Appendices, Maps and Glossary



Volume 2 – Supporting Documents for the Proposed Resource Management Plan and Final Environmental Impact Statement ID-111-2006-EIS-1740 February 2008



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APPENDIX 1. NCA ENABLING LEGISLATION

PUBLIC LAW 103-64 - AUG. 4, 1993

SNAKE RIVER BIRDS OF PREY NATIONAL CONSERVATION AREA

PUBLIC LAW 103-64 103d Congress

An Act

To establish the Snake River Birds of Prey National Conservation Area in the State of Idaho, and for other purposes.

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

Section 1. Findings.

The Congress finds the following:

(1) The public lands managed by the Bureau of Land Management in the State of Idaho within the Snake River Birds of Prey Area contain one of the densest known nesting populations of eagles, falcons, owls, hawks, and other birds of prey (raptors) in North America.

(2) These public lands constitute a valuable national biological and educational resource since birds of prey are important components of the ecosystem and indicators of environmental quality, and contribute significantly to the quality of wildlife and human communities.

(3) These public lands also contain important historic and cultural resources (including significant archaeological resources) as well as other resources and values, all of which should be protected and appropriately managed.

(4) A military training area within the Snake River Birds of Prey Area, known as the Orchard Training Area, has been used since 1953 by reserve components of the Armed Forces. Military use of this area is currently governed by a Memorandum of Understanding between the Bureau of Land Management and the State of Idaho Military Division, dated May 1985. Operating under this Memorandum of Understanding, the Idaho National Guard has provided valuable assistance to the Bureau of Land Management with respect to fire control and other aspects of management of the Orchard Training Area and the other lands in the Snake River Birds of Prey Area. Military use of the lands within the Orchard Training Area should continue in accordance with such Memorandum of Understanding (or extension or renewal thereof), to the extent consistent with section 460iii-3(e) of this title, because this would be in the best interest of training of the reserve components (an important aspect of national security) and of the local economy.

(5) Protection of the conservation area as a home for raptors can best and should be accomplished by the Secretary of the Interior, acting through the Bureau of Land Management, under a management plan that:

(A) emphasizes management, protection, and rehabilitation of habitat for these raptors and of other resources and values of the area;

(B) provides for continued military use, consistent with the requirements of section 460iii-3(e) of this title, of the Orchard Training Area by reserve components of the Armed Forces;

(C) addresses the need for public educational and interpretive opportunities;

(D) allows for diverse appropriate uses of lands in the area to the extent consistent with the maintenance and enhancement of raptor populations and habitats and protection and sound management of other resources and values of the area; and

(E) demonstrates management practices and techniques that may be useful to other areas of the public lands and elsewhere.

(6) There exists near the conservation area a facility, the World Center for Birds of Prey operated by The Peregrine Fund, Inc., where research, public education, recovery, and reestablishment operations exist for endangered raptor species. There also exists at Boise State University a raptor study program which attracts national and international graduate and undergraduate students.

(7) The Bureau of Land Management and Boise State University, together with other State, Federal, and private entities, have formed the Raptor Research and Technical Assistance Center to be housed at Boise State University, which provides a unique adjunct to the conservation area for raptor management, recovery, research, and public visitation, interpretation, and education.

(8) Consistent with requirements of sections 1712 and 1732 of title 43, the Secretary has developed a comprehensive management plan and, based on such plan, has implemented a management program for the public lands included in the conservation area established by this subchapter.

(9) Additional authority and guidance must be provided to assure that essential raptor habitat remains in public ownership, to facilitate sound and effective planning and management, to provide for effective public interpretation and education, to ensure continued study of the relationship of humans and these raptors, to preserve the unique and irreplaceable habitat of the conservation area, and to conserve and properly manage the other natural resources of the area in concert with maintenance of this habitat.

(10) An ongoing research program funded by the Bureau of Land Management and the National Guard is intended to provide information to be used in connection with future decision making concerning management of all uses, including continued military use, of public lands within the Snake River Birds of Prey Area.

(11) Public lands in the Snake River Birds of Prey Area have been used for domestic livestock grazing for more than a century, with resultant benefits to community stability and contributions to the local and State economies. It has not been demonstrated that continuation of this use would be incompatible with appropriate protection and sound management of raptor habitat and the other resource values of these lands; therefore, subject to the determination provided for in section 460iii-3(f) of this title, it is expected that such grazing will continue in accordance with applicable regulations of the Secretary and the management plan for the conservation area.

(12) Hydroelectric facilities for the generation and transmission of electricity exist within the Snake River Birds of Prey Area pursuant to a license(s) issued by the Federal Energy Regulatory Commission, or its predecessor, the Federal Power Commission.

Section 2. Definitions.

As used in this Act:

(1) The term "Secretary" means the Secretary of the Interior.

(2) The term "conservation area" means the Snake River Birds of Prey National Conservation Area established by section 3.

(3) The term "raptor" or "raptors" means individuals or populations of eagles, falcons, owls, hawks, and other birds of prey.

(4) The term "raptor habitat" includes the habitat of the raptor prey base as well as the nesting and hunting habitat of raptors within the conservation area.

(5) The term "Memorandum of Understanding" means the Memorandum of Understanding #ID-237, dated May 1985, between the State of Idaho Military Division and the Bureau of Land Management.

(6) The term "Orchard Training Area" means that area generally so depicted on the map referred to in section 3(b) of this title, and as described in the Memorandum of Understanding as well as the air space over the same.

(7) The term "Impact Area" means that area which was used for the firing of live artillery projectiles and is used for live fire ranges of all types and, therefore, poses a danger to public safety and which is generally so depicted on the map referred to in section 3(b).

(8) The term "Artillery Impact Area" means that area within the Impact Area into which live projectiles are fired, which is generally described as that area labeled as such on the map referred to in section 3(b) of this title.

(9) The term "the plan" means the comprehensive management plan developed for the conservation area, dated August 30, 1985, together with such revisions thereto as may be required in order to implement this Act.

(10) The term "hydroelectric facilities" means all facilities related to the generation, transmission, and distribution of hydroelectric power and which are subject to, and authorized by, a license(s), and any and all amendments thereto, issued by the Federal Energy Regulatory Commission.

Section 3. Establishment of National Conservation Area.

(a) Establishment and Purposes – (1) There is hereby established the Snake River Birds of Prey National Conservation Area (hereafter referred to as the "conservation area").

(2) The purposes for which the conservation area is established, and shall be managed, are to provide for the conservation, protection, and enhancement of raptor populations and habitats and the natural and environmental resources and values associated therewith, and of the scientific, cultural, and educational resources and values of the public lands in the conservation area.

(3) Subject to the provisions of subsection (d) of this section and section 4, uses of the public lands in the conservation area existing on August 4, 1993, shall be allowed to continue.

- (b) Area Included The conservation area shall consist of approximately 482,457 acres of federally owned lands and interests therein managed by the Bureau of Land Management as generally depicted on the map entitled "Snake River Birds of Prey National Conservation Area", dated November 1991.
- (c) Map and Legal Description As soon as is practicable after August 4, 1993, the map referred to in subsection (b) of this section and a legal description of the conservation area shall be filed by the Secretary with the Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate. Each such map shall have the same force and effect as if included in this Act; except that the Secretary may correct clerical and typographical errors in such map and legal description. Each such map shall be on file and available for public inspection in the office of the Director and the Idaho State Director of the Bureau of Land Management of the Department of the Interior.
- (d) Withdrawals Subject to valid existing rights, the Federal lands within the conservation area are hereby withdrawn from all forms of entry, appropriation, or disposal under the public land laws; and from entry, application, and selection under the Act of March 3, 1877 (Ch. 107, 19 Stat. 377, 43 U.S.C. 321 *et seq.*; commonly referred to as the "Desert Lands Act"), section 4 of the Act of August 18, 1894 (Ch. 301, 28 Stat; U.S.C. 641; commonly referred to as the "Carey Act"), the Act of July 3, 1890 (Ch. 656, 26 Stat. 215; commonly referred to as the "State of Idaho Admissions Act"), section 2275 of the Revised Statutes, as amended (43 U.S.C. 851), and section 2276 of the Revised Statutes, as amended (43 U.S.C. 852). The Secretary shall return to the applicants any such applications pending on August 4, 1993, without further action. Subject to valid existing rights, as of August 4, 1993, lands within the Birds of Prey Conservation Area are withdrawn from location under the general mining laws, the operation of the

mineral and geothermal leasing laws, and the mineral material disposal laws, except that mineral materials subject to disposal may be made available from existing sites to the extent compatible with the purposes for which the conservation area is established.

Section 4. Management and Use.

(a) In General – (1)(A) Within 1 year after August 4, 1993, the Secretary shall make any revisions in the existing management plan for the conservation area as necessary to assure its conformance with this Act, and no later than January 1, 1996, shall finalize a new management plan for the conservation area.

(B) Thereafter, the Secretary shall review the plan at least once every 5 years and shall make such revisions as may be necessary or appropriate.

(C) In reviewing and revising the plan, the Secretary shall provide for appropriate public participation.

(2) Except as otherwise specifically provided in section 3(d) of this title and subsections (d), (e), and (f) of this section, the Secretary shall allow only such uses of lands in the conservation area as the Secretary determines will further the purposes for which the Conservation Area is established.

(b) Management Guidance – After each review pursuant to subsection (a) of this section, the Secretary shall make such revisions as may be needed so that the plan and management program to implement the plan include, in addition to any other necessary or appropriate provisions, provisions for –

(1) protection for the raptor populations and habitats and the scientific, cultural, and educational resources and values of the public lands in the conservation area;

(2) identifying levels of continued military use of the Orchard Training Area compatible with paragraph (1) of this subsection;

(3) public use of the conservation area consistent with the purposes of this Act;

(4) interpretive and educational opportunities for the public;

(5) a program for continued scientific investigation and study to provide information to support sound management in accordance with this Act, to advance knowledge of raptor species and the resources and values of the conservation area, and to provide a process for transferring to other areas of the public lands and elsewhere this knowledge and management experience;

(6) such vegetative enhancement and other measures as may be necessary to restore or enhance prey habitat;

(7) the identification of levels, types, timing, and terms and conditions for the allowable nonmilitary uses of lands within the conservation area that will be compatible with the protection, maintenance, and enhancement of raptor populations and habitats and the other purposes for which the conservation area is established; and

(8) assessing the desirability of imposing appropriate fees for public uses (including, but not limited to, recreational use) of lands in the conservation area, which are not now subject to fees, to be used to further the purposes for which the conservation area is established.

- (c) Visitors Center The Secretary, acting through the Director of the Bureau of Land Management, is authorized to establish, in cooperation with other public or private entities as the Secretary may deem appropriate, a visitors center designed to interpret the history and the geological, ecological, natural, cultural, and other resources of the conservation area and the biology of the raptors and their relationships to man.
- (d) Visitors Use of Area In addition to the Visitors Center, the Secretary may provide for visitor use of the public lands in the conservation area to such extent and in such manner as the Secretary considers consistent with the protection of raptors and raptor habitat, public safety, and the purposes for which the conservation area is established. To the extent practicable, the

Secretary shall make available to visitors and other members of the public a map of the conservation area and such other educational and interpretive materials as may be appropriate.

(e) National Guard Use of Area – (1) Pending completion of the ongoing research concerning military use of lands in the conservation area, or until the date 5 years after August 4, 1993, whichever is the shorter period, the Secretary shall permit continued military use of those portions of the conservation area known as the Orchard Training Area in accordance with the Memorandum of Understanding, to the extent consistent with the use levels identified pursuant to subsection (b)(2) of this section.

(2) Upon completion of the ongoing research concerning military use of lands in the conservation area, the Secretary shall review the management plan and make such additional revisions therein as may be required to assure that it meets the requirements of this Act.

(3) Upon completion of the ongoing research concerning military use of lands in the conservation area, the Secretary shall submit to the Committees on Natural Resources and Merchant Marine and Fisheries of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report of the results of such research.

(4) Nothing in this subchapter shall preclude minor adjustment of the boundaries of the Orchard Training Area in accordance with provisions of the Memorandum of Understanding.

(5) After completion of the ongoing research concerning military use of lands in the Orchard Training Area or after the date 5 years after August 4, 1993, whichever first occurs, the Secretary shall continue to permit military use of such lands, unless the Secretary, on the basis of such research, determines such use is not compatible with the purposes set forth in section 3(a)(2). Any such use thereafter shall be permitted in accordance with the Memorandum of Understanding, which may be extended or renewed by the Secretary so long as such use continues to meet the requirements of subsection (b)(2) of this section.

(6) In accordance with the Memorandum of Understanding, the Secretary shall require the State of Idaho Military Division to insure that military units involved maintain a program of decontamination.

(7) Nothing in this subchapter shall be construed as by itself precluding the extension or renewal of the Memorandum of Understanding, or the construction of any improvements or buildings in the Orchard Training Area so long as the requirements of this subsection are met.

(f) Livestock Grazing – (1) So long as the Secretary determines that domestic livestock grazing is compatible with the purposes for which the conservation area is established, the Secretary shall permit such use of public lands within the conservation area, to the extent such use of such lands is compatible with such purposes. Determinations as to compatibility shall be made in connection with the initial revision of management plans for the conservation area and in connection with each plan review required by subsection 4(a)(1)(B).

(2) Any livestock grazing on public lands within the conservation area, and activities the Secretary determines necessary to carry out proper and practical grazing management programs on such lands (such as animal damage control activities) shall be managed in accordance with the Act of June 28, 1934 (43 U.S.C. 315 *et seq.*; commonly referred to as the "Taylor Grazing Act"), section 402 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1752), other laws applicable to such use and programs on the public lands, and the management plan for the conservation area.

- (g) Cooperative Agreements The Secretary is authorized to provide technical assistance to, and to enter into such cooperative agreements and contracts with, the State of Idaho and with local governments and private entities as the Secretary deems necessary or desirable to carry out the purposes and policies of this Act.
- (h) Agricultural Practices Nothing in this subchapter shall be construed as constituting a grant of authority to the Secretary to restrict recognized agricultural practices or other activities on private land adjacent to or within the conservation area boundary.

(i) Hydroelectric Facilities – Notwithstanding any provision of this Act, or regulations and management plans undertaken pursuant to its provisions, the Federal Energy Regulatory Commission shall retain its current jurisdiction concerning all aspects of the continued and future operation of hydroelectric facilities, licensed or relicensed under the Federal Power Act (16 U.S.C. 791a *et seq.*), located within the boundaries of the conservation area.

Section 5. Additions.

(a) Acquisitions – (1) The Secretary is authorized to acquire lands and interests therein within the boundaries of the conservation area by donation, purchase with donated or appropriated funds, exchange, or transfer from another Federal agency, except that such lands or interests owned by the State of Idaho or a political subdivision thereof may be acquired only by donation or exchange.

(2) Any lands located within the boundaries of the conservation area that are acquired by the United States on or after August 4, 1993, shall become a part of the conservation area and shall be subject to this Act.

- (b) Purchase of Lands In addition to the authority in section 318(d) of Federal Land Policy and Management Act of 1976 (43 U.S.C. 1748) and notwithstanding section 7(a) of Land and Water Conservation Fund Act of 1964 (16 U.S.C. 4061-9(a)), monies appropriated from the Land and Water Conservation Fund may be used as authorized in section 5(b) of the Endangered Species Act of 1973 (16 U.S.C. 1534(b)), for the purposes of acquiring lands or interests therein within the conservation area for administration as public lands as a part of the conservation area.
- (c) Land Exchanges The Secretary shall, within 4 years after August 4, 1993, study, identify, and initiate voluntary land exchanges which would resolve ownership related land use conflicts within the conservation area.

Section 6. Other Laws and Administrative Provisions.

(a) Other Laws – (1) Nothing in this subchapter shall be construed to supersede, limit, or otherwise affect administration and enforcement of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) or to limit the applicability of the National Trails System Act (16 U.S.C. 1241 *et seq.*) to any lands within the conservation area.

(2) Except as otherwise specifically provided in this subchapter, nothing in this subchapter shall be construed as limiting the applicability to lands in the conservation area of laws applicable to public lands generally, including but not limited to the National Historic Preservation Act (16 U.S.C. 470 *et seq.*), the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa *et seq.*), or the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 *et seq.*).

(3) Nothing in this subchapter shall be construed as by itself altering the status of any lands that on August 4, 1993, were not managed by the Bureau of Land Management.

(4) Nothing in this subchapter shall be construed as prohibiting the Secretary from engaging qualified persons to use public lands within the conservation area for the propagation of plants (including seeds) to be used for vegetative enhancement of the conservation area in accordance with the plan and in furtherance of the purposes for which the conservation area is established.

(b) Release – The Congress finds and directs that the public lands within the Snake River Birds of Prey Natural Area established as a natural area in October 1971 by Public Land Order 5133 have been adequately studied and found unsuitable for wilderness designation pursuant to section 603 of the Federal Land Policy and Management Act of 1976. Such lands are hereby released from further management pursuant to section 603(c) of Such an Act and shall be managed in accordance with other applicable provisions of law, including this Act.

- (c) Existing Administrative Withdrawal Terminated Public Land Orders 5133 dated October 12, 1971, and 5777 dated November 21, 1980, issued by the Secretary are hereby revoked subject to subsections (d)(3) and (d)(4).
- (d) Water (1) The Congress finds that the United States is currently a party in an adjudication of rights to waters of the Snake River, including water rights claimed by the United States on the basis of the reservation of lands for purposes of conservation of fish and wildlife and that consequently there is no need for this Act to effect a reservation by the United States of rights with respect to such waters in order to fulfill the purposes for which the conservation area is established.

(2) Nothing in this Act or any action taken pursuant thereto shall constitute either an expressed or implied reservation of water or water rights for any purpose.

(3) Nothing in this Act shall be construed as effecting a relinquishment or reduction of any of the water rights held or claimed by the United States within the State of Idaho or elsewhere on or before August 4, 1993.

(4) The Secretary and all other officers of the United States shall take all steps necessary to protect all water rights claimed by the United States in the Snake River adjudication now pending in the district court of the State of Idaho in which the United States is joined under section 208 of the Act of July 10, 1952 (66 Stat. 560; 43 U.S.C. 666; commonly referred to as the "McCarran Amendment").

Section 7. Authorization of Appropriations.

There are authorized to be appropriated such sums as may be necessary to carry out this Act.

Approved August 4, 1993.

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APPENDIX 2. PLANNING CRITERIA

Planning criteria primarily identify the legal, regulatory, and policy authorities and requirements that direct or limit BLM's ability to resolve issues. A BLM manager can also identify additional factors to guide decision making, analysis and data collection during planning. Overall, the planning criteria help to:

- Describe the general and resource-specific standards, rules and measures that constrain or shape decisions;
- Ensure an RMP is tailored to the issues; and
- Identify factors to be considered for data gathering, analysis, and making decisions.

Planning criteria serve as a tool to help identify where the different legal, regulatory, and policy requirements will apply relative to specific issues and concerns. To serve this purpose, the BLM is developing general and specific program planning criteria for the LSRD RMPs. The general criteria will be used to guide the preparation of both RMPs and to guide future land use decisions. The specific program planning criteria will apply to individual Resource Management Plan decisions. Both the general and specific criteria identify existing laws, regulations, and BLM policies. A comprehensive list of other Federal, State and local planning documents is being developed and the documents will be used to determine consistency with other plans as required by FLPMA.

Together, these legal, regulatory, and policy requirements create the framework for the RMP process, including public involvement. The way in which these different layers interact with one another, however, is complex. For example, the guidance contained in the BLM Land Use Planning Handbook is subservient to the legal and regulatory mandates contained in NEPA, FLPMA, and 43-CFR 1600. Thus, for the agency, distinguishing between the different requirements and communicating about their affect on decision-making is a significant challenge.

General Guidance

Several of the Federal laws, regulations, and guidance documents that govern the RMP process also define BLM public involvement responsibilities. These requirements exist in the following places.

- ✓ Federal Land Policy and Management Act (FLPMA)
- ✓ National Environmental Policy Act (NEPA) and Council of Environmental Quality (CEQ) regulations.
- ✓ BLM Planning Regulations: 43 CFR1600 (including RMP process 43CFR1610
- ✓ BLM Land Use Manual (1600 planning series)
- ✓ BLM Land Use Planning Handbook (Appendix C includes program-specific and resource-specific decision guidance.

The Federal Land Policy and Management Act of 1976 (FLPMA) provides the authority for BLM land use planning. The following summary of FLPMA requirements is addressed in BLM Manual 1601.

Sec. 201 requires the Secretary of the Interior to prepare and maintain an inventory of the public lands and their resources and other values, giving priority to Areas of Critical Environmental Concern (ACEC).

Sec. 202(c)(1-9) requires that, in developing land use plans, the BLM shall:

- Use and observe the principles of multiple use and sustained yield;
- Use a systematic interdisciplinary approach;
- Give priority to the designation and protection of Areas of Critical Environmental Concern;
- Rely, to the extent it is available, on the inventory of the public lands;
- Consider present and potential uses of the public lands;
- Consider the relative scarcity of the values involved and the availability of alternative means and sites for realizing those values;
- Provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans;
- Consider the policies of approved Native American Indian Tribes and Federal, State and local plans to the maximum extent possible consistent with Federal law and the purposes of this Act; and
- Assure public involvement and develop procedures, including public hearings where appropriate, to give Federal, State, and local governments and the public adequate notice and opportunity to comment on and participate in the formulation of plans.

<u>Sec. 202(d)</u> provides that all public lands, regardless of classification, are subject to inclusion in land use plans, and that the Secretary may modify or terminate classifications consistent with land use plans.

<u>Sec. 202(f) and Sec. 309(e)</u> provide that Federal, State, and local governments and the public be given adequate notice and an opportunity to comment on the formulation of standards and criteria for, and to participate in, the preparation and execution of plans and programs for the management of public lands.

<u>Sec 302(a)</u> requires the Secretary to manage BLM lands under the principles of multiple use and sustained yield, in accordance with available land use plans developed under Sec. 202 of FLPMA.

The National Environmental Policy Act of 1969 (NEPA), requires the consideration of public availability of information regarding the environmental impacts of major Federal actions significantly affecting the quality of human environment. This includes the consideration of alternatives and mitigation of impacts.

BLM Planning Handbook H-1601-1, states that BLM will rely on available inventories (with updates) of the public lands, their resources, and other values to reach sound management decisions.

The Clean Air Act of 1990 requires Federal agencies to comply with all Federal, State and local requirements regarding the control and abatement of air pollution. This includes abiding by the requirements of State Implementation Plans.

The Clean Water Act of 1987 establishes objectives to restore and maintain the chemical, physical, and biological integrity of the Nation's water.

The Federal Water Pollution Control Act, requires Federal land managers to comply with all Federal, State and local requirements, administrative authorities, process, and sanctions regarding the

control and abatement of water pollution in the same manner and to the same extent as any nongovernmental entity.

The Endangered Species Act (ESA) of 1973, requires:

<u>Sec. 1531(b)</u>, provides a means whereby the ecosystems upon which endangered and threatened species depend may be conserved and provides a program for the conservation of such endangered and threatened species.

<u>Sec. 1531(c)(1)</u>, requires all Federal agencies to seek and conserve endangered and threatened species and utilize applicable authorities in furtherance of the purposes of the Endangered Species Act.

<u>Sec. 1536(1)</u>, requires all Federal agencies to avoid jeopardizing the continued existence of any species that is listed or proposed for listing as threatened or endangered or destroying or adversely modifying its designated or proposed critical habitat.

The Wild and Scenic Rivers Act, requires Federal land management agencies to identify potential river systems and then study them for potential designation as wild, scenic, or recreational rivers.

The Wilderness Act, authorizes the President to make recommendations to the Congress for Federal lands to be set aside for preservation as wilderness.

The Antiquities Act of 1906, protects cultural resources on Federal lands.

The National Historic Preservation Act (NHPA) of 1966 as amended through 1992, expands protection of historic and archaeological properties to include those of national, State, or local significance and directs Federal agencies to consider the effects of proposed actions on properties eligible for or included in the National Register of Historic Places.

The American Indian Religious Freedom Act of 1978, establishes a national policy to protect and preserve the right of American Indians to exercise traditional Indian religious beliefs and practices.

The Taylor Grazing Act of 1934, authorizes the Secretary of the Interior to regulate occupancy and use; provide for the orderly use, improvement, and development of public rangelands; and stabilize the livestock industry dependent on the public lands.

The Public Rangelands Improvement Act of 1978, provides that the public rangelands be managed so that they become as productive as feasible in accordance with management objectives and the land use planning process.

Executive Orders 11644 and 11989, establish policies and procedures to ensure that off-road vehicle use is controlled in a manner that protects public lands.

Executive Order 13007, requires Federal agencies, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions to:

- Accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners;
- Avoid adversely affecting the physical integrity of such sacred sites.

Executive Order 13112, provides that no Federal agency shall authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk or harm will be taken in conjunction with the actions.

BLM Manual 8160, states that BLM is responsible for identifying Native American concerns and issues for all potentially affected lands, through consultation. The BLM should implement its programs, as they relate to Native American concerns, as consistently as practical with State and local laws and ordinances. However, where Federal lands are concerned, Federal law has precedence over State and local law.

Public Law 103-64 (The Act) established the Snake River Birds of Prey National Conservation Area (NCA). The Act provides that the NCA will be managed under the principles of dominant use for the purpose of conserving, protecting, and enhancing raptor populations and habitats. The law specifically withdrew the Federal lands within the NCA from all forms of entry, appropriation, application, selection and disposal except for voluntary land exchanges to resolve ownership related land use conflicts. The Act allows existing uses to continue to the extent they are compatible with the purposes for which the NCA was established. Compatibility determinations will be made through the RMP process.

BLM Information Memo No. 2001-030 Change 1 dated January 23, 2002 states: BLM will allow the Federal military, including reserves, to use lands authorized for State National Guard use, when the authorization is by permit, lease, right-of-way or cooperative agreement if:

- Federal military use is the same or of less impact on the natural and cultural resources as the National Guard use, and
- Total impact of the Federal military use is only a small percentage (less than 10% of the cumulative natural and cultural resource impacts of all military training on the lands authorized for use. The planning analysis will only evaluate proposed military activities within the National Guard's Orchard Training Area. This guidance limits the range of possible military activities that will be considered in the RMP.

Specific Guidance

In addition to the general criteria listed above, the following program-specific criteria will apply to individual program decisions. Most of the program specific guidance comes from BLM's Land Use Planning Handbook (H-1601-1).

<u>Air Quality</u>: Under the Clean Air Act, BLM lands were given a Class II air quality classification. This classification allows moderate deterioration associated with moderate, well controlled industrial and population growth. All lands will be managed under Class II unless they are reclassified by the State as provided for in the Clean Air Act.

<u>Water Quality</u>: BLM will incorporate applicable best management practices, as identified in Idaho Water Quality Standards 16.01.02 subpart 350 rules governing nonpoint source activities, or other conservation measures into the RMP for specific programs and activities. Water quality will be maintained or improved in accordance with State and Federal standards.

Vegetation Management:

- Identify the desired future conditions for vegetative resources, including the desired mix of vegetative types, structural stages, and landscape and riparian functions. Provide for native plant, fish, and wildlife habitats. Idaho Standards for Rangeland Health establish the minimum standards that will be applied to the development of the desired future conditions. All resource uses must support those standards.
- Designate priority plant species and habitats, including BLM listed special status species and populations of plant species as significant for at least one factor such as density, diversity, size, public interest, remnant character or age.
- Identify the general actions needed to achieve desired vegetative conditions.
- Consider the guidance provided in the document "Management Considerations for Sagebrush (*Artemisia*) in the Western United States: a Selective Summary of Current Information about the Ecology and Biology of Woody North American Sagebrush Taxa."

<u>Noxious Weed Control</u>: Noxious weed control will be conducted in accordance with the integrated weed management guidelines and design features identified in the Northwest Area Noxious Weed Control Program EIS of 1985, as well as the Vegetative Treatment on Public Land ROD, dated 1991 or the most current agency guidance.

<u>Cultural Resources</u>: Identify area-wide criteria and use restrictions that apply to special cultural resource issues that may affect the location, timing, or method of development or use of other resources. Every new, revised, and amended RMP will incorporate: (1) sufficient information to identify the nature and importance of all cultural resources known or expected to be present in the RMP area, (2) goals for their management, (3) land use allocation decisions in support of the goals, and (4) management actions and prescriptions that will contribute to achieving the decisions.

Visual Resources: Designate Visual Resource Management Classes.

<u>Special Status Species</u>: BLM sensitive species will be managed such that BLM actions do not contribute to the need to list any species as threatened or endangered. Populations of Federally listed or proposed species will be conserved and will not be jeopardized. The ecosystems on which they depend will also be conserved. Apply the guidance contained in "A Framework to Assist in Making Sensitive Species Habitat Assessment for BLM Administered Public Lands in Idaho." In developing conservation programs for special status species, the BLM will apply criteria provided by the U.S. Fish and Wildlife Service for evaluating conservation efforts.

<u>Fish and Wildlife</u>: Work with State wildlife agencies to describe existing and desired population and habitat conditions for major habitat types that support a wide variety of game and non-game species. Identify actions and opportunities needed to achieve desired populations and habitat conditions while maintaining a thriving natural ecological balance and multiple-use relationships.

<u>Fire Management</u>: Fire, as a critical natural process, will be integrated on a landscape scale through the planning process. The response to wildland fire will be based on ecological, social, and legal consequences of fire. The RMP will set the objectives for the use of fire and the desired future conditions of the public lands. The following categories will be identified to achieve the desired future conditions.

A. Areas where wildland fire is not desired at all. In these areas, emphasis should be placed on prevention, detection, rapid response, and non-fire fuels treatments. Fire suppression

may be required to prevent unacceptable resource damage or to prevent loss of life and property.

- B. Areas where unplanned fire is likely to cause negative effects, but these effects can be mitigated or avoided through fuels management, prevention of human-caused fire, or other strategies.
- C. Areas where fire is desired to manage ecosystems but where there are constraints because of the existing vegetation conditions due to fire exclusion (more substantial non-fire fuels treatments may be necessary prior to the use of prescribed fire).
- D. Areas where fire is desired, and where there are no constraints associated with resource conditions, or social, economic, or political considerations.
- E. Broad treatment levels in areas B through D above.

Livestock Grazing: Identify lands available or not available for livestock grazing considering the following factors: other uses for the land; terrain characteristics; soil, vegetation, and watershed characteristics; the presence of undesirable vegetation, including significant invasive weed infestations; the presence of other resources that may require special management or protection, such as special status species, or ACECs. Information related to these factors is obtained through the resource assessment process. For lands available, decisions on forage allocations, grazing systems, and rangeland developments for administering livestock grazing will be made in subsequent implementation-level plans, in accordance with BLM's national policies for conducting allotment assessments and issuing and renewing grazing permits. The plan will identify priorities for completing assessments based on specific natural resource objectives and conditions. For lands available for livestock grazing identify on an area wide basis both the existing permitted use and the anticipated future permitted use with full implementation of the RMP while maintaining a thriving ecological balance and multiple-use relationship. In addition, identify guidelines and criteria for future allotment-specific adjustments in permitted use, season of use, and grazing management practices.

Recreation:

- The public lands will be managed to enhance recreational opportunities and protect visual resources. Identify allowable kinds and levels of recreation to sustain the goals, standards and objectives that balance the public's recreation demands with the natural resource capabilities.
- Identify the general management strategies, including major actions and limitations required to maintain recreation values. Identify Special Recreation Management Areas (SRMA). Anything not designated as SRMA will, by default, become an Extensive Recreation Management Area (ERMA) for those areas open to recreation.
- All lands will be designated as open, limited, or closed to Off-Highway Vehicle (OHV) use. Specific route designations will be established in subsequent implementation-level travel management plans. The RMP will prepare a base map of existing routes and establish priorities and a schedule for developing travel management plans.

<u>Special Designations</u>: Recommend areas for congressional designation such as National Wild and Scenic Rivers and National Historic or Scenic Trails. Make the following determinations:

• Consistent with Sec. 202 of FLPMA analyze nominations from the public for special designations, in particular WSAs to be managed under the interim management policy and incorporate appropriate special designations in the RMP. Identify management direction for the WSAs, both identified under Sec. 603 of FLPMA and in the subsequent Land Use planning process, should they be released from wilderness consideration by Congress.

- Determine which eligible river segments are suitable for inclusion in the National Wild and Scenic River System. The evaluation will be done in accordance with the guidelines published by the Secretaries of the Interior and Agriculture on September 7, 1983 and other current applicable guidance.
- Designate ACECs and identify goals, standards, and objectives for each, as well as general management practices and uses, including constraints and mitigation measures. ACECs must meet the relevance and importance criteria in 43 CFR 1610.7-2(b) and must require special management to protect the area and prevent irreparable damage to resources or natural systems.
- Designate Back-County Byways, Watchable Wildlife Viewing Sites or other BLM administrative designations.

<u>Riparian Areas, Flood-Plains and Wetlands</u>: Generally riparian areas, flood-plains and wetlands will be managed to protect, improve and restore their natural functions to benefit water storage, groundwater recharge, water quality, and fish and wildlife values. The Clean Water Act and the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management will be used to guide management actions.

<u>Energy and Minerals</u>: The NCA enabling legislation specifically withdrew the affected public lands from the operation of the mining and mineral leasing laws, except that salable minerals could continue to be made from existing mineral material sites.

Lands and Realty: Identify lands available for disposal by land exchange; criteria under which proposed Section 205 acquisitions or interest in lands would occur; proposed withdrawal areas; where and under what circumstances land use authorizations such as major leases and land use permits may be granted; potential right-of-way corridors, avoidance areas, and exclusion areas. All public lands will be retained in Federal ownership unless it is determined that disposal will serve the public interest, as well as the purposes for which the NCA was established. Criteria developed to identify lands for acquisition will be based on public benefits, management considerations, and public access needs. Specific actions to implement the land tenure decisions will include full public participation. Public lands will generally be available for consideration as transportation and utility rights-of-way except where specifically prohibited by law or regulation (such as WSAs), or in areas specifically identified for avoidance or exclusion to protect resource values.

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APPENDIX 3. IDAHO STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR LIVESTOCK GRAZING MANAGEMENT



Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management

FINAL

U.S. Department of the Interior Bureau of Land Management



August 1997

Dear Reader,

After nearly two years of hard work, I am proud to announce the completion of "Standards for Rangeland Health and Guidelines for Livestock Grazing Management" for Idaho. These standards and guidelines, which provide the resource measures and guidance needed to ensure healthy, functional rangelands, went into effect on August 12 after they were approved by the Secretary of the Interior.

As you will recall, the BLM presented proposed standards and guidelines, developed by the 45 mem-

bers of our three Resource Advisory Councils, to the public for feedback earlier this spring. We received 22 letters from individuals and organizations suggesting revisions. We provided a copy of each letter, as well as a summary of comments, to our Resource Advisory Councils and asked them to carefully consider each suggestion and provide us with recommendations for changes. We used our Resource Advisory Councils' recommendations, as well as input from the BLM Washington Office and the Department of the Interior, to develop the final standards and guidelines.

Subsequently, we conducted a comprehensive review of all of our existing land use plans in Idaho and found that the final standards and guidelines conform with them. We then prepared an Administrative Determination to that effect to meet National Environmental Policy Act requirements.

Now, we turn our attention away from developing standards and guidelines to implementing them. We are currently in the process of developing a strategy to prioritize our livestock grazing allotments and evaluate them to determine if standards and guidelines are being met or if significant progress towards meeting them is being achieved. As soon as this strategy is completed, sometime in the next few weeks, we will provide you with the appropriate detailed information.

The final standards and guidelines are the product of extensive discussion, debate, and compromise by individuals and organizations representing a wide variety of interests. Please be assured that we will offer many opportunities for interested parties to provide input as we implement the standards and guidelines and that your continued participation is critical to our success.

Sincerely,

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BLM Idaho State Director



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Standards for Rangeland Health

The Standards for Rangeland Health, as applied in the State of Idaho, are to be used as the Bureau of Land Management's management goals for the betterment of the environment, protection of cultural resources, and sustained productivity of the range. They are developed with the specific intent of providing for the multiple use of the public lands. Application of the standards should involve collaboration between the authorized officer, interested publics, and resource users.

Rangelands should be meeting the Standards for Rangeland Health or making significant progress toward meeting the standards. Meeting the standards provides for proper nutrient cycling, hydrologic cycling, and energy flow.

Monitoring of all uses is necessary to determine if the standards are being met. It is the primary tool for determining rangeland health, condition, and trend. It will be performed on representative sites.

Appropriate to soil type, climate, and landform, indicators are a list of typical physical and biological factors and processes that can be measured and/or observed (e.g., photographic monitoring). They are used in combination to provide information necessary to determine the health and condition of the rangelands. Usually, no single indicator provides sufficient information to determine rangeland health. Only those indicators appropriate to a particular site are to be used. The indicators listed below each standard are not intended to be all inclusive.

The issue of scale must be kept in mind in evaluating the indicators listed after each standard. It is recognized that individual isolated sites within a landscape may not be meeting the standards; however, broader areas must be in proper functioning condition. Furthermore, fragmentation of habitat that reduces the effective size of large areas must also be evaluated for its consequences.

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STANDARD 1 (WATERSHEDS)

Watersheds provide for the proper infiltration, retention, and release of water appropriate to soil type, vegetation, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Indicators may include, but are not limited to, the following:

 The amount and distribution of ground cover, including litter, for identified ecological site(s) or soil-plant associations are appropriate for site stability.

 Evidence of accelerated erosion in the form of rills and/or gullies, erosional pedestals, flow patterns, physical soil crusts/surface sealing, and compaction layers below the soil surface is minimal for soil type and landform.

STANDARD 2 (RIPARIAN AREAS AND WETLANDS)

Riparian-wetland areas are in properly functioning condition appropriate to soil type, climate, geology, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Indicators may include, but are not limited to, the following:

 The riparian/wetland vegetation is controlling erosion, stabilizing streambanks, shading water areas to reduce water temperature, stabilizing shorelines, filtering sediment, aiding in floodplain development, dissipating energy, delaying flood water, and increasing recharge of groundwater appropriate to site potential.

 Riparian/wetland vegetation with deep strong binding roots is sufficient to stabilize streambanks and shorelines. Invader and shallow rooted species are a minor component of the floodplain.

Age class and structural diversity of riparian/wetland vegetation is appropriate for the site.

4. Noxious weeds are not increasing.

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STANDARD 3 (STREAM CHANNEL/FLOODPLAIN)

Stream channels and floodplains are properly functioning relative to the geomorphology (e.g., gradient, size, shape, roughness, confinement, and sinuosity) and climate to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Indicators may include, but are not limited to, the following:

 Stream channels and floodplains dissipate energy of high water flows and transport sediment. Soils support appropriate riparian-wetland species, allowing water movement, sediment filtration, and water storage. Stream channels are not entrenching.

 Stream width/depth ratio, gradient, sinuosity, and pod, riffle and run frequency are appropriate for the valley bottom type, geology, hydrology, and soils.

3. Streams have access to their floodplains and sediment deposition is evident.

4. There is little evidence of excessive soil compaction or the floodplain due to human activities.

5. Streambanks are within an appropriate range of stability according to site potential.

6. Noxious weeds are not increasing.

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STANDARD 4 (NATIVE PLANT COMMUNITIES)

Healthy, productive, and diverse native animal habitat and populations of native plants are maintained or promoted as appropriate to soil type, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Indicators may include, but are not limited to, the following:

 Native plant communities (flora and microbiotic crusts) are maintained or improved to ensure the proper functioning of ecological processes and continued productivity and diversity of native plant species.

2. The diversity of native species is maintained.

 Plant vigor (total plant production, seed and seedstalk production, cover, etc.) is adequate to enable reproduction and recruitment of plants when favorable climatic events occur.

4. Noxious weeds are not increasing.

 Adequate litter and standing dead plant material cre present for site protection and for decomposition to replenish soil nutrients relative to site potential.

STANDARD 5 (SEEDINGS)

Rangelands seeded with mixtures, including predominately non-native plants, are functioning to maintain life form diversity, production, native animal habitat, nutrient cycling, energy flow, and the hydrologic cycle.

Indicators may include, but are not limited to, the following:

1. In established seedings, the diversity of perennial species is not diminishing over time.

2. Plant production, seed production, and cover are adequate to enable recruitment when favorable climatic events occur.

3. Noxious weeds are not increasing.

 Adequate litter and standing dead plant material cre present for site protection and for decomposition to replenish soil nutrients relative to site potential.

STANDARD 6 (EXOTIC PLANT COMMUNITIES, OTHER THAN SEEDINGS)

Exotic plant communities, other than seedings, will meet minimum requirements of soil stability and maintenance of existing native and seeded plants. These communities will be rehabilitated to perennial communities when feasible cost effective methods are developed.

Indicators may include, but are not limited to, the following:

1. Noxious weeds are not increasing.

2. The number of perennial species is not diminishing over time.

 Plant vigor (production, seed and seedstalk production, cover, etc.) of remnant native or seeded (introduced) plants is maintained to enable reproduction and recruitment when favorable climatic or other environmental events occur.

 Adequate litter and standing dead plant material is present for site protection and for decomposition to replenish soil nutrients relative to site potential.

STANDARD 7 (WATER QUALITY)

Surface and ground water on public lands comply with the Idaho Water Quality Standards.

Indicators may include, but are not limited to, the following:

 Physical, chemical, and biologic parameters described in the Idaho Water Quality Standards.

STANDARD 8 (THREATENED AND ENDANGERED PLANTS AND ANIMALS)

Habitats are suitable to maintain viable populations of threatened and endangered, sensitive, and other special status species.

Indicators may include, but are not limited to, the following:

1. Parameters described in the Idaho Water Quality Standards.

 Riparian/wetland vegetation with deep, strong, binding roots is sufficient to stabilize streambanks and shorelines. Invader and shallow rooted species are a minor component of the floodplain.

 Age class and structural diversity of riparian/wetland vegetation are appropriate for the site.

 Native plant communities (flora and microbiotic crusts) are maintained or improved to ensure the proper functioning of ecological processes and continued productivity and diversity of native plant species.

5. The diversity of native species is maintained.

6. The amount and distribution of ground cover, including litter, for identified ecological site(s) or soil-plant associations are appropriate for site stability.

7. Noxious weeds are not increasing.

Guidelines for Livestock Grazing Management

INTRODUCTION

Guidelines direct the selection of grazing management practices, and where appropriate, livestock management facilities to promote significant progress toward, or the attainment and maintenance of, the standards. Grazing management practices are livestock management techniques. They include the manipulation of season, duration (time), and intensity of use, as well as numbers, distribution, and kind of livestock. Livestock management facilities are structures such as fences, corrals, and water developments (ponds, springs, pipelines, troughs, etc.) used to facilitate the application of grazing management practices. Livestock grazing management practices and guidelines will be consistent with the Idaho Agricultural Pollution Abatement Plan.

Grazing management practices and facilities are implemented locally, usually on an allotment or watershed basis. Grazing management programs are based on a combination of appropriate grazing management practices and facilities developed through consultation, coordination, and cooperation with the Bureau of Land Management, permittees, other agencies, Indian tribes, and interested publics.

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These guidelines were prepared under the assumption that regulations and policies regarding grazing on the public lands will be implemented and will be adhered to by the grazing permittees and agency personnel. Anything not covered in these guidelines will be addressed by existing laws, regulations, Indian treaties, and policies.

The BLM will identify and document within the local watershed all impacts that affect the ability to meet the standards. If a standard is not being met due to livestock grazing, then allotment management will be adjusted unless it can be demonstrated that significant progress toward the standard is being achieved. This applies to all subsequent guidelines.



GUIDELINES

 Use grazing management practices and/or facilities to maintain or promote significant progress toward adequate amounts of ground cover (determined on an ecological site basis) to support infiltration, maintain soil moisture storage, and stabilize soils.

 Locate livestock management facilities away from riparian areas wherever they conflict with achieving or maintaining riparian-wetland functions.

 Use grazing management practices and/or facilities to maintain or promote soil conditions that support water infiltration, plant vigor, and permeability rates and minimize soil compaction appropriate to site potential.

4. Implement grazing management practices that provide periodic rest or deferment during critical growth stages to allow sufficient regrowth to achieve and maintain healthy, properly functioning conditions, including good plant vigor and adequate vegetative cover appropriate to site potential.

5. Maintain or promote grazing management practices that provide sufficient residual vegetation to improve, restore, or maintain healthy riparian-wetland functions and structure for energy dissipation, sediment capture, ground water recharge, streambank stability, and wildlife habitat appropriate to site potential.

6. The development of springs, seeps, or other projects affecting water and associated resources shall be designed to protect the ecological functions, wildlife habitat, and significant cultural and historical/archaeological/paleontological values associated with the water source. Apply grazing management practices to maintain, promote, or progress toward appropriate stream channel and streambank morphology and functions. Adverse impacts due to livestock grazing will be addressed.

 Apply grazing management practices that maintain or promote the interaction of the hydrologic cycle, nutrient cycle, and energy flow that will support the appropriate types and amounts of soil organisms, plants, and animals appropriate to soil type, climate, and landform.

 Apply grazing management practices to maintain adequate plant vigor for seed production, seed dispersal, and seedling survival of desired species relative to soil type, climate, and landform.

 Implement grazing management practices and/or facilities that provide for complying with the Idaho Water Quality Standards.

 Use grazing management practices developed in recovery plans, conservation agreements, and Endangered Species Act, Section 7 consultations to maintain or improve habitat for federally listed threatened, endangered, and sensitive plants and animals.

12. Apply grazing management practices and/or facilities that maintain or promote the physical and biological conditions necessary to sustain native plant populations and wildlife habitats in native plant communities.

13. On areas seeded predominantly with non-native plants, use grazing management practices to maintain or promote the physical and biological conditions to achieve healthy rangelands.

14. Where native communities exist, the conversion to exoic communities after disturbance will be minimized. Native species are emphasized for rehabilitating disturbed rangelands. Evaluate whether native plants are adapted, available, and able to compete with weeds or seeded exotics.

15. Use non-native plant species for rehabilitation only in hose situations where:

a. native species are not readily available in sufficient quantities;

b. native plant species cannot maintain or achieve the standards; or

c. non-native plant species provide for management and protection of native rangelands. Include a diversity of appropriate grasses, forbs, and shrubs in rehabilitation efforts.

16. On burned areas, allow natural regeneration when it is determined that populations of native perennial shrubs, grasses, and forbs are sufficient to revegetate the site. Rest burned or rehabilitated areas to allow recovery or establishment of perennial plant species.

 Carefully consider the effects of new management facilities (e.g., water developments, fences) on healthy and properly functioning rangelands prior to implementation.

18. Use grazing management practices, where feasible, for wildfire control and to reduce the spread of targeted undesirable plants (e.g., cheatgrass, medusa head, wildrye, and noxious weeds) while enhancing vigor and abundance of desirable native or seeded species.

19. Employ grazing management practices that promote natural forest regeneration and protect reforestation projects until the Idaho Forest Practices Act requirements for timber stand replacement are met.

