STATEMENT FOR MANAGEMENT FEBRUARY 1979 (Revised)

PACIFIC NORTHWEST REGION NATIONAL PARK SERVICE

PREPARED	BY:	Superintendent
APPROVED	BY:	Regional Director
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STATEMENT FOR MANAGEMENT CRATERS OF THE MOON NATIONAL MONUMENT

I. PURPOSE OF THE PARK

To preserve for the educational, inspirational and recreational use of the public, certain portions of the volcanic geological features and other areas of scenic, scientific, natural and recreational values.

A Proclamation of May 2, 1924, President Calvin Coolidge - The above purpose of the park is based on the following relevant portions of the presidential proclamation, public law, establishing Graters of the Moon National Monument.

". . . remarkable fissure eruption together with its associated volcanic cones, craters, rifts, lava flows, caves, natural bridges, and other phenomena characteristic of volcanic action which are of unusual scientific value and general interest. . .for educational values and to administer the area in accordance with the act of August 25, 1916, establishing the National Park Service."

II. SIGNIFIC NOW OF THE MONUMENT'S RESOURCES

The primary natural resource of Craters of the Moon National Monument is the vast basaltic lava flows and associated features which resulted from extensive fissure type eruptions from 2,000 to 5,000 years ago.

Included in the Monument are examples of nearly all known features of basaltic volcanism. The uniqueness of the area lies not so much in individual features as in the existence of the many diverse features of basaltic volcanism compressed within a remarkably small reographic area.

Wildlife is surprisingly numerous, although not seen in large numbers by the average visitor. The most common are mule deer, coyote, marmot, ground squirrel, chipmunk, mountain bluebird, Clark's nutcracker, Lewis woodpecker, and black-billed magpie.

Vegetation is varied on both the cinder slopes and lava flows. Over 300 species of plants are native to the Monument. The most common are big sagebrush, untelope bitterbrush, rubber rabbitbrush, and limber pine in the older flows and cones. The geologically younger areas support mock orange, tansybush, and dwarf buckwheat. The Little Cottonwood Canyon drainage, north of the highway, supports Douglas-fir and aspen.

Numerous archeological sites have been recorded within the Monument. These sites consist mainly of sparsely scattered artifacts on the ground surface and are of limited significance archeologically. The sites are being preserved, however, as intensive investigation might yield additional information at a future date. Interpretively, the sites are a testimony to man's survival and use of a seemingly hostile environment.

III. LAND CLASSIFICATION (See Land Classification Map, Appendix B)

As most of the Monument area remains largely unaltered by human activity except for present developments essential for its management, use, and appreciation, only two land classification categories have been considered, and these are the <u>Natural Zone</u> and the <u>Development Zone</u>.

Natural Zone: The Natural Zone is broken down into the following subzones within Craters of the Moon National Monument.

The wilderness subzone comprises over 80 percent of the total Monument acreage and lies south and east of Highway 20/93A and the main visitor use area. Total acreage is 43,243. Minimum use of this subzone takes place at present with not more than a few hundred persons a year making the effort to venture forth into this fairly hostile environment, and probably not more than a few dozen of them camp overnight in the area. These lands are managed to protect wilderness values in accordance with wilderness management policies.

The outstanding natural feature subzone has numerous geological (volcanic) phenomena possessing unusual intrinsic value or uniqueness. A number of these features are available for firsthand viewing by the visitor along the monument road system. This is not to infer that the outstanding natural features of the park lie only in this subzone. In fact, the majority of these features are located within the wilderness, but as such are appreciated only by a handful of visitors each year. Being included in the wilderness subzone, the latter features have not been indicated on the map. Their remoteness might be considered to be advantageous to the Monument's management program as some of the more delicate and fragile formations still show signs of minimum damage even though few persons have viewed them. Those visitors truly interested and intrigued by the more unique features of the monument will make the effort necessary to visit them regardless of their location and, in most cases, will appreciate the resource enough to minimize their impact upon them.

