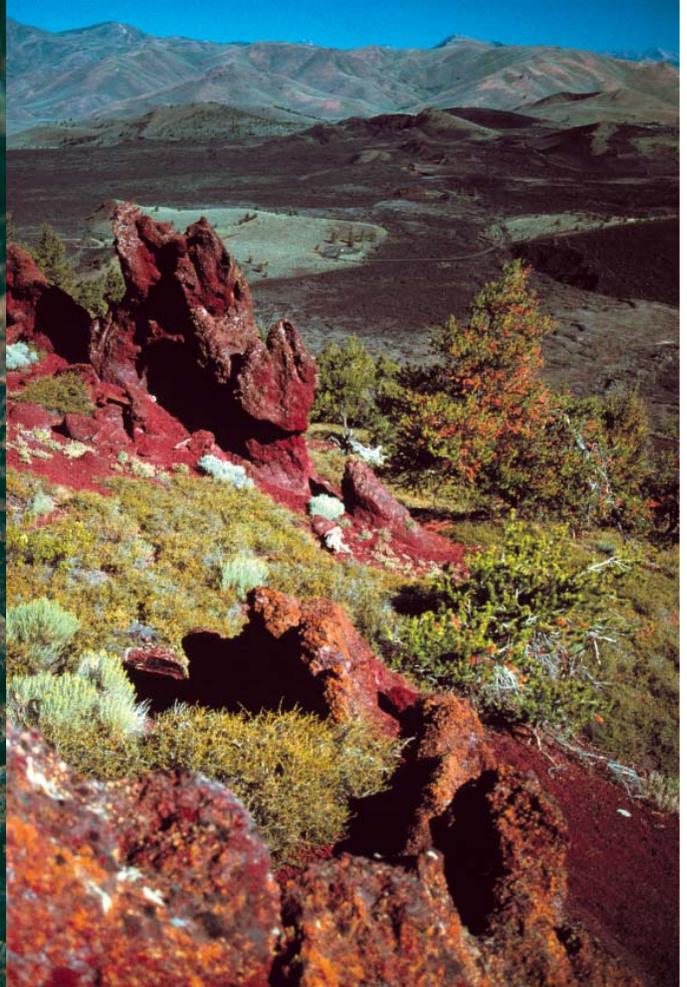


**Appendices, Glossary, Abbreviations and Acronyms,
Bibliography, List of Preparers, and Index**



Previous page, clockwise, from top left
Lava arch
Big Craters view
Sprouts

APPENDIX A

PROCLAMATIONS AND ENABLING LEGISLATION

Proclamation 1694

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA
A PROCLAMATION

[No. 1694—May 2, 1924—43 Stat. 1947]

WHEREAS, there is located in townships one south, one and two north, ranges twenty-four and twenty-five east of the Boise Meridian in Butte and Blaine Counties, Idaho, an area which contains are markable 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; and

WHEREAS, this area contains many curious and unusual phenomena of great educational value and has a weird and scenic landscape peculiar to itself; and

WHEREAS, it appears that the public interest would be promoted by reserving these volcanic features as a National Monument, together with as much land as may be needed for the protection there of.

NOW, THEREFORE, I, Calvin Coolidge, President of the United States of America, by authority of the power in me vested by section two of the act of Congress entitled, “An Act for the preservation of American antiquities,” approved June eighth, nineteen hundred and six (34 Stat., 225) do proclaim that there is here by reserved from all forms of appropriation under the public land laws, subject to all valid existing claims, and set apart as a National Monument all that piece or parcel of land in the Counties of Butte and Blaine, State of Idaho, shown as the Craters of the Moon National Monument upon the diagram hereto annexed and made a part hereof.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy or remove any feature of this Monument and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management and control of this Monument as provided in the act of Congress entitled “An Act to establish a National Park Service and for other purposes,” approved August twenty-fifth, nineteen hundred and sixteen (39 Stat., 535) and Acts additional thereto or amendatory there of.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

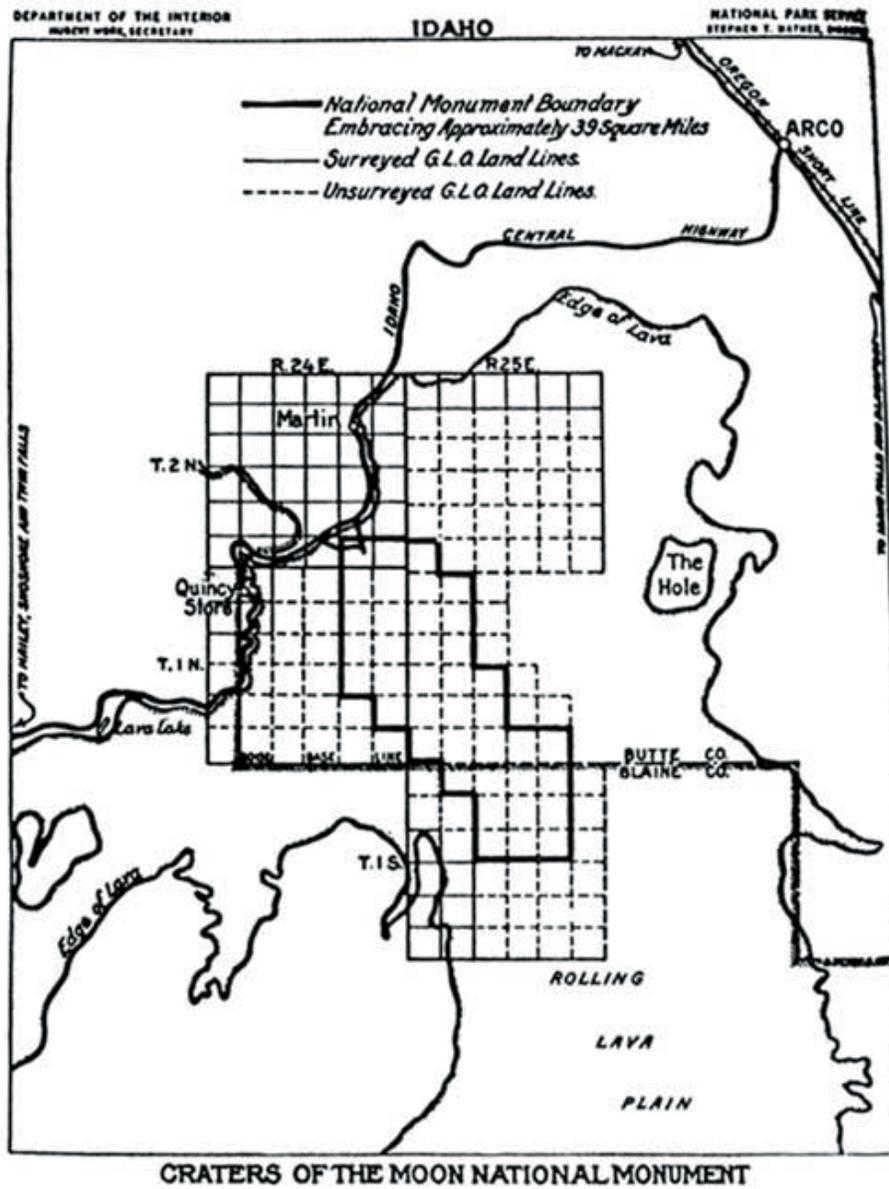
[SEAL]

DONE in the City of Washington this 2d day of May in the year of our Lord one thousand nine hundred and twenty-four and of the Independence of the United States of America the one hundred and forty-eighth.

By the President:
CHARLES E. HUGHES,
Secretary of State.

CALVIN COOLIDGE

Proclamation 1843



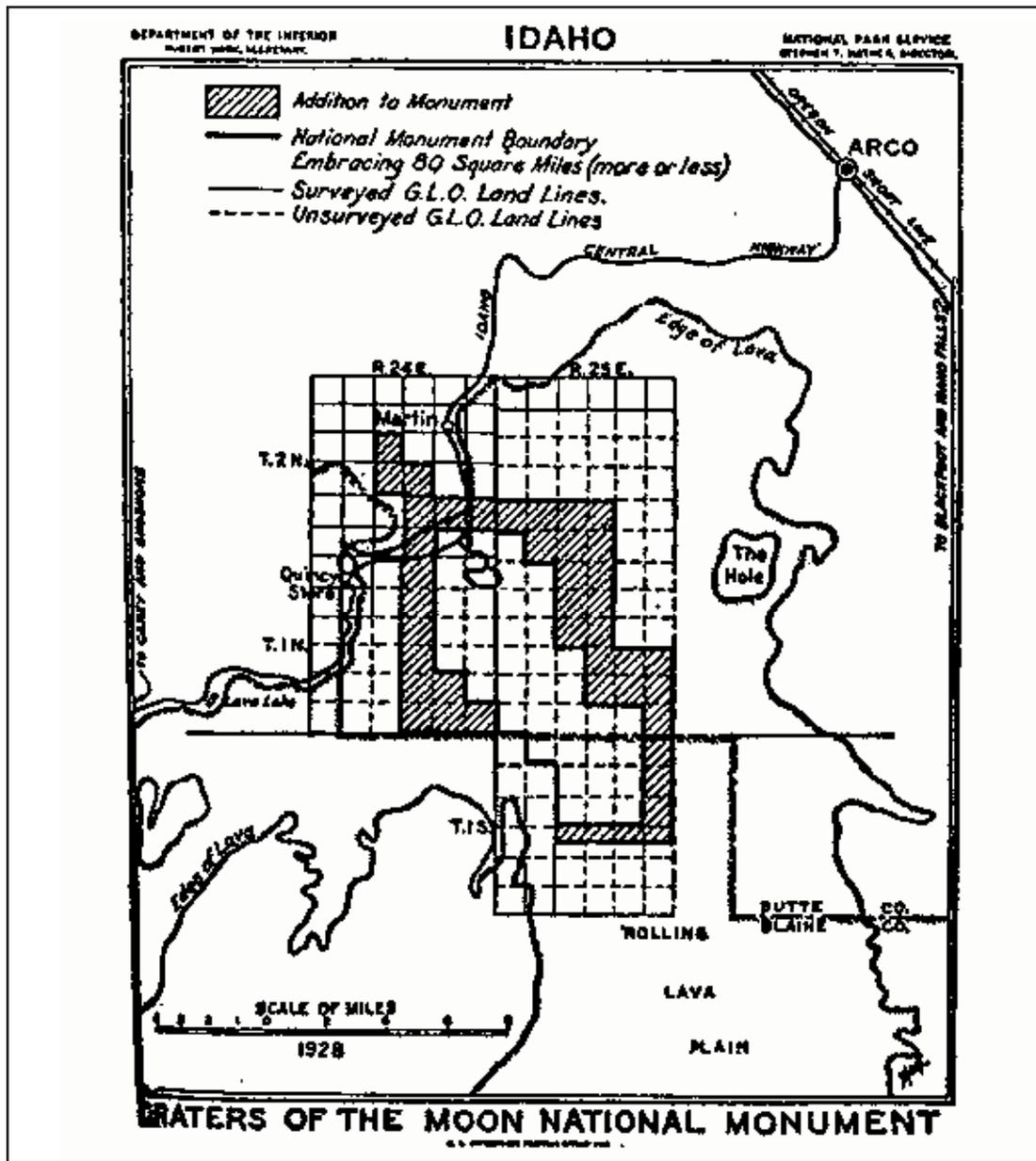
BY THE PRESIDENT OF THE UNITED STATES OF AMERICA
A PROCLAMATION

[No. 1843—July 23, 1928—45 Stat. 2959]

WHEREAS, it appears that the public interest would be promoted by adding to the Craters of the Moon National Monument in the State of Idaho, certain adjoining lands for the purpose of including within said monument certain springs for water supply and additional features of scientific interest located thereon.



NOW, THEREFORE, I, Calvin Coolidge, President of the United States of America, by authority of the power in me vested by section two of the act of Congress entitled, "An Act for the Preservation of American antiquities", approved June eighth, nineteen hundred and six (34 Stat, 225), do proclaim that Sections sixteen, twenty-one, twenty-two, twenty-five, twenty-six, twenty-seven, and thirty-four in Township two North, Range twenty-four East; Unsurveyed Sections twenty-seven, twenty-eight, twenty-nine, thirty, thirty-two, thirty-three and thirty-four in Township two North, Range twenty-five East; Unsurveyed Sections three, ten, fifteen, twenty-two, twenty-six, twenty-seven, thirty-four, thirty-five and thirty-six in Township one North,



Range twenty-four East; Unsurveyed Sections three, four, nineteen, fifteen, sixteen, twenty-two, twenty-three, twenty-four, twenty-five, twenty-six, twenty-seven and thirty-six in Township one North, Range twenty-five East; Unsurveyed Sections one, twelve, thirteen and the north half of Sections twenty-one, twenty-two, twenty-three and twenty-four in Township one South, Range twenty-five East; all Boise Meridian, Idaho; are hereby reserved from all forms of appropriation under the public land laws, subject to all valid existing claims, and set apart as an addition to the Craters of the Moon National Monument and that the boundaries of the said National Monument are now as shown on the diagram hereto annexed and made a part hereof.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy or remove any feature of this Monument and not to locate or settle upon any of the lands there of.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of this Monument as provided in the Act of Congress entitled "An Act to establish a National Park Service and for other purposes," approved August twenty-fifth, nineteen hundred and sixteen (39 Stat., 535) and Acts additional thereto or amendatory there of.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

[SEAL]

DONE at the City of Washington this 23 day of July in the year of our Lord one thousand nine hundred and twenty-eight and of the Independence of the United States of America the one hundred and fifty-third.

CALVIN COOLIDGE.

By the President:
FRANK B. KELLOGG,
Secretary of State.



Proclamation 1916

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA
A PROCLAMATION

[No. 1916—July 9, 1930—46 Stat. 3029]

WHEREAS lot 1, section 28, township 2 north, range 24 east, Boise meridian, Idaho, is bounded on the north and east by the Craters of the Moon National Monument; and

WHEREAS said lot 1, Section 28, contains a spring which is needed to furnish the said monument with an adequate water supply ; and

WHEREAS said lot 1, section 28, is vacant unappropriated public land of the United States;

NOW, THEREFORE, I, Herbert Hoover, President of the United States of America, do proclaim that the lands herein after described shall be, and are hereby, added to and included within the Craters of the Moon National Monument, and as part of said monument shall be, and are hereby, made subject to the provisions of the act of August 25, 1916 (39 Stat. 535), entitled “An act to establish a national park service, and for other purposes and all acts supplementary there to and amendatory thereof and all other laws and rules and regulations applicable to, and extending over, the said monument:

BOISE MERIDIAN

In township 2 north, range 24 east, lot 1, section 28.

Nothing herein shall affect any existing valid claim, location, or entry on said lands made under the land laws of the United States whether for homestead, mineral, right of way, or any other purposes whatsoever, or shall affect the right of any such claimant, locator, or entryman to the full use and enjoyment of his land.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

[SEAL]

DONE at the City of Washington this 9th day of July, in the year of our Lord nineteen hundred and thirty, and of the Independence of the United States of America the one hundred and fifty-fifth.

HERBERT HOOVER.

By the President:
HENRY L. STIMSON,
Secretary of State.

Proclamation 2499

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

[No. 2499—July 18, 1941—55 Stat. 1660]

WHEREAS it appears that certain public land which is now a part of the Craters of the Moon National Monument in the State of Idaho, established by proclamation of May 2, 1924, 43 Stat. 1947, and enlarged by proclamations of July 23, 1928, 45 Stat. 2959, and July 9, 1930, 46 Stat. 3029, is not necessary for the proper care and management of the objects of scientific interest situated on the lands within the said monument; and

WHEREAS it appears that such land is needed for the construction of Idaho State Highway No. 22, by the State of Idaho:

NOW, THEREFORE, I, Franklin D. Roosevelt, President of the United States of America, under and by virtue of the authority vested in me by section 2 of the act of June 8, 1906, c. 3060, 34 Stat. 225, U. S. C., title 16, sec. 431, do proclaim that a strip of land situated in section 3, Township 1 North, Range 24 East, and sections 25, 34, 35 and 36, Township 2 North, Range 24 East, Boise Meridian, Butte County, Idaho, as shown on a map prepared by the Department of Public Works, Bureau of Highways, State of Idaho, on file in the General Land Office, Department of the Interior, bearing the title

“FAP 128-E(1)
Map showing right-of-way across
Craters of the Moon National
Monument – Butte County – Idaho
February 1941 – Scale 1 in = 400 ft”

Is hereby excluded from the Craters of the Moon National Monument.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington this 18th day of July in the year of our Lord nineteen hundred and forty-one, and of the Independence of the United States the one hundred sixty-sixth.

FRANKLIN D. ROOSEVELT

By the President:

SUMNER WELLES,
Acting Secretary of State.



Proclamation 3506
Presidential Documents

From Federal Register of Nov. 22, 1962

Title 3—THE PRESIDENT

Proclamation 3506

ADDITION TO THE CRATERS OF THE MOON NATIONAL
MONUMENT, IDAHO

By the President of the United States of America
A Proclamation

WHEREAS the Craters of the Moon National Monument, Idaho, established by Proclamation No. 1694 of May 2, 1924, was reserved and set apart as an area that contains a remarkable fissure eruption together with its associated volcanic cones, craters, rifts, lava flows, caves, natural bridges, and other phenomena characteristic of volcanic action that are of unusual scientific value; and

WHEREAS it appears that it would be in the public interest to add to the Craters of the Moon National Monument a 180-acre kipuka, a term of Hawaiian origin for an island of vegetation completely surrounded by lava, that is scientifically valuable for ecological studies because it contains a mature, native sagebrush-grassland association which has been undisturbed by man or domestic livestock; and to add to the monument the intervening lands between the kipuka and the present monument boundaries:

NOW, THEREFORE, I, JOHN F. KENNEDY, President of the United States of America, by virtue of the authority vested in me by Section 2 of the Act of June 8, 1906 (34 Stat. 225; 16 U.S.C. 431), and subject to valid existing rights do proclaim that the following-described lands are hereby added to and reserved as a part of the Craters of the Moon National Monument:

BOISE MERIDIAN, IDAHO

T. 1 S., R. 24 E.
sec. 3, W-1/2
All of section 4, 5, 8, 9, 17, 18 and 19
sec. 10, W-1/2
sec. 20, W-1/2 and W-1/2 E-1/2
sec. 29, NW-1/4 and W-1/2 NE-1/4
sec. 30, NE-1/4;
comprising 5,360 acres, more or less.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy or remove any of the features or objects of this monument and not to locate or settle upon any of the lands thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the United States of America to be affixed.

[SEAL] DONE at the City of Washington this nineteenth day of November in the year of our Lord nineteen hundred and sixty-two, and of the Independence of the United States of America the one hundred and eighty-seventh.

JOHN F. KENNEDY

By the President:
DEAN RUSK,
Secretary of State.