 Design management fences to minimize adverse impacts, such as habitat fragmentation, to maintain habitat integrity and connectivity for native plants and animals.

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Glossary

 $\label{eq:accelerated} \begin{array}{l} \mbox{Accelerated eroSiON} - \mbox{Soil loss at a rate in excess of natural or geologic erosion as a result of human-caused disturbance.} \end{array}$

AGE CLASS — A classification of woody plant species according to relative age, e.g., seedling, young, mature, or decadent.

ALLOTMENT MANAGEMENT PLAN — A documented program which applies to livestock grazing on public lands, prepared by consulting, cooperating, and coordinating with the permittee(s), lessee(s), or other interested publics.

ANIMAL HABITAT —T he place and environment where an animal lives including all biotic, climatic, and edaphic factors.

BEST MANAGEMENT PRACTICE (BMP) — A component practice or combination of component practices determined to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals. (Idaho Agricultural Pollution Abatement Plan, August 1993)

COMPONENT PRACTICES — Approved practices, used alone or in combination with other practices, are used to develop BMPs. (Idaho Agricultural Pollution Abatement Plan, August 1993)

CONNECTIVITY — The state of being functionally connected by movement of organisms, material, or energy. The opposite of habitat fragmentation.

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CONSULTATION, COORDINATION, AND COOPERATION — A process prescribed by the Public Rangelands Improvement Act of involving the permittee(s), lessee(s), federally recognized Indian tribes, and interested publics in the development of allotment management plans and other management programs on public lands. The process also includes trust responsibilities to Federally recognized Indian tribes.

COLLABORATION -T o work jointly with others.

COVER - (See Ground Cover)

DEFERMENT — Nongrazing, either by delay or discontinuance of grazing, from the beginning of plant growth until the seed is set or the equivalent stage of vegetative reproduction.

DIVERSITY — (1) The absolute number of species in a community, species richness; and (2) a measure of the number of species and their relative abundance in a community; low diversity refers to few species or unequal abundances, high diversity to many species or equal abundances.

ECOLOGICAL SITES — A kind of land with specific physical characteristics that differs from other kinds of land in its ability to produce distinctive kinds and amounts of vegetation and its response to management. Ecological site is synonymous with range site and ecological type.

ENERGY FLOW — The capture of sunlight energy by plants and the conversion through photosynthesis to biomass.

EXOTIC PLANT COMMUNITIES, OTHER THAN SEEDINGS — Assemblages of plants that are not indigenous to the area, such as cheatgrass, yellow star thistle, and medusa head rye.

FRAGMENTATION — The process of dividing habitats into smaller and smaller units until their utility as habitat is lost.

GRAZING MANAGEMENT PRACTICES — Techniques used to manage livestock and include season, duration (amount of the time grazing occurs), intensity of use, numbers of livestock, kind of livestock, and distribution (e.g., salting, herding, and water development).

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GRAZING PLAN OR PROGRAM — A combination of grazing management and/or facilities used to ensure an expectation of meeting or making significant progress toward meeting the Standards for Rangeland Health.

GROUND COVER — The percentage of material, other than bare ground, covering the land surface. It may include live and standing dead vegetation, microbiotic crust, litter, cobble, gravel, stones, and bedrock. Ground cover, plus bare ground, totals 100 percent.

HUMAN ACTIVITIES — Any activity that is initiated or controlled by people, such as recreation, timber harvest, livestock grazing, road and other construction, and mining.

HYDROLOGIC CYCLE — The circulation of water in the atmosphere, on the surface of the earth, in the soil, and in the underlying rocks.

INDIAN TREATY — A contract in writing between the United States Government and Indian tribes formally signed by duly authorized representatives and ratified by the United States Senate.

INDICATOR — Components or attributes of a rangeland ecosystem that can be observed and/or measured that provides evidence of the function, productivity, health and/or condition of the ecosystem.

INFILTRATION — A soil, as influenced by soil texture, aspect, slope, and vegetation cover.

LANDFORM — A naturally formed element of the landscape that controls or influences hydrologic, physical, and ecological processes.

LANDSCAPE - Landform of a region in aggregate.

LAND USE PLAN — Land use plan means a resource management plan or management framework plan, developed under the provisions of 43 CFR 1600. These plans are developed through public participation in accordance with the provisions of the Federal Land Policy and Management Act of 1976 and establish management direction for resource uses of public lands. (43 CFR 4100)

UFE FORM — Characteristic form or appearance of a plant species at maturity, e.g., tree, shrub, forb, grass, etc.

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LITTER — Dead plant or animal material on the soil surface.

LIVESTOCK MANAGEMENT FACILITIES — Physical fadilities, such as fences, water developments, and corrals that are used to handle and control livestock.

MICROBIOTIC CRUST — Community of non-vascular primary producers that occur as a "crust" on the surface of soils and made up of a mixture of algae, lichens, mosses, and cyanobacteria (bluegreen algae).

MONITORING — The orderly collection, analysis, and interpretation of resource data and information to evaluate progress toward meeting Standards for Rangeland Health and/or management objectives.

MULTIPLE USE — The definition of multiple use is defined in the Federal Policy and Management Act of 1976 as follows:

"The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resource or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform with changing needs and conditions; the use of some land for less than all of the resources: a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historic values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of the uses that will give the greatest economic return or the greatest output."

NATIVE SPECIES - Plants or animals indigenous to the area.

NON-NATIVE SPECIES — Plants or animals that are not indigenous to the area.

NOXIOUS WEEDS — Exotic plants that are listed by the State of Idaho and subject to Idaho weed control laws.

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NUTRIENT CYCLE — The cyclical process by which plants and animals use chemical compounds and elements in the soil, water, and atmosphere to produce plants and animals and the decomposition of plants and animals to return chemical compounds and elements to the soil, water, and air for future use.

PRODUCTIVITY — The ability of a site to produce vegetation.

PROPER FUNCTIONING CONDITION (RIPARIAN) -

"Riparian-wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve floodwater retention and ground-water recharge; develop root masses that stabilize streambanks against cutting oction; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity."

USDI. 1993, Revised 1995. Riparian Area Management, Process for Assessing Proper Functioning Condition, Technical Report 1737-9, p. 4. Bureau of Land Management, BLM/SC/ST-93/ 003+1737+REV95, Service Center, CO. 51 pp.

USDI. 1994. Riparian Area Management, Process for Assessing Proper Functioning Condition for Lentic Riparian-Wetland Areas. Technical report 1737-11. Bureau of Land Management, BLM/ SC/ST-94/008+1737, Service Center, CO. 37 pp.

RANGELAND — A kind of land on which the native vegetation is predominately grasses, grass- like plants, forbs, or shrubs. Rangelands include natural grasslands, savannas, shrublands, most deserts, alpine communities, riparian areas, and wet meadows.

RANGELAND CONDITION — The present status of a unit in terms of specific values or potential.

RANGELAND HEALTH — The degree to which the integrity of the soil and ecological processes of rangeland ecosystems is maintained. National Research Council. 1994. Rangeland Health: New Methods to Classify, Inventory and Monitor Rangelands.

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RESIDUAL VEGETATION — Amount, cover, and species composition of the vegetation on a site after it has been grazed for a period of time.

REST — Nongrazing for a specified period of time, generally a full growing season up to a full year.

RIPARIAN AREAS — A form of wetland transition between permanently saturated wetlands and uplands. The areas exhibit vegetation or physical characteristics that reflect permanent surface or subsurface water influence. Typical riparian areas include such areas as lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers, streams, glacial potholes, and shores of lakes and reservoirs with stable water levels. Riparian areas do not include ephemeral (permanently above the water table and flows only during or immediately after a rainstorm or snowmelt) streams that do not exhibit the presence of vegetation dependent upon free water in the soil. (Bureau of Land Management Technical Reference TR 1737-9 and 11)

SENSITIVE PLANTS AND ANIMALS — Plants and anima's listed by the Bureau of Land Management State Directors.

SIGNIFICANT PROGRESS — Measurable and/or observable (i.e., photography, use of approved qualitative procedures) changes in the indicators that demonstrate improved rangeland health.



SPATIAL SCALE — The relative size of an area under consideration. For example, a small scale is a site, a mid-scale is a watershed, and a large scale is a basin.

SPECIAL STATUS SPECIES — Plant and animal species that are federally listed as threatened or endangered, proposed threatened or endangered, candidate species, State listed as threatened or endangered, or listed by a Bureau of Land Management State Director as sensitive.

SUSTAINED PRODUCTIVITY OF THE RANGE — Maintaining the production capability of the rangeland for long periods of time (100 years +).

TREND — The direction of change in ecological status or resource value rating observed over time.

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USE — Human activities (e.g., mining, forestry, livestock grazing, vegetation manipulation, road construction and maintenance, other construction and maintenance activities, wild horses, recreation, habitat manipulation, and management facility construction and maintenance).

WATERSHED — An area that collects and discharges runoff to a given point. It is often used synonymously with drainage basin or catchment.

WETLAND — Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and which under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Typical wetlands include marshes, shallow swamps, sloughs, lake shores, bogs, wet meadows, and riparian areas. (Bureau of Land Management Technical Reference TR 1737-9 and 11)

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APPENDIX 4. SPECIAL STATUS SPECIES ANIMALS

Endangered

• Idaho springsnail

Threatened Species

• Bald eagle

Candidate Species

Yellow-billed cuckoo

Rangewide/Globally Imperiled Species

- Pygmy rabbit
- American white pelican

Regional/State Imperiled Species

- Spotted bat
- Piute ground squirrel
- Trumpeter swan
- Peregrine falcon
- Prairie falcon
- Northern goshawk
- Ferruginous hawk
- Black tern
- Calliope hummingbird
- Lewis' woodpecker

- Willow flycatcher
- Olive-sided flycatcher
- Loggerhead shrike
- Brewer's sparrow
- Sage sparrow
- Mojave black-collard lizard
- Longnose snake
- Ground snake
- Common garter snake
- Western toad
- Woodhouse's toad

Idaho Watch List

- Yuma myotis
- Western small-footed myotis
- Western pipistrelle
- Barrows goldeneye
- Swainson's hawk
- Long-billed curlew
- Wilson's phalarope
- Short-eared owl
- Western burrowing owl

- Red-napped sapsucker
- Green-tailed towhee
- Cordilleran flycatcher
- Sage thrasher
- Grasshopper sparrow
- Brewer's blackbird
- Cassin's finch
- Night snake

Note: Scientific names can be found in Appendix 5.

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APPENDIX 5. FISH AND WILDLIFE IN THE NCA

			Habitat		-
	Type/	Season ² /		Riparian/	
Common/Scientific Name		Abundance'	Shrub	Aquatic	Grass
Mammals					
Moose (Alces alces)	N/A	Sp,Su/R	Х	Х	
Elk (Cervus elaphus)	N/A	W/R	Х		Х
Mule deer (Odocoileus hemionus)	N/A	YR/C	Х	Х	X
White-tailed deer (Odocoileus virginianus)	N/A	YR/R	Х	Х	
Pronghorn (Antilocapra americana)	N/A	YR/C	Х		Х
Coyote (Canis latrans)	N/A	YR/C	Х	Х	Х
Red fox (Vulpes vulpes)	N/A	YR/C	Х	Х	Х
Mountain lion (Felix concolor)	N/A	YR/R	Х	Х	
Bobcat (Felix rufus)	N/A	YR/C	Х	Х	
River otter (Lutra canandensis)	N/A	YR/R		Х	
Badger (Taxidea taxus)	N/A	YR/C	Х		Х
Western spotted skunk (Spilogale gracilis)	N/A	YR/R	Х	Х	
Striped skunk (Mephitis mephitis)	N/A	YR/C	Х	Х	Х
Mink(Mustela vison)	N/A	YR/C		Х	
Long-tailed weasel (Mustela frenata)	N/A	YR/C	Х	Х	Х
Racoon (Procyon lotor)	N/A	YR/C		Х	
Black-tailed jackrabbit (Lepus californicus)	N/A	YR/C	Х		Х
Nuttall's cottontail (Sylvilagus nuttallii)	N/A	YR/C	Х	Х	
Pygmy rabbit (Brachylagus idahoensis)	T2	YR/R	Х		
Beaver (Castor canadensis)	N/A	YR/C		Х	
Porcupine (Erethizon dorsatum)	N/A	YR/C	Х	Х	
Yellow-bellied marmot (Marmota flaviventris)	N/A	YR/C			Х
Townsend's pocket gopher	N/A	YR/C	Х	Х	Х
(Thomomys townsendii)					
Northern pocket gopher (<i>Thomomys talpoides</i>)	N/A	YR/C	Х	Х	Х
Piute ground squirrel (Spermophilus mollis)	N/A	YR/C	Х		Х
Belding's ground squirrel (Spermophilus beldingi)	N/A	YR/C	Х	Х	Х
Muskrat (Ondatra zibethicus)	N/A	YR/C		Х	
Bushy-tailed woodrat (Neotoma cinerea)	N/A	YR/C	Х	Х	
Desert Woodrat (Neotoma lepida)	N/A	YR/C	Х	Х	
Norway rat (<i>Rattus norvegicus</i>)	N/A	YR/C	Х	Х	Х
Eastern fox squirrel (Sciurus niger)	N/A	YR/C			
White-tailed antelope squirrel	N/A	YR/C	Х		
(Ammonospermophilus leucurus)					
Least chipmunk (Tamias minimus)	N/A	YR/C	Х	Х	
Great Basin pocket mouse (Perognathus parvus)	N/A	YR/C			
Ord's kangaroo rat (Dipodomys ordii)	N/A	YR/C	Х		Х
Chisel-toothed kangaroo rat (Dipodomys microps)	N/A	YR/C	Х		
Western harvest mouse	N/A	YR/C	Х	Х	Х
(Reithrodontomys megalotis)					
Deer mouse (<i>Peromyscus maniculatis</i>)	N/A	YR/C	Х	Х	Х
Canyon mouse (<i>Peromyscus crinitus</i>)	N/A	YR/C	X		1
Northern grasshopper mouse	N/A	YR/R	X		X
(Onochomys leucogaster)			-		_
House mouse (<i>Mus musculus</i>)	N/A	YR/C		Х	
Montane vole (<i>Microtus montanus</i>)	N/A	YR/C		Х	Х
Meadow vole (<i>Microtus pennsylvanicus</i>)	N/A	YR/C		Х	

			Habitat		
	Type/	Season ² /		Riparian/	
Common/Scientific Name	Status	Abundance'	Shrub	Aquatic	Grass
Sagebrush vole (<i>Lemmiscus curtatus</i>)	N/A	YR/C	X		X
Vagrant shrew (Sorex vagrans)	N/A	YR/C		X	
Spotted Bat (Euderma maculatum)	T3	YR/R	Х	X	
Western pipistrelle (Pippistrellus hesperus)	T5	YR/R		X	
Little brown myotis (Myotis lucifugus)	N/A	YR/R		X	
Fringed myotis (Myotis thysanodes)	T3	YR/R		X	X
Yuma myotis (Myotis yumanensis)	T5	W/R	Х	X	X
California myotis (<i>Myotis californicus</i>)	N/A	YR/C	Х		X
Western small-footed myotis (Myotis ciliolabrum)	T5	YR/R		X	Х
Long-legged myotis (Myotis volans)	T5	Sp,W/R		X	
Big brown bat (<i>Eptisicus fuscus</i>)	N/A	YR/C		X	
Pallid Bat (Antrozous pallidus)	N/A	Sp,Su,F/R	Х		Х
Birds					
Red-throated loon (Gavia stellata)	N/A	W/R		Х	
Pacific loon (Gavia pacifica)	N/A	W/R		Х	
Common loon (Gavia immer)	N/A	YR/R		Х	
Pied-billed grebe (Podilymbus podiceps)	N/A	YR/C		Х	
Horned grebe (<i>Podiceps auritus</i>)	N/A	Sp,Su,W/R		Х	
Eared grebe (Podiceps nigricollis)	N/A	YR/R		Х	
Red-necked grebe (Podiceps grisegena)	N/A	Su,F/R		Х	
Western grebe (<i>Aechmophorus occidentalis</i>)	N/A	YR/C		Х	
Clark's grebe (Aechmophorus clarkii)	N/A	Sp,Su/C		Х	
American white pelican	T2	YR/R-C		Х	
(Pelecanus erythrorhynchos)					
Double-crested cormorant (Palacrocorax auritus)	N/A	YR/C		Х	
American bittern (<i>Botaurus lentiginosus</i>)	N/A	YR/R		Х	
Black-crowned night heron	N/A	YR/R		Х	
(Nycticorax nycticorax)					
Cattle egret (Bubulcus ibis)	N/A	Sp,Su,F/R		Х	Х
Snowy egret (Egretta thula)	N/A	Sp,Su,F/R		Х	
Great egret (Ardea albus)	N/A	Su,F/R		Х	
Green heron (Butorides virescens)	N/A	Su/R		Х	
Great blue heron (Ardea herodias)	N/A	YR/C		Х	
White-faced ibis (<i>Plegadis chihi</i>)	T4	Sp,Su/R		Х	
Tundra Swan (Cvgnus columbianus)	N/A	YR/C		Х	
Trumpeter Swan (Cvgnus buccinator)	T3	Sp.W/R		Х	
Canada goose (Branta canadensis)	N/A	YR/C		Х	Х
Greater white-fronted goose (Anser albifrons)	N/A	W/R		Х	
Snow goose (<i>Chen caerulescens</i>)	N/A	YR/R		Х	
Ross' goose (<i>Chen rossii</i>)	N/A	W/R		X	
Wood duck (Aix sponsa)	N/A	YR/C		X	
Mallard (Anas platyrhynchos)	N/A	YR/C		X	
Northern pintail (Anas acuta)	N/A	YR/R		X	
Blue-winged teal (Anas discors)	N/A	YR/R-C		X	
Cinnamon teal (Anas cyanontera)	N/A	YR/R		X	
Green-winged teal (Anas crecca)	N/A	VR/C		X	
Northern shoveler (Anas chopeata)	N/A	YR/R-C		X	
Garganev (Anas auerauedula)	N/A	Sn/R	1	X	
Gadwall (Anas strepera)	N/A	YR/C	<u> </u>	X	
American wigeon (Anas Americana)	N/A	YR/C	<u> </u>	X	
rinerican mgoon (mas micricana)	11/11	1100	1	2 1	

			Habitat		
	Type/	Season ² /		Riparian/	
Common/Scientific Name	Status ¹	Abundance ³	Shrub	Aquatic	Grass
European wigeon (Anas penelope)	N/A	W/R		Х	
Canvasback (Aythya valisineria)	N/A	YR/R		Х	
Redhead (Aythya americana)	N/A	YR/R-C		Х	
Ring-necked duck (Aythya collaris)	N/A	YR/R-C		Х	
Greater scaup (Aythya marila)	N/A	YR/R		Х	
Lesser scaup (Aythya affinis)	N/A	YR/R		Х	
White-winged scoter (Melanitta fusca)	N/A	YR/R		Х	
Surf scoter (Melanitta perspicillata)	N/A	Sp/R		Х	
Long-tailed duck (Clangula hyemalis)	N/A	F/R		Х	
Common goldeneye (Bucephala changula)	N/A	YR/R-C		Х	
Barrow's goldeneye (Bucephala islandica)	T5	Sp,W/R-C		Х	
Bufflehead (Bucephala albeola)	N/A	W/C		Х	
Hooded merganser (Lophodytes cucullatus)	N/A	Sp,W/R		Х	
Common merganser (Mergus merganser)	N/A	YR/C		Х	
Red-breasted merganser (Mergus serrator)	N/A	Sp/R		Х	
Ruddy duck (Oxyura jamaicensis)	N/A	YR/R-C		Х	
Turkey vulture (Cathartes aura)	N/A	Sp,Su,F/R	Х	Х	Х
Osprey (Pandion haliaetus)	N/A	YR/R		Х	
Bald eagle (Haliaeetus leucocephalus)	T1/T	W/C	Х	Х	
Northern harrier (Circus cyaneus)	N/A	YR/C	Х	Х	Х
Sharp-shinned hawk (Accipiter striatus)	N/A	YR/R-C	Х	Х	
Cooper's hawk (Accipiter cooperii)	N/A	YR/R-C	Х	Х	
Northern Goshawk (Accipiter gentiles)	T3	YR/R		Х	
Red-shouldered hawk (Buteo lineatus)	N/A	Su,F/R	Х	Х	
Swainson's hawk (Buteo swainsoni)	T5	Sp.Su.F/R-C	Х	Х	Х
Red-tailed hawk (Buteo jamaicensis)	N/A	YR/C	Х	Х	Х
Ferruginous hawk (Buteo regalis)	T3	YR/R-C	Х	Х	Х
Rough-legged hawk (Buteo lagopus]	N/A	Sp.F.W/C	Х	Х	Х
Golden eagle (Aquila chrysaetos)	N/A	YR/C	Х		Х
American kestrel (Falco sparverius)	N/A	YR/C	Х	Х	Х
Merlin (Falco coumbarius)	N/A	Sp.Su.F/R	Х	Х	
Prairie falcon (Falco mexicanus)	T3	YR/C	Х		Х
Peregrine falcon (Falco peregrinus)	T3	Sp,Su/R	Х	Х	
Gyrfalcon (Falco rusticolus)	N/A	W/R	Х		Х
Greater sage grouse (<i>Centrocercus urophasianus</i>)	T2	YR/R	Х		
Gray partridge (<i>Perdix perdix</i>)	N/A	YR/R	Х		Х
Chukar (Alectoris chukar)	N/A	YR/R	Х		Х
Ring-necked pheasant (<i>Phasianus colchicus</i>)	N/A	YR/C	Х	Х	
California quail (<i>Callipepla californica</i>)	N/A	YR/C	Х	Х	
Virginia rail (<i>Rallus limicola</i>)	N/A	YR/C		Х	
Sora (Porzana carolina)	N/A	Sp.Su/C		Х	
American coot (Fulica americana)	N/A	YR/C		Х	
Sandhill crane (Grus canadensis)	N/A	Sp/R		Х	
Black-bellied ployer (<i>Pluvialis sauatarola</i>)	N/A	Sp.Su/R		X	
Snowy ployer (<i>Charadrius alexandrinus</i>)	N/A	Sp/R		X	
Semipalmated plover (<i>Charadrius seminlamatus</i>)	N/A	Sp/R		X	
Killdeer (<i>Charadrius vociferous</i>)	N/A	YR/C		X	x
Black-necked stilt (<i>Himantonus mexicanus</i>)	N/A	Sp.Su/C		X	
American avocet (<i>Recurvirostra americana</i>)	N/A	Sp,Su/C		X	
Greater vellowlegs (Tringa melanoleuca)	N/A	Sp.Su/R		X	

			Habitat		
	Type/	Season ² /		Riparian/	
Common/Scientific Name	Status	Abundance'	Shrub	Aquatic	Grass
Lesser yellowlegs (<i>Tringa flavipes</i>)	N/A	YR/R		X	
Solitary sandpiper (<i>Tringa solitaria</i>)	N/A	Sp,Su/R		X	
Willet (Catoptrophorus semiplamatus)	N/A	Sp,Su/R	X	X	
Spotted sandpiper (Actitis mancularia)	N/A	Sp,Su/R		X	
Long-billed curlew (Numenius americanus)	T5	Sp,Su/C		X	X
Marbled godwit (<i>Limosa fedoa</i>)	N/A	Sp,Su,F/R		Х	
Sanderling (Calidris alba)	N/A	Sp/R		Х	
Semipalmated sandpiper (Calidris pusilla)	N/A	Sp,Su/R		Х	
Western sandpiper (<i>Calidris mauri</i>)	N/A	YR/R		X	
Least sandpiper (<i>Calidris minutilla</i>)	N/A	Sp,Su/R		Х	
Baird's sandpiper (Calidris bairdii)	N/A	Sp,Su/R		Х	
Dunlin (<i>Calidris alpina</i>)	N/A	Sp,Su/R		Х	
Long-billed dowitcher	N/A	Sp,Su/R		Х	
(Limnodromus scolopaceus)					
Short-billed dowitcher (Limnodromus griseus)	N/A	Sp,Su/R		X	
Common snipe (Gallinago gallinago)	N/A	YR/R-C		Х	
Wilson's phalarope (Phalaropus tricolor)	T5	Sp,Su/R		Х	
Red-necked phalarope (Phalaropus lobatus)	N/A	Sp,Su/R		Х	
Franklin's gull (Larus pipixcan)	N/A	Sp,Su/R		Х	
Bonaparte's gull (Larus philadelphia)	N/A	Sp,Su,F/R		Х	
Ring-billed gull (Larus delewarensis)	N/A	YR/C		Х	
California gull (Larus californicus)	N/A	YR/C		Х	
Herring gull (Larus argentatus)	N/A	W/R		Х	
Glaucous gull (Larus hyperboreus)	N/A	W/R		Х	
Glaucous-winged gull (Larus glaucescens)	N/A	W/R		Х	
Sabine's gull (Xema sabini)	N/A	Sp/R		Х	
Caspian tern (Sterna caspia)	N/A	Sp,Su/C		Х	
Forester's tern (Sterna forsteri)	N/A	Sp,Su,W/R		Х	
Black tern (Chlidonias niger)	T3	Sp,Su/R		Х	
Rock dove (feral pigeon) (Columba livia)	N/A	YR/C	Х	Х	
Band-tailed pigeon (Columba fasciata)	N/A	Sp/R		Х	
Mourning dove (Zenaida macroura)	N/A	YR/C	Х	Х	Х
Yellow-billed cuckoo (Coccyzus americanus)	T1/C	Sp,Su/R		Х	
Barn owl (Tyto alba)	N/A	YR/C	Х	Х	
Western screech-owl (Megascops kennicottii)	N/A	YR/C		Х	
Great horned owl (Bubo virginianus)	N/A	YR/C	Х	Х	
Snowy owl (Nyctea scandiaca)	N/A	W/R	Х		Х
Burrowing owl (Speotyto cunicularia)	T5	Sp.Su,F/C	Х		Х
Long-eared owl (Asio otus)	N/A	YR/C	Х	Х	
Short-eared owl (Asio flammeus)	T5	YR/R-C	Х	Х	Х
Northern saw-whet owl (<i>Aegolius acadicus</i>)	N/A	Sp.Su.W/R		X	
Barred owl (Strix varia)	N/A	W/R		X	
Great gray owl (<i>Strix nebulosa</i>)	T5	W/R		X	
Common nighthawk (Chordeiles minor)	N/A	Sp.Su.F/C	X	X	X
Common poorwill (<i>Phalaenontilus nuttallii</i>)	N/A	Sp.Su.F/R	X		X
Vaux's swift (<i>Chaetura vauxi</i>)	T5	Sp/R		Х	
White-throated swift (<i>Aeronautes sayatalis</i>)	N/A	Sp.Su/C		X	
Black-chinned hummingbird	N/A	Sp.Su/C	X	X	
(Archilochus alexandri)	1.011	~			
Calliope hummingbird (Stellula calliope)	Т3	Sp,Su/R		Х	

			Habitat		
	Type/	Season ² /		Riparian/	
Common/Scientific Name	Status ¹	Abundance ³	Shrub	Aquatic	Grass
Broad-tailed hummingbird	T3	Sp,Su/R		Х	
(Selasphorus platycercus)					
Rufous hummingbird (Selasphorus rufus)	N/A	Sp,Su/R		Х	
Belted kingfisher (Ceryle alcyon)	N/A	YR/R-C		Х	
Lewis' woodpecker (Melanerpes lewis)	T3	Sp/R		Х	
Red-napped sapsucker (Sphyrapicus nuchalis)	T5	Sp/R		Х	
Downey woodpecker (Picoides pubescens)	N/A	Sp/R		Х	
Hairy woodpecker (Picoides villosus)	N/A	Sp,W/R		Х	
Northern flicker (Colaptes auratus)	N/A	YR/C	X	Х	
Olive-sided flycatcher (Contopus cooperi)	T3	Sp/R		Х	
Western wood-pewee (Contopus sordidulus)	N/A	Sp,F/R		Х	
Willow flycatcher (Empidonax traillii)	T3	Sp,Su/R		Х	
Cordilleran flycatcher (<i>Empidonax occidentalis</i>)	T5	Sp/R		Х	
Say's phoebe (Sayornis saya)	N/A	YR/C	Х	Х	
Ash-throated flycatcher (<i>Myiarchus cinerascens</i>)	N/A	Sp,F/R		Х	
Western kingbird (Tyrannus verticalis)	N/A	Sp,Su/C	Х	Х	
Eastern kingbird (<i>Tyrannus tyrannus</i>)	N/A	Sp,Su/R	Х	Х	
Horned lark (Eremophila alpestris)	N/A	YR/C	X		Х
Purple martin (<i>Progne subis</i>)	N/A	Su/R		Х	
Tree swallow (Tachycineta bicolor)	N/A	Sp,Su/R	Х	Х	
Violet-green swallow (<i>Tachycineta thalassina</i>)	N/A	Sp.Su.F/C	Х	Х	
Northern rough-winged swallow	N/A	Sp.Su.F/C		Х	
(Stelgidoptervx serripennis)		F			
Bank swallow (<i>Riparia riparia</i>)	N/A	Sp.Su/C	X	Х	
Cliff swallow (<i>Petrochelidon pyrrhonata</i>)	N/A	Sp.Su/C	X	Х	
Barn swallow (<i>Hirundo rustica</i>)	N/A	Sp.Su.F/C	X	X	
Blue jay (<i>Cvanocitta cristata</i>)	N/A	YR/R		X	
Western scrub jay (<i>Aphelocoma californica</i>)	N/A	YR/R		X	
Steller's jay (Cvanocitta stelleri)	N/A	Sp/R		X	
Pinyon jay (Gymnorhinus cyanocenhalus)	N/A	VR/R	x	21	
Black-billed magnie (<i>Pica hydronia</i>)	N/A	VR/C	X	x	x
American crow (Corvus brachyrhynchos)	N/A	VR/C	Λ	X	
Common Bayen (Corvus corar)	N/A	VR/C	x	X	x
Black canned chickadee (Poscila atricanilla)	N/A	$\frac{110}{\text{Sp W/P}}$	Λ		Λ
Mountain chickadee (Poacila gambali)	N/A	$\frac{Sp, W/R}{Sp, W/R}$	v		
Bushtit (Phaltringrus minimus)	N/A N/A	Sp, w/R Sp Su E/P			
Pad braasted putbatch (Sitta Canadansis)	N/A	Sp,Su,F/R	Λ		
White breasted nuthately (Sitta garolingusis)		Sp,Su,T/K			
Brown crooper (Corthia amariagna)	N/A N/A	$S_{\rm H} = W/P$			
Book wron (Salnington obsolatus)	IN/A N/A	VP/C	v		
Convon wron (Cathernes mexicanus)	IN/A		Λ V		
Lange group (Teals dates and an)	IN/A		Λ		
Winten semen (Tues la dutas tues la dutas)	IN/A	Sp,Su,W/R			
Winter Wren (<i>Troglodytes troglodytes</i>)	IN/A	Sp,F,W/K			
Bewick's Wren (Inryomanes bewickii)		Sp/K		X V	
Inviaisn wren (<i>Cistoinrus palusiris</i>)	IN/A	Y K/C		X V	
Dela superior de la construction	IN/A	Su,F,W/K		<u>Å</u>	
Ruby-crowned kinglet (<i>Regulus calendula</i>)	N/A	Su,F,W/C	37	Х	
Iviountain bluebird (<i>Sialia currucoides</i>)	N/A	Sp,Su,W/R	Х	37	
I ownsend's solitaire (<i>Myadestes townsendii</i>)	N/A	Su,F,W/K		X	
Hermit thrush (<i>Catharus guttatus</i>)	I N/A	I Sp/R		Х	

			Habitat		
	Type/	Season ² /		Riparian/	
Common/Scientific Name	Status	Abundance ³	Shrub	Aquatic	Grass
American robin (<i>Turdus migratorius</i>)	N/A	YR/C	Х	Х	
Varied thrush (Ixoreus naevius)	N/A	Sp,F/R		X	
Northern mockingbird (Mimus polyglottos)	N/A	Sp,Su,F/R	Х	Х	
Sage thrasher (Oreoscoptes montanus)	T5	YR/R	Х	Х	
American pipit (Anthus rubescens)	N/A	Sp,F,W/R	Х	Х	Х
Bohemian waxwing (Bombycilla garrulous)	N/A	Sp,W/R		Х	
Cedar waxing (Bombycilla cedrorum)	N/A	YR/R		Х	
Northern shrike (Lanius excubitor)	N/A	Sp,F,W/R	Х	Х	
Loggerhead shrike (Lanius ludovicianus)	T3	YR/R	Х	Х	
European starling (Sturnus vulgaris)	N/A	YR/C	Х	Х	Х
Warbling vireo (Vireo gilvus)	N/A	Sp,F/R		Х	
Cassin's vireo (Vireo cassinii)	N/A	Sp/R		Х	
Red-eyed vireo (Vireo olivaceus)	N/A	Sp,Su/R		Х	
Orange-crowned warbler (Vermivora celata)	N/A	Sp/R		Х	
Nashville warbler (Vermivora ruficapilla)	N/A	Sp,Su/R		Х	
Yellow warbler (Dendroica petechia)	N/A	Sp,Su/R	Х	Х	
Yellow-rumped warbler (Dendroica coronata)	N/A	Sp,F,W/C	Х	Х	
Townsend's warbler (Dendroica townsendi)	N/A	Sp/R		Х	
American restart (Setophaga ruticilla)	N/A	Su/R		Х	
Ovenbird (Seiurus aurocapillus)	N/A	Sp/R	Х	Х	
MacGillivray's warbler (<i>Oporornis tolmiei</i>)	N/A	Sp/R		Х	
Common yellowthroat (<i>Geothlypis trichas</i>)	N/A	Sp.Su/C		Х	
Wilson's warbler (<i>Wilsonia pusilla</i>)	N/A	Sp.Su.F/R		Х	
Yellow-breasted chat (<i>Icteria virens</i>)	N/A	Sp.Su/C		Х	
Western tanager (<i>Piranga ludoviciana</i>)	N/A	Sp.Su.F/R	Х	Х	
Black-headed grosbeak	N/A	Sp.Su/R		Х	
(Pheucticus melanocephalus)		··· • • • • • • • • • • • • • • • • • •			
Lazuli bunting (Passering ameona)	N/A	Sp.Su/R	Х	Х	
Indigo bunting (Passering cyanea)	N/A	Sp.Su/R	Х	Х	
Green-tailed towhee (<i>Pipilo chlorurus</i>)	T5	Sp/R	Х	Х	
Spotted towhee (<i>Pipilo maculatus</i>)	N/A	YR/R	Х	Х	
Cassin's sparrow (Aimophila cassinii)	N/A	Sp.Su/R	Х		
Grasshopper sparrow (Ammodramus savannarum)	T5	Sp.Su/C			X
American tree sparrow (<i>Spizella arborea</i>)	N/A	W/R		X	
Chipping sparrow (Spizella passering)	N/A	S.Su/R	X		
Brewer's sparrow (Spizella beweri)	T3	Sp.Su.F/C	X		
Lark bunting (Calamospiza melanocorys)	N/A	Sp,Su,P,C	X		
Lark sparrow (Chondestes grammacus)	N/A	Sp.Su.W/C	X	X	
Black-throated sparrow (Amphispiza hilineata)	T4	Sp,Su, W/C	X		
Sage sparrow (Amphispiza belli)	T3	YR/C	X	x	
Vesper's sparrow (Pooecetes gramineus)	N/A	Sn Su/R	X	21	
Savannah sparrow (Passerculus sandwichensis)	N/A	Sp,Su/C	21	x	x
Harris sparrow (Zonotrichia querula)	N/Λ	Sp,Su/C		X	Λ
Song sparrow (Melospiza melodia)	N/A	VR/C	x	X	
Lincoln's sparrow (Melospiza lincolnii)	N/Δ	Sp/R	Δ	X	
White-throated sparrow (Zonotrichia albicollis)	N/A	Sp/K Sn/P		Λ V	
White-crowned sparrow (Zonotrichia layonhous)	N/A		v	Λ V	
Fox sparrow (Passaralla iliaca)	N/A	$\frac{1}{\sqrt{P}}$	Λ	л V	
Swamp sparrow (Melospize georgiana)	N/A	F W//P		л V	
Dark-eved junco (lunco hyanalis)	N/Δ	Sn F W/C	x	X	x
j Bark eyea janeo (sanco nyemans)	1 1/ 17	$_{\rm op,r}, w/c$	11	11	1

