Owyhee Canyonlands Wilderness and Wild & Scenic Rivers

Draft Management Plan and Environmental Assessment

U.S. Department of the Interior
Bureau of Land Manangement
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BLM

Boise District BLM
3948 Development Ave
Boise, ID 83705

Twin Falls District BLM
2536 Kimberly Road
Twin Falls, ID 83301

Cover Photo: South Fork Owyhee WSR, Owyhee Wilderness

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Chapter 1. Owyhee Canyonlands Wilderness and Wild & Scenic Rivers Management Plan

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1.1. Management Plan Introduction

On March 30, 2009, Congress passed the Omnibus Public Land Management Act (OPLMA) (Public Law 111-11). Section 1503 of the OPLMA designated the following six wilderness areas in Owyhee County, Idaho:

1. Big Jacks Creek Wilderness Area,
2. Bruneau-Jarbidge Rivers Wilderness Area,
3. Little Jacks Creek Wilderness Area,
4. North Fork Owyhee Wilderness Area,
5. Owyhee River Wilderness Area, and
6. Pole Creek Wilderness Area

The six wilderness areas total approximately 517,000 acres and are collectively and informally known as the Owyhee Canyonlands Wilderness Areas.

Section 1504 of the OPLMA designated the 16 wild and scenic river (WSR) segments listed in Table 1.2, "Wild and Scenic Rivers with identified ORVs grouped by Wilderness Area" (p. 28) which total approximately 325 miles[1] (see Map 1.1, "Owyhee Wilderness Map Series Overview and Legend" (p. 4)).

All but about six miles of the designated WSRs are contained within the above wilderness areas. An approximate five mile long section of the North Fork Owyhee WSR extends from the westernmost edge of the North Fork Owyhee Wilderness Area to the Idaho-Oregon border. In addition, the entire length of the Owyhee WSR in Idaho is contained within the Owyhee River Wilderness with the exception of a 1.3 mile-long segment extending downstream from the Northwest Pipeline crossing. The map referenced in Section 1503(a)(1)(E) of the OPLMA shows the Owyhee River to be the wilderness boundary along this 1.3 mile-long stretch. The map, however, is not drawn with sufficient detail to show whether the wilderness boundary is located in the middle of the river or along one of its banks. To address situations such as this, Section 1.6D.1.a. of BLM Manual 6340 (Management of Designated Wilderness Areas - Public) states in pertinent part the following:

> *"Where [wilderness] boundaries are not specified in law or specific direction is not provided by Congress on setbacks, and legislative history gives no indication of the intended boundary, the following guidelines will apply…*
>
> *iii. Where the boundary follows a water course, the boundary will be assumed to be the near (the wilderness side of the water) ordinary high water mark or line of mean high tide, with no setback."*

Given the above direction, the Owyhee WSR and the westerly portion of the Owyhee WSR corridor lie outside of the Owyhee River Wilderness for a distance of approximately 1.3 miles downstream from the Northwest Pipeline crossing.

[1]Based on the beginning and ending points described in Section 1504 of the OPLMA, the length in miles of the various WSR segments has been revised to reflect the more accurate 1:24,000-scale geometry in the National Hydrography Database GIS data.

Each of the designated wilderness areas and many of the designated WSRs contain private and/or state-owned inholding properties within their boundaries. Wilderness and WSR designation, however, neither prohibits development on, nor gives the federal government control over, private or state inholdings. Recreation, agricultural practices, residential development, and other uses may occur on these private and state lands.

According to OPLMA Section 1503(b)(10)(a), "The designation of a wilderness area…shall not create any protective perimeter or buffer zone around the wilderness" Section 1503(b)(10)(b) states: "The fact that non-wilderness activities or uses can be seen or heard from areas within a wilderness area…shall not preclude the conduct of those activities outside the boundary of the wilderness area." Thus, while activities occurring outside wilderness can affect wilderness character (i.e., solitude, naturalness, etc.), they will neither be regulated nor monitored.

The OPLMA states that designated wilderness areas shall be managed in accordance with the Wilderness Act of September 3, 1964 (16 U.S.C. 1131-1136). Section 4(b) of the Wilderness Act sets forth BLM's responsibilities in administering wilderness areas, with the primary mandate being the preservation of wilderness character. In relevant part, the Wilderness Act states: "Except as otherwise provided…, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area."

Section 4(c) of the Wilderness Act describes uses that are generally prohibited in order to preserve wilderness character, as follows:

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

Because the above-described uses are prohibited as a rule, limited (rare and occasional) exceptions to the rule must meet the rigorous test of being the minimum necessary to administer the areas for the purposes of the Wilderness Act, and in a manner that preserves wilderness character.

Section 4(d) of the Wilderness Act sets forth "special provisions" for managing certain uses in wilderness areas that may impair wilderness character.

Wilderness Background

The National Wilderness Preservation System was established by the Wilderness Act to ensure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas of the United States. The Wilderness Act defines wilderness characteristics, the uses of wilderness, and the activities prohibited within its boundaries.

Congress designates wilderness areas to protect and preserve the lands in their natural state. As such, wilderness areas provide a contrast to lands where human activities dominate the landscape.

Wilderness areas are managed for the use and enjoyment of the American people in a manner that will:

1. leave them unimpaired for future use and enjoyment as wilderness,

2. protect and preserve wilderness character, and

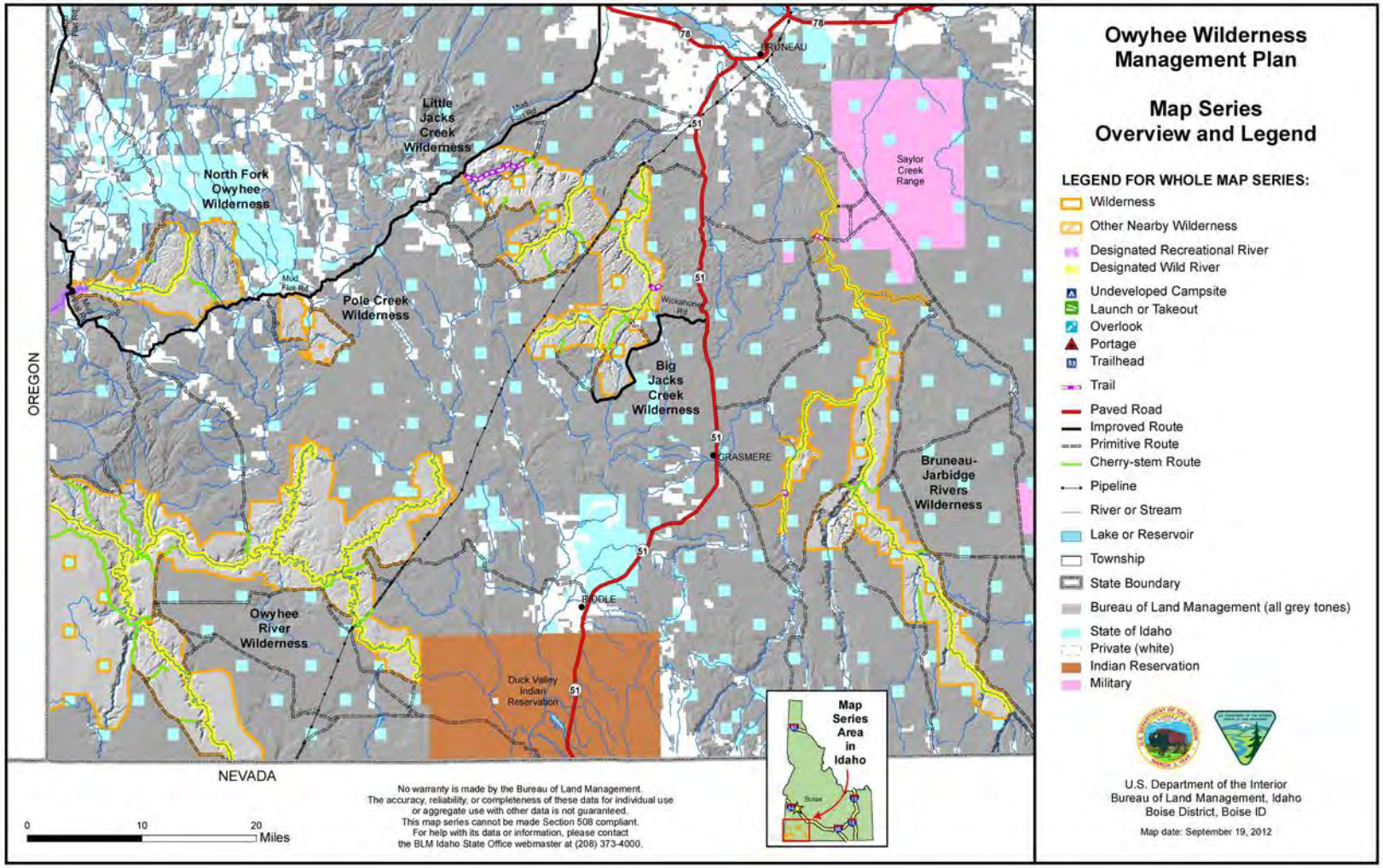
3. allow for the gathering and dissemination of information regarding their use and enjoyment as wilderness.

Wild and Scenic River Background

The Wild and Scenic Rivers Act (WSR Act) of 1968 (16 U.S.C. 1271-1287) was established to protect some of our Nation's rivers in their free-flowing condition. Section 10(a) of the WSR Act states:

> *"Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archaeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area."*

Owyhee River Wilderness



Map 1.1. Owyhee Wilderness Map Series Overview and Legend

1.2. Purpose of and Need for the WMP

BLM Manual 8561 (Wilderness Management Plans) requires that wilderness areas be managed pursuant to a specific management plan. In addition, Section 3(d)(1) of the WSR Act requires that a Comprehensive River Management Plan be prepared to provide for the management and protection of WSR values. In fulfillment of the above requirements, the Bureau of Land Management (BLM) Boise and Twin Falls Districts (BDO and TFDO, respectively) have prepared this Wilderness and Wild and Scenic River Management Plan (WMP) to address future management of the six wilderness areas and 16 WSR segments. A consolidated plan was determined appropriate for the areas due to their relative proximity, comparable natural and cultural resources and values, and similar management issues.

As noted in Section 302 of the Federal Land Policy and Management Act (FLPMA) of 1976:

> *"The Secretary shall manage the public lands under the principles of multiple use and sustained yield...except that where a tract of such public land has been dedicated to specific uses according to any other provisions of law it shall be managed in accordance with such law."*

Based on the above-cited FLPMA direction, WMP decisions will be guided by requirements of the Wilderness Act, the WSR Act, and the OPLMA. Based on requirements of law and regulation, or by decisions reached through this planning process, some uses will be restricted or excluded on certain lands to protect and preserve wilderness character and to protect and enhance WSR values.

This WMP describes the existing environment in each of the wilderness areas and WSR segments. The plan proposes management actions to address specific management issues or concerns. The Environmental Assessment (EA) that follows the WMP describes and analyzes potential effects of imposing different levels of management to wilderness character and WSR outstandingly remarkable values. This WMP is analyzed as the Proposed Action, which is usually compared to a No Action Alternative, normally defined as the continuation of current management. However, in this instance, a true No Action Alternative cannot exist, since BLM is required to manage designated wilderness areas and WSRs according to standards that were not in effect when the designated areas were being managed as multiple use public lands under FLPMA. Thus, what would normally have been a No Action Alternative is being termed a Minimal Management Alternative because it incorporates the minimum land use restrictions considered necessary to protect and preserve wilderness character and to protect and enhance WSR values. The Minimal Management Alternative includes no discretionary management actions.

1.2.1. Compliance with Existing Laws and Regulations

The WMP complies with the Wilderness Act, the WSR Act, and the enabling OPLMA, as well as numerous other applicable laws, regulations, and executive orders, including 43 CFR Parts 6300 and 8560.

1.2.2. Conformance to BLM policy manuals and handbooks

The WMP conforms to the requirements and management direction contained in the following BLM and Departmental policy manuals and handbooks:

- BLM Manual 1626 - Travel and Transportation Manual

- BLM Manual 6220 - National Monuments, National Conservation Areas, and Similar Designations (Public)
- BLM Manual 6340 - Management of Designated Wilderness Areas.
- BLM Manual 6400 - Wild and Scenic River Policy and Program Direction for Identification, Evaluation, Planning and Management
- BLM Manual 8561 - Wilderness Management Plans.
- BLM Handbook H1742-1 - Burned Area Emergency Stabilization and Rehabilitation
- Departmental Manual 620 DM 3 - Wildland Fire Management Burned Area Emergency Stabilization and Rehabilitation

1.2.3. Consistency with Existing BLM Land Use Plans

The WMP conforms to BLM wilderness management policy, as well as applicable goals, objectives, and decisions of the Bruneau Management Framework Plan (1983), the Jarbidge Resource Management Plan (1987), and the Owyhee Resource Management Plan (1999). The plan is also consistent with the goals and objectives being proposed in the Revised Jarbidge Resource Management Plan, currently under development.

Specific decisions from the above land use plans that are consistent with the wilderness and WSR management direction contained herein include the following:

Bruneau MFP:

- Retain in federal ownership all public lands within wilderness areas and wild and scenic river corridors.

Owyhee RMP:

- Retain lands in public ownership in wilderness areas and wild and scenic river corridors,
- Manage designated wilderness in accordance with enabling legislation and other applicable federal legislation and policies.
- Prohibit the construction of new rangeland (livestock, watershed, and wildlife) facilities within the primitive settings of the Special Recreation Management Areas (SRMA) lands associated with the Owyhee River system, except for a maximum of one linear mile of gap fence if needed to exclude livestock from river corridors. The affected SRMAs are:

    1. North Fork Canyon SRMA.
    2. North Fork Owyhee Backcountry SRMA.
    3. Owyhee Canyonlands SRMA
    4. Deep Creek SRMA.

- Protect and enhance California bighorn sheep habitat and populations within the boundaries of the Owyhee River Bighorn Sheep Habitat Area ACEC through continued implementation of the ACEC Management Plan.
- Provide appropriate management response (for wildfire), considering resource values, fire-fighter safety, costs, allowing natural fire to burn to meet resource objectives, in closely monitored opportunities, on all natural and human caused fires to meet established suppression standards. When prescriptive criteria are developed fires may be managed to meet resource objectives.
- Use rehabilitation techniques that are least damaging to wilderness resources, including:
    1. Staggered or irregular seedings to blend with the landscape.
    2. Hand or aerially-applied native seed species to restore natural vegetation.
    3. Watershed reclamation to prevent soil erosion and to avoid impacts to wilderness values.
- Restrict the use of heavy equipment for wilderness fireline construction.

Jarbidge RMP:

- Manage wilderness areas in conformance with BLM wilderness management policy.
- Manage designated WSRs to protect their outstandingly remarkable values.
- Manage wilderness areas and WSRs as right-of-way exclusion areas.
- Retain public ownership of all federal lands in wilderness areas and WSR corridors.

1.3. Wilderness Overview

1.3.1. Wilderness Character

The Wilderness Act defines wilderness and mandates that the primary management direction is to preserve wilderness character. The definition of wilderness is found in Section 2(c) of the Wilderness Act, and the qualities of wilderness character are commonly described as follows (Arthur Carhart National Wilderness Training Center, 2011):

- **Untrammeled -** The "earth and its community of life" are essentially unhindered and free from modern human control or manipulation in wilderness areas, "in contrast with those areas where man and his own works dominate the landscape." This quality is important because it helps insure that wilderness management respects the autonomy of nature that allows a place to be wild and free. This quality is impaired by human activities or actions that control or manipulate the components or processes of wilderness ecological systems.
- **Natural -** Wilderness ecological systems are substantially free from the effects of modern civilization. Preserving this quality ensures that indigenous species, patterns and ecological processes are protected and allows us to understand and learn from natural features. This quality is impaired by human actions or activities that leave scars on the landscape that would not be there naturally, like roads, trails, and seeded areas.

- **Undeveloped -** Wilderness retains its "primeval character and influence," and is essentially "without permanent improvements" or modern human occupation. Preserving this quality keeps areas free from “expanding settlement and growing mechanization” and “with the imprint of man’s work substantially unnoticeable” as required by the Wilderness Act. Human developments, such as fences, water troughs, springs, etc., degrade this quality.

- **Outstanding opportunities for solitude or a primitive and unconfined type of recreation -** The Wilderness Act provides individuals with opportunities to experience primitive recreation, natural sights and sounds, solitude, freedom, risk, the physical and mental challenges of self-discovery and self-reliance, and to use traditional skills free from the constraints of modern culture. This quality is impaired by the sight and sound of motorized and mechanized vehicles and equipment.

- **Unique, Supplemental, or Other Features -** The Wilderness Act states that wilderness areas “may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.” Though these supplemental values need not be present for an area to meet the definition of wilderness, where they are present they are part of that area’s wilderness character, and must be protected as rigorously as any of the four required qualities.

1.3.2. Descriptions of the Owyhee Canyonlands Wilderness Areas

The six Wilderness Areas lie within the Northern Basin and Range, an elevated plateau with mountains separated by canyons draining into the Pacific Ocean via the Snake and Columbia rivers. The area lies within the broad regional landform and vegetative classification known as the Intermontane Sagebrush Province/Sagebrush Steppe Ecosystem. The area contains diverse landforms and vegetation types, ranging from salt desert shrub communities in lower elevations to sagebrush-covered plateaus cut by rugged canyons to rolling juniper and mountain mahogany savannas in higher elevations. Wilderness Areas are managed under Visual Resource Management (VRM) Class I Management Objectives, generally defined as pristine landscape with few or no human developments.

The wilderness areas are generally located within a two to four hour drive from Boise, Idaho’s largest metropolitan area. Although annual visitation is difficult to quantify across such a large area, traffic counter data collected thus far (see Appendix F, *Traffic Counter Summary Data* (p. 169)) reflects low visitor numbers. Year round visitation is possible, but the wilderness areas’ remoteness and ruggedness have historically prohibited high levels of human use and development. Visitation is also limited during winter when snow is common, and in summer when temperatures often exceed 100°F.

The areas exhibit characteristics valued for wilderness designation. Visitors will experience very low levels of human impacts, abundant solitude, and may enjoy several primitive recreational opportunities, including river floating, backpacking, hiking, fishing, hunting, camping, rock climbing, enjoying scenery, and nature study. The remote canyons, rugged mountain areas, and WSR segments offer destinations for virtually every type of recreational user.

The wilderness areas provide opportunities to experience a sense of remoteness and isolation. The numerous canyons, draws, ravines, rocky outcrops, and ridges create secluded locales that provide outstanding opportunities for solitude, when combined with the large size of the wilderness areas and the low visitor numbers. However, flat topography, sparse vegetation, and

periodic sights and sounds of vehicles in adjacent lands, as well as aircraft flying overhead, may decrease experiences of solitude.

Wildlife populations characteristic of the Basin and Range are supported by the diverse habitat types found in these wilderness areas. Key habitats include sagebrush steppe, cliffs and canyons, riparian areas, and lower montane woodlands. All of the wilderness areas, with the exception of the North Fork Owyhee Wilderness, provide Preliminary Priority Habitat for the greater sage-grouse (*Centrocercus urophasianus*), a candidate species, as shown on Figure 1.1, "Sage-Grouse Preliminary General and Priority Habitats" (p. 9) below.

