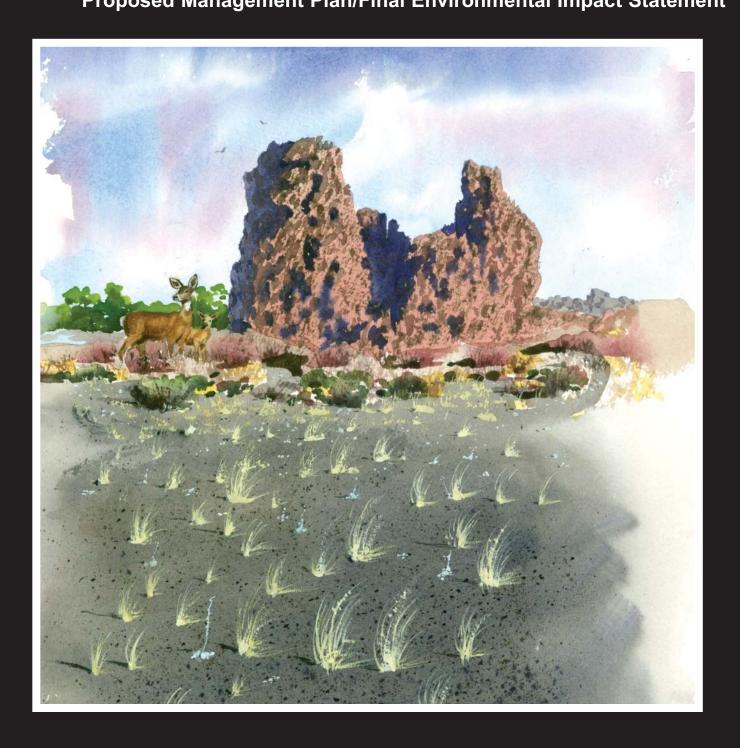




Craters of the Moon

National Monument and Preserve Idaho Proposed Management Plan/Final Environmental Impact Statement





CRATERS OF THE MOON NATIONAL MONUMENT AND PRESERVE

Proposed Management Plan and Final Environmental Impact Statement

July 2005

Dear Reader:

Enclosed for your inspection is the Proposed Management Plan/Final Environmental Impact Statement (Proposed Plan/FEIS) for the Craters of the Moon National Monument and Preserve (Monument). This Proposed Plan/FEIS sets forth the management direction for approximately 740,000 acres of public lands located on the Snake River Plain of Southern Idaho that are cooperatively managed by the Bureau of Land Management (BLM) and the National Park Service (NPS).

BLM and NPS published a Notice of Intent to prepare the plan and associated EIS in the April 24, 2002 Federal Register. The agencies then solicited public input and developed four management alternatives, including a No Action alternative and three action alternatives that provided different strategies for managing the Monument in the future. These alternatives were presented and analyzed in the Draft Plan/EIS. A Notice of Availability for the Draft Plan/EIS was published in the Federal Register on April 30, 2004, and copies of the Draft Plan/EIS were made available to the public through several outlets. Alternative D was identified as the Preferred Alternative in that document.

This document, the Proposed Plan/FEIS, presents an overview of the planning process and planning issues, describes all alternatives and their associated impacts, summarizes public comment received on the Draft Plan/EIS, and provides responses to the substantive issues raised. Alternative D, which is identified as the Proposed Plan, is largely based on the Preferred Alternative (Alternative D) presented in the Draft Plan/EIS. However, the Proposed Plan adopts several recommendations received from the public to increase the amount of Pristine Zone and reduce the amount of Passage Zone in the selected alternative. It also incorporates clarifications and additions recommended by reviewers regarding various management actions, including those relating to transportation, access, grazing allotments, and fire history. Many of these recommendations incorporated select portions of Alternatives A, B, and C in the Draft Plan/EIS into the Proposed Plan (Alternative D) presented in this document.

BLM and NPS appreciate the large amount and high quality of public involvement that has taken place throughout this planning process. We believe that this Proposed Plan/FEIS represents a collaborative effort that would not have been possible without the participation of the public, state and local governments, and consultation with tribal governments.

Once adopted, the Proposed Plan/FEIS will become the Final Management Plan and will serve as the guiding management strategy for the Monument. It will provide a framework for proactive decision-making, including decisions regarding visitor use and preserving natural and cultural resources. The Final Management Plan will provide overall guidance under which more detailed activities are conducted or implementation plans are prepared.

This Proposed Plan/FEIS is open for a 30-day no-action/protest period beginning with the date the U.S. Environmental Protection Agency (EPA) publishes the notice of availability of the FEIS in the Federal Register. During this period, neither the NPS nor the BLM will take action to implement the plan. However, the portion of the Proposed Plan/FEIS that addresses BLM-administered lands within the Monument may be protested by any person who participated in the planning process and who has an interest that may be adversely affected by approval of the Proposed Plan/FEIS. A protest may raise only those issues that were submitted for the record during the planning process (see Code of Federal Regulations 1610.5-2). Protests must be filed with the Director, Bureau of Land Management.

Regular mail protests and overnight mail should be sent to: Director, Bureau of Land Management (210) Attention – Brenda Hudgens-Williams, 1620 L Street, Suite 1075, Washington, D.C. 20036. Emailed and fax protests will not be accepted as valid protests unless the protesting party also provides the original letter by either regular or overnight mail postmarked by the close of the protest period. Under these conditions, BLM will consider the emailed or faxed protest as an advance copy and it will receive full consideration. If you wish to provide BLM with such advance notification, please direct faxed protests to the attention of the BLM protest coordinator at 202-452-5112, and emails to Brenda_Hudgens-Williams@blm.gov.

All protests must be written and must be postmarked on or before the 30th day following publication by EPA of the Notice of Availability in the Federal Register and contain the following information:

- The name, mailing address, telephone number, and interest of the person filing the protest;
- A statement of the issue or issues being protested;
- A statement of the part or parts of the document being protested;
- A copy of all documents addressing the issue or issues previously submitted during the planning process by the protesting party, or an indication of the date the issue or issues were discussed for the record; and
- A concise statement explaining precisely why the decision presented in the Proposed Plan/FEIS is believed to be wrong.

The Director, Bureau of Land Management, will promptly render a decision on the protest. The decision will be in writing and will be sent to the protesting party by certified mail, return receipt requested. The decision of the Director shall be final.

Although the NPS does not include a formal protest period in its procedures, anyone who wishes to communicate a particular concern with the Proposed Plan/FEIS before a final decision is rendered may write to the Regional Director, Pacific West Region, National Park Service, 1111 Jackson Street, Suite 700, Oakland, CA 94607.

Upon resolution of any protests, the plan will be approved and a Record of Decision will be issued. The Final Management Plan/Record of Decision will be mailed to all individuals who participated in this planning process and all other interested publics upon their request.

Sincerely,

James A. Morris

Games a. Monis

Superintendent

Craters of the Moon National Monument and Preserve

National Park Service

Rick Vander Voet

Monument Manager

Craters of the Moon National Monument

Bureau of Land Management

Nich Vander Voet

SUMMARY

The purpose of this Proposed Management Plan/Final Environmental Impact Statement (Proposed Plan/FEIS) for Craters of the Moon National Monument and Preserve (Monument) is to provide land use direction for both the Bureau of Land Management (BLM) and the National Park Service (NPS) at the Monument. The approved plan will provide the framework for making decisions about managing the natural and cultural resources, visitor use, development, and operations so that future opportunities and problems can be addressed effectively.

On November 9, 2000, Presidential Proclamation 7373 expanded Craters of the Moon National Monument from approximately 54,000 acres to more than 750,000 acres. The Proclamation and subsequent U.S. Department of the Interior direction instructed the BLM and NPS to co-manage the Monument and jointly prepare a land use plan. A Notice of Intent for the Plan/EIS was published in the Federal Register on April 24, 2002. On August 21, 2002, Public Law 107-213 re-designated the NPS portion of the expanded Monument as a National Preserve. The BLM National Monument, original NPS National Monument, and NPS National Preserve are simply referred to as "the Monument."

Once approved, the Management Plan will replace portions of four existing BLM land use plans and entirely replace the NPS Craters of the Moon National Monument General Management Plan (GMP) (1992). NPS and BLM use slightly different land use planning processes. NPS units typically operate under a GMP, while BLM areas operate under a Resource Management Plan (RMP). This marriage between NPS and BLM represents a need to design a unique planning process, which will produce an effective, single, stand-alone, comprehensive Management Plan for the entire Monument.

ISSUES ADDRESSED

Five major issues were identified during public scoping and were subsequently used in developing alternatives for the Proposed Plan/FEIS. Public scoping included eight open houses and three

alternative workshops, with an emphasis on gateway communities. Public comments also involved responses to the publication of three newsletters, tours, briefings for local and state government agencies, Resource Advisory Council meetings, both agencies' Web sites, and presentations to a wide variety of interest groups. The five major issues addressed by the planning process include:

- 1) <u>Development</u>: What kinds of Monument facilities and services will be provided apart from the existing facilities?
 - This issue deals with the kind of visitor facilities and services the agencies will provide.
- 2) <u>Transportation and Access</u>: What type of road and trail system will be needed for travel to, and access within, the Monument?
 - This issue concerns the impacts of roads and access on the visitor experience and natural and cultural resources.
- 3) <u>Public/Visitor Use and Safety</u>: What will be the extent and location of public uses within the Monument? What kinds of experiences do visitors want?
 - This issue includes a variety of topics, from solitude and managing increased visitation to emergency services and interpretation.
- 4) <u>Authorized Uses</u>: How will the different uses in the Monument be managed?
 - This issue addresses concerns over mineral materials, outfitters/guides/concessioners, and permitted livestock use.
- 5) Natural and Cultural Resources: How will natural and cultural resources be protected?

This issue concerns the protection of the outstanding geologic features, as well as plant, animal, and cultural/historic resources, plus related issues concerning fire management, noxious weeds, and restoration of perennial plant communities.

III

ALTERNATIVES

Four alternatives, including the Proposed Plan, are analyzed in this FEIS.

- Alternative A represents the No Action Alternative and continues current management at present levels of effort.
- Alternative B emphasizes a variety of different visitor experiences within the Monument.
- Alternative C emphasizes and enhances the primitive character of the Monument.
- Alternative D (Proposed Plan) emphasizes protection and restoration of physical and biological resources. This alternative is a slight modification of Alternative D as presented in the Draft Plan/EIS (the Preferred Alternative). Modifications were made in response to public comments regarding the amount of various management zones within the alternative and agency review.

The four alternatives vary by emphasis theme, resource management decisions, desired future conditions, and the application of management zones. Each alternative assigns various areas of the Monument to different management zones. These zones identify how different areas would be managed to achieve a variety of resource conditions and visitor experiences, including different levels of desired development.

- 1. <u>Frontcountry Zone</u> areas would allow for a high probability of encountering other people; paved, improved, and maintained roads; a diverse non-motorized trail system; administrative and visitor facilities; developed campgrounds; and a high level of interpretive programs.
- Passage Zone areas would offer a medium probability of encountering other people, relatively high standard gravel/dirt roads, rustic designated campsites, limited interpretation, multiuse trailheads/trails, and a high probability for encountering livestock and associated facilities.
- 3. <u>Primitive Zone</u> areas would prescribe a low probability of encountering other people,

- challenging driving conditions on low-standard roads, minimal on-site interpretation, low-standard multiuse trails, and a medium probability of encountering livestock and associated facilities.
- 4. <u>Pristine Zone</u> areas would allow for a high probability of experiencing solitude, challenging access and no roads, no designated campsites, no on-site interpretation, very few trails, and a low probability of encountering livestock and associated facilities.

Alternative A, the No Action Alternative, proposes no major changes in resource management, visitor programs, or facilities. It depicts current management under the agencies' five existing management plans, as modified by Proclamation 7373, Public Law 107-213, and the agencies' Interim Management Guidelines. Alternative A also serves as a baseline for comparison with the other three alternatives.

The management zones depicted in Alternative A represent the planning team's assessment of current conditions. In other words, the management zones were mapped based on actual, existing conditions in 2003.

Alternative B emphasizes a broad array of visitor experiences within the Monument. Alternative B provides the largest amount of multiuse trail opportunities; improved access both inside and outside the Monument; and extensive educational, informational, and directional signs and interpretive support facilities throughout the Monument. This alternative also allocates large areas in the Passage Zone to allow for potential new developments like designated rustic campsites, high standard motorized and non-motorized trail networks, and a relatively high standard road system that provides easier access to many areas of the Monument. Alternative B also includes suggested management direction for access roads outside of the Monument.