Common/Scientific Name Type/ Season?/ Aquatic Season?/ Grass Lapland longspur (Calcarius lapponicus) N/A W/R X Snow bunting (Plectrophenax nivalis) N/A F,W/R X X Bobolink (Dichemys ory:evens) N/A Su/R X X Red-winged blackbird (Agelatus phoeniceus) N/A YR/C X X Western meadowlark (Stamella neglecta) N/A YR/C X X Vestern meadowlark (Stamella neglecta) N/A YR/C X X Vestern meadowlark (Stamella neglecta) N/A YR/C X X Common grackle (Quiscalus guiscula) N/A YR/C X X Common grackle (Quiscalus guiscula) N/A Sp.R X X Bullock's oriole (Icterns bullockii) N/A Sp.W/R X X Bullock's oriole (Icterns bullockii) N/A Sp.W/R X X Bullock's oriole (Icterns bullockii) N/A Sp.W/R X X Bullock's oriole (Icterus bullockiii)				Habitat		
Common/Scientific NameStatus'Abundance'ShrubÁquaticGrassLapland longspur (Calcarius lapponicus)N/AF,W/RXXSnow bunting (Plectrophenax nivalis)N/AF,W/RXXBobolink (Dolichoryx oryzivorus)N/ASu/RXXBobolink (Dolichoryx oryzivorus)N/AYR/CXXWestern meadowlark (Sturnella neglecta)N/AYR/CXXVellow-headed blackbirdN/AYR/CXXCommon grackle Quisculus guisculu)N/AYR/CXXBrewer's blackbird (Laphagus cyanocephalus)T5YR/CXXGreat-tailed grackle (Quisculus guisculu)N/ASp/RXXXBrown-headed cowbird (Molathrus ater)N/ASp/RXXXBack rosy finch (Leucosticte tephrocotis)N/ASp,Su,F/CXXCassin's finch (Carpodacus cassinif)T5Sp,W/RXLCassin's finch (Carpodacus cassinif)T5Sp,W/RXXLesser goldfinch (Carduells palaria)N/ASp,E/RXXPine siksin (Carduells pinus)N/AYR/CXXHouse spartor (Paser domesticus)N/ASp,L/W/RXXEvening grosbeak (Coccothraustes vespertinus)N/ASp,L/W/RXXWestern rattlesnake (Croatles viridis)N/AYR/CXXRepties		Type/	Season ² /		Riparian/	
Lapland longspur (Calcarius lapponicus)N/AW/RXSnow bunting (Plectrophenax nivalis)N/AF.W/RXRed-winged blackbird (Agelatus phoeniceus)N/AYR/CXRed-winged blackbird (Agelatus phoeniceus)N/AYR/CXWestern meadowlark (Surnella neglecta)N/AYR/CXYellow-headed blackbird (Luphagus cyanocephalus)T5YR/CXBrewer's blackbird (Euphagus cyanocephalus)T5YR/CXCommon grackle (Quiscalus guiscula)N/AF/RXXCommon grackle (Quiscalus guiscula)N/AYR/CXXBulkok's oriole (Icterus bullockii)N/ASp.Su,F/CXXBulkok's oriole (Icterus bullockii)N/ASp.Su,F/CXXBaker orsy finch (Leucostict e tephrocotis)N/ASp.W/RXBaker or sy finch (Leucostict et phrocotis)N/ASp.W/RXBulsok 's oriole (Ictrus bullockii)N/ASp.W/RXBase six (Carpodacus mexicanns)N/AYR/CXXLesser goldfinch (Carpodacus mexicanns)N/AYR/CXXAmerican goldlinch (Carduelis psaltria)N/ASp.Su,W/RXHouse spart ow (Passer domesticus)N/AYR/CXXAmerican goldlinch (Carduelis tristis)N/AYR/CXXAmerican goldlinch (Carduelis tristis)N/AYR/CXXRegre to the constrictor)N/AYR/C <td< th=""><th>Common/Scientific Name</th><th>Status¹</th><th>Abundance³</th><th>Shrub</th><th>Aquatic</th><th>Grass</th></td<>	Common/Scientific Name	Status ¹	Abundance ³	Shrub	Aquatic	Grass
Snow bunting (Plectrophenax nivalis) N/A F,W/R X X Bobolink (Dolichomy: oryzivorus) N/A Su/R X X Red-winged blackbird (Sutrella neglecta) N/A YR/C X X Western meadowlark (Sturnella neglecta) N/A YR/C X X (Xanthocephalus xanthocephalus) N/A YR/C X X Common grackle (Quisculas guisculo) N/A F/R X X Gravit-tailed grackle (Quisculas guisculo) N/A Sp/R X X Brown-headed cowbird (Molathrus ater) N/A Sp/R X X Back rosy finch (Leucosticte tephrocotis) N/A Sp,W/R X Cassin's finch (Leucosticte tephrocotis) N/A Sp,W/R X Lesser goldfinch (Carbodacus cassini) T5 Sp,W/R X X E Iback rosy finch (Leucosticte tephrocotis) N/A YR/C X X E Lesser goldfinch (Carbodacus cassini) T5 Sp,W/R X X E Evening grobback (Caccotarbarstex vespertinus) N/A YR/C X X House spartow (Passer domesticus) N/A YR/C X X Evening grobback (Cactotalus viridis)	Lapland longspur (Calcarius lapponicus)	N/A	W/R			X
Bobolink (Dolichony: org:ivorus) N/A Su/R X Red-winged blackbird (Agelains phoeniceus) N/A YRC X Western meadowlark (Surnella neglecta) N/A YRC X (Zamthocephalus xamthocephalus) TS YR/C X Brewer's blackbird (Euphagus cyanocephalus) TS YR/C X Common grackle (Quiscalus quiscula) N/A F/R X X Common grackle (Quiscalus quiscula) N/A F/R X X Brown-headed cowbird (Molofhrus ater) N/A Sp/R X X Bullock's oriole (Icterus hullockii) N/A Sp.W/R X Gray-crowned rosy finch (Leucosticte tephrocotis) N/A Sp.W/R X House finch (Carpodacus cassinii) TS Sp.W/R X Lesser goldfinch (Carbaelis psalria) N/A Sp.F/R X House finch (Carbaelis psalria) N/A Sp.W/R X Lesser goldfinch (Carbaelis tristis) N/A Sp.W/R X American goldfinch (Carbaelis tristis) N/A YR/C X Meerican goldfinch (Carbaelis tristis) N/A YR/C X Meericange coldentice viridis) N/A YR/C X Meering grase do	Snow bunting (Plectrophenax nivalis)	N/A	F,W/R	Х		X
Red-winged blackbird (Agelaius phoeniceus) N/A YR/C X Western meadowlark (Sturnella neglecta) N/A YR/C X (Xanthocephalus sunthocephalus) N/A YR/C X Drewer's blackbird (Euplegus cyanocephalus) T5 YR/C X Common grackle (Quiscalus quiscula) N/A F/R X X Great-tailed grackle (Quiscalus quiscula) N/A Sp/R X X Brown-headed cowbird (Molohrus ater) N/A Sp/R X X Bullock's oriole (Leterus bullockii) N/A Sp,BW/R X Bulsck rosy finch (Leucosticte tephrocotis) N/A Sp,W/R X Lesser goldfinch (Carbodacus cassinii) T5 Sp,W/R X House finch (Carbodacus cassinii) T5 Sp,W/R X Lesser goldfinch (Carduelis psalria) N/A YR/C X House spartow (Passer domesticus) N/A YR/C X X Evening grosbeak (Coccohraustes vespertinus) N/A YR/C X X House spartow (Passer domesticus) N/A YR/C X X Roptiles	Bobolink (Dolichonyx oryzivorus)	N/A	Su/R		Х	
Western meadowlark (Sturnella neglecta) N/A YR/C X Yellow-headed blackbird N/A YR/C X (Xanthocephalus xanthocephalus) TS YR/C X Brewer's blackbird (Euphagus cyanocephalus) TS YR/C X X Common grackle (Quiscalus mexicanus) N/A F/R X X Great-tailed grackle (Quiscalus mexicanus) N/A Sp/R X X Bullock's oriole (Leren's bullockii) N/A Sp.U/C X X Gray-crowned rosy finch (Leucosticte tephrocotis) N/A Sp.W/R X Image: Common sequence commo	Red-winged blackbird (Agelaius phoeniceus)	N/A	YR/C		Х	
Yellow-headed blackbird N/A YR/C X (Xanthocephaluss xanthocephaluss) T5 YR/C X Brewer's blackbird (Euphagus cyanocephalus) T5 YR/C X X Common grackle (Quiscalus guiscula) N/A F/R X X Great-tailed grackle (Quiscalus mexicanus) N/A Sp/R X X Bullock's oriole (Icterus bullockii) N/A Sp.W/R X C Black rosy finch (Leucosticte atrata) N/A Sp.W/R X C Buse finch (Carpodacus cassinii) T5 Sp.W/R X C Lesser goldfinch (Carduelis psaltria) N/A Sp.F/R X X House finch (Carduelis pisaltria) N/A Sp.Su,W/R X X House spartow (Passer domesticus) N/A Sp.Su,W/R X X House spartow (Passer domesticus) N/A YR/C X X Reptiles N/A YR/C X X X Gopher snake (Drotalus viridis) N/A YR/C X X X Western rattlesnake (Crotalus vir	Western meadowlark (Sturnella neglecta)	N/A	YR/C	Х		Х
(Xanthocephalus xanthocephalus) T5 YR/C X Brewer's blackbird (Euphagus cyanocephalus) T5 YR/C X X Common grackle (Quiscalus quiscula) N/A Sp/R X X Great-tailed grackle (Quiscalus mexicanus) N/A Sp/R X X Brown-headed cowbird (Molothrus ater) N/A Sp,R/R X X Bullock's oriole (Letras bullockii) N/A Sp,Su,F/C X X Back rosy finch (Leucosticte tephrocotis) N/A Sp,W/R X L Cassin's finch (Carodacus cassinii) T5 Sp,W/R X L Lesser goldfinch (Carduelis psaltria) N/A Sp,F/R X X Lesser goldfinch (Carduelis tristis) N/A Sp,Su,W/R X X American goldfinch (Carduelis tristis) N/A Sp,Su,W/R X X House sparrow (Passer domesticus) N/A YR/C X X X Westem rattlesnake (Crotalus viridis) N/A YR/C X X X Repfiles N/A YR/C X X <	Yellow-headed blackbird	N/A	YR/C		Х	
Brewer's blackbird (Euphagus cyanocephalus) T5 YR/C X X Common grackle (Quiscalus quiscula) N/A F/R X X Great-tailed grackle (Quiscalus mexicanus) N/A Sp/R X X Bullock's oriole (Icterus bullockii) N/A Sp,Su,F/C X X Bullock's oriole (Icterus bullockii) N/A Sp,W/R X Black rosy finch (Leucosticte atrata) N/A Sp,W/R X Cassin's finch (Carpodacus cassinii) T5 Sp,W/R X Lesser goldfinch (Carduelis psaltria) N/A Sp,F/R X X Pine siskin (Carduelis psaltria) N/A Sp,F/R X X Americang goldfinch (Carduelis ristis) N/A Sp,Su,W/R X House spartow (Passer domesticus) N/A YR/C X X Reptiles Western rattlesnake (Crotalus viridis) N/A YR/C X X Racer (Coluber constrictor) N/A YR/C X X Rubperback (Masticophis taeniatus) N/A YR/C X X Rober snake (Pinnophis melanole) N/A YR/C X X Western terrestrial garter snake<	(Xanthocephalus xanthocephalus)					
Common grackle (Quiscalus quiscula)N/AF/RXXGreat-tailed grackle (Quiscalus mexicanus)N/ASp/RXXBullock's oriole (Letens bullockii)N/AYR/CXXBullock's oriole (Letens bullockii)N/ASp.W/RXCGray-crowned rosy finch (Leucosticte tephrocotis)N/ASp.W/RXCBack rosy finch (Leucosticte atrata)N/ASp.W/RXCLesser goldfinch (Carpodacus cassinii)T5Sp.W/RXXHouse finch (Carpodacus cassinii)N/ASp.F/RXXLesser goldfinch (Carduelis psaltria)N/ASp.F/RXXAmerican goldfinch (Carduelis psaltria)N/AF.W/RXXAmerican goldfinch (Carduelis tristis)N/ASp.Su,W/RXXHouse sparrow (Passer domesticus)N/ASp.Su,W/RXXReptilesWWestern rattlesnake (Crotalus viridis)N/AYR/CXXStriped whipsnake (Masticophis teeniatus)N/AYR/CXXRacer (Coluber constrictor)N/AYR/CXXXRobert boa (Charina bottae)N/AYR/CXXXInglis taske (Hhinocheilus lecontei)T3YR/RXLongnose snake (Rhinocheilus lecontei)T3YR/RXOround snake (Sonora semiannulata)T3YR/RXUcongose logand lizard (Gambelia wi	Brewer's blackbird (Euphagus cyanocephalus)	T5	YR/C	Х	Х	
Great-tailed grackle (<i>Quiscalus mexicanus</i>)N/ASp/RXXXBrown-headed cowbird (<i>Molathrus ater</i>)N/AYR/CXXBullock's oriole (<i>Icterus bullockii</i>)N/ASp,Su,F/CXGray-crowned rosy finch (<i>Leucosticte tephrocotis</i>)N/ASp,W/RXBlack rosy finch (<i>Leucosticte tephrocotis</i>)N/ASp,W/RXCassin's finch (<i>Carpodacus carsini</i>)T5Sp,W/RXXHouse finch (<i>Carpodacus carsini</i>)T5Sp,W/RXXLesser goldfinch (<i>Carduelis psaltria</i>)N/ASp,F/RXXAmerican goldfinch (<i>Carduelis tristis</i>)N/ASp,Su,W/RXXHouse sparrow (<i>Passer domesticus</i>)N/ASp,Su,W/RXXHouse sparrow (<i>Passer domesticus</i>)N/ASp,Su,W/RXXReptiles </td <td>Common grackle (Quiscalus quiscula)</td> <td>N/A</td> <td>F/R</td> <td>Х</td> <td>Х</td> <td></td>	Common grackle (Quiscalus quiscula)	N/A	F/R	Х	Х	
Brown-headed cowbird (Molothrus ater) N/A YR/C X X Bullock's oriole (Icterus bullockii) N/A Sp.Su,F/C X Gray-crowned rosy finch (Leucosticte tephrocotis) N/A Sp.W/R X Black rosy finch (Leucosticte atrata) N/A Sp.W/R X Cassin's finch (Carpodacus cassinii) T5 Sp.W/R X Lesser goldfinch (Carduelis psatiria) N/A Sp.F/R X X Lesser goldfinch (Carduelis psatiria) N/A Sp.F/R X X American goldfinch (Carduelis tristis) N/A Sp.Su.W/R X X House sparrow (Passer domesticus) N/A Sp.Su.W/R X X House sparrow (Passer domesticus) N/A YR/C X X Western rattlesnake (Crotalus viridis) N/A YR/C X X Striped whipsnake (Masticophis taeniatus) N/A YR/C X X Rognose snake (Rhinocheilus lecontei) T3 YR/R X X Longnose snake (Rhinocheilus lecontei) T3 YR/R X X Migiat snake (Hypsiglena torquata) T5 YR/R X X Mojave black-collard lizard (Chamnophis sirtalis) T3 YR/R	Great-tailed grackle (Quiscalus mexicanus)	N/A	Sp/R	X	Х	X
Bullock's oriole (<i>Icterus bullockii</i>) N/A Sp.Su,F/C X Gray-crowned rosy finch (<i>Leucosticte tephrocotis</i>) N/A Sp,W/R X Cassin's finch (<i>Carpodacus cassinii</i>) T5 Sp,W/R X Lesser goldfinch (<i>Carpodacus mexicanus</i>) N/A YR/C X House finch (<i>Carpodacus mexicanus</i>) N/A YR/C X Lesser goldfinch (<i>Carduelis psaltria</i>) N/A Sp,F/R X X Pine siskin (<i>Carduelis pinus</i>) N/A Sp,F/R X X American goldfinch (<i>Carduelis tristis</i>) N/A Sp,R/R X X Evening grosbeak (<i>Cocothraustes vespertinus</i>) N/A Sp,Su,W/R X X House sparrow (<i>Passer domesticus</i>) N/A YR/C X X Reptiles Western rattlesnake (<i>Crotalus viridis</i>) N/A YR/C X X Striped whipsnake (<i>Masticophis taeniatus</i>) N/A YR/C X X Raber too (<i>Charina botae</i>) N/A YR/C X X Longnose snake (<i>Rhinocheilus lecontei</i>) T3 YR/R X Longnose snake (<i>Rhinocheilus lecontei</i>) T3 YR/R X Ground snake (<i>Sonora semiann</i>	Brown-headed cowbird (Molothrus ater)	N/A	YR/C	Х	Х	
Gray-crowned rosy finch (Leucosticte tephrocotis)N/ASp,W/RXBlack rosy finch (Leucosticte atrata)N/ASp,W/RXBlack rosy finch (Carodacus cassini)T5Sp,W/RXXHouse finch (Carodacus cassini)T5Sp,W/RXXHouse finch (Carodacus cassini)N/AYR/CXXPine siskin (Carduelis psaltria)N/AF,W/RXXAmerican goldfinch (Carduelis tristis)N/AF,W/RXXEvening grosbeak (Coccothraustes vespertinus)N/AYR/CXXHouse sparrow (Passer domesticus)N/AYR/CXXReptiles	Bullock's oriole (Icterus bullockii)	N/A	Sp,Su,F/C		Х	
Black rosy finch (Leucosticte atrata) N/A Sp,W/R X Cassin's finch (Carpodacus cassinii) T5 Sp,W/R X X House finch (Carpodacus mexicanus) N/A YR/C X X Lesser goldfinch (Carduelis psilicia) N/A Sp,F/R X X Pine siskin (Carduelis psilicia) N/A Sp,F/R X X American goldfinch (Carduelis tristis) N/A YR/C X X House sparrow (Passer domesticus) N/A YR/C X X House sparrow (Passer domesticus) N/A YR/C X X Reptiles	Gray-crowned rosy finch (Leucosticte tephrocotis)	N/A	Sp,W/R	Х		
Cassin's finch (Carpodacus cassini)T5Sp,W/RXXHouse finch (Carpodacus mexicanus)N/AYR/CXXLesser goldfinch (Carduelis psiltria)N/ASp,F/RXXPine siskin (Carduelis psiltria)N/AF,W/RXXAmerican goldfinch (Carduelis tristis)N/AF,W/RXXEvening grosbeak (Coccothraustes vespertinus)N/ASp,Su,W/RXXHouse sparrow (Passer domesticus)N/AYR/CXXReptilesN/AYR/CXXXGopher snake (Pituophis melanole)N/AYR/CXXStriped whipsnake (Masticophis taeniatus)N/AYR/CXXRacer (Coluber constrictor)N/AYR/CXXRuber boa (Charina bottae)N/AYR/RXXNight snake (Hpinocheilus lecontei)T3YR/RXNNight snake (Ifpsiglena torquata)T5YR/RXCommon garter snake (Thamnophis sirtalis)T3YR/RXCondus lecontealT3YR/RXLongnose leopard lizard (Gambelia wislizenii)N/AYR/CXXWestern whiptail (Cnemidophorus tigris)N/AYR/RXCrotaphytus bicinctores)Longnose loopard lizard (Gambelia wislizenii)N/AYR/RXLongnose leopard lizard (Gambelia wislizenii)N/AYR/RXGround snake (Scoloporus graciosus) <td>Black rosy finch (<i>Leucosticte atrata</i>)</td> <td>N/A</td> <td>Sp,W/R</td> <td>Х</td> <td></td> <td></td>	Black rosy finch (<i>Leucosticte atrata</i>)	N/A	Sp,W/R	Х		
House finch (Carpodacus mexicanus)N/AYR/CXXLesser goldfinch (Carduelis psaltria)N/ASp,F/RXXPine siskin (Carduelis prints)N/AF,W/RXXAmerican goldfinch (Carduelis tristis)N/AYR/CXXEvening grosbeak (Coccothraustes vespertinus)N/ASp,Su,W/RXHouse sparrow (Passer domesticus)N/AYR/CXXReptilesWestern rattlesnake (Crotalus viridis)N/AYR/CXXStriped whipsnake (Masticophis taeniatus)N/AYR/CXXRacer (Coluber constrictor)N/AYR/CXXRubber boa (Charina bottae)N/AYR/CXXLongnose snake (Rhinocheilus lecontei)T3YR/RXWestern terrestrial garter snakeN/AYR/CXXGround snake (Sonora semiannulata)T3YR/RXMojave black-collard lizardT3YR/RXCommon garter snake (Thamnophis sirtalis)T3YR/RXLongnose leopard lizard (Gambelia wislizenii)N/AYR/CXXWestern horned lizard (Phrynosoma douglassii)N/AYR/CXMojave black-collard lizard (Gambelia wislizenii)N/AYR/CXLongnose leopard lizard (Gambelia wislizenii)N/AYR/CXSide-botched lizard (Drawidophorus tigris)N/AYR/CX<	Cassin's finch (Carpodacus cassinii)	T5	Sp,W/R	Х	Х	
Lesser goldfinch (Carduelis psaltria)N/ASp,F/RXXPine siskin (Carduelis pinus)N/AF,W/RXXAmerican goldfinch (Carduelis tristis)N/AF,W/RXXEvening grosbeak (Caccothraustes vespertinus)N/ASp,Su,W/RXXHouse sparrow (Passer domesticus)N/AYR/CXXReptiles </td <td>House finch (Carpodacus mexicanus)</td> <td>N/A</td> <td>YR/C</td> <td>Х</td> <td>Х</td> <td></td>	House finch (Carpodacus mexicanus)	N/A	YR/C	Х	Х	
Pine siskin (Carduelis pinus)N/AF,W/RXXAmerican goldfinch (Carduelis tristis)N/AYR/CXXEvening grosbeak (Cocothraustes vespertinus)N/ASp,Su,W/RXHouse sparrow (Passer domesticus)N/AYR/CXXReptilesN/AYR/CXXXWestern rattlesnake (Crotalus viridis)N/AYR/CXXXStriped whipsnake (Masticophis taeniatus)N/AYR/CXXXRacer (Coluber constrictor)N/AYR/CXXXRubber boa (Charina bottae)N/AYR/CXXXLongnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Hypsiglena torquata)T5YR/RXX(Thamnophis elegans)T3YR/RXXCommon garter snake (Thamnophis sirtalis)T3YR/RXXMojave black-collard lizardT3YR/RXXWestern whiptail (Cnemidophorus tigris)N/AYR/CXXShort-horned lizard (Phrynosoma douglassii)N/AYR/CXXSagebrush lizard (Sceloporus occidentalis)N/AYR/CXXSide-botched lizard (Sceloporus graciosus)N/AYR/CXXSugebrush lizard (Gambelia wislizenii)N/AYR/CXXSugebrush lizard (Genoporus occidentalis)N/AYR/CXXSugebrush lizard (Dhrynosoma douglassii)	Lesser goldfinch (Carduelis psaltria)	N/A	Sp,F/R	Х	Х	
American goldfinch (Carduelis tristis)N/AYR/CXXEvening grosbeak (Coccothraustes vespertinus)N/ASp,Su,W/RXHouse sparrow (Passer domesticus)N/AYR/CXXReptilesWestern rattlesnake (Crotalus viridis)N/AYR/CXXGopher snake (Pituophis melanole)N/AYR/CXXStriped whipsnake (Masticophis taeniatus)N/AYR/CXXRacer (Coluber constrictor)N/AYR/CXXRubber boa (Charina bottae)N/AYR/RXXLongnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Hypsiglena torquata)T5YR/RXX(Thamnophis elegans)Common garter snake (Thamnophis sirtalis)T3YR/RXGround snake (Sonora semiannulata)T3YR/RXLongnose leopard lizard (Gambelia wislizenii)N/AYR/CXWestern whiptail (Cnemidophorus tigris)N/AYR/CXWestern methelizard (Gambelia wislizenii)N/AYR/CXShort-horned lizard (Charynosoma douglassii)N/AYR/CXXSide-botched lizard (Us tansburiana)N/AYR/CXXSide-botched lizard (Us tansburiana)N/AYR/CXXSide-botched lizard (Us tansburiana)N/AYR/CXXSide-botched lizard (Us tansburiana)N/AYR/C <td< td=""><td>Pine siskin (Carduelis pinus)</td><td>N/A</td><td>F,W/R</td><td>Х</td><td>Х</td><td></td></td<>	Pine siskin (Carduelis pinus)	N/A	F,W/R	Х	Х	
Evening grosbeak (Coccothraustes vespertinus)N/ASp,Su,W/RXHouse sparrow (Passer domesticus)N/AYR/CXXReptiles </td <td>American goldfinch (<i>Carduelis tristis</i>)</td> <td>N/A</td> <td>YR/C</td> <td>Х</td> <td>Х</td> <td>Х</td>	American goldfinch (<i>Carduelis tristis</i>)	N/A	YR/C	Х	Х	Х
House sparrow (Passer domesticus)N/AYR/CXXReptilesWestern rattlesnake (Crotalus viridis)N/AYR/CXXGopher snake (Pituophis melanole)N/AYR/CXXStriped whipsnake (Masticophis taeniatus)N/AYR/CXXXRacer (Coluber constrictor)N/AYR/CXXXRubber boa (Charina bottae)N/AYR/CXXXLongnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Hypsiglena torquata)T5YR/RXXWestern terrestrial garter snakeN/AYR/CXX(Thamnophis elegans)T3YR/RXXCommon garter snake (Thamnophis sirtalis)T3YR/RXXMojave black-collard lizardT3YR/RXX(Crotaphytus bicinctores)N/AYR/CXXLongnose loopard lizard (Gambelia wislizenii)N/AYR/CXXWestern whiptail (Cnemidophorus tigris)N/AYR/CXXShort-horned lizard (Phrynosoma douglassii)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXSide-botched lizard (Bufo boreas)T3YR/RXXWestern torus frog (Pseudacris triseriata)N/AYR/CXX	Evening grosbeak (Coccothraustes vespertinus)	N/A	Sp,Su,W/R		Х	
ReptilesN/AYR/CXXWestern rattlesnake (Crotalus viridis)N/AYR/CXXXGopher snake (Pituophis melanole)N/AYR/CXXXStriped whipsnake (Masticophis taeniatus)N/AYR/CXXXRacer (Coluber constrictor)N/AYR/CXXXRubber boa (Charina bottae)N/AYR/CXXXLongnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Hypsiglena torquata)T5YR/RXXWestern terrestrial garter snakeN/AYR/CXX(Thamnophis elegans)T3YR/RXXCommon garter snake (Thannophis sirtalis)T3YR/RXMGround snake (Sonora semiannulata)T3YR/RXMLongnose leopard lizard (Gambelia wislizenii)N/AYR/CXMWestern whiptail (Cnemidophorus tigris)N/AYR/CXMDesert horned lizard (Phrynosoma dauglassii)N/AYR/CXMWestern fence lizard (Celoporus occidentalis)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXWestern toad (Bufo boreas)T3YR/RXXWestern toad (Bufo boreas)T3YR/RXXSide-botched lizard (Uta stansburiana)N/AYR/CXXMetern toral algo boreas)T3YR/R	House sparrow (<i>Passer domesticus</i>)	N/A	YR/C	Х	Х	
Western rattlesnake (Crotalus viridis)N/AYR/CXXXGopher snake (Pituophis melanole)N/AYR/CXXXStriped whipsnake (Masticophis taeniatus)N/AYR/CXXXRacer (Coluber constrictor)N/AYR/CXXXRubber boa (Charina bottae)N/AYR/CXXXLongnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Hypsiglena torquata)T5YR/RXXWestern terrestrial garter snakeN/AYR/CXX(Thannophis elegans)T3YR/RXXGround snake (Sonora semiannulata)T3YR/RXXMojave black-collard lizardT3YR/RXX(Crotaphytus bicinctores)N/AYR/CXXLongnose leopard lizard (Gambelia wislizenii)N/AYR/CXXWestern whiptail (Cnemidophorus tigris)N/AYR/CXXShort-horned lizard (Phrynosoma platyrhinos)N/AYR/RXXSide-botched lizard (Cleaporus occidentalis)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXWestern toad (Bufo boreas)T3YR/RXXSide-botched lizard (Uta stansburiana)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXWestern toad (Bufo boreas)T3 </td <td>Reptiles</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Reptiles					
Gopher snake (Pituophis melanole)N/AYR/CXXXStriped whipsnake (Masticophis taeniatus)N/AYR/CXXXRacer (Coluber constrictor)N/AYR/CXXXRubber boa (Charina bottae)N/AYR/CXXXLongnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Hypsiglena torquata)T5YR/RXXWestern terrestrial garter snakeN/AYR/CXX(Thamnophis elegans)T3YR/RXXCommon garter snake (Thamnophis sirtalis)T3YR/RXMojave black-collard lizardT3YR/RX(Crotaphytus bicinctores)N/AYR/CXLongnose leopard lizard (Gambelia wislizenii)N/AYR/CXWestern whiptail (Cnemidophorus tigris)N/AYR/CXShort-horned lizard (Phrynosoma platyrhinos)N/AYR/CXSide-botched lizard (Uta stansburiana)N/AYR/CXSide-botched lizard (Uta stansburiana)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXWest	Western rattlesnake (Crotalus viridis)	N/A	YR/C	Х	Х	Х
Striped whipsnake (Masticophis taeniatus)N/AYR/CXXXRacer (Coluber constrictor)N/AYR/CXXXRubber boa (Charina bottae)N/AYR/CXXXLongnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Hypsiglena torquata)T5YR/RXXWestern terrestrial garter snakeN/AYR/CXX(Thamnophis elegans)T3YR/RXXCommon garter snake (Thamnophis sirtalis)T3YR/RXXGround snake (Sonora semiannulata)T3YR/RXXMojave black-collard lizardT3YR/CXX(Crotaphytus bicinctores)UV/AYR/CXXDesert horned lizard (Cambelia wislizenii)N/AYR/CXXWestern whiptail (Chemidophorus tigris)N/AYR/CXXShort-horned lizard (Sceloporus occidentalis)N/AYR/CXXSide-botched lizard (Sceloporus occidentalis)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXXMoodhouse's toad (Bufo boreas)T3YR/RXXWestern chorus frog (Pseudacris triseriata)N/AYR/RXXMestern toard Gufo boreas)T3YR/RXXMestern toard (Bufo boreas)T3YR/RXXMestern toard (Sceloporus citerrontanus)	Gopher snake (Pituophis melanole)	N/A	YR/C	Х	Х	Х
Racer (Coluber constrictor)N/AYR/CXXRacer (Coluber constrictor)N/AYR/CXXRubber boa (Charina bottae)N/AYR/CXXLongnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Hypsiglena torquata)T5YR/RXXWestern terrestrial garter snakeN/AYR/CXX(Thannophis elegans)T3YR/RXXCommon garter snake (Ihannophis sirtalis)T3YR/RXGround snake (Sonora semiannulata)T3YR/RXMojave black-collard lizardT3YR/CX(Cortaphytus bicinctores)	Striped whipsnake (<i>Masticophis taeniatus</i>)	N/A	YR/C	X	Х	X
Rubber boa (Charina bottae)N/AYR/CXLongnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Hypsiglena torquata)T5YR/RXXWestern terrestrial garter snakeN/AYR/CXX(Thamnophis elegans)T3YR/RXXCommon garter snake (Thamnophis sirtalis)T3YR/RXGround snake (Sonora semiannulata)T3YR/RXMojave black-collard lizardT3YR/CX(Crotaphytus bicinctores)	Racer (Coluber constrictor)	N/A	YR/C	X	X	X
Longnose snake (Rhinocheilus lecontei)T3YR/RXXNight snake (Rhinocheilus lecontei)T3YR/RXXWestern terrestrial garter snakeN/AYR/RXX(Thamnophis elegans)T3YR/RXXCommon garter snake (Thamnophis sirtalis)T3YR/RXXGround snake (Sonora semiannulata)T3YR/RXXMojave black-collard lizardT3YR/RXX(Crotaphytus bicinctores)N/AYR/RXXLongnose leopard lizard (Gambelia wislizenii)N/AYR/CXXWestern whiptail (Cnemidophorus tigris)N/AYR/CXXDesert horned lizard (Phrynosoma platyrhinos)N/AYR/CXXShort-horned lizard (Sceloporus occidentalis)N/AYR/RXXSide-botched lizard (Sceloporus graciosus)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXMestern toad (Bufo boreas)T3YR/RXXWoodhouse's toad (Bufo woodhousii)T3YR/RXXWestern chorus frog (Pseudacris triseriata)N/AYR/RXWestern chorus frog (Pseudacris triseriata)N/AYR/RXWestern chorus frog (Pseudacris triseriata)N/AYR/CXWoodhouse's toad (Bufo woodhousii)T3YR/RXWestern chorus frog (Pseudacris regilla)N/AYR/CX<	Rubber boa (<i>Charing hottae</i>)	N/A	YR/C		X	
DisplaceToToTiTiNight snake (Hypsiglena torquata)T5YR/RXWestern terrestrial garter snakeN/AYR/CXX(Inamnophis elegans)T3YR/RXXCommon garter snake (Thamnophis sirtalis)T3YR/RXXGround snake (Sonora semiannulata)T3YR/RXXMojave black-collard lizardT3YR/RXX(Crotaphytus bicinctores)Image: Signal of the signal of t	Longnose snake (<i>Rhinocheilus lecontei</i>)	T3	YR/R	X	X	
Western terrestrial garter snakeN/AYR/CXWestern terrestrial garter snakeN/AYR/CXX(<i>Thamnophis elegans</i>)T3YR/RXCommon garter snake (<i>Thamnophis sirtalis</i>)T3YR/RXGround snake (<i>Sonora semiannulata</i>)T3YR/RXMojave black-collard lizardT3YR/CX(<i>Crotaphytus bicinctores</i>)T3YR/CXLongnose leopard lizard (<i>Gambelia wislizenii</i>)N/AYR/CXWestern whiptail (<i>Cnemidophorus tigris</i>)N/AYR/CXDesert horned lizard (<i>Phrynosoma platyrhinos</i>)N/AYR/CXShort-horned lizard (<i>Phrynosoma platyrhinos</i>)N/AYR/CXWestern fence lizard (<i>Sceloporus occidentalis</i>)N/AYR/CXSide-botched lizard (<i>Uta stansburiana</i>)N/AYR/CXXAmphibiansIIIIGreat Basin spadefoot (<i>Scaphiopus intermontanus</i>)N/AYR/RXXWestern toad (<i>Bufo boreas</i>)T3YR/RXIWestern chorus frog (<i>Pseudacris triseriata</i>)N/AYR/RXIWestern chorus frog (<i>Pseudacris regilla</i>)N/AYR/RXWe diffic chorus frog (<i>Pseudacris regilla</i>)N/AYR/CXN. et al. (https://www.chorus.com/dom/dom/dom/dom/dom/dom/dom/dom/dom/d	Night snake (Hypsiglena torquata)	T5	YR/R	X		
(Thamophis elegans)InitInitInitInitCommon garter snake (Thamnophis sirtalis)T3YR/RXGround snake (Sonora semiannulata)T3YR/RXMojave black-collard lizardT3YR/CX(Crotaphytus bicinctores)InitN/AYR/RXLongnose leopard lizard (Gambelia wislizenii)N/AYR/RXWestern whiptail (Cnemidophorus tigris)N/AYR/CXDesert horned lizard (Phrynosoma platyrhinos)N/AYR/RXShort-horned lizard (Sceloporus occidentalis)N/AYR/RXWestern fence lizard (Sceloporus graciosus)N/AYR/RXSide-botched lizard (Uta stansburiana)N/AYR/RXGreat Basin spadefoot (Scaphiopus intermontanus)N/AYR/RXWestern toad (Bufo boreas)T3YR/RXWoodhouse's toad (Bufo woodhousii)T3YR/RXWestern chorus frog (Pseudacris triseriata)N/AYR/RXWestern chorus frog (Pseudacris regilla)N/AYR/RXWestern chorus frog (Pseudacris regilla)N/AYR/RXWestern chorus frog (Pseudacris regilla)N/AYR/RXWestern chorus frog (Pseudacris regilla)N/AYR/RX	Western terrestrial garter snake	N/A	YR/C	X	X	
Common garter snake (Thamnophis sirtalis)T3YR/RXGround snake (Sonora semiannulata)T3YR/RXMojave black-collard lizardT3YR/CX(Crotaphytus bicinctores)Longnose leopard lizard (Gambelia wislizenii)N/AYR/CXWestern whiptail (Cnemidophorus tigris)N/AYR/CXDesert horned lizard (Phrynosoma platyrhinos)N/AYR/CXShort-horned lizard (Sceloporus occidentalis)N/AYR/RXWestern fence lizard (Sceloporus graciosus)N/AYR/RXSide-botched lizard (Uta stansburiana)N/AYR/CXXAmphibians </td <td>(Thamnophis elegans)</td> <td>1011</td> <td>1100</td> <td></td> <td></td> <td></td>	(Thamnophis elegans)	1011	1100			
Ground snake (Sonora semiannulata)T3YR/RXMojave black-collard lizardT3YR/RX(Crotaphytus bicinctores)T3YR/RXLongnose leopard lizard (Gambelia wislizenii)N/AYR/RXWestern whiptail (Cnemidophorus tigris)N/AYR/CXDesert horned lizard (Phrynosoma platyrhinos)N/AYR/CXShort-horned lizard (Phrynosoma platyrhinos)N/AYR/RXWestern fence lizard (Sceloporus occidentalis)N/AYR/CXSide-botched lizard (Sceloporus graciosus)N/AYR/RXSide-botched lizard (Uta stansburiana)N/AYR/CXXAmphibians	Common garter snake (<i>Thamnophis sirtalis</i>)	Т3	YR/R		X	
Initial of the bernaminationInitial of the bernaminationInitial of the bernaminationMojave black-collard lizardT3YR/CX(Crotaphytus bicinctores)N/AYR/RXLongnose leopard lizard (Gambelia wislizenii)N/AYR/RXWestern whiptail (Cnemidophorus tigris)N/AYR/CXDesert horned lizard (Phrynosoma platyrhinos)N/AYR/CXShort-horned lizard (Phrynosoma douglassii)N/AYR/RXWestern fence lizard (Sceloporus occidentalis)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/RXXSide-botched lizard (Uta stansburiana)N/AYR/CXXAmphibiansInitermontanus)N/AYR/CXXWestern toad (Bufo boreas)T3YR/RXXWoodhouse's toad (Bufo woodhousii)T3YR/RXXWestern chorus frog (Pseudacris triseriata)N/AYR/RXXPacific chorus frog (Pseudacris regilla)N/AYR/CXX	Ground snake (Sonora semiannulata)	T3	YR/R	X		
Inspire orbit conditional mathI.o.I.o.I.o.I.o.(Crotaphytus bicinctores)I.o.I.o.I.o.I.o.Longnose leopard lizard (Gambelia wislizenii)N/AYR/RXWestern whiptail (Cnemidophorus tigris)N/AYR/CXDesert horned lizard (Phrynosoma platyrhinos)N/AYR/CXShort-horned lizard (Phrynosoma douglassii)N/AYR/RXWestern fence lizard (Sceloporus occidentalis)N/AYR/RXSagebrush lizard (Sceloporus graciosus)N/AYR/RXSide-botched lizard (Uta stansburiana)N/AYR/CXXAmphibiansI.o.I.o.I.o.I.o.Great Basin spadefoot (Scaphiopus intermontanus)N/AYR/CXXWoodhouse's toad (Bufo woodhousii)T3YR/RXI.o.Western chorus frog (Pseudacris triseriata)N/AYR/CXXPacific chorus frog (Pseudacris regilla)N/AYR/CXI.o.Nucle and a feet and the interviewIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Mojave black-collard lizard	T3	YR/C	X		
Longnose leopard lizard (Gambelia wislizenii)N/AYR/RXWestern whiptail (Cnemidophorus tigris)N/AYR/CXDesert horned lizard (Phrynosoma platyrhinos)N/AYR/CXShort-horned lizard (Phrynosoma douglassii)N/AYR/RXWestern fence lizard (Sceloporus occidentalis)N/AYR/RXWestern fence lizard (Sceloporus graciosus)N/AYR/RXSide-botched lizard (Uta stansburiana)N/AYR/CXXAmphibians </td <td>(Crotaphytus bicinctores)</td> <td>15</td> <td>1100</td> <td></td> <td></td> <td></td>	(Crotaphytus bicinctores)	15	1100			
Western whiptail (Cnemidophorus tigris)N/AYR/CXDesert horned lizard (Phrynosoma platyrhinos)N/AYR/CXShort-horned lizard (Phrynosoma douglassii)N/AYR/RXWestern fence lizard (Sceloporus occidentalis)N/AYR/CXXSagebrush lizard (Sceloporus graciosus)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXAmphibians	Longnose leopard lizard (<i>Gambelia wislizenii</i>)	N/A	YR/R	X		
Desert horned lizard (Phrynosoma platyrhinos)N/AYR/CXShort-horned lizard (Phrynosoma douglassii)N/AYR/RXWestern fence lizard (Sceloporus occidentalis)N/AYR/CXXSagebrush lizard (Sceloporus graciosus)N/AYR/CXXSide-botched lizard (Uta stansburiana)N/AYR/CXXAmphibians </td <td>Western whiptail (<i>Cnemidophorus tigris</i>)</td> <td>N/A</td> <td>YR/C</td> <td>X</td> <td></td> <td></td>	Western whiptail (<i>Cnemidophorus tigris</i>)	N/A	YR/C	X		
Short-horned lizard (Phrynosoma douglassii)N/AYR/RXWestern fence lizard (Sceloporus occidentalis)N/AYR/CXXSagebrush lizard (Sceloporus graciosus)N/AYR/RXSide-botched lizard (Uta stansburiana)N/AYR/CXXAmphibiansImage: Stansburiana intermontanus)N/AYR/CXXGreat Basin spadefoot (Scaphiopus intermontanus)N/AYR/CXXWestern toad (Bufo boreas)T3YR/RXXWoodhouse's toad (Bufo woodhousii)T3YR/RXXWestern chorus frog (Pseudacris triseriata)N/AYR/RXXPacific chorus frog (Pseudacris regilla)N/AYR/CXXNuclear and for the stanse intermone intermone intermole inter	Desert horned lizard (<i>Phrvnosoma platvrhinos</i>)	N/A	YR/C	X		
Western fence lizard (Sceloporus occidentalis)N/AYR/CXXSagebrush lizard (Sceloporus graciosus)N/AYR/CXXXSide-botched lizard (Uta stansburiana)N/AYR/CXXXAmphibians	Short-horned lizard (<i>Phrynosoma douglassii</i>)	N/A	YR/R	X		
Sagebrush lizard (Sceloporus graciosus) N/A YR/R X Side-botched lizard (Uta stansburiana) N/A YR/R X Amphibians	Western fence lizard (<i>Sceloporus occidentalis</i>)	N/A	YR/C	X	X	X
Side-botched lizard (Uta stansburiana) N/A YR/C X X Amphibians	Sagebrush lizard (Sceloporus graciosus)	N/A	YR/R	X		
Amphibians N/A YR/C X X Great Basin spadefoot (Scaphiopus intermontanus) N/A YR/C X X Western toad (Bufo boreas) T3 YR/R X X Woodhouse's toad (Bufo woodhousii) T3 YR/R X X Western chorus frog (Pseudacris triseriata) N/A YR/R X Pacific chorus frog (Pseudacris regilla) N/A YR/C X	Side-botched lizard (<i>Uta stansburiana</i>)	N/A	YR/C	X	x	x
Great Basin spadefoot (Scaphiopus intermontanus)N/AYR/CXXWestern toad (Bufo boreas)T3YR/RXXWoodhouse's toad (Bufo woodhousii)T3YR/RXXWestern chorus frog (Pseudacris triseriata)N/AYR/RXPacific chorus frog (Pseudacris regilla)N/AYR/CX	Amphibians	11/11	1100		21	
Western toad (Bufo boreas)T3YR/RXXWoodhouse's toad (Bufo woodhousii)T3YR/RXXWestern chorus frog (Pseudacris triseriata)N/AYR/RXPacific chorus frog (Pseudacris regilla)N/AYR/CX	Great Basin spadefoot (Scaphiopus intermontanus)	N/A	VR/C	x	X	
Woodhouse's toad (Dufo voodhousii) T3 YR/R X Woodhouse's toad (Bufo woodhousii) T3 YR/R X Western chorus frog (Pseudacris triseriata) N/A YR/R X Pacific chorus frog (Pseudacris regilla) N/A YR/C X	Western toad (<i>Bufo horeas</i>)	T3	VR/R	X	X	
Woodnouse's toda (Digo woodnousit) 15 HNR X Western chorus frog (Pseudacris triseriata) N/A YR/R X Pacific chorus frog (Pseudacris regilla) N/A YR/C X	Woodhouse's toad (Bufo woodhousii)	T3	VP/P	X	X	
Pacific chorus frog (Pseudacris regilla) N/A YR/C X N/A YR/C X	Western chorus frog (<i>Pseudaeris triseriata</i>)	N/A				
$\frac{1}{10} \frac{1}{10} \frac$	Pacific chorus frog (<i>Pseudaeris regilla</i>)	N/Λ		v	л V	
(Northern Leonard trog (Rang ninions)) $(T') = V U U = V$	Northern leonard frog (<i>Para ninians</i>)	T2		Λ		
$\frac{12}{\text{Rullfrog}(Rana catesheiana)} = \frac{12}{\text{N}/\text{A}} = \frac{1}{\text{N}/\text{C}} = \frac{1}{\text{V}}$	Bullfrog (Rang catesbeigna)	N/A			X X	

			Habitat		
		Season ² /		Riparian/	
Common/Scientific Name	Status	Abundance'	Shrub	Aquatic	Grass
Fish					
Redband Trout (Oncorhynchus mykiss gairdneri)	T2	YR/R		Х	
Rainbow trout (Oncorhynchus mykiss)	N/A	YR/R		X	
Brown trout (Salmo trutta)	N/A	YR/R		Х	
Mountain whitefish (Prosopium williamsoni)	N/A	YR/R		Х	
White sturgeon (Acipenser transmontanus)	N/A	YR/R		Х	
Carp (Cyprinus carpio)	N/A	YR/C		Х	
Chiselmouth (Acrocheilus alutaceus)	N/A	YR/C		Х	
Peamouth (Mylocheilus caurinus)	N/A	YR/C		Х	
Northern pikeminnow (<i>Ptychocheilus oregonensis</i>)	N/A	YR/C		Х	
Longnose dace (Rhinichthys cataractea)	N/A	YR/R		Х	
Speckled dace (<i>Rhinichthys osculus</i>)	N/A	YR/C		Х	
Redside shiner (Richardsonius balteatus)	N/A	YR/C		Х	
Bridgelip sucker (Catostomus columbianus)	N/A	YR/C		Х	
Largescale sucker (Catostomus macrocheilus)	N/A	YR/C		Х	
Brown bullhead (Ictalurus nebulosus)	N/A	YR/C		Х	
Channel catfish (<i>Ictalurus punctatus</i>)	N/A	YR/C		Х	
Flathead catfish (Pylodictus olivaris)	N/A	YR/R		Х	
Pumpkinseed (Lepomis gibbosus)	N/A	YR/C		Х	
Warmouth (Lepomis gulosus)	N/A	YR/R		Х	
Bluegill (Lepomis macrochirus)	N/A	YR/C		Х	
Smallmouth bass (Micropterus dolomieui)	N/A	YR/C		Х	
Largemouth bass (Micropterus salmoides)	N/A	YR/R		Х	
Black crappie (Pomoxis nigromaculatus)	N/A	YR/C		Х	
Mottled sculpin (Cottus bairdi)	N/A	YR/R		Х	
Piute sculpin (Cottus beldingi)	N/A	YR/R		Х	
Shorthead sculpin (Cottus confuses)	T5	YR/R		Х	
Yellow perch (Perca flavescens)	N/A	YR/R		Х	
Invertebrates					
Idaho springsnail (Pyrgulopsis idahoensis)	T1/E	YR/R		Х	

¹ Type/Status -

Type 1 - Federally Threatened (T), Endangered (E), Proposed (P) and Candidate (C) species, Idaho Sensitive Species

Type 2 - Rangewide/Globally Imperiled Species

Type 3 – Regional/State Imperiled Species

Type 4 – Peripheral Species

Type 5 – Watch Species (not considered as sensitive species)

 $\dot{N/A}$ – Not applicable, no special status

² Season – YR = Year Round; Sp = Spring; Su = Summer; F = Fall; W = Winter ³ Abundance – C = Common; R = Rare

APPENDIX 6. GENERAL CHARACTERISTICS OF RAPTORS IN THE NCA

	Season of			
Species	Use	Abundance ^b	Principal Prey ^c	Foraging Habitats ¹
Golden eagle	Year-round	Common	Black-tailed jackrabbit, Nuttall's cottontail, pheasant ^c	Shrubland, cliffs, talus ^{m, n}
Prairie falcon ^a	Year-round	Common	Piute ground squirrel, black-tailed jackrabbit, Nuttall's cottontail ^c	Shrubland, grassland, farmland edge ^m
Red-tailed hawk	Year-round	Common	Piute ground squirrel, black-tailed jackrabbit, Nottall's cottontail, snakes ^c	Shrubland, farmland ^{m, n} Cliffs, calus, grassland
Ferruginous hawk ^a	Breeding	Common	Piute ground squirrel, Townsend's pocket gopher ^d	Shrubland, grassland ^m
Swainson's hawk	Breeding	Uncommon	Small mammals, insects	Shrubland, farmland ^m
Northern harrier ^a	Year-round	Common	Black-tailed jackrabbit, Nuttall's cottontail, montane vole ^e	Shrubland, riparian, farmland ^{m,o}
American kestrel	Year-round	Common	Grasshoppers, beetles, montane vole ^f	Shrubland, grassland, riparian, farmland
Great horned owl	Year-round	Common	Rabbits, Townsend's pocket gopher, Kangaroo rat ^g	Shrubland, grassland, riparian, farmland
Barn owl	Year-round	Common	Montane vole, pocket gopher, kangaroo rat ^h	Shrubland, grassland, riparian, farmland
Western screech-owl	Year-round	Uncommon	Montane vole, pocket mouse, earwigs ⁱ	Shrubland, grassland, riparian, farmland
Northern saw-whet owl	Breeding	Rare	Montane vole, house mouse, harvest mouse ^j	Riparian ^j
Long-eared owl	Year-round	Common	Kangaroo rat, montane vole, deer mouse ^h	Shrubland, grassland, riparian, farmland
Short-eared owl	Year-round	Uncommon to Common	Small mammals	Shrubland, grassland, farmland
Burrowing owl	Breeding	Common	Deer mouse, kangaroo rat, pocket mouse ^f	Shrubland, grassland, farmland
Turkey vulture	Breeding	Rare	Carrion	Shrubland, grassland, farmland
Bald eagle	Migration and Winter	Common	Fish, small mammals, carrion, waterfowl	River, riparian, shrubland
Osprey	Breeding and Migration	Uncommon	Fish	River
Peregrine falcon	Migration	Rare	Birds	Shrubland, grassland, riparian, farmland
Merlin	Migration	Rare	Birds	Shrubland, grassland, riparian, farmland
Northern goshawk	Migration and Winter	Rare	Mammals, birds	Riparian
Cooper's hawk	Migration and Winter	Uncommon	Birds	Shrubland, grassland, riparian, farmland

Species	Season of Use	Abundance ^b	Principal Prey ^c	Foraging Habitats ¹
Sharp-shinned hawk	Migration and Winter	Uncommon	Birds	Riparian, farmland
Rough-legged hawk	Winter	Common	Small mammals	Shrubland, grassland, riparian
Gyrfalcon	Winter	Rare	Birds, mammals	Shrubland, grassland, farmland
Snowy owl	Winter	Rare	Small mammals	Grassland, riparian, farmland

^a Subjective classification based on the season species is most abundant.

^b Data from USDI (1979) unless footnoted, in which case the top three prey items are ordered by % biomass or # of individuals

- ^c Steenhof and Kochert (1988, p.41)
- ^d Steenhof and Kochert (1985 pp. 14-15)
- ^e Powers *et al.* (1981) and USDI unpubl. data
- ^f Marti *et al.* (1993 pp. 8-9)
- ^g Marti and Kochert (1996 pp. 502-503)
- ^h Marti (1988, p.1805)
- ^I Doremus and Marks (1982, p.53)
- ^j Marks and Doremus (1988, p.691)
- ^k Marks (1984 pp. 1-6)
- ¹ Data from Kochert (1986) unless footnoted
- ^m Marzluff *et al.* (1997a pp. 567-584 & 684)
- ⁿ Dunstan *et al.* (1978)
- ^o Martin (1987 pp. 62-63)

APPENDIX 7. NESTING CHARACTERISTICS OF RAPTORS IN THE NCA – 1970-94

Species	Nest Location	Nesting Substrate	Earliest egg laying	Mean hatch date	Latest fledging ^a
Golden eagle	Canyon, few bench	Cliff, utility tower	31 Jan	10 Apr	21 July
Prairie falcon	Canyon, few bench	Cliff	5 Mar	4 May	8 Aug
Red-tailed hawk	Canyon, few bench	Cliff, tree, utility tower/pole, artificial platform	27 Feb	2 May	10 July
Ferruginous hawk	Canyon, bench	Cliff, utility tower/pole, artificial platform, ground, rock outcrop	6 Mar	12 May	17 July
Swainson's hawk	Bench	Tree	26 Apr	10 June	31 July
Northern harrier	Canyon, riparian, bench	Ground	23 Mar	23 May	26 July
American kestrel	Canyon, bench	Cliff, tree, nest box	15 Mar	23 May	11 Aug
Great horned owl	Canyon	Cliff, tree, utility tower	9 Feb	8 Apr	26 June
Barn owl	Canyon	Cliff	21 Feb	27 Apr	18 June
Western screech-owl	Canyon, riparian	Nest box, tree	28 Feb	21 Apr	20 July
Northern saw-whet owl	Canyon	Nest box	19 Feb	6 Apr	20 May
Long-eared owl	Canyon, riparian, few bench	Tree	21 Feb	19 Apr	24 July
Short-eared owl	Bench	Ground	20 Mar	9 May	11 July
Burrowing owl	Bench, few canyon	Ground	3 Apr	24 May	20 Aug
Turkey vulture	Canyon	Cliff			

^a Latest fledging date.

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NUMBER OF OCCUPIED RAPTOR NESTING TERRITORIES IN THE **APPENDIX 8.** NCA - 1970-2004

	Number/Range		Year(s) of
	of Nesting	Year(s) of	Minimum
Species	Territories	Maximum Count	Count ^a
Golden eagle	29-35 ^b	See Fig. 4	See Fig. 4
Prairie falcon	159-217 ^b	2002	1994
Red-tailed hawk	59-87 ^b	1991	1976, 1978
Ferruginous hawk	24-33 ^b	1992	1990
Swainsons' hawk	10 °	2000	
Northern harrier	85-168d	1987	1981
American kestrel	43 °	1977, 1978, 1992	
Great horned owl	44 ^c	1981	
Barn owl	66 °	1978	
Long-eared owl	67 °	1980	
Short-eared owl	35 °	1994	
Burrowing owl	96 °	1994	
Western screech-owl	19 °	1981	
Northern saw-whet owl	7 °	1991	
Turkey vulture	2 °	1978	
Total	746-929		

а

No minimum counts given for years without full surveys. Surveys were complete for the canyon. Surveys were also conducted on the benchlands for ferb ruginous hawks in 1992-1994.

c Surveys incomplete—value given is the maximum observed. Complete survey of riparian area in 1981 and 1987.

d

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APPENDIX 9. BLM SPECIAL STATUS PLANT SPECIES (SENSITIVE & WATCH) KNOWN TO OCCUR IN THE NCA

Soil type and habitat descriptions are for each species across their range. Location and threats are for those known to occur in the NCA.