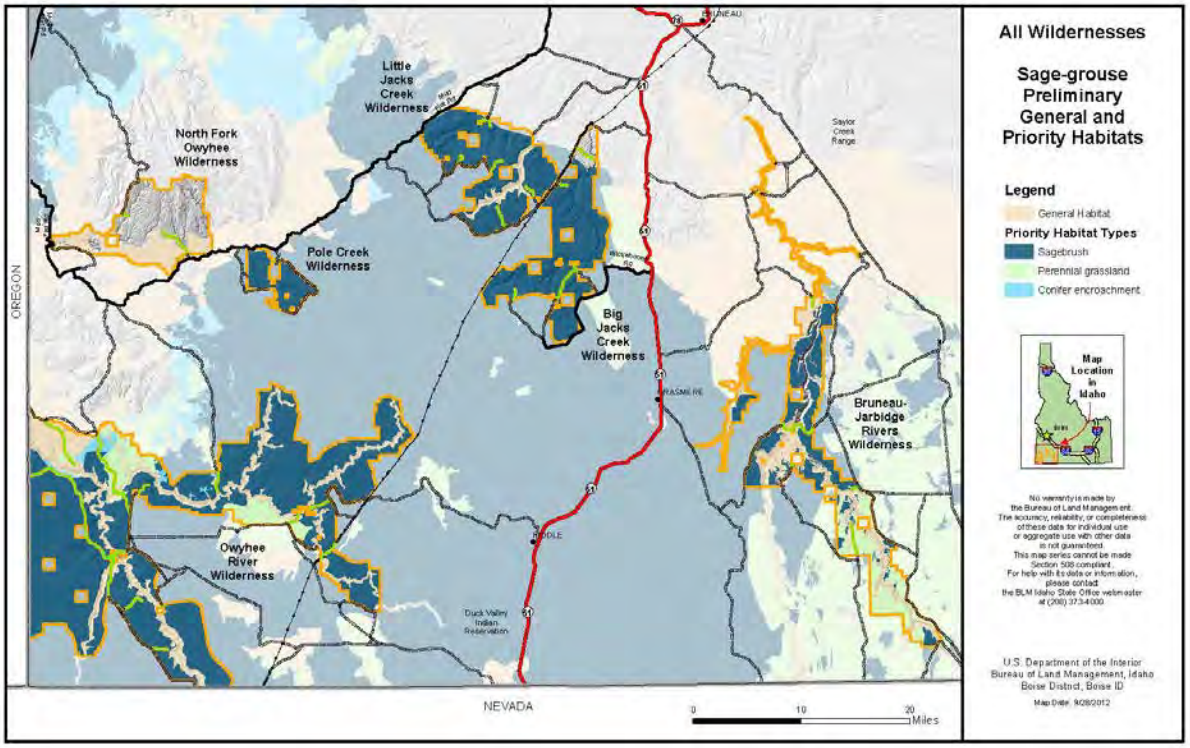


Figure 1.1. Sage-Grouse Preliminary General and Priority Habitats

The wilderness areas also support habitat and lambing areas for about 10% of the world's population of California bighorn sheep (*Ovis canadensis californiana*), as shown on Figure 1.2, "Bighorn Sheep Range and Lambing Areas" (p. 10).

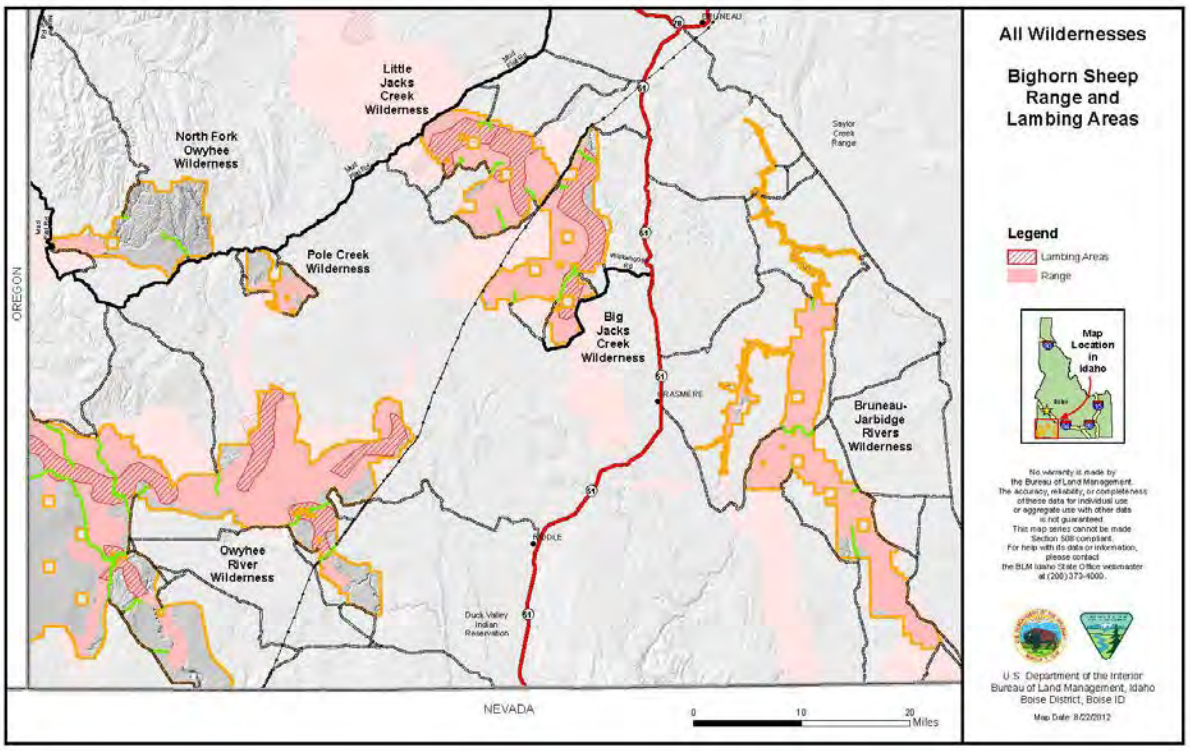


Figure 1.2. Bighorn Sheep Range and Lambing Areas

Hunting and shed antler collection occurs in wilderness areas, which overlap Idaho Hunt Units 40, 41, 42, and 46, and the Owyhee-South Hills Elk Zone. Trophy California bighorn sheep hunts also periodically take place in the area.

The wilderness areas are located within the Southwest Furbearer Region, and trapping occurs in the area subject to applicable state and federal laws and regulations. Trapping has historically been targeted to small game and furbearers in the area, including American badger, red fox, bobcat, Northern river otter, American beaver, mink, muskrat, and coyote. Nongame species of mammals, reptiles, and birds are diverse and provide the prey base for the predators of the area. Because the Wilderness Act precludes commercial enterprises in wilderness, trapping in wilderness that involves the commercial sale of fur, hides, or other animal parts would be prohibited.

All of the wilderness areas support livestock grazing, Table 1.5, "Summary of Wilderness Range Management Projects" (p. 46) lists the number and type of range projects located in each of the wilderness areas. Locations of each project and information about who is liable for continued project maintenance are included in Appendix D, *Wilderness Range Project Inventory Report* (p. 123).

Federally listed species within or near designated Wilderness Areas include the endangered Bruneau hot springsnail and threatened bull trout, both of which are discussed in more detail in the WSR section.

Table 1.1, "Acreage of Owyhee Canyonlands Wilderness Areas" (p. 11) and the following paragraphs provide brief descriptions of each wilderness area. Section 1503(a)(2) of the OPLMA,

and BLM Manual 6120 require official wilderness boundary surveys that result in Congressional wilderness maps and land descriptions that are signed by the BLM State Director.

The acreage of the Big Jacks Creek and Little Jacks Creek Wilderness Areas differs from that showing in Section 1503 of the OPLMA. The acreage of these two wilderness areas was corrected following boundary surveys approved by the BLM Idaho Chief Cadastral Surveyor, and following development of the official Congressional maps and land descriptions signed by the BLM Idaho State Director on October 24, 2011. Acreage for the remaining wilderness areas will be corrected if needed as boundary surveys are completed. In addition, wilderness acres may increase following acquisition of State or private lands located within or adjacent to wilderness areas, as provided for under Section 1505(b) of the OPLMA.

Table 1.1. Acreage of Owyhee Canyonlands Wilderness Areas

Name	Acres
Big Jacks Creek Wilderness	52,684
Bruneau-Jarbidge Rivers Wilderness	89,996
Little Jacks Creek Wilderness	51,491
North Fork Owyhee Wilderness	43,413
Owyhee River Wilderness	267,328
Pole Creek Wilderness	12,533

Approximately 30 cherrystem routes provide public access to or through the six wilderness areas. cherrystem routes are usually defined as dead-end routes where the boundary of the wilderness extends up one side of the route, around its terminus, and down the other side. However, the OPLMA also designated cherrystem routes that cross entirely through the Big Jacks Creek, Bruneau-Jarbidge Rivers, and Owyhee River Wilderness Areas, effectively splitting them into smaller subunits. Non-wilderness cherrystem routes will be addressed by the Boise and Twin Falls Districts as they individually prepare Travel Management Plans for non-wilderness public lands in their respective areas, in accordance with Section 1507 of the OPLMA. To ensure that wilderness areas are not affected by vehicular use of cherrystem routes, turn-arounds at the end of cherrystem routes will be limited to the 60 foot total width of the cherrystem.

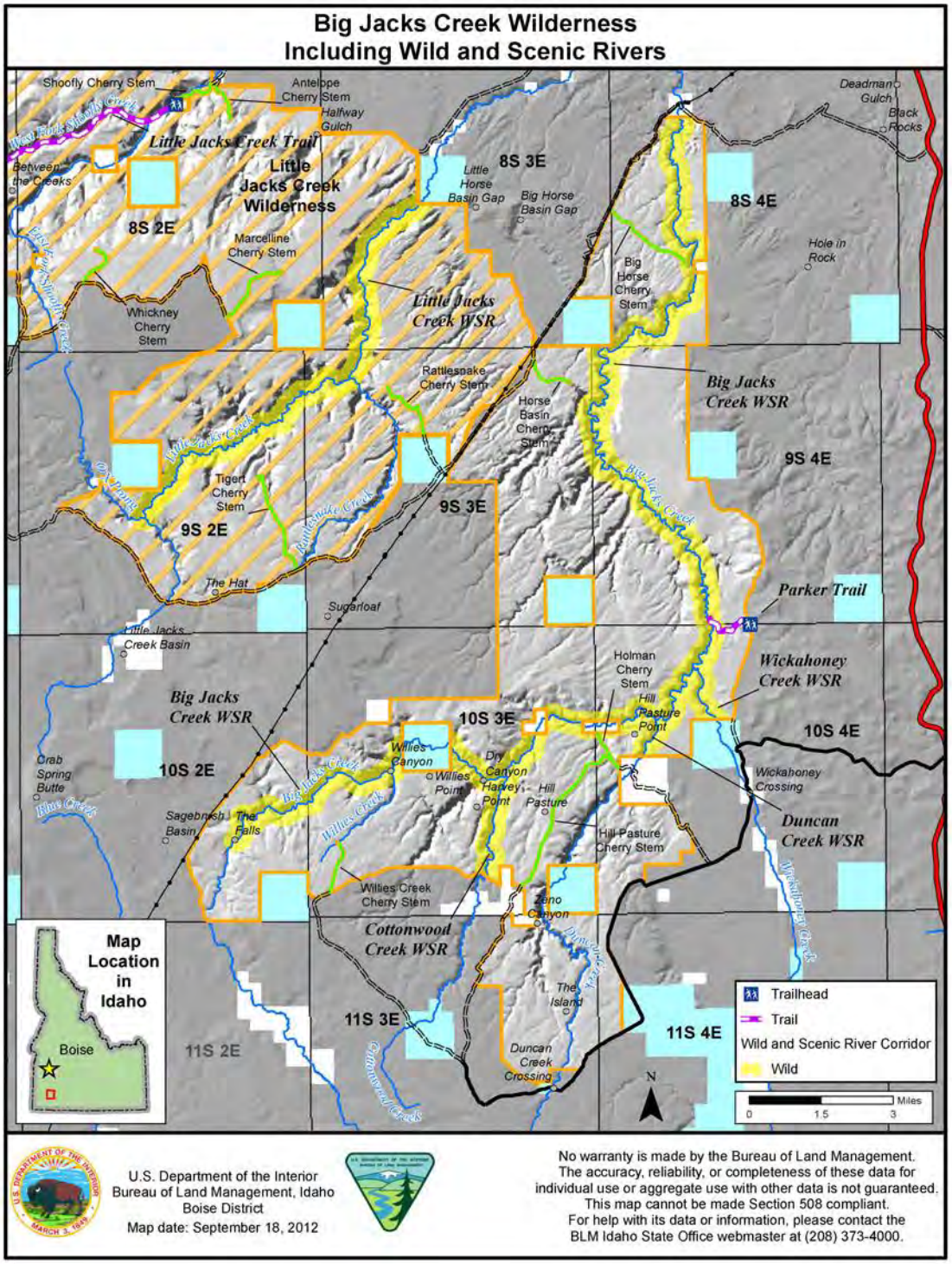
1.3.2.1. Big Jacks Creek Wilderness

The area consists of deep canyons, cold-water streams, and uplands that provide habitat for several sensitive species, including greater sage-grouse, California bighorn sheep, and redband trout (*Oncorhynchus mykiss*) (a sensitive species adapted to high desert regions of Idaho, Nevada, and Oregon).

The wilderness contains four WSR segments, including Big Jacks, Wickahoney, Duncan, and Cottonwood creeks. Table 1.2, “Wild and Scenic Rivers with identified ORVs grouped by Wilderness Area” (p. 28) provides a summary of the WSR segments, including their attributes, classification, and recognized Outstandingly Remarkable Values (ORVs). In the southern portion of the wilderness, the Hill Pasture cherrystem route runs through and splits the wilderness (see Map 1.2, “Big Jacks Creek Wilderness Including Wild and Scenic Rivers” (p. 12)).

Approximately one mile of an old two track route, the Parker Trail, extends from the eastern wilderness boundary to the Big Jacks Creek Canyon. This provides recreational access to the canyon. The route has been partially reclaimed and rehabilitated, which will improve naturalness

by fostering new plant growth and enhancing vegetation communities and wildlife habitat, as well as enhancing the visitor's sense of entering a wilderness.



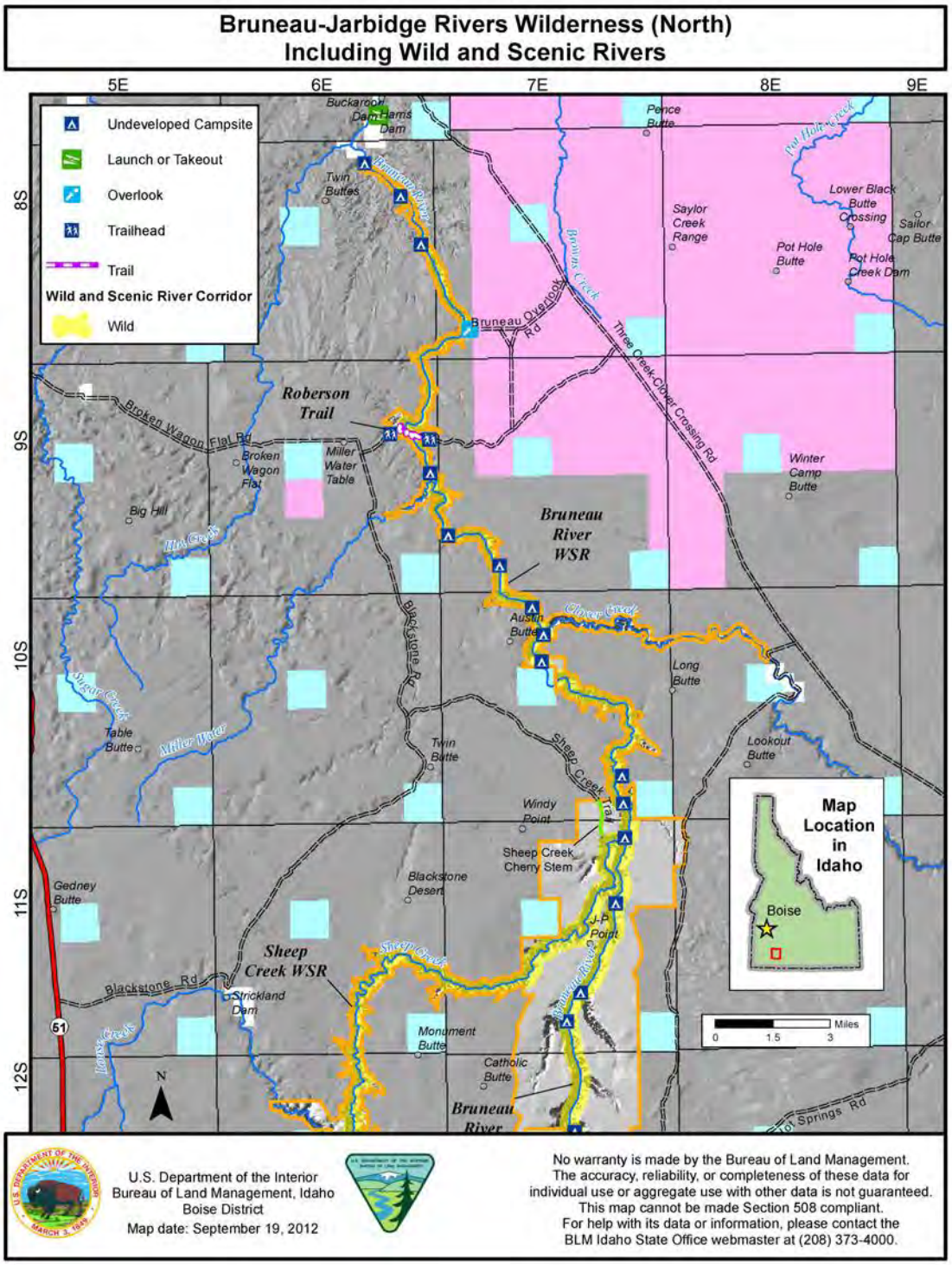
Map 1.2. Big Jacks Creek Wilderness Including Wild and Scenic Rivers