Alternative C emphasizes the Monument's primitive character. This alternative contains the smallest number of visitor facilities. Management actions that influence resource conditions are as "light handed" and non-intrusive as possible, including weed



control and sagebrush steppe restoration. Alternative C allocates the largest acreage of all the alternatives in the Pristine Zone and the least acreage in the Passage Zone, and it would result in the fewest miles of maintained roads. Under this alternative, new interpretive facilities would primarily be located outside the Monument. This alternative includes an 11,000-acre Area of Critical Environmental Concern designation in northern Laidlaw Park to provide special protective management for native sagebrush steppe.

Alternative D (Proposed Plan) emphasizes protection and restoration of physical and biological resources and processes. The Proposed Plan draws primarily upon the Alternative D presented in the Draft Plan/EIS, but includes more Pristine Zone and reduces Passage Zone, especially in the Laidlaw Park area. This was done in response to public and agency comments. Alternative D contains the largest weed treatment and prevention program using all available tools. It prescribes the most extensive fire management program. Alternative D places a greater emphasis than the other alternatives on promoting partnerships at existing facilities such as visitor centers, state parks, and gateway communities. This alternative also encourages the use of outfitters to meet possible future recreation experience demands inside the expanded portion of the Monument. This alternative allows for the upgrade of the Arco-Minidoka Road through the Monument should the adjacent county governments choose to upgrade the portions of the road outside of the Monument.

The principal changes or clarifications that have been made from Alternative D in the Draft Plan/EIS to the Proposed Plan/FEIS are:

- The amount of Pristine Zone is increased to strengthen protection of cultural and natural features, most commonly along the edges of the lava flows.
- The amount of Passage Zone corridors within the Laidlaw Park area of the Monument has been reduced and additional Passage Zone corridors have been added outside or on the

- edge of the Monument boundary.
- The text clarifies that no road improvements will be made until a Comprehensive Travel Management Plan, containing more detailed and specific guidance, is approved.

A summary of the main features of the four alternatives can be found in Table 7 of the Proposed Plan/FEIS. All of the alternatives would provide the high degree of protection for the objects of interest identified in Proclamation 7373, while still fulfilling both agencies' land management missions.

IMPACTS

The potential environmental consequences of the alternatives are addressed for various natural resources, land uses (including livestock grazing), cultural resources, Native American tribal treaty rights, visitor uses, and regional social and economic conditions. Table S-1 provides a summary of impacts related to all four alternatives considered, and Chapter 4 of the Proposed Plan/FEIS contains detailed analyses of these impacts.

Compared to the other alternatives, Alternative D (Proposed Plan) would have substantial long-term beneficial impacts from the completion of the extensive sagebrush steppe restoration program, with limited short-term adverse impacts during its implementation. The Proposed Plan also offers benefits relating to its encouragement for the agencies to work with partners, including several key gateway communities, to provide for public information and services outside the Monument. It would also provide for improved access along targeted roads for fire suppression and resource management, which provides benefits that outweigh the adverse impacts that could occur from any disruption of visitor uses or impacts on natural and cultural resources. No impairment of the Monument's natural or cultural resources would be expected for the Proposed Plan, or for any of the alternatives evaluated.

Table S-1. Summary of Impacts

NATURAL RESOURCES



Alternative A (No Action Alternative)

Alternative B

Alternative C

Alternative D (Proposed Plan)

Geological Resources

Geological resources would be affected by continued visitor access via roads and trails, as well as by wind erosion, fire, fire suppression, and grazing. These impacts would be mainly direct and both short- and potentially major levels. Indirect impacts would result from deposition of dust and soils on geological features over time. The limitation on new mineral extraction sites would result in long-term indirect negligible beneficial effects on geological resources. Although an individual geologic feature could suffer a major impact, in context of the entire Monument's geologic features/resources, the impacts would be quite localized (that is, the effect would cover only a small part of the entire Monument's land area or an individual type of geologic feature, of which there may be many).

Alternative B would have the most improved road access and the greatest number of improved roads and additional trail designations, which would result in the largest increase in visitation and/or access of all the long-term in nature, ranging from negligible to alternatives. As a consequence, Alternative B could result in a slightly greater loss of geologic features or structures and a higher rate of degradation of geologic resources or damage from vandalism. Adverse impacts from increased access would range from negligible to potentially major, with specific concerns about direct major damage to features in the Kings Bowl and Wapi Lava Field areas. Increased fire suppression and continued grazing could result in minor to moderate adverse impacts, and small beneficial effects would result from limits on new mineral extraction areas.

Although an individual geologic feature could suffer a major impact, in context of the entire Monument's geologic features/resources, the impacts would be quite localized (that is, the effect would cover only a small part of the entire Monument's land area or an individual type of geologic feature, of which there may be many).

Alternative C would have the largest area of Pristine Zone, which would afford the most natural protection to geologic features through difficult or remote, foot-only access. Closures of non-essential roads and limited access would lead to the smallest amount of dust-related impacts. Impacts from visitor damage, theft, or vandalism would range from negligible to potentially major locally, but the probability of major impacts would be lower because of decreased access for many visitors. Negligible to minor adverse impacts from fire and grazing would continue, and there would be slight beneficial effects from limits on new mineral extraction sites. Overall, Alternative C would cause the fewest adverse impacts on geologic resources of all the alternatives.

Although an individual geologic feature could suffer a major impact, in context of the entire Monument's geologic features/resources, the impacts would be quite localized (that is, the effect would cover only a small part of the entire Monument's land area or an individual type of geologic feature, of which there may be many).

Alternative D (Proposed Plan), because of its aggressive restoration goals and emphasis on off-site experience, would result in beneficial effects because it would limit damage from visitors and result in restoration of many features.

Although an individual geologic feature could suffer a major impact, in context of the entire Monument's geologic features/resources, the impacts would be quite localized (that is, the effect would cover only a small part of the entire Monument's land area or an individual type of geologic feature, of which there may be many).

Soils

Soil disturbance, erosion, and compaction would be the primary adverse impacts associated with most management actions under Alternative A. Wildland fire and suppression, restoration activities, road and trail maintenance and use, and livestock use are the management activities most likely to affect soils. Overall, short- and long-term adverse impacts on soils would be minor to moderate in intensity, with long-term moderate beneficial effects from the restoration program.

of recreation facilities, and increased visitor use of the Monument under Alternative B might increase the amount of soil area directly and indirectly affected. Additional construction of unpaved roads, trails, and day use areas and more extensive use of fire suppression would cause direct loss of soils locally, resulting in minor to moderate localized adverse impacts. Grazing also would cause minor to moderate adverse impacts. Overall, short- and long-term adverse impacts on soils from Alternative B would range from minor to moderate; the restoration program would result in long-term moderate beneficial effects.

Improved road and trail access, development | The effects of Alternative C on soils would be | The effects of Alternative D (Proposed Plan) substantially the same as those of Alternative A, with slightly more short-term erosion potential and slightly fewer long-term soil impacts. Impacts from facility construction maintenance and fire suppression would be reduced, and adverse impacts from grazing would remain minor to moderate. Overall, short- and long-term adverse impacts would be minor to moderate in intensity, with more long-term beneficial effects from a slightly expanded restoration program.

on soils would be similar to those of Alternative A. with more short-term erosion potential due to road and trail use and maintenance, facility development, and fire. Long- and short-term minor to moderate adverse impacts could result from grazing and fire suppression. Overall, short- and longterm adverse impacts would be minor to moderate. However, there would be moderate to major long-term beneficial effects on soils in the Monument, assuming successful restoration of the entire proposed acreage under this alternative.

because no surface waters connect them.

would be widespread and long-term and

intensity, depending on the location.

The overall effect of livestock use on playas

could range from minor to potentially major

Alternative D Alternative A (Proposed Plan) (No Action Alternative) **Alternative B Alternative C Vegetation and Fire Management** Alternative A would result in both short- and Alternative B would result in a greater possi-Alternative C would involve less opportunity In Alternative D (Proposed Plan), there would long-term negligible to moderate adverse bility of fragmentation, increased risk of for extensive visitor access, less access for be more access for fire suppression and impacts on vegetation from continued use noxious weed spread, and greater risk of fire suppression, less active management of more aggressive noxious weed control, which and maintenance of roads and trails, plus human-caused fire because of increased noxious weeds, and a slower rate of would result in short-term minor to moderate illegal off-road use, spread of noxious weeds. visitation and access and more road and trail adverse impacts but long-term moderate to restoration over a larger area than any other major beneficial effects, occurring in a shorter fire suppression and fire, and continued maintenance. Effects on vegetation would be alternative. Adverse impacts on vegetation grazing. Restoration activities and construcboth short- and long-term, ranging from from access would be minor and limited, with time than in the other alternatives. tion of facilities would cause short-term negligible to moderate, but they would be few impacts from facility development and Strategically placed restoration projects negligible to minor direct adverse impacts, more widespread than in Alternative A. maintenance. Restoration efforts would cause would increase the size and continuity of but they would result in long-term indirect Facility development would cause some longlong-term minor to major beneficial effects. healthy vegetation patches and reduce the term negligible to minor negative impacts on but these would occur more slowly because extent of poor quality vegetation. Adverse minor to major beneficial effects from vegetation restoration and public education. vegetation, but increased public education fewer herbicides and more low impact impacts from visitor access, fire and fire would result in minor to moderate long-term methods would be used. Fires, fire suppression, grazing, and facility beneficial effects. Restoration acreage would suppression, and continued grazing would development would be similar to those in be slightly greater than in Alternative A, with lead to minor to moderate adverse impacts. Alternative A, with both short- and long-term minor to moderate adverse impacts. Impacts short-term minor adverse impacts and longterm moderate to major beneficial effects. from increased access in more sensitive areas of the Monument, including Laidlaw Park, would be limited by the reduction in the Passage Zone and increase in Pristine Zone designations made in response to public comments on the Draft Plan/EIS. **Water Resources** Implementing Alternative A would continue The effects of Alternative B would be The effects of Alternative C could be The effects on water resources from substantially the same as those of Alternative the current local long-term effects on water substantially the same as those of Alternative Alternative D (Proposed Plan) would be much resources at intensity levels generally ranging A, but with a somewhat higher likelihood of A because there still would be a chance that the same as Alternative A, with localized from negligible to potentially major, although more indirect adverse effects on local ice recreational use could affect ice caves, and long-term effects at negligible to major any major effects would be localized to small caves and playas resulting from access there could be limited impacts from grazing. intensities, depending on site location areas. The effects of intense recreational use improvements and increased recreational However, moderate adverse impacts would (proximity of ice caves to roads) or of ice cave pools or from livestock watering potentially be less widespread or frequent concentration of livestock. Implementing use, plus a possible increase in livestock because road access would be reduced. Alternative D (Proposed Plan) could cause on individual playas could create minor to developments. Impacts would generally moderate changes in nutrient concentrations. range from negligible to potentially moderate. local long-term effects on water resources at bacteria levels, and turbidity. The duration of but they would be localized. Depending on intensity levels ranging from negligible to potentially major. Intense recreational use effects would depend on the intensity of use the site-specific circumstances, the effects at each site. The effects would tend to be could be either short term or long term. could affect ice cave pools, and livestock localized to the individual water bodies. watering could affect individual playas,

causing minor to moderate changes in

turbidity. The effects would tend to be

no surface waters connect them.

nutrient concentrations, bacteria levels, and

localized to individual water bodies because



Alternative D Alternative A Alternative B Alternative C (Proposed Plan) (No Action Alternative)

Wildlife Resources

Under Alternative A. which would continue current conditions, effects on wildlife would continue to come primarily from conflicts with human uses of the Monument, including disturbance by people and vehicles and conflicts and competition with livestock use. Access and roads and associated visitor recreation would result in minor long-term adverse impacts, plus short-term moderate local adverse impacts on some species in high use areas. Sagebrush steppe restoration and weed management actions would cause some short-term minor impacts, with minor to major beneficial effects over the long term, depending on the species involved. Fire and suppression of fire would benefit some species but adversely affect others. The 50 sensitive species, which use all major habitats in the Monument and have a variety of life histories, would experience the same range of impacts as other wildlife. The bald eagle and the gray wolf, which are listed as threatened and endangered, are occasionally found in the Monument, but both are peripheral species, and the impacts on them would be negligible to minor. Current livestock use and potential new livestock developments, which would be authorized in accordance with the Idaho Standards for

Rangeland Health and Guidelines, could result in minor to moderate adverse impacts on sagebrush steppe habitat and/or sagebrush obligate wildlife species. In the long-term, the restoration of 40,000 acres of degraded sagebrush steppe would mitigate a portion of any adverse effects on wildlife

resources.