Plant	Type ¹	Soil Type and Habitat	Location	Threats ²
Mulford's milkvetch	2	Sandy slopes in alluvial	Con Shea Basin/	A, B, C, D
(Astragalus mulfordiae)		deposits	Halverson Lakes, to	
Curata Diana ani 111-11-11	5	D 's a state of the state of t	Grandview.	Nama
Snake River milkvetch	5	Fine alluvial sand in big	Halverson	None
(Astrugulus purshil var.		wing salthush zone	Basin to Wilkins	
opmogenesj		wing suite usin zone	Gulch/Eagle Cove	
			West.	
Desert pincushion	4	Coarse sand in salt	Dorsey Butte/Chattin	A, B, C
(Chaenactis stevioides)		desert shrub-Wyoming	Hill to West Rabbit	
		big sagebrush habitat	Creek.	
Greeley's parsley	3	Heavy clay soils	Near Bruneau Dunes	С
(Cymopterus acaulis var.			State Park to west of	
greeleyorum)	_	~	Chalk Gulch.	
Shining flat sedge	5	Streambanks or other	Occurs along the	B, C, D
(Cyperus rivularis)		wet places in the valleys	Snake River	
		and lowlands, tolerant		
White estonella	4	Dry sandy or volcanic	Near the mouth of	BC
(Eatonella nivea)	-	soil	Sinker Creek Fossil	В, С
(Latonena mrea)		Son	Butte, Waterhouse	
			Gulch. Lower Squaw	
			Creek, and East of	
			Wildhorse Butte	
Matted cowpie buckwheat	3	Gravel benches in	Halverson Lakes to	A, C
(Eriogonum shockleyi var.		lakebed sediments in	Bruneau Dunes	
shockleyi)		Wyoming big		
		sagebrush-rabbitbrush-		
		Indian ricegrass habitat,		
Dealeard's acumic	2	Gravel bonehos in	Halverson Lake to	
buckwheat (Friogonum	2	lakehed sediments in	Swan Falls and the	A, C
shocklevi var packardae)		Wyoming hig	Bruneau Valley rim	
shockieyi var. packaraae)		sagebrush-rabbitbrush-	Druneau vancy mi	
		Indian ricegrass habitat.		
		desert pavement		
White-margined wax plant	4	Sandy soils, loose ash,	Guffey Butte to	A, C
(Glyptopleura marginata)		and cinders	Castle Butte	
Spreading inomonsis	3	Loamy, sandy or	Castle Butte/	С
(Ipomopsis polvcladon)	Ŭ	chalky soils of lakebed	Big Foot Bar to	
		origin	Wilkins Gulch SE	

Plant	Type ¹	Soil Type and Habitat	Location	Threats ²
Davis peppergrass	3	Hard bottomed playas in	North of the Snake	A, B, C, D
(Lepidium davisii)		Wyoming and	River Swan Falls to	
		mountain big sagebrush,	Mountain Home	
		salt desert shrub habitats		
Slickspot peppergrass	2	Bare, open nitric	Kuna to Hammett	A, B, D
(Lepidium papilliferum)		(slickspot) sites in		
		Wyoming big sagebrush		
		habitat		
Rigid threadbush	4	Sandy, cindery, or ashy	Near Wildhorse	B, C
(Nemacladus rigidus)		soils	Butte to Castle Butte	
Janish's penstemon	3	Clay soils derived from	Chalk Hills, Historic	A, B, C, D
(Penstemon janishiae)		volcanic ash or lake bed	populations only	
		sediment in sagebrush	known from the	
		communities	NCA	
Annual or Turtleback	3	Gravely or cindery soils	Sinker Creek to	C
brittlebrush		in Wyoming big sage-	Wildhorse Butte	
(Psathyrotes annua)		brush-salt desert shrub-		
		habitat		
Malheur prince's plume	2	Clay soils usually	Near the Rye Patch	C, D
(Stanleya confertiflora)		facing north	Ranch	
American wood sage	3	Along streams, river-	Guffey Butte and	D
(Teucrium canadense var.		banks, and in moist	Halverson Lake	
occidentale)		bottomlands	upstream to Big Foot	
			Bar	
Woven-spore lichen	2	Loamy soils in	Northern Ada	A, C, D
(Texosporium		Wyoming big sage-	County to Cinder	
sancti-jacobi)		brush-green rabbit-	Cone Butte, Orchard	
		brush-Sandberg blue-	Southwest,	
		grass habitat		

¹ Type 2-4 are BLM Sensitive; Type 5 is watch, not BLM Sensitive; Type 1 species are not known to occur in the NCA.

- ² A = fire related factors including loss of habitat, post-fire rehabilitation, fire breaks, and competition with introduced species;
 - B = grazing related activities including livestock and/or wildlife herbivory, trampling, rangeland management projects;

C = off road vehicle use including recreational use and military training activities; and

D = competition with invasive species.

	Admin.	Allotment	Authorized	Authorized	Kind of
Allotment Name	Office	Number	AUMs	Season of Use	Livestock
Castle Butte	ID-111	00359	102	03/15 - 04/15	Cattle
White Butte*	ID-110	00386	44	04/01 - 05/01	Cattle
Joyce FFR * (p)	ID-130	00487	34	11/01 - 02/28	Cattle
				04/01 - 07/31	Horse
Rabbit Creek/	ID-130	00517	558	11/01 - 02/28	Cattle
Peters Gulch * (p)					
Pastures 1 & 2					
Fossil Butte	ID-130	00535	1624	10/01 - 02/28	Cattle, Horse
Con Shea * (p)	ID-130	00571	1085	10/15 - 02/28	Cattle
Sinker Butte	ID-130	00578	723	10/20 - 01/07	Cattle
Montini FFR	ID-130	00654	672	03/01 - 02/28	Cattle
Battle Creek	ID 111	00802	0		Cattle
Pasture 8B					
Pole Creek Individual	ID-120	00806	54	11/01 - 01/31	Cattle
Mountain Home	ID-110	00813	3009	04/01 - 09/30	Cattle
Sub-Unit (p)				10/15 - 12/31	
Chalk Flat (p)	ID-110	00821	2,009	03/1 - 04/30	Cattle
				10/01 - 02/28	
Sunnyside Spring/	ID-111	00825	6,256	04/01 - 06/30	Cattle, Sheep
Fall* (p)				10/15 - 12/16	
Sunnyside Winter*	ID-111	00826	11,280	12/16 - 02/28	Cattle, Sheep
Rattlesnake	ID-111	00827	2,022	11/01 - 02/28	Cattle
Seeding*(p)				03/01 - 06/30	
Crater Rings* (p)	ID-111	00828	509	04/05 - 05/31	Cattle
Rattlesnake Creek*	ID-111	00834	137	04/01 - 06/15	Cattle
			83	10/01 - 11/16	
Rabbit Springs*	ID-111	00837	42	04/15 - 04/29	Cattle
			42	08/15 - 08/29	
Melba Seeding*	ID-111	00868	217	04/01 - 06/30	Cattle
			117	11/01 - 12/15	
Reverse* (p)	ID-111	00873	886	03/01 - 05/31	Cattle
			1069	11/10 - 02/28	
Chattin Hill*	ID-111	00875	833	12/16 - 02/28	Cattle
Squaw Creek * (p)	ID-111	00886	1581	04/01 - 06/30	Cattle
1 47			767	11/01 - 01/05	
Simco* (p)	ID-111	00887	175	04/01 - 06/30	Cattle
Clover Hollow (p)	ID-110	00888	25	04/01 - 06/30	Cattle
	-		17	10/16 - 12/15	
Medbury Hill*	ID-111	00899	201	04/01 - 05/31	Cattle
			95	11/16 - 12/14	
Airbase*	ID-111	00896	3352	11/05 - 02/28	Cattle
Hammett No. 3 (n)	ID-110	01035	104	04/01 - 04/30	Horse
11. minimum (10. 5 (P)		01055	85	08/01 - 11/30	110150
Bruneau Arm (n)	ID-210	01052	479	11/01 - 02/28	Cattle
Browns Gulch*(n)	ID-210	01052	3380	03/31 - 02/28	Cattle
Drowns Outen (P)	10-210	01033	5500	05/51 - 02/20	Cattle

APPENDIX 10. GRAZING ALLOTMENTS IN THE NCA¹

	Admin.	Allotment	Authorized	Authorized	Kind of
Allotment Name	Office	Number	AUMs ¹	Season of Use	Livestock
Flat Iron	ID-210	01060	72	04/16 - 10/15	Cattle
			131	04/16 - 10/31	
			45	05/01 - 09/30	
West Saylor Creek (p)	ID-210	01137	136	04/01 - 11/30	Cattle
			53	03/16 - 06/15	Sheep
			35	10/16 - 12/15	Sheep

¹ For allotments only partially located within the NCA, the listed AUM values reflect the approximate number of AUMs associated with that portion of the allotment located within the NCA. * S&G assessment and determination has been completed. ^(p) Denotes allotments only partially located within the NCA.

Note: AUMs shown in this table do not reflect actual use or any specific grazing management system.

Location	Name/Operator	Commodity ¹	Acres			
Active Mineral Sites						
T1S, R2E, S34	Idaho Department of Military	С	5.0			
T2S, R4E, S28	Idaho National Guard	С	40.0			
T3S, R2W, S26	Owyhee County Rd & Bridge	S&G	10.0			
T3S, R4E, S5	Idaho National Guard	С	87.0			
T3S, R1W, S22	Idaho Dept. of Transportation	S&G	5.0			
T4S, R2E, S30	Owyhee County Rd & Bridge	S&G	36.4			
T4S, R2E, S34	Grandview Irrigation District	S&G	10.0			
T4S, R4E, S31	Chattin Hill Community Pit	Cl	5.0			
T4S, R7E, S14, 15	Bennett Road Quarry	В	50.0			
T5S, R3E, S12	Elmore Community Pit	S&G	17.5			
T5S, R6E, S19	Rattlesnake Community Pit	S&G	120.0			
T5S, R6E, S28	Glenns Ferry Highway District	S&G	40.0			
T5S, R8E, S23	Idaho Dept. of Transportation	S&G	40.0			
T5S, R8E, S33	Hammett Community Pit	S	10.0			
T6S, R4E, S11	Little Valley Community Pit	Cl	5.0			
T6S, R4E, S11	Owyhee County Rd & Bridge	S&G	5.0			
T6S, R6E, S7	Owyhee County Rd & Bridge	S&G	10.0			
Inactive Mineral Sites						
T1N, R2E, S11	Kuna Butte	S&G	10.0			
T1N, R2E, S11	Kuna Butte South	S&G	5.0			
T1N, R1W, S29	Robinson Road Community Pit	С	5.0			
T2S, R2E, S34	Inactive	С	2.0			
T2S, R1W, S6	Inactive	S&G	5.0			
T3S, R4E, S35	Inactive	S&G	5.0			
T3S, R1W, S29	Inactive	S&G	5.0			
T3S, R2E, S25	Inactive	S&G	5.0			
T4S, R1, S21	Inactive	S&G	5.0			
T4S, R3E, S30	Inactive	S&G	5.0			
T4S, R4E, S14, 23	Inactive	Cl	20.0			
T4S, R4E, S2	Inactive	S&G	5.0			
T4S, R4E, S28	Inactive	Bldg St	5.0			
T4S, R8E, S20	Inactive	S&G	5.0			
T5S, R4E, S7	Inactive	S&G	10.0			
T5S, R6E, S20	Inactive	S&G	10.0			
T5S, R6E, S20	Inactive	S&G	10.0			
T5S, R6E, S28	Inactive	S&G	5.0			
T5S, R7E, S10	Inactive	S&G	5.0			
T5S, R7E, S13	Inactive	S&G	5.0			
T5S, R7E, S14	Inactive	S&G	5.0			
T5S, R7E, S15	Inactive	S&G	5.0			

APPENDIX 11. MINERAL MATERIAL SITES IN THE NCA

Location	Name/Operator	Commodity ¹	Acres
T5S, R7E, S24	Inactive	S&G	5.0
T5S, R7E, S27	Inactive	S&G	5.0
T4S, R7E, S14, 15	Inactive	В	20.0
T5S, R8E, S7	Inactive	S&G	5.0
T6S, R6E, S18	Inactive	S&G	10.0
T6S, R7E, S10	Inactive	В	5.0
T6S, R7E, S10	Inactive	В	5.0

¹B = Basalt; Bldg St = Building Stone; C = Cinders; Cl = Clay; S&G = Sand & Gravel

APPENDIX 12. SLICKSPOT PEPPERGRASS CONSERVATION MEASURES

Note: The conservation measures contained herein come directly out of the 2003 Slickspot Peppergrass (LEPA) Candidate Conservation Agreement (CCA). Only those conservation measures that affect the NCA are included.

With the exception of fire that is universal throughout the area of consideration and varies only in the frequency of starts and reasons for starts, the presence and severity of an activity or threat varies throughout the species' range. Therefore, different approaches are needed to reduce, mitigate, and eliminate the threats. To accomplish this, conservation measures have been developed to address concerns at three interrelated levels: the LEPA Consideration Zone (all areas that may or do contain LEPA); specified LEPA management areas; and specific priority element occurrences.



The *Federal Land Policy and Management Act of 1976* (FLPMA) as amended, 43 U.S.C. 1701 *et seq.*, provides the authority for the BLM land use planning. The BLM's Planning Regulations (43 CFR 1600) and the *National Environmental Policy Act* (NEPA) as well as BLM Manual (1600) and Handbook provide direction. The land use planning process resulting in Resource Management Plans is the key tool used by the BLM, in coordination with interested publics, to protect resources and designate uses on federal lands managed by BLM. The BLM Manual and Handbook provide guidance for plan preparation, revision, amendments and subsequent implementation-level plans. The three Resource Management Plans directing management of the public lands encompassed by this conservation agreement will be amended to incorporate the conservation agreement and direct its implementation.

BLM regulations (CFR Title 43, subpart 4130) provide the authority to issue grazing permits or leases to qualified applicants to authorize use of public lands managed by the BLM that are designated as available for livestock grazing through Resource Management Plans. Permits or leases specify the types and levels of livestock grazing use authorized as well as terms and conditions, which will assist

in achieving management objectives. Grazing permittees are prohibited from violating special terms and conditions incorporated in permits and leases. Failure to comply with the terms and conditions of the grazing permit can result in the termination of the permit. Grazing permits or leases for allotments encompassed by this conservation agreement will, through the annual grazing authorizations linked to permit/lease terms and conditions, require compliance with the conservation measures identified in this conservation agreement.

BLM regulations also address authorizations for use of public lands. Regulations (CFR Title 43, subpart 2800) address rights-of-way authorizations and temporary use permits that regulate, control and direct the use of rights-of-way on public lands through requirements that are designed, in part, to protect the natural resources associated with public lands. BLM has the discretion to issue special use permits for commercial use, competitive events and organized events (CFR Title 43, subpart 2932) and can include stipulations intended to protect natural resources associated with public lands. BLM may amend, suspend, or cancel these permits, given due process, if permit stipulations are violated or if necessary to protect public safety and health or the environment. BLM rights-of-way authorizations, temporary use permits, and special use permits will comply with the conservation measures identified in this conservation agreement.

LEPA Consideration Zone Conservation Measures

- .01 BLM and Fire Cooperators will expand on and continue to provide special status plant and habitat awareness training to fire resource advisors, Incident Commanders, Engine Operators and Fire Operations Supervisors. Training will be formalized through issuance of an Instruction Memorandum by May 1, 2004.
- .02 BLM and Fire Cooperators will make protection of known Element Occurrences (EO's) a priority over the surrounding Management Area on wildfires. Fire management standard operating procedures for LEPA will be issued in an Instruction Memorandum by May 1, 2004
- **.03** BLM will refine and formalize Standard Operating Procedures (SOP's) that address conservation of LEPA to be incorporated into Fire Management Plans. The Lower Snake District Fire Management Plan will be completed by September 30, 2004. Fire management standard operating procedures for LEPA will be issued in an Instruction Memorandum by May 1, 2004.
- .04 BLM will evaluate, create and maintain fuel breaks along areas where frequent fires can threaten occupied and suitable habitat (for schedule see **Table 2**).
- .05 Aggressive fire suppression tactics will be utilized in management areas when priority EO's are threatened. Fire management standard operating procedures for LEPA will be issued in an Instruction Memorandum by May 1, 2004.
- .06 BLM will utilize stationary and mobile vehicle wash points for BLM vehicles and equipment to reduce transport of undesirable plant material. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- **.07** BLM and Fire Cooperators will distribute maps and inform fire crews on locations of Management Areas and element occurrences to maximize fire protection and to avoid or minimize impacts from fire prevention and/or suppression activities. Fire management standard operating procedures for LEPA will be issued in an Instruction Memorandum by May 1, 2004.
- .08 BLM will use seeding techniques that minimize soil disturbance such as no-till drills and rangeland drills equipped with depth bands when rehabilitation and restoration projects have the potential to impact occupied and suitable habitat. Rehabilitation and restoration standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.

- .09 BLM will continue to rest rehabilitated areas from land use activities to meet rehabilitation management objectives, defined through the Emergency Stabilization and Restoration plans. "Interagency Burned Area Emergency Stabilization and Rehabilitation Handbook", Version 2.0 Draft, currently being revised, Department of Interior, Departmental Policy Guidance (manual).
- .10 BLM will use native plant materials and seed if available (*see* conservation measure .11) during restoration and rehabilitation activities unless use of non-native, non-invasive species would contribute beneficially to maintenance and protection of occupied and suitable habitat. Fire rehabilitation standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .11 If native plant materials and seed are not available, BLM will avoid use of invasive nonnative species for restoration or rehabilitation activities. Restoration and rehabilitation standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .12 BLM will include forbs in seed mixes to increase diversity and pollen sources for insect pollinators. Restoration and rehabilitation standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .13 Private landowners and permit holders will coordinate with BLM to increase participation in fire prevention, suppression, planning and rehabilitation.
- .14 BLM will authorize organized recreation activities only in areas free of occupied and suitable habitat. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .15 BLM will educate recreationists on special status species & invasive weeds focusing on occupied and suitable habitat areas (for schedule see Table 2).
- .16 BLM, in cooperation with Cooperative Weed Management Areas (CWMA) cooperators, will establish voluntary OHV wash points for dispersed recreationists at key locations.
- .17 BLM will require the use of equipment wash for organized recreation events where invasive or noxious weed introduction could pose a threat to occupied or suitable habitat. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .18 BLM will require complete botanical survey using USFWS Rare Plant Inventory Guidelines within occupied and suitable habitat prior to actions that entail soil disturbance authorizations. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- **.19** BLM will require that all authorizations contain weed control measures. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .20 BLM will increase the frequency of compliance inspections associated with land use permits in occupied and suitable habitat areas. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .21 BLM will increase research on elimination and control of invasive species.
- .22 BLM will require portable wash racks at agency authorized construction sites. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .23 BLM and CWMA cooperators will train weeds staff on LEPA and occupied and suitable habitat recognition. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .24 BLM will require complete botanical surveys for LEPA and its habitat prior to authorizing herbicide use. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.

- .25 BLM will opportunistically acquire occupied and suitable habitat in land exchanges.
- .26 BLM will strive to conserve remaining stands of sagebrush or native vegetation in making land management and project level decisions. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .27 BLM will require that new, renewing or amending right of way holders or other related permit holders to establish 40 – 60% perennial cover depending on the location of the project after all ground disturbing activities. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- **.28** BLM will incorporate requirements that new, renewing or amending right of way holders contact the Land Management Agency for ground disturbing activities in occupied and suitable habitat, pre and post construction. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- **.29** BLM and Law Enforcement Cooperators will modify agreements to increase Law Enforcement patrols to improve adherence to access management requirements and to discourage trespass (*see* **Table 2**).
- .30 BLM will train permittees on LEPA and occupied and suitable habitat recognition.
- **.31** The BLM will conduct periodic compliance inspections during soil disturbance projects and increased inspections during use periods to prevent impacts on occupied and suitable habitat. General management standard operating procedures for LEPA will be issued in an Instruction Memorandum by December 31, 2003.
- .32 The Slickspot Peppergrass Conservation Team, through the State of Idaho Conservation Data Center (CDC) will conduct annual monitoring within all EO's in all MA's 1-11 to assess the effectiveness of the conservation measures. Protocols that expand the existing Habitat Integrity Index (HII) to encompass the monitoring required by this CCA will be in place by May, 2004.
- **.33** BLM, FWS, and the state will continue to survey lands within the LEPA Consideration Zone and report survey information to the CDC and incorporate the information into the CCA adaptive management strategy.
- .34 BLM in cooperation with the US Department of Agriculture (USDA) Plant Protection and Quarantine (PPQ) will aggressively work to minimize the risk of insect (i.e. Mormon crickets and grasshoppers) herbivory when outbreaks occur that may threaten existing element occurrences.
- **.35** BLM will provide USDA PPQ with the location of *Lepidium papilliferum* habitat. Mormon cricket and grasshopper control in *Lepidium papilliferum* habitat will only include those methods that do not significantly impact the plant's pollinators.

Management Area Conservation Measures

The development of management areas provides an organizational structure that facilitates the management of slickspot peppergrass in distinct segments across its range. Each management area has specific conservation measures for the multiple element occurrences located within it. The conservation measures for the management area are designed to eliminate, reduce or mitigate the impacts of site-specific activities and threats and to maintain or restore the sagebrush–steppe habitat. The use of this concept promotes management of slickspot peppergrass habitat across its range that is based on location or site-specific characteristics and issues. Consideration of administrative boundaries, specifically grazing allotment boundaries, private, state, or federal land was also factored into the designation of the management areas.

Priority Element Occurrence Conservation Measures

In addition to the conservation measures for management areas, selected "priority" element occurrences have been identified within each management area listed below for additional, site-specific conservation measures. These element occurrences were designated based on criteria including: existing habitat quality, geographic location relative to other existing occurrences to promote connectivity for the species, minimal land-use activities, the absence or presence of resources to address threats, the need to preserve enough element occurrences throughout the species range to prevent extinction in case of a catastrophic event.

The conservation measures are designed to reflect even greater priority on protection and restoration of the habitat within the element occurrences.

Kuna Management Area

This MA is located south of Kuna, extending from the Kuna Butte area southward for approximately seven miles to south of Initial Point. The MA contains six (018, 019, 024, 025, 042, 057) known slickspot peppergrass occurrences. All of the occurrences are located on BLM land. All but one occurrence is located fully or partially within the Snake River Birds of Prey National Conservation Area. Element occurrences 018 and 057 are priority occurrences. A series of wildfires have swept through this area in the past ten years and the great majority of the original shrub-steppe vegetation has been converted to annual grassland or crested wheatgrass seedings. All but one of the known slickspot peppergrass occurrences in the MA are located in areas that have burned. A few small remnant shrub stands are all that remain within these occurrences. The one occurrence that has not burned is surrounded by cheatgrass-dominated burned habitat. Most of the slickspot peppergrass occurrence (019), covering over 1000 acres, once supported abundant slickspot peppergrass scattered over a series of subpopulations. Slickspot peppergrass is now rare over this large, burned area. Most of the other occurrences within this MA were also known to support relatively large slickspot peppergrass numbers in the past.

The primary threats and activities that impact the species in this management area include: fire, recreation, invasion of nonnative plant species, livestock trampling and land use authorizations and land exchanges.

The following conservation measures will be implemented within the management area:

Fire

Fire management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by May 1, 2004, that incorporates the following measures:

- 6.1 Potential impacts to known locations of occupied LEPA habitat, in contrast to potential benefits of more immediate fire suppression, will be considered by Land Managers, specifically BLM and the State (IDL), in granting authorization to use heavy ground moving equipment for fire suppression.
- **6.2** BLM will provide adequate fire suppression coverage at all stations that respond to this management area with the intent to meet management objectives to suppress ninety (90%) of all fires to less than 100 acres (reduced from the current suppression target of less than 200 acres).

- **6.3** Land management agencies will protect remnant blocks of native vegetation, especially late seral sagebrush-steppe habitats. Fire suppression tactics and prevention/suppression strategies will be specified in Fire Management Plans to be completed by September 2004.
- **6.4** BLM in coordination with fire management cooperators will implement Minimum Impact Suppression Tactics in fire suppression to minimize ground disturbance impacts to slickspot peppergrass, where feasible.

Recreation

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

- **6.5** BLM and the State will manage OHV recreation to minimize impacts to occupied and suitable habitat.
- 6.6 BLM will develop and install educational signage at entry points and key recreational points regarding the biology and conservation of this species and other special status species.

Invasive Nonnative Plants Species

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

- **6.7** BLM in conjunction with the CWMA cooperators require weed spraying control measures including, spraying when wind conditions are less than 7 miles per hour, using large droplet spray only, with reduced pump pressure, and spot spraying.
- **6.8** BLM will assign priority to treatment of nonnative invasive or weed species with emphasis on treating the immediate EO 18 and 57.
- **6.9** BLM and the State will require restoration and rehabilitation to native conditions in trespass cases damaging occupied LEPA habitat.

Land Use Authorizations and Land Exchanges

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

6.10 BLM and the State will require temporary or permanent project fencing to protect habitat adjacent to construction activities.

Livestock Trampling

BLM shall change the terms and conditions of all grazing permits within this management area to reflect and include the conservation measures for this management area and the priority occurrences within it.

- **6.11** Permittees will supplement federal and state agency surveys and monitoring by surveying their allotments for slickspots and plants, including existing occurrences, during their normal course of business.
- **6.12** Permittees will report survey information to the Conservation Data Center for the purposes of aiding monitoring efforts and contributing to the CCA adaptive management strategy.

- **6.13** Permittees shall place salt/supplements to minimize trampling of LEPA and of slickspots, respectively. Supplements will be placed at least 1/2 mile, preferably 3/4 mile from occurrences. Supplement placing shall be considered in the annual LEPA tour with the BLM range specialist, based on the experience in the previous year's grazing season. Supplements that are attractants should be placed so that cattle will not trail through an element occurrence to the supplement or a water source. Attractants should be placed so that cattle are drawn away from the area of the element occurrence. Terms and Conditions within a permit will be adjusted to reflect the distance necessary for supplements from existing element occurrences and slickspots; however, requirements for maximum distance from water may be waived for a compelling reason involving minimizing impact on a slickspot or the plant. If the aforementioned is not possible, then existing sites will be examined by BLM and the permittee to determine the best available location.
- **6.14** Permittees will not trail livestock through element occurrences within the management area when soils are saturated.
- **6.15** Grazing for this management area will be limited to the fall and winter grazing season, beginning approximately on October 1, which ever comes first. Permittee will herd livestock away from priority occurrences if the soils become moist and will relocate livestock if soils become saturated and penetrating trampling is likely to occur to one of three alternative sites, (two of the alternative sites are fenced), away from existing priority element occurrences. If soils are likely to become saturated permittee will also relocate livestock away from the vicinity of existing element occurrences by moving livestock to one of three alternative sites, (two of the alternative sites are fenced).
- **6.16** Permittees within the management area will use only existing roads and tracks for vehicle travel.
- 6.17 Sheep grazing permits will be modified to restrict bedding, trailing or watering herds within $\frac{1}{2}$ mile of EO's.

The following conservation measures will be implemented within EO 18. These measures will be included in Instruction Memorandums covering general, fire and rehabilitation standard operating procedures to be issued by December 31, 2003 or through the permittee's annual authorization and/or through modification of grazing permits.

- BLM will not issue new land use authorizations.
- BLM, the permittee, and CWMA cooperators will use only hand sprayers for herbicide.
- BLM will require control of invasive non native or weed species on new, renewing or amending right of way authorizations.
- BLM will establish 10 ft spray buffer zones around slickspots for weed control activities.
- Within 10 ft no spray buffer zones, weeds will only be treated by hand.
- BLM will evaluate the need for and implement as appropriate motorized vehicle restrictions.

The following conservation measures will be implemented within EO 57. These measures will be included in Instruction Memorandums covering general, fire and rehabilitation standard operating procedures to be issued by December 31, 2003 or through modification of grazing permits.

- BLM will not issue new land use authorizations.
- BLM, the permittee, and CWMA cooperators will use only hand sprayers for herbicide.
- BLM will require control of invasive non native or weed species on new, renewing or amending right of way authorizations.
- BLM will establish 10 ft spray buffer zones around slickspots for weed control activities.

- Within 10 ft no spray buffer zone, weeds will only be treated by hand.
- BLM will evaluate the need for and implement as appropriate motorized vehicle restrictions.

Gowen Field/Orchard Training Area Management Area

This MA is located approximately 20 miles south-southeast of Boise, on BLM land within the Snake River Birds of Prey National Conservation Area. The MA is located within the Orchard Training Range and used by the Idaho Army National Guard for training purposes. Contiguous portions of the Orchard Training Area occur to the south of the MA, while a mix of BLM, State, and private lands extend to the north. The MA contains seven (027, 028, 035, 041, 053, 059, 067) known slickspot peppergrass occurrences. Three of them (027, 028, 067) are located within large stands of intact sagebrush habitat. These stands cover several thousand acres and represent the largest blocks of unfragmented sagebrush habitat remaining along the western Snake River Plain, north of the Snake River. Several of the occurrences within the MA support relatively large numbers of slickspot peppergrass. They represent some of the largest occurrences rangewide. Element occurrences 027 and 028 are priority element occurrences. Large sections of Orchard Training Range located south of the MA contain burned annual grassland or mosaic burned habitats. The Idaho Army National Guard has implemented a number of conservation measures on behalf of slickspot peppergrass within the training range. They have also sponsored much of the life history and other research completed or ongoing for slickspot peppergrass.

The primary threats and activities that impact the species in this management area include: fire, recreation, invasion of nonnative plant species, livestock trampling, military training and land use authorizations and land exchanges.

The following conservation measures will be implemented within the management area:

Fire

Fire management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by May 1, 2004, that incorporates the following measures:

- 7.1 Known locations of occupied LEPA habitat will be considered by Land Managers, specifically BLM and the State, in granting authorization to use heavy ground moving equipment for fire suppression.
- **7.2** BLM will provide adequate fire suppression coverage at all stations that respond to this management area to meet management objectives with the intent to suppress ninety percent (90%) of fires to less than 100 acres (reduced from the current suppression target of less than 200 acres).
- **7.3** Land management agencies will protect remnant blocks of native vegetation, especially late seral sagebrush-steppe habitats. Fire suppression tactics and prevention/suppression strategies will be specified in Fire Management Plans to be completed by September 2004.
- **7.4** BLM in coordination with fire management cooperators will implement Minimum Impact Suppression Tactics in fire suppression to minimize ground disturbance impacts to slickspot peppergrass, where feasible.

Recreation

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

- **7.5** BLM and the State will manage OHV recreation to minimize impacts to occupied and suitable habitat.
- **7.6** BLM will develop and install educational signage at entry points and key recreational points regarding the biology and conservation of this species and other special status species.
- 7.7 BLM will evaluate the need for and implement as appropriate motorized vehicle restrictions.

Invasive Nonnative Plants Species

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

- **7.8** BLM in conjunction with the CWMA cooperators require weed spraying control measures including, spraying when wind conditions are less than 7 miles per hour, using large droplet spray only, with reduced pump pressure, and spot spraying.
- **7.9** BLM will assign priority to treatment of nonnative invasive or weed species with emphasis on treating EO 27 and EO 28.
- **7.10** BLM and the State will require restoration and rehabilitation to native conditions in trespass cases damaging occupied LEPA habitat.

Land Use Authorizations and Land Exchanges

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

7.11 The BLM and the State will require temporary or permanent project fencing to protect occupied habitat adjacent to construction activities.

Livestock Trampling

BLM shall change the terms and conditions of all grazing permits within this management area to reflect and include the conservation measures for this management area and the priority occurrences within it.

- **7.12** Permittees will supplement federal and state agency surveys and monitoring by surveying their allotments for slickspots and plants, including existing occurrences, during their normal course of business.
- **7.13** Permittees will report survey information to the Conservation Data Center for the purposes of aiding monitoring efforts and contributing to the CCA adaptive management strategy.
- 7.14 Permittees shall place salt/supplements to minimize trampling of LEPA and of slickspots, respectively. Supplements will be placed at least 1/2 mile, preferably 3/4 mile from occurrences. Supplement placing shall be considered in the annual LEPA tour with the BLM range specialist, based on the experience in the previous year's grazing season. Supplements that are attractants should be placed so that cattle will not trail through an element occurrence to the supplement or a water source. Attractants should be placed so that cattle are drawn away from the area of the element occurrence. Terms and Conditions within a permit will be adjusted to reflect the distance necessary for supplements from existing element occurrences and slickspots; however, requirements for maximum distance from water may be waived for a compelling reason involving minimizing impact on a slickspot or the plant. If the aforementioned is not possible, then existing sites will be examined by BLM and the permittee to determine the best available location.

- **7.15** Permittees will not trail livestock through element occurrences within the management area when soils are saturated. Permittees when directed by the BLM will move livestock to an alternate area either outside of the management are or to private land to avoid penetrating trampling during periods when soils are saturated.
- 7.16 Permittee will delay turnout, when soils are saturated.
- 7.17 Confine vehicle use to existing roads and tracks where element occurrences are present.
- **7.18** Sheep grazing permits will be modified to restrict bedding, trailing or watering herds within $\frac{1}{2}$ mile of EO's.

Military Training

The following conservation measures were developed with the Idaho Army National Guard (IDARNG) and will be implemented under the 2004-2008 Gowen Field/Orchard Training Area Integrated Natural Resource Management Plan (INRMP). Preparation and implementation of the INRMP is required by law under the Sikes Act. See 16 U.S.C. § 670 *et seq.* The responsibilities of the IDARNG under the CCA are limited to funding and implementing the following conservation measures, in accordance with its INRMP, on the Gowen Field/Orchard Training Area (GFTA).

- **7.19** Continue to prevent damage to and fragmentation of the late seral sagebrush-steppe habitat in which slickspot peppergrass occurs on the Orchard Training Area by controlling IDARNG vehicle traffic through "off limit" areas and restricted travel.
- **7.20** Continue to annually monitor vegetation trends in the late seral sagebrush habitat to determine if the vegetation composition remains stable under current uses and management.
- 7.21 Continue to monitor previously established transects and Habitat Integrity Index plots.
- **7.22** Continue to use only native species and broadcast seeding methods for any habitat restoration projects.
- **7.23** Continue to manage military activities to protect slickspot peppergrass populations and surrounding habitat from training damage.
- 7.24 Continue to review plans for military training exercises in the management area and position them so they do not affect slickspot peppergrass populations and surrounding habitat.
- **7.25** Continue to require troops to view environmental briefings before training and emphasize the importance or protecting slickspot peppergrass.
- 7.26 Continue to install and maintain signs designating population centers.
- 7.27 Continue to monitor the management area to ensure off-limits areas have been respected.
- **7.28** Continue to minimize opportunities for the introduction of invasive and noxious plants on the Orchard Training Area by requiring pre-washing of non-local military vehicles entering the area.
- 7.29 Continue to report to BLM areas of invasive and noxious plants as they are located.
- 7.30 Continue to cooperate with BLM in the control of non-native noxious weeds.
- 7.31 Continue to disallow the development of new roads through slickspot peppergrass habitat.
- **7.32** Continue the mutual support agreement with BLM for the suppression of wildfires in the National Conservation Area.
- **7.33** Continue to inform firefighters of the location of important slickspot peppergrass habitat and implement minimum impact suppression tactics in those areas.
- **7.34** Continue to provide a high level of rapid response fire protection during fire season when military activities are occurring on the Orchard Training Area.
- **7.35** Continue to implement the Integrated Natural Resources Management Plan (INRMP) for the Orchard Training Area.
The following conservation measures will be implemented within EO 27 and EO 28.

- BLM will not issue new land use authorizations.
- BLM, the permittee, and CWMA cooperators will use only hand sprayers for herbicide.
- BLM will require control of invasive non native or weed species on new, renewing or amending right of way authorizations.
- BLM will establish 10 ft spray buffer zones around slickspots for weed control activities.
- Within 10 ft no spray buffer zones, weeds will only be treated by hand.
- All supplements and water sources will be placed a mile away from the vicinity of these priority occurrences.
- Permittee will graze within these element occurrences when the soils are dry. If precipitation occurs causing the soil to become tracking wet and the ten day forecast predicts more rain the live-stock will be removed from the vicinity of the priority element occurrences.

Mountain Home Management Area

Occurrences in this MA are located near the northwestern, eastern, and southern outskirts of Mountain Home, and also further west to the Crater Rings area, and further south to within a few miles northwest of Hammett. The MA contains eight occurrences (002, 010, 021, 029, 050, 051, 061, and 062). Element occurrences 021 and 051 are priority element occurrences. They are located predominately on BLM lands, although one occurrence extends onto adjacent State land. Private land occurs in close proximity to several occurrences. Large areas of public and private land in the Mountain Home region have burned in the past and are now dominated by annual grassland vegetation. Most occurrences in the MA are located within remnant sagebrush stands. These stands vary in size from less than one to over 100 acres, and are generally surrounded by burned habitat.

The primary threats and activities that impact the species in this management area include: fire, recreation, invasion of nonnative plant species, livestock trampling and land use authorizations and land exchanges.

The following conservation measures will be implemented across the management area:

Fire

Fire management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by May 1, 2004, that incorporates the following measures:

- **9.1** Potential impacts to known locations of occupied LEPA habitat, in contrast to potential benefits of more immediate fire suppression, will be considered by Land Managers, specifically BLM, in granting authorization to use heavy ground moving equipment for fire suppression.
- **9.2** BLM will provide adequate fire suppression coverage at all stations that respond to this management area to meet management objectives with the intent to suppress ninety percent (90%) of fires to less than 100 acres (reduced from the current suppression target of less than 200 acres).
- **9.3** Land management agencies will protect remnant blocks of native vegetation, especially late seral sagebrush-steppe habitats. Fire suppression tactics and prevention/suppression strategies will be specified in Fire Management Plans to be completed by September 2004.
- **9.4** BLM with fire management cooperators will implement Minimum Impact Suppression Tactics in fire suppression to minimize ground disturbance impacts to slickspot peppergrass, where feasible. *Recreation*

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures.

- 9.5 BLM will manage OHV recreation to minimize impacts to occupied and suitable habitat.
- **9.6** BLM and the State will develop and install educational signage at entry points and key recreational points regarding the biology and conservation of this species and other special status species.

Invasive Nonnative Plants Species

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures.

- **9.7** BLM in conjunction with the CWMA cooperators require weed spraying control measures including, spraying when wind conditions are less than 7 miles per hour, using large droplet spray only, with reduced pump pressure, and spot spraying.
- **9.8** BLM will assign priority to treatment of nonnative invasive or weed species with this management area.
- **9.9** BLM and the State will require restoration and rehabilitation to native conditions in trespass cases damaging sagebrush-steppe habitat.

Land Use Authorizations and Land Exchanges

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

9.10 The BLM and the State will require temporary or permanent project fencing to protect occupied habitat adjacent to construction activities.

Livestock Trampling

BLM shall change the terms and conditions of all grazing permits within this management area to reflect and include the conservation measures for this management area and the priority occurrences within it.

- **9.11** Permittees will supplement federal and state agency surveys and monitoring by surveying their allotments for slickspots and plants, including existing occurrences, during their normal course of business.
- **9.12** Permittees will report survey information to the Conservation Data Center for the purposes of aiding monitoring efforts and contributing to the CCA adaptive management strategy.
- **9.13** Permittees shall place salt/supplements to minimize trampling of LEPA and of slickspots, respectively. Supplements will be placed at least 1/2 mile, preferably 3/4 mile from occurrences. Supplement placing shall be considered in the annual LEPA tour with the BLM range specialist, based on the experience in the previous year's grazing season. Supplements that are attractants should be placed so that cattle will not trail through an element occurrence to the supplement or a water source. Attractants should be placed so that cattle are drawn away from the area of the element occurrence. Terms and Conditions within a permit will be adjusted to reflect the distance necessary for supplements from existing element occurrences and slickspots; however, requirements for maximum distance from water may be waived for

a compelling reason involving minimizing impact on a slickspot or the plant. If the aforementioned is not possible, then existing sites will be examined by BLM and the permittee to determine the best available location.

- **9.14** Permittees will not trail livestock through element occurrences within the management area when soils are saturated.
- 9.15 Confine vehicle use to existing roads and tracks where element occurrences are present.
- 9.16 No grazing will be conducted in the area containing EO 50.

The following conservation measures will be implemented within EO 21. These measures will be included in Instruction Memorandums covering general, fire and rehabilitation standard operating procedures to be issued by December 31, 2003 or through the permittee's annual authorization and/or through modification of grazing permits.

- BLM will use aerial seeding and/or no-till drill.
- BLM will not issue new land use authorizations within occupied and suitable habitat.
- Idaho Department of Lands will mitigate impacts to slickspot habitat resulting from authorized land use activities conducted after this agreement is signed.
- BLM, the permittee, and the CWMA cooperators, along with the State will use only hand sprayers for weed control activities.
- BLM and the State will require control of invasive non native or weed species on all existing right of way authorizations.
- BLM and the State will establish 10 ft spray buffer zones around slickspots in this EO.
- Within 10 ft no spray buffer zones, weeds will only be treated by hand.
- The State will establish a closure to off road motorized recreational activities within occupied and suitable habitat.
- Grazing is prohibited on this EO.
- Private land owner will incorporate 160 acres of private land (NW¹/₄ Sec. 17, T. 3 S., R. 5 E.) within a currently fenced area to be maintained by BLM to prevent livestock from grazing within the vicinity of this element occurrence. This land will remain excluded from grazing until such time as the owner sells it.

The following conservation measures will be implemented within EO 51. These measures will be included in Instruction Memorandums covering general, fire and rehabilitation standard operating procedures to be issued by December 31, 2003 or through modification of grazing permits.

- BLM will use aerial seeding and/or no-till drill only.
- BLM will not issue new land use authorizations with occupied and suitable habitat.
- BLM, the permittee, and the CWMA cooperators, along with the State will use only hand sprayers for weed control activities.
- BLM will require control of invasive non native or weed species on all existing right of way authorizations.
- BLM will establish 10 ft spray buffer zones around slickspots.
- Within 10 ft no spray buffer zones, weeds will only be treated by hand.
- Permittee will herd livestock away from slickspots during the 2004 grazing season
- As soon as possible BLM will install a fence and the permittee will maintain the fence, creating a pasture containing this element occurrence, which will not be grazed during periods when the soils are saturated.

Glenns Ferry/Hammett Management Area

This MA is located northwest of Glenns Ferry. Occurrences in the MA represent the eastern distribution limit of slickspot peppergrass on the western Snake River Plain. The MA contains four known element occurrences (008, 026, 058, 063), all located on BLM land. Element occurrences 008, 026 and 058 are priority element occurrences. One of these (063) is small and occurs within a large block of burned, annual grassland-dominated habitat. The other three occurrences are much larger, varying from approximately 300 to 900 acres, and characterized by unburned sagebrush habitat over most of their extent. These sagebrush blocks are some of the largest remaining in the western Snake River Plain, north of the Snake River. Part of one occurrence (008) initially burned in the 1980s, but still contains some slickspot peppergrass.

The primary threats and activities that impact the species in this management area include: fire, recreation, invasion of nonnative plant species, livestock trampling and land use authorizations and land exchanges.

The following conservation measures will be implemented across the management area:

Fire

Fire management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by May 1, 2004, that incorporates the following measures:

- **10.1** Potential impacts to known locations of occupied LEPA habitat, in contrast to potential benefits of more immediate fire suppression, will be considered by Land Managers, specifically BLM, in granting authorization to use heavy ground moving equipment for fire suppression.
- **10.2** BLM will provide adequate fire suppression coverage at all stations that respond to this management area to meet management objectives with the intent to suppress ninety percent (90%) of fires to less than 100 acres (reduced from the current suppression target of less than 300 acres).
- **10.3** Land management agencies will protect remnant blocks of native vegetation, especially late seral sagebrush-steppe habitats. Fire suppression tactics and prevention/suppression strategies will be specified in Fire Management Plans to be completed by September 2004.
- **10.4** BLM with fire management cooperators will implement Minimum Impact Suppression Tactics in fire suppression to minimize ground disturbance impacts to slickspot peppergrass, where feasible.

Recreation

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

- **10.5** BLM and the State will manage OHV recreation to minimize impacts to occupied and suitable habitat.
- **10.6** BLM will develop and install educational signage at entry points and key recreational points regarding the biology and conservation of this species and other special status species.

Invasive Nonnative Plants Species

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

- **10.7** BLM in conjunction with the CWMA cooperators and the State will require weed spraying control measures including, spraying when wind conditions are less than 7 miles per hour, using large droplet spray only, with reduced pump pressure, and spot spraying.
- **10.8** BLM will assign priority to treatment of nonnative invasive or weed species with EO 8, EO 26, and EO 58.
- **10.9** BLM will require restoration and rehabilitation to native conditions in trespass cases damaging sagebrush-steppe habitat.

Land Use Authorizations and Land Exchanges

General management standard operating procedures for LEPA will be issued in a BLM Instruction Memorandum by December 31, 2003, that incorporates the following measures:

10.10 The BLM will require temporary or permanent project fencing to protect occupied habitat adjacent to construction activities.

Livestock Trampling

BLM shall change the terms and conditions of all grazing permits within this management area to reflect and include the conservation measures for this management area and the priority occurrences within it.

- **10.11** Permittees will supplement federal and state agency surveys and monitoring by surveying their allotments for slickspots and plants, including existing occurrences, during their normal course of business.
- **10.12** Permittees will report survey information to the Conservation Data Center for the purposes of aiding monitoring efforts and contributing to the CCA adaptive management strategy.
- **10.13** Permittees shall place salt/supplements to minimize trampling of LEPA and of slickspots, respectively. Supplements will be placed at least 1/2 mile, preferably 3/4 mile from occurrences. Supplement placing shall be considered in the annual LEPA tour with the BLM range specialist, based on the experience in the previous year's grazing season. Supplements that are attractants should be placed so that cattle will not trail through an element occurrence to the supplement or a water source. Attractants should be placed so that cattle are drawn away from the area of the element occurrence. Terms and Conditions within a permit will be adjusted to reflect the distance necessary for supplements from existing element occurrences and slickspots; however, requirements for maximum distance from water may be waived for a compelling reason involving minimizing impact on a slickspot or the plant. If the aforementioned is not possible, then existing sites will be examined by the BLM and the permitee to determine the best available location.
- **10.14** Permittees will not trail livestock through element occurrences within the management area when soils are saturated.
- **10.15** Confine vehicle use to existing roads and tracks where element occurrences are present.
- **10.16** Sheep grazing permits will be modified to restrict bedding, trailing or watering herds within $\frac{1}{2}$ mile of element occurrences.

The following conservation measures will be implemented within EO 08. These measures will be included in Instruction Memorandums covering general, fire and rehabilitation standard operating procedures to be issued by December 31, 2003 or through the permittee's annual authorization and/or through modification of grazing permits.

- BLM will use aerial seeding and/or no-till drill only.
- BLM will not issue new land use authorizations.
- BLM will address restoration of the sagebrush-steppe habitat if degradation is found to be associated with authorized uses.
- BLM, permittees, and the CWMA cooperators will use only hand sprayers for herbicide applications.
- BLM will require control of invasive non native or weed species on new, renewing or amending right of way authorizations.
- BLM will establish 10 ft spray buffer zones around slickspots for weed control activities.
- Within 10 ft no spray buffer zones, weeds will only be treated by hand.
- BLM will maintain closure to motorized recreational activities.
- The portion of this EO that is currently fenced within the Hammett 2 allotment north of the Old Oregon Trail Road and west of the Rye Grass Road will not be grazed for the 2004 grazing season.
- The permittee will erect a temporary electric fence before the beginning of the 2004 grazing season to keep cattle out of the vicinity of the priority element occurrence when the soils are saturated.
- The permittee, in conjunction with the BLM, will fence the west side of the Hammett Hill Road, from the southern allotment fence, north to the Old Oregon Trail Road. This fenced area will not be grazed when soils are saturated. The permittee will maintain the fence.

The following conservation measures will be implemented within EO 26. These measures will be included in Instruction Memorandums covering general, fire and rehabilitation standard operating procedures to be issued by December 31, 2003 or through modification of grazing permits.