1.3.2.2. Bruneau-Jarbidge Rivers Wilderness

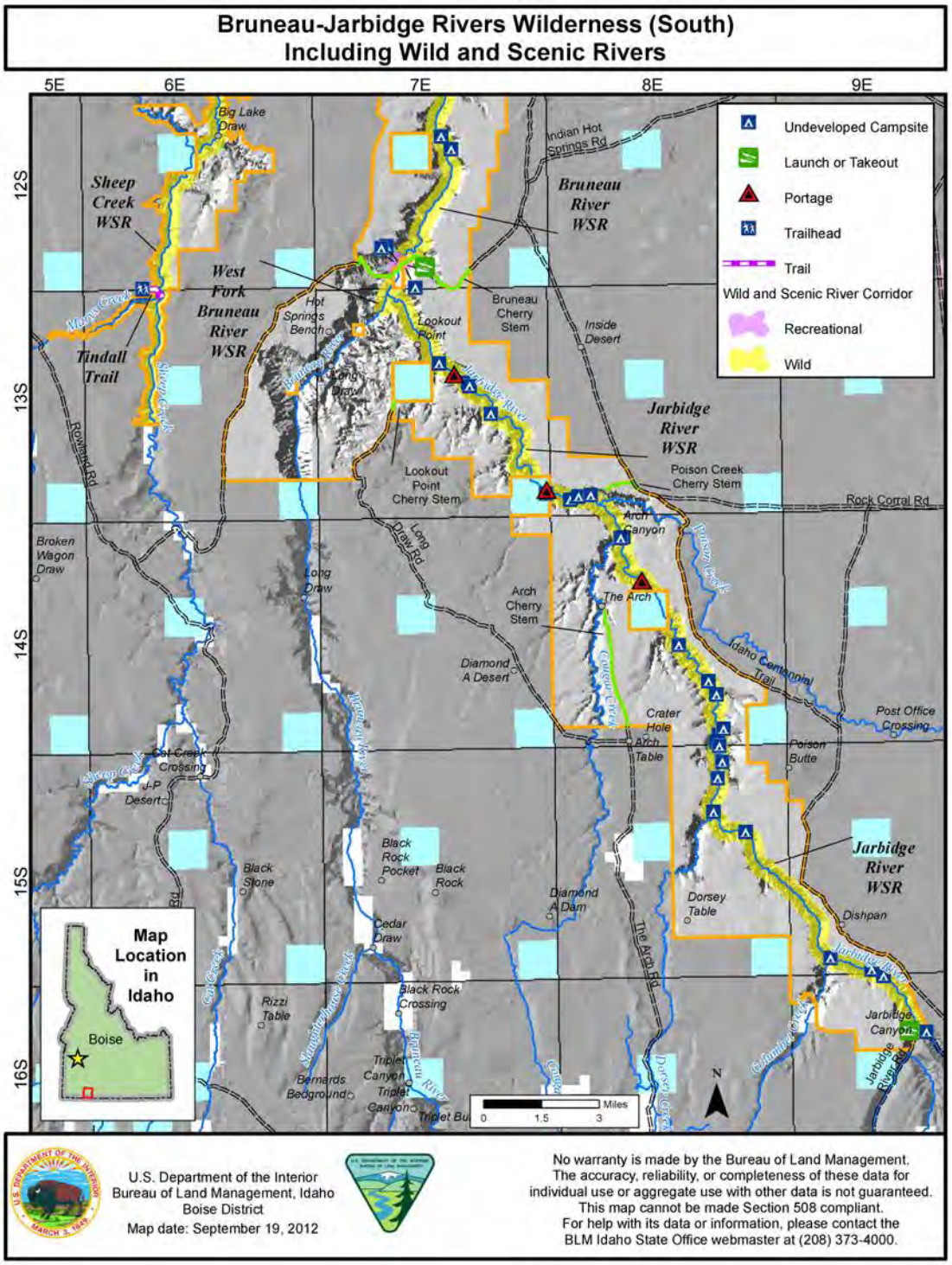
This wilderness is principally comprised of the canyons of the main Bruneau, West Fork of the Bruneau, and Jarbidge rivers, and the lower portion of Sheep Creek. All or portions of these rivers have been designated as WSRs (see Table 1.2, "Wild and Scenic Rivers with identified ORVs grouped by Wilderness Area" (p. 28)). The canyons are habitat for a population of approximately 200 California bighorn sheep (IDFG. 2010). The Bruneau and Jarbidge Rivers are designated critical habitat for the threatened bull trout (*Salvelinus confluentus*). Specific hot springs along the lower one-half mile of the Bruneau River in the wilderness area are also habitat for the endangered Bruneau hot springsnail (*Pyrgulopsis bruneauensis*). Additionally, the Bruneau River Canyon is habitat for the Bruneau River prickly phlox (*Linanthus glabrum*), an endemic sensitive plant. The WSRs and wilderness area are nationally renowned for their exceptional scenic beauty and challenging Class III and IV whitewater, which accounts for large increases of boaters during the short spring runoff period.

Designated cherrystem routes provide access to the Bruneau River Indian Hot Springs put-in site from the east and the west, effectively splitting the wilderness in half. Access to the Jarbidge River put-in site is via the Murphy Hot Springs road (see Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14) and Map 1.4, "Bruneau-Jarbidge Rivers Wilderness (South) Including Wild and Scenic Rivers" (p. 15)).

Bruneau Jarbidge River



Map 1.3. Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers



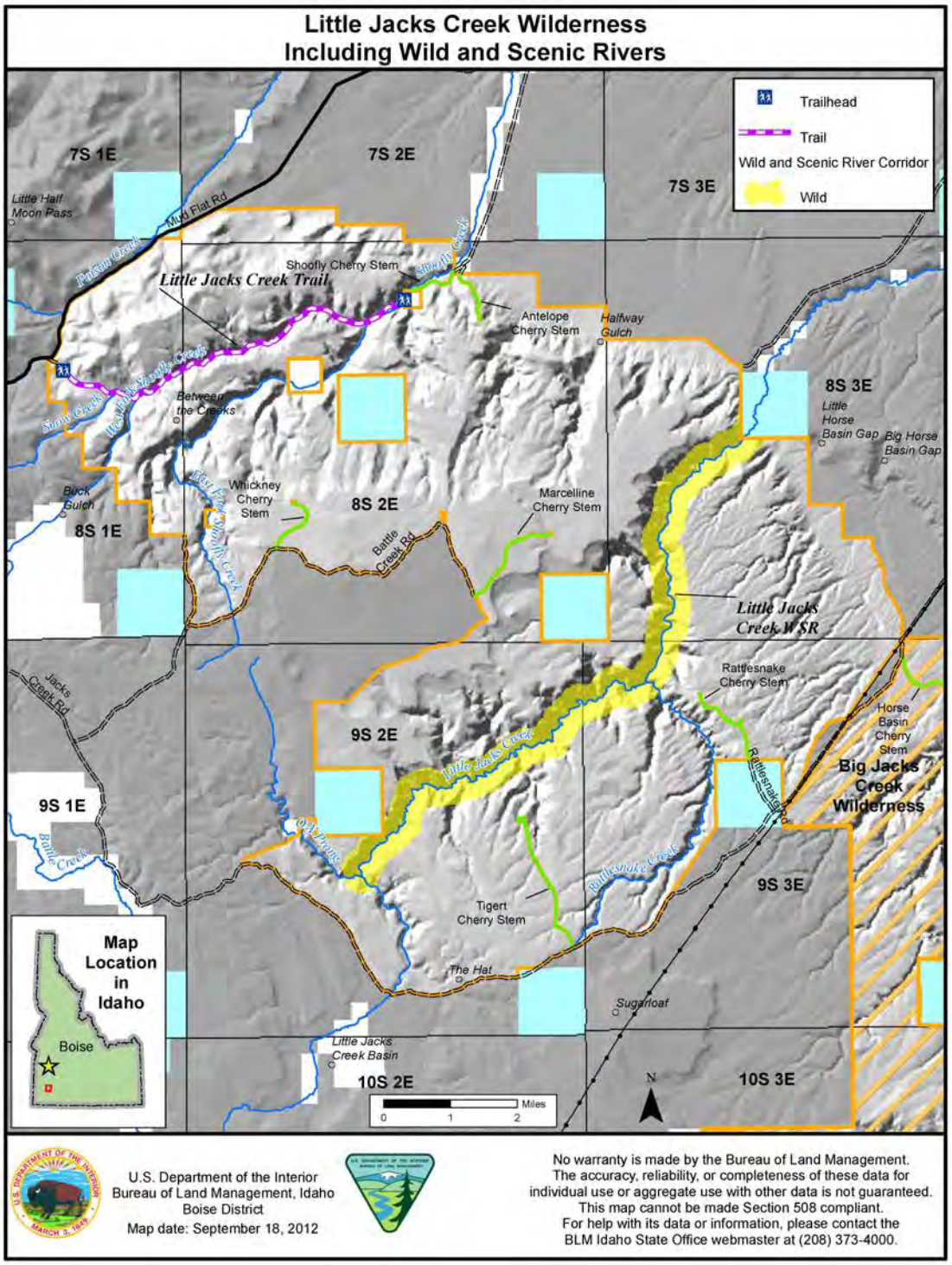
Map 1.4. Bruneau-Jarbidge Rivers Wilderness (South) Including Wild and Scenic Rivers

1.3.2.3. Little Jacks Creek Wilderness

The Little Jacks Creek area is popular for hiking, backpacking, fishing and nature observation. Little Jacks Creek is the closest BLM wilderness to Boise and the urban areas of the Treasure Valley in southwest Idaho, and receives a higher volume of recreational use than the other wilderness areas (see Map 1.5, "Little Jacks Creek Wilderness Including Wild and Scenic Rivers" (p. 17)).

The Little Jacks Creek Wilderness supports a population of California bighorn sheep and contains a WSR segment of the same name (see Table 1.2, "Wild and Scenic Rivers with identified ORVs grouped by Wilderness Area" (p. 28)).

Little Jacks Creek Wilderness



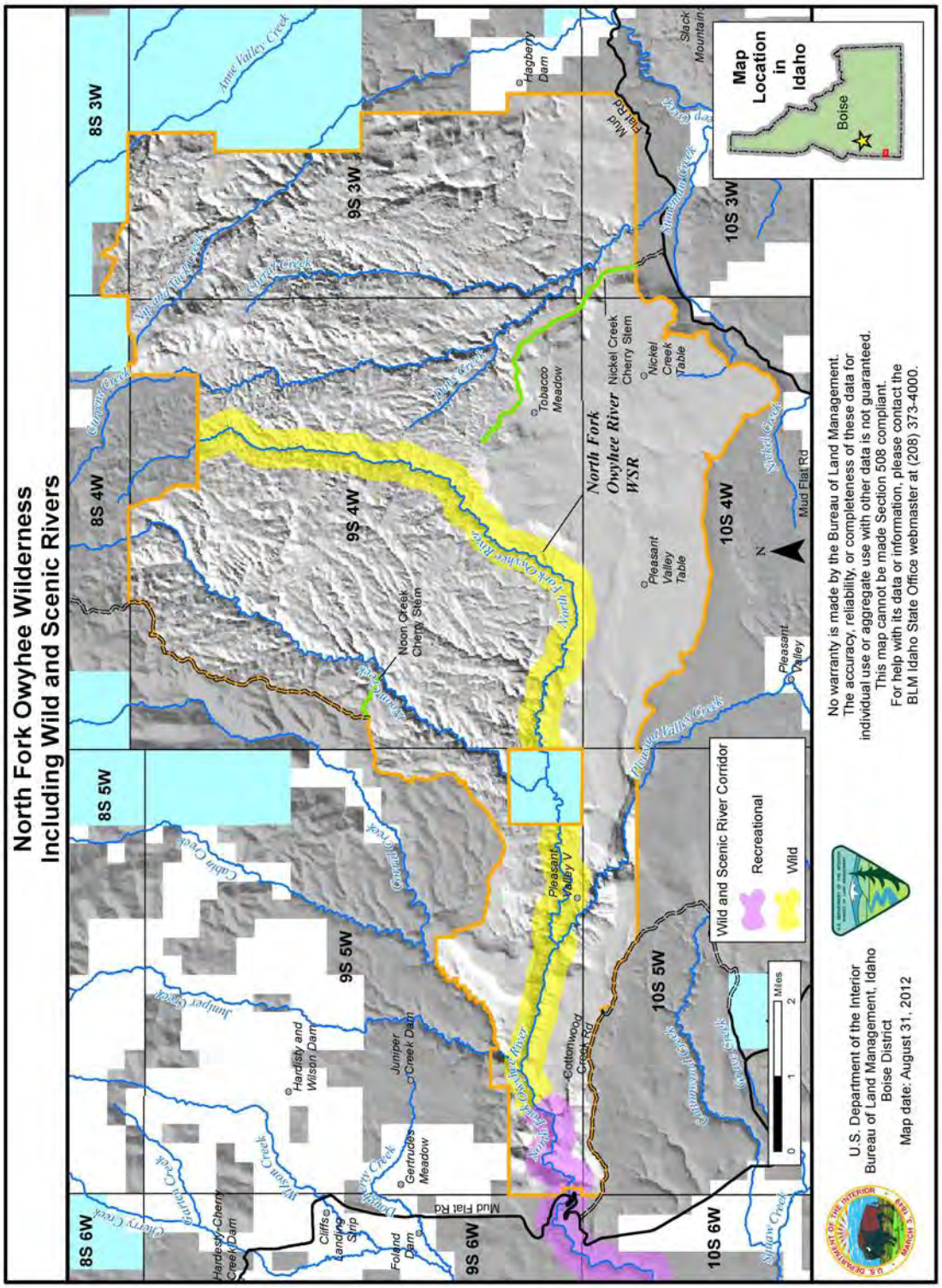
Map 1.5. Little Jacks Creek Wilderness Including Wild and Scenic Rivers

1.3.2.4. North Fork Owyhee Wilderness

This wilderness exhibits some of the most diverse habitats in Southwest Idaho, including riparian areas, grassland, sagebrush uplands, and juniper woodlands. The wilderness also supports known occurrences of three BLM special status plants - short-lobed penstemon (*Penstemon seorsus*), dimeresia (*Dimeresia howellii*), and thinleaf goldenhead (*Pyrrocoma linearis*). Pleasant Valley Creek cuts a canyon northwesterly through the middle of the Pleasant Valley Table as it drains to the North Fork Owyhee River. The wilderness also contains the 300-foot deep Current Creek canyon that flows south into Deep Creek and the Owyhee River Canyon (see Map 1.6, "North Fork Owyhee Wilderness Including Wild and Scenic Rivers" (p. 19)).

The North Fork Owyhee WSR flows through and extends southwesterly outside of this wilderness area to the Idaho–Oregon border (see Table 1.2, "Wild and Scenic Rivers with identified ORVs grouped by Wilderness Area" (p. 28)). The principal river access site is the North Fork Campground, located along Juniper Mountain Road.

North Fork Owyhee Wilderness



Map 1.6. North Fork Owyhee Wilderness Including Wild and Scenic Rivers

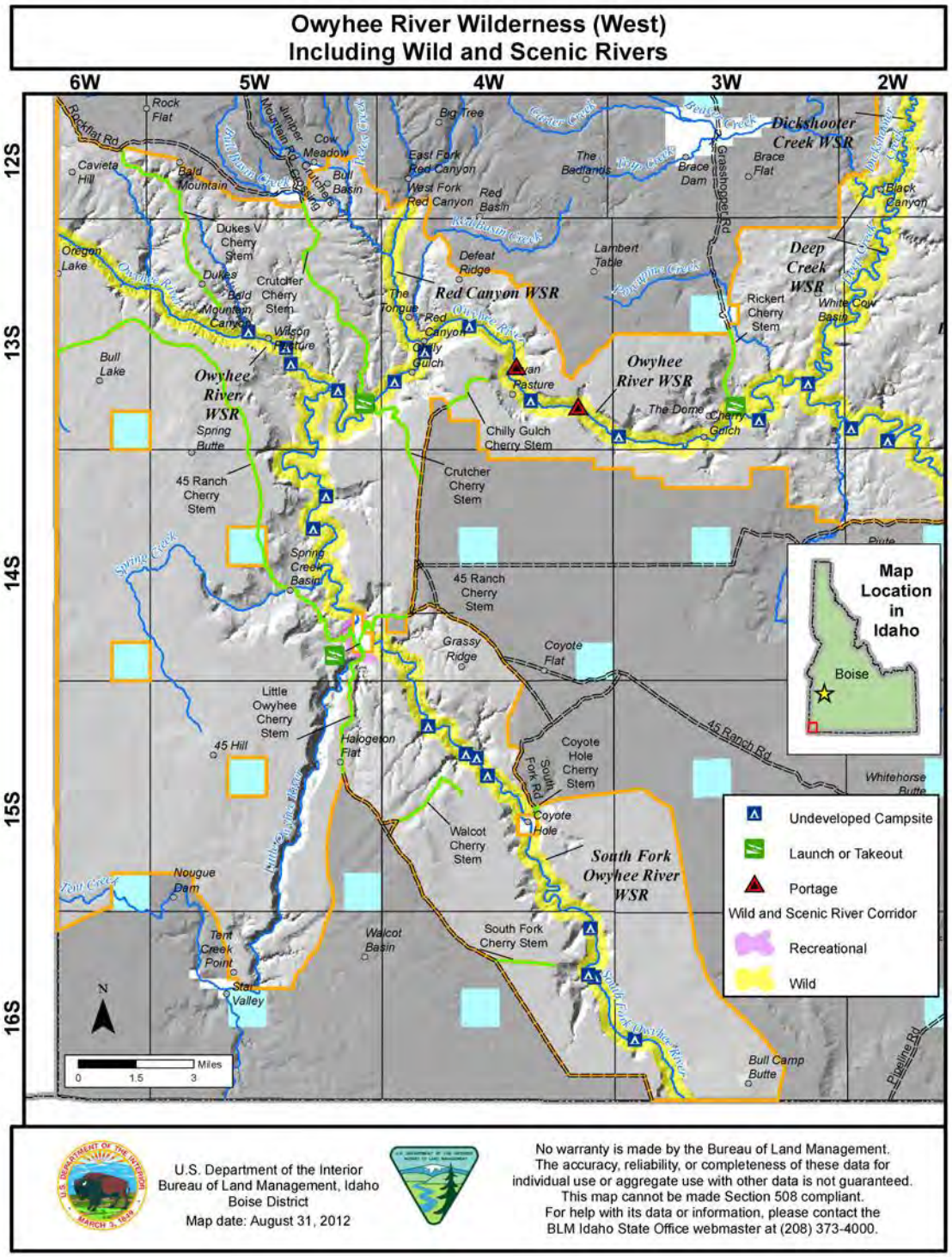
1.3.2.5. Owyhee River Wilderness

The canyons and uplands of this expansive wilderness provide good habitat for greater sage-grouse and a large herd of California bighorn sheep. The area has high scenic values and is a popular hiking area. The area contains intact reference shrub communities and provides habitat for several special status plant species. One species of particular note is the Owyhee forget-me-not (*Hackelia ophiobia*), an endemic plant species restricted to deep canyons of the Owyhee River system.

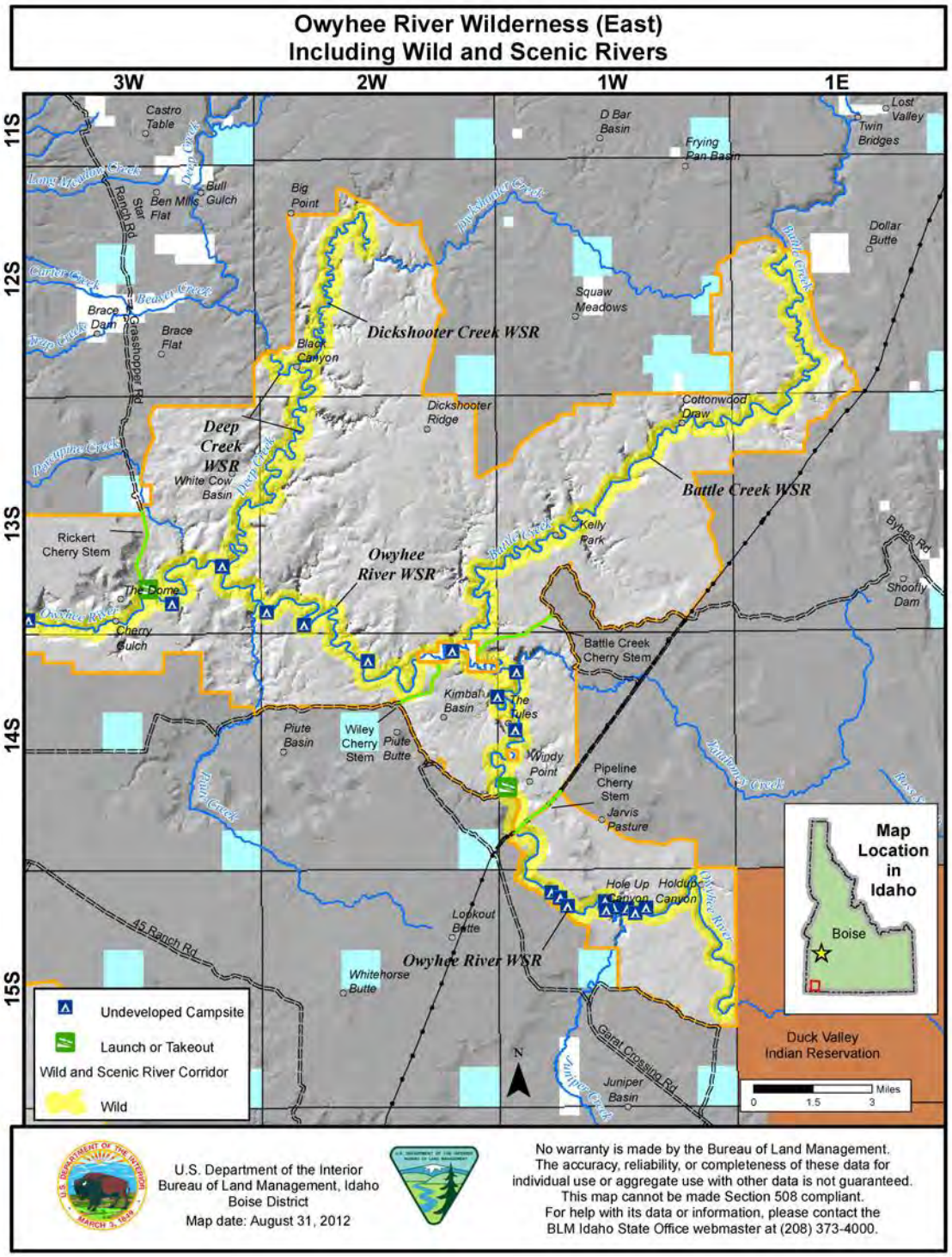
The wilderness contains six WSR segments, including Owyhee and South Fork Owyhee rivers, and Battle, Deep, Dickshooter, and Red Canyon creeks. Table 1.2, "Wild and Scenic Rivers with identified ORVs grouped by Wilderness Area" (p. 28) provides a summary of the recognized attributes and ORVs of these WSR segments. The wilderness has eleven cherrystem routes, five of which cross through the wilderness, splitting it into six subunits. Also unique is that the easterly edge of the Owyhee River forms the wilderness boundary for a distance of 1.3 miles downstream from the Northwest Pipeline right-of-way. Thus, the westerly portion of the WSR corridor lies outside of the wilderness area along this 1.3 mile river stretch (see Map 1.7, "Owyhee River Wilderness (West) Including Wild and Scenic Rivers" (p. 21) and Map 1.8, "Owyhee River Wilderness (East) Including Wild and Scenic Rivers" (p. 22)).