The impacts on wildlife from Alternative B would largely be the same as those of Alternative A, but the slight increase in acres restored would result in a related increase in improved habitat for sagebrush steppe species, a long-term minor to major beneficial effect. There could be a modest increase in adverse impacts from traffic disturbance in the larger Passage Zone area and the potential for increased or improved access to motor vehicles in that zone, as well as the development of a visitor use area in Kings Bowl and multiuse trails. The effects on wildlife would vary from species and species, but most effects would be long-term, minor to moderate, and localized.

The effects on wildlife from Alternative C would largely be the same as those described for Alternative A, but 15,000 more acres would be restored in Alternative C. resulting in more improved habitat for sagebrush steppe species. There would be fewer adverse impacts from traffic disturbance because the Passage Zone would be smaller in Alternative C, and the Primitive Zone would be larger. These designations would include the potential for decreased access for motor vehicles and related recreational use overall. resulting in fewer direct and indirect adverse impacts on all wildlife species.

The effects on wildlife from Alternative D (Proposed Plan) would be largely the same as those described for Alternative A, but twice as much acreage would be restored in Alternative D, resulting more improved habitat for sagebrush steppe species, a major longterm beneficial effect. Modest changes in the adverse impacts could result from increases in the Passage Zone roads for restoration and administration uses and in the potential for increased or improved access for motor vehicles in that zone.

Alternative A (No Action Alternative)	Alternative B	Alternative C	Alternative D (Proposed Plan)		
Air Resources Prescribed fire, wildland use fire, and fugitive dust from roads result in smoke or dust containing particles that adversely affect human health and air quality related values such as visibility. The effects on air quality from smoke and dust caused by the management activities of Alternative A typically would be short-term and local. The intensity of effects could range from negligible to moderate, depending on weather conditions and the location and size of fires. Most prescribed and wildland use fires would cause minor short-term effects. Fugitive dust from roads with current traffic use would produce short-term local adverse effects of negligible intensity.	The adverse effects on air quality from the management actions of Alternative B typically would be short term and limited to the local region. The intensity of effects would range from negligible to moderate, with most prescribed and wildland use fires having minor effects. Fugitive dust from potentially increased vehicle traffic use on unpaved roads would produce short-term local effects of negligible to minor intensity. A substantial increase in traffic would be required to elevate this impact to the moderate levels.	The adverse effects on air quality from Alternative C typically would be short term and limited to the local region. The intensity of effects would range from to negligible to moderate, with most prescribed and wildland use fires causing minor effects. Fugitive dust from roads with decreased traffic use and vehicle speeds would produce short-term local effects of negligible intensity.	The adverse effects on air quality from the actions of Alternative D (Proposed Plan) typically would be short term and limited to the local region. The intensity of effects would range from negligible to moderate, with most prescribed and wildland use fires causing minor effects. Fugitive dust from roads with current traffic use would produce short-term local effects of negligible intensity. The addition of non-Monument sources occurring during the same time period could produce more intense but still moderate effects throughout the Monument.		
	CULTURAL I	RESOURCES			
Alternative A would have a negligible to minor, adverse impact on maintaining the long-term integrity of the majority of archaeological resources within the Monument. The restoration program outcome and fire suppression would have a long-term, moderate beneficial effect, while initial restoration, suppression actions, grazing, and vehicle travel would result in short-term, minor to moderate adverse impacts.	Alternative B would have a moderate adverse effect on maintaining the long-term integrity of the majority of archaeological resources within the Monument by emphasizing recreational opportunities and vehicle access. The restoration program outcome and fire suppression would have a long-term, moderate beneficial impact, where vehicle travel, grazing, initial restoration, and suppression actions would result in short-term minor to moderate adverse impacts.	Alternative C would have a minor beneficial effect on maintaining long-term integrity of the majority of archaeological resources within the Monument by minimizing the amount of human and vehicle traffic into the Primitive and Pristine Zones. The restoration program outcome, fire suppression, and restricted access would all contribute to long-term, minor to moderate beneficial impacts. Vehicle traffic (limited), grazing, initial restoration, and suppression actions would result in short-term, minor to moderate adverse impacts.	long-term integrity of the majority of archaeological resources within the Monument by emphasizing off-site interpretation and visitor services, and by emphasizing range restoration. Short-term minor to moderate adverse impacts would also occur from vehicle travel,		
	NATIVE AMERICAN RIGHTS AND INTERESTS				
Alternative A would have a negligible to minor, beneficial impact on maintaining the long-term integrity of ethnographic resources and traditional use areas within the Monument.	By emphasizing recreational activities and vehicle access, Alternative B would result in a minor to moderate adverse effect on maintaining the long-term integrity of ethnographic resources and traditional use areas in the Monument.	By minimizing the amount of human and vehicle traffic into the Primitive and Pristine Zones, Alternative C would result in a minor beneficial effect on maintaining the long-term integrity of ethnographic resources and traditional use areas in the Monument, but by limiting vehicle access it could cause some hardship for elderly tribal members.	By emphasizing off-site interpretation, off-site visitor services, and range restoration, Alternative D (Proposed Plan) would result in a minor to moderate beneficial effect on maintaining the long-term integrity of the ethnographic resources and traditional use areas in the Monument, but by limiting vehicle access it could cause some hardship for elderly tribal members.		



Alternative A (Proposed Plan) (No Action Alternative) Alternative B Alternative C LAND USE AND TRANSPORTATION

Travel and Access

Increased visitation and other actions under Alternative A would cause minor adverse impacts on travel and access in the Monument, with long-term minor beneficial effects from road maintenance activities.

By emphasizing recreational opportunities and increased access, Alternative B would cause a long term minor to moderate adverse effect on road conditions in the Monument. but it also would lead to a long-term moderate beneficial effect on the availability of access and ease of travel to many locations in the Monument.

By closing more miles of road in the Monument, Alternative C would cause minor to moderate adverse impacts on access. Reduced vehicle traffic could result in minor beneficial effects on transportation safety, but there also might be minor adverse impacts on visitors using lower standard roads.

By emphasizing off-site interpretation, off-site visitor services, and long-term range restoration, Alternative D (Proposed Plan) would lead to long-term minor beneficial effects on access and road conditions in the Monument.

Alternative D

Livestock Grazing

Restoration activities and restrictions in the Pristine Zone in Alternative A could restrict grazing operations and/or increase costs associated with grazing, resulting in shortand long-term minor to moderate adverse impacts. The use of the Passage Zone for potential road improvement and facility development would result in short- and longterm minor beneficial effects, but the potential increased recreational use of this area could cause minor to moderate adverse impacts.

The cumulative effects of Alternative B on livestock grazing would be similar to those described for Alternative A, with both more beneficial effects and more adverse impacts from the additional access available in the expanded Passage Zone. Larger Passage Zone areas and the development of good access could result in road improvement and facility development, which would cause short and long-term minor to moderate beneficial effects. The increased recreational use and access in this area could cause minor to moderate adverse impacts.

The cumulative effects of Alternative C on livestock operations would be similar to those described for Alternative A, with some additional adverse impacts from the expanded restoration activities. The smaller number of areas in the Passage Zone would allow for some access and facility development, a negligible to minor beneficial effect, but any increased recreational use would cause minor adverse impacts on grazing operations. The large amount of Pristine Zone could increase costs and limit access, causing moderate adverse impacts on grazing.

Alternative D (Proposed Plan) would involve the largest acreage identified for restoration; this would cause short-term moderate adverse impacts on grazing operations, but the long-term effects would be beneficial. Compared to Alternative A, the increase in Passage Zone could result in more road improvement and facility development, and potentially more recreation use would result in minor to moderate beneficial effects from increased access and more ability to create new facilities. The Pristine Zone, which was increased in this FEIS, could restrict grazing operations or increase the costs associated with grazing, a moderate adverse impact.

Other Land Uses

Alternative A would result in negligible impacts on administrative facilities, realty actions, and existing minerals leases in the Monument.

Alternative B would cause negligible effects on realty actions and existing minerals leases in the Monument and a minor adverse impact on administrative facilities.

By minimizing the amount of human and vehicle traffic into the Primitive and Pristine Zones, Alternative C would cause long-term minor beneficial effects on the Monument's administrative facilities, realty actions, and existing minerals leases.

Because of its emphasis on off-site interpretation and visitor services, Alternative D (Proposed Plan) would result in negligible impacts on administrative facilities, realty actions, and existing minerals leases in the Monument.

Alternative A			Alternative D
(No Action Alternative)	Alternative B	Alternative C	(Proposed Plan)
Special Designation Areas			
The effects on the characteristics and purposes of special designation areas from Alternative A would be primarily negligible to minor and short term, but the effect of livestock use on natural conditions in WSAs could be moderate in some local areas where livestock concentrate, and the vegetative structure would be altered for long periods of time (5+ years). Road system management and limited regulation of off-highway vehicle use could cause negligible to moderate adverse indirect effects through the spread of invasive weeds and the creation of unauthorized routes.	The effects on the characteristics and purposes of special designation areas from Alternative B would be primarily negligible to minor and short term, but the effects from livestock use on natural conditions in WSAs could be moderate in some local areas where livestock concentrate, and vegetative structure would be altered for long periods of time (5+ years). The improvements to the road system could cause higher levels of indirect adverse effects through the spread of invasive weeds and the creation of unauthorized routes.	The adverse effects on the characteristics and purposes of special designation areas from most actions under Alternative C would be primarily negligible to minor and short term. The effect of livestock on natural conditions in WSAs could be moderate in some local areas where livestock concentrate, and vegetative structure would be altered for long periods of time (5+ years). Designating a new ACEC in North Laidlaw Park would lead to minor beneficial effects on the adjacent Craters of the Moon Wilderness and Great Rift WSA.	The adverse effects on the characteristics and purposes of special designation areas from Alternative D (Proposed Plan) would be mostly negligible to minor and short-term, with potential for more intense effects if restoration activities took place in or near any of the areas. The effect of livestock on natural conditions in WSAs could be moderate in some local areas where livestock concentrate, and vegetative structure would be altered for long periods (5+ years). Road system management and limited regulation of off-highway vehicle use could cause indirect adverse effects through the spread of invasive weeds and the creation of unauthorized routes. The additional Pristine Zone and reduction of Passage Zone in the Laidlaw Park area, compared to Alternative D as presented in the Draft Plan/EIS, would result in indirect beneficial effects to an area that had been discussed as an ACEC candidate during the scoping for this project.



Alternative A (No Action Alternative)

Alternative B Alternative C VISITOR EXPERIENCE

Alternative D (Proposed Plan)

Interpretation and Visitor Understanding

Posting information at backcountry access points and fire stations; offering school programs at the original NPS Monument; interpreting cultural resources; adding interpretive media, programs, exhibits, and waysides; and modest development in the Kings Bowl area would cause long-term minor beneficial effects on interpretation and visitor understanding, as would agency assistance to research and educational institutions.

Upgrading the Carey-Kimama and Arco-Minidoka Roads; offering school programs at the original NPS Monument: interpreting cultural resources; adding interpretive media, programs, exhibits, and waysides; and developing portable interpretive media would result in long-term minor beneficial effects on interpretation, as would the agencies assisting research and educational institutions, developing a cave restoration program, and interpreting sagebrush steppe restoration and integrated weed management. Long-term minor beneficial effects on interpretation would result from adding interpretive facilities along US 20/26/93, at significant sites within the Passage Zone, and at Kings Bowl.

Posting information at backcountry access points and fire stations, offering school programs at the original NPS Monument, developing portable interpretive media, and establishing a limited cave restoration program under Alternative C would result in long-term minor beneficial effects on interpretation. There would be cumulative minor beneficial effects from the Cooperative Weed Management Area programs.

Long-term minor beneficial effects on interpretation under Alternative D (Proposed Plan) would result from placing interpretive signs and information along the US 20/26/93 corridor and at access points; offering school programs (including off-site efforts) and off-site interpretation of cultural resources; posting interpretive media, programs, exhibits, and waysides; developing portable off-site interpretive media; and modest development in the Kings Bowl area. Agency assistance to research and educational institutions and an intensive cave restoration program also would cause long-term minor beneficial effects.

Long-term moderate beneficial effects would come from placing interpretive materials, facilities, and programs outside the Monument, in gateway communities and at a visitor center along the I 84 corridor, as well as from offering commercially guided services in the Monument. Commercial guide services could cause long-term minor adverse impacts on people visiting the interior of the Monument without a guide.

Recreation and Public Safety

Alternative A would result in a wide range of negligible to moderate adverse and beneficial effects on recreation and public safety, depending on the recreational experience desired.

Long-term moderate beneficial effects would result from greater protection of geological features in the original NPS Monument and indirectly from restoring sagebrush steppe communities. Keeping almost all existing roads open to motorized travel would result in long-term minor beneficial effects on certain recreational experiences, but such access also could affect other recreational experiences, resulting in long-term minor adverse impacts.