- BLM will use aerial seeding and/or no-till drill only.
- BLM will not issue new land use authorizations.
- BLM will address restoration of the sagebrush-steppe habitat if degradation is found to be associated with authorized uses.
- BLM, permittees, and the CWMA cooperators will use only hand sprayers for herbicide applications.
- BLM will require control of invasive non native or weed species on new, renewing or amending right of way authorizations.
- BLM will establish 10 ft spray buffer zones around slickspots for weed control activities.
- Within 10 ft no spray buffer zones, weeds will only be treated by hand.
- BLM will maintain closure to motorized recreational activities.
- The permittee, with the assistance of BLM, will fence the northwest corner of pasture 1 within Lower Alkali allotment, south of the Old Oregon Trail Road. This portion of fenced pasture will be maintained by the permittee and will not be grazed when soils are saturated.

The following conservation measures will be implemented within EO 58. These measures will be included in Instruction Memorandums covering general, fire and rehabilitation standard operating procedures to be issued by December 31, 2003 or through modification of grazing permits.

- BLM will use aerial seeding and/or no-till drill.
- BLM will maintain existing exclosure in southern portion of EO 58 to preclude grazing.
- BLM will not issue new land use authorizations.
- BLM will address restoration of sagebrush-steppe habitat if degradation is found to be associated with authorized uses.

- BLM, permittees, and the CWMA cooperators will use only hand sprayers for herbicide applications.
- BLM will require control of invasive non native or weed species on new, renewing or amending right of way authorizations.
- BLM will establish 10 ft spray buffer zones around slickspots for weed control activities.
- Within 10 ft no spray buffer zones, weeds will only be treated by hand.
- BLM will maintain closure to motorized recreational activities within exclosure in southern portion of EO 58.
- Pasture 3, south of the Old Oregon Trail Road will be used to trail cattle through only in the fall if dry conditions exist, otherwise this pasture is fenced and grazing will not occur when the soil is saturated.
- Allotment containing this EO will be deferred to fall grazing and livestock will be herded away from the southern portion of the allotment where the EO exists during periods when soils are saturated.

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APPENDIX 13. SOCIO ECONOMICS BASELINE DATA

Livestock Sector Impacts					
	Southwest Idaho 4-County Employment	NCA Livestock Grazing Related Employment	NCA Percent of 4- County Employment		
Agriculture		0	*		
Forage	3,098	1	*		
Range-Fed Cattle	639	10	1.60%		
Feedlots	232	0	*		
All Other Ag.	9,505	1	*		
Mining	191	0	*		
Construction	23,482	0	*		
Manufacturing	39,154	1	*		
TCU	14,807	0	*		
Trade	52,066	1	*		
FIRE	24,138	1	*		
Hospitality	19,300	0	*		
Other Services	84,827	2	*		
Government	34,792				
Total	306,231	17	-0.01%		

Table A.	NCA Livestock	Grazing	Related	Employment.
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* Less than .01%

Source: EMSI, 2004

Table B.	NCA	Recreation	Related	Emplo	yment.
					/

	Southwest Idaho	NCA Recreation Related	Percent of
	Employment	Employment	Employment
Agriculture			
Forage	3,098	0.015	0.00%
Range-Fed Cattle	639	0.04	0.01%
Feedlots	232	0.01	0.00%
All Other Ag.	9,505	0.93	0.01%
Mining	191	0.015	0.01%
Construction	23,482	0.505	0.00%
Manufacturing	39,154	3.365	0.01%
TCU	14,807	2.355	0.02%
Trade	52,066	16.42	0.03%
FIRE	24,138	4.63	0.02%
Services			
Hospitality	19,300	89.185	0.46%
Other Services	84,827	17.425	0.02%
Government	34,792	0	0.00%
Total	306,231	135	0.04%

	Southwest Idaho 4-County Employment	NCA Restoration Related Employment	NCA Percent of 4-County Employment
Agriculture	Employment	Employment	Employment
Forage	3,098	0.00	0.000%
Range-Fed Cattle	639	0.00	0.000%
Feedlots	232	0.00	0.000%
Vegetation – Restoration	9,505	0.49	0.005%
Mining	191	0.00	0.000%
Construction	23,482	0.03	0.000%
Manufacturing	39,154	0.06	0.000%
TCU	14,807	0.08	0.001%
Trade	52,066	0.14	0.000%
FIRE	24,138	0.07	0.000%
Hospitality	19,300	0.05	0.000%
Other Services	84,827	0.21	0.000%
Government	34,792	1.13	0.003%
Total	306,231	2.25	0.001%

Table Ca	NCA	Vegetation -	- Restoration	Related	Employment.
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Less than .01% Source: EMSI, 2005

	Southwest	NCA Baseline	NCA
	Idaho	Fuels	Percent of
	4-County	Treatment	4-County
	Employment	Employment	Employment
Agriculture			
Forage	3,098	0.1	0.004%
Range-Fed Cattle	639	0.0	0.000%
Feedlots	232	0.0	0.000%
Fuels Treatment	9,505	0.5	0.005%
Mining	191	0.0	0.000%
Construction	23,482	0.0	0.000%
Manufacturing	39,154	0.0	0.000%
TCU	14,807	0.1	0.000%
Trade	52,066	0.1	0.000%
FIRE	24,138	0.1	0.000%
Hospitality	19,300	0.0	0.000%
Other Services	84,827	0.2	0.000%
Government	34,792	0.7	0.002%
Total	306,231	1.8	0.001%

Less than .01% Source: EMSI, 2005

(LIVESIDER)	Southwest Idaho		ation – P	NCA Total		NCA Percent	
	Iobs Income		Iohs		Iohs	Income	
Dairy	558	28 341 908	<1	22,000	0.1%	0.1%	
Misc Livestock	316	1 496 310	<1	22,000	0.1%	0.1%	
Range Cattle	639	8 987 728	11	149 000	1.7%	1.7%	
Feedlots	232	11 981 674	<1	8 000	0.1%	0.1%	
Grains	622	7 055 864	<1	3,000	0.0%	0.0%	
Forage Crops	3.098	15.812.692	1	6.000	0.0%	0.0%	
Misc. Crops	2.868	50.001.655	2	33.000	0.1%	0.1%	
Sugar Beets	516	5,880,805	<1	2,000	0.0%	0.0%	
Ag Services	4,625	33,149,258	4	28,000	0.1%	0.1%	
Mining	191	5,114,220	<1	2,000	0.0%	0.0%	
Construction	23,482	1,095,889,706	17	804,000	0.1%	0.1%	
Manufacturing	39,154	1,965,527,569	19	950,000	0.0%	0.0%	
Transportation &	13,326	376,741,628	12	331,000	0.1%	0.1%	
Communication	-			-			
Services	1,182	177,482,955	1	173,000	0.1%	0.1%	
Irrigation and Water Service.	299	15,750,293	1	20,000	0.1%	0.1%	
Wholesale Trade	15,120	732,746,063	15	736,000	0.1%	0.1%	
Retail Trade	22,658	361,685,016	53	842,000	0.2%	0.2%	
Food Stores	9,585	248,738,609	17	435,000	0.2%	0.2%	
Auto Dealers & Service Stations	4,703	161,671,487	9	302,000	0.2%	0.2%	
Eating & Drinking	16,663	255,349,163	97	1,479,000	0.6%	0.6%	
F.I.R.E.	24,138	713,308,984	43	1,281,000	0.2%	0.2%	
Hotels and Lodging Places	2,637	53,202,716	30	603,000	1.1%	1.1%	
Health Care	20,002	845,801,581	25	1,045,000	0.1%	0.1%	
Services	64,825	1,372,061,905	96	2,025,000	0.1%	0.1%	
Government	34,792	1,032,428,299	647	18,758,000	1.9%	1.8%	
Totals	306,231	9,576,208,087	1,098	30,037,000	0.4%	0.3%	

 Table E. Jobs and Income Linked to the NCA.

 (Livestock, Military, Recreation, Vegetation – Restoration and Fuels Mgmt)

APPENDIX 14. SNAKE RIVER WILD AND SCENIC RIVER REPORT



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Snake River Wild & Scenic River Report Eligibility, Classification, & Suitability

I. Introduction

As part of the planning process for the Snake River Birds of Prey National Conservation Area (NCA) Resource Management Plan (RMP), a BLM interdisciplinary (ID) team completed a Wild and Scenic Rivers (WSR) study under Section 5(d)(1) of the Wild and Scenic Rivers Act (WSRA). This study reviews BLM-administered public land along the 82 miles of the Snake River, evaluates and makes determinations regarding eligibility, makes preliminary classifications to those river segments found eligible, and makes suitability recommendations for all eligible segments.

This report is the official record of the eligibility and suitability determinations made by the ID Team. This report: 1) discusses the definition of free-flowing and whether or not the Snake River fits that definition; 2) describes the criteria for evaluating outstandingly remarkable values; 3) describes and assesses resource values, and determines if specific resource values are outstandingly remarkable; 4) determines preliminary classification for all eligible river segments; and 5) determines suitability recommendations for all eligible river segments.

Purpose

The WSR Act, passed by Congress in October 1968, instituted a legislative program to study and protect free-flowing river segments by making them part of the National Wild and Scenic Rivers System (NWSRS). Congress did nct intend to protect every remaining free-flowing river, but rather sought to conserve a representative sample of many of our most important natural and recreational rivers.

Directives in BLM Manual 8351 and "The Wild and Scenic River Study Process" technical report prepared for the Interagency Wild and Scenic Rivers Coordinating Council, 1999, were followed for integrating a wild and scenic river study within the resource management planning process.

Study Boundary

The study area boundary includes 82 miles of the Snake River from the upstream NCA boundary at about river mile 527 downstream to the western NCA boundary at approximately river mile 445 (Figure 1). Only those river segments that met the initial free flowing criteria were further evaluated for outstandingly remarkable values in this report.



The boundaries of any river proposed for potential addition to the NWSRS, as specified in section 4(d) of the WSR Act, are usually limited to that area measured within one-quarter mile above the ordinary high watermark on each side of the river. The study boundary for this evaluation of the Snake River used the one-quarter mile area as a starting point, but in some locations extended this distance to 100 feet beyond the canyon rim to include the entire expanse of the Snake River Canyon. In evaluating the river's scenic values, the surrounding background, when viewed from the canyon rim, was considered as part of the view shed.



Figure 1 Snake River Wild & Scenic River Study Area

The Snake River's special values were assessed as to whether they are unique, rare or exemplary within the state, region, or nation. For purposes of this report and in order to better define the evaluation criteria, "regionally significant" refers to the portion of the United States that includes Washington, Oregon, Idaho, western Montana, northern Nevada, northern Utah, and western Wyoming.



Overview of the W&SR Study Process

The first phase of a WSR study is the eligibility determination, an analysis to see whether the river is eligible to be considered for WSR designation.

To be considered eligible a water course:

1. Must be a: River - defined as:

A flowing body of water, or estuary, or section, portion, or tributary thereof, including: rivers, streams, creeks, runs, kills, rills, and small lakes.

2. Must Be: Free flowing - defined as:

Existing or flowing in a natural condition without impoundment, with exceptions (low dams, diversion works, and other minor structures), diversion, straightening, rip-rapping, or other modification of the waterway (channelization).

Can: be any size or length, lie between impoundments or major dams, be nonfloatable or non-boatable, be intermittent, or non-perennial.

3. And must possess at least one (1) outstandingly remarkable value, such as:

Scenic, Recreational, Geologic, Fish and Wildlife, Historic, Cultural, or other similar values including Biological, Botanical, Ecological, Hydrological, or Paleontological.

The second phase of the study is the classification analysis, which determines whether the river should be tentatively classified as a recreational, scenic, or wild river if it were designated by Congress. This tentative BLM classification is based on the level of development present within the river corridor.

The third phase of the study is the suitability assessment which looks at the possible impacts of designation, weighs various elements such as public access, long-term protection of resources, and traditional resource uses, and asks the basic question of would this be a worthy addition to the National Wild & Scenic River System.

II. Free Flowing Criteria and Determinations

Free flowing is defined by Section 16(b) of the Wild and Scenic Rivers Act as "existing or flowing in a natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence of low dams, diversion works, or other minor



structures at the time of evaluation does not automatically disqualify a stream from consideration.

Swan Falls Dam and C.J. Strike Dam create impoundments at two different locations along the 82 miles of the Snake River. Swan Falls Reservoir extends 9.5 miles upstream from Swan Falls Dam. CJ Strike Reservoir extends 24 miles upstream from CJ Strike Dam. These two reservoirs on the Snake River do not meet the initial criteria as free flowing. The remaining segments of the Snake River do meet the initial criteria of free flowing (Table 1 and Figure 2).



Figure 2 Free flowing segments of the Snake River



River Segment Description	Number of Miles	River Segment Name	Free Flowing Criteria Met
East boundary of the NCA to the backwaters of CJ Strike Reservoir	9	Indian Cove	Yes
Backwaters of C.J. Strike Reservoir to CJ Strike Dam	24	C.J. Strike Reservoir	No
Downstream of C.J. Strike Dam to the backwaters of Swan Falls Reservoir	26.5	Grand View	Yes
Backwaters of Swan Falls Reservoir to Swan Falls Dam	9.5	Swan Falls Reservoir	No
Downstream of Swan Falls Dam to the west boundary of the NCA	13	Swan Falls	Yes

Findings Summary: Three (3) segments of the Snake River (49 miles total) were found to meet the free-flowing criteria. Two (2) segments (33 miles total) did not meet the criteria.

The 26.5 mile Grand View segment has two distinct characters. The initial 17.5 miles downstream from CJ Strike Dam is visually characterized by being a wide valley floor with the canyon rim several miles to the north and no canyon rim south of the river. The ownership is predominately private land on both sides of the river, being either rural townships or agricultural fields and pasture lands. At the end of this segment the river turns north and the surrounding canyon closes back into a river characterized by vertical basalt cliffs on the north and broken cliffs and buttes to the south. The ownership changes to predominately public lands with some private lands spaced throughout. For this reason the Grand View segment will



be divided and evaluated as two segments - the Grand View Segment and the Jackass Butte Segment.

The Grand View segment extends from just below CJ Strike Dam at the Strike Dam Road Bridge downstream approximately 17.5 miles to Jackass Butte at River Mile 474. The Jackass Butte Segment extends from Jackass Butte downstream approximately 9 miles to the backwaters of Swan Falls Reservoir (Figure 3).

These four (4) free flowing segments (Indian Cove, Grand View, Jackass Butte, and Swan Falls) will be further analyzed as to their possible outstandingly remarkable values.



Figure 3 Snake River Eligibility Study Segments



III. Outstandingly Remarkable Values (ORVs)

The determination that a river area contains ORVs is a professional judgment on the part of the interdisciplinary study team (ID team), based on objective, scientific analysis. In order to be assessed as outstandingly remarkable, a river-related value must be a unique, rare, or exemplary feature that is significant at a comparative state, regional or national scale. Dictionary definitions of the words "unique" and "rare" indicate that such a value would be one that is a conspicuous example from among a number of similar values that are themselves uncommon or extraordinary.

The ID team evaluated 49 miles of the Snake River, which met the free flowing criteria, by listing all of the river's special values and then assessing whether they were unique, rare or exemplary within the state, region, or nation. Only one such value is needed for a segment to be eligible. Of the 82 miles of the Snake River in the study area, four segments (49 miles) were identified for further analysis for the presence of outstandingly remarkable values and are discussed in greater detail below.

The values, which must be directly river-related or owe their location or existence to the river ecosystem, are considered outstandingly remarkable if they are unique or exemplary compared to similar values of other rivers within a geographic region of comparison. The regions used for comparison in this study are the Northern Great Basin and the Northern Rocky Mountains.

The following eligibility criteria were used and are intended to set minimum thresholds to establish ORVs and are illustrative but not all-inclusive. The "standard" criteria for each resource and the Outstandingly Remarkable Value Rating used are from BLM Manual 8351 and are an interagency standard for greater consistency within the federal river-administering agencies.

Discussion of River-Related Values

Scenic (S)

Criteria for Outstandingly Remarkable Value Rating

The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions. The BLM Visual Resource Inventory handbook, H-4810-1 may be used in addressing visual quality and in evaluating the extent of development upon scenic values. The rating must be a scenic quality "A" as defined in the BLM Visual Inventory Handbook. When analyzing scenic values, additional factors -- such as seasonal variations in vegetation, scale of cultural modifications, and the length of time



negative intrusions are viewed -- may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.



Figure 4 View east of Indian Cove Segment of the Snake River

Evaluation of Present Situation

The general scenic character of the Snake River is one of vertical canyon cliffs interspersed with wide expansive views of valley floor and rolling hills leading south toward the Owyhee Mountains. The Swan Falls segment is the most enclosed, having cliffs on both sides of the river for the majority of the segment. The four segments, while similar, have slightly different visual characteristics.

The Indian Cove segment begins with canyon cliffs rising 400 feet along both sides of the river and then opening to distant views of hills and buttes to the south after approximately 2 miles. The canyon closes back in on the river again at approximately 6 miles (Figure 4.). The Grand View segment is privately owned land in some form of agricultural development for almost the entire length. This segment of the river opens into a large flood plain with the canyon rim typically 2-3 miles from the river on the north and no rim to the south (Figure 5). The downstream portion of the segment begins to move into open rangelands and the canyon rim comes back to within 1 mile of the river and starts to create a more enclosed canyon. At this point, the Jackass Butte segment begins.





Figure 5 View west of Grand View segment of the Snake River

Initially the views in the Jackass Butte segment are limited in distance due to the canyon cliffs and rim and the curving of the river. At about three miles the canyon rim again disappears to the south, broken only by Castle Butte and Morgan Butte. The north rim fluctuates between being adjacent to the river to two miles from the river. At Wild Horse Butte the canyon closes in again and remains this way for the remainder of the segment. The Swan Falls segment is a large, one mile wide canyon for a majority of its length with cliffs ranging from 300 to 600 feet above the river (Figure 6).



Figure 6 View west of Snake River Canyon below Swan Falls Dam.

The vertical cliffs and angular talus slopes of all four segments provide straight visual lines of rock and low vegetation with a medium texture. Along the Swan Falls, Jackass Butte, and Indian Cove segments the cliffs vary in proximity to the river from immediately adjacent to approximately one half mile away. The cliffs along the Grand View segment are set back as much as three miles. The distance of the canyon rim creates differences in the scale of the



canyon and the feeling of openness. The Swan Falls segment has the highest vertical cliffs (600 feet) but the canyon does not feel tight because the rim to rim distance averages about one mile across.

The south side of the four segments is a mixture of steep cliffs, buttes, rolling hills, and flood plains. The Indian Cove segment initially consists of flood plains slowing rising to low hills. The mixed ownership provides a mixture of croplands, groves of mature trees, and desert vegetation. This combination of vegetation breaks up the visual form across the landscape. The Grand View segment is almost entirely flood plains and rolling hills with no cliffs. The Jackass Butte segment changes character as the canyon cliffs come closer to the river to form an initial enclosed canyon that opens up after a few miles.

For the majority of the year the color tends to be dark cliff faces and brown/tan vegetation. The exception to this is the irrigated agricultural fields which stay green into the fall and the brief period during the spring when vegetation can be a brilliant green.

The BLM administered lands along the Snake River are categorized as Visual Resource Management (VRM) Class I, II, and III. The areas managed under VRM Class I are the north side of the Swan Falls segment, (which was classified as such when the Snake River Birds of Prey Natural Area received national protection in 1972), and those areas in the Grand View and Indian Cove segments along the Oregon National Historic Trail. The remaining segments are a mixture of VRM Class II and III.

Finding

While the visual elements and scenic quality of the Snake River Canyon can be spectacular, they are not unlike many other portions of the Snake River through southern Idaho and other areas of volcanic activity. Examples of similar scenic views in Idaho include the Snake River Canyon and Lower Salmon Falls Creek near Twin Falls. The quality of the scenic values for these four segments of the Snake River does not constitute an outstandingly remarkable scenic value when compared to other regional scenes.

Recreational (R)

Criteria for Outstandingly Remarkable Values Rating

Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region of comparison or are unique or rare within the region. Visitors are willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, camping, photography, hiking, fishing and boating. Interpretive opportunities may



be exceptional and attract, or have the potential to attract, visitors from outside the region of comparison. The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.

Evaluation of the Present Situation

The Snake River Canyon provides a unique opportunity to observe one of the largest concentrations of nesting raptors in the world. This opportunity attracts visitors from the local area, the region, the nation, and other countries. Feature articles in magazines and newspapers has prompted visitation from across the United States. Environmental organizations, such as Hawk Watch International and the Audubon Society, routinely bring visitors from throughout the U.S. for the opportunity to view birds of prey along this stretch of the Snake River.

The Snake River Canyon also provides diverse opportunities for additional recreational activities such as fishing, camping, float and power boating, hiking, mountain biking, horseback riding, waterfowl hunting, and parasailing primarily for local residents. Recreation use occurs year-round with visitor use being highest in the spring and early summer months and lowest during winter months.

Finding

Opportunities for general river-related recreational activities along the Snake River are similar to those that can be found on many western rivers. However, the Snake River Canyon provides a very unique raptor watching opportunity found in only a few places in the United States. This opportunity is truly an outstandingly remarkable recreational value to the birding community.

Geology (G)

Criteria for Outstandingly Remarkable Value Rating

The river, or the area within the river corridor, contains one or more examples of a geologic feature, process or phenomenon that is unique or rare within the region of comparison. The feature(s) may be in an unusually active stage of development, represent a "textbook" example, and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures).



Evaluation of Present Situation

The NCA is located in the western Snake River Plain physiographic province, which is the western limb of a broad, flat arcuate depression which is concave to the north and extends 400 miles westward from northwest Wyoming to the Idaho-Oregon border. The structural depression is fault bounded and has an average width of about 35 miles. The western Plain is a north - northwest - trending 10 million year old basin bounded by normal faults. The surface consists primarily of Quaternary basalt flows underlain by Lake Idaho lacustrine sediments over 1000 feet thick and stream deposits derived from the Idaho batholith to the north and the Owyhee Mountains to the south.

Both arms of the Plain appear to have been strongly shaped by extension of the crust on the North American Plate during the past 17 million years. This structural formation was triggered by the magmatism of the migrating Yellowstone hot spot. In the NCA, the Snake River has cut a deep canyon in the lake deposits. The basalts have repeatedly filled the canyon over the past 100,000 years and subsequently been eroded by the Snake River forming a new canyon. The canyon is the predominant surface feature in the NCA and provides important nesting habitat for the raptor populations that inhabit the area.

The volcanism in the western Snake River Plain region began with extrusion of rhyolitic lavas followed by the eruption of basalt and ash-flow tuffs. As the plain pulled apart and subsided, a lake, or succession of lakes, known as Lake Idaho formed. Volcanic activity occurring when the lake was present resulted in many spectacular examples of three major types of phreatomagmatic volcances (volcanic activity associated with water): emergent, subaqueous, and subaerial. Emergent volcances, like Sinker Butte, began erupting under water and eventually build a volcanic edifice above the lake level. Subaqueous volcances erupt under water and never build above the lake level Finally, subaerial volcances erupt through a buried aquifer system which produces violent eruptive features. All of these volcanic systems contain a significant amount of water, causing a high magma/water interaction. Emergent and subaqueous volcances usually form gently sloping tuff cones, whereas subaerial volcances form maars or tuff rings. The western Snake River Plain is an excellent area to study phreatomagmatic eruptions and hydrovolcanism.

Bonneville Flood - As glaciers receded during the last ice age, the inland basin of central Utah slowly filled with meltwater, creating Lake Bonneville. This lake covered approximately 20,000 square miles. The water level rose and finally crested at the lowest point in the basin -- Red Rock Pass, Idaho. The lake crested over the pass over a period of 500 to 1000 years before a catastrophic failure of the alluvial threshold dropped the lake level by approximately 100 meters during the Bonneville flood about 14,500 years ago. Water spilled out of Lake Bonneville and flowed north into the valleys of Marsh Creek and the Portneuf River. The deluge entered the Snake River Plain just north of Pocatello and flowed west across southern Idaho before turning



back north into the Hell's Canyon region. Over an estimated eight week period approximately 380 cubic miles of water passed through and over the Snake River Canyon.

The Snake River and its canyons are the major geographic features across the volcanic plain and became the main conduit for the Bonneville flood. The varying topographic features of the Snake River produced distinct types of hydraulics. In places where the canyon is deep and constricted, the velocity of the water increased tremendously. This increased energy allowed the water to pick up talus boulders the size of houses, turn, roll, and smooth out their rough edges, and deposit them many miles downstream. When the water entered wide, open stretches, the velocity decreased and the energy of the water could not keep the boulders suspended. The rocks settled in the bottom of the river and are now exposed on the larger bars along the river. These large, rounded boulders were nicknamed "melon gravel" due to the resemblance to big watermelons.

Dedication Point is an excellent location to view some of the effects of this catastrophic event. The river canyon above Swan Falls Dam is narrow and constricted, and widens below the dam. The large bar on the north side of the river below Dedication Point is covered with the Bonneville Flood boulders. You will notice the boulders on the upstream side of the bar are larger than the boulders on the downstream end. This demonstrates how the river lost energy as the canyon widened and was unable to hold the larger boulders in suspension. Floodwaters completely filled the canyon in some locations and flowed above the canyon rim in other areas. The force of the flood waters scoured the canyon in constricted locations. The river carved out many "box" canyons along the cliffs in places where large eddies formed.

Finding

The portion of the Snake River Canyon located within the NCA provides fine examples of canyon development and erosional features created by massive flood action, however; similar and in many ways much more definitive features can be observed up-stream and down-stream from the NCA and in the Columbia River Gorge and its tributaries. The Bonneville Flood was a single catastrophic event that changed the face of the Snake River Canyon, but the Glacial Lake Missoula Flood, of the Columbia River drainage was many times larger exploding downstream at a rate 10 times the combined flow of all the rivers of the world. Lake Missoula was drained of its estimated 500 cubic miles of water in as little as 48 hours. Rebuilding and failure of the ice dam created catastrophic flooding perhaps as many as 100 times before the alpine glaciers receded for the last time. The geologic resources associated with these four segments of the Snake River, while interesting are not unique when compared to regional geologic features and do not meet the criteria as outstandingly remarkable.



Fish (F)

Criteria for Outstandingly Remarkable Value Rating

Fish values may be judged on the relative merits of either fish populations, habitat, or a combination of these river-related conditions.

Populations: The River is nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable."

Habitat: The River provides exceptionally high quality habitat for fish species indigenous to the region of comparison. Of particular significance is habitat for wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself lead to a determination of "outstandingly remarkable."

Evaluation of Present Situation

Populations:

The Snake River's aquatic habitat is home to 27 species of fish, including white sturgeon, the largest fresh water fish in North America. White sturgeon, redband trout and mountain whitefish are the only native game fish in the NCA, since the salmon and steelhead runs were blocked by downstream dams. Twelve species of exotic game fish have been introduced into the Snake River system. These include small-mouth bass, rainbow trout, perch, crappie and channel catfish. Carp, an exotic fish, may be the most common large fish in the Snake River. Eleven native fish are considered non-game fish including suckers, northern pikeminnow, dace, shiners and sculpin.

Habitat:

The Snake River is a large volume, (greater than fifth order), river that is one of the most important water resources in the state. The river provides important agricultural, recreational, and wildlife resources. In this reach, the river flows through basalt canyons, rangeland, and agricultural land. The channel shape varies from being confined in the canyons to wide single channel areas with extensive floodplains and meandering channels with island complexes.



Findings:

The fish populations and habitat of the Snake River within the NCA are similar to those throughout Idaho and of other large volume rivers in the Pacific Northwest and do not constitute an outstandingly remarkable value.

Wildlife (W)

Criteria for Outstandingly Remarkable Values Rating

Wildlife values may be judged on the relative merits of either terrestrial or aquatic wildlife populations or habitat or a combination of these conditions.

Populations: The river or area within the river corridor contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened, endangered, or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable"

Habitat: The river or area within the river corridor provides exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide unique habitat or a critical link in habitat conditions for federal or state listed (or candidate) threatened, endangered or sensitive species. Contiguous habitat conditions are such that the biological needs of the species are met. The diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable".

Evaluation of the Present Situation

Populations: Two-hundred and eighteen bird, 49 mammal, 14 reptile, 4 amphibian species, and an unknown number of invertebrates have been found in the area. Each plays an integral part in the unique ecosystem of the Snake River Plain and Canyon.

While many bird species can be found along the Snake River Canyon, the raptor populations are the most distinctive feature. This unique raptor aggregation is the largest concentration of nesting birds of prey in North America and is generally believed to be one of the densest in the world. It is for this reason the area was congressionally designated a National Conservation Area in 1994. Raptors are relatively scarce animals even under the best conditions because they exist at the top of the food chain where the amount of energy available will support only small populations.



This unusual concentration of raptors exists because of the co-occurrence of two factors critical to their survival. One is that nest sites are very abundant in cavities, cracks, and ledges in the fractured basalt and eroded sandstone that make up the walls of the Snake River Canyon, numerous side canyons, and buttes that arise in the Snake River plain. The second factor is the fertile, fine- and medium-textured loess soils that support grasses, forbs, and shrubs, which in turn sustain many small mammals, birds, reptiles, and invertebrates. These animal populations, especially Piute ground squirrels and black-tailed jackrabbits, are prey for the raptors. Thus, the co-occurrence of abundant nesting sites and food supplies is the chief factor explaining why so many raptors occur in the NCA.

Twenty-five raptor species can be found in the NCA at different times of the year. Sixteen species nest in the NCA, and the remaining nine occur here during migration or in winter. Prairie falcons, golden eagles, red-tailed hawks, northern harriers, and American kestrels are the most common diurnal species. Several owl species are also common, including the barn owl, great horned owl, long-eared owl, short-eared owl, western screech owl, and burrowing owl. Of the 16 nesting raptor species, 10 are year-round residents. Winter visitors include the bald eagle, rough-legged hawk, sharp-shinned hawk, and Cooper's hawk.

Habitat:

The proximity of the Snake River's vertical canyon cliffs to the abundant prey of the Snake River Plain has created a unique raptor habitat in North America. This one of a kind habitat has been recognized by Congress in its designation as a National Conservation Area and by the American Bird Conservancy in its designation as a Globally Important Bird Area.

Raptors use diverse habitats in the NCA, nesting in three distinct zones: the cliffs, the uplands above the canyon, and the riparian areas adjacent to the Snake River. Riparian habitats are limited occurring in narrow bands along the Snake River and several small streams. Trees in riparian areas are important nesting and roosting habitat for several raptors and are hunting habitat for some, including species found there only in the winter. Long-eared owls, northern harriers, western screech-owls, and saw-whet owls are the raptor species that nest in riparian areas of the Snake River.

Finding

The remarkable wildlife values (birds of prey) associated with this portion of the Snake River has been recognized since the 1950's. These same values lead to its first congressional designation as a Natural Area in 1972 and as a National Conservation Area in 1994. The unique raptor habitat and population constitutes an outstandingly remarkable wildlife value.



Cultural /Prehistory (C)

Criteria for Outstandingly Remarkable Value Rating

The river, or area within the river corridor, contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must have unique or rare characteristics or exceptional human interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; and/or may have been used by cultural groups for rare sacred purposes. Many such sites are listed on the National Register of Historic Places, which is administered by the NPS.

Evaluation of the Present Situation

The Snake River Canyon corridor contains hundreds of sites that indicate evidence of use or occupation by Native Americans. Some of these sites have unique or rare characteristics, and some exhibit exceptional human interest values. Many of the cultural resource sites have regional and national importance for interpreting prehistory and some are important because they represent where a culture or cultural period was first identified or described. A number of sites have indications that they were used by more than one cultural group concurrently. It is also believed by researchers that some sites contain traditional cultural properties (TCPs) and exist in the corridor for sacred or ceremonial purposes.

The lower elevation and protective walls of the Snake River Canyon provide a milder winter climate for both humans and animals than the surrounding Boise and Owyhee Mountains. Spring and fall salmon runs once provided a ready food supply for inhabitants. As such, the Snake River Canyon has been used by different cultures, dating as far back as 9,000 years, including the Shoshone, Bannock, and Paiute Cultures in prehistory and Euro American cultures after 1811.

The river corridor contains many prehistoric site types including lithic scatters, caves, habitation sites, rockshelters, burials, and rock art sites left by Native Americans.

Wees Bar is a large boulder field in the Swan Falls Segment that contains hundreds of petroglyphs etched into the basalt boulders that were deposited by the Bonneville Flood. This petroglyph field is one of the largest concentrations in the Pacific Northwest. Like most petroglyph sites, the Wees Bar site is considered rare as a site type and exceptional for its size and number of glyphs. Early Euro American miners and homesteaders also inscribed names, initials, and dates on some boulders within the canyon and at nearby Halverson Bar.



The Guffey Butte-Black Butte Archaeological District was listed on the National Register of Historic Places (NRHP) in 1978 to protect over 200 known prehistoric sites in the area. The Archaeological District covers approximately 26,300 acres of public land extending upstream along the Snake River Canyon from Guffey Bridge to Grand View, which covers the Swan Falls, Jackass Butte, and a small part of the Grand View segments of the Snake River.

Schellbach Cave, a small cave in the Archaeological District excavated by Louis Schellbach in 1929, is recognized as the first archaeological expedition in Idaho. Well preserved artifacts excavated by Schellbach emphasized the importance of prehistoric fishing technology and the use of fish by early Canyon peoples.

The Snake River Corridor was probably simultaneously occupied by Shoshone and Northern Paiute Tribes. It is unclear just how much interaction or sharing of natural resources occurred. It is likely, however, that there were trade relations and intermarriages between the Tribes that helped foster cooperation and mutual sharing of resources. The cooperative relations probably changed as groups expanded or contracted based on resources, and personal strengths or personalities of their leaders. There was also an overlap of Euro-Americans and Native Americans using the Snake River Canyon from exploration in 1811 through the fur trade era, through the immigrant and homestead eras until the Indians were placed on the Fort Hall Indian Reservation and the Duck Valley Indian reservation by 1880.

The canyon was explored by the Astoria Party in 1812 after their canoes were capsized near Milner. Starting in 1842, thousands of immigrants traveled the South Alternate of the Oregon Trail that parallels the south side of the Snake River along the Indian Cove segment and then turns south of the Canyon below Grand View. Oregon Trail traffic diminished with the arrival of train tracks in the region during the 1870s and 1880s.

Camp Buford, which existed for less than a year, was established in 1866 as a US Cavalry Post to protect the emigrants along the Oregon Trail. The area began as a river crossing point and an emigrant camp spot at the confluence of the Snake and Bruneau Rivers. It is near this spot that Governor Caleb Lyon signed the Bruneau Indian Treaty of April 12, 1866, which Congress failed to ratify. These sites, located near the BLM's Cove Recreation Site, were later inundated by C.J. Strike Reservoir.

Fur trappers, Oregon Trail emigrants, gold miners, ranchers and homesteaders left traces from the 19th century and the early part of the 20th century. The site types include cattle and sheep herding camps, homesteads, town sites, miners' cabins, mine tailings and debris, stone monuments, ditches, depressions, and graves. Other historic period sites include transportation road networks, trails, ferry crossings, irrigation ditches, and historic trash dumps or scatters. At Wees Bar, the stone walls of a house built in 1902 still stand along with ruins of a dugout and other mining related artifacts and features.



Priest Ranch, which was the site of a ferry crossing, still exhibits leveled fields, apricot trees, ruins of an irrigation system of ditches, and a water wheel. The town site of Guffey was started on the north bank of the Snake River, but was moved to the south bank one mile downstream from present day Celebration Park after the Guffey Railroad Bridge was finished in 1897. The bridge is now owned by Canyon County and accommodates foot and equestrian traffic.

Swan Falls Dam, which was built in 1901, became the first dam on the Snake River and is now listed on the National Register of Historic Places. In 1993, the dam was remodeled and continues to generate electricity for Idaho Power Company.

The town of Grand View was established in 1889 as part of an irrigation and settlement project. The Grand View ferry operated until 1921 when a bridge was constructed.

Finding

The Snake River Canyon corridor through the four river segments contains abundant and significant evidence of prehistoric and historic cultures and values. However, these same values are replicated along other stretches of the Snake River outside of the NCA, and as such, are not considered unique or outstandingly remarkable from a regional perspective.

Other Similar Values

No other similar values have been identified for these four segments of the Snake River.

Outstandingly Remarkable Values Summary

The interdisciplinary team determined that the following river-related resources meet the criteria as outstandingly remarkable values: Wildlife and Recreation (all segments).

IV. Eligibility Determinations

It is the determination of the ID Team that all four river segments of the Snake River currently exist in a free-flowing condition and contain at least one outstandingly remarkable value and therefore meet the requirements for eligibility as a Wild and Scenic River (Table 2).



River Segment	Free Flowing Criteria Met	Outstandingly Remarkable Values	Eligible	Eligible Miles
Indian Cove	Yes	W, R	Yes	9
Grand View	Yes	W, R	Yes	17.5
Jackass Butte	Yes	W, R	Yes	9
Swan Falls	Yes	W, R	Yes	13

V. Classification Analysis

Potential Classifications

The W&SR Act and Interagency Guidelines provide the following direction for establishing preliminary classifications for eligible rivers. All eligible river segments must be tentatively classified and management measures instituted as necessary to ensure appropriate protection of the values supporting the eligibility and classification determinations. Actual classification is a Congressional determination.

Classification Categories

Section 2 (b) of the WSRA specifies three classification categories for eligible rivers. Classification is based on the type and degree of human developments associated with the adjacent lands as they exist at the time of the evaluation.

Wild rivers (W): Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic rivers (S): Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads. Scenic does not necessarily mean the river corridor has to have scenery as an outstandingly remarkable value; however, it means the river segment may contain more development than a wild segment and less development than a recreational segment.



Recreational rivers (R): Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past. Parallel roads or railroads, existence of small dams or diversions can be allowed in this classification. A recreational river area classification does not imply that the river will be managed or prioritized for recreational use or development.

Preliminary Classifications

Classification establishes a guideline for management until either a suitability determination or designation decision is reached. It is a determination based on existing characteristics of a river area resulting from human-caused change or level of development. Classification does not affect land use decisions related to private property.

The four Snake River segments are described below with the preliminary classification and are summarized in Table 3.

Indian Cove Segment (9 miles)

State Highway 78 parallels the initial stretch of the Indian Cove segment. This segment is a mixture of private and public lands. The private lands contain residential houses, out buildings, irrigated agricultural fields, and pasture lands. The segment is easily accessed at many locations and is paralleled, for a short portion, by a gravel road that accesses an irrigation pump station. A three mile canyon stretch is primarily a natural setting with road access at the canyon rim at several locations. The parallel Highway and other roads, the level of access, and level of human development along this segment warrants a tentative classification of "recreational."

Grand View Segment (17.5 miles)

The Grand View segment begins where Strike Dam Road crosses the Snake River just downstream from C.J. Strike Dam. Several gravel and paved roads parallel the Snake River in places between the Strike Dam Bridge and the town of Grand View where the river is crossed by State Highway 67. A majority of the land in this portion is privately owned with private residences, barns, and assorted out-buildings on the property. Much of the land is irrigated farmlands with evidence of human development. Downstream from the Highway 67 bridge paved and gravel roads either parallel the river or access the river for the rest of the segment. The south side of the river is all private land with human evidence being prominent. This segment meets the criteria for a recreational classification.



Jackass Butte Segment (9 miles)

The Jackass Butte Segment begins with gravel roads paralleling both sides of the river leading to private property. The primary views along this segment are of a natural setting. Although the private lands have residences and other developments associated with them, they do not dominate the scenery. Beyond this point the shoreline is mostly undeveloped with vehicle access at several locations. Additional private lands and developments exist along this segment further downstream. Although the level of shoreline development in this segment is less than the upstream Grand View segment, the segment does not meet the scenic classification description of "shorelines or watersheds still largely primitive and shorelines largely undeveloped . . . ", therefore, this segment would meet the criteria for a tentative classification of "recreational."

Swan Falls Segment (13 miles)

Beginning just below Swan Falls Dam, this segment has a maintained gravel road paralleling the north shoreline and a dirt road along the south. These roads follow the river for about five miles. This stretch of the river has many undeveloped campsites with fire-rings and several vault toilets are located at strategic places for recreational users. The four miles below the end of the road are managed for non-motorized experiences and the evidence of human development dates to the early 1900s. At approximately ten miles the river is again accessed by a gravel road at Celebration Park and crossed by an abandoned railroad bridge. Celebration Park is a developed county park with many facilities including a small campground, interpretive center, picnic area, and a concrete boat ramp with floating docks. Below the railroad bridge the land is primarily privately owned with residential houses and other buildings. This river segment is crossed by electric power lines at two locations. Although the views in this segment are primarily of natural settings, the level of access by roads, and other human developments warrant a tentative classification of "recreational."

Classification Summary

All four eligible river segments of the Snake River were determined to have tentative classifications as recreational river (Table 3).


River Segment	Tentatve Classification	Segment Miles	
Indian Cove	Recreational	9	
Grand View	Recreational	17.5	
Jackass Butte	Recreational	9	
Swan Falls	Recreational	13	

VI. Suitability Assessment

The third component of a W&SR study is the suitability assessment. It is designed to identify the possible impacts of designation, weighs various elements such as public access, long-term protection of resources, and traditional resource uses, and asks the basic question of would this be a worthy addition to the National WIId & Scenic River System. Additionally, the willingness of county, state and local landowners to participate in river corridor management is considered.

Criteria for Determining Suitability

In considering suitability, the criteria specified in Section 4(a) of the Wild and Scenic Rivers Act (listed below) provide the basis for assessment.

- Characteristics that do or do not make the river corridor a worthy addition to the WSR system
- · Current status of land ownership and uses in the area
- Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed if the river were designated
- · Public, state, local or other interests in designation or non-designation of the river
- Estimated costs of acquiring necessary lands and interests in lands, and of administering the river if designated
- · Ability of the agency to manage the river and protect identified values



- · Historical or existing rights that would be adversely affected by designation
- · Other issues and concerns identified in the land-use planning process

Indian Cove Segment

River Values/Characteristics

The Indian Cove segment is visually very characteristic of many sections of the Snake River throughout southern Idaho. The north side of the river is flanked by basalt cliffs rising 300-400 feet above the river. The south shore is open, flat terrain that has been settled or otherwise modified. At the downstream end of this segment a butte on the south creates a three mile long canyon that is slightly less than ½ mile wide (rim-to-rim). Many different species of raptors use the cliffs for nesting and forage over the surrounding desert and farmlands. Public access to the river is limited by private land on the south and is somewhat limited on the north by topography (i.e. steep cliffs).

Opportunities for viewing raptors and other wildlife within the river corridor are limited by legal public access. Raptor viewing is primarily from the main county and state roads which provide few safe opportunities to pull to the shoulder. The Indian Cove segment is at the upstream end of the NCA where the raptor habitat begins to lose its uniqueness as raptor nesting habitat.

Land Ownership and Uses

Land ownership is approximately 39 percent private land and 61 percent BLM land (public). Private lands are associated with the community of Indian Cove primarily on the south side of the river. The public land lies mainly on the more rugged north side of the river.

Public land use along this segment includes primarily recreational activities such as boat fishing, and waterfowl hunting. The canyon cliffs limit the amount of general dispersed recreation that occurs on the public land in the area. Several irrigation pump stations, (two located on public land), transport river water to adjacent and distant agricultural fields. The private lands are primarily residential farms and associated irrigated agriculture or livestock pastures.



Potential Uses of Land and Water Resources enhanced or foreclosed

This river segment ends at the backwaters of CJ Strike Reservoir and the river gradient is very low. These factors make the potential for new hydroelectric facilities not very feasible. However, the private lands have potential for new pump systems for local irrigation. Designation would preclude any new hydroelectric facilities within this segment and would also preclude any new diversions or structures which would impact private landowners. Potential surface disturbing activities would not be constrained by designation. Designation would not significantly enhance any land or water resources along this segment.

Interest in Designation

Local and regional environmental and conservation organizations have expressed positive interest in including all eligible segments of the Snake River in the National W&S River System. Local communities have not expressed interest in federal designation for the river.

Estimated Costs of Acquisition and Administration

Initial costs associated with designation would include mapping and printing documentation of the wild and scenic river process, layout, design, and publication of educational information about the new designations including brochures, website updates, and maps. Future costs would depend on the level of threats to river-related values and are foreseen to result from the need for regulatory and educational signing, patrol and enforcement, and biological or visitor use monitoring. Additional land acquisition cost would occur if any private landowners were willing to sell. Currently no parcels have been identified for acquisition.

Ability to Manage/Protect River Values

Current BLM management of the area as an NCA protects a majority of the shoreline miles, especially those cliff areas with raptor nest sites. Current limitations on recreation management for wildlife/raptor viewing are from topography and legal public access to the river and would not change with designation. Future potential threats to identified river related values are minimal.

Adverse Effects on Historical/Existing Rights

No adverse effects on historic or valid existing rights are expected as a result of designation of this segment as a recreational river.



Other Issues and Concerns

The intent of designation would be to preserve the identified river related wildlife and recreational values along this segment of the Snake River. NCA legislation provides protection for the raptors and their habitat. This would not change with or without designation. The major change in management would be prohibitions on new hydroelectric facilities and other diversions.

Grand View Segment

River Values/Characteristics

The Grand View segment is characterized by a narrow riparian area surrounded by open, rural countryside. This area is similar to other stretches along the Snake River throughout southern Idaho.

Although the distant views of the Owyhee Mountains to the south and canyon rim to the north are nice, they are not unique or exceptional. The wildlife values (raptor habitat) associated with this segment are mainly foraging habitat and not as nesting habitat.

The Grand View segment lies in an area where the unique raptor habitat areas move away from the river and are generally outside the ¼ mile corridor. Ten miles of this 17.5 mile segment lie outside the official boundary of the NCA. The raptor nesting areas on BLM land within the river corridor are within the NCA and are currently protected by legislation.

Land Ownership and Uses

Land ownership is approximately 82 percent private land, 17 percent BLM land (public), and 1 percent state land.

Private land is associated with the town of Grand View, Idaho. Private land uses include residential houses and farms, irrigated agriculture, gravel pits, and livestock pastures.

The public land along this segment is situated at three locations – all on the north side or in (island) the river. Gold Isle (approximately 118 acres) is located at river mile 487 and was acquired for wildlife habitat in a 1996 land exchange. The Ted Trueblood Wildlife Management Area fronts 1.5 miles of Snake River shoreline. This area is also primarily a wildlife management area where waterfowl hunting is allowed. The remaining public land (approximately 600 ac.) gets a variety of recreation uses, primarily fishing and hunting.



Potential Uses of Land and Water Resources enhanced or foreclosed

The private land along this segment is a historic floodplain characterized by low, flat farmland and pastures. Private lands not currently in irrigated agriculture have potential for new pump systems for local irrigation. Designation would preclude any new hydroelectric facilities within this segment and would also preclude any new diversions or structures which would impact private landowners. Potential surface disturbing activities would not be constrained by designation. Designation would not significantly enhance any land or water resources along this segment.

Interest in Designation

Local and regional environmental and conservation organizations have expressed positive interest in including all eligible segments of the Snake River in the National W&S River System. Local communities have expressed either no interest or negative interest in designation. Landowners along this segment have not expressed interest in national designation for the river and have historically opposed any type of national designation.