Principal access points to the Owyhee River Wilderness Area include the following:

- 45 Ranch cherrystem on the South Fork Owyhee River, which includes access from both the east and the west.
- Access road to the Garat Crossing put-in on the west side of the Owyhee River downstream from the Northwest Pipeline crossing.
- Crutcher Crossing cherrystem on the Owyhee River, which includes access from both the north and the south.
- Rickert cherrystem (with 1/8 mile trail to the river) on the north side of the Owyhee River.
- Battle Creek cherrystem on the north side of the Owyhee River. This provides access to private land along the river, but does not provide public access to the river.
- Wiley Ranch cherrystem on the south side of the Owyhee River. This provides access to private land along the river, but does not provide public access to the river.
- Coyote Hole cherrystem on the east side of the South Fork Owyhee River. This provides access to private land along the river, but does not provide public access to the river.
- Pump Station cherrystem on the east side of the Owyhee River along the Northwest Pipeline. This route ends at the canyon rim above the river.



Map 1.7. Owyhee River Wilderness (West) Including Wild and Scenic Rivers

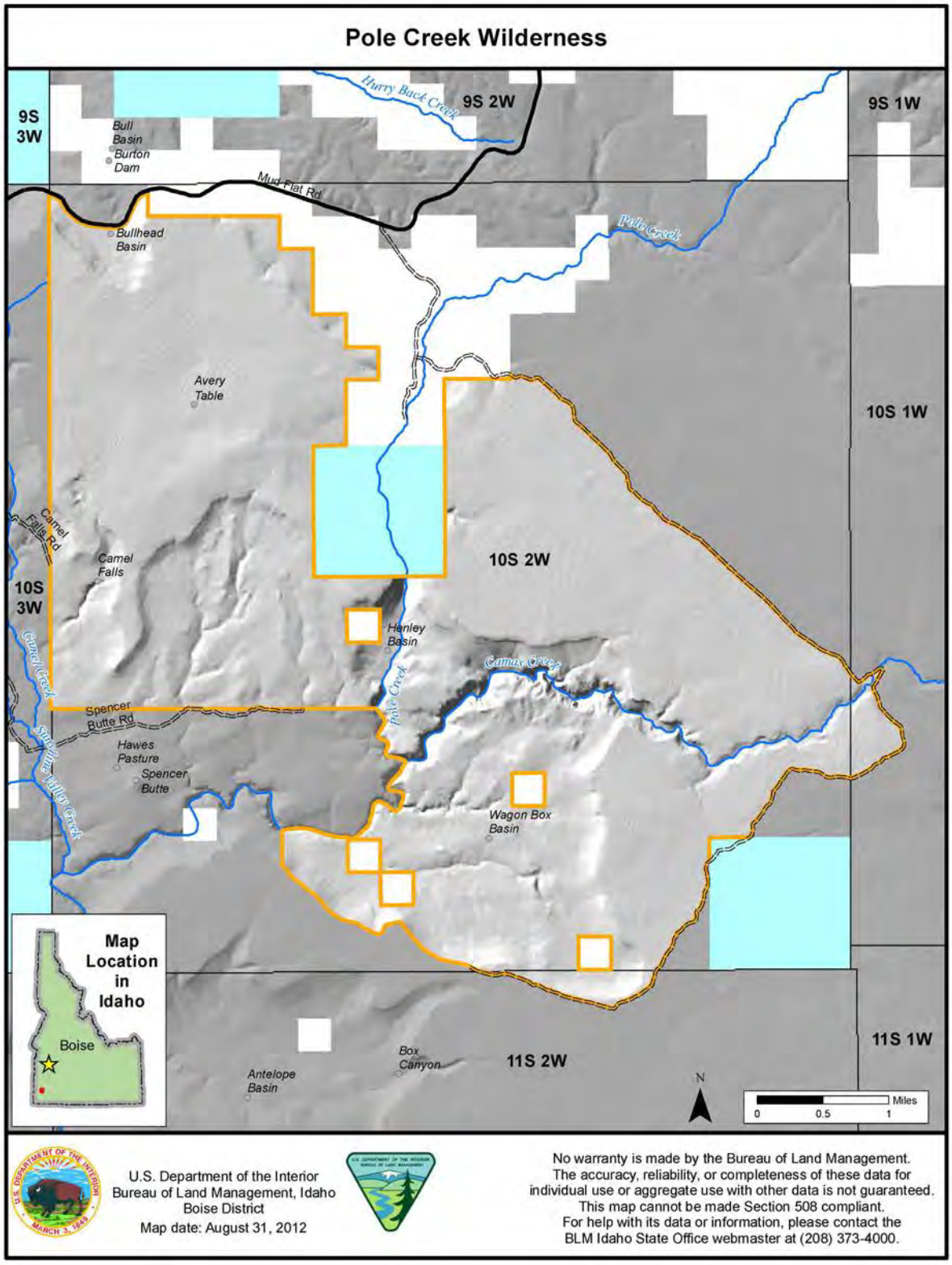


Map 1.8. Owyhee River Wilderness (East) Including Wild and Scenic Rivers

1.3.2.6. Pole Creek Wilderness

The Pole Creek Wilderness Area contains historic, cultural, scenic, and wildlife values, but no WSR segment. Many of the historic sites are associated with early homesteading and Basque settlement. The wilderness area incorporates portions of the National Register Camas and Pole Creeks Archaeological District. The area also supports various sensitive species, including populations of Columbia spotted frog (*Rana luteiventris*), greater sage-grouse, Mud Flat milkvetch (*Astragalus yoder-williamsii*), and Bacigalupi's downingia (*Downingia bacigalupii*). Portions of Pole Creek contain pristine riparian communities (see Map 1.9, "Pole Creek Wilderness" (p. 24)).

Camas Creek



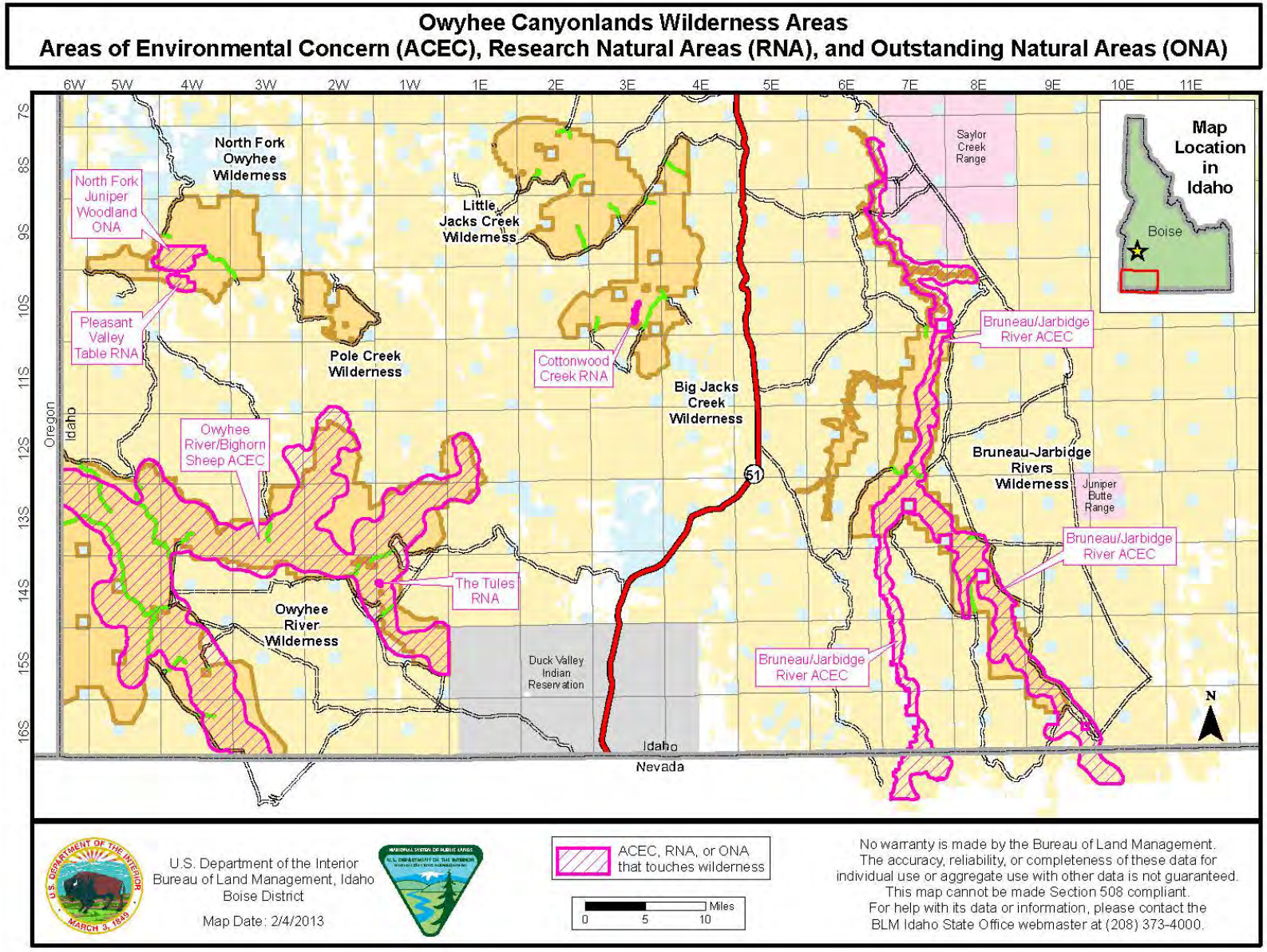
Map 1.9. Pole Creek Wilderness

1.3.3. Wilderness Issues Being Addressed

This WMP was prepared to address issues identified through internal agency and public scoping. Interested publics were involved in this process during public meetings and through letters, email, the BLM website, and personal contact. Initial public scoping meetings were held during the Spring of 2011 in Boise, Grandview, Murphy, Nampa, and Twin Falls, Idaho. Issues and concerns raised during scoping were considered during development of this WMP and are described in the following sections.

1.3.3.1. Protecting and preserving the untrammeled, undeveloped, and natural appearance of wilderness areas

- Structures associated with historic and valid existing land uses may not be conducive to or compatible with preservation of wilderness character and WSR values.
- Wildfire suppression and post-fire rehabilitation may affect the "natural" and "undeveloped" wilderness character by disturbing soil and changing vegetative composition and structure.
- The configuration of the wilderness areas resulted in unusually long perimeters compared to the area within their boundaries. Long boundary perimeters increase the amount of wilderness that may be impacted by human-influenced changes to vegetative structure and composition in areas immediately adjacent to the wilderness areas, especially following large-scale wildfires, such as the 2012 Jacks Fire.
- Human activities may increase the establishment of noxious and invasive plant species; in particular, cheatgrass (*Bromus tectorum*), whitetop (*Cardaria draba*), perennial pepperweed (*Lepidium latifolium*), Scotch thistle (*Onopordum acanthium*), Canada thistle (*Cirsium arvense*), Russian olive (*Elaeagnus angustifolia*), tamarisk (*Tamarix parviflora*), spotted knapweed (*Centaurea maculosa*), and rush skeletonweed (*Lygodesmia juncea*).
- Numbers of visitors to wilderness areas may increase, which could result in site-specific impacts to wilderness character and/or WSR values.
- The notoriety and popularity of wilderness areas resulting from their designation may increase visitation to a level that poses a risk to designated Areas of Critical Environmental Concern (ACEC), Outstanding Natural Areas (ONA), or Research Natural Areas (RNA) (Map 1.10, "Owyhee Canyonlands Wilderness Areas ACECs, RNAs, and ONAs" (p. 26)), including:
    - The Tules RNA (Owyhee River Wilderness),
    - California bighorn sheep habitat ACEC (Owyhee River Wilderness),
    - North Fork Juniper Woodland ONA (North Fork Owyhee Wilderness),
    - Pleasant Valley Table RNA (North Fork Owyhee Wilderness),
    - Cottonwood Creek ACEC (Big Jacks Creek Wilderness).
    - Bruneau/Jarbidge River ACEC (only in the Jarbidge Field Office portion of the Bruneau-Jarbidge Rivers Wilderness)



Map 1.10. Owyhee Canyonlands Wilderness Areas ACECs, RNAs, and ONAs

1.3.3.2. Management of non-conforming land uses allowed by Section 4(d) of the Wilderness Act

Continued livestock grazing-related activities, including access to and maintenance of existing structures (i.e., springs, pipelines, fences, reservoirs, etc.), may adversely affect naturalness and undeveloped wilderness character and WSR values.

Mineral exploration and extraction activities within valid existing mining claims may adversely affect naturalness, and untrammeled and undeveloped wilderness character and WSR values.

1.4. Wild and Scenic River (WSR) Overview

1.4.1. WSR Designation

Congress established the WSR system to protect rivers (or river segments) in their free flowing condition. In addition to free flowing, a river must have one or more "outstandingly remarkable values" (ORVs), including scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values.

Rivers are classified as wild, scenic, or recreational according to the following criteria:

- **Wild**— Rivers or sections thereof that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.
- **Scenic**— Rivers or sections thereof that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads. None of the river segments in this area are designated as Scenic.
- **Recreational**— Rivers or sections thereof 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. Rivers classified as Recreational do not necessarily have to possess a Recreation ORV.

The WSR Act encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. Designated river segments need not include the entire river and may include tributaries.

Section 1504(b) of the OPLMA provides specific guidance on interim WSR corridors, and states that the boundary of a designated WSR segment shall extend not more than the shorter of –

1. An average distance of ¼ mile from the high water mark on both sides of the river, or
2. The distance to the nearest confined canyon rim.

BLM surveys will establish official corridor boundaries along each of the WSR segments. The boundary surveys will result in development of official maps and legal descriptions for each WSR segment. These documents will be certified by the BLM Idaho Chief Cadastral Surveyor and the BLM Idaho State Director, per Section 12.E.1 of BLM Manual 6120.

Streamflows are not well defined for 14 of the 16 river segments. High and low streamflows and their seasonality must be determined (and then protected through water right claims) in order

to ensure that WSR management decisions protect and enhance the recognized ORVs that are tied to the various flows. Based on stream gauge data collected by the U.S. Geological Survey (USGS), calculated streamflows will become the basis for federal water right claims that BLM will file with the state of Idaho to protect the identified ORVs.

High flows maintain the habitat (channel scouring and cleaning, deposition of nutrients into riparian areas, etc.) that supports the viability of the fish populations. High flows also provide recreational opportunities that support public use and enjoyment, primarily through boating. Low flows are necessary to support cold water biota during the dry, summer season by providing the habitat (i.e., pools, substrate, hiding cover) needed for the year-long survival of aquatic species. This is particularly important for the Bruneau and Jarbidge rivers, which are designated critical habitat for the threatened bull trout.

1.4.2. WSR Descriptions

Table 1.2, "Wild and Scenic Rivers with identified ORVs grouped by Wilderness Area" (p. 28) lists the WSRs designated within each of the affected wilderness areas, and identifies the outstandingly remarkable values (ORVs) recognized in each of the segments. Thirteen of the river segments, totaling about 317 miles, are designated as wild, while three segments, totaling about eight miles, are designated as recreational.

Table 1.2. Wild and Scenic Rivers with identified ORVs grouped by Wilderness Area

River Name	Length (Miles[a])	Classification	Scenic	Recreational	Geologic	Fish	Wildlife	Cultural/ Historical	Other[b]
Big Jacks Creek Wilderness									
Wickahoney Creek	1.5	Wild	X	NA	NA	X	X	NA	NA
Big Jacks Creek	36.2	Wild	X	X	NA	X	X	NA	X
Cottonwood Creek	2.5	Wild	X	X	NA	X	X	NA	X
Duncan Creek	0.9	Wild	X	X	NA	X	X	NA	NA
Bruneau-Jarbidge Rivers Wilderness									
Bruneau River	38.8	Wild	X	X	X	X	X	X	X
	0.6	Recreational							
West Fork Bruneau River	0.3	Wild	X	X	X	X	X	X	NA
Sheep Creek	26.2	Wild	X	X	X	X	X	X	NA
Jarbidge River	29.6	Wild	X	X	X	X	X	X	X
Little Jacks Creek Wilderness									
Little Jacks Creek	12.4	Wild	X	X	NA	X	X	NA	X

River Name	Length (Miles[a])	Classification	Scenic	Recreational	Geologic	Fish	Wildlife	Cultural/ Historical	Other[b]
North Fork Owyhee Wilderness									
North Fork Owyhee River	16.1	Wild	X	X	X	X	X	X	X
	5.8	Recreational							
Owyhee River Wilderness									
Owyhee River	69.7	Wild	X	X	X	X	X	NA	X
South Fork Owyhee River	30.6	Wild	X	X	X	X	X	X	NA
	1.2	Recreational							
Red Canyon Creek	4.7	Wild	X	X	X	X	X	NA	NA
Deep Creek	13.6	Wild	X	X	X	X	X	NA	NA
Battle Creek	24.3	Wild	X	X	X	X	X	NA	X
Dick-shooter Creek	9.5	Wild	NA	X	X	X	X	NA	NA
Pole Creek Wilderness									
Pole Creek Wilderness contains no WSR Segments									
Total 324.5 Miles									

[a]River miles are rounded to the nearest tenth mile.

[b]Bruneau River prickly phlox along the Bruneau and Jarbidge Rivers; Owyhee River forget-me-not along the Owyhee River and some tributaries.

Two apparent inconsistencies appear in Section 1504 of the OPLMA, which describes the beginning and ending points of designated WSR segments.