Long-term minor beneficial effects would result from the availability of undeveloped and would result in long-term minor beneficial

The added access available in Alternative B would contribute both beneficial and adverse effects, depending on the type of recreation desired.

Nearly all roads would remain open to motorized use under Alternative B, but some roads could be closed individually to protect resources. This continued level of access to Monument features and destinations would lead to long-term minor beneficial effects. However, this level of access, and its associated use, would result in long-term minor adverse effects on visitors seeking solitude. A few new Class I and Class II trails might be developed in certain areas, and trails in the Kings Bowl areas would be rehabilitated or maintained; these actions would result in long-term minor beneficial

The restricted access of Alternative C would contribute beneficial and adverse effects, depending on the type of recreation desired. Overall, the cumulative effects on recreational users from the actions of Alternative C, combined with the expected (primarily beneficial) effects from other activities and plans, would result in cumulative long-term moderate beneficial effects on recreational activities.

Long-term moderate beneficial effects would result from greater protection of geological features in the original NPS Monument, and there would be indirect long-term moderate benefits from restoring sagebrush steppe communities.

Long-term minor beneficial effects on certain recreational experiences would come from

The added access available in Alternative D (Proposed Plan) would contribute both beneficial and adverse effects, depending on the type of recreation desired. In Alternative D (Proposed Plan), the effects on recreation from increased efforts to protect geologic features through interpretative efforts would be the same as those described for Alternative A, resulting in long-term moderate beneficial effects in the original NPS Monument and long-term minor beneficial effects in the expanded part of the Monument. Interpretive efforts would also emphasize safety, resulting in safety improvements that would cause long-term minor beneficial

Long-term minor beneficial effects on certain recreational experiences would result from

effects on recreational visitors.

Alternative A (No Action Alternative)	Alternative B	Alternative C	Alternative D (Proposed Plan)
dispersed camping, but this also could affect people who prefer more developed, dispersed camping, resulting in long-term minor adverse impacts. Ongoing livestock operations would result in long-term minor to moderate adverse impacts on certain recreational experiences, but this also could affect other recreational opportunities, resulting in long-term negligible to minor beneficial effects.		converting some Class D roads to non- motorized trails, but such conversion also would affect other recreational experiences, causing long-term minor adverse impacts. Closing certain roads and ways in the Pristine Zone to motorized and mechanized vehicle travel would result in long-term moderate beneficial effects on certain recreational experiences, but long-term minor adverse impacts also would result from such closures, affecting other recreational experiences. These closures also would result in long-term moderate adverse impacts from reduced access. Long-term minor beneficial effects would result from the availability of undeveloped and dispersed camping, but this also could adversely affect people who prefer more developed, dispersed camping, resulting in long-term minor adverse impacts.	closing Class D roads or converting them to non-motorized trails to trails in the Primitive and Pristine Zones, but such conversion also would affect other recreational experiences, causing long-term minor adverse impacts. Long-term moderate beneficial effects would result from the availability of undeveloped and dispersed camping, but this also could affect people who prefer more developed, dispersed camping, resulting in long-term minor adverse impacts.



Alternative A (No Action Alternative)

Alternative B

Alternative D (Proposed Plan)

Visual Resources

Long-term minor beneficial effects on visual resources would result from greater protection of geologic features, from restoring sagebrush steppe communities, and from holding surface disturbing activities to the VRM management class standards that apply in Alternative A.

Several communications sites outside the Monument are visible from inside the Monument. These communication sites would cause long-term minor adverse impacts on visual resources during the day and longterm moderate adverse impacts on visual resources at night. Artificial light sources and light pollution from neighboring towns would affect the Monument's night sky, causing long-term negligible adverse impacts. Class B road use would cause short-term minor adverse impacts, and short-term minor to moderate adverse impacts would be caused by wildland fires and prescribed fires. Short-term negligible to moderate cumulative adverse impacts would result from outside sources of air pollution.

Rehabilitating or restoring 40,000 acres of sagebrush steppe communities and controlling weed infestations would return those vegetated areas to their natural appearance, a long-term minor beneficial effect on viewscapes in the Monument.

Long-term minor beneficial effects on visual resources would result from greater protection of geologic features and from restoring sagebrush steppe communities. Long-term minor to moderate beneficial effects would come from holding surfacedisturbing activities to VRM management class standards that apply in Alternative B. As in Alternative A, efforts to protect geologic features from damage would be increased. and rehabilitating or restoring 45,000 acres of sagebrush steppe communities and controlling weed infestations would return those vegetated areas to their natural appearance, a long-term minor beneficial effect on viewscapes in the Monument. Road upgrades would cause short-term minor cumulative adverse impacts, and short-term minor to moderate adverse impacts would result from Class B road use. Short-term minor to moderate adverse impacts would be

caused by wildland fires and prescribed fires.

adverse impacts would result from outside

sources of air pollution.

Long-term minor beneficial effects on visual resources would result from greater protection of geologic features; long-term minor to moderate beneficial effects would come from restoring sagebrush steppe communities; and long-term moderate beneficial effects would result from holding surface- disturbing activities to VRM management class standards that apply in Alternative C.

Alternative C

As in Alternative A. efforts to protect geologic features from damage would be increased, and rehabilitating or restoring 55,000 acres of sagebrush steppe communities and controlling weed infestations would return those vegetated areas to their natural appearance, a long-term minor beneficial effect on viewscapes in the Monument. Class B road use would cause short-term minor adverse impacts, and short-term minor to moderate adverse impacts would be caused by wildland fires and prescribed fires. Short-term negligible to moderate cumulative Short-term negligible to moderate cumulative adverse impacts would result from outside sources of air pollution.

Long-term minor beneficial effects on visual resources would result from greater protection of geologic features; long-term minor to moderate beneficial effects would result from holding surface-disturbing activities to VRM management class standards that apply in Alternative D (Proposed Plan), and restoring sagebrush steppe communities would create long-term moderate beneficial effects.

As in Alternative A. efforts to protect geologic features from damage would be increased, and rehabilitating or restoring 80,000 acres of sagebrush steppe communities and controlling weed infestations would return those vegetated areas to their natural appearance, a long-term minor beneficial effect on viewscapes in the Monument. The reduction of Passage Zone in the Laidlaw Park area included in Alternative D (Proposed Plan) of the FEIS would help to limit the visual intrusion and the visual fragmentation of that

Class B road use would cause short-term minor adverse impacts, and short-term minor to moderate adverse impacts would be caused by wildland fires and prescribed fires. Short-term negligible to moderate cumulative adverse impacts would result from outside sources of air pollution.

Soundscapes

The effects on natural soundscapes in the Monument would result mainly from transportation, administrative uses, and grazing. The use of the US 20/26/93 corridor would cause long-term minor adverse impacts Short-term negligible to minor adverse impacts would result from the use of various vehicles in the Monument, from fire management operations, and from livestock operations. Air operations would cause shortterm minor adverse impacts.

The effects on natural soundscapes in the Monument would result mainly from transportation, administrative uses, and grazing. Some increased noise would come from more use of the Passage Zone. The use of the US 20/26/93 corridor would cause long-term minor adverse impacts. Short-term negligible to minor adverse impacts would result from the use of various vehicles in the Monument, from fire management operations, and from livestock operations. Air operations would cause short-term minor adverse impacts.

The effects on natural soundscapes in the Monument would result mainly from transportation, administrative uses, and grazing. The use of the US 20/26/93 corridor would cause long-term minor adverse impacts. Short-term negligible to minor adverse impacts would result from the use of various vehicles in the Monument, from fire management operations and from livestock operations. Air operations would cause shortterm minor adverse impacts.

The effects on natural soundscapes in the Monument would result mainly from transportation, administrative uses, and grazing. The use of the US 20/26/93 corridor would cause long-term minor adverse impacts. Short-term negligible to minor adverse impacts would result from the use of various vehicles in the Monument, from fire management operations, and from livestock operations. Air operations would cause shortterm minor adverse impacts.

Alternative A (No Action Alternative)	Alternative B	Alternative C	Alternative D (Proposed Plan)
Social and Economic Conditions			
Alternative A would result in a negligible adverse or beneficial effect on the number of annual visitors to the Monument, length of stay, or visitor spending. There would be no direct, indirect, or cumulative effects on the regional economy or any economic or social indicator, other than moderate adverse impacts related to a gradual loss of mineral leases. Alternative A would not affect the rural character around the Monument.	Alternative B would result in a moderate increase in the annual number of visitors, would lengthen visitors' stay, and would increase recreational spending per visit. This moderate increase in visitors and visitor spending would result in a negligible effect on the local economy; a negligible or minor effect on local employment rates and per capita income; a negligible effect on the local population, health care, education, and crime rates around the Monument; and a moderate adverse or beneficial effect on visitor satisfaction. A moderate adverse impact would result from the gradual loss of mineral leases.	Alternative C would result in a negligible adverse or beneficial effect on the annual number of visitors to the Monument and Preserve, the length of visitors' stay, and the amount of visitor spending. There would be negligible direct, indirect, or cumulative effects on the regional economy or any economic or social indicator, other than the moderate adverse impacts from the gradual loss of mineral leases. Alternative C would not affect the rural character around the Monument.	Alternative D (Proposed Plan) would result in a moderate increase in the annual number of visitors, the length of visitors' stay, and the amount of recreational spending per visit. This moderate increase in visitors and visitor spending would result in result in a negligible effect on the local economy; a negligible or minor effect on local employment rates and per capita income; a negligible effect on the local population, health care, education, and crime rates around the Monument; and a moderate adverse or beneficial effect on visitor satisfaction. A moderate adverse impact would result from the gradual loss of mineral leases.

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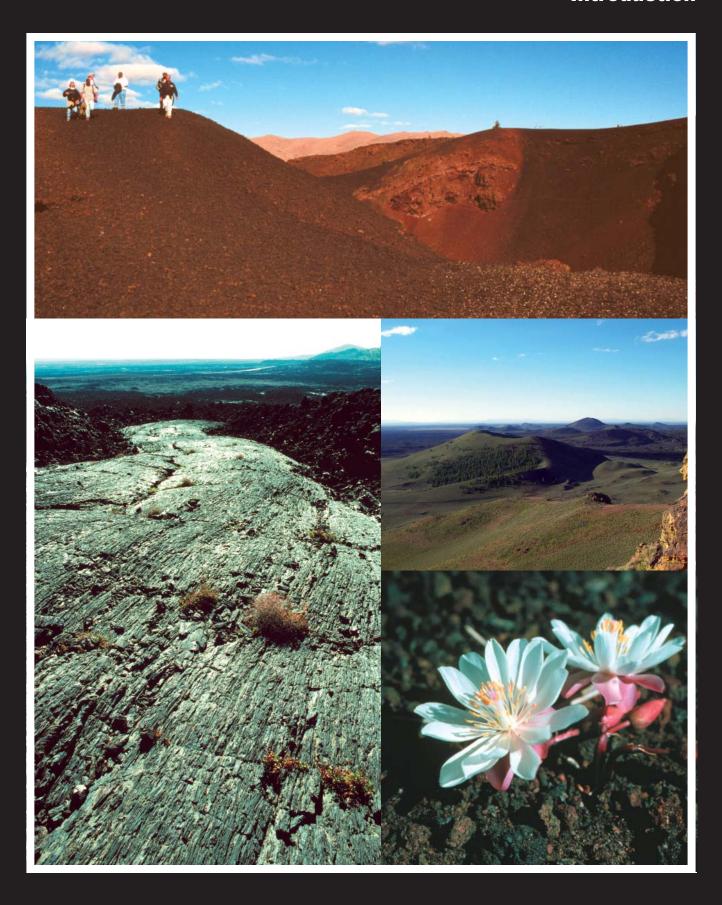
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Chapter 1 Introduction



Previous page, clockwise, from top left People hiking on cinder cone Chain of Craters Bitterroot Lava river

CHAPTER INTRODUCTION

n November 9, 2000, Presidential Proclamation 7373 expanded Craters of the Moon National Monument from roughly 53,400 acres to approximately 752,500 acres, including 737,700 acres of federal land¹. The President signed this proclamation to ensure protection of the Great Rift volcanic rift zone and its associated features. The Proclamation also placed the lands under the administration of both the National Park Service (NPS) and the Bureau of Land Management (BLM), with each agency having primary management authority over separate portions. In addition, on August 21, 2002, Public Law (PL) 107-213, 116 Statute [Stat.] 1052 designated the NPS portion of the expanded Monument as a National Preserve.