Estimated Costs of Acquisition and Administration

Initial costs associated with designation would include mapping and printing documentation of the wild and scenic river process, layout, design, and publication of educational information about the new designations including brochures, website updates, and maps. Future costs would depend on the level of threats to river-related values and are foreseen to result from the need for regulatory and educational signing, patrol and enforcement, and biological or visitor use monitoring. Additional land acquisition cost would occur if any private landowners were willing to sell. Currently no parcels have been identified for acquisition.

Ability to Manage/Protect River Values

Current BLM management is very limited due to the small amount of public land. Current limitations on recreation management for wildlife/raptor viewing are from limited river access due to private ownership and would not change with designation. Future potential threats to identified river related values are minimal.

Adverse Effects on Historical/Existing Rights

No adverse effects on historic or valid existing rights are expected as a result of designation of this segment as a recreational river.



Other Issues and Concerns

The intent of designation would be to preserve the identified river related wildlife and recreational values along this segment of the Snake River. NCA legislation provides protection for the raptors and their habitat on the limited amount of BLM administered lands along this segment. This would not change with or without designation. The major change in management would be prohibitions on new hydroelectric facilities and other diversions primarily on private lands.

Jackass Butte Segment

River Values/Characteristics

The original designation of the Snake River Birds of Prey Natural Area in 1971 (27,000 acres) recognized the Snake River canyon as a unique raptor habitat. This designation started at the upstream end of the Jackass Butte segment and continued downstream to the end of the Swan Falls segment.

The Jackass Butte segment begins at the downstream end of the very open environment of the Grand View segment, and includes a river section bordered by large buttes and canyon rim on the south and canyon rim on the north. The many side canyons along this stretch provide abundant nesting opportunities for a variety of raptors. Additionally, as one moves downstream, access to this remote section of the river is more difficult and provides outstanding opportunities for viewing raptors in a more natural habitat with minimal contacts with other people. This combination of high numbers of nesting raptors and opportunities for seeing raptors in a natural habitat is not currently represented in the National W&SR System.

Land Ownership and Uses

Land ownership is approximately 35 percent private land, 63 percent BLM land (public), and 2 percent state land. The private lands are primarily associated with several large farms and ranches primarily in irrigated agriculture or pasture land. The state land is in an undeveloped, natural condition. The public land is undeveloped and is used for a variety of dispersed recreational activities.

Potential Uses of Land and Water Resources enhanced or foreclosed

This river segment has a very low gradient and no rapids or other river obstacles. This creates opportunities for beginner and novice river floaters to experience the river canyon and its unique wildlife/raptor viewing opportunities. These opportunities could be further enhanced



with the additional recognition of designation. This segment ends at the backwaters of Swan Falls Reservoir which combined with the low gradient, makes the potential for new hydroelectric facilities not very feasible. However, the private lands have potential for new pump systems for local irrigation. Designation would preclude any new hydroelectric facilities within this segment and would also preclude any new diversions or structures which would impact private landowners. Potential surface disturbing activities would not be constrained by designation.

Interest in Designation

Local and regional environmental and conservation organizations have expressed positive interest in including all eligible segments of the Snake River in the National W&S River System. Local communities have expressed both positive and negative interest in designation.

Estimated Costs of Acquisition and Administration

Initial costs associated with designation would include mapping and printing documentation of the wild and scenic river process, layout, design, and publication of educational information about the new designation including brochures, website updates, and maps. Future costs would depend on the level of threats to river-related values and are foreseen to result from the need for regulatory and educational signing, patrol and enforcement, and biological or visitor use monitoring. Additional land acquisition cost would occur if any private landowners were willing to sell. Currently no parcels have been identified for acquisition.

Ability to Manage/Protect River Values

Current BLM management of the area as a NCA protects a majority of the shoreline miles, especially those cliff areas with raptor nest sites. Current recreation management for wildlife/raptor viewing is not limited by public access. Future potential threats to identified river related values are minimal.

Adverse Effects on Historical/Existing Rights

No adverse effects on historic or valid existing rights are expected as a result of designation of this segment as a recreational river.

Other Issues and Concerns

The intent of designation would be to preserve the identified river related wildlife and recreational values along this segment of the Snake River. NCA legislation provides protection for the raptors and their habitat. This would not change with or without designation. The major



change in management would be prohibitions on new hydroelectric facilities and other diversions which would detract from the users' river experience.

Swan Falls Segment

River Values/Characteristics

The Swan Falls segment is visually similar to several other sections of the Snake River in southern Idaho. The river flows within a basalt canyon with cliffs rising between 400 - 600 feet above the river with a width varying from $\frac{1}{2}$ to $\frac{1}{2}$ mile.

The original designation of the Snake River Birds of Prey Natural Area in 1971 (27,000 acres) recognized the Snake River canyon as a unique raptor habitat. This designation started at the upstream end of the Jackass Butte segment and continued downstream to the end of the Swan Falls segment. While the NCA as a whole contains the highest concentration of nesting birds of prey in North America, the Swan Falls segment has the densest concentration of nesting raptors within the NCA. For example, prairie falcons, which normally maintain a nesting territory measured in miles, are known to nest within 200 yards of each other.

The Swan Falls segment also is the most accessible portion of the Snake River canyon to the general public. The Western Heritage National Scenic Byway terminates in the Snake River canyon at the upstream end of the Swan Falls segment. The combination of consistently high numbers of nesting raptors and the high probability of seeing raptors for a large number of visitors creates a unique wildlife and recreational opportunity which is not currently represented in the National W&SR System.

Land Ownership and Uses

Land ownership is approximately 22 percent private land, 74 percent BLM land (public), and 5 percent state land.

Private land at the upstream portion of the segment is owned by Idaho Power Company (IPC) and is associated with the Swan Falls Dam project. The majority of the IPC land is undeveloped and is managed in conjunction with the BLM for raptors and raptor habitat protection. These lands are often mistaken for public land. Another private land section contains Celebration Park, which is a county park dedicated to interpreting the archeological and cultural history of the river and canyon. Other private lands are located at the downstream end of the segment and include residences and open pastures.

The state land along this segment is undeveloped.



The public land along this segment is important nesting habitat in the cliffs but also provides recreational opportunities in the canyon along the river. Recreational uses are typically dispersed in nature and include activities such as fishing, camping, and bird watching.

Potential Uses of Land and Water Resources enhanced or foreclosed

The Western Heritage National Scenic Byway terminates in the Snake River canyon at the upstream end of the Swan Falls segment. Designation of this segment could enhance the attention given to and the attractiveness for visiting this Scenic Byway. This additional attention could also enhance the economic development of the gateway community of Kuna by the increased visitation.

This river segment begins below Swan Falls Dam and continues to the western NCA boundary. The river gradient is very low along this segment. The potential for new hydroelectric facilities does not exist. One irrigation pump system exists along this segment which supplies water to a farm approximately one mile from the river. The potential for new pump systems for local irrigation do exist along the segments of private land. Designation would preclude any new hydroelectric facilities within this segment and would also preclude any new diversions or structures which would impact private landowners. Potential surface disturbing activities would not be constrained by designation.

Interest in Designation

Local and regional environmental and conservation organizations have expressed positive interest in including all eligible segments of the Snake River in the National W&S River System. Local communities have expressed positive interest in designation. Negative comments for designation have been minimal.

Estimated Costs of Acquisition and Administration

Initial costs associated with designation would include mapping and printing documentation of the wild and scenic river process, layout, design, and publication of educational information about the new designations including brochures, website updates, and maps. Future costs would depend on the level of threats to river-related values and are foreseen to result from the need for regulatory and educational signing, patrol and enforcement, and biological or social monitoring. Additional land acquisition cost would occur if any private landowners were willing to sell. Currently no parcels have been identified for acquisition.



Ability to Manage/Protect River Values

Current BLM management of the area as an NCA protects a majority of the shoreline miles, especially those cliff areas with raptor nest sites. Current recreation management focuses on opportunities for wildlife/raptor viewing and dispersed activities along the river. Future potential threats to identified river related values are minimal.

Adverse Effects on Historical/Existing Rights

No adverse effects on historic or valid existing rights are expected as a result of designation of this segment as a recreational river.

Other Issues and Concerns

The intent of designation would be to preserve the identified river related wildlife and recreational values along this segment of the Snake River. NCA legislation provides protection for the raptors and their habitat. This would not change with or without designation. The major change in management would be prohibitions on new hydroelectric facilities and other diversions.

Suitability Summary

The uniqueness of the NCA lies in its raptor habitat and the educational opportunities therein. As one moves both upstream and downstream from the area, certain elements of the habitat change just enough that the unusual concentration of nesting raptors, and the opportunities to see them diminishes.

These characteristics are best exemplified along the Jackass Butte and Swan Falls segments of the Snake River which make up what was the original designation of the Snake River Birds of Prey Natural Area in 1971. These two river segments provide unique raptor habitat in addition to the unique recreational opportunity of easily viewing large numbers of raptors. When the general public is asked about the "Bird of Prey Area" it is these river segments that typically come to mind. The community of Kuna and many community organizations have expressed positive interest in national designations that could potentially assist in the economic development of their community.

Although the Jackass Butte and Swan Falls segments currently are protected through the congressional designation as a national conservation area, these two segments would be worthy additions to the National W&SR System due to the unique raptor habitat along the Snake River and raptor viewing opportunities not currently represented.



Although much of the land along the Grand View segment is used as foraging habitat by raptors, most of this segment lies outside the NCA boundary and is in private ownership. Local communities and landowners have not expressed interest in designation and historically oppose all federal designations. This would make management of this segment as a Wild and Scenic river very difficult.

While a majority of the Indian Cove segment is in public ownership, public access to the river is limited by topography in many areas and by private land in others. The unique raptor nesting habitat along this stretch has permanent protection under the NCA legislation. Management of this stretch of river under the Wild and Scenic Rivers Act would be similar to the Grand View segment. Local interest in designation is minimal and opposition to limitations due to designation is a major concern.

It is the determination of the ID Team that the Jackass Butte and Swan Falls segments of the Snake River be recommended suitable for inclusion in the National Wild and Scenic Rivers System. Both segments are tentatively classified as recreational. Until Congress decides whether to add these river sections to the system, the BLM will manage them to preserve the river-related values identified in this report.

The ID Team has also determined that the Grand View and Indian Cove segments of the Snake River be recommended as not suitable for inclusion in the National Wild and Scenic Rivers System. The public lands along these two river segments will continue to be managed to protect the unique raptor populations and adjacent raptor habitat under the NCA legislation.

VII. Protective Management for Suitable River Segments

When a river segment is determined to be eligible and given a tentative classification, its identified outstandingly remarkable values shall be afforded adequate protection, subject to valid existing rights, and until the eligibility determination is superseded, management activities and authorized uses shall not be allowed to adversely affect either eligibility or the tentative classification from a wild area to a scenic area or a scenic area to a recreational river area.

Specific management prescriptions for all eligible river segments will provide protection in the following ways:

1. Free-flowing values: The free-flowing characteristics of the eligible river segments cannot be modified to allow stream impoundments, diversions, and/or channelization to the extent the BLM is authorized under law.

 River Related Values: Each segment shall be managed to protect identified outstandingly remarkable values and, to the extent practicable, such values shall be enhanced.



3. Classification Impacts: Management and development of an eligible river segment and its corridor cannot be modified, subject to valid existing rights, to the degree that its eligibility or tentative classification would be affected. Should a non-suitable determination be made in the RMP process, then the river shall be managed in accordance with management objectives as outlined in the resource management plan.

VIII. List of Preparers

lame Title		Responsibility	
Larry Ridenhour	Outdoor Recreation Planner	Recreation, Scenic	
John Doremus	Wildlife Biologist	Wildlife, Fish	
Dean Shaw	Archaeologist	Cultural History	
Bob Harrison	Geologist	Geology	



APPENDIX 15. ROS CLASSIFICATIONS

Recreation Opportunity Spectrum

The Recreation Opportunity Spectrum (ROS) is a behavioral approach developed for land managers to help them identify and provide a diversity of recreation opportunities on public lands. The ROS approach recognizes that people seeking certain types of recreation are looking for more than just a generic place to do their activities. Instead, people are seeking a complex *experience* that derives from a matrix of related factors. People are seeking opportunities to engage in their preferred activities in preferred *physical, social and managerial* settings. ROS is a zoning tool that allows managers to describe and provide a range of recreation experiences to a diverse public, recognizing that no one piece of land can provide the entire recreation spectrum at once.

The ROS identifies a spectrum of recreation opportunities on a continuum ranging from *Primitive* to *Semi-primitive non-motorized* to *Semi-primitive motorized* to *Roaded Natural* to *Rural* to *Urban/developed*. In the Bruneau Planning Unit, most of the area (57%) is currently classified as Semi-primitive motorized. 28% of the area is currently classified as Semi-primitive non-motorized, 15% of the area is Roaded natural, less than 12% is closed. Though no Primitive, Rural or Urban/developed acreage currently exists in the Bruneau Planning Unit, this RMP proposes creating a Primitive area by closing some roads adjacent to the major canyon systems under one of the four alternatives.

Each of these classifications has differences in the sorts of settings supplied. For example, in the *Primitive* classification the appropriate social setting calls for encounters with fewer than 6 parties a day on trails or streams and fewer than 3 parties a day visible from campsites; the physical setting calls for an area of a least 5,000 acres no closer than 1 mile from all roads or motorized use; the managerial setting calls for a limited or absent enforcement presence, recreation users assuming most responsibility for their own health and safety, and rules, regulations, signs and facilities kept to the minimum necessary. In the Bruneau Planning Unit, the Primitive area envisioned would be located in remote deep canyon and adjacent rim areas in and around existing WSAs.

In the *Roaded natural* classification, the appropriate social setting allows for "moderate to high" contact on roads, "low to moderate" contact on trails; the physical setting establishes no requirements for distance from low standard roads or trails, and lies within 1 mile of improved roads; the managerial setting calls for more intensive management with frequent encounters with enforcement or regulatory personnel, much more frequent interaction with other parties, more intensive facility development such as signing, restroom, parking and staging areas, trail building and grooming, as well as reasonable access to emergency medical responders in case of accidents. In the Bruneau Planning Unit, the largest amount of area proposed to be managed as Roaded Natural under each alternative is found in the low elevation desert flats and sand washes of the Owyhee Front, where OHV activities are the dominant recreational activity.

ROS is a broad zoning approach that attempts to identify large polygons of land where certain kinds of recreation experiences will likely be available to the public. The classifications are tentative and are expressed in terms of a range of percentages rather than absolute acreage or trail/road miles, because the Bruneau Planning Unit will also conduct a route designation process related to, but not contained within the RMP. This process will identify and classify each route and determine whether to keep it open, close it, or in some way limit its use. Though the route designation process will be guided and influenced by ROS, it is currently impossible to determine exactly what the route network that is finally adopted will look like, and likewise it is also impossible to predict what the ROS polygons will ultimately be.

For that reason, the percentage of land in the Planning Unit allocated to each ROS classification in each Alternative is expressed as a possible range (e.g. 20-30% or 40-60%), rather than an absolute value.

Snake River Birds of Prey NCA Proposed RMP/FEIS

Appendices

Physical		Semi-Primitive	Semi-Primitive Mo-			
Setting	Primitive	Non-Motorized	torized	Roaded Natural	Rural	Urban
Remoteness	3 miles from any	1 mile from inter-	At least ¹ / ₄ mile from	May include areas	No distance criteria	No distance criteria
	interstate, county or	state, county or BLM	interstate or state	within 1 mile of in-		
	BLM system roads	system roads, or iso-	roads	terstate, state, county		
	or isolated by topog-	lated by		or BLM roads		
	raphy	topography				
Minimum Size	5,000 acres	2,000 acres	1,000 acres	No size criteria	No size criteria	No size criteria
Evidence of	Essentially unmodi-	Natural setting with	Natural setting with	Natural setting with	Modified natural	Structurally
Humans	fied natural envi-	some subtle modifi-	moderate	easily noticed to	setting with domi-	dominated setting,
	ronment	cations	alterations	dominant	nant modifications	with natural
				modifications	continually	elements
					noticeable	subordinate.
Social Set- ting						
Ulsan Dansiter	I and there 6 anation	I and than 15 montion	I am to modometo	Madamata ta biah	Ilich function of	Moon acceptant
User Delisity	Less utait o parties	Less utait 10 parties	LUW IO IIIOUCIAIC	fragmentate to might	mign nequency or	ncal coustant
	on trails Less than 3	on trails Less than 6	other narties	encounters with	other narties	other narties
	parties encountered	parties encountered		other parties.		
	in	in camping areas.		4		
	camping areas.					
Managerial Setting						
Managerial	Very low levels of	Onsite	Onsite	Onsite management	Onsite management	Onsite
Presence	onsite management	management is pre-	management is pre-	is noticeable, but	is obvious, fre-	management is
		sent, but subtle.	sent, but subtle.	designed to blend	quently blending	obvious and
				with the natural	with the natural envi-	numerous.
				environment.	ronment.	

Appendix 15. ROS Classifications

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APPENDIX 16. LIST OF PREPARERS

Name and Title	RMP Responsibility	Experience	Education
	BLM Interdisciplinary	y Planning Team	
Mike Austin	Lands and Realty	BLM 28 years	B.B.A. Business Admini-
Realty Specialist	Utility Corridors	Other 9 years	stration and Management,
			Boise State University
Mike Barnum	Livestock Grazing	BLM 3 years	B.S. Agriculture
Rangeland Manage-	Upland Vegetation	Other 34 years	M.S. Plant Science
ment Specialist			California State University
Tim Carrigan	Fish and Wildlife	BLM 22 years	B.S. Wildlife Management
Wildlife Biologist	Special Status Animals	Other 5 years	B.S. Range Management
			Humboldt State University
John Doremus	Fish and Wildlife	BLM 30 years	B.S. Biology
Wildlife Biologist	Special Status Animals		College of Idaho
Bob Harrison	Mineral Resources	BLM 13 years	B.S. Geology
Geologist		Other 25 years	Boise State University
Frank Jenks	Recreation	BLM 27 years	B.A. Anthropology
Outdoor Recreation	Visual Resources		University of Toledo
Planner	Wild & Scenic Rivers		
Mary Jones	Writer/Editor	BLM 12 years	Northern Virginia
Writer/Editor		Other 18 years	Community College and
			Boise State University
Bob Mallis	Mineral Resources	BLM 22 years	B.S. Geology
Geologist		Other 18 years	Virginia Polytechnic
			Institute
John Martin	Social and Economics	BLM 26 years	B.S. Agricultural Business
Economist		Other 9 years	Management
			California Polytechnic State
			University;
			M.S. Agricultural and
			Natural Resource
			Economics,
	X 7	DIM 16	University of Nevada Reno
Matt McCoy	Vegetation	BLM 16 years	B.S. Fisheries Science
NEPA Specialist	Fish and Wildlife		Utan State University
			M.S. Wildlife Management
	CIQ Querra ent	DIM 20	Rumboldt State University
Jell Mork	GIS Support	BLM 20 years	B.S. Forest Resource
GIS Specialist		Other 3 years	Nanagement
			B.S. Forest Products
			Liniversity of Idaha
Mike O'Donnall	RMP Team Load	BIM 16 years	BLAEPLandsonno
Planning and		Others 12 years	Architecture
Finite and Finite Finit		Oulers 15 years	Litah State University
Coordinator			

Name and Title	RMP Responsibility	Experience	Education	
Larry Ridenhour	Recreation	BLM 14 years	B.S. Forestry	
Outdoor Recreation	Visual Resources	5	North Carolina State	
Planner	Wild & Scenic Rivers		University	
			M.S. Recreation	
			Management	
			University of Montana	
Irene Saphra	Fire and Fuels	BLM 22 years	B.S. Forest Biology	
Fuels Specialist	Vegetation		Syracuse University	
-			M.S. Fire Ecology	
			University of Idaho	
Paul Seronko	Soil, Water, Air and	BLM 26 years	B.S. Soil Science	
Soil Scientist	Hazardous Materials	Other 2 years	University of Wisconsin	
Dean Shaw	Cultural and	BLM 13 years	B.A. Anthropology	
Archaeologist	Tribal Resources	Other 1 year	Boise State University	
Mark Steiger	Vegetation	BLM 7 years	B.S. Wildlife Management	
Botanist	Special Status Plants	Other 9 years	M.A. Mycology	
	*	2	Humboldt State University	
John Sullivan	NCA Manager	BLM 28 years	B.S. Range Management	
NCA Manager			Oregon State University	
			M.S. Range Science	
			Texas Tech University	
Allen Tarter	Riparian and Water Quality	BLM 15 years	B.S. Biology	
Riparian Specialist			Boise State University	
Cooperating	Agency Representatives on t	he Interdisciplina	ary Planning Team	
Charles Chambers	Idaho Army National Guard	Army 32 years	B.A. Sociology	
Special Projects	-	IDARNG 8	Idaho State University	
Officer		years	M.S. Strategic Planning	
Colonel (Retired)			US Army War College	
Jim Desmond	Interdisciplinary Team	Army 30 years	B.A. Education	
Director, Owyhee	Member	Owyhee	University of Northern	
County Natural		County 6 years	Colorado	
Resources Committee				
Marjorie McHenry	Idaho Army National Guard	IDARNG 18	B.S. Biological Sciences	
IDARNG Natural		years	Southwestern College	
Resources Manager			M.S. Environmental	
			Ecology	
			Emporia State University	
URS Contract Staff				
Charles Baun	Upland Vegetation	URS 3 years	B.S. Biology/Chemistry	
Range Ecologist	Livestock Grazing	BLM 2 years	Albertson College of Idaho	
	Idaho Army National Guard	Other 4 years	M.S. Natural Resource	
			Management	
			University of Idaho	
Jarod Blades	Fish and Wildlife and	URS 1 year	B.S. Biology in	
Biologist	Special Status Animals	BLM 3 years	Environmental Sciences	
		Other 2 years	M.S. (in progress) Natural	
			Resource Management	
		1	University of Idaho	

Name and Title	RMP Responsibility	Experience	Education
Suzy Cavanagh	Project Coordination, Soils,	URS 5 years	B.S. Geology
Assistant Project	Mineral Resources, Air	Other 5 years	M.S. Geology
Manager, Geologist	Quality, Lands and Realty,		Boise State University
	Recreation, Transportation		
Brandt Elwell	GIS	URS 2 years	B.S. Geography
GIS Analyst		Other 10 years	M.S. Forest Resources
			University of Idaho
Aaron English	Project Management	URS 4 years	B.S. Wildlife Biology
Project Manager	Fish and Wildlife and	Other 10 years	The Evergreen State
Wildlife Biologist	Special Status Animals		College
NEPA Specialist			
Dan Green	Socio-economic Analysis	15 Years	Ph.D. Forest Resources
Economist			University of Idaho
Hank Robinson	Socio-economic Analysis	30 Years	Ph.D. Economics
Economist			University of Utah.
Charlie McKetta	Socio-economic Analysis	30 Years	Ph.D. Forest Management
Economist			Economics
			University of Washington.
Amy Jerome	Lands and Realty	URS 2 years	B.S. Environmental Science
Realty Specialist		Other 6 years	M.B.A. Business
			Bellevue University
Kavi Koleini	Fire and Fuels	URS 1 year	B.S. Environmental
Biologist	Visual Resources	BLM 4 years	Science
	Water Quality and Riparian	Other 1 year	Humboldt State University
Dautis Pearson	Recreation	URS 6 years	B.A. Biology
Land Use Planner	Transportation	Other 14 years	Boise State University
Mark Plew	Cultural and	Professor and	PhD. Archeology
Cultural and	Tribal Resources	Chair of the	Indiana University
Tribal Resources		Dept. of	
		Anthropology	
		at BSU	
Dave Schwarz	Technical Editor	URS 2 years	Ph.D. Geology
Technical Editor		Other 18 years	University of Iowa
Sandra Steele	Project Administration	URS 17 years	B.B.A. Marketing
Project Administrator		Other 3 years	Boise State University

Supporting Specialists

BLM – Boise District

Joe Bucher, Supervisory Geographic Information Specialist MJ Byrne, Public Affairs Officer Jean Fend, Resource Advisor Ray Pease, Rangeland Management Specialist Glen Secrist, Former District Manager Jerry Taylor, District Manager Rosemary Thomas, Four Rivers Field Office Manager Joan Watkins, Budget Assistant Kimberly Werven, Administrative Records Specialist

BLM - Idaho State Office John Augsburger, Wildlife Biologist K. Lvnn Bennett, Idaho State Director Kim Buxton, BLM Website Coordinator Jon Foster, Supervisory Resource Manager Ervin Cowley, Rangeland Management Specialist Karl Gebhardt, Hydrologist/Environmental Engineer Susan Giannettino, Deputy State Director for Resource Services Terry Heslin, Outdoor Recreation Planner Kurt Kotter, Associate State Director Stan McDonald, Archaeologist Tom Miles, Rangeland Management Specialist Barry Rose, Supervisory Public Affairs Specialist Roger Rosentreter, Botanist Signe Sather-Blair, Wildlife Biologist Kay Schiepan, Outdoor Recreation Planner Gary Wyke, Planning Coordinator

Idaho Army National Guard Jake Fruhlinger, Archaeologist Nick Nydegger, GIS Manager Dana Quinney, Natural Resource Specialist Stacey Shaffer, GIS Specialist Jay Weaver, Natural Resources Technician

Others

Chad Gibson, Owyhee County Karen Steenhof, US Geological Survey Michael Kochert, US Geological Survey

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APPENDIX 18. MAPS

Information and Generation of the NCA RMP Maps

General Location:

The Snake River Birds of Prey Resource Management Plan occurs in the following general area:

Between 42 Degrees, 45 Minutes and 43 Degrees, 30 Minutes Latitude. Also between -115 Degrees, 22 Minutes, 30 Seconds and -116 Degrees, 45 Minutes Longitude.

Disclaimer for all the maps in this RMP document:

No Warranty is made by the Bureau of Land Management (BLM) for use of this data for purposes not intended by BLM. BLM does not warranty the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

Data Sources:

- The source data files used in data analysis and map production were collected at 1:24,000 scale whenever possible. Some exceptions are listed here. Data accuracy adheres to the national map accuracy standards. Data at 1:24,000 scale, when compared to the true horizontal ground position is +- 40 feet accurate. The differentially corrected GPS data, when compared to the true horizontal ground position is +- 17 feet (5 meters) accurate.
- Background data source files were acquired from several sources. United States Geological Survey (USGS) Digital Line Graphs (DLGs) and Digital Raster Graphs (DRGs) at 1:24,000 scale were used. Data was assembled in May 2001. Data used was the best available to the RMP team and was current at the time the initial maps were made. Resource Specialists serving on the RMP team provided expertise and direction for the makeup of the digital data that was used for GIS data analysis and the RMP maps. For ownership and section lines, BLM Geographic Coordinate Database (GCDB) files created at the Idaho State Office were used. Data is current to December 2003.
- Global Positioning System (GPS) data used was collected using a Trimble Geo 3 unit and then differentially corrected before it was converted to GIS data. Data is current to December 2003.
- Vegetation data was created from IKONOS (1 meter resolution) and Landsat (30 meter resolution) satellite images from 2000 and 2001. Vegetation was classified using ERDAS software. Staff from the Pacific Northwest National Laboratories (PNNL) assembled the data.
- Electric transmission line data was created by the Idaho Power Company and is current to May 2001. This data is 1:100,000 scale.
- Special Status Plants data is from the Idaho Fish and Game Department and the Conservation Data Center (CDC) database. Data is current to December 2004.
- Soils data is from the National Resources Conservation Service (NRCS) Soil Survey Geographic Database (SURRGO) and is current to September 2003.

- Slope data is from the USGS National Elevation Dataset (NED) and has a 30-meter resolution. Data is current to May 2001.
- Detailed data within the Orchard Training Area (OTA) was provided by the GIS staff at the Idaho National Guard at Gowen Field.
- Existing Visual Resource Management (VRM) and Recreational Opportunity Spectrum (ROS) data was digitized from mylar overlays at 1:100,000 scale by the Interior Columbia Basin Ecosystem Management Project (ICBEMP) in 1994.
- Town locations were digitized from 1:100,000 scale data at the Boise District. Data is current to May 2001.
- Metadata collected is consistent with the Federal Geographic Data Committee Standard (FGDC).

MANAGEMENT AREA MAP



CULTURAL MAP



FIRE MAP



GRAZING MAPS















IDAHO ARMY NATIONAL GUARD (IDARNG) MAPS











LANDS AND REALTY MAPS

















MINERALS MAP



PLANNING MAPS

Planning Map 1



Planning Map 2



Planning Map 3



RECREATION MAPS


























SOILS MAP



SPECIAL STATUS PLANTS MAP



TRANSPORTATION MAPS











VEGETATION MAPS















VISUAL RESOURCE MANAGEMENT (VRM) MAPS









WATER QUALITY MAP



WILDLIFE MAPS

Wildlife Map 1



Wildlife Map 2



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APPENDIX 19. GLOSSARY (TERMS, ACRONYMS, AND ABBREVIATIONS)

Acronyms

ACEC – Area of Critical Environmental Concern

ACHP – Advisory Council on Historic Preservation

ADC – Animal Damage Control

AML – Appropriate Management Level

AMR – Appropriate Management Response

ARPA – Archaeological Resources Protection Act

ATV - All Terrain Vehicle

AUM – Animal Unit Month

BLM – Bureau of Land Management

BMP – Best Management Practice

CAA – Clean Air Act

CCA - Candidate Conservation Agreement

CEQ - Council on Environmental Quality

CFR – Code of Federal Regulations

CRMP – Cultural Resource Management Plan or, Coordinated Resource Management Plan

CRPP – Cultural Resource Protection Plan

CWA – Clean Water Act

DEQ – Department of Environmental Quality

DFC – Desired Future Condition

DoD – Department of Defense

DPC – Desired Plant Community

DRMP – Draft Resource Management Plan

EA – Environmental Assessment

EIS - Environmental Impact Statement

EPA – Environmental Protection Agency

ERMA – Extensive Recreation Management Area

ESA - Endangered Species Act

ESI - Ecological Site Inventory

ESR – Emergency Stabilization and Rehabilitation

FFR – Fenced Federal Range

FLPMA – Federal Land Policy and Management Act

FMAP – Fire Management Activity Plan

FRFO – Four Rivers Field Office

GB-BB – Guffey Butte-Black Butte

GFTA – Gowen Field Training Area

GIS – Geographic Information Science

GRA – Geographical Reference Area

GMA – Groundwater Management Area

HMA – Herd Management Area

HMP – Habitat Management Plan

ICG – Intergovernmental Coordination Group

ID Team – Interdisciplinary Team

IDANG – Idaho Air National Guard

IDARNG -- Idaho Army National Guard

IDF&G – Idaho Department of Fish and **PNC** – Potential Natural Community Game **R&PP** – Recreation and Public Purposes **IDPR** – Idaho Department of Parks and (Act) Recreation RAC – Resource Advisory Council **IDL** – Idaho Department of Lands RMP – Resource Management Plan **ISO** – Idaho State Office **ROD** – Record of Decision LUP – Land Use Plan **ROS** – Recreation Opportunity Spectrum MFP – Management Framework Plan S&G(s) – Standards and Guidelines NAGPRA – Native American Graves Protection Act SCORP - Statewide Comprehensive Outdoor **Recreation Plan** NCA - National Conservation Area **SHPO** – State Historic Preservation Office(r) **NEPA** – National Environmental Policy Act **SIP** – State Implementation Plan NGB - National Guard Bureau **SOP** – Standard Operating Procedure **NHPA** – National Historic Preservation Act **SRBOPNCA** – Snake River Birds of Prey **NMFS** – National Marine Fisheries Service National Conservation Area NOA – Notice of Availability **SRMA** – Special Recreation Management Area **NOI** – Notice of Intent **SRP** – Special Recreation Permit NPS – National Park Service (Department of Interior) **SSP** – Special Status Plants NRCS - Natural Resource Conservation **SSS** – Special Status Species Service **SSSA** – Special Status Species Animals NRHP – National Register of Historic Places T&E – Threatened and Endangered **OHV** – Off Highway Vehicle **TCP** – Traditional Cultural Properties **OR** – Outstandingly Remarkable (value) TWMA – Trueblood Wildlife Management **ORV** – Off-Road Vehicle Area **FWS** – U.S. Fish and Wildlife Service **OTA** – Orchard Training Area (Department of Interior) **PFC** – Proper Functioning Condition **USDA** – U.S. Department of Agriculture

PL – Public Law

USFS – U.S. Forest Service (Department of Agriculture)

USGS – U.S. Geological Survey

VRM – Visual Resource Management

 $W\&\ SR-$ Wild and Scenic River

WMA – Wildlife Management Area

 $\mathbf{WUI}-\mathbf{Wildland}\ \mathbf{Urban}\ \mathbf{Interface}$

Glossary

Activity Planning – A level of BLM planning where objectives are established and a plan of activities to meet those objectives is developed.

Actual Use Data – Numbers and class of livestock, and period of time those livestock actually grazed a specific allotment or pasture.

Adaptive Management – A continuing process of planning, implementation, monitoring, and evaluation to adjust management strategies to meet DFC and objectives.

"Adventures in the Past" - The BLM's "umbrella" strategy for promoting public education and outreach in cultural resources and for enlisting public involvement in the protection of archaeological resources. Goals include increasing the public's enjoyment of cultural resources, demonstrating that the BLM is a good steward of cultural resources, and reducing the destruction of cultural resources by: (1) expanding interpretation, (2) showcasing cultural resources with recreation and tourism potential, (3) promoting scientific study, research and management projects, and education experiences, (4) increasing on-the-ground presence to combat vandalism, and (5) focusing on cultural resources with ethnic and minority ties to create a sense of identity and community.

All Terrain Vehicle (ATV) – Small threewheel or four-wheel recreational vehicles capable of operating off of hard surfaces and in rugged terrain.

Allotment – an area of land designated and managed for gazing of livestock; may contain a mixture of BLM, other federal, private, and/or State lands.

Anadromous Fish – Those species of fish that mature in the sea and migrate back to freshwater streams to spawn; e.g., salmon, steelhead trout. Snake River Birds of Prey NCA

Proposed RMP/FEIS

Animal Unit Month (AUM) – The amount of forage needed to sustain one cow unit or its equivalent (one horse or five sheep, all over six months old) for one month (approximately 800 pounds of forage).

Appropriate Management Response (AMR)

- The 2001 Federal Fire Policy, Appendix B, defines AMR as " the response to a wildland fire is based on an evaluation of risks to fire-fighter and public safety, the circumstances under which the fire occurs, including weather and fuel conditions, natural and cultural resource management objectives, protection priorities, and values to be protected. The evaluation must also include an analysis of the context of the specific fire within the overall local, geographic area, or national wildland fire situation."

Aquatic – Living or growing in or on the water.

Archaeological Resources – Sites, areas, structures, objects, or other material evidence of prehistoric or historic human activities.

Archaeological Site – A geographic location containing structures, artifacts, material remains, and/or other evidence of past human activity.

Area of Critical Environmental Concern (ACEC) – public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historical, cultural, or visual values, fish and wildlife resources, or other natural systems or processes. The identification of a potential ACEC shall not, of itself, change or prevent change of the management or use of public lands.

Avoidance Area – Areas with sensitive resource values where rights-of-way and Section 302 permits, leases, and easements for largescale utility developments would be strongly discouraged. Authorizations made in avoidance areas would have to be compatible with the purpose for which the area was designated and not be otherwise feasible on lands outside the avoidance area.

Barrier – An impediment to movement of organisms across the landscape which is natural, such as water bodies or mountain ranges, or man-made, such as roads, fences or irrigation diversion structures.

Beneficial Use – Any of the various uses which may be made of water, including, but not limited to, domestic use, industrial use, agricultural irrigation, navigation, recreation, wildlife habitat, and aesthetics. A beneficial use is identified based upon actual use, the ability of water to support a non-existing use either now or in the future, and its likelihood of being used in a given manner.

Best Management Practice (BMP) – A practice or combination of practices determined by the state to be the most effective and practicable (including technological, economic, and institutional considerations) means of presenting or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

Big Game – Those species of large mammals normally managed as a sport hunting resource; includes elk, mule deer, pronghorn antelope, and bighorn sheep.

Biodiversity (biological diversity) – The variation in components and processes of an ecosystem; i.e., the distribution and abundance of different plant and animal communities and species over time and space. This variation is typically studied and analyzed at four levels of diversity: genetic, species, community and landscape.

Biological Assessment – In general, a documented review of programs or activities in sufficient detail to determine how an action or proposed action may affect any Federally listed threatened or endangered wildlife, fish, or plant species. Specifically, a procedural step in the interagency consultation process under the Endangered Species Act, Section 7, where the BLM submits a written summary of potential project impacts to threatened or endangered species to the FWS and/or NMFS for their evaluation.

Bivouac Site – Area of concentrated activity including command and control headquarters, fixed temporary communication equipment, food preparation and eating, temporary sleeping facilities (tents), light maintenance.

Boot Stage – A plant growth stage in grasses at which time the flowering portion is beginning to form in the leaf sheath.

Buffer Strip – a land area of varying size and shape immediately adjacent to stream courses or to other water bodies, where the type and/or intensity of land use is managed to meet defined water resource goals. Also: a protective area adjacent to an area of concern requiring special attention or protection (e.g., wildlife habitat).

Candidate Species - A plant or animal species designated by the FWS or NMFS as a candidate for listing as threatened or endangered (see threatened species, endangered species). A candidate species is a plant or animal species for which the FWS or NMFS currently has on file substantial information to support a proposal to list the species as endangered or threatened (see proposed species). A candidate species' numbers are declining so rapidly that official listing as threatened or endangered pursuant to Section 4 of the Endangered Species Act may become necessary as a conservation measure. Declines may be due to one or more factors, including the following: destruction, modification, or curtailment of the species' habitat or range; over utilization for commercial, sporting, scientific, or educational purposes; disease or predation; the inadequacy of existing regulatory mechanisms; or other factors.

Carrying Capacity (*syn.* **Grazing Capacity)** – The maximum stocking rate possible with-

out inducing damage to vegetation or related resources. Carrying capacity may vary from year to year on the same area due to fluctuating forage production.

Commodities – The goods and services produced by industries are classified in terms of one or more product types, or "commodities."

Competition – The general struggle for existence in which living organisms compete for a limited supply of the necessities of life. Competition can exist between species, and even between individuals of a species, for food, shelter, space, nest sites, birthing sites, mates, access to water, and many other habitat and life cycle requirements.

Community – An ecological boundary defined by the species and species interactions, which occur.

Consumptive Use – Resources that are extracted and utilized either in an intermediate for final process with or without replacement. An example of a resource with replacement would be vegetation used in feeding wildlife or livestock, an example of a resource without replacement would be mineral materials used for landscaping.

Corridor – An avenue for movement across the landscape. In the natural landscape, corridors are generally contiguous avenues of preferred habitat. In a human altered landscape, corridors may be less preferred but still functional avenues. Human activity may sometimes create corridors where none previously existed (e.g., disturbed areas along roadsides which are corridors for weed dispersal, or shrubby fence lines which are corridors for small mammals and some birds).

Crucial Habitat (or Key Habitat) – Describes a particular seasonal range or other habitat component (e.g., winter or winter/yearlong range for big game animals; riparian habitat for riparian-dependent species; and wintering and/or nesting areas for sage grouse) which is a primary determining factor in a population's ability to maintain and reproduce itself at a certain level (theoretically at or above population objectives).

Cultural Property – A definite location of past human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and possible religious importance to specified social and/or cultural groups. Concrete, material places and things that are classified, ranked, and managed through a system of inventory, evaluation, planning, protection, and utilization.

Cultural Resource – A general term meaning any cultural property or traditional lifeway value. Also, the physical remains of human activity (artifacts, ruins, petroglyphs, etc.) and conceptual content or context (as a setting for legendary, historic, or prehistoric events as a sacred area of native peoples, etc.) of an area.

Designated Critical Habitat – Those areas formally designated as critical by the Secretary of Interior or Commerce for the survival and recovery of listed threatened and endangered species. Because the term has legal implications, its use is limited to only those habitats officially determined as critical by the Secretary.

Desired Plant Community – The plant community which provides the vegetation attributes required for meeting or exceeding RMP vegetation objectives. The desired plant community must be within an ecological site's capability to produce these attributes through natural succession, management action, or both. Of the several plant communities that may occupy a site, the one that has been identified through a management plan to best meet the plan's objectives for the site (Society for Range Management, Task Group on Unity in Concepts and Terminology, 1991:10)

Developed Recreation Site – A site developed primarily to accommodate specific inten-
sive use activities or groupings of activities such as camping, picnicking, boating, swimming, winter sports, etc. These sites include permanent facilities, which require continuing management commitment and regular maintenance, such as roads, trails, toilets, and other facilities needed to accommodate recreation use versus the long term.

Direct Effects – Production changes associated with the immediate effects of final demand changes.

Disjunct Species – Species with a discontinuous distribution. The most common pattern is a large center of distribution with distant "disjunct" populations.

Dispersal Corridor – A corridor through which animal populations move or distribute themselves throughout an area.

Disturbance – Any management activity that has the potential to accelerate erosion or mass movement. Also, any other activity that may tend to disrupt the normal movement or habits of a particular wildlife or plant species.

Diversity – The distribution and abundance of different plant and animal communities and species within an area.

Dormant Stage – A plant growth stage occurring after annual growth and reproduction when the plant prepares for winter.

Ecological Condition – The present state of vegetation on a site compared to the natural potential of vegetation on the site.

Ecological Site – Land with a specific potential natural community and specific physical characteristics, differing from other kinds of land in its ability to produce vegetation and in its response to management.

Ecological Site Inventory – A type of rangeland inventory where current species composition on a given site is compared to the composition that should be there if the site were at climax or highest ecological condition.

Ecological Status (syn. Seral Stage, Seral Community, Successional Community, Successional Community, Successional Stage) – To what degree the present state of kinds, proportions, and amounts of plants on an ecological site resemble the potential natural community (climax successional stage) for the site. Classes are designated based on percentage of present plant community that is climax for that site: early seral (0 to 25%), mid seral (25 to 50%), late seral (51 to 75%) and potential natural community (climax) (76 to 100%).

Ecosystem – An interacting system of organisms considered together with their environment; for example, a marsh, watershed, or lake ecosystem.

Edaphic – Relating to the soil, resulting from or influenced by factors inherent in the soil.

Edge – The site where different plant communities, successional stages, or vegetative condition classes meet and change in flora, fauna, and microclimate occur. For example: the boundary between riparian vegetation (e.g., willows) and sagebrush-grasslands.

Effects (Impacts) - The biological, physical, social, or economic consequences resulting from a proposed action. Effects may be adverse (detrimental) or beneficial, and direct, indirect, or cumulative. Direct effects are caused by the action and occur at the same time and place. Indirect effects are also caused by the action, but occur at a later time or further removed in distance. Cumulative effects include incremental effects of the proposed action when added to other past, present, or reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes the actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Emergency Stabilization and Rehabilitation (ESR) – Emergency Stabilization actions are taken immediately following a wildland fire incident and are completed within one year. They are intended to 1) stabilize and prevent unacceptable degradation to natural and cultural resources, 2) minimize the threats to life or property resulting from the effects of a fire, and 3) repair/replace/construct physical improvements necessary to prevent degradation of land or resources.

Endangered Species – Any plant or animal species that is in danger of extinction throughout all or a significant portion of its range, and has been officially listed as endangered by the Secretary of Interior or Commerce under the provisions of the Endangered Species Act. A final rule for the listing has been published in the *Federal Register*.

Enabling Legislation – The Congressional act that designated the NCA and prescribes the constraints under which it will be managed.

Endemic Species – those native species, whose distribution is restricted to a small, localized area.

Environment – The aggregate of physical, biological, economic, and social factors affecting organisms in an area.

Environmental Assessment (EA) – A concise public document which complies with NEPA law and regulation and analyzes the effects of a proposed action. An EA briefly provides sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact, aids an agency's compliance with NEPA when an EIS is unnecessary, and facilitates preparation of an EIS when necessary.

Environmental Impact Statement (EIS) – A detailed public document which complies with NEPA law and regulation. An EIS describes a major Federal action which significantly affects the quality of the human environment,

provides alternatives to the proposed action, and analyzes the effects of the proposed action.

Ephemeral Stream – A stream which has no predictable flow pattern and only flows in direct response to precipitation (rainfall), and whose channel is at all times above the water table.

Erosion – The wearing away of the land's surface by water, wind, ice or other physical processes. It includes detachment, transport, and deposition of soil or rock fragments.

Essential Habitat – Pertaining to threatened, endangered, or sensitive species only – those areas possessing the same characteristics as critical habitat for a threatened or endangered species, without having been declared as critical habitat by the Secretary of the Interior or Commerce.

Exclosure – An area fenced to exclude grazing animals, usually for study purposes.

Existing Roads, Vehicle Ways, and Trails – Existing refers to (1) roads, vehicle ways, and trails which exist at the time the Record of Decision for the RMP is signed, and (2) any newly constructed road, trail, or parking area authorized by the BLM during the life of the RMP.

Extensive Recreation Management Areas (ERMA) – BLM administrative units where recreation management is only one of several management objectives and where limited commitment of resources is required to provide extensive and unstructured types of recreation activities. ERMAs may contain recreation sites. These areas consist of the remainder of land areas not included in the Special Recreation Management Areas (SRMA).

Fenced Federal Range – A small amount of public land fenced with a larger amount of private land.

Fire Suppression – All work and activities associated with fire extinguishing operations, beginning with discovery and continuing until the fire is completely extinguished.

Flowering Stage – A plant growth stage occurring when the reproductive portion of the plant begins to emerge.

Forage – All browse and non-woody plants that are available to wildlife for grazing or harvested for feeding livestock. Normally includes only the current year's growth.

Forb – Any herbaceous plant species other than those in *Gramineae* (grasses), *Cyperaceae* (sedges), and *Juncaceae* (rushes) families; fleshy leaved plants.

Fragmented – A term describing a landscape where large areas of suitable habitat are broken up into smaller patches which are surrounded or bisected by unsuitable habitat.

Free-Flowing – As defined by the Wild and Scenic Rivers Act: A river which is "existing or flowing in natural condition without impoundment, diversion, straightening, riprapping or other modifications of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed shall not automatically bar its consideration..."

Fuel Break – A strip of land of variable width that has been treated through biological, chemical or mechanical means to reduce fuels and enhance fire suppression efforts.

Fuel Reduction – Manipulation, including combustion, or removal of fuels to reduce the likelihood of ignition and/or lessen potential damage and resistance to control.

Fuel Suppression – All the work of extinguishing or containing a fire.

Full Time Equivalent (FTE) – The amount of time worked in one or more jobs equal to a work year.

Genetic Diversity – The variation within individual species which results from genetic variability (the variation in traits and genes within a single species).

Goal – The desired state or condition that a resource management policy or program is designed to achieve (usually not quantifiable and may not have a specific completion date).

Grazing Permit – Under Section 3 of the Taylor Grazing Act, a document authorizing the use of the public lands within grazing districts for the purpose of grazing livestock.