Omnibus Parks and Public Lands Management Act of 1996

Public Law 104-333
104th Congress

An Act

To provide for the administration of certain Presidio properties at minimal cost to <<NOTE: Nov. 12, 1996 - [H.R. 4236]>> the Federal taxpayer, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, <<NOTE: Omnibus Parks and Public Lands Management Act of 1996. 16 USC 1 note.>>

SEC. 205. CRATERS OF THE MOON NATIONAL MONUMENT BOUNDARY ADJUSTMENT.

(a) Boundary Revision.--The boundary of Craters of the Moon National Monument, Idaho, is revised to add approximately 210 acres and to delete approximately 315 acres as generally depicted on the map entitled "Craters of the Moon National Monument, Idaho, Proposed 1987 Boundary Adjustment", numbered 131-80,008, and dated October 1987, which map shall be on file and available for public inspection in the office of the National Park Service, Department of the Interior.

(b) Administration and Acquisition.--Federal lands and interests therein deleted from the boundary of the national monument by this section shall be administered by the Secretary of the Interior through the Bureau of Land Management in accordance with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.), and Federal lands and interests therein added to the national monument by this section shall be administered by the Secretary as part of the national monument, subject to the laws and regulations applicable thereto. The Secretary is authorized to acquire private lands and interests therein within the boundary of the national monument by donation, purchase with donated or appropriated funds, or exchange, and when acquired they shall be administered by the Secretary as part of the national monument, subject to the laws and regulations applicable thereto.



Proclamation 7373



Federal Register

Wednesday,
November 15, 2000

Part VII

The President

Proclamation 7373—Boundary
Enlargement of the Craters of the Moon
National Monument
Proclamation 7374—Vermilion Cliffs
National Monument
Proclamation 7375—Veterans Day, 2000

Presidential Documents

Title 3—

Proclamation 7373 of November 9, 2000

The President

Boundary Enlargement of the Craters of the Moon National Monument
By the President of the United States of America
A Proclamation

The Craters of the Moon National Monument was established on May 2, 1924 (Presidential Proclamation 1694), for the purpose of protecting 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 “weird and scenic landscape peculiar to itself.” The unusual scientific value of the expanded monument is the great diversity of exquisitely preserved volcanic features within a relatively small area. The expanded monument includes almost all the features of basaltic volcanism, including the craters, cones, lava flows, caves, and fissures of the 65-mile-long Great Rift, a geological feature that is comparable to the great rift zones of Iceland and Hawaii. It comprises the most diverse and geologically recent part of the lava terrain that covers the southern Snake River Plain, a broad lava plain made up of innumerable basalt lava flows that erupted during the past 5 million years.

Since 1924, the monument has been expanded and boundary adjustments made through four presidential proclamations issued pursuant to the Antiquities Act (34 Stat. 225, 16 U.S.C. 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, a minor boundary adjustment was made by section 205 of the Omnibus Parks and Public Lands Management Act of 1996 (Public Law 104–333, 110 Stat. 4093, 4106).

This Proclamation enlarges the boundary to assure protection of the entire Great Rift volcanic zone and associated lava features, all objects of scientific interest. The Craters of the Moon, Open Crack, Kings Bowl, and Wapi crack sets and the associated Craters of the Moon, Kings Bowl, and Wapi lava fields constitute this volcanic rift zone system. Craters of the Moon is the largest basaltic volcanic field of dominantly Holocene age (less than 10,000 years old) in the conterminous United States. Each of the past eruptive episodes lasted up to several hundred years in duration and was separated from other eruptive episodes by quiet periods of several hundred years to about 3,000 years. The first eruptive episode began about 15,000 years ago and the latest ended about 2,100 years ago.

Craters of the Moon holds the most diverse and youngest part of the lava terrain that covers the southern Snake River Plain of Idaho, a broad plain made up of innumerable basalt lava flows during the past 5 million years. The most recent eruptions at the Craters of the Moon took place about 2,100 years ago and were likely witnessed by the Shoshone people, whose legend speaks of a serpent on a mountain who, angered by lightning, coiled around and squeezed the mountain until the rocks crumbled and melted, fire shot from cracks, and liquid rock flowed from the fissures as the mountain exploded. The volcanic field now lies dormant, in the latest of a series of quiet periods that separate the eight eruptive episodes



during which the 60 lava flows and 25 cinder cones of this composite volcanic field were formed. Some of the lava flows traveled distances of as much as 43 miles from their vents, and some flows 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."

The kipukas provide a window on vegetative communities of the past that have been erased from most of the Snake River Plain. In many instances, the expanse of rugged lava surrounding the small pocket of soils has protected the kipukas from people, animals, and even exotic plants. As a result, these kipukas represent some of the last nearly pristine and undisturbed vegetation in the Snake River Plain, including 700-year-old juniper trees and relict stands of sagebrush that are essential habitat for sensitive sage grouse populations. These tracts of relict vegetation are remarkable benchmarks that aid in the scientific study of changes to vegetative communities from recent human activity as well as the role of natural fire in the sagebrush steppe ecosystem.

The Kings Bowl lava field and the Wapi lava field are included in the enlarged monument. The Kings Bowl field erupted during a single fissure eruption on the southern part of the Great Rift about 2,250 years ago. This eruption probably lasted only a few hours to a few days. The field preserves explosion pits, lava lakes, squeeze-ups, basalt mounds, and an ash blanket. The Wapi field probably formed from a fissure eruption simultaneously with the eruption of the Kings Bowl field. With more prolonged activity over a period of months to a few years, the Wapi field formed a low shield volcano. The Bear Trap lava tube, located between the Craters of the Moon and the Wapi lava fields, is a cave system more than 15 miles long. The lava tube is remarkable for its length and for the number of well preserved lava-cave features, such as lava stalactites and curbs, the latter marking high stands of the flowing lava forever frozen on the lava tube walls. The lava tubes and pit craters of the monument are known for their unusual preservation of winter ice and snow into the hot summer months, due to shielding from the sun and the insulating properties of the basalt.

Section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and to reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected.

WHEREAS it appears that it would be in the public interest to reserve such lands as an addition to the Craters of the Moon National Monument:

NOW, THEREFORE, I, William J. Clinton, President of the United States of America, by the authority vested in me by section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), do proclaim that there are hereby set apart and reserved as an addition to the Craters of the Moon National Monument, for the purpose of protecting the objects identified above, 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" attached to and forming a part of this proclamation. The Federal land and interests in land reserved consist of approximately 661,287 acres, which is the smallest area compatible with the proper care and management of the objects to be protected.

All Federal lands and interests in lands within the boundaries of this monument are hereby appropriated and withdrawn from all forms of entry, location, selection, sale, or leasing or other disposition under the public land laws, including but not limited to withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating

to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument. For the purpose of protecting the objects identified above, the Secretary shall prohibit all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes.

Lands and interests in lands within the proposed monument not owned by the United States shall be reserved as a part of the monument upon acquisition of title thereto by the United States.

The Secretary of the Interior shall prepare a transportation plan that addresses the actions, including road closures or travel restrictions, necessary to protect the objects identified in this proclamation.

The Secretary of the Interior shall manage the area being added to the monument through the Bureau of Land Management and the National Park Service, pursuant to legal authorities, to implement the purposes of this proclamation. The National Park Service and the Bureau of Land Management shall manage the monument cooperatively and shall prepare an agreement to share, consistent with applicable laws, whatever resources are necessary to manage properly the monument; however, the National Park Service shall have primary management authority over the portion of the monument that includes the exposed lava flows, and shall manage the area under the same laws and regulations that apply to the current monument. The Bureau of Land Management shall have primary management authority over the remaining portion of the monument, as indicated on the map entitled, "Craters of the Moon National Monument Boundary Enlargement."

Wilderness Study Areas included in the monument will continue to be managed under section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701-1782).

The establishment of this monument is subject to valid existing rights.

Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Idaho with respect to fish and wildlife management.

This proclamation does not reserve water as a matter of Federal law. Nothing in this reservation shall be construed as a relinquishment or reduction of any water use or rights reserved or appropriated by the United States on or before the date of this proclamation. The Secretary shall work with appropriate State authorities to ensure that water resources needed for monument purposes are available.

Nothing in this proclamation shall be deemed to enlarge or diminish the rights of any Indian tribe.

Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the monument administered by the Bureau of Land Management.

Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national monument shall be the dominant reservation.

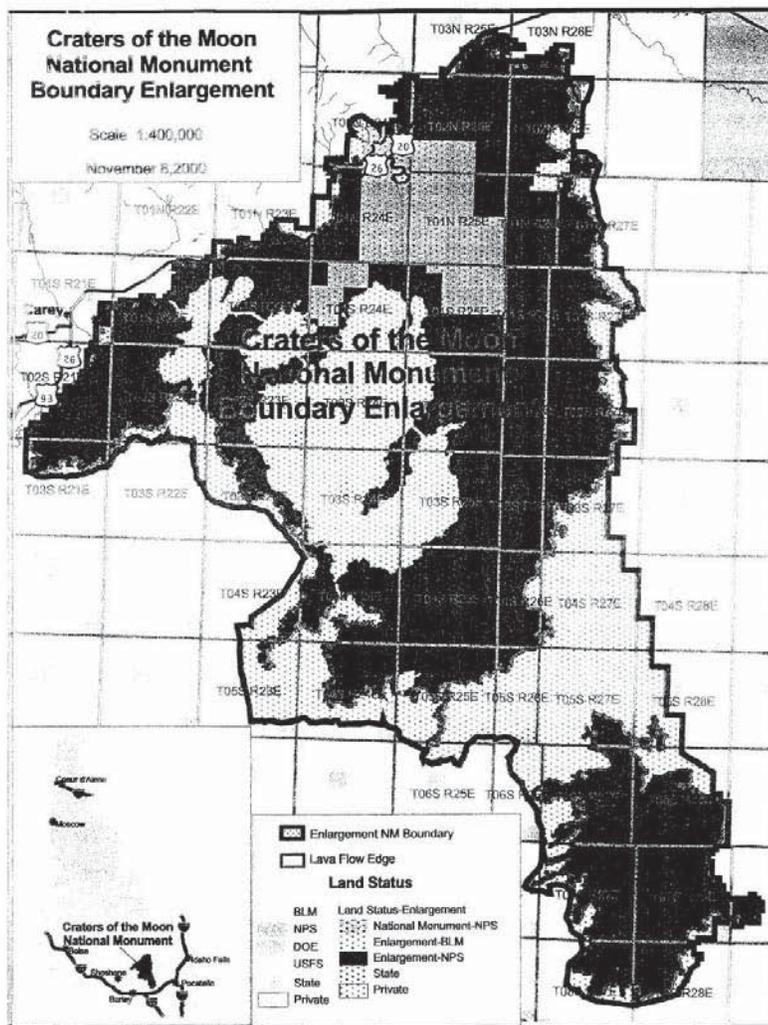
Warning is hereby given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.



IN WITNESS WHEREOF, I have hereunto set my hand this ninth day of November, in the year of our Lord two thousand, and of the Independence of the United States of America the two hundred and twenty-fifth.

William Clinton

Billing code 3195-01-P



[FR Doc. 00-29452
Filed 11-14-00; 8:46 am]
Billing code 3195-01-C

Federal Legislation PL 107-213

Public Law 107-213
107th Congress

An Act

To redesignate certain lands within the Craters of the Moon National Monument, and for other purposes. <<NOTE: Aug. 21, 2002 - [H.R. 601]>>

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. <<NOTE: 16 USC 431 note, 698w.>> SPECIAL MANAGEMENT REQUIREMENTS FOR FEDERAL LANDS RECENTLY ADDED TO CRATERS OF THE MOON NATIONAL MONUMENT, IDAHO.

(a) Redesignation.--The approximately 410,000 acres of land added to the Craters of the Moon National Monument by Presidential Proclamation 7373 of November 9, 2000, and identified on the map accompanying the Proclamation for administration by the National Park Service, shall, on and after the date of enactment of this Act, be known as the ``Craters of the Moon National Preserve``.

(b) Administration.--

(1) In general.--Except as provided by paragraph (2), the Craters of the Moon National Preserve shall be administered in accordance with--

(A) Presidential Proclamation 7373 of November 9, 2000;

(B) the Act of June 8, 1906, (commonly referred to as the ``Antiquities Act``; 34 Stat. 225; 16 U.S.C. 431); and

(C) the laws generally applicable to units of the National Park System, including the Act entitled ``An Act to establish a National Park Service, and for other purposes``, approved August 25, 1916 (16 U.S.C. 1 et



seq.).

(2) Hunting.--The Secretary of the Interior shall permit hunting on lands within the Craters of the Moon National Preserve in accordance with the applicable laws of the United States and the State of Idaho. The Secretary, in consultation with the State of Idaho, may designate zones where, and establish periods when, no hunting may be permitted for reasons of public safety, protection of the area's resources, administration, or public use and enjoyment. Except in emergencies, any regulations prescribing such restrictions relating to hunting shall be put into effect only after consultation with the State of Idaho.

Approved August 21, 2002.

LEGISLATIVE HISTORY--H.R. 601:

HOUSE REPORTS: No. 107-34 (Comm. on Resources).

SENATE REPORTS: No. 107-181 (Comm. on Energy and Natural Resources).

CONGRESSIONAL RECORD:

Vol. 147 (2001):

May 1, considered and passed House.

Vol. 148 (2002):

Aug. 1, considered and passed

Senate.

**Wilderness Designation
Public Law 91-504**

An Act to designate certain lands as wilderness. (84 Stat. 1104)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

* * * * *

DESIGNATION OF WILDERNESS AREAS WITHIN NATIONAL PARKS
AND MONUMENTS

SEC. 2. In accordance with Section 3(c) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(c)), the following lands are hereby designated as wilderness:

(a) certain lands in the Craters of the Moon National Monument, which comprise about forty-three thousand two hundred and forty-three acres and which are depicted on a map entitled "Wilderness Plan, Craters of the Moon National Monument, Idaho", numbered 131-91,000 and dated March 1970, which shall be known as the "Craters of the Moon National Wilderness Area";

SEC. 4. As soon as practicable after this Act takes effect, a map and a legal description of each wilderness area shall be filed with the Interior and Insular Affairs Committees of the United States Senate and the House of Representatives, and such description shall have the same force and effect as if included in this Act: *Provided however*, That correction of clerical and typographical errors in such legal description and map may be made.

SEC. 5. Wilderness areas designated by or pursuant to this Act shall be administered in accordance with the provisions of the Wilderness Act governing areas designated by that Act as wilderness areas, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act, and any reference to the Secretary of Agriculture shall be deemed to be a reference to the Secretary who has administrative jurisdiction over the area.

Approved October 23, 1970.



APPENDIX B

PLANNING CRITERIA AND INTERIM MANAGEMENT GUIDELINES

GENERAL PLANNING CRITERIA

“Planning area” or use of the “Monument” refers to the original NPS Monument, expanded Monument, and Preserve as a whole. The following General Planning Criteria will be considered in developing the Management Plan for the Craters of the Moon National Monument and Preserve:

| GENERAL PLANNING CRITERIA |
|---|
| Presidential Proclamations 1694 and 7373 |
| Compatibility of proposed uses with the purposes for which the Monument was established |
| Existing laws, regulations, and agency policies |
| Plans, programs, and policies of North American Indian tribes and other federal, state, and local governments |
| Public input |
| Quantity and quality of non-commodity resource values |
| Future needs and demands for existing or potential resource commodities and values |
| Past and present use of public and adjacent lands |
| Public benefits of providing goods and services relative to costs |
| Environmental impacts |
| Social and economic values |
| Public welfare and safety |
| Appropriate scientific findings |

PROGRAM PLANNING CRITERIA

Section II of the National Parks Omnibus Management Act of 1998 (the Act) directs the NPS to inventory and monitor resources to establish baseline conditions and provide information on long-term trends in the condition of resources. The Act also provides a clear mandate to encourage scientific studies to benefit both park management and broader scientific understanding. The Act further directs that the information gained from resource inventories, monitoring, and research be disseminated to the public and utilized in management decisions.

In addition to the General Planning Criteria, the following program-specific criteria will apply to individual program decisions. Planning criteria are listed on the left; the laws, regulations, and policies that guide or mandate the criteria are referenced on the right.

PROGRAM PLANNING CRITERIA

| Impairment | |
|---|--|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Law and NPS management policies require the analysis of potential effects to determine whether or not actions would impair Monument resources. Managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on resources and values. Although management discretion may allow certain impacts within NPS units, impairment of Monument resources and values is not permitted unless specifically authorized by federal law. A determination on impairment is made in the <i>Environmental Consequences</i> section for each impact topic.</p> | <p>NPS Organic Act, Proclamation 7373, NPS and BLM Management Policies</p> |
| Archaeological Resources | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Laws and policies, including the National Historic Preservation Act, require that both agencies achieve the following desired conditions for archaeological resources within the Monument:</p> <ul style="list-style-type: none"> • Archaeological sites are identified and inventoried, and their significance is determined and documented. • Sites are protected in an undisturbed condition unless it is determined through formal processes that disturbance or natural deterioration is unavoidable. • Where disturbance or deterioration is unavoidable, sites are professionally documented and salvaged. | <p>National Historic Preservation Act; Executive Order 11593; Archaeological and Historic Preservation Act; Archaeological Resources Protection Act; Federal Land Policy Management Act; the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation; Programmatic Memorandum of Agreement among the NPS, Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers (1995); BLM and NPS Management Policies; National Environmental Policy Act; NPS Organic Act</p> |
| Historic Properties | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Under the National Historic Preservation Act and other laws, historic properties within the Monument will be inventoried and evaluated under National Register criteria. The qualities that contribute to the eligibility for listing of properties on the Register will be protected in accordance with the Secretary of Interior's Standards (unless it is determined through a formal process that disturbance or natural deterioration is unavoidable).</p> | <p>National Historic Preservation Act; Executive Order 11593; Archaeological and Historic Preservation Act; Federal Land Policy Management Act; the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation; Programmatic Memorandum of Agreement among the NPS, Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers (1995); BLM and NPS Management Policies; National Environmental Policy Act; NPS Organic Act</p> |