This document is the Proposed Management Plan/ Final Environmental Impact Statement (Proposed Plan/FEIS), which sets forth the future direction for the use and management of the Monument. This plan covers all expansion lands and the original NPS Monument. It addresses the direction set forth in the Proclamation and the designation of National Preserve status for NPS lands. It is intended to serve as a combined Resource Management Plan (RMP)/General Management Plan (GMP) to replace portions of four existing BLM RMPs and one NPS GMP. From here on, any reference to "the Monument" is intended to refer to all lands within the new Monument boundaries, including the

National Preserve.

¹ Area and length figures referenced here and through this document are based on the best available GIS data at the time of publication. These figures are based on the Universal Transverse Mercator Zone 11 North projection referencing the North American Datum of 1927. For improved accuracy and in response to public comments, revisions to GIS data, analyses, and calculations have been made resulting in minor change to acreage and mileage figures between the Draft Plan/EIS and this Proposed Plan/Final EIS.

MONUMENT DESCRIPTION

HISTORY

Craters of the Moon National Monument, the first national monument in Idaho, was established on May 2, 1924 (Presidential Proclamation 1694) for the purpose of protecting some of the unusual landscape of the Craters of the Moon Lava Field. This "lunar" landscape was thought to resemble that of the moon and was described in the Proclamation as "a weird and scenic landscape peculiar to itself."

Since 1924, the Monument was expanded and boundary adjustments made through five presidential proclamations issued pursuant to the Antiquities Act (34 Stat. 225, 16 U.S. Code [USC] 431). Presidential Proclamation 1843 of July 23, 1928, expanded the Monument to include certain springs for water supply and additional features of scientific interest. Presidential Proclamation 1916 of July 9, 1930; Presidential Proclamation 2499 of July 18, 1941; and Presidential Proclamation 3506 of November 19, 1962, made further adjustments to the boundaries. In 1996, Section 205 of the Omnibus Parks and Public Lands Management Act of 1996 (PL 104-333, 110 Stat. 4093, 4106) made a minor boundary adjustment to the Monument.



Spring flowers in lava

Presidential Proclamation 7373 of November 9, 2000, expanded the boundary to 737,700 acres of federal land (from about 53,400 acres) to include many more of the area's volcanic features. It also enlarged the Monument's administration by adding the efforts of the BLM to those of the NPS, all under the direction of the Secretary of the Interior. Federal legislation (PL 107-213, 116 Stat.1052), on August 21, 2002, made one further adjustment by designating the area within the expanded NPS boundaries of Craters of the Moon National Monument as a National Preserve, which allowed for hunting on lands that were closed to this activity by the November 2000 Proclamation. Appendix A provides copies of the proclamations and legislation related to creation of the current Monument and Preserve.

MONUMENT OVERVIEW

Craters of the Moon National Monument and Preserve is located in South Central Idaho (Figure 1) in Blaine, Butte, Lincoln, Minidoka, and Power Counties. It is within a one-hour drive of Twin Falls, Idaho Falls, Pocatello, and other population centers along the Interstate 84 (I-84), I-86, and I-15 corridors.

The Monument contains the youngest and most geologically diverse section of basaltic lava terrain found on the Eastern Snake River Plain, an extensive area of volcanic formations that reaches

across southern Idaho east to Yellowstone National Park. It includes three distinct lava fields: Craters of the Moon, Kings Bowl, and Wapi. The Craters of the Moon Lava Field is significant in that it is the largest basaltic lava field of predominantly Holocene age (less than 10,000 years old) in the conterminous United States.

The Monument protects most of the Great Rift area, which includes the numerous lava flows and other discharge from the Great Rift volcanic rift zone. It compares in significance to other

volcanic rift zones such as those found in Hawaii and Iceland. The Great Rift varies in width between one and five miles and extends for more than 50 miles.

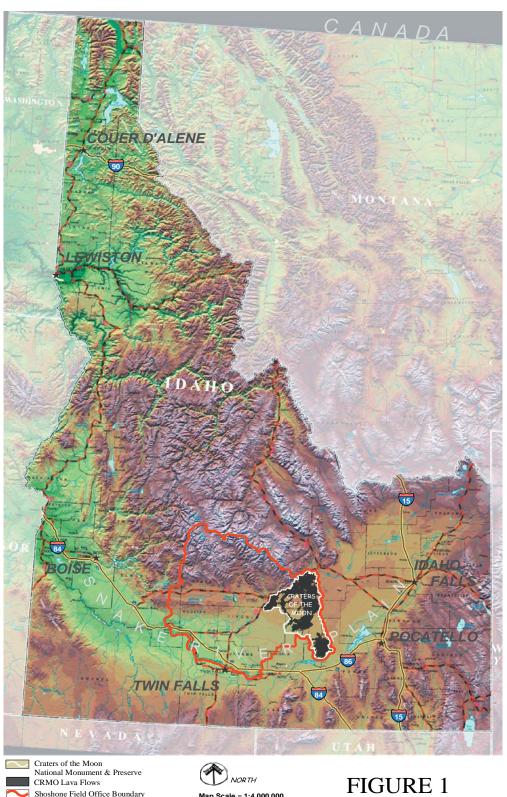
Many features and structures associated with basaltic volcanism are represented in the Great Rift Zone, including various kinds of lava flows, volcanic cones, and lava tubes. There are also lava-cave features such as lava stalactites and curbs, explosion pits, lava lakes, squeeze-ups, basalt mounds, an ash blanket, and low shield volcanoes. Some lava flows within the Great Rift Zone diverged around areas of higher ground and rejoined downstream to form isolated islands of older terrain surrounded by new lava. These areas are called "kipukas." In many instances, the expanse of rugged lava surrounding these small pockets of soil has protected the kipukas from people, animals, and even exotic plants. As a result, these kipukas represent some of the last undisturbed vegetation communities in the Snake River Plain.

Young (dominantly Holocene) lava flows and other features cover about 450,000 acres of the Monument. The remaining 300,000 acres in the Monument are also volcanic in origin, but older in age and covered with a thicker mantle of soil. This older terrain supports a sagebrush steppe ecosystem consisting of diverse communities of grasses, sagebrush, and shrubs, providing habitat



Kings Bowl, The Great Rift



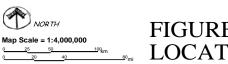






Shoshone Field Office Boundary Idaho's Intersta
US Highways Idaho's Interstate Highways

No warranty is made by the Bureau of Land Management or National Park Service for use of the data for purposes not intended by these agencies.



Craters of the Moon National Monument & Preserve U.S. Department of the Interior * National Park Service * Bureau of Land Management

for a variety of wildlife. This area also includes lava tube caves, older volcanic formations, and volcanic edifices locally referred to as buttes.

Approximately 70 percent of the Monument is in Wilderness Study Area (WSA) status or designated Wilderness. The Craters of the Moon Wilderness, designated in 1970, is located south of U.S. Highway 20/26/93 (US 20/26/93) within the original Monument. A substantial portion of each of the four WSAs includes lava flows administered by the NPS.

Both the Great Rift Zone and sagebrush steppe ecosystem contain a wealth of cultural resources dating back to the last volcanic eruptions, which were likely witnessed by the Shoshone people. Today, local tribes and communities, as well as visitors and other stakeholders, have an interest in the Monument. Current efforts include preserving cultural resources, wildlife habitat, and pristine wilderness qualities, while also allowing for a variety of resource uses.

Most visitor and educational opportunities are located near US 20/26/93 between the "gateway" communities of Carey and Arco in the north. In addition to guided walks and programs offered by the NPS, the Monument has several self-interpreting trails with waysides and a 7-mile Loop Drive. Facilities include a visitor center complex, which consists of a campground, museum, and bookstore.

PURPOSE AND NEED FOR THE PLAN

PURPOSE

The purpose of the Proposed Plan/FEIS is to provide the NPS and BLM with a comprehensive framework for managing public lands within the newly expanded Monument. Both agencies are required to maintain up-to-date management plans with an environmental impact statement level analysis. When approved, this plan will replace the land use planning decisions in the existing land use plans for this area. Decisions in existing plans that still have merit will be carried forward and incorporated into

the planning effort.

Once approved, this plan will become the Final Management Plan, which will provide a framework for proactive decision making, including decisions on visitor use and on managing and preserving natural and cultural resources. It will prescribe the resource conditions and visitor experiences that are to be achieved and maintained in the Monument over time. Where law, policy, or regulations do not provide clear guidance, management decisions will be based on the Monument's purpose, public concerns, and analysis of social and resource impacts of alternative courses of action, including long-term operational costs.

This document will not describe how particular programs or projects will be implemented or prioritized. Those decisions will be deferred to more detailed implementation planning, which will follow the broad, comprehensive plan presented in this document.

NEED

The Monument is currently being managed under four BLM land use plans, one NPS GMP and the Interim Management Guidelines (Appendix B). These five separate existing plans do not address current administrative boundaries and do not provide a comprehensive interagency framework for managing public lands within the new boundaries. They represent a fragmented approach that should be replaced with a single planning document that addresses both BLM and NPS policies, directives, and concerns. Also, the current plans do not specifically address the status of the NPS lands as a National Preserve. Therefore, there is a need for both BLM and NPS to review, update, and consolidate management direction for the new Monument and Preserve and to present relevant Monument planning information and decision making in one document.

PLANNING AREA DESCRIPTION

The Craters of the Moon National Monument and Preserve encompasses 737,680 acres of federal land,



8,250 acres of state land, and 6,560 acres of private land (see Table 22). The decisions made through this planning process will apply only to the 737,680 acres of federal land within the Monument boundary, referred to as "the planning area" (see Figure 2).

When the Monument was expanded in November 2000, lands within the planning area managed by the BLM were included within three field offices of the Upper Snake River District (Burley, Idaho Falls and Shoshone Field Offices). On October 1, 2004, Idaho BLM district boundaries were realigned and the Twin Falls District was created. As a result, the Craters of the Moon National Monument and Preserve now lies entirely within the Shoshone Field Office, which is now part of the Twin Falls District.

The planning area lies within the Snake River Plain. The Snake River Plain was built up by repeated volcanic outpourings. The chief physiographic features of this region are the flat lava plains broken only by occasional volcanic cones. The Snake River Plain north of the Monument is bounded by the northernmost occurrence of the Basin and Range Mountains. The dominant vegetation is sagebrush with associated grass and forb understory species. Cheatgrass (*Bromus tectorum*) is also widespread as an invasive, non-native component of the plant community.

DIRECTION FOR THE PLAN PURPOSE AND SIGNIFICANCE OF THE MONUMENT

Purpose statements are the foundation for all subsequent decisions and qualify the language used in the legislation to more clearly state why the Monument was established. They are the specific reasons why this area warrants Monument status. Based upon the Proclamations and Legislation (Appendix A), the purposes of Craters of the Moon National Monument and Preserve are to:

- Safeguard the volcanic features and geologic processes of the Great Rift.
- Provide scientific, educational, and interpretive opportunities for the public to foster an