Grazing Preference (total grazing preference) – The total number of animal unit months (AUMs) of livestock grazing on public lands, apportioned and attached to base property owned or controlled by a permittee or lessee. The *active preference* and *suspended preference* are combined to make up the total grazing preference.

Active preference is that portion of the total preference for which grazing use may be authorized

Suspended preference is that portion of the recognized grazing preference which is placed in a suspended category because the preference exceeds the present available livestock grazing capacity.

Grazing System – A system of manipulating livestock grazing to accomplish desired results.

Season (season long) – grazing use throughout a specific season.

Deferred Rotation – discontinuance of livestock grazing on various parts of a range in succeeding years, allowing each part to rest successively during the growing season. Two, but more commonly three or more, separate pastures are required. *Rest rotation* – one pasture is totally rested from livestock grazing in a given year, and all other pastures absorb the grazing load.

Trailing – livestock use is limited to incidental grazing which occurs as livestock move through the area.

Greenstrip – see fire break

Ground Water – Water beneath the earth's surface between saturated soil and rock that supplies wells and springs.

Guzzler – A water development for wildlife that relies on rainfall or snowmelt to recharge it, rather than springs or streams. Usually used where no other sources of wildlife water exist.

Habitat – Specific set of physical conditions that surround a species, group of species, or large community. For example, major habitat components for wildlife are food, water, living space, and cover.

Habitat Type – The aggregate of land area potentially capable of producing similar plant communities at climax. Each habitat type is named for the climax tree species and understory species that would eventually occupy a site at climax, under ideal conditions. In reality, habitat types indicate the potential of a site, for many factors (e.g., fire interval, climate, soil productivity, aspect, percent slope) and will determine the vegetation that occupies a site over time.

Habitat Management Plan (HMP) – An approved activity plan for a geographical unit of land that identifies wildlife habitat management activities to be implemented to meet specific land use plan goals.

Hazardous Fuels – A fuel complex defined by kind, arrangement, volume, condition, and location that form a special threat of ignition and/or suppression difficulty.

Heavy Maneuver – Off road military travel by one or more tracked vehicles and heavy wheeled vehicles specifically designed for combat operations.

Herbaceous – Plants that are green and leaf like in appearance or texture and have characteristics typical of an herb, as distinguished from a woody plant.

Heritage Education – A nationwide BLM program that seeks to strengthen children's sense of personal responsibility for the stewardship of America's cultural heritage and to use historic and archaeological resources in math and science education.

Hiding Cover – Vegetation capable of hiding all or a portion of an animal.

Historic Property/Resources – A term used in the National Historic Preservation Act that refers to a cultural resource which is considered eligible to be listed or is listed on the National Register of Historic Places.

Hydrology – The scientific study of the properties, distribution, and effects of water in the atmosphere, on the earth's surface, and in soil and rocks.

Indirect Effects – Production changes in backward-linked industries caused by the changing input needs of directly affected industries, e.g., additional purchases to produce additional output).

Induced Effects – Changes in regional household spending patterns caused by changes in household income (generated from the direct and indirect effects).

Integrated Pest Management – The use of several techniques (i.e., fire, grazing, herbicide, biological agents) as one system to gain control of a pest species.

Intergovernmental Coordination Group (**ICG**) – This group is comprised of representatives from state and Federal agencies, counties and congressional staffs who meet periodically to review plan development and is-

Appendices

sues, provide for consistency review from their respective agency perspectives, and help resolve interagency issues that may be in conflict, not only with BLM but among participating entities.

Intermittent Stream – A stream or segment of stream that flows only at certain times of the year when it receives water from springs or from some surface source, such as melting snow in mountainous areas.

Interpretive Site – A site where local history, environment, and/or current land use practices are explained through signs and brochures or other media.

Invertebrates – A group of organisms lacking a backbone, including insects, butterflies, spiders and worms.

Irretrievable – A loss of production or use of a renewable natural resource for a period of time. The loss of production or use for that period of time cannot be "retrieved," but production or use of the resource may still be possible in the future (i.e., the land management action can be reversed and the loss of production or use is not permanent).

Irreversible – A loss of production or use of a renewable or non-renewable resource that is permanent (cannot be reversed), or is so long term as to be considered permanent (i.e., as in the case of soil productivity, which can only be renewed over very long time periods). An irreversible commitment of a resource implies loss of production or use for a period of time as well as loss of future options for production or use of the affected resource.

Key Area – A relatively small area that reflects or has the ability to reflect the effectiveness of management actions over a much larger area.

Key Habitat – See crucial habitat.

Knowledgeable and Reasonable Practices – Those practices, or combination of component practices, developed through a systematic approach and implemented in a manner which demonstrates reasonable success in minimizing adverse resource impacts. Any knowledgeable or reasonable practice which is not expressly described in this RMP, but is proposed and developed at a later date, would be based on the following: (1) current scientific rationale, applicable study results, or other documentation which reasonably demonstrates that improvement would result from implementing the practice; (2) the recommendations of an ID team responsible for reviewing, interpreting and documenting the scientific literature or study results upon which the knowledgeable and reasonable practice is based; and (3) completion of an environmental assessment documenting how the knowledgeable and reasonable practice would meet resource objectives.

Landscape Diversity – The variation of pattern and size of communities within a landscape, including the size of unfragmented habitat, the existence of migration corridors, the juxtaposing of feeding and cover habitat, etc.

Landscape Level Processes – Natural or human activities which create patterns at the level of landscapes (i.e., across community boundaries).Run this definition past the team to see if they agree

Land Transfer – (For the purposes of the NCA.) The exchange, or other conveyance of land, from one owner to another.

Leakage – The amount of a dollar that leaks out or leaves an area or region to be spent elsewhere rather than remaining to be spent in the area it was generated.

Leasable Minerals – Minerals subject to lease by the Federal government under the Mineral Leasing Act of 1920, including coal, oil, gas, phosphate, sodium, potassium, oil shale, sulphur, and geothermal steam. Lek - A site where birds, specifically grouse, regularly congregate for display and courtship purposes.

Light Maneuver – Off-road military travel by one or more wheeled vehicles not including wheeled vehicles designed specifically for combat operations.

Management Area – A portion of the Field Office where BLM administered public lands would remain in public ownership for the long term, unless the RMP is amended. Lands would be managed for multiple use purposes consistent with the NCA-enabling legislation.

Management Framework Plan (MFP) – A BLM land use plan for a specific area of land called a planning unit. MFP's were the first generation of BLM land use plans, prior to completion of Resource Management Plans.

Mesic – Relatively moist habitat sites typically occupied by vegetative species requiring relatively higher amounts of soil moisture for survival.

Mineral Withdrawal – Closure of public land to specific mineral development laws, such as the Mining Law of 1872 and the Mineral Leasing Act of 1920. Withdrawal of public lands is subject to valid existing rights, such as valid mining claims and mineral leases which precede the withdrawal.

Mitigation – Actions to avoid, minimize, reduce, eliminate, compensate, or rectify the impact of a management practice.

Monitoring – The systematic gathering of data to determine whether progress is being made in achieving land use objectives or goals.

Motorized Vehicle – Any form of motorized transportation. (Also see Off Highway Vehicle).

Multiple Use – The management of the public lands and their various resource values so they

are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources: a combination of balanced and diverse resource uses that takes into account the long term needs of future generations for renewable and nonrenewabl resources with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output.

Multipliers – The change in some economic measure resulting from a specified change in some other economic measure.

National Register of Historic Places – A register of districts, sites, buildings, structures, and objects significant in American history, architecture, or archaeology, and culture, established by the National Historic Preservation Act of 1966 (NHPA) and maintained by the Secretary of Interior.

Natural Regeneration (Revegetation) – The regeneration of a site by natural means, whether from seedlings originating by natural seeding, or from sprouts and other plants which reproduce vegetatively. Natural regeneration may or may not be preceded by site preparation.

Nested Frequency Trend Monitoring -A method of monitoring rangeland trend that consists of observing plots of various sizes along a transect. The frame is constructed such that successively smaller plots are included within the next larger plot.

Net Resource Value Change – The difference in value of planned resource outputs on an area before and after a fire. This figure includes all resource values including range, watershed, wildlife, soils and recreation. This figure is the average dollar value per acre within each fire management zone.

Non-Attainment Area – An airshed in which one or more air quality standards are not being met.

Non-Consumptive – Resources that are not extracted but are utilized in an activity that does not diminish their quantity or value. An example would be the view of a canyon or rock outcrop that remains long after the visitor has departed.

Non-Discretionary Action - A BLM action that is required by law or regulation. These types of actions cannot vary by alternative within the RMP.

Non-Game – Species of animals which are not managed as a sport hunting resource.

Nonpoint Source – A source of water pollution which cannot be attributed to a specific point or small area, but is generated on a wider scale from a larger land area. Nonpoint source pollutants may include sediment, nutrient, chemical or bacteria loadings to a body of water. Nonpoint sources of these pollutants may include activities such as grazing, mining, timber harvesting, high use recreation and road construction and maintenance.

Noxious Weed – Any plant designated as noxious by the Director of the Idaho Department of Agriculture.

Obligate Hydric Vegetation – Plants that are dependent on the constant presence of free water or saturated soil conditions, and do not persist in environments where substrates become seasonally dry.

Objectives – Planned results to be achieved within a stated time period; objectives are measurable, quantifiable, subordinate to goals, and narrower in scope.

Off-Highway Vehicle (Off-Road Vehicle) Use – Any motorized vehicle use off an existing or designated route. Also see motorized vehicle.

Off Highway Vehicle (OHV) Area Designations –

Open – Vehicle travel is permitted throughout the area designated as "open" to OHV use, if the vehicle is operated responsibly.

Limited – Motorized vehicle travel on designated areas, routes, roads, vehicle ways, and trails is subject to restrictions.

Closed – Motorized vehicle travel is prohibited in the area. Access by means other than motorized vehicle is permitted.

Outstandingly Remarkable (OR) Value – A resource value or natural element of a stream being considered for inclusion in the National Wild and Scenic Rivers System which is extraordinary within the region (or RMP planning area). Categories of resource values listed in Section 1(b) of the Wild and Scenic Rivers Act include "scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values." "Other similar values" include, but are not limited to, hydrologic, ecologic/biologic diversity, paleontologic, botanic, and scientific study opportunities.

Paleontological Resource – Fossilized remains of vertebrate, invertebrate, or botanical life forms associated with past geologic periods.

Perennial Plant Community – A group of long-lived, native and/or desirable non-native plant species.

Perennial Stream – A stream that flows continuously and is generally associated with a water table in the areas through which it flows.

Peripheral Species – Species whose distribution in Idaho is at the edge of their range. Because populations of these species often occur in marginal habitat (in terms of species needs), they are especially important to the genetic diversity of the species.

Pesticide – Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

Phenology – the relationship between climate and plant growth stage.

Planning Issues – Defined by BLM Manual 1601 as a matter of controversy or dispute regarding a resource management activity or land uses that is well defined and/or topically discrete and involves alternatives among which to choose or decide.

Plant Maintenance – Fulfilling the plant's requirements for water, nutrients, and sunlight to ensure food storage and plant vigor sufficient for normal growth and reproduction.

Prehistoric Site – A geographic location where Native American cultural activities took place during a period when Native Americans were not yet influenced by contact with historic non-native cultures.

Prescribed Burn (Prescribed Fire) – Intentional use of fire, by planned ignition, to accomplish planned objectives.

Prescription – Management practices which are selected and scheduled for application in a specific area in order to attain goals and objectives.

Primitive – Characterized by an essentially unmodified natural environment isolated from the sights, sounds, and structures of man.

Primitive Values – Opportunity for primitive and unconfined recreation, opportunity for solitude, and naturalness.

Priority Fish Species – Fish having special significance for management, including (1)

special status species; (2) species of high economic or recreational value; or (3) populations of fish recognized as significant for one or more factors such as density, diversity, size, public interest, remnant character, or age.

Pristine Condition – The ecological condition of that plant community assumed to have existed prior to the influence of European man.

Project Planning – The most detailed level of BLM planning which identifies the design, placement, and implementation of specific projects. (Also see Activity Planning).

Proper Functioning Condition – When the physical and biological processes work together to provide a stable stream or wetland environment.

Proposed Species – Species that have been officially proposed for listing as threatened or endangered by the Secretary of the Interior or Commerce under the provisions of the Endangered Species Act. A proposed rule has been published in the *Federal Register*.

Public – Affected or interested individuals, including consumer organizations, public land resource users, corporations, and other business entities, environmental organizations and special interest groups.

Public Land – Any land and interest in land (i.e., mineral estate) owned by the United States and administered by the Secretary of the Interior through the BLM, except lands located on the Outer Continental Shelf and lands held for the benefit of Indians, Aleuts, and Eskimos (43 CFR 1601.0-5(i)). May include public domain or acquired lands in any combination.

Range Improvement – A structure, excavation, treatment or development to rehabilitate, protect, or improve range conditions on public lands. **Raptor** – A bird of prey with sharp talons and strongly curved beak (i.e., hawk, owl, vulture, eagle).

Rare Species – Plant or animal species which are uncommon to a specific area. All threatened or endangered and sensitive species can be considered rare, but the converse is not true.

Recreation Opportunity Spectrum (ROS) – A classification system which characterizes the ability of the land resource to prove opportunities for certain types of recreation experiences. Classifications (listed in order of increasing development) – modification of the natural environment – and decreasing opportunities for solitude include the following: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural and urban

Recreational River – Rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along the shorelines and that may have undergone some impoundments or diversions in the past.

Recreational Values – See Recreation Opportunity Spectrum.

Rehabilitation – The activities necessary to repair damage or disturbance. Most of the rehabilitation efforts are the same as the Emergency Stabilization treatments. The primary difference between the two is the urgency of Emergency Stabilization as opposed to Rehabilitation and the timeline for implementation. Rehabilitation actions can occur up to 3 years after control of a fire to: 1) repair or improve land damaged by wildfire that is unlikely to recover to a pre-fire condition, 2) repair or replace minor facilities damaged or destroyed by fire, or 3) re-treat areas that were treated under an ESR plan that failed due to factors such as flooding or drought.

Relict Communities – A plant community surviving in an environment that has changed

considerably, usually as a result of grazing animal use. Relict communities often occupy areas inaccessible to or otherwise unused by grazing ungulates.

Residual Ground Cover – That portion of the total vegetative ground cover that remains after the livestock grazing season.

Remnant Population – A small population of a plant or animal species that has been reduced in numbers and/or area of distribution; or: A small isolated population has been extirpated from the area.

Resource Advisory Group (RAC) – The Boise District RAC is a twelve member Federal Advisory Committee Act-chartered group responsible for providing consensus-based advice to BLM

Resource Management Plan (RMP) – A land use plan as described by FLPMA.

Restoration – Activities used to restore the structure and function of desired plant communities for wildlife habitat.

Right-of-Way – A permit or easement which authorizes the use of public lands for certain specified purposes, commonly for pipelines, roads, telephone lines, electric lines, reservoirs, etc.; also, the lands covered by such an easement or permit.

Right-of-Way Corridor – A linear parcel of land that has been identified by law, by Secretarial Order through the land use planning process, or by other management decision as being a preferred location for existing and future right-of-way grants that are similar or compatible.

Riparian – Of, pertaining to, situated, or dwelling on the bank of a river or other body of water.

Riparian Area – The area between permanently saturated wetland and upland areas, which exhibits vegetation or physical charac-

teristics reflective of permanent surface or subsurface water influence. Typical riparian areas include lands along, adjacent to, or contiguous with perennial and intermittent streams, glacial potholes, and the shores of latkes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil.

Riparian Ecosystem – A transition between the aquatic ecosystem and adjacent upland terrestrial ecosystem which is identified by soil characteristics and distinctive vegetation communities that require free or unbounded water.

Riparian Area Condition Classes – Riparian areas may be classified in one of three conditions: proper functioning, non-functional, or functional-at-risk.

Rip-Rap – Broken angular stone used for embankments; a foundation or wall of stone thrown together irregularly.

Road – A vehicle route which has been improved and maintained by mechanical means to ensure relatively regular and continuous use.

Saleable Minerals – High volume, low value mineral resources, including common varieties of rock, clay, decorative stone, sand, and gravel. Specifically, mineral materials made available for sale under provisions of the Mineral Materials Act of 1947, as amended.

Salmonid – A member of the family of fish species *salmonidae*; includes trout and salmon species.

Scenic River – Rivers or sections of rivers that are free of impoundments, with shorelines or watersheds largely primitive and shorelines largely undeveloped, but accessible in places by road.

Scoping – The process of obtaining input from the ID team, resource staff, management, and

the public (including the general public and relevant government agencies, Indian Tribes, organizations, and interest groups) in order to determine (1) which issues are significant to the RMP and (2) the scope of issues to be addressed in the alternatives.

Season of Use – A period of grazing use defined either by calendar dates or phonological stages (i.e., early = prior to boot, critical = boot to flower, late= after flowering, dormant = dormant/winter). (Also see Boot Stage, Dormant State and Prior to Boot Stage)

Secretary – The Secretary of Interior or the individual to whom the authority and responsibility have been delegated.

Section 106 Consultation – Discussion between a Federal agency official and the Advisory Council on Historic Preservation, State Historic Preservation Officer, and other interested parties concerning historic properties that could be affected by a specific undertaking. The consultation process is outlined in the National Historic Preservation Act, Section 106, and codified in 36 CFR 800.

Sediment – Solid material that originates mostly from disintegrating rocks and is transformed by, suspended in, or deposited by water. Sediment includes chemical and biochemical precipitates and decomposed organic material.

Sediment Yield – The volume or weight of sediment transported from a site.

Seep (or Spring) – A saturated zone at or near the ground surface where voids in the rock or soil are filled with water at greater than atmospheric pressure. Seep or spring sites are typically characterized by riparian vegetation and soil formed in the presence of water. Water may or may not be discharging from these sites, depending on the underlying geology, water source, season, or long term climatic trends. A seep is a small spring. **Semi-Developed Recreation Site** – A site partially developed to accommodate specific intensive uses such as camping, boat launching, gaining access, etc. These sites may include some permanent facilities such as a launch ramp, parking area, and/or toilet. However, regular maintenance may not occur.

Sensitive Species – Plant or animal species designated by the BLM State Director as sensitive, usually in cooperation with the State agency responsible for managing the species. Sensitive species are those (1) which are under status review by the FWS or NMFS; or (2) whose numbers are declining so rapidly that Federal listing may become necessary, or (3) with typically small and widely dispersed populations; or (4) inhabiting ecological refugia or other specialized or unique habitats.

Seral Stage – See Ecological Status.

Significant Cultural Sites – Eligible for listing on the National Register of Historic Places as identified by 36 CFR part 60, and are evaluated at local, state or national levels of importance in consultation with the Tribes, State Historic Preservation Officer, local governments, communities and individuals.

Special Management Area (SMA) – Special Management Areas include Wilderness Study Areas, Wild and Scenic Rivers, and Areas of Critical Environmental Concern/Research Natural Areas

Species of Concern – Those animals and plants that because of low population numbers, a downward trend in population and/or habitat, restricted ranges, or restricted habitats may become candidates for threatened or endangered status.

Special Status Species – Species which have official recognition of rarity or decline, including specified identified in the *Federal Register* as "threatened", "endangered", "proposed", or "candidate" and species listed as "sensitive" by a State or the Bureau of Land Management (Also see Threatened Species, Endangered Species, Proposed Species, Candidate Species, State Listed Species, and Sensitive Species).

Special Recreation Management Area (SRMA) – BLM administrative units established to direct recreation program priorities, including the allocation of funding and personnel, to those public lands where a commitment has been made to provide specific recreation activities and experience opportunities on a sustained yield basis.

Species Diversity – The variation in numbers and kinds of species and the complexity of their interaction within a community.

Spring-Summer-Fall Range – Available habitat sites annually used by a population or portion of a population of animals during the period when persistent winter conditions are not present. Typically, this period would be between May 1 and November 30.

Standards and Guidelines – Provide the resource measures and guidance needed to ensure healthy, functional rangeland. The Standards for Rangeland Health are to be used as the BLM's management goals for the betterment of the environment, protection of cultural resources, and sustained productivity of the range.

Standards are a description of a minimally functioning condition for soil, water quality, and biological components of rangelands.

Guidelines direct the selection of grazing management practices, and, where appropriate, livestock management facilities to promote... progress toward ... or ... maintenance of the Standards. Grazing management practices are livestock management techniques that can be incorporated into grazing permits.

State Listed Species – A plant or animal species proposed for listing or listed by a State in a category implying potential endangerment or extinction. Listing is either by legislation or regulation.

Statewide Comprehensive Outdoor Recreation Plan (SCORP) – Recreation management plan developed periodically (about 10 years) by the Idaho Department of Parks and Recreation to help Federal, State and local agencies assess recreational use trends and the needs for future management and facilities.

Stocking Level – The current level of livestock grazing use on a unit of land, usually expressed as acres of land per AUM grazed.

Stubble Height – The height of ungrazed herbaceous matter left standing at the close of the grazing period or growing season.

Supervised Trailing – Livestock are actively pushed to their destination, not merely allowed to move along at their own pace without human encouragement.

Sustained Yield – The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands, consistent with multiple uses.

Thermal Cover – Vegetative or topographic cover used by animals to ameliorate the effects of weather.

Threatened Species – A plant or animal species which is likely to become endangered (See Endangered Species) within the foreseeable future throughout all or a significant portion of its range, and is officially listed as threatened by the Secretary of Interior or Commerce under the provisions of the Endangered Species Act. A final rule for listing has been published in the *Federal Register*.

Traditional Use – The utilization of natural resources in a similar fashion over a considerable period of time. Cattle grazing on the public land might be considered a traditional use since it has occurred for more than 150 years. Hunting and gathering activities by Native Americans may also be considered a traditional use of the vast open space of the west.

Traditional Cultural Property – A cultural property that is eligible for inclusion on the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.

Traditional Lifeway Value – The quality of being useful in or important to the maintenance of a specified social and/or cultural group's traditional systems or religious belief, cultural practice, or social interaction, not closely identified with definite locations.

Trail – Any designated, designed, and constructed pathway suitable for one or more of the following methods of travel: foot, packstock, cross country ski, mountain bike, motorcycle, or OHV.

Treaty – A formal agreement between two or more nations, relating to peace alliance, trade, etc. Treaties between the United States government and Indian Tribes are formal contracts between two sovereigns which were signed by authorized representatives and ratified by two-thirds of the U.S. Senate.

Treaty Rights – Those provisions negotiated in treaties between the U.S. government and Indian Tribes which retain certain "rights" for the Indian Tribes, such as hunting and fishing rights, land rights, water rights, etc.

Trend – The direction in change in ecological status observed over time. Trend is described as toward or away from the potential natural community, or as not apparent.

Trespass – The use of public land without authority, resulting from an innocent, willful, or negligent act.

Tribal/Trust Resources – Those resources (i.e., deer, elk, and fish) located on public lands, which Native American Tribes have the right to take under treaty.

Tribal Resources – Those resources that Native Americans are deeply interested in or concerned about. Tribal resources are deeply embedded in cultural, traditional and spiritual values held by the Tribes. The local Shoshone-Bannock Tribe and Shoshone-Piute Tribe are concerned about all natural resources and their cultural resources. The Tribes are guardians for the animals and their habitats. The Tribes are also interested in resources related to their treaty rights such as the right to hunt, fish, gather raw materials and cut firewood. They are also interested in certain landscapes and specific locations that they interpret as sacred locations, spiritual locations that are important in their cultures. The Tribes also want to retain access to these resources. These tribal resources are protected under various legislated laws, regulations and agency policies.

Trust Responsibility – The sovereign status of Indian Tribes and special provisions of treaty language, which set Native Americans apart from other U.S. Populations, and define a special level of Federal agency responsibility. Most of the Federal lands were ceded to the U.S. government through treaties with the Indian Tribes. By retaining certain rights on these lands, the Indian Tribes, in essence, places their lands in the trust of the U.S., government, giving the U.S. government "trust responsibility" to manage those ceded lands for the benefit of the Tribes' treaty rights.

Upland – The portion of land located away from riparian and floodplain areas.

Utilization – The proportion of current year's vegetative growth consumed or destroyed by grazing animals, usually expressed as a percentage.

Viable Population – That population level that is self-sustaining without exhibiting genetic depression caused by inbreeding.

Visual Resource Management (VRM) Classes –

Class I - Preservation - The objective of this class is to maintain a landscape setting that appears unaltered by humans. Natural ecological changes and very limited management activity are allowed. Any contrast created within the characteristic landscape must not attract attention. It is applied to wilderness areas, some natural areas, wild portions of Wild and Scenic Rivers, and other similar situations where management activities are to be restricted.

Class II - Retention - The objective of this class is to design proposed alterations so as to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Class III - Partial Retention - The objective of this class is to design proposed alterations so as to partially retain the existing character of the landscape. Contrasts to the basic elements (form, line, color, and texture) caused by a management activity may be evident and begin to attract attention in the characteristic landscape. However, the change should remain subordinate to the existing characteristic landscape. Structures located in the foreground distance zone (0-1/2 mile) often create a contrast that exceeds the VRM class, even when designed to harmonize and blend with the characteristic landscape. This may be especially true when a distinctive architectural motif or style is designed. Approval by the District Manager is required on a case-by-case basis to determine whether the structure(s) meet the acceptable VRM class standards and, if not, whether they add acceptable visual variety to the landscape.

Class IV – Modification – The objective of this class is to provide for management activi-

ties, which require major modification of the existing character of the landscape. Contrasts may attract attention and be a dominant feature of the landscape in terms of scale; however, the change should repeat the basic elements (form, line, color, and texture) inherent in the characteristic landscape. Structures located in the foreground distance zone (0-1/2)mile) often create a contrast that exceeds the VRM class, even when designed to harmonize and blend with the characteristic landscape. This may be especially true when a distinctive architectural motif or style is designed. Approval by the District Manager is required on a case-by-case basis to determine whether the structure(s) meet the acceptable VRM class standards and, if not, whether they add acceptable visual variety to the landscape.

Class V – Rehabilitation or Enhancement – Change is needed to bring an area up to the standards of Class I, II, II, or IV (rehabilitation), or change may add acceptable visual variety to enhancement). This class applies to areas where the natural character of the landscape has been disturbed to a point where the contrast inharmonious with the characteristic landscape and rehabilitation is needed. (For example, unacceptable cultural modification has reduced the scenic quality.) It may also be applied to areas that have the potential to increase the visual quality or variety of an area or site. Class V should be considered an interim or short-term classification until one of the other VRM class objectives can be reached through rehabilitation or enhancement. The desired visual resource management class should be identified.

Visual Quality – The relative worth of a landscape from a visual perception point of view.

Visual Resource – The visible physical features on a landscape (i.e., land, water, vegetation, animals, structures, and other features).

Watershed (or Drainage Basin) – A topographically defined area drained by a river, stream, or system of connecting rivers or streams such that all outflow is discharged through a single outlet.

Watershed Assessment – A procedure used to characterize and document the human, aquatic, riparian, and terrestrial features, conditions, processes, and interactions within a defined area. Watershed assessment provides a context and focus for resource activity or project planning, design and implementation.

Watershed Condition Class – The description of watershed condition as satisfactory or unsatisfactory.

Satisfactory Condition Watershed – A watershed which has stable soils, sustains soil development and ecological processes, stores water and attenuates floods, maintains the integrity of nutrient cycles and energy flow, and has present, functioning recovery mechanisms.

Unsatisfactory Condition Watershed – A watershed in which one or more of the attributes described for a satisfactory condition watershed is non-functional, not properly functioning, or is functioning and at risk of becoming less than properly functioning.

Water Quality Limited Stream Segment – A stream segment in which full attainment of an identified beneficial use has not been achieved as a result of one or more limiting water quality parameters.

Wetland Area/Habitat – An area where at least periodic inundation or saturation with water (either from the surface or subsurface) is the predominant factor determining the nature of soil development and the types of plant and animal communities living there. These include the entire zones associated with streams, lakes, ponds, canals, seeps, wet meadows, and some aspen stands.

Wetted Width – The width of the water surface measured at right angles to the direction of flow and at a specific discharge.

Wild and Scenic River – As designated by the 1968 Wild and Scenic Rivers Act, specific water-courses and their immediate environments which have outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or similar values and are preserved in their free-flowing condition to protect them for the benefit and enjoyment of present and future generations. Wild and Scenic River segments are classified as wild, scenic, or recreational from section 2(b), Public Law 90-542:

Wild – Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic – Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Recreational – Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundments or diversions in the past.

Wild and Scenic River Study – A two-step study process followed by the BLM in order to identify rivers or river segments for possible inclusion in the National Wild and Scenic Rivers System (NWSRS). In step one the river is found eligible (or ineligible) for further study. In step two, eligible rivers are recommended as suitable (or unsuitable) for possible inclusion in the NWSRS. *Eligible River* – A river or river segment determined through inventory and evaluation to be eligible for further study. Three elements are considered (1) is the drainage or waterway according to the WSR Act and BLM Manual definition; (2) is the river free-flowing according to the WSR Act definition; and (3) does the river support any of the Outstandingly Remarkable values listed in the WSR Act, Section 1(b). Rivers meeting the eligibility criteria for further study are assigned the appropriate tentative classification as wild, scenic, or recreational, as defined in Section 2(b) of the WSR Act.

Suitable River – A river or river segment determined by the BLM to be suitable for possible inclusion in the NWSRS. Factors which may be considered include the following: (1) characteristics which made the river segment a worthy addition to the NWSRS; (2) the current status of land ownership and use in the area; (3) reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the NWSRS; and (4) proposed costs of acquiring necessary lands and interests in lands and of administering the area (Wild and Scenic Rivers Act, Sec. 4(a)).

Wildland Fire Use – Use of unplanned fire to accomplish planned objectives.

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APPENDIX 20. PUBLIC COMMENT LETTERS

The public comment letters do not include the attachments. Specific comments are included in the comment response Section of Chapter 6. To see the full comments, including the attachments, contact the Boise District BLM (208) 384-3300.

LETTER NUMBER CROSS REFERENCE			
Letter			
Number	Last Name	First Name	Organization
1	Nielsen	Rep. Pete	House of Representatives State of Idaho
2	Binder	Angelia M.	Mountain Home Air Force Base
3	Reichgott	Christine	U.S. EPA Region 10
4	Cook	Jeff	Idaho Department of Parks and Recreation
5	Swanson	John R.	Individual
6	Whitlock	Clair	Snake River Raptor Volunteers, Inc.
7	Taylor	Bill	Idaho State 4x4 Association
8	Richards	Jeff	PacifiCorp
9	Culver	Nada	The Wilderness Society
10	Steenhof	Karen	USGS Snake River Field Station Forest and
	Kochert	Michael N.	Rangeland Ecosystem Science Center
11	Taylor	Bill	Idaho State 4x4 Association
	Davidson	Nate	
12	Black	Doug	Joe Black and Sons
13	Nordstrom	Jenifer	Western Watersheds Project
14	Belt	Doug	Western Elmore County Recreation District
15	Turner	Terry	Military Affairs Committee
16	Smith	Bradley	Idaho Conservation League
17	Chatburn	John	Idaho Department of Agriculture

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Appendices

Appendix 21a. Idaho Springsnail (Pyrgulopsis idahoensis). LUP Programs Evaluated **Conservation Measures BLM Implementation Actions** Special Status The conservation measures contained throughout this table implement important The implementation actions reflect BLM's commitment to support species Animal and Plant elements included in the Recovery Plan for the Snake River snails. The conservarecovery and meet ESA objectives. Actions apply to BLM lands and activities Management tion measures reflect BLM's commitment to support species recovery and meet only. Habitat terms used throughout this document are defined in Appendix Note: Common to C: Species-Specific Habitat Definitions. ESA objectives. All Programs 1) In cooperation with Idaho Department of Fish and Game (IDFG), U.S. Fish 1) Following actions to be completed in cooperation with others: and Wildlife Service (USFWS), U.S. Bureau of Reclamation (USBR), hydroelectric power companies, and others: a) Cooperate in gathering existing information to understand the distribution a) Provide new occurrence information to CDC as project-level clearance of known populations, and contribute new information as opportunities arise. inventories are completed. Cooperate with other agencies to develop and update a map or spatial database of known Snake River snails locations. 2) Ensure that ongoing Federal actions support or do not preclude species 2) Ongoing BLM activities: recovery. a) As needed, review ongoing activities in and adjacent to occupied suitable habitat where local consultation has not yet been completed. b) Determine if direct or indirect negative impacts to the species or its habitat are occurring as a result of ongoing discretionary BLM actions. If so, modify the activity to avoid or minimize anticipated negative impacts and, where feasible, promote species recovery. c) Where needed, complete section 7 consultation for ongoing activities that may affect any of these species and their habitats. 3) Ensure that new Federal actions support or do not preclude species recov-3) New BLM activities: ery a) Project-level inventories will be completed in suitable habitat during project planning if inventory information is not available or adequate. SO will issue instruction memorandum concerning special status species project-level clearance inventories. The Instruction Memorandum (IM) will specify the circumstances under which inventories would be required for Snake River snails. b) If direct or indirect negative impacts to the species or their habitats are anticipated as the result of new BLM actions, modify the activity to avoid or minimize negative impacts and, where feasible, promote species recovery.

APPENDIX 21. CONSERVATION MEASURES FOR LISTED SPECIES

Appendix 21. Conservation Measures for Listed Species

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
		c) Where needed, complete section 7 consultation for new activities that may affect any of these species and their habitats.
	4) Implement adaptive management as needed to achieve conservation objectives.	4) Conduct site-specific implementation and effectiveness monitoring. Adjust management as needed to ensure that management objectives are met.
	5) Support conservation easements, cooperative management efforts, and other programs on adjacent non-Federal lands to support recovery of the Snake River snails.	5) Take advantage of opportunities as they arise.
Air Resources	None	None
Soil and Water Resources: Riparian/Wetland Areas (includes weed management)	 Activities within the Soil and Water Resources: Riparian/Wetland Ar- eas (includes weed management) program will implement relevant conserva- tion measures as described in the Special Status Animal and Plant Man- agement program section to promote recovery. As a part of promoting recov- ery, the goals are to promote conservation of healthy riparian areas to avoid erosion, sediment delivery, and other negative water quality impacts, or to minimize impacts if avoidance is not possible. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Projects involving the application of pesticides (herbicides, insecticides, etc.) that may affect the species will be analyzed at the project level and designed such that pesticide applications will support conservation and recovery and minimize risks of exposure.	 2) Site-specific stipulations will be developed locally using the following criteria: a) Evaluate the benefits and risks of vegetation treatment, including the following: application methods; pesticides, carriers, and surfactants used; needed treatment buffers; and use of non-chemical weed control (for example, bio-controls, hand pulling). If management objectives can be effectively accomplished using non-chemical methods, such is the preferred alternative. b) Apply appropriate spatial and temporal buffers to avoid species' exposure to harmful chemicals. c) Implement appropriate revegetation measures to reduce the risks of soil erosion and water quality impacts adjacent to suitable habitat.
	3) Where needed and feasible, coordinate with adjacent landowners and local governments regarding control of invasive plants in riparian areas through cooperative weed management programs.	3) Take advantage of opportunities as they arise.

Appendix 21a. Idaho Springsnail (Pyrgulopsis idahoensis).

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	4) Where needed, improve watershed conditions adjacent to suitable habitat to prevent soil erosion and negative water quality impacts. Conserve riparian vegetation near suitable habitat to minimize potential for erosion and sediment delivery to springs.	 4) Management actions: a) Identify areas with unsuitable watershed conditions that are negatively impacting suitable habitat. Develop and implement a rehabilitation plan to reduce or eliminate negative impacts. b) Emphasize soil stabilization and avoid ground disturbance when risks of erosion and sediment delivery are high.
Upland Vegeta- tion Management: Rangelands (includes weed management)	 Activities within the Upland Vegetation Management: Rangelands (in- cludes weed management) program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Projects involving the application of pesticides in uplands adjacent to ripar- ian areas located near suitable Snake River snails habitat will be designed and implemented in accordance with the approach described in the Soil and Wa- ter Resources: Riparian/Wetland Areas (includes weed management) program section.	2) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
	3) Manage upland areas to minimize sediment delivery into suitable habitat.	 Emphasize soil stabilization and avoid ground disturbance when risks of erosion and sediment delivery to suitable habitat are high.
Forest and Wood- land Management (includes weed management)	1) Activities within the Forest and Woodland Management (includes weed management) program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Wildlife and Wildlife Habitat Management	 Activities within the Wildlife and Wildlife Habitat Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recov- ery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Fish and Aquatic Habitat Management	 Activities within the Fish and Aquatic Habitat Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recov- erv. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.

Appendix 21. Conservation Measures for Listed Species

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Livestock Grazing Management: Permits and Leases	 Activities within the Livestock Grazing Management: Permits And Leases program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Manage livestock grazing and trailing adjacent to suitable Snake River snails babitat to promote healthy watershed conditions while implementing	2) Permit or lease renewal actions:
	rangeland health standards and guidelines (S&Gs).	a) For review of ongoing actions, see Special Status Animal and Plant Management program section item (2).
		b) For new actions, see Special Status Animal and Plant Management pro- gram section item (3).
		c) As appropriate to avoid or minimize negative impacts, modify livestock grazing permits and leases.
	3) Promote restoration of areas adjacent to suitable habitat following fire, fire rehabilitation, restoration treatments, or other major disturbances.	3) As needed, protect disturbed areas using temporary closures or other meas- ures until vegetation is re-established and self-sustaining.
	4) Maintain regular compliance checks on grazing allotments adjacent to suit- able habitat to identify problems as soon as possible and take immediate cor- rective measures.	4) Ongoing, day-to-day BLM action.
Livestock Grazing Management: Livestock Management Facilities	 Activities within the Livestock Grazing Management: Livestock Man- agement Facilities program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Manage livestock facilities to promote healthy riparian communities or to prevent erosion, or a combination of these objectives, while implementing rangeland health S&Gs.	2) For review of ongoing actions, see Special Status Animal and Plant Man- agement program section item (2). For new actions, see Special Status Ani- mal and Plant Management program section item (3). As appropriate to avoid or minimize negative impacts, modify existing and avoid placement of new livestock facilities adjacent to suitable habitat. Consider fencing livestock away from suitable habitat, and developing water gaps for livestock.
	 Protect springs in or adjacent to suitable habitat to conserve and recover Snake River snails habitat. 	3) Avoid development of springs or other water sources in or adjacent to suitable habitat unless the activity will have beneficial long-term or neutral effects on Snake River snail populations. If a spring or water site is to be developed, install facilities as needed to avoid or minimize negative impacts.

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Appendices

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Appendices

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Wild Horse Management	 Activities within the Wild Horse Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Recreation Management	 Activities within the Recreation Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Developed facilities (boat access, paved campgrounds, vault toilets, inter- pretive kiosks, etc.): Manage existing and new recreation facilities so as not to	2) Management of existing and new facilities:
	preclude species habitat conservation and recovery. This includes manage- ment of the physical facilities, as well as disturbances to the species resulting from human uses.	a) For review of existing facilities, see Special Status Animal and Plant Management program section item (2). As appropriate to avoid or minimize negative impacts, modify existing facilities.
		b) For new facilities, or for expansion of uses at existing facilities, see Special Status Animal and Plant Management program section item (3). In addi- tion, modify new recreation facilities in or adjacent to suitable habitat if nega- tive impacts are anticipated.
	3) Dispersed use areas (informal areas, including camping areas, spring access, and tie-up areas for pack animals and boats): Manage dispersed use sites so as not to preclude species habitat conservation and recovery. This includes limiting disturbances to the species resulting from human uses.	3) For review of ongoing activities, see Special Status Animal and Plant Management program section item (2). In addition, minimize human activity in and adjacent to known populations, if negative impacts are occurring. Close areas, either seasonally or year-round, as needed, and post and monitor the closure.
	4) Commercial and noncommercial recreation permits, including outfitter	4) Issuance and review of existing and new permits:
	preclude species habitat conservation and recovery. This includes manage- ment of physical facilities (such as camps), as well as disturbances to the spe- cies resulting from human uses.	a) For review of existing permits, see Special Status Animal and Plant Management program section item (2). If needed, modify existing permits if the permitted activity is causing negative impacts.
		b) For new permits, see Special Status Animal and Plant Management pro- gram section item (3). Modify recreation permits if negative impacts are ex- pected. If a recreation permit is to be issued in or adjacent to suitable habitat, apply stipulations to the permit to support or to not preclude species conserva- tion and recovery.
	5) Protect springs with known populations to conserve Snake River snails habitat.	5) Discourage or prohibit human entry in springs with known Snake River snail populations, if such entry causes negative impacts.

Appendix 21a. Idaho Springsnail (Pyrgulopsis idahoensis).

Appendix 21. Conservation Measures for Listed Species

1

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	6) Educate the public on the Snake River snails' unique ecological require- ments, sensitivity to habitat alteration, and need for habitat protection.	6) Take advantage of opportunities as they arise.
Recreation Management: Travel Management	1) Activities within the Recreation Management: Travel Management pro- gram will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Manage roads, off-highway vehicle (OHV) routes and areas, and non- motorized trails, so as to not preclude species habitat conservation and recov- ery. This includes management of physical facilities, as well as disturbances to	2) Review of existing and new roads, OHV routes, and areas and non- motorized trails:
	the species resulting from human uses.	a) For existing roads, OHV routes and areas, and non-motorized trails, see Special Status Animal and Plant Management program section item (2). Limit OHV activities in areas adjacent to suitable habitat that are particularly susceptible to erosion and thus sediment delivery. Seek opportunities to close and revegetate OHV routes or non-motorized trails and use areas if negative impacts are occurring.
		b) For new roads, OHV routes and areas, and non-motorized trails, see Spe- cial Status Animal and Plant Management program section item (3). Avoid constructing new roads, trails, routes, and areas if negative impacts are ex- pected. In particular, avoid opening new roads, trails, routes, and areas adja- cent to suitable habitat particularly susceptible to erosion and thus sediment delivery.
	3) Maintain regular compliance checks on OHV closures to protect known populations and to identify problems as soon as possible and take immediate corrective measures.	3) Ongoing, day-to-day BLM activities.
Visual Resource Management	None	None
Special Designation Area Management	 Activities within the Special Designation Area Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Explore the potential for new designations that would enhance species re- covery.	2) Take advantage of opportunities as they arise.
	3) Preserve the Box Canyon Springs Complex.	3) Update the 1985 ACEC Management Plan for Box Canyon Springs to ad- dress conservation of Snake River snails.

Appendices

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Fire Management: Fire Suppression	 Activities within the Fire Management: Fire Suppression program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. Hu- man life and firefighter safety and property take priority over species protec- tion. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Fire suppression efforts will be conducted, as possible, to protect Snake River snails habitat. Place a high priority on protecting highly erosive areas	2) Fire management activities:
	adjacent to suitable habitat from wildfire.	 Review Fire Management Plan for adequacy in addressing conservation measures. Modify the plan if needed.
		b) Apply minimum impact suppression tactics (MIST) adjacent to suitable habitat, as appropriate. Consult with resource advisors to determine where MIST tactics should be applied to avoid or minimize negative impacts.
		c) Avoid fire base camps, staging areas, fueling areas, or other related activi- ties in highly erosive areas adjacent to suitable habitat.
	 Coordinate with U.S. Forest Service, Idaho Department of Lands, or other applicable agency personnel regarding fire suppression activities in or near suitable habitat. 	3) Ongoing interagency coordination.
Fire Management: Emergency Stabilization and Rehabilitation	 Activities within the Fire Management: Emergency Stabilization and Rehabilitation program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	 Implement Emergency Stabilization and Rehabilitation (ES&R) activities to promote restoration of areas adjacent to suitable Snake River snails habitat. 	2) ES&R activities:
		a) If needed and if natural recovery would not achieve habitat objectives, im- plement ES&R activities to promote rehabilitation of areas adjacent to suitable habitat. Plant locally appropriate vegetation to prevent erosion, if natural re- covery of such vegetation is doubtful. Include requirements that protect Snake River snails habitat, for example, sediment barriers.
		b) As needed, protect disturbed areas using temporary closures or other measures until site-specific stabilization, rehabilitation, and revegetation plan goals are met.

Appendix 21. Conservation Measures for Listed Species

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	3) Fire rehabilitation projects involving the application of pesticides will be analyzed and implemented in accordance with the approach described in the Soil and Water Resources: Riparian/Wetland Areas (includes weed man- agement) program section.	3) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
Fire Management: Wildland Fire Use	1) Activities within the Fire Management: Wildland Fire Use program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	 Wildland fire use projects (where allowed) will be designed to conserve suitable Snake River snails habitat. 	 When developing wildland fire use plans, avoid burning lands adjacent to suitable habitat.
Fire Management: Prescribed Fire	1) Activities within the Fire Management: Prescribed Fire program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	 Prescribed fire projects will be designed to conserve suitable Snake River snails habitat. 	2) When developing and implementing prescribed fire plans, avoid or mini- mize negative impacts to suitable habitat. Avoid prescribed fire use adjacent to suitable habitat, unless adequate erosion protections are implemented.
Fire Management: Non-Fire Fuels Management	1) Activities within the Fire Management: Non-Fire Fuels Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Implement projects involving the application of pesticides in accordance with the approach described in the Soil and Water Resources: Ripar- ian/Wetland Areas (includes weed management) program section.	2) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
	3) Promote establishment of plant species needed to control erosion adjacent to suitable habitat.	3) Incorporate conservation actions into the fuels projects, as needed, to con- trol erosion and prevent sediment delivery to suitable habitat.
Fire Management: Community Assistance	 Activities within the Fire Management: Community Assistance program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recov- ery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Follow all measures included throughout the Fire Management program sections.	2) See actions within Fire Management program sections. Incorporate into community assistance agreements.

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Lands and Realty Management: Land Tenure Adjustment (land sale, exchanges	 Activities within the Lands and Realty Management: Land Tenure Ad- justment (land sale, exchanges, withdrawals, etc.) program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
withdrawals, etc.)	2) Where feasible and funding is available, acquire through land exchange or purchase private lands that support known populations or could enhance habi- tat for Snake River snails.	2) Take advantage of opportunities as they arise. Priority should be given to lands that are adjacent to or near public lands.
	 Retain Snake River riparian habitat in Federal ownership to the extent pos- sible, while balancing other needs. 	3) Review each land tenure decision in terms of species habitat. Avoid the loss of riparian habitat along the Snake River from Federal ownership. If property is to be transferred out of Federal ownership, permanent conservation easements may be attached to the transfer that would result in equal or greater protection than under Federal management. Such measures must be approved by the State Director.
Lands and Realty Management: Land Use Permits and Leases	 Activities within the Lands and Realty Management: Land Use Permits and Leases program will implement relevant conservation measures as de- scribed in the Special Status Animal and Plant Management program sec- tion to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Issue new land use permits and leases and review existing permits and leases at renewal so as not to preclude species habitat conservation and recov- ery. This includes management of physical facilities, as well as disturbances to the species resulting from human uses.	2) For new permits and renewal of existing permits, see Special Status Ani- mal and Plant Management program section item (3). Avoid issuing new permits or leases, or renewing existing permits or leases, adjacent to suitable habitat if negative impacts are expected. If a permit or lease is to be issued or re-issued adjacent to suitable habitat, apply stipulations to the permit that sup- port or do not preclude species recovery and that avoid or minimize negative impacts.
	3) Protect the watershed contributing to Snake River snails habitat.	3) Conduct appropriate hydrologic studies or analysis before permitting de- velopments on BLM lands where the extraction of groundwater may nega- tively impact suitable habitat. Depending on the scope of the activity, this may require coordination and cooperation with other agencies.
Lands and Realty Management: Rights-of-Way	 Activities within the Lands and Realty Management: Rights-of-Way program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.