The <u>natural environment subzone</u> is located in the northwest corner of the monument and is managed much the same as the wilderness subzone. Visitor impact is light and fairly well limited to the use of a group campground in the area. Roads in the area are utilized by the park staff for administrative purposes only. Springs existing in this section of the park provide the domestic water needs of the residents and park visitors.

While this natural environment subzone does not have the individually spectacular geological features, it provides an outstanding remnant of the high desert/lower alpine transitional zone. Also, it is a superb wildlife sanctuary, presenting a protected oasis for a large mule deer herd and numerous other wild creatures. Although this type of habitat currently exists within the surrounding region, there are no other examples that have not been heavily impacted by livestock and civilization. Indeed, because the drainage is almost entirely within the boundaries of the monument, it is a naturally functioning ecosystem. Presently, human impact is minimal and the resource is allowed to perpetuate itself naturally.

The northwest corner of this area takes in part of the Pioneer Mountain Range, sections of which U.S. Forest Service RARE II study recommends be established as wilderness areas.

Development Zone: The Development Zone at Craters of the Moon National Monument at this time is relatively minor in size, and it is unlikely that it will increase much in size in the near future. The bulk of this zone consists of the headquarters area (visitor center, equipment garage and shop area), residential area (quarters for permanent and seasonal employees), campground, and a seven-mile paved road system with its associated trailhead parking areas, wayside exhibits, and nature trails. In addition, the north unit of the monument contains a group campground and a graveled access road to the monument's water system. In 1977 a well was drilled in this area to provide a more dependable source of water. The appurtenances necessary to activate this well (chlorinator building and power being the main ones) should be under construction during the summer of 1979. Once in operation, the old water source (springs) will be separated from the system. However, the capabilities to reconnect it will be available in case of an emergency need. Other minor development considerations, if undertaken, would remain within the main headquarters complex which now exists. This some is managed to provide and maintain development that serves the needs of Monument management and relatively large numbers of visitors.

IV. INFLUENCES ON MANAGEMENT

A. <u>Legislative</u> and Administrative Constraints

July 18, 1941—a proclamation by the President of the United States excluding land from Craters of the Moon National Monument, Idaho. Such land excluded was needed for the construction of Idaho State Highway 22 (now numbered 20/26/Alt. 93). A total of 94.19 acris were deleted.

March 29, 1961—informal cooperative agreement between Craters of the Moon National Monument and the state office of the Bureau of Land Management, Boise, Idaho, covering the prevention, detection, and suppression of fires occurring on Bureau of Land Management or Monument lands. (See Informal Cooperative Agreement - Appendix C)

November 19, 1962—a proclamation (No. 3506) by the President of the United States adding a 180-acre kipuka (an island of soil and vegetation within a lava flow) and the intervening lands between the kipuka and the then existing monument boundaries, thereby aggregating 5346.41 acres within the park. The area was added because it was scientifically valuable for ecological studies and contained a mature, native sagebrush-grassland association which has been undisturbed by man or domestic livestock. (See Appendix D)

October 23, 1970—Public Law 91-504 establishing certain lands within Creters of the Moon National Monument as wilderness. Total acreage was 43,243. (See Appendix E)

B. Regional Influences

The increasingly popular use of native lava rock in building and fireplace construction throughout southeastern Idaho dictates a vital need on the part of management to provide additional securit; and protection for the unique and diverse forms of lava that reside within the boundaries of the Monument.

The grazing of domestic stock on both private and federal lands adjacent to the northwest unit of the monument has created a wildlife habitat within the monument that is conducive to producing a sizeable deer population. This reasoning is based on the availability of more food for the animals within the park confines due to the absence of grazing by domestic stock. Presently, there seems to be a good balance between wildlife and the vegetative resource. However, research is necessary to ensure proper management and to continue to encourage a stable, naturally functioning ecosystem. The carrying capacity of this range must be recognized and routine deer census and biological transect analysis will assure proper management of the entire resource.

Trespass of domestic livestock (mainly sheep) has been a common and continuing activity for nearly 20 years in the northern section of the park. A small fencing project was completed in 1977 by a YCC group in an attempt to help control the trespass situation. Although there has been insufficient time to properly evaluate the fence's performance, it is felt that it is a step in the right direction and should help solve the problem with domestic stock. Emphasis on liaison with other agencies such as Bureau of Land Management and the Public Health Service will continue to be a primary tool used to ensure the protection of the natural resource and adherence to water quality standards.

