issued under the mining laws of the United States affecting national forest lands designated by this Act as wilderness areas shall convey title to the mineral deposits within the claim, together with the right to cut and use so much of the mature timber therefrom as may be needed in the extraction, removal, and beneficiation of the mineral deposits, if the timber is not otherwise reasonably available, and if the timber is cut under sound principles of forest management as defined by the national forest rules and regulations, but each such patent shall reserve to the United States all title in or to the surface of the lands and products thereof, and no use of the surface of

the claim or the resources therefrom not reasonably required for carrying on mining or prospecting shall be allowed except as otherwise expressly provided in this Act: Provided, That, unless hereafter specifically authorized, no patent within wilderness areas designated by this Act shall issue after December 31, 1983, except for the valid claims existing on or before December 31, 1983. Mining claims located after the effective date of this Act within the boundaries of wilderness areas designated by this Act shall create no rights in excess of those rights which may be patented under the provisions of this subsection. Mineral leases, permits, and licenses covering lands within national forest wilderness areas designated by this Act shall contain such reasonable stipulations as may be prescribed by the Secretary of Agriculture for the protection of the wilderness character of the land consistent with the use of the land for the purpose for which they are leased, permitted, or licensed. Subject to valid rights then existing, effective January 1, 1984, the minerals in lands designated by this Act as wilderness areas are withdrawn from all forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral leasing and all amendments thereto.

APPENDIX 2

THE FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 (P.L. 94-579)

BUREAU OF LAND MANAGEMENT WILDERNESS STUDY

Within fifteen years after the date of approval of this Act, the Secretary shall review those roadless areas of five thousand acres or more and roadless islands of the public lands, identified during the inventory required by section 201(a) of this Act as having wilderness characteristics described in the Wilderness Act of September 3, 1964 (78 Stat. 890; 16 U.S.C. 1131 et seq.) and shall from time to time report to the President his recommendation as to the suitability or nonsuitability of each such area or island for preservation as wilderness: Provided, That prior to any recommendations for the designation of an area as wilderness the Secretary shall cause mineral surveys to be conducted by the Geological Survey and the Bureau of Mines to determine the mineral values, if any, that may be present in such areas: Provided further, That the Secretary shall report to the President by July 1, 1980, his recommendations on those areas which the Secretary has prior to November 1, 1975, formally identified as natural or primitive areas. The review required by this subsection shall be conducted in accordance with the procedure specified in section 3(d) of the Wilderness Act.

The President shall advise the President of the Senate and the Speaker of the House of Representatives of his recommendations with respect to designation as wilderness of each such area, together with a map thereof and a definition of its boundaries. Such advice by the President shall be given within two years of the receipt of each report from the Secretary. A recommendation of the President for designation as wilderness shall become effective only if so provided by an Act of Congress.

During the period of review of such areas and until Congress has determined otherwise, the Secretary shall continue to manage such lands according to his authority under this Act and other applicable law in a manner so as not to impair the suitability of such areas for preservation as wilderness, subject, however, to the continuation of existing mining and grazing uses and mineral leasing in the manner and degree in which the same was being conducted on the date of approval of this Act: Provided, That, in managing the public lands the Secretary shall by regulation or otherwise take any action required to prevent unnecessary or undue degradation of the lands and their resources or to afford environmental protection. Unless previously withdrawn from appropriation under the mining laws, such lands shall continue to be subject to such appropriation during the period of review unless withdrawn by the Secretary under the procedures of section 204 of this Act for reasons other than preservation of their wilderness character. Once an area has been designated for preservation as wilderness, the provisions of the Wilderness Act which apply to national forest wilderness areas shall apply with respect to the administration and use of such designated area, including mineral surveys required by section 4(d) (2) of the Wilderness Act, and mineral development, access, exchange of lands, and ingress and egress for mining claimants and occupants.

GLOSSARY

<u>Aa</u> - a lava flow with a rough clinkery or loose blocky surface. The rock contains deflated and stretched vesicles. Hawaiian word for "hard on the feet."

Air Quality Classes - classes established by the Environmental Protection Agency that define the amount of pollution considered significant within an area. Class I applies to areas where almost any change in air quality would be considered significant; Class II applies to areas where the deterioration normally accompanying moderate well-controlled growth would be considered insignificant; and Class III applies to areas where deterioration up to the national standards would be considered insignificant.