Section 1504(a)(190)(A) of the OPLMA describes the recreational segment of the North Fork Owyhee River as:

> "*The 5.7 mile segment from the Idaho-Oregon State border to the upstream boundary of the private land at the Juniper Mt. Road crossing, as a recreational river.*"

The only private land crossed by the North Fork Owyhee River is the former Hanley property, which BLM acquired in 2011. The OPLMA appears to describe the upstream boundary of this property as being at the Juniper Mountain Road crossing, when in fact the Juniper Mountain Road crossing is located near the downstream end of the property. However, since the upstream boundary of this parcel is located approximately 5.7 miles from the Oregon border, we have no doubt that this is the described property. As such, WSR maps (refer to Map 1.6, "North Fork Owyhee Wilderness Including Wild and Scenic Rivers" (p. 19)) show the recreational river segment extending from the Idaho-Oregon border to the upstream boundary of the former Hanley property.

Section 1504(a)(194)(B) of the OPLMA describes the recreational segment of the South Fork Owyhee River as:

> *"…the 1.2-mile segment of the South Fork of the Owyhee River from the point at which the river enters the southernmost boundary to the point at which the river exits the northernmost boundary of private land in sec. 25 and 26, T. 14 S., R. 5 W., Boise Meridian…"*

Since no private land exists in section 26, but does exist in section 36 and is contiguous to that in section 25, this description reflects a simple typographical error, and should read "…private land in sec. 25 and 36, T. 14 S., R. 5 W., Boise Meridian…" As such, WSR maps show this recreational river segment extending through the private land in sections 25 and 36.

1.4.2.1. WSR Outstandingly Remarkable Values (ORVs)

Designated WSRs possess one or more ORVs that are considered unique, rare, or exemplary at a comparative regional or national scale, including scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values. The area of consideration may vary by resource; it may be all BLM-administered lands within a state, a portion of a state, or an appropriately scaled physiographic or hydrologic unit. The following ORVs have been identified for the 16 WSR segments designated by the OPLMA:

Scenic Values: Landscape forms throughout the Owyhee Canyonlands vary from broad, open sagebrush steppes to narrow canyons, some exceeding 800 feet in depth. The canyons are dominated by a mixture of high, vertical lines and forms of coarse-textured, red, brown, or blackish eroded cliffs, often glazed with yellow to light green micro-flora. Intertwined with the vertical features are some very steep diagonal lines that frame triangular forms associated with talus slopes. The slopes have a mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities and/or dark green juniper, as well as either medium-textured, reddish rhyolite rubble fields or coarse-textured, blackish basalt rubble fields. In some areas, colorful rhyolite spires and rock pinnacles ("hoodoos") line the canyons and provide vivid contrast to the deep green of the dense riparian ribbons that flank the stream channels.

Spring rains result in medium-textured, rich green riparian vegetation that follows the meandering lines of fast moving streams that run brownish in high flows. Large boulders and whitewater rapids are interspersed to varying degrees between the calm reaches. During summer months, sparkling pools and slow-moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, colors, and lines from surrounding cliffs and steep slopes. Receding waters also expose whitish, medium-textured stream-bottom gravel and boulders.

Although basalt and rhyolite canyon/riparian associations are widespread over southwest Idaho, the associations found along the Owyhee, Bruneau, and Jarbidge WSR segments are among the best representations of this landscape in the region. The combinations of line, form, color, and texture found amidst this close association of landforms, water, and vegetation create exceptional landscapes that possess outstandingly remarkable scenic values.

Each WSR segment is managed under Visual Resource Management (VRM) Class I Management Objectives, generally defined as pristine landscape with few or no human developments, and thus represents scenic quality.

Recreational Values: Outstandingly remarkable recreational values along the designated river segments relate primarily to the availability of outstanding float boating and associated experiences. The Bruneau and Jarbidge River canyons have a national reputation among kayakers

for offering challenging whitewater (Class III, IV, and V) affording a multi-day river trip in a remote desert canyon.

The Owyhee River and its major tributaries are generally rated as Class II whitewater, although several Class III or IV rapids exist on the South Fork, and several Class IV through VI sections exist in the Lambert and Garat Gorges. Despite recent drought years, the Owyhee River system has become regionally and nationally recognized for offering one of the nation's best open canoe float opportunities.

Along many stream segments, the float boating experience is enhanced by outstanding day-hiking opportunities. It is possible to hike from canyon rims to the stream in many locations, especially during low-water periods. Due to their meandering character, diversity of landforms, and topographic screening, the canyons provide exceptional opportunities for solitude and for primitive and physically challenging activities, including hiking, wildlife viewing, photography, floating, fishing, and camping.

Boating opportunities and activities are supported, only briefly, by seasonally high water flows during Spring and Summer. High flows maintain channel diversity, riparian habitat, and streamside campsites. While some low-flow (canoe and kayak) floating opportunities are available later in the season, the majority of use occurs during peak flows in the Spring.

Outstandingly remarkable recreational values in the balance of the wilderness areas are attributed to their solitude and untrammeled character.

Geologic Values: Designated WSR segments are located in the Owyhee Uplands sub-province of the Columbia Intermontane geologic province, informally known as the Owyhee volcanic field. The Bruneau and Jarbidge River canyons, and the canyons of the Owyhee River and its tributaries, possess predominately Miocene Era volcanic formations. Of the two exposed rock units, the Little Jacks Creek Tuff is the older, lower unit. It is a flow-layered, ledge-forming rhyolite tuff that may have a thickness of over 1,000 feet. The tuff is over-lain by a thin veneer of younger Banbury Basalt. The two units are separated by a thin section of poorly consolidated sedimentary rock and silicic ash.

The canyons have been eroded to depths of 200 to over 800 feet. If overlying basalt is present, the rhyolite formations are nestled in the rubble slopes below vertical walls of basalt. Weathering and erosion have carved immense monolithic cliffs and numerous sculptured pinnacles known as "hoodoos." The oxbow canyon of "The Tules" on the Owyhee River is a rare geologic formation in the desert environments of the western United States. The only known locatable mineral activity within the WSR corridors includes one small-scale jasper mining claim in the vicinity of Indian Hot Springs in the Bruneau River Canyon, most of which lies within the Recreational segment of the Bruneau WSR corridor.

The Owyhee, Bruneau, and Jarbidge river systems provide the largest concentration of sheer-walled rhyolite/basalt canyons in the western United States. Though not unique to southwest Idaho, the presence of these geologic formations in such great abundance and aerial extent makes the designated river segments geologically unique from a national perspective.

Fisheries and Aquatic Species Values: Outstandingly remarkable fisheries values are defined as the ability of a given stream segment to support populations of endangered, threatened, or BLM sensitive fish species. The ability to support these species is reflected by their presence in

the stream(s). WSRs each support sensitive redband trout populations, while the Bruneau and Jarbidge rivers support populations of the threatened bull trout.

The Jarbidge River has outstandingly remarkable fisheries value because it supports the southernmost population of bull trout in North America (USFWS 2012b). The threatened bull trout is the only fish in the Owyhee Canyonlands that is federally listed under the Endangered Species Act. The Jarbidge River contains one of six bull trout populations identified for recovery. Genetic analysis indicates that Jarbidge River bull trout have a shared evolutionary history with populations in the upper Columbia River and Snake River, but are genetically distinct. For over 100 years, Jarbidge River bull trout have been geographically isolated from other populations by more than 150 miles (240 km) of marginally suitable habitat and several impassable hydroelectric dams on the Snake River and diversion dams on the lower Bruneau River.

Jarbidge River bull trout are important because they occupy a unique and unusual semi-arid desert ecological setting, and their loss would result in a substantial modification of the species' range. Bull trout critical habitat consisting of a Rocky Mountain juniper-dominated riparian zone is unique to the area. The majority of occupied bull trout habitat north of the Snake River Plain is in coniferous forest types (i.e. Douglas fir, Engelmann spruce, and others). Although bull trout spawn in upstream portions of the Jarbidge River in Nevada, the Jarbidge WSR segment contains bull trout over-wintering and migratory habitat, which is maintained by bank-full flows that move the river bed materials downstream and the silts and sands to the upper channel banks between bank-full and floodplain levels. The bull trout and redband trout populations also rely on low flows that maintain hiding pools that hold water throughout dryer seasons.

In Idaho Instruction Memorandum No. ID-96-010, the BLM Idaho State Director instituted the Interim Bull Trout Habitat Conservation Strategy, which has as its foundation the PACFISH strategy for conserving anadromous fish species in the Northwest. Among other things, the strategy established a Riparian Habitat Conservation Area (RHCA) corridor along the Bruneau and Jarbidge Rivers, which extends 300 feet from the high water mark on each side of the river. The purpose for the RHCA is to maintain or restore riparian habitat, water quality, stream channel integrity and processes, in-stream flows, and diversity and productivity of native and desirable non-native plant communities. Requirements of the Wilderness Act and the WSR Act that are incorporated in this WMP fulfill the goals and objectives of the Interim Bull Trout Habitat Conservation Strategy.

The lower (northern) approximate two miles of the Bruneau River near Hot Creek is habitat for the endangered Bruneau hot springsnail (*Pyrgulopsis bruneauensis*), as well as the California floater (*Anodonta californiensis*), another mollusk species of concern. The principal threat to the Bruneau hot springsnail is the reduction and/or elimination of its geothermal habitats as a result of groundwater withdrawal, primarily for agriculture (USFWS 2012a). Although the California floater may be locally common in the Snake River and its major tributaries, which includes the Bruneau River, its population status is currently unknown (Frest 1999, Frest and Johannes 2000).

Little Jacks, Big Jacks, Cottonwood, and Duncan Creeks are outstandingly remarkable, both from a fisheries population and habitat standpoint. These streams are among the 17% of desert streams in the Northern Basin and Range identified as aquatic-habitat strongholds for redband trout, a BLM sensitive species and a state of Idaho species of special concern (Thurow et al. 1997). Little Jacks Creek's good water quality, a well-shaded riparian vegetative canopy, and long-term protection from livestock grazing have produced the highest densities of redband trout of any surveyed stream in southwest Idaho (Zoellick et al. 2005).

Although redband trout are found in the Owyhee River and its tributaries, including North and South Fork Owyhee River, Battle Creek, Deep Creek, Dickshooter Creek, and Red Canyon Creek, warmer summer water temperatures are insufficient to support productive redband fisheries. The seasonal migration of smallmouth bass into the Owyhee River system over the past several decades suggests that conditions may favor the development of a cool water fishery. There is competition for food and space between smallmouth bass and trout in many Owyhee tributaries. Current habitat conditions and water quality parameters favor smallmouth bass. Habitat and water quality improvements could allow a smallmouth bass population to prosper, which would be a unique situation for local streams, and could result in an outstandingly remarkable cool water fishery.

The success of fisheries in these systems depends on appropriate flows during key life stages. These WSRs exhibit typical flashy, desert streamflows to which the resident fish species are adapted. In summer and early fall, low flows are sufficient to maintain standing pools for fish survival. The high flows that may occur only every few years are integral to the maintenance of channels that support pool depths and channel diversity also necessary for fish survival.

Wildlife Values: Deep canyon habitats are important to wildlife species in desert and semi-desert environments in the western United States, especially when the canyons possess a large diversity of plant species, such as those that exist along the streams of the Owyhee, Bruneau, and Jarbidge river systems. The Owyhee Canyonlands provide upland and riparian habitats for a number of wildlife species common to Southwest Idaho. Big game commonly found in the Owyhee Canyonlands include California bighorn sheep, elk, mule deer, and pronghorn.

California bighorn sheep generally prefer isolation from human disturbance, conditions typically provided in the wilderness and WSR areas. Steep cliffs and alcoves along the canyons provide key critical lambing and escape habitat for bighorn sheep. The Owyhee River, in combination with Battle Creek, Deep Creek, Duncan Creek, and Wickahoney Creek, supports the majority of the bighorn sheep population in the Owyhee Canyonlands, which is about 10% of the species' population. Although California bighorn sheep are not genetically distinct from Rocky Mountain bighorn sheep, the IDFG bighorn management plan (IDFG 2010) manages bighorns south of Interstate-84 as a California bighorn sheep "trophy class."

Common large and mid-sized predators in the area include cougar, bobcat, coyote, badger and, raccoon. Small mammals include rodents (mice, kangaroo rats, voles, squirrels, chipmunks), rabbits, shrews, bats, weasels, and skunks. The waters along the entire Owyhee and Bruneau River systems and their tributaries are considered outstanding habitat for river otter because of adequate year-long flows and a good prey base (fisheries).

A variety of bird species are present including songbirds, waterfowl, shorebirds, owls, and raptors. The high, well fractured and eroded canyon cliffs are considered outstanding habitat for cliff nesting raptors, a small number of which occasionally winter along the canyon walls of the upper Owyhee River system and its major tributaries. Other wildlife includes several snake and lizard species as well as a few amphibians (frogs, toads, and salamanders).

Listed, Candidate, and BLM Sensitive Wildlife Values: The only threatened or endangered species known to inhabit designated WSR segments are the threatened bull trout in the Bruneau and Jarbidge river systems and the endangered Bruneau hot springsnail in the Bruneau River (see Figure 1.3, "All Wilderness Other Species of Concern " (p. 34)).

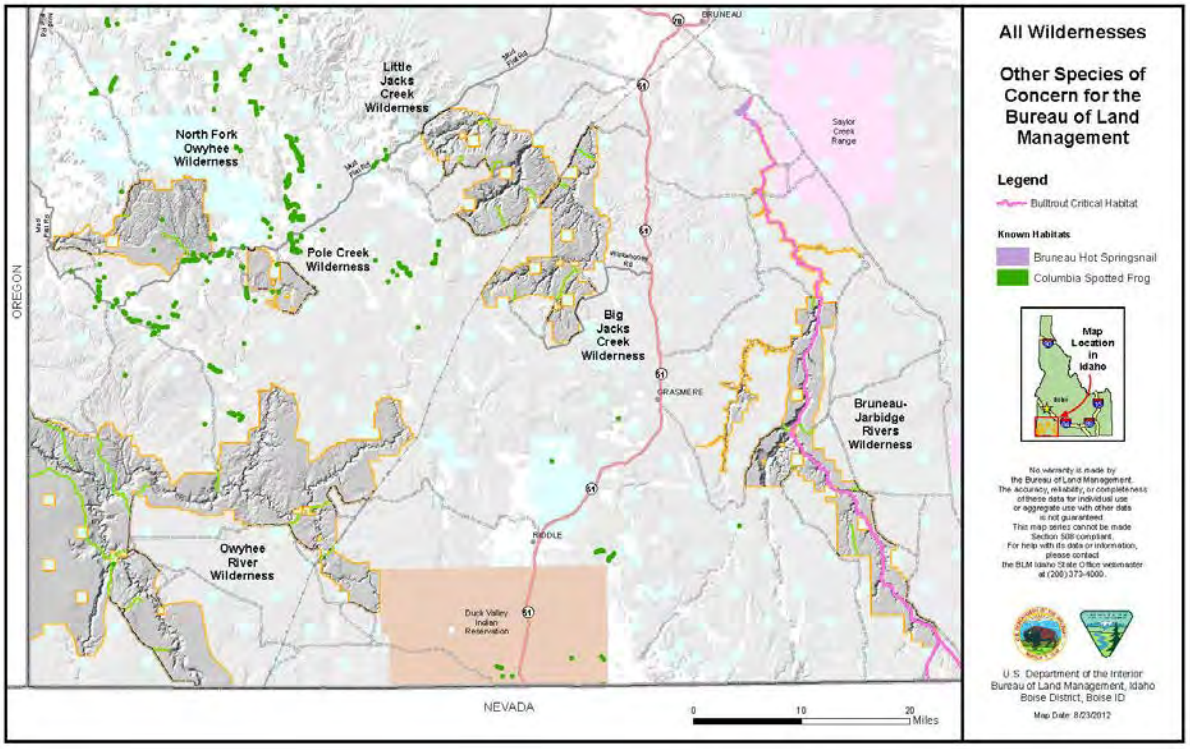


Figure 1.3. All Wilderness Other Species of Concern

All but the North Fork Owyhee Wilderness Area is considered Preliminary Priority Habitat for greater sage-grouse (Section 1.3.2, "Descriptions of the Owyhee Canyonlands Wilderness Areas" (p. 8)), a Federal Candidate species and a BLM sensitive species. Idaho BLM sensitive species are also known or expected to occur along designated river corridors, including bald eagle (*Haliaeetus leucocephalus*), yellow-billed cuckoo (*Coccyzus americanus*), prairie falcon (*Falco mexicanus*), ferruginous hawk (*Buteo regalis*), several neotropical migratory bird species, several bat species, Columbia spotted frog, western toad (*Bufo boreas*), and redband trout. Cliffs also support spotted and Townsend's big-eared bats, both Idaho BLM sensitive species (Doering and Keller 1998). In Idaho, although some of the WSR corridors could have once supported mountain quail (*Oreotyx pictus*) populations, mountain quail are currently restricted in their range to areas of west–central Idaho, with remnant population strongholds in the Riggins area (Vogel and Reese 1995; Crawford 2000).

Upland habitats within the Owyhee River system, including many topographically isolated slopes nestled amid cliffs, are in good to excellent ecological condition. A canyon system of such large size, and containing good to pristine habitat, possesses outstanding wildlife values. When the Owyhee River is considered in concert with the South and North Forks, and Deep Creek, where additional riparian and upland vegetation species diversity exists, the Owyhee Canyonlands system as a whole is a wildlife habitat area of national, if not international, importance.

Cultural Values: The Cultural Resource Density Predictive Model (Young 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that many of the designated WSR corridor segments in the Owyhee Canyonlands may contain cultural resource values. Many of the designated stream corridors were the major locations of permanent water, fuel, and varied animal

and vegetable materials for early Native Americans in the harsh Southwest Idaho environment, and as such, could have supported campsites. Few sites have yet been designated as eligible for inclusion in the National Register of Historic Places. Relatively few recent cultural inventories have been conducted in the area and eligibility determinations have not been made for many of the known sites.

In areas where inventories have been conducted, sites have been located that provide evidence of past and present occupation and/or use by Native Americans. Numerous historic and prehistoric archaeological sites and/or artifacts have been discovered along rimrock areas and on surrounding plateau lands. Rock shelters have been located in canyons within which cultural deposits have accumulated over an unknown expanse of time. These shelters contain datable organic materials and other fragile remnants of the past. Although some rock shelters are associated with open sites on terraces, most are tucked away at the base of cliffs. Other sites may have existed adjacent to rivers, but frequent springtime floods and the continual realignment of meandering stream channels may have long since destroyed these. Inventories in the Bruneau and Jarbidge River canyons have revealed the presence of archaeological sites on almost all river terraces large enough to camp on. Continued surveys along these river systems may reveal additional sites or resources that reflect values of regional or national significance.

Historic Values: River corridors with historic ORVs are generally defined as those that contain a site(s) or feature(s) (usually at least 50 years old) associated with a significant event, an important person, or a past cultural activity that was rare or one-of-a-kind in the region. Historic sites that reflect European-American settlement and development of southeast Oregon and southwest Idaho are present within the Owyhee Canyonlands area. Evidence of wagon and military roads, homesteads, and sheep and livestock driveways dating back to the 1800s exist throughout the area and provide insight into when and how the area was settled and developed.

Numerous historic sites and artifacts are scattered throughout the Owyhee Canyonlands and along designated stream segments. These include a water wheel, a historic CCC roadbed, rock cairns, stone corrals, and ruins of stone and/or log buildings that are representative of those constructed in the late-19th and early-20th centuries. These sites occupy both federal and private land, and are typical of historic sites found throughout southwest Idaho. The sites have not been individually evaluated for their eligibility for inclusion on the National Register of Historic Places (NRHP). However, when viewed collectively with other sites scattered throughout the Owyhee Canyonlands, they could possibly qualify for inclusion on the NRHP as contributing elements of a Historic Site District centered on early ranching within the various tributaries of the Owyhee, Bruneau, and Jarbidge Rivers.