| Native American Trust Resources/Tribal Treaty Rights | |
|---|--|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| Secretarial Order 3175 requires that any anticipated impacts to Indian Trust Resources from a proposed project or action by Department of Interior agencies be explicitly addressed in environmental documents. The Federal Indian Trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights; and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes. | Secretarial Order 3175; Department of Interior ECM 95-2, NPS and BLM Management Policies <i>Treaty with the Eastern Band Shoshoni and Bannock, 1868</i> , commonly known as the Fort Bridger Treaty (15 Stat. 673) |
| Ethnographic Resources | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| Certain contemporary American Indian and other communities are permitted by law, regulation, or policy to pursue customary religious, subsistence, and other cultural uses of resources with which they have traditionally associated. Both agencies plan and execute programs in ways that safeguard cultural and natural resources, while reflecting informed concern for the contemporary peoples and cultures traditionally associated with those resources. Ethnographic information will be collected through collaborative research that recognizes the sensitive nature of such information. Certain research data may be withheld from public disclosure to protect sensitive or confidential information about archaeological, historic, or other resources when doing so would be consistent with the Freedom of Information Act (FOIA). In many circumstances, this will allow the agencies to withhold information about ethnographic resources. | National Historic Preservation Act; Programmatic Memorandum of Agreement among the NPS, Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers (1995); Executive Order 11593; American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, Executive Order 13007 on American Indian Sacred Sites; Presidential Memorandum of April 29, 1994, on Government-to-Government Relations with Tribal Governments; BLM and NPS Management Policies; NPS Organic Act; National Register Bulletin 38 |
| Collections | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| NPS and BLM policies and other laws require that the qualities that contribute to the significance of collections be protected in accordance with established standards. All museum objects and manuscripts will be identified and inventoried with their significance determined and documented. Federal regulations (CFR Title 36, Section 2.5) prohibit collection of animal, plant, and mineral specimens on NPS lands without a permit. Specimen collection is limited to scientific or educational purposes, and all such specimens must be labeled as NPS property and recorded in the NPS museum catalog. | National Historic Preservation Act; American Indian Religious Freedom Act; Archaeological and Historic Preservation Act; Archaeological Resources Protection Act; Native American Graves Protection and Repatriation Act; NPS and BLM Management Policies; NPS Organic Act |

| Air Quality | |
|--|---|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Under the federal Clean Air Act, the Craters of the Moon Wilderness is designated a Prevention of Significant Deterioration (PSD) Class I area. The goal for Class I areas is to remedy existing visibility impairment and prevent future visibility impairment. Only small increases from new sources of air pollutants above established baseline levels of sulfur dioxide and particulate matter are permitted. The non-wilderness lands within the Monument are classified as Class II. Class II allows larger but still moderate increases above baseline levels. All lands within the planning unit will be managed in compliance with applicable local, state, tribal, and federal air quality laws, regulations, standards and implementation plans, including the Idaho DEQ regulations and the Montana/Idaho Smoke Management Program. Current laws and policies require that air quality in the Monument meets National Ambient Air Quality Standards (NAAQS) for specified pollutants and that Monument activities do not contribute to the deterioration of air quality.</p> | <p>Clean Air Act; BLM and NPS Management Policies; National Parks Omnibus Management Act of 1998; NPS Organic Act</p> |
| Water and Soil Resources | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Section 319 of the Clean Water Act obligates federal agencies to be consistent with state nonpoint source management program plans. Section 313 requires compliance with the state water quality standards. Both agencies will coordinate with the IDEQ regarding their total maximum daily load program and other relevant water quality programs. Water quality will be maintained or improved in accordance with state and federal standards. Water resources within the Monument are ephemeral and relatively rare, with the exception of the northernmost end, which contains small spring-fed streams. The plan will describe the desired future condition of those types of water sources that occur within the Monument.</p> <p>The plan will also identify any Best Management Practices necessary, or desirable, to protect watersheds or to maintain or enhance soil conditions in order to maintain long-term productivity of soils.</p> | <p>Clean Water Act; Executive Order 11514; Executive Order 12088; Executive Order 11988 (Floodplain Values); Executive Order 11990 (Wetland Values); Rivers and Harbors Act; BLM and NPS Management Policies; National Environmental Policy Act; National Parks Omnibus Management Act of 1998; NPS Organic Act</p> |



| Vegetation | |
|---|---|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Vegetation will be managed to achieve desired plant communities or desired future condition. Ecological site potential will be considered, providing for biodiversity; protection and restoration of native species; and nonconsumption uses, including plant protection, visual quality, and watershed protection. The desired plant communities will provide both wildlife habitat and forage for livestock and native wildlife. Plant maintenance, watershed protection and stability, and wildlife habitat needs will be a primary goal. The plan will identify and describe desired plant communities and those actions necessary to achieve that desired future condition.</p> <p>Domestic livestock will use forage on BLM rangeland. The BLM will manage grazing according to Idaho's Standards for Rangeland Health and ecological site potential. Prescribed fire and other treatment methods, consistent with approved fire management plans, will be considered as management tools to manipulate and restore native vegetation.</p> | <p>NPS and BLM Management Policies; Idaho Standards for Rangeland Health; National Parks Omnibus Management Act of 1998; NPS Organic Act</p> |
| Geologic Resources | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>The natural soil resources and geologic processes in the Monument should function in as natural condition as possible, except where special management considerations are allowable under policy. These areas of special management considerations will be determined through the management zoning decisions in the plan.</p> | <p>Monument's enabling legislation; NPS and BLM Management Policies; National Parks Omnibus Management Act of 1998; NPS Organic Act; Proclamation 1694</p> |
| Caves and Paleontology | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Significant cave resources in the Monument will be identified and protected pursuant to 43 CFR, Part 37. Cultural sites within caves that meet the National Register criteria will be protected and nominated for inclusion on the register. Both agencies will coordinate with the Idaho State Historic Preservation Officer and Tribal State Historic Preservation Officers on issues dealing with historic or cultural resources. BLM will identify significant caves on federal lands and regulate, or restrict use of, significant caves under the Federal Cave Resources Protection Act of 1988. The policy of the NPS, pursuant to its Organic Act of 1916 (16 USC 1, et seq.) and Management Policies (Chapter 4:20, Dec. 1988), is that all caves are afforded protection and will be managed in compliance with approved resource management plans. Accordingly, all caves on NPS-administered lands are deemed to fall within the definition of "significant cave."</p> <p>Paleontological resources will be considered and management recommendations will be developed, as appropriate.</p> | <p>Federal Caves Resources Protection Act of 1988; NPS Organic Act; NPS and BLM Management Policies; National Parks Omnibus Management Act of 1998; Proclamation 1694</p> |

Special Designations: Wilderness, Areas of Critical Environmental Concern, Wild and Scenic Rivers

| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
|--|--|
| <p>Approximately 70 percent of the Monument is either in WSA status or designated Wilderness. Proclamation 7373 directs both agencies to manage WSAs under Section 603(c) of the Federal Land Policy and Management Act (FLPMA) of 1976 (43 USC 1701-1782).</p> <p>Areas of Critical Environmental Concern (ACECs) are areas within the public lands where special management attention may be required to protect important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect human life and safety from natural hazards. The BLM is required to consider designating ACECs as part of the planning process. FLPMA provides for ACEC designation and establishes national policy for the protection of public land ACECs. Section 202(c)(3) of FLPMA requires the agency to give priority to the designation and protection of ACECs in the development and revision of land use plans. One ACEC is proposed in north Laidlaw Park for its undisturbed native plant communities. A planning decision will be made as to whether or not new ACEC designations are necessary or desirable.</p> <p>Four Research Natural Areas (RNAs) have been designated within the Monument: Carey Kipuka, Sand Kipuka, Big Juniper Kipuka, and Brass Cap Kipuka. The Great Rift System Natural Landmark was designated by the Secretary of the Interior in 1968 for its geological significance and enlarged in 1980 in recognition of its biological significance. The Idaho Conservation Data Center has nominated two areas in the northern portion of the Monument, representing nationally significant vegetation communities, for National Natural Landmark status. There are no Wild and Scenic Rivers within the Monument.</p> | <p>Proclamation 7373; Federal Land Policy and Management Act (FLPMA) of 1976; BLM and NPS Management Policies; BLM "Interim Management Policy for Lands Under Wilderness Review"; Wilderness Act of 1964</p> |



| Species of Special Concern | |
|---|---|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Management actions authorized, funded, or implemented by BLM or NPS will be conducted in a manner that will not jeopardize the continued existence of federally listed, threatened, or endangered plant or animal species. The agencies will consult with the U.S. Fish and Wildlife Service in preparing the plan. Management actions should not result in the destruction or modification of habitat for state-, BLM- and NPS-designated sensitive species. Species proposed, or candidates for, federal listing will be given the same consideration as listed species.</p> <p>Planning criteria will protect and maintain the intrinsic and recreational values associated with native and appropriate non-native species; identify habitat needs in consultation with the Idaho Department of Fish and Game; integrate Biological Opinions, Conservation Agreements, and Strategy Plans; protect federally listed threatened or endangered plant or animal species, including protection of critical habitat; and protect BLM sensitive species. For example, for a sensitive species, the following guidance would be considered: BLM 1640 Manual, 684 Manual on Special Status, Idaho BLM Sensitive Species List, Idaho BLM Standards and Guidelines for Rangeland Health, and 50 CFR Chapter IV (Fish and Wildlife Service Draft Policy for Evaluation of Conservation Efforts When Making Listing Decisions).</p> | <p>Endangered Species Act; Executive Order 13112, Invasive Species; BLM and NPS Management Policies; National Environmental Policy Act; Monument’s enabling legislation; National Parks Omnibus Management Act of 1998; NPS Organic Act</p> |
| Fish and Wildlife | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>There are no fisheries within the Monument, although some vernal ponds support fairy shrimp. Terrestrial wildlife species are a diverse and important part of the ecosystem. The plan will acknowledge the Idaho Department of Fish and Game’s role in managing fish and wildlife populations. The plan will closely coordinate goals and objectives for wildlife management with those developed for vegetation management, livestock management, fire management, wetlands, and recreation (including guides and outfitters).</p> | <p>NPS and BLM Management Policies; National Parks Omnibus Management Act of 1998; NPS Organic Act</p> |
| Fire Management | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Fire management on the Monument will be in accordance with the BLM Upper Snake River District Fire, Fuels and Related Vegetation Management Direction Plan Amendment, the new Monument Management Plan, and the agencies’ Fire Management Plans. The planning criteria will include enforcing standards for the public and firefighters while protecting natural resources, historic properties, and private property; implementing current and future fire management activity plans; coordinating with other local cooperators in developing plans; and implementing the National Fire Plan DOI/USDA Cohesive Strategy.</p> | <p>BLM and NPS Management Policies; National Fire Plan; BLM/NPS Fire Management Plans; National Parks Omnibus Management Act of 1998</p> |

| Viewscope/Night Sky Management | |
|---|--|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Large expanses of lands with little human intrusion and night skies where human caused light remains at minimum levels are considered important natural resources and have a high value because of their increasing rarity. The agencies will protect expansive, panoramic views that provide unobstructed views for up to 100 miles as an integral resource within the Monument. They will also recognize the importance that a light/dark cycle plays in the natural environment as well as the value of the opportunity to view a night sky without the interference of artificial light sources. To prevent the loss of western landscape vistas and natural dark conditions, the agencies will seek the cooperation of visitors, neighbors, and local government agencies to prevent or minimize the intrusion of human intrusion on the ecosystems of the Monument.</p> | <p>Proclamation 7373; Proclamation 1694; NPS and BLM Management Policies; National Parks Omnibus Management Act of 1998; NPS Organic Act</p> |
| Natural Soundscape/Natural Quiet | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Both BLM and NPS will preserve, to the greatest extent possible, the natural soundscapes of the Monument. The agencies will restore degraded soundscapes to the natural condition wherever possible, and will protect natural soundscapes from degradation due to noise (undesirable human-caused sound). Using appropriate management planning, managers will identify what levels of human-caused sound can be accepted. The frequencies, magnitudes, and durations of human-caused sound considered acceptable will vary throughout the Monument, being generally greater in developed areas and generally lesser in undeveloped areas. In and adjacent to the Monument, the agencies will monitor human activities that generate noise that adversely affects Monument soundscapes, including noise caused by mechanical or electronic devices. The agencies will take action to prevent, or minimize, all noise that, through frequency, magnitude or duration, adversely affects the natural soundscape or other Monument resources or values, or that exceeds levels that have been identified as being acceptable to or appropriate for visitor uses at the sites being monitored.</p> | <p>Proclamation 7373; Proclamation 1694; NPS Management Policies; National Parks Omnibus Management Act of 1998; NPS Organic Act</p> |



| Visitor Experience, Visual Resources, and Monument Use Requirements | |
|---|--|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Public lands will be managed to enhance appropriate recreation opportunities and visual resources. Either agency may identify special recreation management areas within a Development or Special Use Planning Zone as part of the planning process. Some areas may be subject to special measures to protect resources or reduce conflicts among uses. Recreation planning will follow the principles and guidance in NPS Management Policies (2000), the BLM National OHV Strategic Action Plan, and the draft National Mountain Bicycling Strategic Action Plan.</p> <p>According to BLM policy, all Wilderness Study Areas are designated as Visual Resources Management Class I. The plan will contain Visual Resource Management designations for the remainder of the Monument. All reasonable effort will be made to make NPS and BLM facilities, programs, and services accessible to and usable by all people, including those with disabilities.</p> <p>The NPS-administered portion of the Monument was a pilot site for the National Fee Demonstration Program. Entry fees will continue to be charged for entry into the north end of the Monument via the "Monument Loop Drive."</p> <p>Under the 1978 National Parks and Recreation Act (PL 95-625), NPS is required to address the issue of carrying capacity in its general management plans. The concept of carrying capacity is intended to safeguard the quality of park resources and visitor experiences. Identifying desired resource conditions and visitor experience by zone is part of general management planning. At this level of decision-making, the desired resource conditions and experiences describe carrying capacity in qualitative terms. These qualitative terms are then translated into quantitative standards over time during implementation planning.</p> | <p>BLM OHV Strategic Action Plan; National Mountain Bicycling Strategic Action Plan (Draft); National Parks and Recreation Act of 1978; NPS Organic Act; Monument's enabling legislation; BLM Manual Section 8400, Visual Resource Management; Americans with Disabilities Act; Architectural Barriers Act; Rehabilitation Act; 1998 Executive Summary to Congress, Recreational Fee Demonstration Program, Progress Report to Congress, Volume I – Overview and Summary (U.S. Department of the Interior, National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management; U.S. Department of Agriculture, Forest Service); NPS and BLM Management Policies; National Parks Omnibus Management Act of 1998</p> |
| Relations with Monument Neighbors and Other Agencies | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Public participation in planning and decision-making will ensure that both agencies fully understand and consider the public's interests in the Monument, which is part of their national heritage, cultural traditions, and community surroundings. The agencies will actively seek out, and consult with, existing and potential visitors, neighbors, people with traditional cultural ties to Monument lands, scientists and scholars, concessionaires, cooperating associations, gateway communities, other partners, and government agencies. The agencies will work cooperatively with others to improve the condition of the Monument, to enhance public service, and to integrate the Monument into sustainable ecological, cultural, and socioeconomic systems.</p> | <p>BLM and NPS Management Policies; National Environmental Policy Act</p> |

| Sustainable Design/Development | |
|---|--|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| Sustainability can be described as the result achieved by doing things in ways that do not compromise the environment or its capacity to provide for present and future generations. Sustainable practices minimize the short- and long-term environmental impacts of development and other activities through resource conservation, recycling, waste minimization, and the use of energy efficient and ecologically responsible materials and techniques. Facilities will be integrated into the Monument landscape and environs with sustainable designs and systems to minimize environmental impact. Development will not compete with, or dominate, Monument features, or interfere with natural processes, such as the seasonal migration of wildlife or hydrologic activity associated with wetlands. | BLM and NPS Management Policies |
| Environmental Justice | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| NPS and BLM will incorporate environmental justice into the plan. Identifying and addressing any disproportionately high or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities will accomplish this. | Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" |
| Socioeconomics | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| Both agencies understand the need to promote social and economic diversification and resiliency in southeastern Idaho and recognize the increasing demand for outdoor recreational opportunities and the dependency of local community economies on goods and services from public lands. Livestock production on public lands also makes a contribution to the health of local and rural economies. Population growth continues to increase and shift the demand on public lands for many uses including recreation opportunities. This demand and shift in the kinds and uses of public lands may contribute to changes in the economies of the counties and communities within the Monument area. | NPS and BLM Management Policies |



| Land Protection/Land Tenure Adjustments | |
|--|---|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| Proclamation 7373 prohibits all forms of land disposal except exchanges that further the purposes of the Monument. The Proclamation also acknowledges that state or private lands may be acquired. Plans will be developed and periodically reviewed and updated, for the Monument containing lands that may be subject to acquisition. The plans will identify the alternative methods that will provide for the protection of resources, for visitor use, and for development; identify the minimum interests necessary for those purposes; and establish priorities for acquisition of land or interests in land. | NPS Management Policies; NPS Land Acquisition Policy Implementation Guideline (NPS-25); the Department of the Interior’s “Policy for the Federal Portion of the Land and Water Conservation Fund” (FR 47:19784); the NPS “Land Protection Plan Instructions” (FR 48:21121); the Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 USC 4601 et seq.); Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights”; Proclamation 7373, FLPMA Sec. 205 and 206, 43 CFR 2100 and 2200 and FLTFA |
| Rights-of-Way and Telecommunication Infrastructure | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| BLM-administered lands are generally available for transportation and utility rights-of-way (ROWs) subject to Monument compatibility determinations and NEPA evaluation, except where specifically prohibited by law or regulation or in areas specifically identified for avoidance and exclusion to protect significant resource values. Other types of ROW may be restricted. Major differences in ROW authority exist between BLM and NPS and the Plan will establish how potential conflicts might be resolved. Telecommunication structures are permitted in the Monument (outside of wilderness and wilderness study areas) to the extent that they do not jeopardize the Monument’s mission and resources. | 16 USC 5; 16 USC 79; 23 USC 317; 36 CFR 14; BLM and NPS Management Policies; Director’s Order 53A, Wireless Telecommunications |
| Minerals and Energy | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| Presidential Proclamation 7373 withdrew lands within the Monument from location under the general mining laws, and the operation of the mineral and geothermal leasing laws, and from the mineral material disposal law, other than by exchange that furthers the protective purposes of the Monument. | Proclamation 7373 |
| Noxious Weed Control | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| Both agencies will work with state and county governments and Cooperative Weed Management Areas to monitor the location and spread of noxious weeds. The agencies will control the occurrence and spread of noxious weeds on public lands where economically feasible, and to the extent funds are available, to comply with Executive Order 11312. Noxious weed control is conducted in accordance with the integrated weed management guidelines and design features identified in current policies and programs. | Executive Order 11312, Invasive Species (February 1999); NPS Management Policies; the Northwest Area Noxious Weed Control Program EIS of 1985 and the USDI-BLM Final Environmental Impact Statement for Vegetation Treatment on BLM Lands in 13 Western States (May 1999); National Parks Omnibus Management Act of 1998 |

| Livestock Management | |
|---|--|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Proclamation 7373 provides for continued livestock use on that portion of the Monument administered by the BLM under 43 CFR 4100, which addresses rangeland health and grazing administration. The Idaho State Director of the BLM, in consultation with the Resource Advisory Council, established under 43 CFR Part 1780, Subpart 1784, developed standards and guidelines to be applied to livestock use. On Monument lands administered by the BLM, livestock will be managed in accordance with Idaho's Standards for Rangeland Health and Guidelines for Livestock Grazing Management in reference to ecological site potentials. Rangeland health assessments presented in the plan will guide issuance of grazing decisions in accordance with applicable BLM regulations and policy.</p> | <p>Proclamation 7373; Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management; Federal Land Policy Management Act; Public Range Improvement Act; BLM Planning Regulations</p> |
| Transportation | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| <p>Proclamation 7373 specifically directs the agencies to prepare a transportation plan that addresses any actions, including road closures or travel restrictions, necessary to protect monument resources. Except for emergency or authorized administrative purposes, the Proclamation prohibits all motorized and mechanized vehicle use off road. In consultation with the respective county and transportation districts, the planning team will incorporate transportation planning in the Monument management plan by providing broad guidance on travel within the Monument. Any specific long-term road closures or travel restrictions will be carried out after completion of the management plan. The agencies will inform the public of travel opportunities and restrictions within the Monument by providing a Monument travel map, road signing as appropriate, and by other means. The BLM and NPS will follow existing agency policies in determining and describing road and trail definitions and standards. The planning team will develop the criteria for use in determining how roads and trails of different standards will fit into a comprehensive transportation system.</p> | <p>Proclamation 7373; Proclamation 1694; BLM and NPS Management Policies</p> |



| Water Rights | |
|---|--|
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| Proclamation 7373 does not reserve water as a matter of Federal law. Nothing in this reservation shall be construed as a relinquishment or reduction of any water use or rights reserved or appropriated by the United States on or before the date of this proclamation. The Secretary shall work with appropriate State authorities to ensure that water resources needed for monument purposes are available. The agencies will continue to participate in the Snake River Basin Adjudication (SRBA) pursuant to the McCarran Amendment (43 U.S.C. 666) and the Commencement Order for the SRBA (Case No. 39576, 5 th District Court of Idaho), to secure historical priority to stock water under state and /or federal law. | Idaho Code 42-202; Fish & Wildlife Coordination Act of March 10, 1934 (16 USC 661); Federal Land Management Policy Act (43 USC 666); 43 CFR 4120.3-9; Idaho Code 42-1503 |
| Forestry | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| There are no commercial forest resources within the Monument. | N/A |
| Wild Horses and Burros | |
| <i>Planning Criteria</i> | <i>Laws, Regulations, Policies</i> |
| There are no wild horses or burros or herd management plans within or near the Monument. | N/A |

**GENERAL AGREEMENT AND
MEMORANDUM OF UNDERSTANDING
CRATERS OF THE MOON NATIONAL MONUMENT**

between the

United States Department of the Interior
National Park Service
Craters of the Moon National Monument

and the

United States Department of the Interior
Bureau of Land Management
Upper Snake River District

This General Agreement (NPS) and Memorandum of Understanding (BLM), hereinafter called Agreement, is between two field units of two agencies within the Department of Interior. The National Park Service's Craters of the Moon National Monument (NPS) and Bureau of Land Management's Upper Snake River District (BLM) jointly manage the recently expanded Craters of the Moon National Monument.