Animal Unit Month (AUM) - the amount of forage necessary for the sustenance of one cow or five sheep for a period of 1 month.

Ash - sand- or dust-size volcanic ejected matter.

Basalt - a dark lava rich in iron and magnesium and comparatively poor in silicon; the common lava in the Craters of the Moon and Wapi flows.

Blue Dragon Lava - lava with a sky-blue to cobalt-blue surface caused by electron exchanges in titanium and iron atoms.

Bombs - volcanic ejecta molten when thrown out and having particular forms, such as ribbon, bread-crust, spindle, etc.

Cinder Cone - a mound built by small ejecta around a vent, with most of the fragments larger than 1/2-inch across, very vesicular, and mostly loose.

<u>Climax Vegetation</u> - the final vegetative community that emerges after a series of successive vegetational stages. The climax community perpetuates itself indefinitely unless disturbed by outside forces.

Crater - a depression at a volcanic vent.

<u>Cultural Resources</u> - those fragile and nonrenewable remains of human activities, occupations and endeavors as reflected in sites, buildings, structures, or objects, including works of art, architecture and engineering. Cultural resources are commonly discussed as prehistoric and historic values, but each period represents a part of the full continuum of cultural values from the earliest to the most recent.

<u>Driblet Spire</u> - a hornito which is more vertical in nature, with a rise to run ratio approaching 1:1 or steeper. Formed by the accretion of lava globs as they are projected from gas vents or blowholes and fall on one spot.

Ecosystem - complex self-sustaining natural system which includes living and non-living components of the environment and the interactions that bind them together. Its functioning involves the circulation of matter and energy between organisms and their environment.

Endangered Species - a species of fish, wildlife or plants found by the Secretary of Interior to be threatened with extinction because its habitat is threatened with destruction, drastic modification or severe curtailment, or because of over-exploitation, disease, predation or other factors. Its survival requires assistance.

Fault - a fracture in the earth's crust along which movement has occurred.

Hornito - a low oven-shaped mound of lava with a rise to run ratio from 1:5 to 1:3. Formed by the accretion of lava globs as they are issued from gas vents or blowholes.

Kipuka - an island of old lava surrounded, but not covered by, a lava flow. It can be higher or lower than the lava flow. Hawaiian word for "window."

Obsidian - volcanic glass formed by lava chilling too quickly to crystallize. Tachylyte is the technical name of basaltic glass.

Off-Road Vehicle (ORV) - any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland or other terrain.

<u>Pahoehoe</u> - lava with a smooth or ropey surface spread chiefly through tubes and characterized by round vesicles. Hawaiian word for "ropey coils."

<u>Pressure Ridges</u> - dome like ridges which are usually cracked open at the top throughout their length, formed by lateral pressure in the surface of a lava flow.

<u>Public Land</u> - formal name for lands administered by the Bureau of Land Management.

Rift - a lengthy fissure in the earth's crust.

Scoping Session - an early and open public process for determining the scope of the issues to be addressed and for identifying the significant issues related to a proposed action.

Sensitive Species - animals classified by the BLM and Idaho Fish and Game Department are those: 1) not yet officially listed but which are undergoing a status review or are proposed for listing, 2) whose populations are consistently small and widely dispersed, or whose ranges are restricted to a few localities, and 3) whose numbers are declining so rapidly that official listing may become necessary as a conservation measure.

Shield Volcano - a broad, fairly flat lava cone having the shape of a shield. An example is the Pillar Butte area of the Wapi flow.

<u>Site</u> - (archaeological) a physical location where human activities or events occurred.

<u>Spatter Cone</u> - a cone built by spatter around a vent. The clots stuck together when they fell.

<u>Succession</u> - the orderly process by which plant communities develop toward the climax plant association.

Threatened Species - any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, and which has been designated in the Federal Register by the Secretary of Interior as a threatened species.

Tree Mold - a hole in a lava flow caused by lava making a cast of a tree trunk.

Tube - a lava cavern through which pahoehoe lava flowed.

<u>Wilderness Study Area</u> - an area of Public Land which has undergone BLM's initial and intensive wilderness inventories, including public involvement, and has been determined to have wilderness characteristics and to warrant further wilderness study.

<u>Wilderness Suitability</u> - BLM's judgment of the suitability of a wilderness study area to be managed as wilderness. The judgment process includes a conflict analysis with other resource values.

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