Although historic sites are an important resource that contributes to the recreational experience along the various river corridors, individual sites are not of outstandingly remarkable historical value when compared to historic resources in southwest Idaho as a whole. However, these sites may still be eligible for inclusion on the NRHP

Other Values: Several of the designated WSR corridors support rare plant species or unique vegetation assemblages that serve as exceptional reference areas for managers and researchers. Owyhee River forget-me-not (*Hackelia ophiobia*) is a regionally endemic plant known to exist only along the Owyhee River and several of its tributaries, including Battle Creek.

The Bruneau River prickly phlox (*Linanthus glabrum*), which colonizes vertical and overhanging rhyolite canyon walls, is an endemic plant found nearly exclusively in the Bruneau-Jarbidge river system, with one additional confirmed location in Nevada.

A dense, nearly impenetrable thicket of riparian vegetation along about two miles of Cottonwood Creek has a nearly complete complement of potential natural plant communities. These are used as a reference area by the Idaho Conservation Data Center for describing riparian and wetland communities of southwestern Idaho (Moseley 1998).

The main Little Jacks Creek Canyon and portions of upper Big Jacks Creek Canyon support riparian communities that are also sterling examples of potential natural riparian communities. Additionally, several segments of the middle portion of Big Jacks Creek Canyon support representative examples of black cottonwood communities that were much more widespread prior to European settlement.

The North Fork Owyhee River Canyon is an excellent example of the Montane Western Juniper Woodland Subtheme for the Western Juniper Woodland Theme in the Northern Basin and Range Natural Region, based upon illustrative character, condition, diversity, rarity, and value for science and education.

1.4.3. WSR Issues to be Addressed

The WSR Act provides federal protection for designated free-flowing rivers, and preserves them and their immediate environment for the use and enjoyment of present and future generations (BLM Manual 6400). Designated rivers or segments thereof are classified as Wild, Scenic, or Recreational. Section 10(a) of the WSR Act states that:

> *"Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area."*

Like the wilderness issues, the following WSR issues were identified through scoping:

- Streamflows within each of the wild and scenic rivers may be at risk from upstream developments. Upstream water rights that may be issued in the future could reduce streamflows needed to protect ORVs identified for affected river segments.

- Increased visitor use may result in resource impacts that would conflict with wilderness character and ORVs associated with river segments.

- Continued livestock grazing-related activities, including access to and maintenance of existing structures (i.e., springs, pipelines, fences, reservoirs, etc.), may adversely affect naturalness and undeveloped wilderness character and WSR values

- Mineral exploration and extraction activities within valid existing mining claims may adversely affect naturalness and undeveloped wilderness character and WSR values.

1.5. Wilderness and WSR Management Strategy

The management strategy for the designated Wilderness Areas and WSRs is to manage human use in a manner that protects and preserves the natural, untrammeled, and undeveloped wilderness character, as well as the opportunities for solitude and primitive experience. Management will also serve to protect or enhance the ORVs that are recognized for each WSR. In addition, as opportunities arise, discretionary actions may be taken to address the effects of natural and human-caused disturbances.

This WMP considers existing resource and management issues within the wilderness areas and WSRs. Management actions describe resource protection to ensure conformity with wilderness and WSR management goals and objectives. WSR resources would be managed according to wilderness values except where WSR management requirements are more stringent. One exception to this is the portion of the Recreational section of the North Fork Owyhee WSR that extends outside of the North Fork Owyhee Wilderness Area. A second exception involves the 1.3 mile long section of the Owyhee WSR that lies outside of the Owyhee River Wilderness Area downstream from the Northwest Pipeline. These two short sections of WSR would be managed strictly according to the WSR Act.

1.5.1. Wilderness Management Goals and Objectives

This section outlines the goals and objectives that guide this WMP. The goals, along with related laws, regulations, and BLM policies, provide broad management direction and are refined into specific objectives. Objectives are statements of desired conditions stemming from current situations and assumptions about the future. Management actions proposed to meet these objectives are described in Section 1.5.3, “Wilderness and WSR Management Actions” (p. 39).

1.5.1.1. Wilderness Goal 1

Provide for the long-term protection and preservation of wilderness character.

1.5.1.1.1. Objectives

- Preserve the natural and untrammeled character and influence of wilderness areas by allowing fire to function in its natural role of disturbance and succession, except where life, property, and/or high value resources are threatened.
- Protect and preserve wildlife habitat to support healthy, viable, and naturally distributed wildlife populations to retain the wilderness areas’ natural and undeveloped character.
- Maintain the natural wilderness character by reducing or eliminating infestations of noxious weeds and non-native invasive species.

1.5.1.2. Wilderness Goal 2

Manage wilderness areas for visitor use and enjoyment in a manner that leaves them unimpaired for future use and enjoyment. The protection and preservation of wilderness character must be dominant in all decisions regarding the promotion or management of visitor use.

1.5.1.2.1. Objectives

- Manage wilderness areas using the minimum tool, equipment, structure or method necessary to accomplish the objective. The chosen tool, equipment, structure or method should be the one that least degrades wilderness character and values temporarily or permanently.

- Eliminate redundant special land use designations and allocations (i.e., ACEC, RNA, SRMA, ONA, etc.) during future land use plan revisions, and revoke associated withdrawals wherever the designations afford no more protection than is provided by the withdrawal language attached to the wilderness and WSR designations.

- Minimize the number of visitor use regulations to enhance outstanding opportunities for primitive recreation and solitude, while ensuring protection of other wilderness character.

- Utilize education and interpretation as a proactive approach to address agency decisions and visitor activities that may impact wilderness character.

- Prevent unauthorized use of motorized and mechanized vehicles and equipment by managing vehicle access points, posting appropriate boundary and informational signs, and blocking and rehabilitating unauthorized routes.

- Ensure that user-created trails (those created by hikers and equestrians) that access popular areas do not degrade natural wilderness character and values.

1.5.1.3. Wilderness Goal 3

Manage non-conforming uses permitted by the Wilderness Act and subsequent laws to preserve wilderness character.

1.5.1.3.1. Objectives

- Authorize special provisions permitted by the enabling legislation in a manner that preserves wilderness character by minimizing developments, degradation of naturalness, and other impacts to wilderness character and values.

- Close or limit access to specific areas when resources, such as soils, vegetation, sensitive plant or animal populations or habitat, or cultural resources are being negatively affected by visitor activities.

- Maintain or enhance the natural wilderness character by removing unnecessary facilities and minimizing or reclaiming human-caused surface disturbances.

- Authorize commercial services (i.e., outfitters and guides, etc.) in wilderness areas to entities that educate their customers about land use practices that protect and preserve wilderness character.

- Ensure that the current Fire Management Plans are consistent with the goals of this WMP and current Wilderness and WSR management policies.

1.5.2. WSR Management Goals and Objectives

1.5.2.1. Wild River Goal

Manage for the protection and enhancement of each river's ORVs while providing river-related outdoor recreation opportunities in a wild setting.

1.5.2.1.1. Wild River Objectives

- Permit minor structures, if needed for research or monitoring purposes (i.e., streamflow, water quality, bull and redband trout research, etc.), following a Minimum Requirements Analysis, described in BLM Manual 6340, Appendix B-1.
- Maintain portage trails around unnavigable river reaches to a minimum standard necessary to provide safe boater passage. Portages must be compatible with the wild river setting and the surrounding wilderness character.
- Preserve the health and function of riparian and floodplain areas while providing for visitor use by developing a required permit system when visitor use volume is within one year of exceeding the designated user capacity of the rivers.

1.5.2.2. Recreational River Goal

Manage use levels to protect and enhance the exceptional primitive recreational opportunities within the three recreational river corridors consistent with protecting and enhancing other ORVs.

1.5.2.2.1. Recreational River Objectives

- Develop only the minimum recreation facilities within recreational river corridors while minimizing adverse effects to wilderness character and/or ORVs.
- Provide for visitor services immediately outside the wilderness areas and WSR corridors, including maintaining or repairing access roads to a high clearance standard.

1.5.3. Wilderness and WSR Management Actions

1.5.3.1. Fire Management

The overall goal of wilderness fire management is to emphasize protection and preservation of wilderness character and protection and enhancement of WSR values. This goal requires BLM to facilitate the operation of natural processes and ecological change by allowing fire to function in its natural role of disturbance and succession, except where life, property, and/or high value resources are threatened. An integral part of this process is ensuring that Fire Management Plans (FMPs) are consistent with Wilderness and WSR legislative requirements and BLM management policies, as well as the goals and objectives of this WMP. The goals and objectives of this WMP would be incorporated into future FMP revisions.

In addition to the Wilderness Act, fire suppression and rehabilitation activities would be consistent with current National Interagency Standards for Fire and Fire Aviation Operations (NIFC 2011), and FMPs and Land Use Plans. Where feasible, fire management activities within wilderness areas would utilize Minimum Impact Suppression Tactics (MIST) (USDI 2010b).

Response to a wildland fire in or near wilderness would consider the full range of fire management strategies and tactics to achieve multiple objectives (ranging from monitoring to full suppression). BLM staff would define the set of multiple objectives to protect and/or enhance wilderness character and WSR ORVs, while considering situational factors, such as fuel loading, fire behavior, and threats to human life and property.

Off-road travel and development of new access routes would not be authorized for fire suppression.

1.5.3.1.1. Fire Suppression Actions

Pursuant to Section 4(c) of the Wilderness Act, otherwise prohibited uses may be authorized in wilderness areas only when they are determined to be "…necessary to meet minimum requirements for the administration of the area for the purpose of this Act…" While administrative activities should be accomplished with economic efficiency, both the Wilderness Act and the agency's wilderness policy direct managers away from using either the cost or the time required for implementation as over-riding considerations when evaluating the potential use of otherwise prohibited activities. Table 1.3, "Delegation of Authority for Approving Fire Management Related Activities in Wilderness Areas" (p. 41) lists the authorized officers with current (as of 2012) delegated authority to approve the use of motorized and mechanized vehicles and equipment, as well as other fire management related "Prohibited Uses" (including ES&R) in wilderness.

An evaluation and approval template for emergency actions that functions as a Minimum Requirements Analysis (Appendix B-1 of BLM Manual 6340) is included in Appendix C, *Fire Approvals* (p. 113). Revisions to this approval process would be consistent across BLM District boundaries, as well as with this WMP.

The approval process outlined in Appendix C, *Fire Approvals* (p. 113) would be used to evaluate the following actions (and any others) that may be considered during development of a proposed emergency fire response.

- Assign a resource advisor with knowledge and experience in wilderness stewardship to the firefighting team to assist in identifying and protecting wilderness character.
- Prevent the establishment of noxious weeds and invasive species to preserve the natural wilderness character
    - Inspect and wash suppression equipment prior to wilderness entry, but locate wash-down sites outside of wilderness areas.
    - Where practical, locate base camps and supporting operations, such as helibases and vehicle and equipment staging areas outside of wilderness areas and away from areas infested by noxious weeds and invasive species.
    - Use WSRs as the priority water source for suppressing fires in WSR corridors and wilderness areas to prevent cross-contamination and/or spread of aquatic invasive species.

  - When WSRs are unavailable or their use is impractical, avoid using water sources containing invasive species for suppressing fires in WSR corridors and wilderness areas.

- Use Minimum Impact Suppression Tactics (MIST) when feasible, as long as the safety of firefighters, human life and property is protected.

- Prohibited uses, including motorized or mechanized vehicles and equipment, may be utilized to protect life and property, and important wilderness resources, including vegetative composition and structure that supports habitat for greater sage-grouse, bighorn sheep, and threatened, endangered, or sensitive species.

- Remove or rehabilitate evidence of human intervention to the maximum extent possible.

  - Plan and implement rehabilitation or restoration actions immediately following containment and prior to the suppression incident organization demobilization.

  - Repairs to damaged sites or resources may occur with the same type of equipment that was used for suppression. For example, if motorized, earth-moving equipment was used to construct fire lines, then the same type of equipment may be used to contour and rehabilitate.

The appropriate delegated authority must document their approval of otherwise prohibited uses, and the documentation must be included in periodic wilderness monitoring reports.

Table 1.3. Delegation of Authority[a] for Approving Fire Management[b] Related Activities in Wilderness Areas

Type of Prohibited Use Requested	Approval Authority in Emergency
Helicopter Bucket Work, Dip sites, and Water Delivery	Field Office Manager
Motorized Water Pumps	
Aerial Retardant Application	
Air Transport/Personnel Shuttle (landings) and Supply Drops	
Erosion Control Treatment (biodegradable material such as mulch)	
Fence (Facility) Repair or Temporary Fence Installation	
Chainsaws	
Motor Vehicles ● Engines ● Transports ● Crew Trucks ● UTV/ATV	District Manager
Helispot Construction (major ground disturbance)	
Monitoring Facility Installation (temporary ES&R)	
Erosion Control Installations (check dams, wattles, includes stakes, wire, or other semi-permanent materials)	
Other Standard Emergency Stabilization Treatments (Seeding, Planting, Weed treatments (including chemicals, other)	
Heavy Equipment (equipment associated with major ground disturbance, i.e. bulldozers, excavators)	State Director
Post-fire drill seeding or other major ground disturbing ES&R activities.	

[a] BLM wilderness manual 6340 requires that managers complete wilderness stewardship training prior to their being delegated authority to authorize prohibited uses in wilderness.

[b] This table guides approvals for any emergency action (suppression, stabilization, and rehabilitation). Potentially ground-disturbing management actions not listed in Table 1.3, "Delegation of Authority for Approving Fire Management Related Activities in Wilderness Areas" (p. 41) require additional analysis and approval.

1.5.3.1.2. WSR Specific Actions

Due to the confined spaces and the limited ingress and egress for personnel and equipment, safety of visitors and fire personnel would be of prime importance when considering potential fire management actions in WSR canyons.

1.5.3.2. Emergency Stabilization and Rehabilitation (ES&R)

The overall goal of the wilderness ES&R program is to maintain the natural wilderness character by facilitating the natural recovery of burned areas, while minimizing or precluding noxious weed and non-native invasive species infestations.

Pursuant to BLM Manual 6340, ES&R activities should be conducted as part of the fire incident and in accordance with current Department of Interior policy (Departmental Manual 620 DM 3 - Wildland Fire Management Burned Area Emergency Stabilization and Rehabilitation) and BLM ES&R policy (H-1742-1 - Burned Area Emergency Stabilization and Rehabilitation Handbook). Stabilization, rehabilitation, and restoration activities may be intensive when post-fire processes threaten ecological integrity or wilderness character. ES&R activities within wilderness or WSR corridors must follow the guidance below:

1. Natural recovery of native plant species is preferable to all other treatments.

2. Seeding or planting would be used when objectives for natural recovery cannot otherwise be accomplished and there is a threat to wilderness character and values if no action is taken. The use of native weed-free materials, preferably of local or regional genetic stock, would be first priority.

3. Non-native weed-free materials may be seeded or planted if no native species are available and the non-native species are part of an assisted succession program, which promotes the rehabilitation of native vegetation. The proposed action must meet at least one of the following criteria:

    a. the natural biological diversity of the treated area would not be diminished; or

    b. exotic and naturalized species can be confined within the treated area, or

    c. ecological site inventory information indicates that a site would not support reestablishment of a species that was historically a part of the natural environment.

The authorized officer may approve the following prohibited uses for ES&R projects on a case-by-case basis subject to a Minimum Requirements Analysis (see Table 1.3, "Delegation of Authority for Approving Fire Management Related Activities in Wilderness Areas" (p. 41)). The analysis and approval process would be the same as discussed in Section 1.5.3.1, "Fire Management" (p. 39):

- Use motorized/mechanized equipment similar to that used during suppression.

- Install temporary structures (i.e., fences or hydrologic monitoring devices deemed essential to post-fire emergency actions).
- Apply standard erosion control techniques that prevent or minimize soil movement and loss (i.e., straw bales, wattles, mulch, etc.).
- Repair or replace facilities and developments burned or damaged by wildfire or suppression activities (i.e., fences, boundary signs, water control structures, corrals, water developments, trails, etc.).
- Stabilize and mitigate post-fire related degradation to cultural resources including archaeological sites, cultural landscapes, traditional cultural properties, and historic structures.

1.5.3.3. Noxious Weeds and Non-Native Invasive Plants

The goal of management is to protect and preserve the natural wilderness character by sustaining native plant communities, and reducing or eliminating infestations of noxious weeds and non-native invasive species.

The Restoration and Vegetation Management section (Section 1.6.C.15.) of BLM Manual 6340 outlines the protocol and approval process for vegetation treatments in wilderness. Noxious weeds in Idaho are classified by Title 22 – Chapter 24 of Idaho Statutes. Current noxious weeds and invasive plant infestations in wilderness areas include, but are not limited to whitetop, perennial pepperweed, Scotch thistle, Canada thistle, tamarisk, spotted knapweed, rush skeletonweed, Russian olive, and cheatgrass. The potential exists for further infestations of these and other species from surrounding areas.

The Owyhee Canyonlands Wilderness Areas are configured along canyons that result in unusually long perimeters compared to the area within their boundaries. These long wilderness boundaries increase the potential for the spread of noxious weeds and non-native invasive plants from surrounding areas. The wilderness areas must be managed to maintain the degree of wilderness character that existed prior to their designation. Manipulation of vegetation through any one or a combination of prescribed fire, chemical application, mechanical treatment, or introduced biological agents may be permitted in wilderness areas only to preserve wilderness character and values. While these activities may have short- or long-term effects on vegetative species or communities, the ultimate goal is to facilitate improvement in ecological condition, and thus, the natural quality and character of the affected wilderness.

Although weed prevention is the ultimate objective, three primary types of restoration may help to preserve wilderness character (BLM Manual 6340– Management of Designated Wilderness Areas):

1. ***Site-specific disturbance*** - Restoration normally includes site-specific treatments to restore the appearance and promote regrowth of native vegetation on disturbed site(s).
2. ***Control of non-native vegetation*** - Non-native vegetation that interferes with ecosystem function may be controlled using the most effective method(s) while causing the least damage to non-target species. Native species may be reseeded or replanted following weed treatment where natural seeding is inadequate and to prevent reestablishment of non-native vegetation.

3. ***Large-scale landscape function*** - In some areas, human disturbance has changed the vegetative composition, density, and structure, with impacts to soil stability, watershed function, and wildlife habitat. Although these areas cannot be returned to a natural state without intervention, management should determine whether the required type, extent, and level of intervention is feasible and practical.

If, through a Minimum Requirements Analysis, the BLM authorized officer determines that weed treatment is necessary, emphasis would be placed on controlling small (<0.1 acre) infestations of noxious and invasive weeds that have the potential to spread and displace native plants. Larger infestations would be considered separately, since they could involve several treatment applications or associated tactics. Post-treatment seeding and/or transplant projects would follow guidelines contained in the ES&R section of this plan. BLM Boise District and Jarbidge Field Office weed management protocols (BLM 2007) would guide the use of herbicides. Treatments would be prioritized in the following order, though it is likely that treatment combinations would be necessary in some situations:

1. Manual removal with hand tools if weeds can be controlled or eradicated without causing re-sprouting, without undue soil disturbance leading to expansion of infestations, and where infestations are of a size manageable by hand crews.

2. Herbicides applied by backpack or pack stock (horse, mules, or llamas).

3. Biological control.

4. Herbicides applied aerially or with motorized equipment, where control is feasible, where control impacts may be quickly and readily rehabilitated, and where the infestation is of such size that herbicide(s) cannot be effectively applied without motorized equipment. Use of motorized equipment would require a Minimum Requirements Analysis.