I. Purpose:

Presidential Proclamation 7373 of November 9, 2000 - Boundary Enlargement of the Craters of the Moon National Monument (attached), gave the following direction to the National Park Service and Bureau of Land Management:

"The National Park Service and the Bureau of Land Management shall manage the monument cooperatively and shall prepare an agreement to share, consistent with applicable laws, whatever resources are necessary to manage properly the monument . . . "

In addition, the Secretary of Interior instructed the Director, Bureau of Land Management and the Director, National Park Service, in a Memorandum dated November 24, 2000 to prepare a



shared resources agreement to, “. . . *provide seamless service to the public and use their resources accordingly.*” The Directors of the Bureau of Land Management and the National Park Service further refined these instructions in a Memorandum to the District Manager, BLM Upper Snake River District and the Park Superintendent, Craters of the Moon National Monument, dated February 15, 2001 stating in part, “*The joint management of the Craters of the Moon National Monument represents a new chapter in a continuing partnership between BLM and NPS.*”

The purpose of this Agreement is to implement the direction contained in the Proclamation by describing the cooperative working relationship between NPS and BLM. This Agreement is intended to form a framework for joint agency management of a single National Monument. Such interagency cooperation is in the interest of the American public. Both the NPS and BLM have unique abilities and strengths which can be jointly applied for efficient management of the Monument. While both agencies are part of the Department of Interior, cooperative management as described by this Agreement provides the agencies with a high visibility opportunity to demonstrate their capabilities in natural resource stewardship and management effectiveness.

II. Background:

Since the 1924 Presidential Proclamation that created the original National Monument, several expansion proposals, National Park designations, National Conservation Area designations, and other proposals have been made. The Monument has now been expanded through five separate Presidential Proclamations and one legislative initiative. Over the past few years, both BLM and NPS staff have developed a close working relationship, partially in response to these many initiatives for Monument expansion.

The BLM and NPS have formally cooperated for many years in managing the Great Rift - Craters of the Moon area. The agencies have signed several agreement instruments, including a Memorandum of Understanding (MU928095001) in 1999 that also included the U.S. Geological Survey.

At a January 2001 Workshop, staff and managers from both agencies wrote the following vision statement to help guide the development of this Agreement:

The NPS and BLM will cooperatively manage Craters of the Moon National Monument. Cooperative management means providing seamless public service and extensive public participation opportunities. Working together, both agencies will manage a wide variety of uses, promote education and enjoyment of the Monument’s significant natural resources, while retaining appropriate traditional human uses and practices associated with the land. Cooperative management will follow the Proclamations that created the Monument. Cooperative

management will recognize the diverse assemblage of geologic features, high desert plant and animal communities, and the rich traditions of human use and interaction within this uniquely Western landscape.

III. Authority:

The BLM is delegated authority of the Secretary of the Interior which is contained in the Federal Land Policy and Management Act of 1976 (FLPMA, 43 U.S.C. 1701 *et seq.*, as amended). The NPS is delegated authority of the Secretary of the Interior which is contained in the National Park Service Organic Act (16 U.S.C. 1 g, as amended) and Presidential Proclamation 1694 which originally established the Monument as a unit of the National Park System.

President Clinton enlarged the Craters of the Moon National Monument, through Proclamation, by the authority vested in him by Section 2 of the Act of June 8, 1906 (Antiquities Act, 16 U.S.C. 431). Proclamation 7373 instructed both agencies to follow their respective legal authorities on the land each agency administers within the Monument, subject to the overriding purpose of protecting the scientific and historic objects described in the Proclamation.

IV. Commitments:

The NPS and BLM will:

- * Support one another in activities within the Monument irrespective of the interior boundaries between the agency administered lands.
- * Share the expertise each agency possesses to the maximum extent feasible.
- * Acknowledge and incorporate the particular strengths and abilities of each agency.
- * Strive to develop an integrated budget that outlines all the needs for the Monument.
- * Promote the Monument as a model of effective interagency coordination and cooperation.
- * Make decisions on discretionary uses and authorizations only after consultation with each other.
- * Coordinate public information releases that pertain to matters involving both agencies in the management of the Monument.
- * Provide a diversity of opportunities for high quality, safe, educational and enjoyable visitor



experiences.

- * Insure full public understanding of agency actions and seamless service to the public in a way that is both clear and easily understandable.
- * Actively seek the involvement of all stakeholders and a range of views on all Monument management issues, particularly during the planning process.
- * Work in close cooperation with local governments including five Boards of County Commissioners, Sheriffs, search and rescue organizations, and community development associations.
- * Complete a single, combined Resource Management Plan - General Management Plan - Environmental Impact Statement that meets both agency's legal, regulatory, and policy requirements.
- * Work in close cooperation with the Craters of the Moon Natural History Association to support interpretive and research programs at the Monument.
- * Partner with the U. S. Geological Survey to foster the scientific understanding of the Monument which serves as a natural laboratory for the study and interpretation of the processes and products of basaltic volcanism and of volcanic rift zones.

Interim Management Guidelines are attached to this Agreement as an addendum. Both parties expect to develop several additional addendums following the execution of this instrument, including a Project Agreement/Preparation Plan to guide the Monument's planning effort.

V. Duration and Limitations:

A. This Agreement becomes effective on the date of its signature by both parties.

B. The need for this Agreement is perpetual because a Presidential Proclamation ordered the preparation of an agreement. Both parties expect to propose modifications to the Agreement. Generally, either party will propose modifications in writing at least sixty days prior to the proposed date of the modification. Both parties will update and review the contents of this Agreement, including modifications and subservient instruments, at least annually.

C. Nothing in this Agreement may be construed to obligate the Department of the Interior or the United States to any current or future expenditures of resources in advance of the availability of appropriations from Congress.

D. Nothing in this Agreement will be construed as affecting the authorities of the participants or as binding beyond their respective authorities.

E. Specific work projects or activities that involve the transfer of funds, services, or property between the parties to this Agreement will require the execution of a separate Intra-Agency Agreement(s). Each subsequent agreement or arrangement involving the transfer of funds, services, or property must comply with all applicable statutes and regulations.

F. No member of, or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise there from, but these provisions shall not be construed to extend to this Agreement if made with a corporation for its general benefits.

G. During the performance of this Agreement, the participants agree to abide by the terms of USDI-Civil Rights Assurance Certification, non-discrimination, and will not discriminate against any person because of race, color, religion, sex, or national origin. The participants will take affirmative action to ensure that applicants are employed without regard to their race, color, sexual orientation, national origin, disabilities, religion, age, or sex.

H. The existing MOU (MU928095001) with the U.S. Geological Survey remains in effect.

I. This Agreement is coordinated with other existing agreements related to fire and emergency services.

VI. Authorizing Signatures:

/s/ 9/06/01
John Reynolds, date
Regional Director
Pacific West Region
National Park Service

/s/ 8/24/01
Martha Hahn, date
State Director
Idaho
Bureau of Land Management



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Upper Snake River District
1405 Hollipark Drive
Idaho Falls, Idaho 83401-2100

In Reply Refer To:
1511 (ID-070) P

November 29, 2001

Memorandum

To: Acting Director, Bureau of Land Management
Director, National Park Service

Through: State Director, Idaho, BLM
Regional Director, Pacific West Region, NPS

From: District Manager, Upper Snake River District, BLM
Park Superintendent, Craters of the Moon National Monument, NPS

Subject: Joint Agency Recommendations for Craters of the Moon National Monument

Attached is our proposed agreement for the sharing of resources and joint management of Craters of the Moon National Monument that you requested. The agreement has two components:

An umbrella General Agreement (NPS) and Memorandum of Understanding (BLM) which broadly frames the cooperative relationship between the National Park Service and Bureau of Land Management.

Interim Management Guidelines which are an Addendum to the Agreement. These Guidelines describe how the two agencies intend to manage the Monument during a three year planning process.

We are working on a Project Agreement (NPS) and Preparation Plan (BLM) to provide structure and focus for our interagency planning process. We anticipate submitting this product for your review by August 31. BLM will complete a metes and bounds description of the Monument this Fall and will publish the description as soon as possible.

We appreciate your interest in our unique interagency partnership.

ADDENDUM # 1

CRATERS OF THE MOON NATIONAL MONUMENT

INTERIM MANAGEMENT GUIDELINES

Introduction: Presidential Proclamation 7373 expanded Craters of the Moon National Monument and instructed the Bureau of Land Management and the National Park Service to prepare a joint management plan for the Monument. The agencies anticipate completing this plan by January 2004. In a Memorandum dated November 24, 2000 the Secretary of Interior instructed the Bureau of Land Management and the National Park Service to, “. . . *issue interim management guidance for managing the Craters of the Moon National Monument*”. Furthermore, in a Memorandum dated February 15, 2001 the Acting Directors of the National Park Service and Bureau of Land Management instructed the Park Superintendent, Craters of the Moon National Monument and District Manager, Upper Snake River District to, “. . . *provide us with a proposal as to how the agencies can best coordinate management of the Monument*”. Until the agencies complete the Monument Plan, these Interim Management Guidelines will provide direction specific to Craters of the Moon National Monument.

These Guidelines are an Addendum to the Agreement between the NPS and BLM for cooperative management of Craters of the Moon National Monument. These Guidelines constitute a more specific level of direction than the commitments outlined in the umbrella Agreement. For BLM, these Guidelines are tiered to the National Interim Management Policy for Newly Created National Monuments. NPS will follow the National Park Service Management Policies.

These Guidelines only apply to the expanded portion of the Monument created by Presidential Proclamation 7373. A 1992 General Management Plan is currently in place for lands administered by the NPS prior to Proclamation 7373.

General Guidelines: The overall theme of this interim management strategy is to maintain existing management policies, designations, and allocations except where changes are necessary to comply with the Proclamation and protect the objects of scientific and historic interest within the Monument.

Proclamation 7373 did not change much of the agencies’ regular and routine work within the Monument. Over the next three years, regular, on-going, base work will continue, albeit with a higher agency priority and a higher level of public interest.



However, all project level work within the expanded portion of the Monument, whether approved prior to the Proclamation or a new proposal, will be “screened” to insure no conflicts exist with the Proclamation. In most cases this will involve a quick, simple review and documentation in the appropriate project file. If conflicts or concerns with the project surface during the Proclamation screening, then the project should either undergo additional analysis using National Environmental Policy Act procedures, or be put on hold until completion of the Monument plan.

All BLM designations, restrictions, authorizations, and use limitations in effect on November 9, 2000, on lands now under NPS administration, remain in effect unless specifically addressed in the Proclamation, or in Park Service legal authorities. All NPS designations, restrictions, authorizations, and use limitations in effect on the portion of the Monument established prior to 2000 also remain in effect.

Both agencies expect to discover minor conflicts between NPS and BLM legal authorities, regulations, and policies during the interim management period. These conflicts should be interpreted based on the Monument Proclamation(s) and resolved to the benefit of the Monument’s resources at the lowest possible level within the agencies.

Public outreach and the involvement of local communities, users, and the Tribes are perhaps the most critical tasks facing the agencies. The agencies will communicate the contents of the Agreement and Interim Guidelines as widely as possible. It is important that staff from both agencies communicate the same message to the public.

Discussion of Specific Activities

Planning and NEPA: Both agencies have their own planning guidance. Development of the Craters of the Moon General Management Plan - Resource Management Plan - Environmental Impact Statement will require a unique mixing of both agencies procedures and guidance. A forthcoming Project Agreement (NPS) and Preparation Plan will outline the proposed Craters of the Moon planning process.

Evaluation of the five current BLM land use plans and NPS General Management Plan in effect at the Monument will be an interdisciplinary as well as interagency effort. The agencies view evaluation of these current plans as an excellent opportunity for staff from both agencies to become familiar with each other’s planning systems.

With limited exceptions, most “mid-level” planning for the expanded area will be placed on hold until completion of the Monument plan. BLM’s mid-level plans are generally referred to as Activity Plans. NPS mid-level plans are part of Implementation Planning. Individual project level planning and NEPA analysis will continue. Environmental Assessments are an important tool for involving the public in Monument management during this interim period.

Budget and Staffing: The agencies intend to function under a completely coordinated budget by Fiscal Year 2004. For Fiscal Year 2001, spending will be coordinated as closely as possible. Staff have already submitted Fiscal Year 2002 budget requests. Fiscal Year 2003 requests will provide the first opportunity for development of a consolidated budget.

The agencies will need to complete an Intra-Agency Agreement(s), Economy Act Determination(s), task orders, administrative and overhead fee waivers to share funding beginning in Fiscal Year 2002. The capability of the agencies to provide financial assistance to each other will be determined on a year-by-year, project-by-project basis, subject to the availability of funds. Intra-Agency Agreements also require a financial plan and reports documenting the completion of projects and funds expended.

The agencies will prepare an integrated Operations Plan for the Monument by Fiscal Year. The Operations Plan will facilitate interagency coordination at the project and specific task level. The Operations Plan will assign staff responsibility for specific work items, display the multi-fiscal year nature of some work, and provide documentation of accomplishments.

NPS line authority will continue through the Monument Superintendent. The BLM Interim Monument Manager will have authority as a point of contact, for day to day decisions, and to coordinate activities between the three affected BLM Field Office Managers in Shoshone, Burley, and Idaho Falls. Because the Monument includes three BLM Field Offices, authority for decisions that affect the entire Monument resides with the Upper Snake River District Manager.

The agencies will discuss opportunities to combine staff under the authority of a single line manager during the planning process. The agencies anticipate Monument plan decisions regarding facility and office locations. The staff and table of organization required to implement the Monument plan will likely differ from the staff and tables of organization in place during the interim planning period.

The agencies will encourage opportunities for details and informal cross assignments between staffs. Employees of both agencies will have access to training opportunities under the same terms as employees of the agency offering the training.

Travel and Transportation System Management: Within the expanded Monument, all of the existing transportation network is on BLM administered land. A few primitive routes (ways) are located within Wilderness Study Areas on NPS administered land. All existing roads and trails within the Monument that were open to vehicle travel prior to the Proclamation will remain open during the interim planning period. The agencies may close individual roads and trails to protect resources on a case by case basis. An example of such a closure would be roads within a fire rehabilitation project.



The Proclamation closed the Monument to cross-country travel by motorized or mechanical vehicles. Mechanical vehicles include mountain bikes. On-the-ground, this closure only affects land outside of Wilderness Study Areas because cross-country vehicle travel was already prohibited in Wilderness Study Areas. BLM administers most of the land affected by this Proclamation restriction. BLM will coordinate with livestock permittees, USDA Wildlife Services, Idaho Department of Fish and Game and others who may require authorizations for cross-country vehicle use. Due to the rugged, roadless nature of NPS administered lava flows, authorizations for cross-country vehicle travel are neither desired nor necessary.

BLM will continue to maintain, inventory, and coordinate with County Governments in managing the roads historically and regularly used by motorized and mechanical vehicles. Existing County Road rights-of-way are considered a Valid Existing Right and are not affected by the Proclamation.

The Proclamation mandated preparation of a transportation system plan. The agencies will include a transportation plan as an important component of the Monument plan.

Recreation: The Proclamation did not affect most recreation uses such as camping and hiking. Historically, the recent addition to the Monument received very small amounts of recreation use. BLM estimates from the Recreation Management Information System indicate less than 10,000 visits per year. The vast majority of this use was hunting for sage grouse and mule deer. BLM estimates that the NPS portion of the expanded Monument received less than 300 visits a year, most of which were hunters and hikers along the edge of lava flows.

The area has attracted increasing numbers of mountain bikers, hikers, cavers and other adventure oriented recreationists in recent years. The agencies anticipate additional increases in non-hunting recreation use. The agencies will improve the quantity and quality of visitor use measurements as well as the monitoring of biophysical and social impacts of recreation use.

The proclamation did not affect hunting on BLM administered portions of the Monument, other than the prohibition on cross-country vehicle use. Hunting or the use of firearms on the NPS administered portion of the Monument is prohibited.

Outfitter and Guide Operations: BLM and NPS will coordinate all outfitter and guide authorizations with the Idaho State Outfitter and Guide Licensing Board. The NPS will explore the possibility of signing onto the statewide agreement between all of the Federal land management agencies and the Board. Both agencies will work with the Board to develop additional, temporary guidelines for outfitter activities in the Monument during the interim planning period. The agencies anticipate that decisions in the Monument Plan will address outfitter activities and perhaps use allocation.