The great variety of recreational activities provided by the rivers, lakes, and mountains of central Idaho and the short driving distances from the main population centers to this area have done much to determine the visitor use at Craters of the Moon National Monument. The Monument is situated so that most highway travelers heading for the Sawtooth Mountains and Salmon River country from the east and southeast usually take a route that passes through the Monument. In addition, the shortest and fastest route from Yellowstone and Grand Teton National Parks to Boise, Idaho, and points west or vice versa is via Highway 20/26/Alt.93 which passes through the Monument.

The above factors have caused the Monument to become a rest stop for a considerable number of the highway travelers and its camping facilities to become an overnight stopping point. Usually by 10 a.m. each morning, many of the campers have packed up and moved on to their next destination. Strong efforts are made by the interpreters at the evening campfire programs to try to entice more of the visitors to remain for part of the following day to enjoy more of the experiences the Monument has to offer.

Exploration for geothermal energy in the region outside the Monument boundaries is likely to occur in the immediate future. Those exploration activities will have some visual impact on the Monument and will tend to lessen the wilderness character of some adjacent desert environment. Should energy development take place, much greater impact can be anticipated on Monument wilderness values.

C. Within Park Influences

Removal of volcanic material (pahoehoe, AA, bombs, spatter, etc.) by monument visitors over the years has, in some locations of the park been fairly heavy. Some of its effects have been the complete removal of volcanic phenomena such as tree molds and lava trees that have been made accessible to the park visitor by trails or signing. Some of the major spatter cones have been depositories for litter and rocks, the latter being in most cases taken from the spatter cone formation itself.

Off-trail travel by the Monument visitor in certain locations (mainly the Spatter Cones and Big Craters areas) has produced an adverse impact on these volcanic phenomena. From the air, one can easily spot areas of human use by the red-brown coloring of the broken surface as contrasted with the oxidized gray of the undisturbed surroundings. Because they are not regenerative, like a biological resource, the volcanic features must be managed more carefully if they are to retain their unique character. Management of the geologic resource is the most important responsibility of the National Park Service at Craters of the Moon National Monument. The keynote is protection.

Prior to 1978, visitor travel to the Monument reached its highest peak in 1971 when 274,000 persons visited the area. It is felt that the World Jamboree Boy Scout gatherings in Northern Idaho might have been one reason for the high visitation in 1971. From 1971 through 1974, the visitation dropped rather significantly, with a low of 163,000 recorded in 1974. The year 1974, which immediately followed the previous winter's energy crisis, made the highway traveler somewhat wary about traveling long distances without a good guarantee of fuel along the way. With the cost of gasoline much higher in 1975, but with plenty of fuel available, visitation rose nearly 35 percent to 217,000. From 1976 to 1978, a steady increase in visitation occurred. It was 251,000 in 1976 and increased to 258,000 in 1977. Visitation increased 29 percent in 1978 when it reached its highest point of 360,000 visitors. Fairly steady gasoline prices during 1978 may have contributed to this large increase. Unless there is a gasoline shortage or prices soar to an unrealistic high, it is expected that they will not dramatically affect visitation figures at Craters of the Moon National Monument in the near future.

The time spent within the confines of the monument by visitors has not increased appreciably over the past six years. The average stay seems to be less than two hours per visitor (for those utilizing the monument on a day—use basis).

The Monument is rarely a final destination for any of its visitors. Probably 90 percent of the overnight visitors utilize the campground facilities only as a rest stop along their route to a primary destination. One of the major interpretation goals has always been to encourage this latter group to remain a little longer at the Monument and take advantage of the interpretive services offered to the visitor.

The monument's major campground is located adjacent (within one hundred yards) to the park headquarters and residential area. It leaves much to be desired in the location of a campground, but any thoughts on relocating it have been rejected. With the campground now remaining in sight, serious thought needs to be given to the upgrading of this facility. With the modern type of recreational vehicles now in use, the campground sites and road system are mostly below standard when it comes to handling them.