5. Alternative treatments, including targeted grazing by livestock.

For treatments involving herbicides, Standard Operating Procedures, the manufacturer's label, and mitigation and conservation measures listed in the Record of Decision for the Vegetation Treatments Using Herbicides Programmatic EIS (USDI 2007) (or more current decision), as well as the Record of Decision for the Boise District Noxious and Invasive Weed Treatment EA (BLM 2007) (or more current decision) would be followed. Treatments would be designed to facilitate movement toward native vegetative composition and structure. Actions to rehabilitate the effects from fire or other natural disasters are considered emergency actions and could be authorized in locations where natural seed sources are inadequate to compete with non-native vegetation and/or where substantial unnatural soil loss is expected. Managers would adjust the level of response by considering current ecological health and vigor against the potential for invasion by undesirable species.

Chemical treatment may be necessary to prepare habitat for the reestablishment of native species, to protect or recover habitat that supports federally listed threatened, endangered, or candidate species, or to correct unnatural conditions resulting from human influence. Activities normally prohibited by the Wilderness Act for the delivery of chemicals must be approved through the process outlined in Appendix C, *Fire Approvals* (p. 113), and according to the appropriate level of delegated authority (Table 1.3, "Delegation of Authority for Approving Fire Management Related Activities in Wilderness Areas" (p. 41)). Management actions must comply with label directions and regulatory requirements for chemical application near water bodies.

1.5.3.4. Livestock Management

The overall goal of livestock management is to provide for continued livestock grazing in wilderness areas in a manner that minimizes impacts to the natural, undeveloped, and untrammeled wilderness character.

Section 4(d)(4)(2) of the Wilderness Act and Section 1503(b)(3)(A) of the OPLMA provide for continued livestock grazing where it existed prior to wilderness designation, subject to reasonable regulations deemed necessary by the Secretary of Interior. Section 10(a) of the WSR Act allows for livestock grazing in WSR corridors that does not conflict with the primary emphasis of protection and enhancement of ORVs.

A total of 33 grazing allotments are located wholly or partially within one or more of the six wilderness areas. Over 30,000 Animal Unit Months (AUMs[2]) of livestock grazing are currently authorized within the wilderness portions of the allotments (See Table 1.4, "Grazing Allotments Located Wholly or Partially Within Wilderness Areas" (p. 45)).

Table 1.4. Grazing Allotments Located Wholly or Partially Within Wilderness Areas

Allotment Name	Approximate Acres[a] within Wilderness	Approximate AUMs[b] within Wilderness	Wilderness Area
Battle Creek	26,030	1987	Little Jacks Creek
Big Springs	51,986	4493	Owyhee River, Little Jacks Creek, Pole Creek
Black FFR	290	8	Pole Creek
Blackstone	3,044	96	Bruneau-Jarbidge Rivers
Bogus Creek FFR	306	1	North Fork Owyhee
Bruneau Canyon	2,537	306	Bruneau-Jarbidge Rivers
Bull Basin	21,929	1074	Owyhee River
Burghardt[c]	11,479	0	North Fork Owyhee
Burghardt FFR	3	0	North Fork Owyhee
Castlehead / Lambert	8,684	598	Owyhee River
China Creek	50	2	Big Jacks Creek
Cliffs	12,810	540	North Fork Owyhee
Diamond A	21,990	1,843	Bruneau-Jarbidge Rivers
East Canyon View	143	36	Bruneau-Jarbidge Rivers
East Castle Creek	6,685	558	Little Jacks Creek
45	47,045	1425	Owyhee River
Garat	49,653	4618	Owyhee River
Garat Individual	760	1611	Owyhee River
Indian Meadows	1,325	50	North Fork Owyhee
Miller Table Seeding	8	1	Bruneau-Jarbidge Rivers
Nahas FFR	309	11	Pole Creek
Nickel Creek	22,173	1535	North Fork Owyhee, Owyhee River
Nickel Creek FFR	182	2	Owyhee River
Northwest	50,436	2740	Little Jacks Creek, Big Jacks Creek
Owens	11,006	698	Little Jacks Creek
Pleasant Valley	3,947	291	North Fork Owyhee
Poison Butte	8,678	746	Bruneau-Jarbidge Rivers
Riddle	21,297	2020	Owyhee River

[2]An AUM equals the amount of forage that a cow and unweaned calf consume in one month; usually considered to be about 900 pounds (air dry).

Allotment Name	Approximate Acres[a] within Wilderness	Approximate AUMs[b] within Wilderness	Wilderness Area
Seventy-One Desert	10,089	924	Bruneau-Jarbidge Rivers
Sheep Creek SE	12,616	1143	Bruneau-Jarbidge Rivers
Tent Creek	35,846	808	Owyhee River
Trout Springs	1,233	140	North Fork Owyhee
Winter Camp	131	6	Bruneau-Jarbidge Rivers

[a]Approximate acreage was calculated using GIS.

[b]Approximate AUMs were based on an assumed constant stocking rate across the allotment.

[c]The grazing permit for the Burghardt Allotment was voluntarily relinquished, and the allotment was officially closed to livestock grazing in November 2011.

Range management projects in the wilderness portion of grazing allotments are identified in the Wilderness Range Management Projects Inventory Report Appendix D, *Wilderness Range Project Inventory Report* (p. 123). Table 1.5, "Summary of Wilderness Range Management Projects" (p. 46) lists the number of range projects by general type in each wilderness area.

Table 1.5. Summary of Wilderness Range Management Projects

Wilderness Area	Fences[a]	Corrals and other structures	Reservoirs, Ponds, Lakes and Dugouts	Water Developments (Troughs, Guzzlers Wells and Springs)	Total Projects
Big Jacks Creek	17	0	3	0	20
Bruneau – Jarbidge Rivers	17	0	2	1	20
Little Jacks Creek	10	0	5	3	18
North Fork Owyhee	24	2	10	4	40
Owyhee River	50	3	56	7	116
Pole Creek	3	0	4	0	7
Total	121	5	80	15	221

[a]The "Fences" category includes 8 exclosures. Fences total approximately 120 miles.

Livestock grazing in wilderness areas and WSR corridors will be administered pursuant to the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management (BLM 1997) so long as the grazing does not conflict with the preservation of wilderness character or with the protection and enhancement of WSR ORVs. For instance, overgrazing of riparian vegetation in a WSR corridor, or livestock management resulting in manure-scattered streambanks or bank shearing and trampling would conflict with BLM's requirement to protect and enhance the scenic and fish ORVs that are recognized for all of the designated WSRs except for Dickshooter Creek, which does not have a scenic ORV.

Section 4(c) of the Wilderness Act requires activities in wilderness areas to be accomplished without motorized or mechanized vehicles and equipment unless truly necessary to administer the area, or when specifically permitted by other provisions of the Wilderness Act.

Section 2 of the Congressional Grazing Guidelines (Appendix A of House Report 101-405, 1990) provides the following direction for maintenance of livestock grazing-related facilities and the occasional use of motorized equipment in wilderness:

> *"The maintenance of supporting facilities, existing in an area prior to its classification as wilderness (including fences, line cabins, water wells and lines, stock tanks, etc.) is permissible in wilderness. Where practical alternatives do not*

> *exist, maintenance or other activities may be accomplished through the occasional use of motorized equipment...Such occasional use of motorized equipment should be expressly authorized in the grazing permits for the area involved. The use of motorized equipment should be based on a rule of practical necessity and reasonableness...Moreover, under the rule of reasonableness, occasional use of motorized equipment should be permitted where practical alternatives are not available and such use would not have a significant adverse impact on the natural environment. Such motorized equipment uses will normally only be permitted in those portions of a wilderness area where they had occurred prior to the area's designation as wilderness or are established by prior agreement."*

Routine livestock management activities in wilderness areas, including project inspection and maintenance (e.g. minor fence repairs or small quantity salt distribution) would normally be accomplished by non-motorized, non-mechanized means.

Requests by grazing permittees for occasional use of motorized or mechanized vehicles and equipment will be evaluated on a case-by-case basis through a Minimum Requirements Analysis to determine whether they are the minimum tool necessary for administration of the area as wilderness.

The viability and usefulness of existing wilderness range projects would be evaluated, in consultation with the permittee, during the permit renewal process. If a range project or other structure is determined to be abandoned and not of historical or cultural value, it would be removed by the permittee, BLM staff, or authorized volunteers. Ground disturbing activities associated with project removal would be subject to prior National Historic Preservation Act Section 106 consultation.

Proposals for new livestock water or other developments would not be approved unless they are determined to be the minimum necessary to protect or preserve wilderness character. New project proposals would require both an environmental analysis and a Minimum Requirements Analysis.

Administrative access routes would not be maintained or repaired except on a site-specific basis with BLM authorization. Prior to authorizing route maintenance, the affected BLM Field Office would complete a Minimum Requirements Analysis to ensure that the minimum tool necessary was to be used to accomplish the objective. If necessary, a gate or bollard, signed as administrative access, would be installed at the entrance to an administrative route to prevent unauthorized motorized access.

Permittees would be authorized to use motorized vehicles during emergency situations, such as rescuing sick or stranded animals. A permittee would not need prior authorization for emergency vehicular access, though they would be required to notify the BLM authorized officer immediately afterward. Authorization for emergency access would be included as a term and condition of the grazing permit.

Subject to specific BLM authorization following a Minimum Requirements Analysis, motorized and mechanized vehicles and equipment may be utilized, as described below, to carry out livestock grazing-related activities. Specific wilderness access requirements and schedules would be included as terms and conditions in affected grazing permits. Terms and conditions would specify the timeframe during which vehicular access would be authorized, as well as the specific administrative route(s) and the type(s) of vehicles to be used.

1. Salt and mineral supplement may be delivered into wilderness areas via motor vehicle in quantities sufficient to ensure only one motorized entry annually. Subsequent distribution of stockpiled salt would be accomplished by foot, horseback, or pack stock.

2. Motorized and mechanized activities for range project inspection and maintenance may occur one time per year prior to livestock entry. Where the project is a let-down fence, one additional entry would be authorized following livestock removal. Maintenance would be accomplished as needs are discovered (i.e., during project inspection) using a pick-up or off-highway vehicle carrying larger quantities of supplies into the wilderness. For larger repair or reconstruction projects, motorized vehicles may be authorized to stockpile supplies at distribution points in the wilderness, thereafter distributed by pack stock. Requests for additional motorized access to complete larger projects would be evaluated through a Minimum Requirements Analysis.

3. Reservoir maintenance and repair may occur within wilderness areas as necessary to prevent or respond to existing or impending failure and associated resource damage. Since frequency of reservoir repairs may range from 10 to 50 years, permittees would be required to request specific authorization on an as-needed basis for each instance of reservoir maintenance or repair. Maintenance or repairs would be limited to the previously disturbed site and would not increase storage capacity from historic levels.

The use of motor vehicles for livestock monitoring, herding, and gathering is prohibited, as are off-road and over-snow travel and development of new routes.

1.5.3.5. Research and Monitoring

One of the goals of wilderness management is to respond to the need for scientific investigation and discovery, while minimizing or precluding adverse impacts associated with the activities.

1.5.3.5.1. Research and Climate Monitoring

Research and climate/weather monitoring activities would not be permitted in wilderness if they can be accommodated outside of wilderness. If wilderness areas are required for research or monitoring, the activities would be conducted without motorized or mechanized vehicles or equipment, and without installation of structures or improvements that would affect the natural, undeveloped or untrammeled wilderness character. Proposals would be subject to a Minimum Requirements Analysis and environmental analysis, and if authorized, would be subject to the requirements of the Wilderness Act and WSR Act, as well as relevant guidelines in this WMP.

1.5.3.5.2. Water Monitoring

BLM must file federal water right claims on each of the 16 designated WSR segments to ensure that sufficient streamflow is protected to support recognized WSR values, such as fisheries and recreation, that may require differing flow levels. The maintenance of minimum flow is important to support both riparian and vertebrate wildlife habitat. Riparian vegetative growth and survival is highly dependent on instream flow levels, particularly in arid environments. Stromberg and Patten (1990) found that a four to five-fold increase in streamflow doubled the width of growth rings in cottonwood (*Populus trichocarpa*). Increased growth means greater riparian structure to provide habitat for wildlife.

Only three of the 16 WSRs have streamflow gauges either within the designated segment or within close enough proximity to allow reliable streamflow estimates. As such, a Minimum Requirements Analysis has determined that additional temporary water monitoring devices are necessary to aid in calculating streamflows on ungauged WSR segments. Water monitoring devices may be authorized in wilderness for the purpose of providing stream flow data if they do not obstruct the “free-flowing” character of the affected WSR. Once necessary data is collected, authorized monitoring devices would be removed.

1.5.3.6. Mining-related Reclamation

One active mining claim exists along the Bruneau River near Indian Hot Springs in the Bruneau-Jarbidge Rivers Wilderness. Five additional mining claims in the same area were recently relinquished, which leaves BLM responsible for reclaiming associated soil and vegetation disturbance, most of which occurs within the cherrystem access point on the east side of the Bruneau River. Necessary resource surveys and consultation would be completed to determine whether reclamation is feasible, or if the reclamation activities themselves would cause additional soil and vegetation disturbance, and simply add to the problem of noxious weeds and non-native invasive plant establishment. If reclamation is determined to be appropriate, a Minimum Requirements Analysis would be conducted to decide the best and most compatible course of action.

Although none are currently known, abandoned mine adits or shafts in wilderness areas would be filled in or otherwise closed to preserve wilderness character and enhance public safety.

1.5.3.7. Wildlife and Fisheries Management

The overall goal of wildlife and fisheries management in wilderness areas is to protect, preserve, and where appropriate, enhance habitat to retain the wilderness areas’ natural character, and to support healthy, viable, and naturally distributed wildlife populations. To facilitate these efforts, the current BLM-Idaho Department of Fish and Game (IDFG) Memorandum of Understanding (MOU) No. ID-0253 would be reviewed for compatibility with the goals and objectives of this WMP.

While states have a primary and critical role in fish and wildlife population management (43 CFR 24), fish and wildlife management activities in wilderness would be administered in conformance with the Wilderness Act's purpose of securing an "enduring resource of wilderness" for the American people through the preservation of wilderness character. It is expected that nature, not human intervention, would play the dominant role. Therefore, to be authorized in wilderness areas, proposed wildlife actions would need to be determined necessary to protect or preserve wilderness character or to protect or enhance WSR values.

The BLM would manage wilderness areas to protect known populations of threatened, endangered, candidate, and sensitive species, and to aid their recovery in previously occupied habitat. Over the life of this WMP, some or all of the following wildlife management activities may be implemented, if deemed necessary for the administration of the wilderness area(s) for the purposes of the Wilderness Act following a Minimum Requirements Analysis.

- Facility development and habitat alteration needed to address adverse impacts of human activities on fish or wildlife populations.

- Research on fish and wildlife, their habitats, and the effect(s) of recreational use and livestock grazing on these resources.
- Wildlife population surveys, including the use of motorized equipment, landing of aircraft (including dropping material from aircraft), or the temporary use of a structure.
- Wildlife and fish population management.

Use of prohibited tools such as motorized equipment and installations would be rare and temporary, and would be the minimum tool necessary to preserve wilderness character. Although wilderness overflights are not precluded by the OPLMA, every effort would be made to coordinate with wildlife managers and researchers so that overflights minimize disturbance to both wildlife and visitors.

1.5.3.7.1. Wildlife-Related Facilities

Similar to livestock permittees, the IDFG, U.S. Fish and Wildlife Service, or other state or federal agency may request administrative access into a wilderness area(s) with motorized vehicles and/or equipment for wildlife or fisheries management purposes or to complete facility maintenance and/or repairs. Requests for motorized access must include the following information:

- Name of the wilderness area
- Reason for the requested access
- Type of motorized and mechanized equipment required
- Proposed access dates
- Estimated number of persons involved
- Estimated number of landings, if helicopters are proposed

The BLM Field Manager would work with the requesting agency to complete a Minimum Requirements Analysis that documents the evaluation of the agency's request. For requests involving only the management of a wildlife population(s) and/or that involve no ground disturbance, the Minimum Requirements Analysis and a letter of authorization with associated terms and conditions would suffice as approval. An environmental analysis, Minimum Requirements Analysis, and associated decision document would be needed for proposals involving ground disturbance.

An existing wildlife guzzler in the Little Jacks Creek Wilderness would be maintained by IDFG or BLM using non-motorized/non-mechanized methods. If repair, reconstruction, removal, or modification are proposed, the authorized officer would complete a Minimum Requirements Analysis to determine what the minimum necessary tool(s) is for administering the area as wilderness. New wildlife water developments would not be authorized.

The effects of non-ground disturbing operations for wildlife and fisheries management in wilderness areas are analyzed in the accompanying environmental analysis for this WMP. An annual report would be completed by the BLM to document any landings and other motorized and mechanized access for maintenance and repairs. This documentation would be incorporated into wilderness monitoring reports.

1.5.3.7.2. Wildlife Relocation

Wildlife and fish transplants (i.e., removal, augmentation, or reintroduction) may be permitted if deemed necessary to perpetuate or recover a threatened, endangered, or sensitive species eliminated or reduced by human disturbance. Wildlife transplants would occur first outside of wilderness boundaries, if reasonable. If suitable transplant sites are unavailable outside wilderness, transplant proposals would be considered in wilderness areas.

Proposed transplant projects would require a Minimum Requirements Analysis and environmental analysis. If motorized or mechanized activities are authorized, staging would occur outside of wilderness. When feasible, project implementation would occur during periods when visitor use is low (for example, weekdays). In order to inform visitors of impending activity, dates of proposed activity would be posted on the BLM and IDFG websites at least two weeks in advance.

1.5.3.7.3. Wildlife Damage Management

Wildlife interactions occasionally impact federally listed threatened, endangered, or candidate species, transmit diseases or parasites that affect wildlife and humans, or cause serious losses of domestic livestock. Wildlife damage control in wilderness may be necessary to prevent one or more of these impacts. Although hunting in wilderness areas is permitted for big game, upland game, and other species during IDFG-regulated seasons, killing or otherwise controlling a native wildlife species to reduce conflicts with other native species is not permitted, unless consistent with preservation of wilderness character. In wilderness, agencies would use the minimum control necessary to conduct wildlife damage control activities.

Proposals that involve uses generally prohibited under Section 4(c) of the Wilderness Act would be evaluated through a Minimum Requirements Analysis. The BLM would consider the following criteria (in order of importance) when reviewing wildlife damage control proposals within wilderness areas:

- Is the target wildlife population or individual adversely affecting a federally listed threatened, endangered, or candidate species?
- Is the target wildlife population or individual non-native, domestic, or feral?
- Would removal of the target wildlife population or individual prevent transmission of diseases or parasites to humans or other wildlife populations?
- Is the target wildlife population or individual responsible for serious losses of domestic livestock?

Acceptable control measures would be determined through coordination and associated analysis conducted by the agencies involved. Activities in wilderness would be conducted on foot or with riding and pack stock, unless BLM determines through a Minimum Requirements Analysis that the use of motorized and/or mechanized vehicles and equipment is the minimum tool necessary for the protection of wilderness character.

1.5.3.8. Recreation Management

Solitude and primitive and unconfined recreational opportunities exist in all six wilderness areas. One of the main goals of wilderness management is to provide for visitor use and enjoyment

in a manner that leaves wilderness areas unimpaired for future use and enjoyment. Thus, the protection and preservation of wilderness character, and the protection and enhancement of WSR values would be dominant in all decisions regarding the promotion or management of visitor use.