All existing outfitter activities within the Monument will be “screened” to insure compliance with the Proclamation. The agencies will perform a NEPA analysis of all proposed changes to existing Outfitter Plans of Operation. Any approved changes will be temporary authorizations pending completion of the Monument plan. Temporary authorizations will not grant an outfitter any preference in future authorizations or allocations which may be made in the Monument plan.

Both agencies believe that new outfitter services may be appropriate in the expanded portion of the Monument. Desired activities in portions of the Monument might include: guided hiking, geologic interpretation, jeep tours, backpacking, wildlife viewing, and mountain biking. Until the agencies complete the Monument plan, BLM will accept Special Recreation Permit Applications for outfitted services. BLM will prepare an environmental assessment for each application. The applicant must pursue the concurrent authorization process with the State Board. If the application is approved, the Special Recreation Permit will be issued for a term of one year. An acceptable annual performance evaluation will be required prior to renewal of the permit for another year. Annual authorizations will be required until completion of the Monument plan. These temporary authorizations will not grant an outfitter any preference in future authorizations or allocations which may be made in the Monument plan.

The agencies will work closely with all authorized hunting outfitters to insure they are aware of NPS restrictions regarding firearms and hunting on NPS administered portions of the Monument. The Proclamation did not change hunting and firearm use on BLM administered portions of the Monument.

Information, Education and Interpretation: NPS will have the lead in these program areas. All products and materials should include both agencies’ logos. All products will comply with the intent of BLM’s Interim Printing and Signing Guidelines for National Landscape Conservation System Units (IM-2001-083) and NPS Sign Standards (draft Director’s Order # 52 C). During the interim planning period, most products will be temporary. Both agencies will monitor public demand for different types of products and evaluate the effectiveness of the available temporary products. The first initial priority is to provide visitor safety information related to the expanded portion of the Monument. The second initial priority is to reach out to local communities, schools, and historic users of the Monument.

It is critical that visitors seeking a developed recreation setting and experience receive information directing them to existing NPS facilities. This theme will be emphasized in all information materials including web sites, informational signs, kiosks, responses to inquiries, press releases, and hard copy handouts and sale items.

Visitors intentionally seeking a remote, primitive, dispersed experience will be provided with information containing a strong “Leave-No-Trace” message. Information on current conditions, hazards, and recommended equipment for backcountry travel will also be provided.



Publication and distribution of maps, educational materials, interpretive brochures and guides, will normally involve the Craters of the Moon Natural History Association. The three BLM Field Offices and Interagency Visitor Center in Idaho Falls will explore opportunities for working with the Natural History Association.

Wilderness Study Areas: Approximately 90 percent of the land transferred from BLM to NPS by the Proclamation is in Wilderness Study Area status. In many areas, BLM administered land lies between the WSA boundary and the NPS administered lava flows within the WSA. The Proclamation instructed NPS to manage WSA's according to Section 603 of FLPMA. NPS has national policy guidance for management of areas recommended suitable for wilderness designation. However, at Craters of the Moon, NPS will generally use BLM's handbook, "Interim Management Policy and Guidelines for Lands Under Wilderness Review" (IMP, Handbook 8550-1). BLM's IMP is directly tiered to Section 603 of FLPMA. This will also facilitate seamless service and avoid contrasts between the two agencies' management of the same WSA within the same Monument.

Every effort will be made to coordinate WSA IMP work with ongoing transportation network inventory, visitor use measurement, and cadastral survey. For example, the transportation system inventory will involve looking for any new ways established in WSA's since 1980 as well as documenting the condition of all existing ways.

The Proclamation had no effect on the existing, designated, NPS Craters of the Moon Wilderness.

Water Rights: The Proclamation does not reserve water as a matter of Federal law. However, the agencies will file for water rights under Idaho State Statute and within the procedures of the Snake River Basin General Water Adjudication. BLM has submitted several filings within the Monument, primarily for purposes of livestock and wildlife water.

Mineral Materials: The Proclamation prohibits casual rock collection on all land within the Monument. The agencies will provide information on BLM areas outside the Monument where casual collection of materials similar to those found in the Monument is appropriate and permitted.

No mining claims or mineral leases exist within the boundaries of the Monument. Existing authorizations for material sites within the Monument will continue during the interim planning period. Applications for new free use sites, community pits, common variety mineral material sales, or other discretionary mineral material disposals will not be accepted until completion of the Monument plan.

Lands and Realty: The Monument's external boundary is over 260 miles long. Within the boundary are approximately 8,000 acres of State land and 7,000 acres of private land. The Monument does not contain any Recreation and Public Purpose Act leases; active land exchanges, land sales or other land disposal actions.

BLM will perform an inventory of all rights-of-way, easements, land use permits, and other authorizations in effect as of the date of the proclamation. The agencies will make determinations on Valid Existing Rights as part of the planning process. At this time, the agencies are not aware of any conflicts between existing lands and realty program actions and the Proclamation. Action on applications for new, discretionary land use authorizations will be guided by existing NPS and BLM policies until completion of the Monument plan.

The agencies will accept proposals for the acquisition of the private and state land within the Monument boundary during the interim planning period. The agencies will emphasize that all acquisition proposals, whether through easement, fee title, or exchange involve a willing seller who initiates the proposal. The agencies will identify acquisition priorities as part of the Monument plan.

BLM will prepare a written description of the Monument boundary and perform a meets and bounds survey of the external Monument boundary. Both agencies will approve the final boundary description. Minor boundary corrections based on the survey require the approval of both agencies. The agencies will consider maps showing the Monument boundary as preliminary and draft, until the description and survey are complete, approved, and filed with the Secretary of Interior.

In many places, the boundary between NPS and BLM administered land is extremely difficult to describe and locate. In most cases, distinguishing the boundary between BLM and NPS administered land, on the ground, is not a matter of concern to the agencies or the public. Surveying the boundary between the agencies is not a high priority. If a specific situation requires determination of the BLM - NPS boundary, then the boundary line will be described by the Universal Transverse Mercator coordinates which correspond to the edge line of the brown colored lava shown on USGS 7.5 minute series topographic maps.

Government to Government Tribal Coordination: Federal agencies are responsible for maintaining a formal government to government relationship with American Indian tribes. Federal agencies protect and maintain treaty rights on public land. Regarding cultural resources, this relationship focuses on identifying and protecting archaeological sites possessing traditional and religious values. BLM generally provides access for tribal members to gather traditional plant and animal resources from public lands, including National Monuments. Both agencies will facilitate access for tribal members to sacred sites. BLM and NPS will incorporate the concerns of the Shoshone-Bannock Tribes into the Monument plan through formal coordination. The agencies will also regularly coordinate with the Tribes and Tribal staff concerning management activities at the Monument.

Coordination with State and Local Governments: Most state and local government coordination will involve both agencies. Whenever possible, BLM and NPS will cooperatively conduct communication and coordination as the “Monument” rather than as an individual agency.



Law Enforcement Coordination: Law enforcement staff will work together in a cooperative and coordinated manner within the Monument. Both agencies intend to emphasize education over enforcement during the interim management period.

Coordination with County Sheriffs will be conducted jointly. County deputization of BLM or NPS law enforcement staff is entirely at the discretion of the individual County Sheriff. BLM will enter into separate agreements with each of the five County Sheriffs affected by the Monument. During the interim management period, these agreements will provide financial assistance to the County Sheriffs so that they can manage an expected increase in people accessing the Monument as well as search and rescue activities.

Fire Management: BLM has traditionally functioned as the lead agency for most fire management activities in the Monument area. The agencies have established a long standing cooperative relationship prior to the expansion Proclamation. Both agencies have also entered into a variety of agreements with nearby local fire departments and rural Fire Districts. The agencies intend to continue, if not improve, these existing partnerships.

The Monument contains a complete spectrum of fire management activities. Fire suppression ranges from highest priority immediate response aimed at protecting remnant stands of sagebrush to low level monitoring of lightening caused fires within the Craters of the Moon Wilderness. BLM has scheduled several fuel management projects and range restoration projects which are partially within the Monument. Existing vegetation studies related to fire effects and fire rehabilitation will continue.

During the interim planning period, adequate fire management guidance exists under the agencies' existing plans and agreements. For example, existing fire management guidance requires a Resource Advisor for all wildfires within or near the Monument. Both agencies will continue to operate under existing fire management plans and Interagency Agreements which are reviewed and updated on an annual basis. The Monument plan will address fire management and the relationship between fire management and other resources.

Weed and Grasshopper Control Programs: The Proclamation will result in the agencies placing a higher priority on weed management over a large area. The focus on stopping the spread of new invaders will continue. The agencies will explore opportunities to increase cooperation and logistical coordination with local governments and weed control districts. The ongoing, nationally recognized, Raven's Eye WSA leafy spurge program will continue on both agencies' jurisdictions. Weeds are recognized to be an important element of transportation system management.

Historically, grasshopper control activities have occurred within the Monument boundary where there is an agricultural interface. The agencies will work with USDA APHIS to address the additional constraints of Monument designation in the NEPA process for proposed grasshopper control activities.

USDA Wildlife Service's Operations: The Proclamation did not specifically address predator control. However, predator control activities are addressed in the Background Materials document, the Secretary's Memorandum, the Director's Memorandum, and BLM's National Interim Management Policy for Newly Created National Monuments. For BLM administered land, predator control, including any necessary preemptive strategies, will continue to be governed under applicable laws. BLM will continue to coordinate with Wildlife Services as described in existing national MOU's, BLM State policy, and Upper Snake River District annual meetings.

The NPS Superintendent has the authority to authorize predator control on NPS administered land for individual offending animals on a case-by-case basis.

Livestock Grazing: Both agencies will emphasize that the Proclamation affirms BLM's continued management of livestock grazing consistent with existing policies. Both agencies recognize that livestock grazing is an important component of the landscape described in the Proclamation. BLM will continue to follow the same laws, regulations, and policies for administering grazing as it did prior to the Proclamation.

Scientific Study: All of the Proclamations associated with Craters of the Moon National Monument focus on the unique geologic resources of the Monument. The protection, study, and appreciation of the Monument's unique geologic features are perhaps the over-riding purpose of the Monument. Both agencies acknowledge the challenge of scientific study in the Monument's remote and often harsh environment. In addition, restrictions on surface disturbance and cross-country travel can constrain geologic research. Nonetheless, the agencies recognize the potential exists for significant scientific discoveries. In addition, basic research plays an important role in the identification, characterization and interpretation of the Monument's resources.

The existing MOU between the agencies and the U.S. Geological Survey remains in effect. BLM and NPS will continue to encourage the U. S. Geological Survey to pursue ongoing research involving geologic mapping, geochemistry, geophysics, geomorphology, seismology, geomagnetism, geodesy, tectonics, earthquake hazards, volcanic hazards, and climate change.

The agencies will encourage partnerships with a variety of academic organizations, professional societies, clubs and hobby organizations who have expressed interest in the Monument's unique geologic resources. These organizations include three separate Grottos associated with the National Speleological Society.

The existing NPS unit has a long term air quality monitoring program in place. Both agencies intend to continue and expand climatic and air quality research and monitoring. The Idaho National Energy and Environmental Laboratory has cooperatively participated in these activities and is expected to be an important partner in the future.



The Monument contains several ongoing archeologic scientific studies. The agencies will continue established relationships with academic institutions for these challenge cost share research projects. Inventory, characterization, and protection of cultural resources is a high priority for both agencies. The potential for additional discoveries of significant cultural and paleontological resources is high. Investigations must conform with policy guidelines for surface disturbance within Wilderness Study Areas and minimize surface disturbance elsewhere.

The lava flows at Craters of the Moon create many unique opportunities for the study of isolated, relatively undisturbed native plant communities. The Proclamation describes kipukas as important comparative benchmarks relative to human altered plant communities in the Snake River Plain. The Monument has been the site of many vegetative studies and research projects. Several studies involving rare plants, natural fire, fire rehabilitation, and grazing are in progress. The agencies intend to continue ongoing studies without regard to the Proclamation's transfer of administration of some study sites.

The Monument is also a remnant stronghold for sage grouse. The Monument is particularly suited for the study of healthy sage grouse populations. The agencies intend to encourage both population and habitat research in cooperation with the Idaho Department of Fish and Game.

Several potential partners have expressed an interest in biological science at the Monument including Idaho's Conservation Data Center, the Idaho Rangeland Resource Commission, universities, and the Biological Division of the U.S. Geological Survey. Both agencies will actively encourage appropriate and needed biological research in cooperation with these partners to fulfill this important aspect of Monument designation.

The agencies hope to sponsor and host a Science Symposium in Fiscal Year 2002 with the intent of cataloging existing scientific information and fostering future research within the Monument.

Recommended by:

/s/ _____ 10/24/01

Jim May, date

District Manager

BLM

Upper Snake River District

10/26/01 _____
/s/

James A. Morris, date

Superintendent

NPS

Moon National Monument

Craters of the

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Upper Snake River District
1405 Hollipark Drive
Idaho Falls, Idaho 83401-2100

In Reply Refer To:
6210 (ID-079) P

November 29, 2001

EMS
Instruction Memorandum No. ID-070-2002-001
Expires: 9/30/03

To: All Employees

From: District Manager

Subject: Interim Management Guidelines for Craters of the Moon National Monument

Program Area: National Landscape Conservation System (NLCS).

Purpose: This Instruction Memorandum transmits the attached Interim Management Guidelines for Craters of the Moon National Monument. The Guidelines provide a management strategy for the Monument while BLM and the National Park Service (NPS) cooperatively prepare a land use plan.

Policy/Action: These Interim Guidelines are an Addendum to the Memorandum of Understanding (BLM-ID-MOU-399) between BLM and NPS for the Craters of the Moon National Monument. The Memorandum of Understanding was recently signed by the BLM Idaho State Director and NPS Pacific West Regional Director. The MOU broadly frames the cooperative relationship between the NPS and BLM. The Interim Management Guidelines describe how BLM and NPS will manage the National Monument during the land use planning process. The Guidelines apply to all BLM and NPS management actions and activities at the expanded National Monument. The NPS unit at Craters of the Moon National Monument will publish the Guidelines as part of the Compendium of Superintendents Orders.

Timeframe: This IM is effective immediately.



Background: Presidential Proclamation 7373 of November 9, 2000 expanded Craters of the Moon National Monument and instructed BLM and NPS to prepare a joint management plan for the Monument. Subsequently, the Secretary of Interior instructed the agencies to issue interim management guidance for the expanded Monument. For BLM, NLCS national policy requires the development of unit specific interim management guidelines which are tiered to the National Interim Management Policy for Newly Created National Monuments.

Manual/Handbook Sections Affected: None.

Coordination: The following Offices have provided input to, and reviewed draft versions of the attached Interim Management Guidelines: BLM Shoshone Field Office, Upper Snake River District, Idaho State Office Resource Services and Support Services Divisions, Headquarters NLCS Office; NPS Craters of the Moon National Monument, Columbia Cascades Support Office and the Pacific West Regional Office.

Contact: If you have questions regarding this IM or the Interim Management Guidelines, please contact Rick VanderVoet, BLM Monument Manager, at 208-886-7288, or Jim Morris, NPS Superintendent, at 208-527-3257.

Signed by:
Jim May
USRD, District Manager

Authenticated by:
Sandy Hoffer
Secretary

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240
October 4, 2001

In Reply Refer To:
2071 (WO-171) N

EMS TRANSMISSION 10/11/01
Instruction Memorandum No. 2002-008
Expires: 09/30/2003

To: State Directors and Assistant Directors

From: Director

Subject: Interim Management Policy for Bureau of Land Management National
Monuments and National Conservation Areas

Program Area: National Landscape Conservation System; National Monuments; National Conservation Areas

Purpose: This Instruction Memorandum issues interim management guidelines for newly designated BLM national monuments and national conservation areas and supercedes IM No. 2000-62. The guidelines in this policy are designed to provide direction to State Directors responsible for the proper care of new national conservation areas or national monuments, pending the completion of the required planning processes.

Policy/Action: See Attachment 1.

Time Frame: This guidance is in effect immediately.

Background: IM No. 2000-62, which provides interim management guidance for newly designated BLM national monuments expired on September 30, 2001. This Instruction Memorandum updates the guidance to include national conservation areas with input from the field.

Budget Impact: n/a

Manual/Handbook Sections Affected: n/a



Coordination: n/a

Contact: If you have any questions or concerns regarding this policy, you may contact Elaine Marquis-Brong, Director, National Landscape Conservation System, at (202) 208-3516.

Signed by:
Nina Rose Hatfield
Acting Director

Authenticated by:
Vincent C. Chapman Jr
Policy & Records Group, WO-560

1 Attachment
1 Interim Management Policy (4 pp)

Interim Management Policy

BLM National Monuments

BLM National Conservation Areas

Adhere to direction in the legislation or the President's Proclamation

- Federal lands and interests in lands within the national conservation area or monument are withdrawn from all forms of entry, location, selection, sale, leasing, or other disposition under the public land laws, including among others the mineral leasing and mining laws unless otherwise specified in legislation or the Proclamation.
- Valid existing rights will be recognized.
- The States responsibilities and authorities regarding wildlife management, including fishing and hunting, within the national conservation area or the monument are unaffected by legislation or the Proclamation.
- Grazing activities shall continue to be governed by applicable laws and regulations other than specified in legislation or the Proclamation.
- Existing withdrawals, reservations, or appropriations are not revoked, but the national conservation area or monument is the dominant reservation.

Maintain existing management policies, designations, and allocations except where changes are necessary to comply with the legislation or Proclamation and protect the objects of scientific and historic interest within the national conservation area or monument.

Provide the public with prompt and accessible information on questions regarding the use of federal lands within the national conservation area or monument.

Coordinate with the local, State, Tribal, and other governmental entities (under existing agreements and any new arrangements deemed necessary) to disseminate and exchange information and cooperate in management actions, consistent with applicable legal authorities and other directives.

Assure the applications, proposals, and future use requests pending when the legislation or Proclamation was issued are subject to the terms of the legislation or Proclamation, including its recognition of valid existing rights, and other management directives and decisions relate to the national conservation area or monument.

Consider land or easement acquisitions and land exchanges that will enhance the values of the national conservation area or monument.

All existing planning documents related to the monument lands should be reviewed for consistency with the legislation or Proclamation. Consistent with NEPA and FLPMA, the plans should be modified or a



new plan created for the monument that addresses all resource issues in the legislation or Proclamation. A separate planning document for the national conservation area or monument is recommended, as opposed to combining the national conservation area or monument with an adjacent administrative resource area.

Discussion of Specific Activities

In general, actions that are not precluded by the Proclamation or legislation and which do not conflict with the established purposes of the monument or national conservation area may continue. Allowed activities can be restricted only where (1) the BLM, through processes required by existing law, identifies places where such uses ought to be restricted or prohibited as necessary to protect the federal lands and resources, including the objects protected by the monument or national conservation designation; or (2) where the BLM finds a clear threat from such a use to the federal lands and resources, including the objects protected by the national conservation area or monument designation and the circumstances call for swift protective action.