A short spur trail was constructed in 1976 to allow better access into the park's wilderness. The trail spurs off another trail (Tree Molds Trail) and joins with an old road that use to provide access to the wilderness. Wilderness use, especially day—use has increased significantly due to this new route. However, overall, wilderness use in the monument is well below capacity. The increase in use of this area will require that management provide for better protection of the resources that lie within the wilderness through increased ranger patrols and programs to increase the visitor's awareness of how to enjoy the wilderness in a manner that ensures the long—term protection of its values. A Wilderness Use pamphlet, produced by the National Park Service in cooperation with the Craters of the Moon Natural History Association, will undoubtedly help to provide the public with the knowledge necessary to protect against user impact.

It is felt that there are some deficiencies in our knowledge of the park's natural and cultural resources. Most every year some independent type of research or study is being undertaken by colleges or universities at the monument. Currently, several research projects are underway. These will supplement our present knowledge and suggest solutions to resource management problems.

The most significant and complete geological study since the mid 1920's is to be concluded and published by the fall of 1979. The project is the result of recent studies conducted on BIM lands adjacent to Craters of the Moon. In addition, the geological history of the park lava fields is under re-evaluation by the U.S.G.S. The result of these studies will more than likely be a classification of some of the BIM lands as wilderness. Also of great benefit to the park will be the interpretive value of the study. Information from it will be published by the Craters of the Moon Natural History Association and offered as a sales item at the visitor center.

Knowledge and research of the park's biological resource is minimal. Efforts are underway to plan and complete a Basic Resource Inventory, Deer Study and Range Analysis. These projects will provide the basis for the end result — a Resource Management Plan. The historical and archeological surveys do fulfill the requirements of Executive Order 11593.

- 8 -V. MANAGEMENT OBJECTIVES Preservation of geological resources to preserve to the greatest extent possible the basaltic volcanism features of the Monument through effective interpretation and protection programs. Preservation of natural resources—To preserve and perpetuate the natural eco systems and biological communities within the park. Preservation of archeological sites—to identify, evaluate, protect, and preserve the park's archeological and historic resources in a manner consistent with historic preservation law and National Park Service policies. Physical development—to provide, in the most environmentally suitable locations possible, only those minimal developments necessary to serve the needs of park visitors and park management. Existing facilities will be upgraded where feasible to provide proper access to the handicapped and all new development will be fully accessible to the handicapped. Energy conservation—to comply with Executive Order 12003 goals and reduce the average energy use on a per square foot basis in existing park buildings by 20 percent by 1985, and establish energy plans for reducing energy consumption in other park operations. In addition, provide energy conservation messages to the park visitor through demonstration projects and regularly scheduled interpretive programs. Water conservation to emphasize water conservation, through recycling or other means, in the development of management and visitor facilities as well as in the park's operating programs. Interpretation—to foster an understanding and appreciation of the environmental forces that formed the present-day landscape of the Columbia Plateau as well as an understanding of the plants and animals which have adapted to this harsh habitat. Recreational use-to encourage camping, picnicking, hiking, and other recreational uses by providing quality facilities for a more meaningful experience for the visitor. Cooperation to promote perpetuation and compatible use of Morument and regional resources through cooperation in planning and management activities with other governmental agencies as well as private interests. Wildlife-to promote a continuing program of scientific research and study to gather information that will lead to the development of a sound deer management program.

- Grazing—to work on a cooperative basis with other government agencies, primarily the Bureau of Land Management and the Idaho Department of Fish and Game in matters of mutual concern, such as the effect of stock grazing in the vicinity of the monument and its impact on management of park wildlife—primarily big game.
- Wilderness preservation and management—to establish objective policy and guidelines (backcountry management plan) that will ensure a strong and definite committment by park management to the preservation of the monument's wilderness.
- can be studied, planned and programmed for action, temporary steps will be taken by the park to upgrade the quality of the Lava Flow Campground to insure the safety of the park visitor and his/her personal property (recreational vehicles).