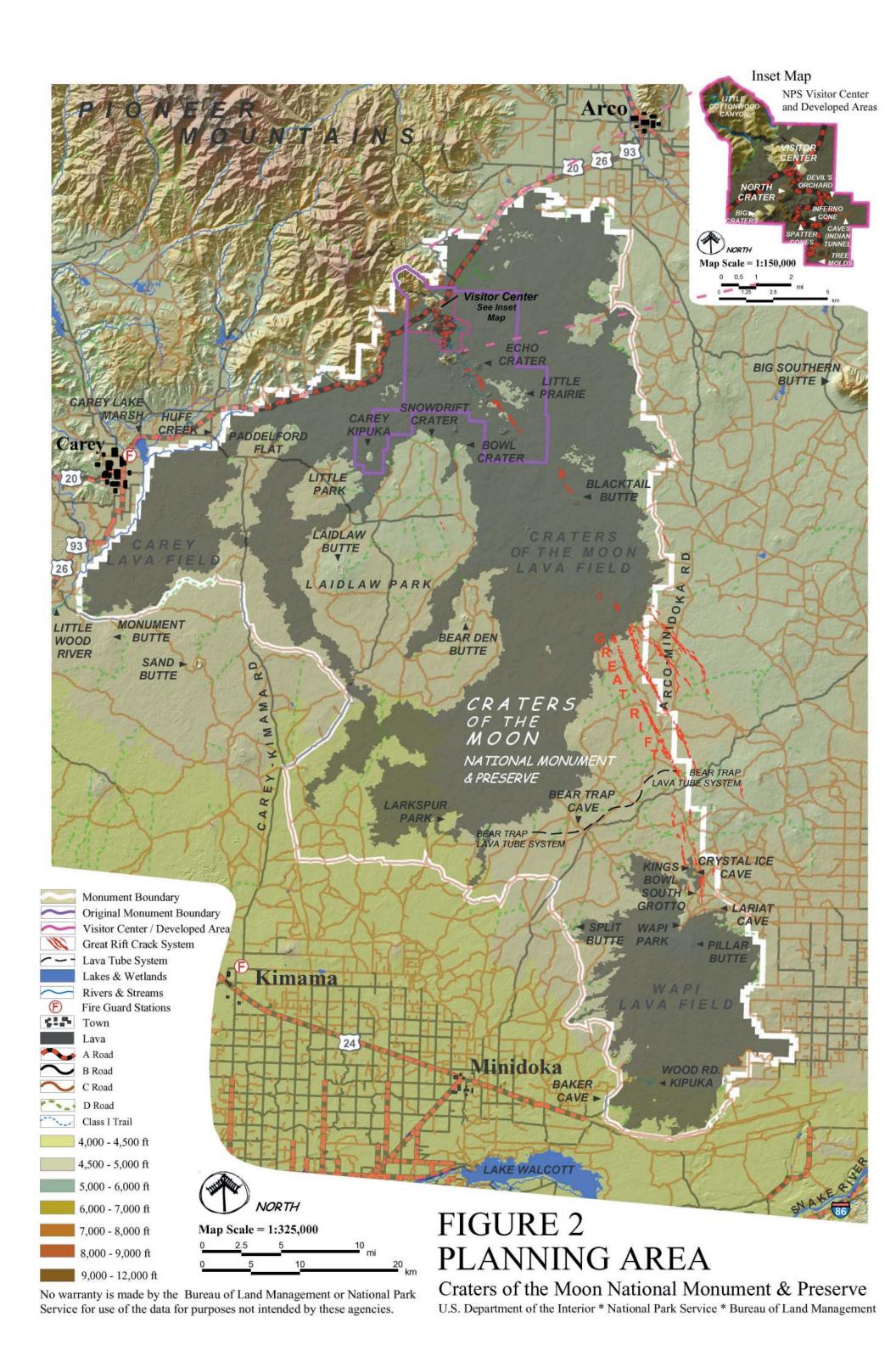
- understanding and appreciation of the volcanic geology and associated natural phenomena.
- Maintain the wilderness character of the Craters of the Moon Wilderness Area and of the WSAs.
- Perpetuate the scenic vistas and great open western landscapes for future generations.
- Protect kipukas (older vegetated terrain surrounded by lava flows) and remnant vegetation areas and preserve important habitat for sage-grouse, a BLM sensitive species.
- Continue the historic and traditional human relationships with the land that have existed on much of this landscape for generations.

Significance statements are also drawn from the proclamations establishing Craters of the Moon National Monument, as well as other descriptive documents. Significance statements explain what resources and values warrant the area's designation as a National Monument. Craters of the Moon National Monument and Preserve is significant because:

- It contains a remarkable and unusual diversity of exquisitely preserved volcanic features, including nearly all of the familiar features of purely basaltic volcanism – craters, cones, lava flows, caves, and fissures.
- It contains most of the Great Rift area, the deepest known land-based open volcanic rift, and the longest volcanic rift in the continental United States.
- Many of the more than 400 kipukas contain representative vegetative communities that have been largely undisturbed by human activity. These communities serve as key benchmarks for scientific study of long-term ecological changes to the plants and animals of sagebrush steppe communities throughout the Snake River Plain.
- It contains the largest remaining land area within the Snake River Plain still retaining its wilderness character. The Craters of the Moon Wilderness Area and WSAs within the Monument encompass over one-half million acres of

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undeveloped federal lands.

- It is a valued western landscape of over 750,000 acres that are characterized by a variety of scenery, broad open vistas, and pristine air quality.
- It contains abundant sagebrush steppe communities that provide some of the best remaining sage-grouse habitat and healthiest rangelands on the Snake River Plain.
- It contains many diverse habitats for plants and animals as a result of a long history of volcanic deposition.

MISSION GOALS

The following statements are general desired future conditions, or mission goals, for the Monument. These goals incorporate mandates required of Monument management and include input solicited from the public on how they would like to see this area managed.

- The Monument protects, restores, and monitors the geological features, the native biological communities, and the viewscape that characterize the Great Rift area.
- The public enjoys a range of recreational and educational opportunities compatible with protecting Monument resources.
- The Craters of the Moon Wilderness Area and the Wilderness Study Areas retain natural conditions and remarkable opportunities for solitude.
- The public has opportunities to learn about and appreciate the Monument's diverse history, prehistory and important cultural resources.
- The livestock permittees work with BLM to develop management actions to achieve sustainable, healthy rangelands.
- The public receives efficient and coordinated services from the NPS and BLM.

PLANNING CRITERIA (INCLUDING LAWS, **REGULATIONS, AND POLICIES)**

BLM planning regulations (43 Code of Federal Regulations [CFR] 1610) and NPS directives (Director's Order #2) require preparation of planning criteria to guide development of all RMPs/GMPs. Planning criteria are the constraints, or ground rules, which guide and direct the development of the plan. They influence all aspects of the planning process, including inventory and data collection, formulation of alternatives, estimation of effects, and ultimately the selection of a Preferred Alternative. They ensure that plans are tailored to the identified issues and that unnecessary data collection and analyses are avoided. Planning criteria are based primarily on standards prescribed by applicable laws and regulations and agency guidance, plus consultation with Federally Recognized Tribes, and coordination with other federal, state and local agencies; input from the public; analysis of information pertinent to the planning area; and professional judgement.

Consultation with Federally Recognized Native American Tribes (North American Indians or tribes) is mandated. The agencies have a trust responsibility to maintain government-to-government consultation and coordination with Federally Recognized tribes. Compliance with all federal laws regarding the protection of tribal cultural interests and cultural resource concerns will also be conducted in accordance with consultation with all affected tribes. in this case the Shoshone-Bannock Tribes and the Shoshone-Paiute Tribes. This recognizes and upholds the off-reservation rights of the Shoshone-Bannock Nation under the Fort Bridger Treaty of 1868.

The NPS and the BLM jointly developed the planning criteria for this planning effort, although the authorities of each agency differ. Each agency's authorities have their origin in separate and different enabling legislation and proclamations. As a result, some planning criteria are specific to one agency or the other. On the other hand, some laws, such as the

Clean Water Act, apply equally to both agencies and require the same planning criteria. The agencies' goal was to develop a single set of planning criteria to guide the development of a single management plan for the Craters of the Moon National Monument and Preserve. The BLM District Manager, Upper Snake River District, approved the planning criteria, with concurrence by the NPS Superintendent for Craters of the Moon National Monument and Preserve, in September 2002.

Appendix B presents the planning criteria for this planning effort and identifies the laws, regulations, and policies that form the basis for these criteria and are relevant to each of the resource topics discussed in this Proposed Plan/FEIS.

THE PLANNING PROCESS AND PUBLIC SCOPING

Planning provides an opportunity to create a vision and to define the Monument's role in relation to its national, historic, and communal settings. The planning process is designed to provide decision makers with adequate information about resources, impacts, and costs. Analyzing the Monument in relation to its surrounding natural, historic, and communal setting, as well as future challenges, helps managers and staff understand how the Monument could interrelate with neighbors and others in systems that are ecologically, socially, and economically sustainable. Decisions made within this planning context are more likely to be successful over time and promote more efficient use of public funds.

Figure 3 Planning Process

2001 Initiate Project Project Scoping

October Joint planning team assembled, identified project scope and issues, and customized planning project.

2002 Visioning Develop Alternatives

February
1st newsletter sent out to
obtain public suggestions on
qualities of Monument that
are valuable to preserve, uses
to be accommodated, and
concerns to be addressed.

June
Public open house meeting
held with agencies and
interest groups.

July 2nd newsletter sent out summarizing public comments from June workshops. August
Preliminary alternatives
developed by joint planning
team from public comments,
resource data, and planning
criteria.

October Alternatives reviewed by BLM state director and NPS regional director.

2003 Alternatives Evaluated and Developed

March May
Comments compiled and Environmental impacts of

April - December Draft Monument Management Plan

Develop Draft Monument Management Plan/EIS

January
3rd newsletter sent out
for public comment on
preliminary alternatives.

February Public workshop for input on alternatives.

Comments compiled and alternatives revised to reflect comments.

Environmental impacts of alternatives assessed.

written.

Final Plan Distributed

2004 Proposed Monument Management Plan/FEIS Prepared/Distributed

- 2005

April 2004 Draft Monument Management Plan distributed for public review May - July 2004 90-day public comment period; open house held to obtain comments on Draft Plan August 2004 - June 2005 Revisions to the Draft Plan; Proposed Plan prepared and printed. July 2005 Proposed Plan distributed to the public; 30-day no-action period. Fall 2005
Record of Decision Signed.
Final/Presentation Plan
prepared and distributed.
Implementation and
Monitoring.



The planning process begins by defining the purpose and significance of the Monument, including appropriate goals, and descriptions of resource conditions, visitor uses, and management actions to best achieve those goals. After goals are established, the treatment and use of Monument resources are considered, based on scientific and technical analyses that employ current scientific research, as well as applied and accepted professional practices. Management alternatives are generated on the basis of the goals and analyses. The alternatives are then scrutinized with respect to their consistency with the Monument's purpose and goals, the planning criteria, the impact on Monument resources, the quality of the visitor experience, the short- and longterm costs, and environmental consequences that extend beyond Monument boundaries. The overall planning process is illustrated in Figure 3.

An interdisciplinary planning team was assembled in the spring of 2002. It was comprised of the BLM Monument Manager, the NPS Monument Superintendent, and resource specialists and staff from both the NPS and BLM. The team also included representation from the Idaho Department of Fish and Game (IDFG), U.S. Fish and Wildlife Service (USFWS), and U.S. Geological Survey (USGS). The planning team met several times during 2002 and 2003 to gather background information, identify goals and objectives, examine resource issues, and develop alternatives. Throughout the planning process, public scoping efforts played a large part in helping to focus the plan, identify issues, and formulate alternatives. Public input was especially important in the development of the four management zones that were used to define the alternatives. Several Monument tours and briefings were held, three newsletters were released, and open houses were conducted in eight communities throughout southern Idaho. A detailed account of the public scoping process and public input received during the planning process for the Monument is provided under the Consultation and Coordination chapter of this Proposed Plan/FEIS (Chapter 5).

A Draft Plan/EIS was released in April 2004. This was followed by a 90-day public review period including public meetings. Over that time, comments were received from the public and various government agencies. These were gathered, analyzed, and used to complete the Proposed Plan/FEIS.

This Proposed Plan/FEIS is being released for a 30day no-action and protest period. Upon resolution of any protests, the NPS Regional Director and the BLM State Director will sign a Record of Decision, and a Final Management Plan will be released to the public. The plan is then implemented, subject to additional environmental analysis for site-specific actions.

RELATIONSHIP TO OTHER PLANS, **POLICIES, AND PROGRAMS**

This Proposed Plan/FEIS seeks to define what resource conditions and visitor experiences should be achieved and maintained over time to achieve the purpose of the Monument. This Proposed Plan/FEIS considers various approaches to use, management, and development, some of which may represent competing interests for the same resource base. Ultimately, the plan serves to define a series of desired future conditions that reflect the concerns and needs of the BLM and the NPS, as well as the public.

As previously described, this Proposed Plan/FEIS replaces the four existing BLM land use plans and the current NPS GMP, and serves as a combined RMP/GMP for the Monument. As such, it covers a broad area; addresses a wide range of programs, concerns, and resources; and must, therefore, function at a general level.

The more specific actions required to attain the goals and outcomes defined in this Proposed Plan/FEIS are accomplished through implementation plans. These plans apply to specific program areas, projects, or operational and development strategies for specific areas of the Monument. Because planning is an ongoing and continuous process, this Proposed Plan/FEIS must be viewed as a dynamic document. A number of plans already completed would remain in effect, and this Proposed Plan/FEIS reflects those still deemed to be useful. Future implementation plans would use the goals and conditions defined in this Proposed Plan/FEIS as their starting point. Implementation plans for actions with potential to affect the environment would require formal analysis of alternatives in compliance with the National Environmental Policy Act (NEPA) and related legislation, including the National Historic Preservation Act (NHPA).

The following explains the relationship between this planning effort and existing plans, policies, or programs of both the BLM and NPS. Other relevant plans, policies, or programs (e.g., state/local land use plans) that were considered in the preparation of this document are listed and discussed in the Environmental Consequences chapter as part of the cumulative impact scenario.