Livestock Grazing: Where applicable and consistent with the designation, livestock grazing within the national conservation area or monument is permitted, pursuant to the terms of permits and leases. Appropriate grazing management practices (as in all properly managed grazing pastures) should be followed to protect rangeland resources. Implementation of Standards and Guidelines for Rangeland Improvement should continue. Actions should be taken to assist permits in assuring compliance with existing requirements. Enforcement actions against trespassers or other violators continue to be authorized under policy.

Animal Damage Control: Coordinate closely with State Game and Fish Department and Animal and Plant Health Inspection Service (APHIS) on animal damage control issues.

Camping: Dispersed recreational camping may continue consistent with current policies and practices and the Proclamation. Developed BLM camping facilities should be maintained and rehabilitated as appropriate, consistent with monument purposes.

Facilities: Maintenance of existing facilities should be permitted, subject to compliance with current policies and practices, provided monument resources are protected. Applications for new facilities may be considered, if they will protect or enhance monument resources.

Hunting and Fishing: Coordinate with the State to ensure public safety, specifically if there are areas of increased visitor use.

Mineral Activities (including Hard rock, Oil, Gas, and Coal): Unless otherwise specified in legislation or proclamation all valid existing rights will be recognized in accordance with policy.

Noxious Weeds/Exotic Species: Existing noxious weed control activities should continue. Exotic species should not be introduced, unless doing so is essential to control noxious weeds or other undesirable species.

Off-Road Vehicles: No areas in the national conservation area or monument should be authorized for cross-country, off-road vehicular use, except for authorized administrative and emergency purposes. For routes, including washes, where motorized and mechanical vehicular use has been authorized by past planning decisions, management discretion should be exercised where necessary, through emergency closures or other actions, to protect the national conservation area or monument resources. Wheeled game carriers are exempt.

Paleontological Resources and Rock Collection: The collection of any objects, including vegetation, paleontological resources, or rock specimens, should not be permitted, except where intended for legitimate scientific uses for which documentation is provided to the satisfaction of the responsible management official. Where limited wood gathering for uses including fire wood and fence maintenance occurred prior to designation, this activity could be permitted. In such cases the manager must assure that national conservation area or monument resources are not affected.

Rights-of-Way: No new rights-of-way or ancillary public facilities should be processed, except for rights-of-way pursuant to existing policies and practices and necessary for access and/or maintenance needs to private or state in holdings, public facilities or administrative sites. In addition, rights-of-way may be permitted within the boundary of existing rights-of-way or designated rights-of-way corridors established by previous land use planning, and where site specific NEPA analysis determines that impact to the objects or values for which the national conservation area or monument was designated would be negligible.

Roads: Road improvements should be minimal and designed solely to correct those conditions that are unsafe or hazardous. Activities that maintain, as opposed to enhance, existing roads may be permissible.

Scientific, Archeological, and Historical Investigations: Scientific, archeological, and historical investigations that increase our understanding of the national conservation area's or monument's resources are important and scientific use for surveys and reconnaissance may be allowed but surface disturbance should be avoided.

Signs and Interpretation: Appropriate signs at the national conservation areas or monuments boundaries should be provided. Other relevant information should be posted as needed. Actions should be initiated to interpret the resources and values and provide environmental education to visitors on important topics (i.e., visitor safety and resource protection).

Surface Disturbance and Reclamation Activities under Current Permits: Surface disturbance and reclamation activities under current permits should proceed consistent with those permits. Permit extensions will be considered subject to consistency with applicable policies, laws and proclamation.

Vegetation Manipulation: Vegetation manipulation should proceed only when consistent with conservation and protection of the national conservation area or monument's resources. Chaining and other vegetation manipulation methods that cause substantial surface disturbance shall not be permitted.



Wilderness Study Areas: Where applicable, maintain the non-impairment standard for wilderness study areas, per FLPMA, to prevent undue and unnecessary degradation of resources.

APPENDIX C

PROPOSED BOUNDARY ADJUSTMENTS

The boundary of a national monument may be modified only as authorized by law. This appendix describes four minor proposed changes to the external boundary of the Monument and three proposed changes to the boundary between NPS and BLM within the Monument. The agencies are recommending these boundary modifications for the reasons described below. Congress would have to pass legislation authorizing a modification and the President would need to sign that legislation for the modification to be authorized by law.

As part of the planning process, the Agencies have identified and evaluated boundary adjustments that may be necessary or desirable in order to carry out the purposes of the Craters of the Moon National Monument and Preserve. Boundary adjustments have been recommended to:

- Protect significant resources and values, or to enhance opportunities for public enjoyment related to Monument purposes;
- Address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineations such as topographic or other natural features or roads; or
- Otherwise protect Monument resources that are critical to fulfilling Monument purposes.

All recommendations for boundary changes have met the following two criteria:

- The added lands will be feasible to administer, considering their size, configuration, and ownership, and hazardous substances, costs, the views of and impacts on local communities and surrounding jurisdictions, and other factors such as the presence of exotic species; and
- Other alternatives for management and resource protection are not adequate.

These criteria apply conversely to recommendations for the deletion of lands from the authorized boundaries of the Monument. For example, before recommending the deletion of land, a finding was made that the land did not include a significant resource, value, or opportunity for public enjoyment related to the purposes of the Monument. Full consideration was given to present and future needs before a recommendation was made to delete lands from the authorized boundaries of the Monument.

Boundary adjustments essentially fall into three distinct categories: (1) technical revisions; (2) minor revisions based upon statutorily defined criteria; and (3) revisions to include adjacent real property acquired by donation, purchased with donated funds, transferred from any other federal agency, or obtained by exchange. Adjacent real property is considered to be land located contiguous to, but outside the boundary of the Monument. The modifications proposed here are technical and minor.

The following is a list of recommended boundary modifications including legal description, approximate acreage, and a brief summary of the justification for each proposed change. See Figure C-1 (A through E) for specific locations.

- 1) Township 2 North, Range 24 East, Section 24 – Approximately 90 acres
 - a. Recommended transfer of management from NPS to BLM to provide for the continuation of historic grazing. With the expansion of the Monument, the NPS has assumed management of all lava covered lands within the Monument (indicated by the dark brown coloring on 7.5 minute USGS color maps). The NPS management boundary would be moved eastward from the lava edge illustrated on the USGS 7.5 minute map to the first road. This adjustment would be bounded at the southern end by the Craters of the Moon Wilderness area. A closer evaluation of this particular site revealed relatively low evidence of lava and/or unique features. As such, this land can be more closely identified with most other BLM managed portions of the Monument and should be managed accordingly.
- 2) T2N, R24E, Sec11 – Approximately 120 acres
 - a. Recommended transfer of management from NPS to BLM to provide for the continuation of historic grazing. With the expansion of the Monument, the NPS has assumed management of all lava covered lands within the Monument (indicated by the dark brown coloring on 7.5 minute USGS color maps). The NPS management boundary would be moved eastward from the lava edge illustrated on the USGS 7.5 minute map to the first road. A closer evaluation of this particular site revealed relatively low evidence of lava and/or unique features. As such, this land can be more closely identified with most other BLM managed portions of the Monument and should be managed accordingly.
- 3) T2N, R25E, Sec5 – Approximately 1 acre
 - a. Recommended inclusion of land in the Monument from the BLM to expand the Monument boundary from a legal subdivision to meet the southern edge of the highway right of way. This would provide for a more consistent and manageable boundary.
- 4) T2N, R25E, Sec5 – Approximately 60 acres
 - a. Recommended deletion of land from the Monument to adjust the Monument boundary from a legal subdivision to meet the southern edge of the highway right of way. This would provide for a more consistent and manageable boundary. This land does not provide exceptional opportunities for public enjoyment, nor does it contain features for which the Monument was established to protect.
 - b. It would also eliminate a mineral material site from the Monument.
- 5) T3N, R25E, Sec27 – Approximately 2 acres
 - a. Recommended deletion of land from the Monument to adjust the Monument boundary from a legal subdivision to meet the southern edge of the highway right of way. This



would provide for a more consistent and manageable boundary.

- 6) T3N, R25E, Sec27 – Approximately 3 acres
 - a. Recommended deletion of land from the Monument to adjust the Monument boundary from a legal subdivision to meet the southern edge of the highway right of way. This would provide for a more consistent and manageable boundary.
- 7) T5S, R28E, Sec36 – Approximately 230 acres
 - a. Recommended transfer of management from NPS to BLM to provide for the continuation of historic grazing. With the expansion of the Monument, the NPS has assumed management of all lava covered lands within the Monument (indicated by the dark brown coloring on 7.5 minute USGS color maps). A closer evaluation of this particular site revealed relatively low evidence of lava and/or unique features. As such, this land can be more closely identified with most other BLM managed portions of the Monument and should be managed accordingly.
- 8) T1S, R22E, Sec 5 – Approximately 2 acres
 - a. Recommended adjustment of the Monument boundary from a legal subdivision to meet the southern edge of the highway right of way. This would provide for a more consistent and manageable boundary.

The agencies have consulted with the relative interests to arrive at these proposals which are consistent with enabling Legislation, the Proclamations, and current management guidelines. The agencies received no other proposals for boundary modifications during the scoping for the Draft Plan/DEIS.

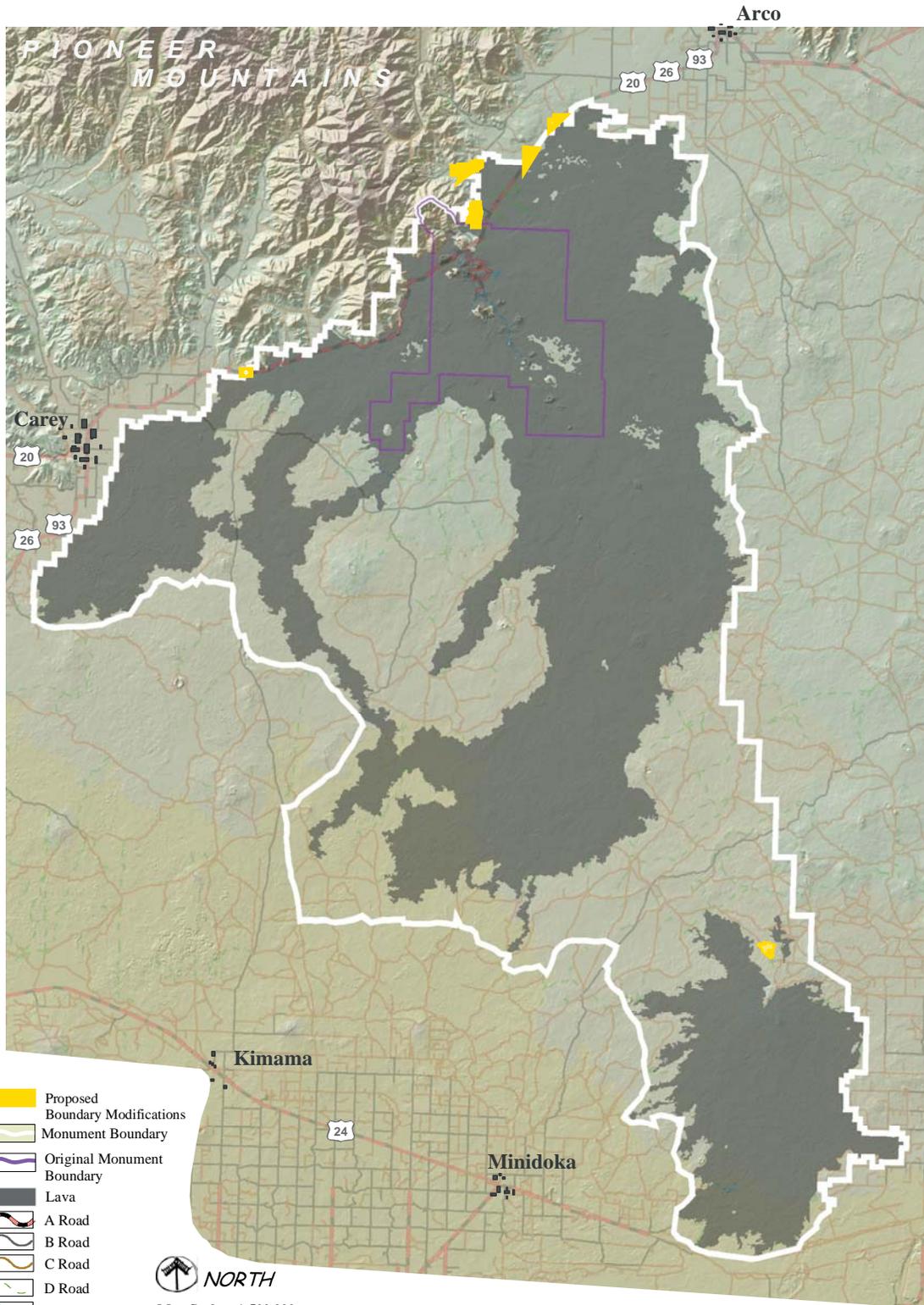
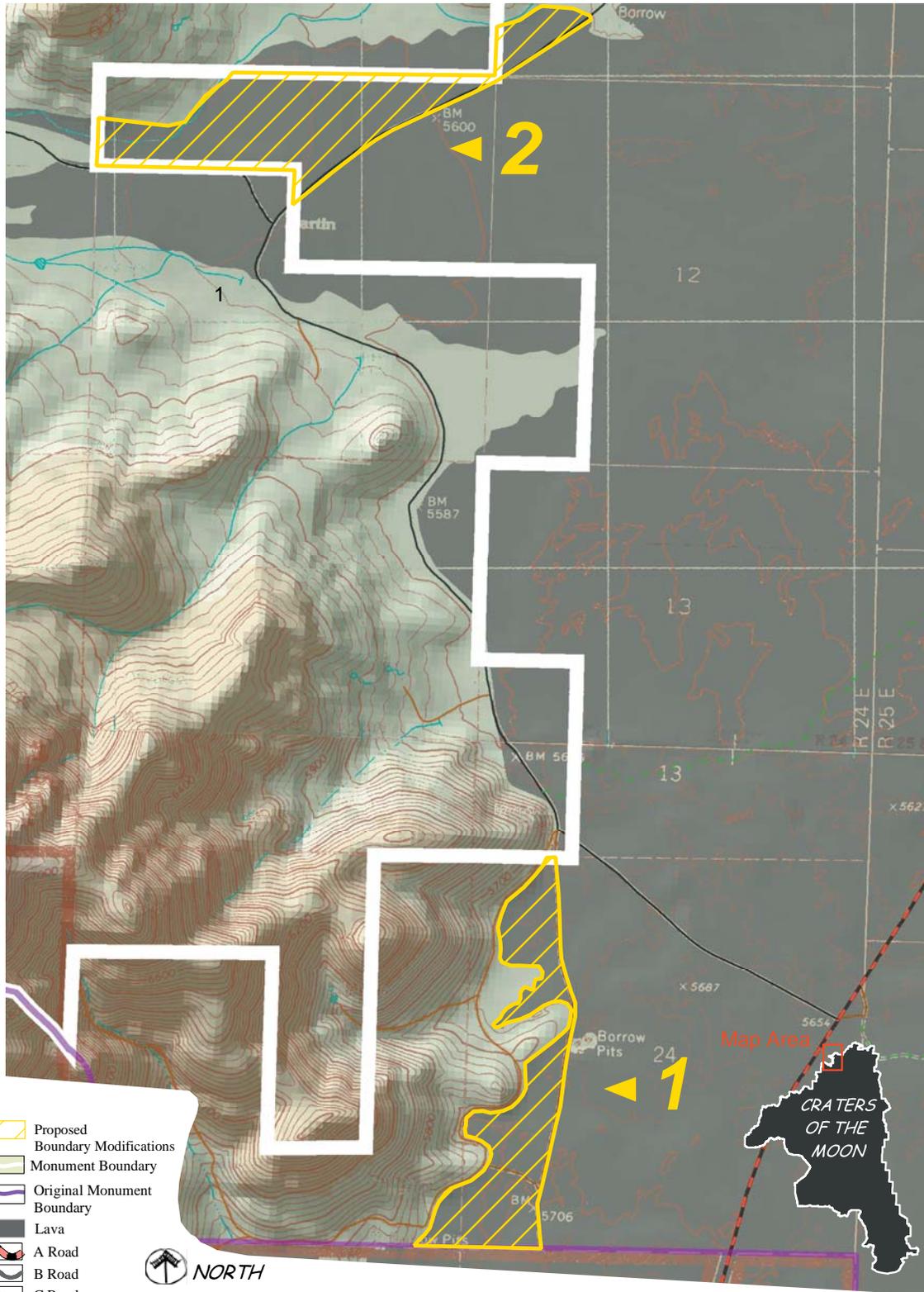


FIGURE C1-A
PROPOSED BOUNDARY MODIFICATIONS
 Craters of the Moon National Monument & Preserve
 U.S. Department of the Interior * National Park Service * Bureau of Land Management

Proposed boundary modifications have been oversized for graphic presentation and are not to scale. 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.