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Appendix 21a. Idaho Springsnail (Pyrgulopsis idahoensis).

Appendix 21. Conservation Measures for Listed Species

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	2) Issue new rights-of-way and review existing rights-of-way at renewal so as not to preclude species habitat conservation and recovery. This includes man- agement of physical facilities, as well as disturbances to the species resulting from human uses.	2) For new rights-of-way and renewal of existing rights-of-way, see Special Status Animal and Plant Management program section item (3). Avoid issuing rights-of-way, or renewing existing rights-of-way, in or adjacent to suitable habitat if negative impacts are expected. If a right-of-way is to be issued or re-issued in or adjacent to suitable habitat, apply stipulations to the right-of-way that support or do not preclude species recovery and that avoid or minimize negative impacts.
Mineral Management: Locatable Minerals	1) Activities within the Mineral Management: Locatable Minerals program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recov- ery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Approve plans of operations or allow notice level operations so as not to preclude species habitat conservation and recovery. This includes manage- ment of physical facilities, as well as disturbances to the species resulting from human uses.	 2) Approval of plans of operations and notice-level operations: a) For review of existing plans of operation and notice-level operations, see Special Status Animal and Plant Management program section item (2). To the extent allowed by law, modify plans of operation or notice-level operations that negatively impact Snake River snails habitat. For notice-level operations, notify the operator that modifications to proposed activities will be required to avoid negative impacts. b) For new plans of operation and notice-level operations, see Special Status Animal and Plant Management program section item (3). To the extent allowed by law, avoid approving plans of operation or notice-level operations, notify the operator that modifications to proposed activities will be required to avoid negative impacts. If a plan of operations is to be approved in suitable habitat, apply stipulations to support or to not preclude species recovery. A notice will require modification by the operator until BLM determines that it will not result in undue or unnecessary degradation.
Mineral Management: Saleable and Leasable Minerals	 Activities within the Mineral Management: Saleable and Leasable Min- erals program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	 Approve development of saleable or leasable minerals so as not to preclude species habitat conservation and recovery. This includes management of 	2) Approval of saleable and leasable minerals:

Appendix 21a. Idaho Springsnail (Pyrgulopsis idahoensis).

	Tunno Springonun (Tyrgutopois Tunnoviisis)	
LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	physical facilities, as well as disturbances to the species resulting from human uses.	a) For review of existing mineral leases, see Special Status Animal and Plant Management program section item (2). Modify existing mineral leases if negative impacts are occurring.
		b) For new sales or leases, see Special Status Animal and Plant Manage- ment program section item (3). Avoid development of saleable or leasable minerals adjacent to suitable habitat if negative impacts are expected. If a minerals lease or sale is to be issued adjacent to suitable habitat, apply stipula- tions to support or to not preclude species recovery.
	3) Protect the watershed contributing to Snake River snail habitat.	3) Conduct appropriate hydrologic studies or analysis before permitting de- velopments on BLM lands where the extraction of groundwater may nega- tively impact suitable habitat. Depending on the scope of the activity, this may require coordination and cooperation with other agencies.
Cultural Management	 Activities within the Cultural Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Paleontology	1) Activities within the Paleontology program will implement relevant con- servation measures as described in the Special Status Animal and Plant Management program section to promote recovery.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Special Status Animal and Plant Management Note: Common to All Programs	The conservation measures contained throughout this table implement im- portant elements included in the Recovery Plan for the bald eagle. The con- servation measures reflect BLM's commitment to support species recovery and meet ESA objectives.	The implementation actions reflect BLM's commitment to support species recovery and meet ESA objectives. Actions apply to BLM lands and activities only
	1) In cooperation with Idaho Department of Fish and Game (IDFG), U.S. Fish and Wildlife Service (USFWS), and others:	1) Following actions to be completed in cooperation with others:
	 a) Continue to cooperate in determining the distribution of populations and suitable habitats. 	a) Mapping and data inventory:
		i) Continue to identify, record, and map the following habitats: nest sites, communal roost sites, key foraging areas, and other suitable habitat on BLM lands.
		ii) Maintain a spatial database of species population and habitat information for BLM lands.
	b) Following current monitoring protocols, continue to cooperate in con- ducting systematic nest surveys and monitoring.	b) Cooperate with IDFG and USFWS (and FWS) to accomplish regular nest surveys and other monitoring (such as winter counts).
	c) Cooperate in the management of nest sites and communal roost sites to promote species recovery.	c) Update or develop management plans for nest sites, communal roost sites, or key foraging areas, as appropriate, for habitats located on BLM lands.
	d) Cooperate in the maintenance and improvement of habitat in key foraging areas, for example, mule deer winter range, and aquatic and riparian habitat for fish and waterfowl, where a need exists.	d) Take advantage of opportunities as they arise.
	e) Cooperate to maintain and develop nesting and roosting habitat for future use by bald eagles.	e) Manage suitable habitat to maintain and promote tree regeneration, in- cluding plantings, fencing, or other management actions. Identify riparian areas that would be appropriate for cottonwood restoration.
	f) Working with other agencies, compile a general list of BMPs that would	f) BMPs:
	tation and species recovery. The intent of implementing BMPs is to avoid or minimize negative impacts.	i) SO to coordinate development of BMPs with FO, District Office (DO), USFWS, and IDFG. Instruction memorandum to be issued by SO.
		ii) FO to implement BMPs.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	2) Ensure that ongoing Federal actions support or do not preclude species recovery.	2) Ongoing BLM activities:
		a) As needed, review ongoing activities within 2.5 miles of bald eagle nests or within the area designated in the local bald eagle nest management plan, and within 1 mile of communal roost sites where local consultation has not yet been completed.
		b) Determine if direct or indirect negative impacts to the species or its habi- tat are occurring as a result of ongoing discretionary BLM actions. If so, modify the activity to avoid or minimize negative impacts and, where feasi- ble, promote species recovery.
		c) Where needed, complete section 7 consultation for ongoing activities that may affect this species and its habitat.
	3) Ensure that new Federal actions support or do not preclude species recov-	3) New BLM activities:
		a) Project-level inventories will be completed in suitable habitat during project planning if inventory information is not available or adequate. SO will issue instruction memorandum concerning special status species project-level clear- ance inventories and assessment.
		b) If direct or indirect negative impacts to the species or its habitat are an- ticipated as a result of new BLM actions, modify the activity to avoid or minimize anticipated negative impacts and, where feasible, promote species recovery.
		c) Where needed, complete section 7 consultation for new activities that may affect this species and its habitat.
	4) Protect bald eagles from disturbance that might result in displacement during critical periods.	4) Avoid implementing activities near nest sites during the breeding season (February 1 to August 15) or follow the local bald eagle plan guidance near communal roost sites and key foraging areas during the wintering season (November 1 to March 1).
	5) Implement adaptive management as needed to achieve conservation objectives.	 Conduct site-specific implementation and effectiveness monitoring. Ad- just management as needed to ensure that management objectives are met.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

Appendix 21. Conservation Measures for Listed Species

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	6) Support conservation easements, cooperative management efforts, and other programs on adjacent non-Federal lands to support recovery of the bald eagle.	6) Take advantage of opportunities as they arise.
Air Resources	None	None
Soil and Water Resources: Riparian/Wetland Areas (includes weed management)	1) Activities within the Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program will implement relevant con- servation measures as described in the Special Status Animal and Plant Management program section to promote recovery. As a part of promoting recovery, the goals are to promote mature forested riparian habitat conserva- tion, to avoid negative impacts, or to minimize impacts if avoidance is not possible.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Projects involving the application of pesticides (herbicides, insecticides, etc.) that may affect the species will be analyzed at the project level and designed such that perticide applications will support concerning the perticides and re-	2) Site-specific stipulations will be developed locally using the following criteria:
	designed such that pesticide applications will support conservation and re- covery and minimize risks of exposure.	a) Evaluate the benefits and risks of vegetation treatment, including the following: application methods; pesticides, carriers, and surfactants used; needed treatment buffers; and use of non-chemical weed control (for example, bio-controls, hand pulling). If management objectives can be effectively accomplished using non-chemical methods, such is the preferred alternative.
		b) Apply appropriate spatial and temporal buffers to avoid species' exposure to harmful chemicals.
		c) Implement appropriate revegetation and weed control measures to reduce the risks of non-native species infestations following any ground/soil dis- turbing actions in or near suitable habitat.
	3) Where needed and feasible, coordinate with adjacent land owners and local governments regarding control of invasive plants in riparian areas through cooperative weed management programs.	3) Take advantage of opportunities as they arise.
	4) Conserve mature riparian forests (i.e., cottonwood galleries) in suitable habitat to maintain their integrity for use as bald eagle nesting, roosting, or	4) Management actions:
perching substrate.	perching substrate.	a) Emphasize eradication of non-native invasive species in riparian areas that compete with cottonwood regeneration. Continue to identify problem

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
		 areas (such as areas infested with tamarisk, Russian olive, and false indigo) and implement appropriate weed control measures. b) Avoid issuing commercial firewood cutting permits in suitable habitats in riparian forests. If permits are issued, ensure that such activities are consistent with the long-term maintenance of mature cottonwood forests. c) As needed, close suitable habitat in riparian forests to non-commercial firewood cutting and post the closure.
Upland Vegetation Management: Rangelands (includes weed management)	 Activities in the Upland Vegetation Management: Rangelands (includes weed management) program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Projects involving the application of pesticides in uplands adjacent to suitable bald eagle habitat or in restoration areas will be designed and implemented in accordance with the approach described in the Soil and Water Resources: Ri- parian/Wetland Areas (includes weed management) program section.	2) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
Forest and Woodland Management (includes weed management)	1) Activities in the Forest and Woodland Management (includes weed management) program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. As a part of promoting recovery, the goals are to promote mature forest conservation in suitable habitat, to avoid negative impacts, or to minimize impacts if avoidance is not possible.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Conserve mature upland forests in suitable habitat to maintain their integ-	2) Management actions:
	ity to use as our eagle nesting, roosting, or perching substitute.	a) Allow commercial timber management projects or firewood cutting when negative impacts to suitable bald eagle habitat can be avoided or minimized. Within 1/2 mile, or as defined in the local bald eagle plan, of nest and commu- nal roost sites ensure that such activities maintain or improve old growth stand characteristics.
		b) Avoid designating suitable habitat as open to non-commercial firewood cut- ting. Close suitable habitat areas to non-commercial firewood cutting if man- agement problems arise.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	3) Projects involving the application of pesticides in forested areas and woodlands adjacent to riparian and wetland areas that provide suitable bald eagle habitat will be designed and implemented in accordance with the ap- proach described in the Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.	3) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
Wildlife and Wildlife Habitat Management	1) Activities within the Wildlife and Wildlife Habitat Management pro- gram will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote recovery.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Fish and Aquatic Habitat Management	 Activities within the Fish and Aquatic Habitat Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recov- ery. As a part of promoting recovery, the goals are to promote productive fish habitat as a prey species for bald eagles, to avoid negative impacts, or to minimize impacts if avoidance is not possible. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Livestock Grazing Management: Permits and Leases	 Activities within the Livestock Grazing Management: Permits And Leases will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote recovery. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Manage livestock grazing and trailing to promote nesting and roosting	2) Permit or lease renewal actions:
	tree growth and recruitment, healthy riparian communities, or a combination of these objectives. Maintain and promote suitable habitat and restore areas for the bald eagle while implementing rangeland health standards and guide- lines (S&Gs).	a) For review of ongoing actions, see Special Status Animal and Plant Management program section item (2).
		b) For new actions, see Special Status Animal and Plant Management program section item (3).
	3) Promote restoration of suitable habitat following fire, fire rehabilitation, restoration treatments, or other major disturbances.	3) As needed, protect disturbed areas using temporary closures or other measures until the cottonwood saplings (or other target tree species) are re- established and self-sustaining.
	4) Maintain regular compliance checks on grazing allotments with nest sites and communal roost sites to identify problems as soon as possible and take immediate corrective measures.	4) Ongoing, day-to-day BLM action.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Livestock Grazing Management: Livestock Management Facilities	 Activities within the Livestock Grazing Management: Livestock Man- agement Facilities program will implement relevant conservation measures as described in the Special Status Animal and Plant Management pro- gram section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Manage livestock facilities to promote nesting and roosting tree growth and recruitment, healthy riparian communities, or a combination of these objectives. Maintain and promote suitable habitat and restore areas for the bald eagle while implementing rangeland health S&Gs.	2) For review of ongoing actions, see Special Status Animal and Plant Management program section item (2). For new actions, see Special Status Animal and Plant Management program section item (3). As appropriate to avoid or minimize negative impacts, modify existing and avoid placement of new livestock facilities.
Wild Horse Management	1) Activities within the Wild Horse Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Recreation Management	 Activities within the Recreation Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Developed facilities (boat access, paved campgrounds, vault toilets, inter- pretive kiosks, etc.): Manage existing and new recreation facilities so as to	2) Management of existing and new facilities:
	not preclude species habitat conservation and recovery. This includes man- agement of the physical facilities, as well as disturbances to the species re- sulting from human uses.	a) For review of existing facilities see Special Status Animal and Plant Management program section item (2). As appropriate to avoid or minimize negative impacts, modify existing facilities.
		b) For new facilities, or for expansion of uses or seasons of use at existing facilities, see Special Status Animal and Plant Management program section item (3). In addition, avoid development of new recreation facilities or expansion of existing facilities within 0.5 mile of bald eagle nests and traditional communal roosting areas, or follow the local bald eagle plan guidance.
	3) Dispersed use areas (informal areas, including camping areas and tie-up areas for pack animals and boats): Manage dispersed use sites so as not to preclude species habitat conservation and recovery. This includes limiting disturbances to the species resulting from human uses.	3) For review of ongoing activities, see Special Status Animal and Plant Management program section item (2). In addition, minimize human activity within 0.5 mile of bald eagle nests and traditional communal roosting areas, or follow the local bald eagle plan guidance if negative impacts are occurring. Close areas, either seasonally or year-round, as needed to protect the species and its habitat, and post and monitor the closure.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	4) Commercial and noncommercial recreation permits, including outfitter camps: Issue commercial and noncommercial recreation permits so as not to preclude species habitat conservation and recovery. This includes manage- ment of physical facilities (such as camps), as well as disturbances to the species resulting from human uses.	 4) Issuance and review of existing and new permits: a) For review of existing permits, see Special Status Animal and Plant Management program section item (2). If needed, modify existing permits that conflict with providing bald eagle suitable habitat conditions. b) For new permits, see Special Status Animal and Plant Management program section item (3). Avoid issuing recreation permits if negative impacts are expected. Consider the seasonal nature of the proposed activities, and whether this conflicts with bald eagle recovery needs. In particular, avoid permitting new recreation permit is to be issued, apply stipulations to the permit to support or to not preclude species conservation and recovery.
	5) Coordinate with the IDFG to educate recreation users at boat ramps and at designated camp areas about the need to conserve bald eagle habitat.	5) Take advantage of opportunities as they arise.
Recreation Management: Travel Management	 Activities within the Recreation Management: Travel Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Manage roads, off-highway vehicle (OHV) routes and areas, as well as non-motorized trails, so as not to preclude species habitat conservation and recovery. This includes management of physical facilities, as well as distur- bances to the species resulting from human uses.	 2) Review of existing and new roads, OHV routes, and areas and non-motorized trails: a) For existing roads, designated OHV routes and areas, and designated non-motorized trails, see Special Status Animal and Plant Management program section item (2). Modify roads, routes, or trails within 0.5 mile of nest sites or communal roosts, or follow the local bald eagle plan guidance, if negative impacts are occurring. Evaluate the need for seasonal OHV use restrictions within or adjacent to occupied nest sites, communal roosts, or key foraging areas. Implement restrictions to reduce disturbance. Seek opportunities to close and revegetate OHV routes or non-motorized trails and use areas in and adjacent to nest sites and communal roosts, if negative impacts are occurring. b) For new roads, OHV routes and areas, and non-motorized trails, see Special Status Animal and Plant Management program section item (3). Avoid con-

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
		structing new roads, trails, routes, and areas if negative impacts are expected. Consider the seasonal nature of the proposed activities, and whether this con- flicts with bald eagle recovery needs. In particular, avoid opening new roads, trails, routes, and areas within 0.5 mile of occupied bald eagle nests, communal roosting areas, or key foraging areas, or follow the local bald eagle plan guid- ance.
	 Maintain regular compliance checks on OHV closures to protect suitable habitat and to identify problems as soon as possible and take immediate corrective measures. 	3) Ongoing, day-to-day BLM activities.
Visual Resource Management	None	None
Special Designation Area Management	1) Activities within the Special Designation Area Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recov- ery.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Explore the potential for new designations that would enhance species recovery, such as relict, good-condition, cottonwood galleries.	2) Take advantage of opportunities as they arise.
Fire Management: Fire Suppression	1) Activities within the Fire Management: Fire Suppression program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recov- ery. Human life and firefighter safety and property take priority over species protection.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	 Fire suppression efforts will be conducted, as possible, to protect bald eagle habitat. Place a high priority on protecting suitable habitat. 	2) Fire management activities:
		a) Review Fire Management Plan for adequacy in addressing conservation measures. Modify the plan if needed.
		 b) Apply minimum impact suppression tactics (MIST) in suitable habitat, as appropriate. Consult with resource advisors to determine where MIST tactics should be applied to avoid or minimize negative impacts. c) Do not locate fire base camps, staging areas, and fueling areas in or adjacent to nest sites and communal roosts. Avoid conducting other related activities in these areas.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	3) Coordinate with U.S. Forest Service, Idaho Department of Lands, or other applicable agency personnel regarding fire suppression activities in or near nest sites and communal roost areas.	3) Ongoing interagency coordination.
Fire Management: Emergency Stabilization and Rehabilitation	 Activities within Fire Management: Emergency Stabilization and Reha- bilitation program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Implement Emergency Stabilization and Rehabilitation (ES&R) activities to promote bald eagle habitat rehabilitation.	 2) ES&R activities: a) If needed and if natural recovery would not achieve habitat objectives, implement ES&R activities to promote rehabilitation of suitable habitat. Plant locally appropriate nesting and roosting trees, if natural recovery of such trees is doubtful. b) As needed, protect disturbed areas using temporary closures or other measures until the cottonwood saplings (or other target tree species) are re-established and self-sustaining.
	3) Fire rehabilitation projects involving the application of pesticides will be analyzed and implemented in accordance with the approach described in the Soil and Water Resources: Riparian/Wetland Areas program section.	3) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
Fire Management: Wildland Fire Use	1) Activities within the Fire Management: Wildland Fire Use program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recov- ery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Wildland fire use projects (where allowed) will be designed to conserve suitable bald eagle habitat.	2) When developing wildland fire use plans, avoid burning suitable habitat and only develop appropriate burn prescriptions that maximize the conservation of suitable habitat.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

Appendices

Snake River Birds of Prey NCA
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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Fire Management: Prescribed Fire	1) Activities within the Fire Management: Prescribed Fire program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recov- ery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Prescribed fire projects will be designed to conserve suitable bald eagle habitat.	2) When developing and implementing prescribed fire plans, avoid or mini- mize negative impacts to suitable habitat, and use prescribed fire as a tool for assisting with species conservation (for example, for enhancement of big game winter range used by bald eagles).
Fire Management: Non-Fire Fuels Management	 Activities within the Fire Management: Non-Fire Fuels Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote recovery. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Implement projects involving the application of pesticides in accordance with the approach described in the Soil and Water Resources: Ripar-ian/Wetland Areas (includes weed management) program section.	2) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
	3) Promote establishment of plant species needed to achieve suitable bald eagle habitat.	3) Incorporate conservation actions into the fuels projects, as needed. For example, design seed mixes that will enhance or promote the growth of cot- tonwoods or other target tree species.
Fire Management: Community Assistance	1) Activities within the Fire Management: Community Assistance pro- gram will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote recovery.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Follow all measures included throughout the Fire Management Pro- gram sections.	2) See actions within Fire Management program sections. Incorporate into community assistance agreements.
Lands and Realty Management: Land Tenure Adjustment (land sale_exchanges	1) Activities within the Lands and Realty Management: Land Tenure Adjustment (land sale, exchanges, withdrawals, etc.) program will im- plement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
withdrawals, etc.)	2) Where feasible and funding is available, acquire through land exchange or purchase private lands in suitable habitat areas that could enhance habitat for bald eagles.	2) Take advantage of opportunities as they arise. Priority should be given to lands that are adjacent to or near public lands and/or a population occurring on BLM and private lands.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

Appendix 21. Conservation Measures for Listed Species

Snake River Birds of Prey NCA Proposed RMP/FEIS

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	3) Retain bald eagle habitat in Federal ownership to the extent possible, while balancing other needs.	3) Review each land tenure decision in terms of species habitat. Retain ac- tive nest sites in public ownership unless compelling circumstances necessi- tate the land tenure adjustment. Avoid the loss of suitable habitat from Fed- eral ownership. If property with suitable habitat is to be transferred out of Federal ownership, permanent conservation easements may be attached to the transfer that would result in equal or greater protection than under Fed- eral management. Such measures must be approved by the State Director.
Lands and Realty Management: Land Use Permits and Leases	1) Activities within the Lands and Realty Management: Land Use Per- mits and Leases program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Issue new land use permits and leases and review existing permits and leases at renewal so as not to preclude species habitat conservation and re- covery. This includes management of physical facilities, as well as distur- bances to the species resulting from human uses.	2) For new permits and renewal of existing permits (apply to areas within suitable habitat), see Special Status Animal and Plant Management program section item (3). Avoid issuing new permits or leases, or renewing existing permits or leases in or near nest sites or communal roosts if negative impacts are expected. Consider the seasonal nature of the proposed activities, and whether this conflicts with bald eagle recovery needs. If a permit or lease is to be issued or re-issued in suitable habitat, apply stipulations to the permit that support or do not preclude species recovery and that avoid or minimize negative impacts.
Lands and Realty Management: Rights-of-Way	 Activities within the Lands and Realty Management: Rights-of-Way program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote recovery. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Issue new rights-of-way—and review existing rights-of-way at renewal— so as not to preclude species habitat conservation and recovery. This in- cludes management of physical facilities, as well as disturbances to the spe- cies resulting from human uses.	2) For new rights-of-way and renewal of existing rights-of-way (applying to areas within suitable habitat), see Special Status Animal and Plant Management program section item (3). Avoid issuing rights-of-way, or renewing existing rights-of-way, in or near nest sites or communal roosts if negative impacts are expected. Consider the seasonal nature of the proposed activities, and whether this conflicts with bald eagle recovery needs. If a right-of-way is to be issued or re-issued in suitable habitat, apply stipulations to the right-of-way that support or do not preclude species recovery and that avoid or minimize negative impacts.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

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Proposed RMP/FEIS

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Mineral Management: Locatable Minerals	1) Activities within the Mineral Management: Locatable Minerals pro- gram will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote recovery.	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Approve plans of operations or allow notice level operations so as not to preclude species habitat conservation and recovery. This includes manage- ment of physical facilities, as well as disturbances to the species resulting from human uses.	 2) Approval of plans of operations and notice-level operations: a) For review of existing plans of operation and notice-level operations (applying to areas either within 2.5 miles of bald eagle nests or within the area designated in the local bald eagle nest management plan, and within 1 mile of communal roost sites), see Special Status Animal and Plant Management program section item (2). To the extent allowed by law, modify plans of operation or notice-level operations that conflict with bald eagle management objectives in suitable habitat. For notice-level operations, notify the operator that modifications to proposed activities will be required to avoid negative impacts. b) For new plans of operation and notice-level operations (applying to areas within suitable habitat), see Special Status Animal and Plant Management program section item (3). To the extent allowed by law, avoid approving plans of operation or notice-level operations that conflict with bald eagle management objectives in suitable habitat. Consider the seasonal nature of the proposed activities, and whether this conflicts with bald eagle recovery needs. For notice-level operations, notify the operator that modifications to proposed activities will be required to avoid negative impacts. If a plan of operations is to be approved in suitable habitat, apply stipulations to support or to not preclude species recovery. A notice will require modification by the operator until BLM determines that it will not result in undue or unnecessary degradation.
Mineral Management: Saleable and Leasable Minerals	1) Activities within the Mineral Management: Saleable and Leasable Minerals program will implement relevant conservation measures as de- scribed in the Special Status Animal and Plant Management program section to promote recovery.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Approve development of saleable or leasable minerals so as not to pre- clude species habitat conservation and recovery. This includes management of physical facilities, as well as disturbances to the species resulting from human uses.	2) Approval of saleable and leasable minerals:a) For review of existing mineral leases (applying to areas either within 2.5 miles of bald eagle nests or within the area designated in the local bald eagle

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

Appendix 21. Conservation Measures for Listed Species

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
		nest management plan, and within 1 mile of communal roost sites), see Spe- cial Status Animal and Plant Management program section item (2).
		b) For new sales or leases (applying to areas within suitable habitat), see Special Status Animal and Plant Management program section item (3). Avoid development of saleable or leasable minerals in suitable habitat if negative impacts are expected. Consider the seasonal nature of the proposed activities, and whether this conflicts with bald eagle recovery needs. If a minerals lease or sale is to be issued in suitable habitat, apply stipulations to support or to not preclude species recovery.
Cultural Management	 Activities within the Cultural Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Paleontology	 Activities within the Paleontology program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote recovery. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.

Appendix 21b. Bald Eagle (Haliaeetus leucocephalus).

Appendices

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Special Status Animal and Plant Management Note: Common to	The conservation measures contained throughout this table implement impor- tant elements for yellow-billed cuckoo conservation. The conservation meas- ures reflect BLM's commitment to support species conservation.	The implementation actions reflect BLM's commitment to support spe- cies conservation. Actions apply to BLM lands and activities only.
All Programs	1) In cooperation with Idaho Department of Fish and Game (IDFG), U.S. Fish and Wildlife Service (USFWS), and others:	1) Following actions to be completed in cooperation with others:
	a) Continue to cooperate in determining the distribution of known populations and suitable habitats.	a) Mapping and data inventory:
		i) Use IDFG, CDC, USFWS, and other data to identify, record, and map known populations and suitable habitat on BLM lands.
		ii) Maintain a spatial database of species population and habitat informa- tion for BLM lands.
		iii) Participate in surveys and map new populations as found. Systematic inventories will continue to be conducted in cooperation with other agencies.
	b) Following current monitoring protocols, continue to cooperate in monitor- ing for species presence on a regular basis.	b) Cooperate with IDFG and USFWS to conduct regular monitoring of populations on BLM lands. Assist in documenting whether cuckoos are using habitats and the type of use.
	c) Participate in research essential to conservation of the species. Cooperate in determining specific limiting factors in terms of habitat needs and characteristics.	c) BLM will participate as funding allows.
	d) Cooperate in the management and improvement of suitable habitat to pro- mote species conservation.	d) Where appropriate, update or develop management plans for suitable habitat, particularly in areas with known populations, as well as in restoration areas.
	e) Working with other agencies, compile a general list of BMPs that would apply to all programs, to the extent that such a list would assist with species	e) BMPs:
	and habitat conservation. The intent of implementing BMPs is to avoid or minimize negative impacts.	 i) SO to coordinate development of BMPs with FO, District Office (DO), USFWS, and IDFG. Instruction memorandum to be issued by SO. ii) FO to implement BMPs.

Appendix 21c. Yellow-Billed Cuckoo (Coccyzus americanus).

Appendix 21. Conservation Measures for Listed Species

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	2) Ensure that ongoing Federal actions support or do not preclude species con- servation.	2) Ongoing BLM activities:a) Review ongoing activities in locations with known populations.
		b) Determine if direct or indirect negative impacts to the species or its habitat are occurring as a result of ongoing discretionary BLM actions. If so, modify the activity to avoid or minimize negative impacts and, where feasible, pro- mote species conservation.
	3) Ensure that new Federal actions support or do not preclude species conservation	3) New BLM activities:
		 a) Project-level inventories will be completed in suitable habitat during project planning if inventory information is not available or adequate. SO will issue instruction memorandum concerning special status species project-level inventories and assessment.
		b) If direct or indirect negative impacts to the species or its habitat are anticipated as a result of new BLM actions, modify the activity to avoid or minimize negative impacts and, where feasible, promote species con- servation.
		c) Avoid implementing activities that have the potential to disturb or dis- place known populations of cuckoos during the breeding season (May through September).
	4) Implement adaptive management as needed to achieve conservation objec- tives.	4) Conduct site-specific implementation and effectiveness monitoring. Adjust management as needed to ensure that management objectives are met.
	5) Support conservation easements, cooperative management efforts, and other programs on adjacent non-Federal lands to support conservation of the yellow- billed cuckoo.	5) Take advantage of opportunities as they arise.
Air Resources	None	None

Appendices

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Soil and Water Resources: Ripar- ian/Wetland Areas (includes weed management)	 Activities within the Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. As a part of conservation, the goals are to promote multi-tiered forested riparian habitat development and maintenance in suitable habitat and restoration areas, to avoid negative impacts, or to minimize impacts if avoidance is not possible. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Projects involving the application of pesticides (herbicides, insecticides, etc.) that may affect the species will be analyzed at the project level and designed such that pesticide applications will support conservation and minimize	2) Site-specific stipulations will be developed locally using the following criteria:
I	risks of exposure.	a) Evaluate the benefits and risks of vegetation treatment, including the following: application methods; pesticides, carriers, and surfactants used; needed treatment buffers; and use of non-chemical weed control (for ex- ample, bio-controls, hand pulling). If management objectives can be ef- fectively accomplished using non-chemical methods, such is the preferred alternative.
		b) Apply appropriate spatial and temporal buffers to avoid species' expo- sure to harmful chemicals.
		c) Implement appropriate revegetation and weed control measures to reduce the risks of non-native species infestations following any ground/soil disturbing actions in or near suitable habitat.
	3) Where needed and feasible, coordinate with adjacent landowners and local governments regarding control of invasive plants in riparian areas through cooperative weed management programs.	3) Take advantage of opportunities as they arise.
4)	4) Conserve riparian vegetation in suitable habitat (for example, healthy wil-	4) Management actions:
	billed cuckoos, and initiate management in restoration areas.	a) Emphasize eradication of non-native invasive species in riparian areas that compete with willow and cottonwood tree regeneration. Continue to identify problem areas (such as areas infested with tamarisk, Russian olive, and false indigo) and implement appropriate weed control measures.
		b) Avoid issuing commercial firewood cutting permits in suitable habitats in riparian forests. If permits are issued, ensure that such activities are

Appendix 21. Conservation Measures for Listed Species

Snake River Birds of Prey NCA Proposed RMP/FEIS

LUP Programs	Conservation Measures	PI M Implementation Actions
Evaluateu	Conservation Measures	BEM Implementation Actions
		consistent with the long-term maintenance of suitable habitat and en- hancement of restoration areas.
		c) As needed, close suitable habitat in riparian forests to non-commercial firewood cutting and post the closure.
Upland Vegetation Management: Rangelands (includes weed	 Activities within the Upland Vegetation Management: Rangelands (in- cludes weed management) program will implement relevant conservation meas- ures as described in the Special Status Animal and Plant Management program section to promote conservation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
management)	2) Projects involving the application of pesticides in uplands adjacent to suit- able yellow-billed cuckoo habitat or in restoration areas will be designed and implemented in accordance with the approach described in the Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.	2) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
Forest and Woodland Management (includes weed management)	 Activities within the Forest and Woodland Management (includes weed management) program will implement relevant conservation measures as de- scribed in the Special Status Animal and Plant Management program section to promote conservation. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Projects involving the application of pesticides in forested areas and woodlands adjacent to suitable yellow-billed cuckoo habitat or in restoration areas will be designed and implemented in accordance with the approach described in the Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.	2) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
Wildlife and Wildlife Habitat Management	 Activities within the Wildlife and Wildlife Habitat Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	 In restoration areas, cooperate in creating opportunities for yellow-billed cuckoo occupancy by enhancing habitat. 	 Consider planting or other habitat enhancement measures to improve yellow-billed cuckoo habitat value.
Fish and Aquatic Habitat Management	1) Activities within the Fish and Aquatic Habitat Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.

Appendix 21c. Yellow-Billed Cuckoo (Coccyzus americanus).

Snake River Birds of Prey NCA
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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Livestock Grazing Management: Permits and Leases	 Activities within the Livestock Grazing Management: Permits And Leases program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Manage livestock grazing and trailing to promote growth and recruitment of healthy riparian vegetation communities (for example, willows and cotton-	2) Permit or lease renewal actions:
	wood trees). Maintain and promote suitable habitat and restore areas for the yellow-billed cuckoo while implementing rangeland health standards and midelines (S&Gs)	a) For review of ongoing actions, see Special Status Animal and Plant Management program section item (2).
	Serverines (Secos).	b) For new actions, see Special Status Animal and Plant Management program section item (3).
		c) As appropriate to avoid or minimize negative impacts, modify live- stock grazing permits and leases.
	3) Promote restoration of suitable habitat following fire, fire rehabilitation, restoration treatments, or other major disturbances.	3) As needed, protect disturbed areas using temporary closures or other measures until the willow shrubs and cottonwood saplings (or other target riparian species) are re-established and self-sustaining.
	4) Maintain regular compliance checks on grazing allotments with known populations to identify problems as soon as possible and take immediate cor- rective measures.	4) Ongoing, day-to-day BLM action.
Livestock Grazing Management: Livestock Management	 Activities within the Livestock Grazing Management: Livestock Man- agement Facilities program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Facilities	2) Manage livestock facilities to promote healthy riparian vegetation commu- nities (for example, willows and cottonwood trees). Maintain and promote suitable habitat and restore areas for the yellow-billed cuckoo while imple- menting rangeland health S&Gs.	2) For review of ongoing actions, see Special Status Animal and Plant Management program section item (2). For new actions, see Special Status Animal and Plant Management program section item (3). As appropriate to avoid or minimize negative impacts, modify existing and avoid placement of new livestock facilities.
Wild Horse Management	1) Activities within the Wild Horse Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.

Appendix 21c. Yellow-Billed Cuckoo (Coccyzus americanus).

Appendix 21. Conservation Measures for Listed Species

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Recreation Management	1) Activities within the Recreation Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Developed facilities (boat access, paved campgrounds, vault toilets, inter- pretive kicks, etc.): Manage existing and new recreation facilities so as not to	2) Management of existing and new facilities:
	preclude species habitat conservation. This includes management of the physi- cal facilities, as well as disturbances to the species resulting from human uses.	a) For review of existing facilities, see Special Status Animal and Plant Management program section item (2). As appropriate to avoid or minimize negative impacts, modify existing facilities.
		b) For new facilities, or for expansion of uses or seasons of use at existing facilities, see Special Status Animal and Plant Management program section item (3). In addition, avoid development of new recreation facilities or expansion of existing facilities in suitable habitat, if negative impacts are anticipated.
	3) Dispersed use areas (informal areas, including camping areas and tie-up areas for pack animals and boats): Manage dispersed use sites so as not to preclude species habitat conservation. This includes limiting disturbances to the species resulting from human uses.	3) For review of ongoing actions, see Special Status Animal and Plant Management program section item (2). In addition, minimize human activity in suitable habitat if negative impacts are occurring. Close areas, either seasonally or year-round, as needed to protect the species and its habitat, and post and monitor the closure.
	4) Commercial and noncommercial recreation permits, including outfitter	4) Issuance and review of existing and new permits:
with goals for promoting species habitat conservation. T ment of physical facilities (such as camps), as well as di- cies resulting from human uses.	with goals for promoting species habitat conservation. This includes manage- ment of physical facilities (such as camps), as well as disturbances to the spe- cies resulting from human uses.	a) For review of existing permits, see Special Status Animal and Plant Management program section item (2). If needed, modify existing per- mits that conflict with achieving or maintaining suitable habitat condi- tions.
		b) For new permits, see Special Status Animal and Plant Management program section item (3). Avoid issuing recreation permits if negative impacts are expected. Consider the seasonal nature of the proposed activi- tics, and whether this conflicts with yellow-billed cuckoo conservation needs. In particular, avoid permitting new recreation activities in suitable habitat. If a recreation permit is to be issued, apply stipulations to the
	5) Coordinate with the IDFG to educate recreation users at boat ramps and at designated camp areas about the need to conserve yellow-billed cuckoo habi-	permit to support or to not preclude species conservation.
	tat.	5) Take advantage of opportunities as they arise.

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Recreation Management: Travel Management	 Activities within the Recreation Management: Travel Management pro- gram will implement relevant conservation measures as described in the Spe- cial Status Animal and Plant Management program section to promote con- servation. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Manage roads, off-highway vehicle (OHV) routes and areas, as well as non- motorized trails, so as not to preclude species habitat conservation. This in- cludes management of physical facilities, as well as disturbances to the species resulting from human uses.	 2) Review of existing and new roads, OHV routes, and areas and non-motorized trails: a) For existing roads, designated OHV routes and areas, and designated non-motorized trails, see Special Status Animal and Plant Management program section item (2). Modify routes in locations with known populations, if negative impacts are occurring. Evaluate the need for seasonal OHV use restrictions in suitable habitat and, if needed, implement restrictions to reduce disturbance to the species and its habitat. Seek opportunities to close and revegetate OHV routes or non-motorized trails and use areas in suitable habitat, if negative impacts are occurring. b) For new roads, OHV routes and areas, and trails, see Special Status Animal and Plant Management program section item (3). Avoid constructing new roads, trails, routes, and areas if negative impacts are expected. Consider the seasonal nature of the proposed activities, and whether this conflicts with yellow-billed cuckoo conservation needs. In particular, avoid opening new roads, trails, routes, and areas in suitable habitat.
	 Maintain regular compliance checks on OHV closures to protect known populations and to identify problems as soon as possible and take immediate corrective measures. 	3) Ongoing, day-to-day BLM activities.
Visual Resource Management	None	None
Special Designation Area Management	1) Activities within the Special Designation Area Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Explore the potential for new designations that would enhance species conser- vation, such as good-condition cottonwood/willow riparian forest.	2) Take advantage of opportunities as they arise.

Appendix 21. Conservation Measures for Listed Species

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Fire Management: Fire Suppression	 Activities within the Fire Management: Fire Suppression program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. Human life and firefighter safety and property take priority over species pro- tection. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Fire suppression efforts will be conducted, as possible, to protect yellow- billed cuckoo habitat.	2) Fire management activities:
		a) Review Fire Management Plan for adequacy in addressing conserva- tion measures. Modify the plan if needed.
		b) Apply minimum impact suppression tactics (MIST) in suitable habitat, as appropriate. Consult with resource advisors to determine where MIST tactics should be applied to avoid or minimize negative impacts.
		c) Do not locate fire base camps, staging areas, and fueling areas in suit- able habitat. Avoid locating these and other related activities in suitable habitat.
	3) Coordinate with U.S. Forest Service, Idaho Department of Lands, or other applicable agency personnel regarding fire suppression activities in or near suitable habitat.	3) Ongoing interagency coordination.
Fire Management: Emergency Stabilization and Rehabilitation	 Activities within the Fire Management: Emergency Stabilization and Rehabilitation program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Kendermation	 Implement Emergency Stabilization and Rehabilitation (ES&R) activities to promote yellow-billed cuckoo habitat rehabilitation. 	2) ES&R activities:
		a) If needed and if natural recovery would not achieve habitat objectives, implement ES&R activities to promote rehabilitation of suitable habitat. Plant locally appropriate trees and shrubs, if natural recovery of such vegetation is doubtful.
		b) As needed, protect disturbed areas using temporary closures or other measures until the cottonwood saplings (and other target tree and shrub species) are re-established and self-sustaining.

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LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	3) Fire rehabilitation projects involving the application of pesticides in or adjacent to suitable habitat areas will be analyzed and implemented in accordance with the approach described in the Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.	3) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
Fire Management: Wildland Fire Use	1) Activities within the Fire Management: Wildland Fire Use program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Wildland fire use projects (where allowed) will be designed to conserve suitable yellow-billed cuckoo habitat.	2) When developing wildland fire use plans, avoid burning suitable habi- tat, and develop appropriate burn prescriptions that maximize the conser- vation of suitable habitat.
Fire Management: Prescribed Fire	 Activities within the Fire Management: Prescribed Fire program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	 Prescribed fire projects will be designed to conserve suitable yellow-billed cuckoo habitat and restoration areas. 	2) When developing and implementing prescribed fire plans, avoid or minimize negative impacts to suitable habitat, and use prescribed fire as a tool for enhancing restoration areas.
Fire Management: Non-Fire Fuels Management	 Activities within the Fire Management: Non-Fire Fuels Management program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Implement projects involving the application of pesticides in or adjacent to suitable habitat or restoration areas in accordance with the approach described in the Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.	2) See Soil and Water Resources: Riparian/Wetland Areas (includes weed management) program section.
	3) Promote establishment of vegetation needed to achieve suitable yellow- billed cuckoo habitat.	3) Incorporate conservation actions into the fuels projects, as needed. For example, design seed mixes that will enhance or promote the growth of willows, cottonwoods, or other target shrub and tree species.
Fire Management: Community Assistance	 Activities within the Fire Management: Community Assistance program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conser- vation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.

Appendix 21c. Yellow-Billed Cuckoo (Coccyzus americanus).

Appendix 21. Conservation Measures for Listed Species

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	2) Follow all measures included throughout the Fire Management program sections.	2) See actions within Fire Management program sections. Incorporate into community assistance agreements.
Lands and Realty Management: Land Tenure Adjustment (land sale, exchanges,	1) Activities within the Lands and Realty Management: Land Tenure Ad- justment (land sale, exchanges, withdrawals, etc.) program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation.	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
withdrawals, etc.)	2) Where feasible and funding is available, acquire through land exchange or purchase private lands that support known populations or could enhance habitat for yellow-billed cuckoo.	2) Take advantage of opportunities as they arise. Priority should be given to lands that are adjacent to or near public lands.
	3) Retain yellow-billed cuckoo habitat in Federal ownership to the extent pos- sible, while balancing other needs.	3) Review each land tenure decision in terms of species habitat. Retain suitable habitat in public ownership unless compelling circumstances necessitate the land tenure adjustment. If property with suitable habitat is to be transferred out of Federal ownership, permanent conservation easements may be attached to the transfer that would result in equal or greater protection than under Federal management. Such measures must be approved by the State Director.
Lands and Realty Management: Land Use Permits and Leases	 Activities within the Lands and Realty Management: Land Use Permits and Leases program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote conservation. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Issue new land use permits and leases and review existing permits and leases at renewal so as not to preclude species habitat conservation. This in- cludes management of physical facilities, as well as disturbances to the species resulting from human uses.	2) For new permits and renewal of existing permits, see Special Status Animal and Plant Management program section item (3). Avoid issuing new permits or leases, or renewing existing permits or leases, in suitable habitat if negative impacts are expected. Consider the seasonal nature of the proposed activities, and whether this conflicts with yellow-billed cuckoo conservation needs. If a permit or lease is to be issued or re-issued in suitable habitat, apply stipulations to the permit that support or do not preclude species conservation and that avoid or minimize negative im- pacts.
Lands and Realty Management: Rights-of-Way	 Activities within the Lands and Realty Management: Rights-of-Way program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.

Appendices

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
	2) Issue new rights-of-way and review existing rights-of-way at renewal so as not to preclude species habitat conservation. This includes management of physical facilities, as well as disturbances to the species resulting from human uses.	2) For new rights-of-way and renewal of existing rights-of-way, see Special Status Animal and Plant Management program section item (3). Avoid issuing rights-of-way, or renewing existing rights-of-way, in suitable habitat if negative impacts are expected. Consider the seasonal nature of the proposed activities, and whether this conflicts with yellow-billed cuckoo conservation needs. If a right-of-way is to be issued or reissued in suitable habitat, apply stipulations to the right-of-way that support or do not preclude species conservation and that avoid or minimize negative impacts.
Mineral Management: Locatable Minerals	 Activities within the Mineral Management: Locatable Minerals program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to promote conser- vation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Approve plans of operations or allow notice level operations so as not to preclude species habitat conservation. This includes management of physical facilities, as well as disturbances to the species resulting from human uses.	 2) Approval of plans of operations and notice-level operations: a) For review of existing plans of operation and notice-level operations, see Special Status Animal and Plant Management program section item (2). To the extent allowed by law, modify plans of operation or notice-level operations that conflict with yellow-billed cuckoo management objectives in suitable habitat. For notice-level operations, notify the operator that modifications to proposed activities will be required to avoid negative impacts. b) For new plans of operation and notice-level operations, see Special Status Animal and Plant Management program section item (3). To the extent allowed by law, avoid approving plans of operation or notice-level operations that conflict with yellow-billed cuckoo management objectives in suitable habitat. Consider the seasonal nature of the proposed activities, and whether this conflicts with yellow-billed cuckoo conservation needs. For notice-level operations, notify the operator that modifications to proposed activities will be required to avoid negative impacts. If a plan of operations is to be approved in suitable habitat, apply stipulations to support or to not preclude species conservation. A notice will require modification by the operator until BLM determines that it will not result in undue or unnecessary deeradation.

Appendix 21. Conservation Measures for Listed Species

LUP Programs Evaluated	Conservation Measures	BLM Implementation Actions
Mineral Management: Saleable and Leasable Minerals	 Activities within the Mineral Management: Saleable and Leasable Min- erals program will implement relevant conservation measures as described in the Special Status Animal and Plant Management program section to pro- mote conservation. 	 Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
	2) Approve development of saleable or leasable minerals so as not to preclude species habitat conservation. This includes management of physical facilities	2) Approval of saleable and leasable minerals:
	as well as disturbances to the species resulting from human uses.	a) For review of existing mineral leases, see Special Status Animal and Plant Management program section item (2). Modify existing mineral leases if negative impacts are occurring.
		b) For new sales or leases, see Special Status Animal and Plant Man- agement program section item (3). Avoid development of saleable or leasable minerals in suitable habitat if negative impacts are expected. Consider the seasonal nature of the proposed activities, and whether this conflicts with yellow-billed cuckoo conservation needs. If a minerals lease or sale is to be issued in suitable habitat, apply stipulations to sup- port or to not preclude species conservation.
Cultural Management	 Activities within the Cultural Management program will implement rele- vant conservation measures as described in the Special Status Animal and Plant Management program section to promote conservation. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.
Paleontology	 Activities within the Paleontology program will implement relevant con- servation measures as described in the Special Status Animal and Plant Management program section to promote conservation. 	1) Apply relevant conservation measures from the Special Status Animal and Plant Management program section at the beginning of this table.

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