RELATIONSHIP TO CURRENT BLM PLANS AND POLICIES

The following current BLM land use plans and Environmental Impact Statements have been considered in the development of this Proposed Plan/FEIS. Once approved as a Management Plan, this plan will replace portions of the following plans that provide direction for the Monument.

Fire, Fuels, and Vegetation Management

Direction: The BLM is preparing an EIS that will amend 12 existing land use plans (USDI 2004). The area, which includes the Monument, is composed of public lands managed by the Burley, Pocatello, Shoshone, and Upper Snake River field offices, which are now part of the Idaho Falls and Twin Falls districts. The Draft Fire, Fuels, and Vegetation Management Direction Amendments (FMDA) overlaps this Proposed Plan/FEIS direction related to fire, fire-affected resources, and sagebrush-steppe restoration. Management direction proposed and analyzed for the Draft FMDA/EIS Preferred Alternative is incorporated in this Proposed Plan/FEIS as "Management Guidance Common to All Alternatives" (see Chapter 2).

Monument Resource Management Plan/EIS and Amendments: The 1985 Monument RMP is the comprehensive framework for managing approximately 1,179,000 acres of public land north of the Snake River in south-central Idaho. RMPs make resource allocations, resolve conflicts between competing uses, and ensure management of the public lands in accordance with the principles of multiple use and sustained yield. The Monument RMP covers approximately 60 percent of the Monument.

Big Lost Management Framework Plan, Grazing EIS, and Amendments: This 1983 Management Framework Plan (MFP) provides management direction for more than 300,000 acres of public land north of US 20/26/93 in central Idaho. MFPs predate RMPs in the BLM land use planning system. MFPs make management decisions and land use allocations by watershed-based planning units. The Big Lost MFP covers less than 5 percent of the Monument.

Big Desert Management Framework Plan, Grazing EIS, and Amendments: This 1981 MFP covers an area west of Idaho Falls in southeastern Idaho and includes 1,162,463 acres of public land. The Big Desert MFP covers approximately 30 percent of the Monument.

Sun Valley Management Framework Plan, Grazing EIS, and Amendments: This 1981 MFP covers approximately 245,000 acres of public land in the northern portion of the BLM Shoshone Field Office. The Sun Valley MFP covers less than 5 percent of the Monument.

Great Rift Proposed Wilderness EIS: This 1980 EIS recommended that 341,000 acres of the Great Rift WSA be designated as part of the National Wilderness Preservation System. The entire Great Rift WSA is within the Monument.

Interior Columbia Basin Ecosystem Management Project: The Interior Columbia Basin Ecosystem Management Project (ICBEMP) was based on Presidential direction to develop a scientifically sound, ecosystem-based strategy for managing the 64 million acres of public lands administered



by the Forest Service and the BLM within the Columbia River Basin, and portions of the Klamath and Great Basins in Oregon. The project was based on concerns over forest and rangeland health, uncharacteristically intense wildland fires, threats to certain fish and wildlife species, and concerns about local community social and economic well being. A Final EIS and Proposed Decision were published in December 2000. No basin-scale Record of Decision has been signed, nor is one expected.

Public lands administered by the BLM and NPS within the Craters of the Moon National Monument planning area are included within the lands covered by the ICBEMP analysis. The BLM State Directors and Regional Foresters are completing the project through the use of the Interior Columbia Basin Strategy (Strategy). The BLM is guided by a 2003 Memorandum of Understanding (MOU) to implement this Strategy in the amendment and revisions of RMPs and project implementation on public lands administered by BLM throughout the Interior Columbia River Basin. The Strategy directs BLM to use the findings of the ICBEMP science, new information, and the best available science in developing land use plans and implementing resource management projects, including consultation and participation in plan and project design. The ICBEMP analysis and findings have been incorporated into this Proposed Plan/FEIS.

RELATIONSHIP TO CURRENT NPS PLANS AND POLICIES

NPS plans and studies used to develop this document are listed in the bibliography. The plans listed below directly influenced the development of this Proposed Plan/FEIS.

NPS Management Policies – 2001: This volume is the basic policy document of the NPS and is revised at appropriate intervals to consolidate agency policy decisions or to respond to new laws and technologies, new understandings of park resources and the factors that affect them, or changes in American society.

1992 Craters of the Moon General Management

Plan: The 1992 GMP was the guiding document for the original NPS Monument. Interim Monument guidelines were developed in 2001 with cooperative input from both agencies. The additional lands added as a National Preserve (approximately 410,000 acres) require the updating of this plan.

1996 Resource Management Plan: NPS RMPs provide a long-range comprehensive strategy for natural and cultural resource management. The strategy describes a program of activities to achieve desired future conditions. The current plan does not incorporate any of the National Preserve resources.

October 2000 Wildland Fire Management

Plan: The Wildland Fire Management Plan (FMP) provides fire management direction for the original NPS Monument, not the expanded lands.

Fiscal Year 2000 – 2005 Strategic Plan for Craters of the Moon National Monument and

Preserve: NPS strategic plans contain the mission statement and goals, describe strategies to accomplish goals, and identify external factors that could significantly affect achievement of goals. The Strategic Plan does not reflect the 2000 expansion, but the Fiscal Year 2005 – 2008 Strategic Plan will.

1993 Cave Management Program: The 1993 Cave Management Program provides management guidelines for the original NPS Monument's cave resources. This plan is no longer adequate, as it does not reflect the expanded areas of the Monument.

1989 (revised 1996) Backcountry/Wilderness Management Plan: This plan provides management guidelines for basic recreation use of the backcountry and wilderness of the original NPS Monument.

RELATIONSHIP TO OTHER PLANS AND POLICIES

Fire Management Planning

The National Fire Plan is an agreement between the U.S. Department of Agriculture (USDA) Forest Service and the Department of the Interior to help protect communities and natural resources as well as the lives of firefighters and the public. The federal wildland fire management agencies worked closely with states, tribes, local governments, and interested publics to prepare the 10-Year Comprehensive Strategy, completed in August 2001. This strategy outlines a comprehensive approach to the management of wildland fire, hazardous fuels, and ecosystem restoration and rehabilitation on federal and adjacent state, tribal, and private forest and range lands in the United States. It emphasizes measures to reduce the risk to communities and the environment and provides an effective framework for collaboration to accomplish this.

An implementation plan was signed in June 2002 to provide consistent and standard direction to implement the common purposes of the Strategy and the National Fire Plan. BLM will incorporate guidance from the National Fire Plan and 10-Year Comprehensive Strategy in this Proposed Plan/FEIS.

FUTURE PLANNING NEEDS

This Proposed Plan/FEIS is intended to describe resource conditions and visitor experiences to be achieved within the planning area at the Monument. The agencies will be cooperatively preparing or amending existing "implementation plans" to implement this Proposed Plan/FEIS. The implementation plans are necessarily dynamic in order to accommodate new information. Following is a list of examples of implementation plans that may be necessary at the Monument.

Comprehensive Travel Management Plan: Proclamation 7373 requires that a transportation plan be prepared that addresses the actions, including closures or travel restrictions, necessary to protect

the objects for which the Monument was established. The management zones, road and trail classification system, and the provisions of the Proposed Plan/FEIS provide the framework for developing a Comprehensive Travel Management Plan. The agencies intend that this will be the first implementation—level plan to be prepared for the Monument. In addition to identifying potential road closures or travel restrictions, the plan will include specific standards for road maintenance and/or improvement and will include a published map/brochure designed for public use, showing road standards, maintenance levels, and appropriate use.

NPS Resources Management Plan: This plan establishes long-term resources management objectives, documents progress towards those objectives, and serves as a guideline for funding specific resource projects.

Fire Management Plan: Management actions analyzed in this Proposed Plan/FEIS, FMDA, and Wildland FMP (USDI NPS 2000) would be incorporated into an implementation plan to guide suppression efforts and proactive fuels and restoration treatments. The FMP would detail management goals and constraints within specific fire management areas. While these goals and constraints would comply with direction set forth in this Proposed Plan/FEIS and FMDA, the FMP would be a dynamic document updated regularly to best protect Monument resources.

Wilderness/Wilderness Study Area Management

Plan: This plan guides the preservation, management, and use of the designated Wilderness and WSAs. One of the principal purposes is to establish indicators, standards, conditions, and thresholds beyond which management actions would be taken to reduce human impacts to wilderness resources. The current Backcountry / Wilderness Management Plan is no longer adequate as it does not incorporate the WSAs within the National Preserve.

Comprehensive Interpretive Plan: This plan would identify the primary stories or interpretive themes needed to provide each visitor with an



opportunity to develop an understanding of the Monument. Interpretation is a process of education designed to stimulate curiosity and convey messages to the visiting public. This plan would guide the future development of interpretive facilities and programs such as signs, waysides, brochures, guided walks, and oral presentations.

Cave Management Plan: This plan is developed to meet the requirements of the Federal Cave Resources Protection Act (FCRPA) to perpetuate the natural systems associated with caves. This plan would build upon the Cave Management Program (USDI NPS 1993) and the Cave Resources Management Plan (USDI BLM 1999).

Cultural Resources Management Plan: This plan would guide the preservation, management, and use of cultural resources. The plan would also include a Native American Graves and Repatriation Act (NAGPRA) Action Plan to address inadvertent discovery of NAGPRA materials within the Monument.

Integrated Pest Management Plan(s): This plan would provide guidance related to potential pests, monitoring indicators, action thresholds, and treatment methods to address pest issues within the Monument. Among these issues are invasive exotic plants, grasshoppers, and large predators. This plan would be accomplished cooperatively with the USDA.

Kings Bowl Development Concept Plan: All of the alternatives for this Proposed Plan/FEIS identify some level of development in the Kings Bowl area. These range from the minimal needed to protect the resources and protect visitors from hazards in the area, to that of more fully accommodating visitor access and opportunities for exploring the unique features present in the area. A Development Concept Plan allows for the agencies to examine in greater detail options for protecting the area while accommodating public access and use.

Administrative History: This is a report that documents the history of a unit of the National Park

System. It records the evolution of its management and programs in order to familiarize new managers, staff, and other agency officials with the area and provide them with a historical basis for future management decisions. This report would probably be an addendum to the Administrative History of Craters of the Moon National Monument (Louter 1992).

Volcanic Hazards Analysis: No contingency planning has ever been done for the advent of a volcanic eruption. No flow routing modeling has been done to help predict where lava would go and how far it would travel based on possible eruption sites and volumes. Therefore, the team has recommended that a comprehensive volcanic hazard assessment be conducted. This would provide the necessary information for crisis and risk management contingency planning.

PLANNING ISSUES AND CONCERNS

BLM and NPS staff and the public raised several issues and related concerns in meetings, responses to newsletters, and discussions with staff from other agencies and organizations. This section identifies those issues or concerns that were discussed and that are considered in development of alternatives and in completion of the EIS, as well as those that are beyond the scope of this planning process.

ISSUES AND CONCERNS ADDRESSED BY THIS PROPOSED **PLAN/FEIS**

The following summarizes the primary issues that were raised and considered in the preparation of this Proposed Plan/FEIS, organized by major category.

Development

What kinds of Monument facilities and services will there be apart from the existing Monument developments?

- Are new public facilities needed within this Monument within the next 20 years?
- Are there Monument facilities desired outside the Monument?
- What opportunities do surrounding "gateway" communities want for providing services and facilities to visitors?
- Do any existing facilities need to be removed?

Travel and Access

What type of road and trail system will be needed for travel to and access within the Monument?

- Will any existing roads within the Monument be closed, or will there be any restrictions on mechanized or motorized travel in order to protect Monument resources?
- Will there be increased risks for fire and noxious weeds?
- Will any existing roads be upgraded? Will some roads receive better maintenance?
- Will access to portions of the Monument be improved?
- Are access improvements needed outside the Monument?
- How will the counties be consulted on transportation issues?

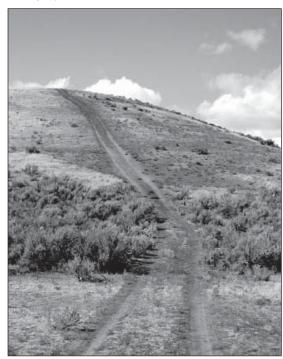
Public Uses and Safety

What is the extent and location of public uses within the Monument?

- How will existing recreational uses of the land be affected?
- Will visitation increase and how would it be managed?
- What opportunities will there be for advancing public understanding and appreciation for the Great Rift area?
- Are there new safety concerns associated with visitor use?
- What level of emergency assistance is needed within the Monument?

Authorized Uses

How will grazing be managed in the Monument?



Hill in Monument showing signs of off-road vehicle use

- Are new range improvements needed to enhance rangeland health?
- Is there a need to authorize access to private and state land inholdings?
- What is the need for local material for road maintenance?
- What opportunities will there be for outfitter and guide operations and concession activities within the Monument?
- What will the criteria be for determinations on new requests for leases or permits?
- What valid existing rights existed at the time of the Proclamation on November 9, 2000?