-  Proposed Boundary Modifications
-  Monument Boundary
-  Original Monument Boundary
-  Lava
-  A Road
-  B Road
-  C Road
-  D Road
-  Class I Trail

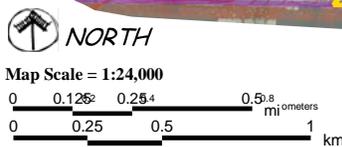
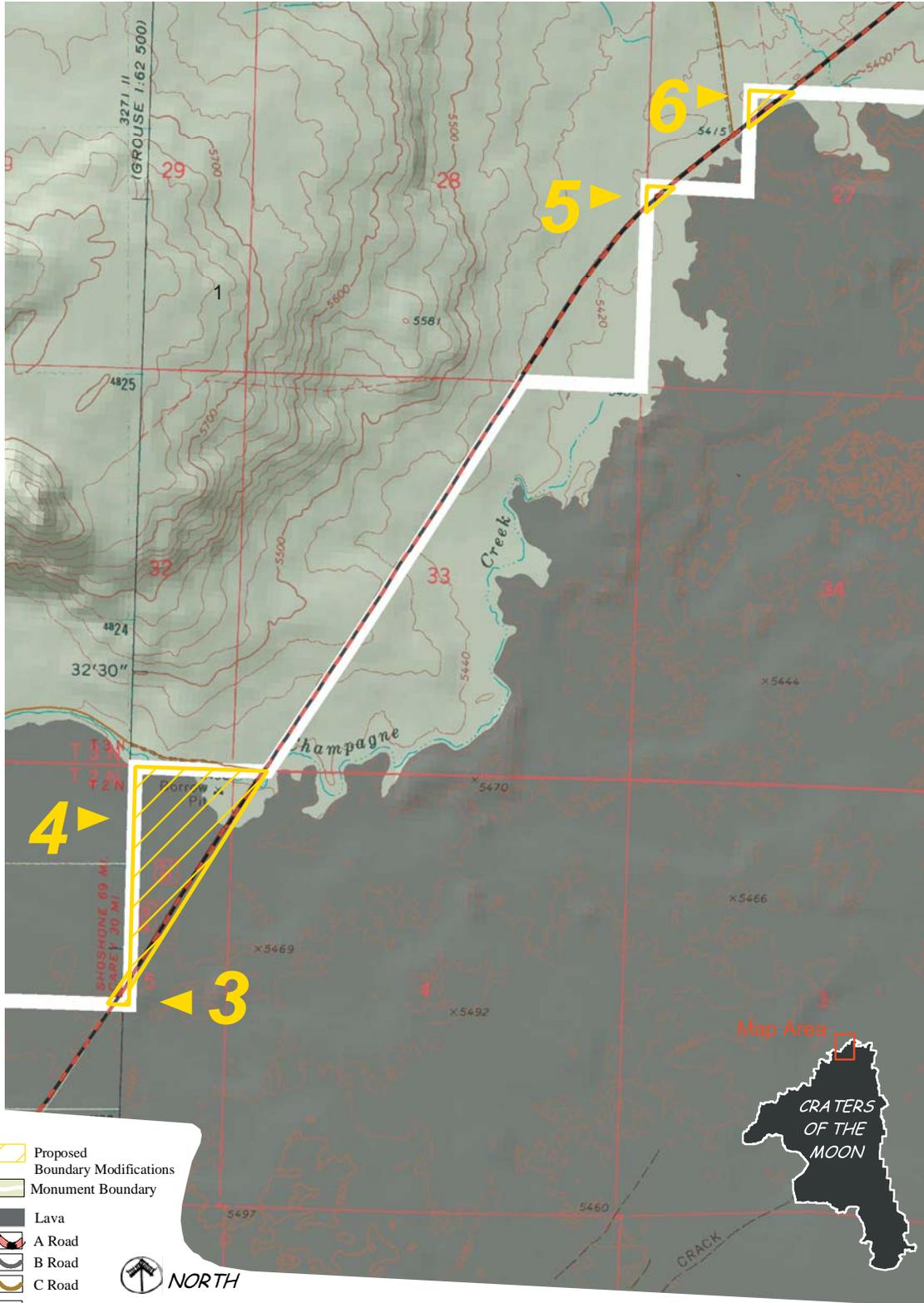


FIGURE C1-B

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

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.



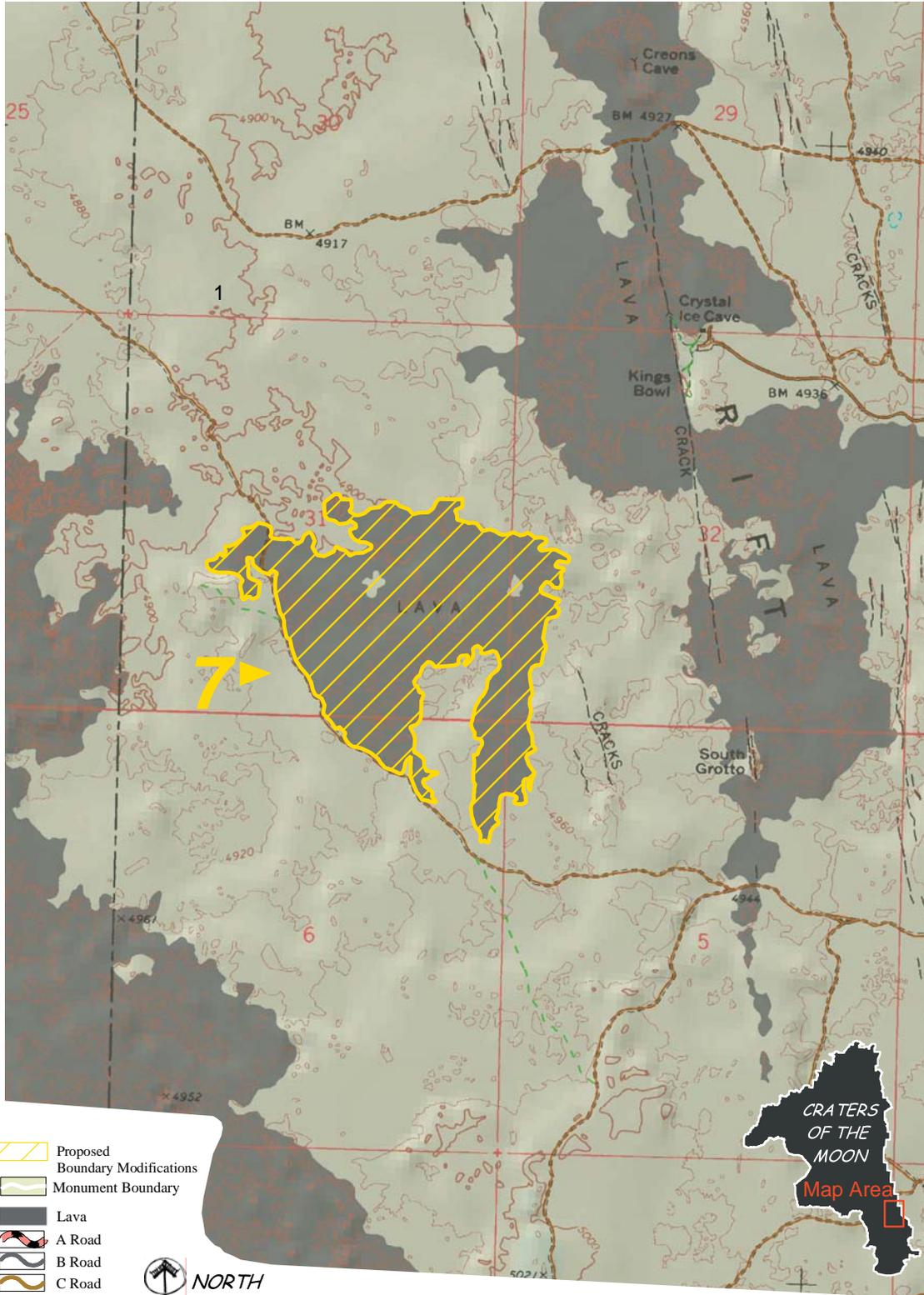
- Proposed Boundary Modifications
- Monument Boundary
- Lava
- A Road
- B Road
- C Road
- D Road
- Class I Trail

NORTH
 Map Scale = 1:24,000
 0 0.125 0.25 0.5 mi
 0 0.25 0.5 1 km

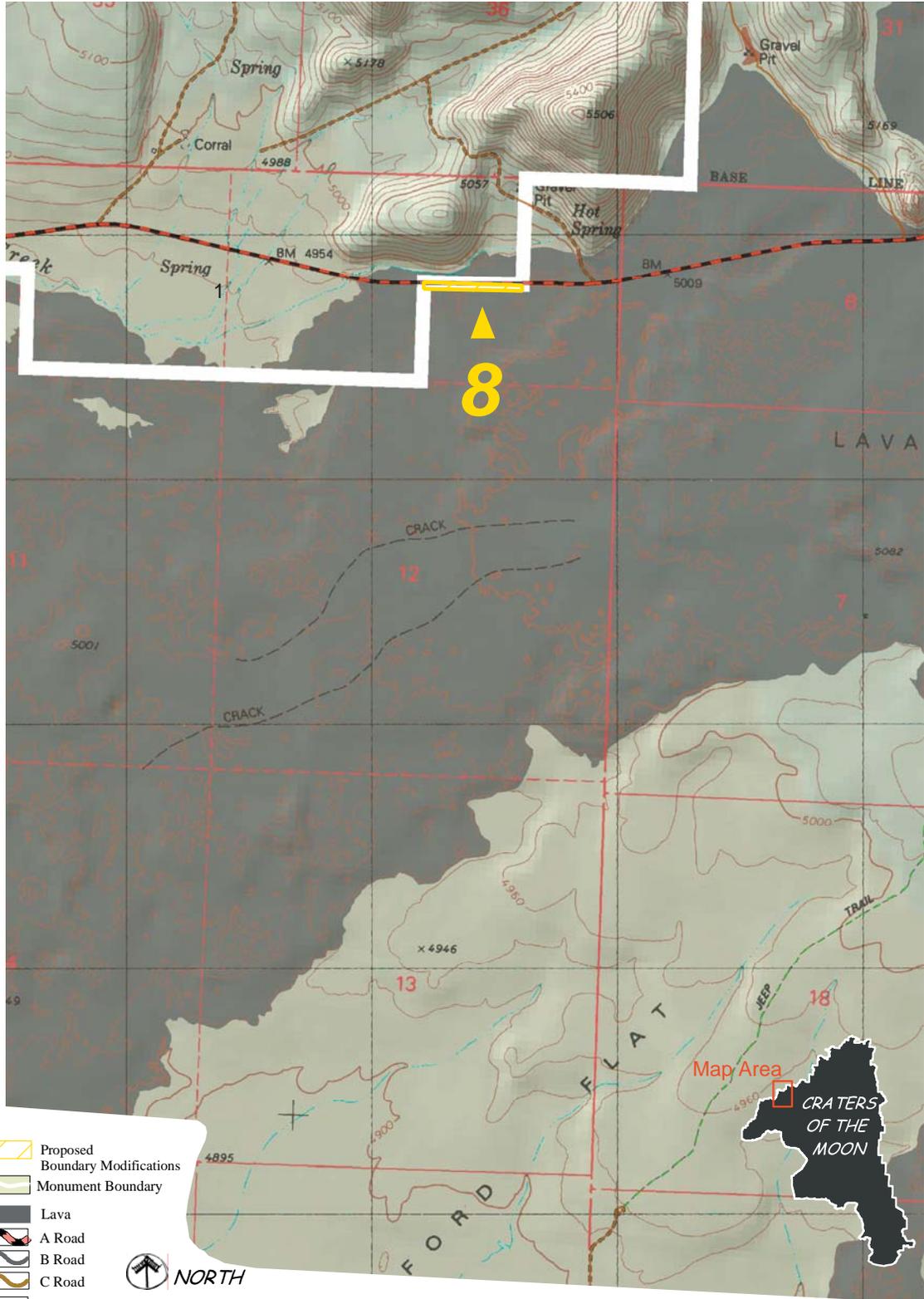
FIGURE C1-C
PROPOSED BOUNDARY MODIFICATIONS
 Craters of the Moon National Monument & Preserve
 U.S. Department of the Interior * National Park Service * Bureau of Land Management

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.





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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.



APPENDIX D

COMMON AND SCIENTIFIC NAMES OF SPECIES OCCURRING AT CRATERS OF THE MOON NATIONAL MONUMENT AND PRESERVE

| Amphibians | |
|-----------------------|----------------------------|
| Western toad | <i>Bufo boreas</i> |
| Boreal chorus frog | <i>Pseudacris maculate</i> |
| Pacific tree frog | <i>Pseudacris regilla</i> |
| Great Basin spadefoot | <i>Spea intermontana</i> |

| Birds | |
|---------------------------|----------------------------------|
| Copper's hawk | <i>Accipiter cooperii</i> |
| Northern goshawk | <i>Accipiter gentilit</i> |
| Sharp-shinned hawk | <i>Accipiter striatus</i> |
| Spotted sandpiper | <i>Acitis macularia</i> |
| Western grebe | <i>Aechmophorus occidentalis</i> |
| Northern saw-whet owl | <i>Aegolius acadicus</i> |
| White-throated swift | <i>Aeronautes saxatalis</i> |
| Red-winged blackbird | <i>Agelaius phoeniceus</i> |
| Chukar | <i>Alectoris chukar</i> |
| Grasshopper sparrow | <i>Ammodrmus savannarum</i> |
| Sage sparrow | <i>Amphispiza belli</i> |
| Black-throated sparrow | <i>Amphispiza bilineata</i> |
| Northern pintail | <i>Anas acuta</i> |
| American wigeon | <i>Anas americana</i> |
| Northern shoveler | <i>Anas clypeata</i> |
| Green-winged teal | <i>Anas crecca</i> |
| Cinnamon teal | <i>Anas cyanoptera</i> |
| Blue-winged teal | <i>Anas discors</i> |
| Mallard | <i>Anas platyrhynchos</i> |
| Gadwall | <i>Anas strepera</i> |
| American pipit | <i>Anthus rubescens</i> |
| Golden eagle | <i>Aquila chrysaetos</i> |
| Black-chinned hummingbird | <i>Archilochus alexandri</i> |
| Great blue heron | <i>Ardea herodias</i> |
| Short-eared owl | <i>Asio flammeus</i> |
| Long-eared owl | <i>Asio otus</i> |
| Western burrowing owl | <i>Athene cunicularia</i> |
| Lesser scaup | <i>Aythya affinis</i> |

| Birds | |
|------------------------|-----------------------------------|
| Redhead | <i>Aythya americana</i> |
| Ring-necked duck | <i>Aythya collaris</i> |
| Canvasback | <i>Aythya valisineria</i> |
| Cedar waxwing | <i>Bombycilla cedrorum</i> |
| Bohemian waxwing | <i>Bombycilla garrulus</i> |
| Ruffed grouse | <i>Bonasa umbellus</i> |
| Canada goose | <i>Branta canadensis</i> |
| Great horned owl | <i>Bubo virginianus</i> |
| Bufflehead | <i>Bucephala albeola</i> |
| Common goldeneye | <i>Bucephala clangula</i> |
| Red-tailed hawk | <i>Buteo jamaicensis</i> |
| Rough-legged hawk | <i>Buteo lagopus</i> |
| Ferruginous hawk | <i>Buteo regalis</i> |
| Swainson's hawk | <i>Buteo swainsonii</i> |
| Lark bunting | <i>Calamospiza melanocorys</i> |
| Common redpoll | <i>Carduelis flammea</i> |
| Hoary redpoll | <i>Carduelis hornemanni</i> |
| Pine siskin | <i>Carduelis pinus</i> |
| American goldfinch | <i>Carduelis tristis</i> |
| Cassin's finch | <i>Carpodacus cassinii</i> |
| House finch | <i>Carpodacus mexicanus</i> |
| Turkey vulture | <i>Cathartes aura</i> |
| Hermit thrush | <i>Catharus guttas</i> |
| Swainson's thrush | <i>Catharus ustulatus</i> |
| Greater sage grouse | <i>Centrocercus urophasianus</i> |
| Brown creeper | <i>Certhia americana</i> |
| Belted kingfisher | <i>Ceryle alcyon</i> |
| Killdeer | <i>Charadrius vociferus</i> |
| Snow goose | <i>Chen caerulescens</i> |
| Black tern | <i>Chlidonias niger</i> |
| Lark sparrow | <i>Chondestes grammacus</i> |
| Common nighthawk | <i>Chordeiles minor</i> |
| American dipper | <i>Cinclus mexicanus</i> |
| Northern harrier | <i>Circus cyaneus</i> |
| Marsh wren | <i>Cistothorus palustris</i> |
| Evening grosbeak | <i>Coccothraustes vespertinus</i> |
| Northern flicker | <i>Colaptes auratus</i> |
| Band-tailed pigeon | <i>Columba fasciata</i> |
| Rock pigeon | <i>Columba livia</i> |
| Olive-sided flycatcher | <i>Contopus cooperi</i> |
| Western wood-pewee | <i>Contopus sordidulus</i> |



| Birds | |
|-------------------------|----------------------------------|
| American crow | <i>Corvus brachyrhynchos</i> |
| Common raven | <i>Corvus corax</i> |
| Steller's jay | <i>Cyanocitta stelleri</i> |
| Tundra swan | <i>Cygnus columbianus</i> |
| Blue grouse | <i>Dendragapus obscurus</i> |
| Yellow-rumped warbler | <i>Dendroica coronata</i> |
| Yellow warbler | <i>Dendroica petechia</i> |
| Townsend's warbler | <i>Dendroica townsendii</i> |
| Bobolink | <i>Dolichonyx oryzivorus</i> |
| Gray catbird | <i>Dumetella carolinensis</i> |
| Hammond's flycatcher | <i>Empidonax hammondii</i> |
| Dusky flycatcher | <i>Empidonax oberholseri</i> |
| Cordilleran flycatcher | <i>Empidonax occidentalis</i> |
| Willow flycatcher | <i>Empidonax traillii</i> |
| Gray flycatcher | <i>Empidonax wrighti</i> |
| Horned lark | <i>Eremophilla alpestris</i> |
| Brewer's blackbird | <i>Euphagus cyanocephalus</i> |
| Merlin | <i>Falco columbarius</i> |
| Prairie falcon | <i>Falco mexicanus</i> |
| Peregrine falcon | <i>Falco peregrinus</i> |
| Gyr falcon | <i>Falco rusticolus</i> |
| American kestrel | <i>Falco sparverius</i> |
| American coot | <i>Filica americana</i> |
| Wilson's snipe | <i>Gallinago gallinago</i> |
| Sandhill crane | <i>Grus canadensis</i> |
| Pinyon jay | <i>Gymnorhinus cyanocephalus</i> |
| Bald eagle | <i>Haliaeetus leucocephalus</i> |
| Barn swallow | <i>Hirunda rustica</i> |
| Yellow-breasted chat | <i>Icteria virens</i> |
| Bullock's oriole | <i>Icterus bullockii</i> |
| Varied thrush | <i>Ixoreus naevius</i> |
| Dark-eyed junco | <i>Junco hyemalis</i> |
| Northern shrike | <i>Lanius excubitor</i> |
| Loggerhead shrike | <i>Lanius ludovicianus</i> |
| Herring gull | <i>Larus argentatus</i> |
| California gull | <i>Larus californicus</i> |
| Ring-billed gull | <i>Larus delawarensis</i> |
| Franklin's gull | <i>Larus pipixan</i> |
| Black rosy-finch | <i>Leucosticte atrata</i> |
| Gray-crowned rosy-finch | <i>Leucosticte tephrocotis</i> |
| Long-billed dowitcher | <i>Limnodromus scolopaceus</i> |