Natural and Cultural Resources

How will the natural and cultural resources be protected?

• How will the more fragile and significant of the geological features be protected from visitor use impacts?



- What protection will be offered for cultural resources?
- · How will the Shoshone-Bannock and Shoshone-Paiute tribes be consulted?



Sagebrush habitat

- How can we best maintain the integrity and understand the scientific value of both the cultural and geological features, the kipukas, and the large tracts of sagebrush habitat in good condition?
- How will the introduction and spread of noxious weeds be controlled? And are kipukas more important to target for eradication efforts?
- Will there be new guidelines for weed, grasshopper, and predator control programs?
- What opportunities will there be for scientific research?
- How will fire management be addressed in the Monument?
- How will restoration and rehabilitation efforts be addressed on Monument lands?
- How will management actions protect intangible resources like night sky and natural quiet, the integrity of viewscapes, and pristine air quality?

Monument Administration

What issues does the staff face in the day-to-day operation of the Monument?

• Will new management (administrative) facilities be needed?

- What public services will the federal government and local governments provide, and which will be provided jointly?
- Will the federal government assist local governments with needs for emergency services within the Monument?
- Will state and private property within or adjacent to the Monument be affected?
- Will the Monument be identified with signs to distinguish it from surrounding public lands? Will NPS and BLM lands within the Monument be marked differently?

Visitor Experience

What kinds of experiences do visitors want?

- What opportunities will there be for enhancing understanding and appreciation of the Great Rift area?
- What kind of interpretive and educational services does the public want?
- Which visitor activities are suitable and where can they occur?

ISSUES BEYOND THE SCOPE OF THIS PROPOSED PLAN/FEIS

A number of public comments raised issues concerning laws, regulations, or actions that cannot be taken because they are beyond the scope of this Proposed Plan/FEIS; inconsistent with laws, regulations, or policy; or more appropriately addressed by an implementation plan. For example, a new road across a WSA near Bear Park was suggested, which would be inconsistent with BLM WSA Policy. Another comment asked for road improvements in the vicinity of Big Southern Butte. Big Southern Butte is outside of the planning area. Another comment suggested that the Monument be scaled back to include only outstanding features. Reducing the size of the Monument is outside the authority of the BLM and NPS. Several commenters called for the elimination of grazing on the expanded Monument lands. The Proclamation that expanded the Monument directs BLM to manage livestock grazing under existing laws, regulations, and policies. BLM

authority is limited to administering grazing permits on BLM-administered lands only.

Comments that are more appropriately addressed by implementation plans were often site-specific. One comment called for signed turnouts on US 93 with trails to access Goodale's Cutoff. While this comment is too site-specific to be addressed by this Proposed Plan/FEIS, the plan will generally address signing, vehicle access, and interpretation, as well as the management of Goodale's Cutoff. Another comment called for offices in Arco or Minidoka to fill the need for additional public services. While BLM and NPS planning authority is limited to the lands within the Monument, the Proposed Plan/FEIS addresses the need for facilities as well as opportunities to work with local communities and governments to provide visitor services and administrative facilities.

Some comments provided very specific ideas as to how areas should be managed. One comment suggested Moss Cave be monitored and visitor use remain light. Another suggested overnight use at Old Juniper Kipuka should be allowed only with a backcountry permit and that group size should be restricted to 10 persons.

Many comments like those presented above are best addressed in future implementation plans. The agencies have saved all comments and will use those in future planning efforts and/or day-to-day management.

IMPACT TOPICS

Impact topics were identified from those issues that were within the scope of the Proposed Plan/FEIS and from relevant BLM and NPS policies and regulations. The specific topics addressed under the Affected Environment and Environmental Consequences chapters of this document include the following:

Natural Resources

- Geological Resources
- Soils

- Vegetation, including Special Status Species, and Fire Management
- Water Resources
- Wildlife, including Special Status Species
- Air Quality

Cultural Resources

Archaeological and Historical Resources

Native American Rights and Interests

Land Use and Transportation

- Travel and Access
- · Livestock Grazing
- Other Land Uses
- Facilities
- · Lands and Realty
- · Mineral Materials
- Special Designation Areas
- Wilderness
- Wilderness Study Areas
- Research Natural Areas, National Natural Landmark, Areas of Critical Environmental Concern

Visitor Experience

- Interpretation/Visitor Understanding
- · Recreation, including Public Health and Safety
- Visual Resources
- Soundscapes

Social and Economic Conditions

Each topic is discussed under Affected Environment and analyzed under Environmental Consequences. Also, these topics form the basis for much of the discussion of Management Guidance in the Alternatives chapter.



IMPACT TOPICS CONSIDERED BUT DISMISSED FROM FURTHER EVALUATION

The following impact topics were discussed during the planning process, but were dismissed from further consideration for the reasons mentioned below.

PRIME AND UNIQUE FARMLAND

In August 1980, the Council on Environmental Quality (CEQ) directed that federal agencies must assess the effects of their actions on farmland soils classified as prime or unique by the Natural Resource Conservation Service (NRCS) of USDA. There are no prime or unique farmlands in Craters of the Moon National Monument and Preserve; therefore, the topic of prime and unique farmland was dismissed as an impact topic in this document.

FLOODPLAINS

Floodplains within the Monument are very limited in extent, and none of the actions proposed in any of the alternatives of this Proposed Plan/FEIS adversely affect floodplains or cause substantial changes to the floodplains or their management. Therefore, floodplains are not included as an impact topic.

HAZARDOUS MATERIALS

The topic of public health and safety is addressed in the EIS as a subset of Social and Economic Conditions. There are no hazardous materials used, or disposed of, in connection with Monument operations other than small amounts of cleaners, maintenance chemicals, and fuels used in daily operations. Therefore, a separate topic of hazardous materials was not included as an impact topic in the document.

ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, focuses federal attention on the envi-

ronment and human health condition in minority and low-income communities, promotes nondiscrimination in federal programs, and provides access to public information and an opportunity to participate in matters that may affect these populations.

Local residents in communities surrounding the Monument include low-income and minority populations. However, no distinct areas of low-income or minority populations were identified near the Monument, or any that depend upon Monument resources for such purposes as subsistence hunting or fishing. Actions proposed under the alternatives would not cause disproportionate adverse human health or environmental impacts to minority and/or low-income populations.

The planned sagebrush steppe restoration program associated with all the alternatives would occur within the Monument and would not affect populations in nearby communities. Monument operations and permitted uses, including associated tribal treaty rights, would continue similar to current conditions, including recreational use, grazing, and hunting in permitted areas. In addition, the subject of tribal treaty rights was included in the impact analysis (under "American Indian Rights and Interests") and is addressed in this Proposed Plan/FEIS. All areas of the Monument would remain available and open to all ethnic groups and income levels, and no action would displace users of the Monument to low-income or ethnically sensitive areas. For these reasons, environmental justice was dismissed as an impact topic in this document.

CULTURAL LANDSCAPES

Although there has never been a formal, systematic inventory to document the presence of any cultural landscapes within the Monument, none has ever been identified by NPS or BLM staff, and the public did not identify any cultural landscapes during scoping for the Proposed Plan/FEIS. Therefore, the topic was not included under Cultural Resources as a separate impact topic.

MUSEUM COLLECTIONS

The Monument's museum collections include objects, specimens, and archival and manuscript collections that serve as scientific and historical documentation of the Monument's purpose and resources. None of the alternatives considered would adversely affect museum collections or cause substantial changes to the collections or their management, so this topic was not included as a separate impact topic under Cultural Resources.

OTHER PLANNING ISSUES

The following planning issues relate to the Monument's carrying capacity and the adequacy of its boundaries. These issues are common to all alternatives.

CARRYING CAPACITY

Carrying capacity is the character of use that can be supported over a specific time by an area developed at a certain level without causing excessive damage to either the physical environment or the experience of the visitor. To make sure that visitation does not impair resources and compromise visitor experience, NPS is required by law to determine carrying capacity. This determination is based on the purpose, significance and goal statements unique to the Monument. At this level of planning, carrying capacity is defined by the management zone prescriptions for levels of development and desired visitor experiences for that particular zone.

There are three major components of carrying capacity: physical capacity (e.g., parking spaces, facility space, road capacity); visitor experience (such as congestion in the Visitor Center, opportunities for solitude); and resources (including natural and cultural resources). The carrying capacity in a given area could be exceeded for any of these components, which would trigger management action.

The north end of the Monument is the only area that presently has facilities intended to invite and accommodate large numbers of visitors. Roads, parking areas, and related facilities have been designed and located to meet current visitation. This includes consideration of the impact of visitors upon nearby resources. Before any additional facilities are built or current facilities expanded, the agencies will assess whether such development might have any detrimental effects on natural or cultural resources or visitor experience.

Part of this assessment is a visitor survey conducted jointly by the University of Idaho and the NPS in 2004. Some of the information gathered as part of that survey was whether visitors feel there are any problems with crowding at existing facilities, infringement on opportunities for solitude, or other related issues with carrying capacity. The BLM conducted a similar survey on the backcountry areas of the Monument in 2004. The results of both surveys will alert the agencies to potential carrying capacity problems that will need to be addressed.

Visitation has not reached the point where visitors cause unacceptable levels of resource damage. Due to the older design of the Visitor Center, the museum and bookstore can be congested during peak visitation periods. Because of the harsh terrain, use of the wilderness and backcountry areas is very light.

Carrying capacity for the Craters of the Moon Wilderness is based on "Limits of Acceptable Change" (LAC) planning framework (USDI NPS 1992). The LAC System for Wilderness Planning is appropriate for use at the Monument, since it is a planning process consisting of a series of interrelated steps leading to the development of measurable objectives, defining desired backcountry and wilderness conditions. It also suggests management actions necessary to maintain or achieve desired conditions. Emphasis is placed on defining and achieving the resource and social conditions desired for the area rather than determining how many users an area can sustain.

MONUMENT BOUNDARIES

Monument Boundaries

Proclamation 7373 set aside and reserved as an addition to Craters of the Moon National Monument all



lands and interests in lands owned or controlled by the United States within the boundaries of the area described on the map entitled "Craters of the Moon National Monument Boundary Enlargement," which is included as part of Appendix A. The previous National Monument was an area of 53,420 acres, with all federal lands administered by the NPS.

In a memorandum from the Secretary of the Interior (memo from the Secretary of the Interior dated November 24, 2000) the BLM was instructed to complete a metes and bounds description of the Monument. BLM completed a cadastral survey of the external monument boundary in 2001. Based on that survey, the Monument and Preserve boundary contains 737,680 acres of federal land. The total acreage encompassed by the Monument and Preserve boundary is 752,490 including 8,250 acres of state land and 6,560 acres of private land, which are inholdings and not part of the Monument.

National Preserve Boundaries

Proclamation 7373 states that the NPS shall have primary management authority over the portion of the Monument that includes the exposed lava flows. This land area was described as including approximately 410,000 acres and designated as a unit of the National Park System "Craters of the Moon National Preserve" by PL 107-213 on August 21, 2002. The NPS continues management authority over the original 53,420 acres of Craters of the Moon National Monument. Proclamation 7373 provides that the BLM has primary management authority over the remaining portion of the Monument.

The boundary between the NPS- and BLM-administered lands is often difficult to describe and locate. In some cases, distinguishing the boundary between the NPS- and BLM-administered land on the ground would be a matter of concern to the agencies and the public. Surveying the entire boundary between the agencies would be costly and is not recommended at this time. When a situation requires determination of the National Preserve boundary within the external Monument boundary, the boundary line would be described by the edge of the brown-colored lava shown on the most recent USGS 7.5-minute series

topographic quadrangle maps available on the date of the Proclamation 7373.

Boundary Modifications

Potential boundary modifications are examined in a management plan to identify potential additional lands with significant resources or opportunities, or which are otherwise critical to fulfilling the Monument's mission. Based on these criteria, eight areas have been identified for potential boundary modifications. These are described in detail in Appendix C, which contains maps relating to these potential modifications.

In addition, the agencies referred to previous studies looking at boundary modifications for Craters of the Moon, including the Reconnaissance Survey – Expansion of Craters of the Moon National Monument (1989) and Management Alternatives – Expansion of Craters of the Moon National Monument (1990), and concluded no additional recommendation for boundary adjustments needed to be proposed in this plan. However, when the BLM develops the Shoshone Resource Management Plan, scheduled to begin in 2006, areas such as Sand Butte identified by the public for consideration for inclusion someday within the Monument will be examined to determine if additional protection is warranted.