| Birds | |
|-------------------------|-----------------------------------|
| Red crossbill | <i>Loxia curvirostra</i> |
| Western screech owl | <i>Megascops kennicottii</i> |
| Red-headed woodpecker | <i>Melanerpes erythrocephalus</i> |
| Lewis' woodpecker | <i>Melanerpes lewis</i> |
| Lincoln's sparrow | <i>Melospiza lincolnii</i> |
| Song sparrow | <i>Melospiza melodia</i> |
| Brown-headed cowbird | <i>Molothrus ater</i> |
| Townsend's solitaire | <i>Myadestes townsendi</i> |
| Ash-throated flycatcher | <i>Myiarchus cinerascens</i> |
| Clark's nutcracker | <i>Nucifraga columbiana</i> |
| Long-billed curlew | <i>Numenius americanus</i> |
| Whimbrel | <i>Numenius phaeopus</i> |
| Snowy owl | <i>Nyctea scandiaca</i> |
| MacGillivray's warbler | <i>Oporornis tolmiei</i> |
| Sage thrasher | <i>Orreoscoptes montanus</i> |
| Ruddy duck | <i>Oxyura jamaicensis</i> |
| Osprey | <i>Pandion haliaetus</i> |
| House sparrow | <i>Passer domesticus</i> |
| Savannah sparrow | <i>Passerculus sandwichensis</i> |
| Lazuli bunting | <i>Passerina amoena</i> |
| Fox sparrow | <i>Passerella iliaca</i> |
| American white pelican | <i>Pelecanus erythrorhynchos</i> |
| Gray partridge | <i>Perdix perdix</i> |
| Cliff swallow | <i>Petrochelidon pyrrhonota</i> |
| Common poorwill | <i>Phalaenoptilus</i> |
| Wilson's phalarope | <i>Phalaropus tricolor</i> |
| Ring-necked pheasant | <i>Phasianus colchicus</i> |
| Black-headed grosbeak | <i>Pheucticus melanocephalus</i> |
| Black-billed magpie | <i>Pica hudsonia</i> |
| Downy woodpecker | <i>Picoides pubescens</i> |
| Hairy woodpecker | <i>Picoides villosus</i> |
| Pine grosbeak | <i>Pinicola enucleator</i> |
| Green-tailed towhee | <i>Pipilo chlorurus</i> |
| Spotted towhee | <i>Pipilo maculatus</i> |
| Western tanager | <i>Piranga ludoviciana</i> |
| Snow bunting | <i>Plectrophenax nivalis</i> |
| White-faced ibis | <i>Plegadis chihi</i> |
| Eared grebe | <i>Podiceps nigricollis</i> |
| Pied-billed grebe | <i>Podilymbus podiceps</i> |
| Black-capped chickadee | <i>Poecile atricapilla</i> |
| Mountain chickadee | <i>Poecile gambeli</i> |



| Birds | |
|-------------------------------|-----------------------------------|
| Blue-gray gnatcatcher | <i>Polioptila caerulea</i> |
| Vesper sparrow | <i>Pooecetes gramineus</i> |
| Sora | <i>Porzana carolina</i> |
| Common grackle | <i>Quiscalus quiscula</i> |
| Virginia rail | <i>Rallus limicola</i> |
| American avocet | <i>Recurvirostra americana</i> |
| Ruby-crowned kinglet | <i>Regulus calendula</i> |
| Golden-crowned kinglet | <i>Regulus satrapa</i> |
| Rock wren | <i>Salpinctes obsoletus</i> |
| Say's phoebe | <i>Sayornis saya</i> |
| Northern waterthrush | <i>Seiurus noveboracensis</i> |
| Broad-tailed hummingbird | <i>Selasphorus platycercus</i> |
| Rufous hummingbird | <i>Selasphorus rufus</i> |
| American redstart | <i>Setophaga ruticilla</i> |
| Mountain bluebird | <i>Sialia currucoides</i> |
| Western bluebird | <i>Sialia mexicana</i> |
| Red-breasted nuthatch | <i>Sitta canadensis</i> |
| White-breasted nuthatch | <i>Sitta carolinensis</i> |
| Red-naped sapsucker | <i>Sphyrapicus nuchallis</i> |
| Williamson's sapsucker | <i>Sphyrapicus thryoideus</i> |
| Brewer's sparrow | <i>Spizella breweri</i> |
| Chipping sparrow | <i>Spizella passerina</i> |
| Northern rough-winged swallow | <i>Stelgidopteryx serripennis</i> |
| Calliope hummingbird | <i>Stellula calliope</i> |
| Forster's tern | <i>Sterna forsteri</i> |
| Western meadowlark | <i>Sturnella neglecta</i> |
| European starling | <i>Sturnus vulgaris</i> |
| Tree swallow | <i>Tachycineta bicolor</i> |
| Violet-green swallow | <i>Tachycineta thalassina</i> |
| Brown thrasher | <i>Toxostoma rufum</i> |
| House wren | <i>Troglodytes aedon</i> |
| Winter wren | <i>Troglodytes troglodytes</i> |
| American robin | <i>Turdus migratorius</i> |
| Eastern kingbird | <i>Tyrannus tyrannus</i> |
| Western kingbird | <i>Tyrannus verticalis</i> |
| Orange-crowned warbler | <i>Vermivora celata</i> |
| Tennessee warbler | <i>Vermivora pergrina</i> |
| Nashville warbler | <i>Vermivora ruficapilla</i> |
| Cassin's vireo | <i>Vireo cassinii</i> |
| Warbling vireo | <i>Vireo gilvus</i> |
| Plumbeous vireo | <i>Vireo plumbeus</i> |

| Birds | |
|-------------------------|--------------------------------------|
| Wilson's warbler | <i>Wilsonia pusilla</i> |
| Yellow-headed blackbird | <i>Xanthocephalus xanthocephalus</i> |
| Mourning dove | <i>Zenaida macroura</i> |
| White-throated sparrow | <i>Zonotrichia albicollis</i> |
| Golden-crowned sparrow | <i>Zonotrichia atricapilla</i> |
| White-crowned sparrow | <i>Zonotrichia leucophrys</i> |

| Mammals | |
|--------------------------|--------------------------------|
| Moose | <i>Alces alces</i> |
| Pronghorn | <i>Antilocapra americana</i> |
| Pallid bat | <i>Antrozous pallidus</i> |
| Pygmy rabbit | <i>Brachylagus idahoensis</i> |
| Coyote | <i>Canis latrans</i> |
| Gray wolf | <i>Canis lupus</i> |
| Beaver | <i>Castor canadensis</i> |
| Elk | <i>Cervus elephas</i> |
| Townsend's big-eared bat | <i>Corynorhinus townsendii</i> |
| Ord's kangaroo rat | <i>Dipodomys ordii</i> |
| Big brown bat | <i>Eptesicus fuscus</i> |
| Porcupine | <i>Erethizon dorsatum</i> |
| Mountain lion | <i>Felis concolor</i> |
| Sagebrush vole | <i>Lagurus curtatus</i> |
| Snowshoe hare | <i>Lepus americanus</i> |
| White-tailed jackrabbit | <i>Lepus californicus</i> |
| Black-tailed jackrabbit | <i>Lepus townsendii</i> |
| Bobcat | <i>Lynx rufus</i> |
| Yellow-bellied marmot | <i>Marmota flaviventris</i> |
| Striped skunk | <i>Mephitis mephitis</i> |
| Long-tailed vole | <i>Microtus longicaudis</i> |
| Montane vole | <i>Microtus montanus</i> |
| Short-tailed weasel | <i>Mustela ermina</i> |
| Long-tailed weasel | <i>Mustela frenata</i> |
| California myotis | <i>Myotis californicus</i> |
| Long-eared myotis | <i>Myotis evotis</i> |
| Small-footed myotis | <i>Myotis leibii</i> |
| Little brown myotis | <i>Myotis lucifugus</i> |
| Fringed myotis | <i>Myotis thysanodes</i> |
| Long-legged myotis | <i>Myotis volans</i> |
| Bushy-tailed woodrat | <i>Neotoma cinerea</i> |
| Pika | <i>Ochotona princeps</i> |



| Mammals | |
|--------------------------------|----------------------------------|
| Mule deer | <i>Odocoileus hemionus</i> |
| Muskrat | <i>Ondatra zibethicus</i> |
| Great Basin pocket mouse | <i>Perognathus parvus</i> |
| Deer mouse | <i>Peromyscus maniculatus</i> |
| Heather vole | <i>Phenacomys intermedius</i> |
| Raccoon | <i>Procyon lotor</i> |
| Western harvest mouse | <i>Reithrodontomys megalotis</i> |
| Merriam's shrew | <i>Sorex merriami</i> |
| Dusky shrew | <i>Sorex monticolus</i> |
| Vagrant shrew | <i>Sorex vagrans</i> |
| Columbian ground squirrel | <i>Spermophilus columbianus</i> |
| Golden-mantled ground squirrel | <i>Spermophilus lateralis</i> |
| Piute ground squirrel | <i>Spermophilus mollis</i> |
| Western spotted skunk | <i>Spilogale gracilis</i> |
| Mountain cottontail | <i>Sylvilagus nuttallii</i> |
| Yellow-pine chipmunk | <i>Tamias amoenus</i> |
| Least chipmunk | <i>Tamias minimus</i> |
| Red squirrel | <i>Tamiasciurus hudsonicus</i> |
| Badger | <i>Taxidea taxus</i> |
| Northern pocket gopher | <i>Thomomys talpoides</i> |
| Black bear | <i>Ursus americanus</i> |
| Kit fox | <i>Vulpes macrotis</i> |
| Red fox | <i>Vulpes vulpes</i> |
| Western jumping mouse | <i>Zapus princeps</i> |

| Reptiles | |
|----------------------------------|-------------------------------|
| Rubber boa | <i>Charina bottae</i> |
| Western yellow-bellied racer | <i>Coluber constrictor</i> |
| Western rattlesnake | <i>Crotalus viridis</i> |
| Western skink | <i>Eumeces skiltonianus</i> |
| Longnose leopard lizard | <i>Gambelia wislizenii</i> |
| Short-horned lizard | <i>Phrynosoma douglasii</i> |
| Desert horned lizard | <i>Phrynosoma platyrhinos</i> |
| Gopher snake | <i>Pituophis catenifer</i> |
| Sagebrush lizard | <i>Sceloporus graciosus</i> |
| Western terrestrial garter snake | <i>Thamnophis elegans</i> |

Common and Scientific Names of Plant Species Referenced in this Document

| Trees | |
|------------------------|------------------------------|
| Utah juniper | <i>Juniperus osteosperma</i> |
| Rocky Mountain juniper | <i>Juniperus scopulorum</i> |
| Limber pine | <i>Pinus flexilis</i> |
| Quaking aspen | <i>Populus tremuloides</i> |
| Black cottonwood | <i>Populus trichocarpa</i> |
| Douglas fir | <i>Pseudotsuga menziesii</i> |

| Shrubs | |
|------------------------------|--|
| Alder | <i>Alnus incana</i> |
| Serviceberry | <i>Amelanchier alnifolia</i> |
| Low sagebrush | <i>Artemisia arbuscula</i> |
| Early low (alkali) sagebrush | <i>Artemisia longiloba</i> |
| Basin big sagebrush | <i>Artemisia tridentata</i> ssp. <i>tridentata</i> |
| Mountain big sagebrush | <i>Artemisia tridentata</i> ssp. <i>vaseyana</i> |
| Wyoming big sagebrush | <i>Artemisia tridentata</i> ssp. <i>wyomingensis</i> |
| Threetip sagebrush | <i>Artemisia tripartita</i> |
| Fern-bush (tansy bush) | <i>Chamaebatiaria millefolium</i> |
| Green rabbitbrush | <i>Chrysothamnus viscidiflorus</i> |
| Rubber rabbitbrush | <i>Chrysothamnus nauseosus</i> |
| Rock spirea | <i>Holodiscus dumosus</i> |
| Syringa | <i>Philadelphus lewisii</i> |
| Chokecherry | <i>Prunus virginiana</i> |
| Antelope bitterbrush | <i>Purshia tridentata</i> |
| Golden current | <i>Ribes aureum</i> |
| Wax current | <i>Ribes cereum</i> |
| Willow | <i>Salix</i> spp. |
| Mountain snowberry | <i>Symphoricarpos oreophilus</i> |
| Gray horsebrush | <i>Tetradymia canescens</i> |



| Grasses and Grasslike Plants | |
|-------------------------------------|--------------------------------|
| Crested wheatgrass | <i>Agropyron cristatum</i> |
| Tall wheatgrass | <i>Agropyron elongata</i> |
| Siberian wheatgrass | <i>Agropyron fragile</i> |
| Cheatgrass | <i>Bromus tectorum</i> |
| Great Basin wildrye | <i>Elymus cinereus</i> |
| Snake River wheatgrass | <i>Elymus wawaensis</i> |
| Idaho fescue | <i>Festuca idahoensis</i> |
| Prairie junegrass | <i>Koeleria cristata</i> |
| Onion grass | <i>Melica bulbosa</i> |
| Indian ricegrass | <i>Oryzopsis hymenoides</i> |
| Big bluegrass | <i>Poa ampla</i> |
| Sandberg bluegrass | <i>Poa secunda</i> |
| Bluebunch wheatgrass | <i>Pseudoroegneria spicata</i> |
| Threesquare bulrush | <i>Scirpus americanus</i> |
| Needle-and-thread grass | <i>Stipa comata</i> |
| Western needlegrass | <i>Stipa occidentalis</i> |
| Thurber needlegrass | <i>Stipa thurberiana</i> |

| Forbs | |
|-----------------------|--|
| Dwarf mistletoe | <i>Arceuthobium campylopodum</i> |
| Picabo milkvetch | <i>Astragalus oniciformis</i> |
| Milkvetch | <i>Astragalus</i> spp. |
| Arrowleaf balsamroot | <i>Balsamorhiza sagittata</i> |
| Douglas chaenactis | <i>Chaenactis douglasii</i> |
| Oval-leaved buckwheat | <i>Eriogonum ovalifolium</i> |
| Dwarf buckwheat | <i>Eriogonum ovalifolium</i> var. <i>depressum</i> |
| Buckwheat | <i>Eriogonum</i> spp. |
| Bitterroot | <i>Lewisia rediviva</i> |
| Blue flax | <i>Linum perenne</i> |
| Lupine | <i>Lupinus</i> spp. |
| Alfalfa | <i>Medicago sativa</i> |
| Dwarf monkeyflower | <i>Mimulus nanus</i> |
| Sainfoin | <i>Onobrychis viciaefolia</i> |
| Penstemon | <i>Penstemon</i> spp. |
| Scorpion weed | <i>Phacelia hastata</i> |
| Obscure phacelia | <i>Phacelia inconspicua</i> |
| Phlox | <i>Phlox</i> spp. |
| Gland cinquefoil | <i>Potentilla glandulosa</i> |

| Noxious Weeds | |
|----------------------|--|
| Russian knapweed | <i>Acroptilon repens</i> |
| Musk thistle | <i>Carduus nutans</i> |
| Diffuse knapweed | <i>Centaurea diffusa</i> |
| Spotted knapweed | <i>Centaurea maculosa</i> |
| Rush skeletonweed | <i>Chondrilla juncea</i> |
| Canada thistle | <i>Cirsium arvense</i> |
| Field bindweed | <i>Convolvulus arvensis</i> |
| Leafy spurge | <i>Euphorbia esula</i> |
| Dalmation toadflax | <i>Linaria genistifolia ssp. dalmatica</i> |
| Scotch thistle | <i>Onopordum acanthium</i> |



APPENDIX E

LIST OF SPECIES PROTECTED BY THE MIGRATORY BIRD SPECIES ACT AND KNOWN TO OCCUR AT CRATERS OF THE MOON NATIONAL MONUMENT AND PRESERVE

| | |
|------------------------|-----------------------|
| Pied-billed grebe | Copper's hawk |
| Eared grebe | Northern goshawk |
| Western grebe | Swainson's hawk |
| American white pelican | Red-tailed hawk |
| Great blue heron | Rough-legged hawk |
| White-faced ibis | Ferruginous hawk |
| Turkey vulture | Golden eagle |
| Snow goose | American kestrel |
| Canada goose | Merlin |
| Tundra swan | Gyr falcon |
| Gadwall | Peregrine falcon |
| American wigeon | Prairie falcon |
| Mallard | American coot |
| Northern shoveler | Virginia rail |
| Cinnamon teal | Sora |
| Northern pintail | Sandhill crane |
| Blue-winged teal | Killdeer |
| Green-winged teal | American avocet |
| Ruddy duck | Spotted sandpiper |
| Canvasback | Whimbrel |
| Redhead | Long-billed curlew |
| Ring-necked duck | Wilson's snipe |
| Lesser scaup | Wilson's phalarope |
| Common goldeneye | Long-billed dowitcher |
| Bufflehead | Ring-billed gull |
| Osprey | Herring gull |
| Bald eagle | California gull |
| Northern harrier | Franklin's gull |
| Sharp-shinned hawk | Forster's tern |

| | |
|---------------------------|-------------------------------|
| Black tern | Ash-throated flycatcher |
| Band-tailed pigeon | Western kingbird |
| Mourning dove | Eastern kingbird |
| Great horned owl | Loggerhead shrike |
| Snowy owl | Northern shrike |
| Western burrowing owl | Plumbeous vireo |
| Long-eared owl | Cassin's vireo |
| Short-eared owl | Warbling vireo |
| Western screech owl | Steller's jay |
| Northern saw-whet owl | Pinyon jay |
| Common nighthawk | Clark's nutcracker |
| Common poorwill | Black-billed magpie |
| White-throated swift | American crow |
| Black-chinned hummingbird | Common raven |
| Calliope hummingbird | Horned lark |
| Broad-tailed hummingbird | Tree swallow |
| Rufous hummingbird | Violet-green swallow |
| Belted kingfisher | Cliff swallow |
| Lewis' woodpecker | Northern rough-winged swallow |
| Red-headed woodpecker | Barn swallow |
| Red-naped sapsucker | Black-capped chickadee |
| Williamson's sapsucker | Mountain chickadee |
| Downy woodpecker | Red-breasted nuthatch |
| Hairy woodpecker | White-breasted nuthatch |
| Northern flicker | Brown creeper |
| Olive-sided flycatcher | Rock wren |
| Western wood-pewee | Winter wren |
| Willow flycatcher | Marsh wren |
| Hammond's flycatcher | American dipper |
| Gray flycatcher | Golden-crowned kinglet |
| Dusky flycatcher | Ruby-crowned kinglet |
| Cordilleran flycatcher | Blue-gray gnatcatcher |
| Say's phoebe | Western bluebird |



Mountain bluebird
Townsend's solitaire
Swainson's thrush
Hermit thrush
American robin
Varied thrush
Gray catbird
Sage thrasher
Brown thrasher
American pipit
Bohemian waxwing
Cedar waxwing
Tennessee warbler
Orange-crowned warbler
Nashville warbler
Yellow warbler
Yellow-rumped warbler
Townsend's warbler
American redstart
Northern waterthrush
MacGillivray's warbler
Wilson's warbler
Yellow-breasted chat
Western tanager
Green-tailed towhee
Spotted towhee
Chipping sparrow
Brewer's sparrow
Vesper sparrow
Lark sparrow
Black-throated sparrow
Sage sparrow
Lark bunting

Savannah sparrow
Grasshopper sparrow
Fox sparrow
Song sparrow
Lincoln's sparrow
White-throated sparrow
White-crowned sparrow
Golden-crowned sparrow
Dark-eyed junco
Snow bunting
Black-headed grosbeak
Lazuli bunting
Bobolink
Red-winged blackbird
Western meadowlark
Yellow-headed blackbird
Brewer's blackbird
Common grackle
Brown-headed cowbird
Bullock's oriole
Baltimore oriole
Gray-crowned rosy-finch
Black rosy-finch
Pine grosbeak
Cassin's finch
House finch
Red crossbill
Hoary redpoll
Common redpoll
Pine siskin
American goldfinch
Evening grosbeak
Weaver finches