Supplemental rules will be published in the Federal Register for all wilderness-related visitor use requirements established in the WMP, as specified in 43 CFR 8365.1-6. Visitor use requirements for WSR corridors are exempt from the Federal Register publication process, and thus, will only be published locally, as specified in 43 CFR 8351.2-1 (Special Rules). BLM would use public outreach and education about *Tread Lightly!* and *Leave No Trace* land use ethics to encourage minimum impact land use practices to accomplish wilderness recreation goals.

No permits are required for the general public to visit the Owyhee Canyonlands wilderness areas. While BLM would aim to minimize limitations or controls on visitor use in wilderness areas, the following general visitor use standards are designed to minimize effects to resources and maintain compliance with wilderness and WSR policy.

1.5.3.8.1. Camping in Wilderness or WSR Corridors

Campgrounds and campsites would not be developed or improved in wilderness areas. Therefore, the following restrictions would be imposed on dispersed and unmanaged camping to preclude effects to health and safety, and minimize potential effects to wilderness character, including impacts to soils, vegetation, and water quality, and conflicts with wildlife and livestock.

- Upland camping would be allowed at any one location for up to 14 days. Visitors camping longer than 14 days within any of the Owyhee Canyonlands Wilderness Areas must relocate their camp a minimum of 5 miles from the previous site.
- Upland campsites (those located outside of a WSR corridor) must be located at least 300 feet from natural springs or developed upland water sources (e.g., troughs, reservoirs, etc.) to limit potential conflicts with wildlife and livestock.
- Campers in upland sites must either: 1) use a water-tight, portable toilet, the contents of which must be deposited in an Environmental Protection Agency (EPA)-approved dump station at the end of the trip, or 2) bury human waste in cat-holes dug at least 6” to 8” deep and 200 feet from water, trails, and campsites. Proper disposal of human waste will minimize pollution of water sources, avoid the possibility of someone else finding it, and minimize the potential to spread disease.
- Campers must use pack-in/pack-out land use ethics to reduce noxious odors, insects and/or unwanted animal encounters.
- To protect and sustain the primitive experience of wilderness for future generations, individuals may not dig, dam, or otherwise alter the natural flow and appearance of hot springs.
- To reduce or prevent damage to the soils and native vegetation, WSR campers must contain campfires in a metal fire pan or on a fire blanket raised off the ground. All unburned contents of the fire, including ash, must be removed from the river corridor.
- To reduce impacts to limited streamside campsites from odors, unwanted animal encounters, and impacts to vegetation, hikers, campers, and floaters are strongly encouraged to urinate directly into the river (not in or around campsites).

- To minimize water pollution and protect fish habitat, WSR campers must use biodegradable soap for personal use and dishwashing. Strain all dish and rinse water before scattering water broadly onto vegetated soil at least 200 feet from water, if possible.

1.5.3.8.2. Boating

WSR boaters must adhere to the following requirements:

- To enhance river management and visitor safety, groups and individuals embarking on single or multi-day river trips must complete a BLM registration form located at the put-in site, or from the BLM website. The trip leader must retain a copy of the form throughout the trip, and must present the form to a BLM employee or Idaho Fish and Game officer upon request.
- Owners of non-motorized boats in Idaho (i.e., canoe, kayak, raft, driftboat, etc.) must display an Idaho Invasive Species Fund sticker on their vessel(s). Inflatable vessels under 10 feet in length are exempt from this requirement. If traveling into Oregon on the Owyhee River, a state of Oregon Aquatic Invasive Species Prevention permit is required for watercraft exceeding 10 feet in length.
- All boaters, including kayakers, must carry and use a water-tight, portable toilet for both human and pet waste. Waste must be deposited in an Environmental Protection Agency (EPA)-approved dump station at the end of the trip. Any other system of disposing of waste must comply with current EPA regulations. Proper disposal of waste protects water quality and minimizes potential to spread disease.

1.5.3.8.3. Hunting and Trapping

- Private or commercially-guided hunting (refer to Section 1.5.3.8.4, "Special Recreation Permits" (p. 53) for commercial services) for big game, upland game, and other species would be permitted in wilderness areas on foot or horseback subject to state and federal laws.
- Pursuant to Section 4(c) of the Wilderness Act, commercial trapping is prohibited in wilderness areas. Commercial trapping is defined as trapping that involves the sale of furs, hides, or other animal body parts.
- Personal, non-commercial trapping would be permitted, subject to applicable state and federal laws and regulations. Access to traps would be limited to foot or horseback.
- Section 4(c) of the Wilderness Act precludes structures and installations in wilderness areas. As such, permanent blinds for hunting, photography, or other purposes are prohibited.
- Temporary, portable or "pop-up" blinds would be permitted for hunting, photography, wildlife observation or similar purposes only while occupied.

1.5.3.8.4. Special Recreation Permits

Section 4(c) of the Wilderness Act precludes most commercial enterprises in wilderness areas other than valid rights that existed prior to wilderness designation. Section 4(d)(6) of the Wilderness Act , however, provides an exception for commercial services that are deemed "…proper for realizing the recreational or other wilderness purposes of the areas." Commercial enterprises that are wilderness-dependent, contribute to *Leave No Trace* or environmental

education, and that do not degrade wilderness character are considered proper for realizing the recreational purposes of the areas, including commercial outfitting and guide services, and riding and pack stock rentals.

Commercial outfitters and guides are integral for WSR recreational floating due to the physical limitations imposed on vehicles accessing river put-in and take-out sites, and the need for long distance vehicle shuttles around canyons. Currently, six licensed commercial outfitters and guides hold BLM Special Recreation Permits (SRPs) for river floating in the Owyhee River system, and four licensed commercial outfitters and guides hold SRPs for river floating in the Bruneau River system. See Table 1.6, "Combined Commercial and Private (Non-commercial) Visitor Use Capacity of Floatable WSR Segments" (p. 55) for a description of the WSR segments contained in the Bruneau and Owyhee river systems. Permitted outfitters are required to hold a commercial outfitter and guide license issued by the Idaho Outfitter and Guides Licensing Board (IOGLB).

Current visitor use levels along WSRs have resulted in no known user conflicts, although impacts to some higher-use campsites are apparent, including trampled vegetation, scattered trash and litter, human waste, trees and shrubs with cut or broken branches (presumably used for firewood), partially burned wood and ash, fire-scarred soil, etc. Responsible parties have not been identified.

Approximately four SRPs are issued annually for commercially guided big game hunts in areas affecting most of the wilderness areas, including trophy bighorn sheep hunts. BLM would continue to issue SRPs to licensed commercial outfitters and guides for activities involving the following activities as long as they provide services deemed necessary for realizing the recreational values of the wilderness areas, and as long as they operate within the terms and conditions of their SRP:

- Hunting,
- Fishing,
- Pack trips,
- Hiking,
- Camping,
- Nature viewing,
- Still photography.

SRPs would also be issued to the following on an as needed basis:

- Entities whose message includes an emphasis on wilderness ethics, *Tread Lightly!, Leave No Trace*, or environmental education, and
- Entities whose primary purpose is to support individuals with disabilities.

SRPs for outfitter and guide operations (new or changes to previously held permits) within wilderness areas may or may not require environmental analysis, depending on the scope and scale of their proposals. The number of commercial outfitter and guide licenses issued by the IOGLB would not exceed the number of SRPs permitted under this WMP.

1.5.3.8.5. Visitor Use Capacity

Due to their remoteness and primitive access routes, the six wilderness areas exhibit outstanding opportunities for solitude and primitive recreational experiences, with relatively few visitors. Therefore, with the exception of the floatable WSR segments discussed below, wilderness access permits would not be required, and no need exists to establish numeric standards for frequency of visitor encounters or group size limits in wilderness areas. If future monitoring shows that solitude, primitive recreational experiences, or other wilderness characters are adversely affected by increased visitor numbers or encounters, visitor use capacity limits would be re-evaluated where necessary.

Non-motorized (float) boating would be permitted along all WSR segments, even though some of the smaller tributary WSRs are deemed unfloatable. The Bruneau, Jarbidge, and Owyhee rivers (and some of their tributaries) provide multi-day canoe, kayak, and raft float trip opportunities predominately in Spring, when flows are of sufficient volume. Visitor use of these WSRs is often described as self-managing due to their highly variable annual flow regimes, unpredictable and often cold weather during the typical Spring use season, remote and primitive river access routes, and the lack of suitable campsites along some river sections. These factors should maintain visitor use indefinitely at or near current levels.

WSRs would be managed as pristine natural environments with outstanding opportunities for solitude. Visitors to the Owyhee River or its tributaries would not likely observe other groups while on the river or at riverside campsites during their trip. Visitors to the Bruneau River may encounter one or more individuals or groups while on the river or at campsites. More encounters would no doubt occur on the Bruneau River during three-day weekend holidays, like Memorial Day. Encounters with individuals or groups along other WSR segments would be rare due to inherent limitations imposed by a river's difficulty rating, and by the ruggedness and remoteness of the canyonlands. The goal of management is to maintain current recreational expectations as the designated capacity.

Table 1.6, "Combined Commercial and Private (Non-commercial) Visitor Use Capacity of Floatable WSR Segments" (p. 55) reflects proposed commercial and private (non-commercial) visitor use capacities along floatable WSR segments that would maintain current and expected future recreational expectations. BLM would manage for these capacity numbers for the life of the plan by: 1) tracking the number of river floater registration permits issued or completed, 2) performing periodic visitor counts at put-in and take-out sites, and 3) performing in-person river and campsite patrols. If a substantial increase in visitor use is observed for any specific WSR segment, or if visitor use is causing unacceptable impacts to wilderness character or WSR values, visitor use capacities would be adjusted to address the issue. BLM would adjust the distribution of visitor use capacities to address the issue(s). This could affect the allocation between commercial and private users.

Table 1.6. Combined Commercial and Private (Non-commercial) Visitor Use Capacity of Floatable WSR Segments

Management Category	Limitations for each Category
Group Size	15 persons maximum
Launches/day	Three (3) launches per river segment, no more than one of which may be commercial. Two additional private launches for the Bruneau River.

Management Category	Limitations for each Category
Guide Permits Administered	Up to 6 (Owyhee River System) Up to 6 (Bruneau River System)
These limitations apply to both river systems: 1. Owyhee River System (Owyhee River, North Fork Owyhee River, South Fork Owyhee River, Deep Creek, and Battle Creek), 2. Bruneau River System (Bruneau River, West Fork Bruneau River, Sheep Creek, and Jarbidge River).	

Smaller WSR segments not listed in Table 1.6, "Combined Commercial and Private (Non-commercial) Visitor Use Capacity of Floatable WSR Segments" (p. 55) either have streamflows insufficient to support floating in most years, or have topography and/or dense riparian vegetation that render floating impossible on all but a very few days a year. Therefore, these WSR segments have not been analyzed for capacity since visitation is considered extremely low (zero to less than five known visitors or groups per year). Dispersed use of these WSR segments occurs primarily in the Spring by individuals seeking hiking, photography, and backpacking related recreation. Hunting is common in the Fall throughout the wilderness areas for big game and upland bird species. Due to the remoteness and ruggedness of the canyons, visitor use is not expected to increase substantially, and therefore, should not adversely affect existing ORVs or wilderness character.

Current and foreseeable recreational use levels along floatable WSR segments do not warrant significant facility construction. Installation of restroom facilities and informational and educational kiosks may be appropriate at certain staging areas, including river put-in and take-out sites, canyon overlooks, and cherrystem routes, all of which are located outside of wilderness boundaries. An Americans with Disabilities Act (ADA) facility is being planned to enhance public access to the Bruneau Canyon Overlook, subject to funding.

BLM may temporarily close campsites along floatable WSR segments on a rotating basis to prevent or mitigate damage to ORVs or wilderness character. Maintenance of river access roads may be required to address ongoing erosion and safety concerns. Maintenance of cherrystem and other river access routes would be addressed in the Owyhee Travel Management Plan or affected resource management plan.

1.5.3.8.6. Other Visitor Use

- Traditional geocaching and letterboxing are prohibited to reduce soil and vegetation disturbance caused by object burial.

- Goats would not be permitted as pack stock to reduce the potential for disease transmission to bighorn sheep populations.

- To reduce weed transport and infestation within the wilderness areas, supplemental feed for riding and pack stock must be certified weed-free, as defined by Idaho Department of Agriculture Administrative Rules (IDAPA 02.06.31 - Noxious Weed Free Forage & Straw Certification Rules).

- Pursuant to Section 4(c) of the Wilderness Act, commercial enterprises are prohibited in wilderness, including the collection of any resource, including shed antlers, for the purpose of commercial sale.
- Casual collection on foot or horseback (surface only, no digging) of small quantities (<20 lbs.) of renewable and mineral resources would be permitted (i.e., wood, fruit, vegetation, rock and mineral specimens, petrified wood, shed antlers, and common invertebrate and plant fossils).
- To reduce impacts to the natural wilderness character and protect the area for future generations, individuals may not cut, break, or otherwise destroy standing live and dead trees or shrubs for firewood (or clear an area for a campsite, visitor convenience, or comfort, such as cutting out poison ivy). Only dead and down woody material may be used for firewood.
- Fireworks are prohibited to reduce potential impacts to soils, vegetation, and wildlife habitat from wildfire and suppression activities.
- To preserve the area's history, vertebrate fossils and cultural, archaeological, and historic sites and artifacts, including arrowheads, may not be damaged or removed without BLM authorization.
- To maintain natural conditions, rock climbers may not destroy vegetation or damage rock faces to enhance a route, including chiseling or rock chipping, forcibly prying off rock, gluing, drilling, or otherwise affixing climbing bolts or other permanent artificial holds on rock.

1.5.3.8.7. Trail Designation and Management

Pedestrian or equestrian trails would not be constructed within the six wilderness areas; however, a few existing trails or two-track roads would be designated as trails to facilitate visitor use and reduce impacts to wilderness character and resources. Designated trails would be marked at trailheads and/or staging areas outside of wilderness and displayed on BLM wilderness and recreation maps. Signs and structures related to recreational use would not be placed in wilderness unless a Minimum Requirements Analysis determined that they are the minimum necessary for administration of the area as wilderness. They may be justified due to an extraordinary hazard or to protect naturalness where it is being impacted from visitor use, but not for visitor convenience.

Remnant two-track roads and user-created trails would be considered part of the wilderness experience and would not be marked or signed, would not receive routine maintenance, and would not be displayed on BLM recreation maps or brochures. As time and funding allow, BLM may take action to rehabilitate surface disturbances with actions similar to those discussed in the fire rehabilitation and weed control sections of this document. Otherwise, trails and two-track roads would be allowed to re-vegetate naturally unless their continued use causes excessive soil erosion, poses an unacceptable public safety hazard, or adversely affects wilderness character.

Trailheads and staging areas that provide access into wilderness areas would be managed in accordance with the pending Owyhee Travel Management Plan that will designate travel management objectives for non-wilderness public lands in Owyhee County.

The following trails would be designated for both pedestrian and equestrian use:

1. Parker Trail (east side of Big Jacks Creek Wilderness, Map 1.2, "Big Jacks Creek Wilderness Including Wild and Scenic Rivers" (p. 12)) 1.2 mi

2. Tindall Trail (west side of Bruneau-Jarbidge Rivers Wilderness, Map 1.4, "Bruneau-Jarbidge Rivers Wilderness (South) Including Wild and Scenic Rivers" (p. 15)) 0.5 mi

3. Roberson Trail - East (east side of Bruneau-Jarbidge Rivers Wilderness, Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14)) 0.7 mi

4. Roberson Trail - West (west side of Bruneau-Jarbidge Rivers Wilderness, Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14)) 0.7 mi

5. Little Jacks Creek Trail (northern end of Little Jacks Creek Wilderness, Map 1.5, "Little Jacks Creek Wilderness Including Wild and Scenic Rivers" (p. 17)) 6.1 mi

6. Jarbidge River Trail (east side of Bruneau-Jarbidge Rivers Wilderness, Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14)) (below the Forks CG) approx. 1.0 mi.

Designated trails would have a continuous, discernible tread that is narrow and usually rough, and would be managed according to the design specifications listed in Table 1.7, "Design Specifications for Wilderness Trails" (p. 58). Trails would consist of native materials with common obstacles intended to maintain a primitive experience. Vegetation would be allowed to encroach into a trail, but rock-fall or tree-fall would be cleared if needed to facilitate public safety, to define the route, or to protect resources. Bridges or water crossings would not be constructed, but erosion control structures would be installed at the minimum design level if needed to protect the trail infrastructure or resources. Route signing or markers would exist only at the trail entrance.

Subject to appropriate environmental analysis, designated trails may be rehabilitated, rerouted, improved, or maintained according to the trail design specifications in Table 1.7, "Design Specifications for Wilderness Trails" (p. 58). An environmental analysis would be necessary to designate new wilderness trails. New trails would be subject to the design parameters in Table 1.7, "Design Specifications for Wilderness Trails" (p. 58).

Table 1.7. Design Specifications for Wilderness Trails

Design Parameter	Measure	Maximum
Trail Tread	Width	18 inches
Surface Type	Description	Native, ungraded, and continuously rough
Surface Protrusions	Height	24 inches
Surface Protrusions	Description	May be common and continuous
Surface Obstacles	Max. Height allowable	24 inches
Grade (Target)	Percent	18%
Grade (Short Pitch Maximum)	Percent	40%
Grade (Maximum Pitch Density)	Percent of total length of trail	up to 40% of trail
Cross Slope (Target)	Hillslope as a percent	Natural (no maximum)
Clearing (Height)	Height of cleared vegetation	7 feet
Clearing (Width)	Width of cleared vegetation	48 inches
Clearing	Description	Some light vegetation may encroach into clearing area
Clearing (Trail Shoulder)	Distance from edge of trail	12 inches
Turns (Switchbacks)	Radius of turn	6 feet

Design Parameter	Measure	Maximum
Signage	Location	Beginning (trailhead)
Off-trail Paths	Other paths parallel or tributary to main trail	Exist only when other destinations exist

Three portage trails exist along the Jarbidge River and two exist along the Owyhee River (see Map 1.4, "Bruneau-Jarbidge Rivers Wilderness (South) Including Wild and Scenic Rivers" (p. 15) and Map 1.7, "Owyhee River Wilderness (West) Including Wild and Scenic Rivers" (p. 21). Portage trails are considered integral to a safe and successful boating experience. If needed, these trails would be maintained, repaired, or rerouted to a minimum safety standard similar to that listed in Table 1.7, "Design Specifications for Wilderness Trails" (p. 58).

Except for the five existing portage trails referenced above, new trail construction would not be permitted within WSR corridors that are within wilderness areas. Within Recreational WSR river corridors located outside of wilderness areas, roads, trails, bridges and crossings may be maintained, repaired, or replaced as needed to meet public access needs.

1.5.3.9. Education and Interpretation

General interpretive information regarding natural and cultural resources and recreation opportunities in wilderness would be located on kiosks outside of wilderness, in brochures, on BLM recreation maps, and on the BLM Idaho State Office, and the Boise, Twin Falls, Vale and possibly Elko and Winnemucca District websites. Wilderness maps would include area descriptions, designated trails, interpretive information, and information on wilderness ethics and *Leave No Trace* principles. *Leave No Trace* ethics would also be emphasized in classes and workshops presented at local schools and in the field. Interpretive trails would not exist in wilderness areas.

In all publications, visitors to wilderness areas and WSRs would be advised to pack in/pack out, and to respect private property rights.

When feasible, interpretive and informational materials would be developed in collaboration with other agencies, tribes, non-governmental organizations, and interested individuals.

Wilderness boundary signs would be simple installations (e.g., carsonite or metal posts) used to delineate wilderness boundaries from adjacent non-wilderness, and would be located in accordance with BLM Manual 6220, Section 1.6.D.6.

Key entrance signs would identify the name of the wilderness and/or WSR corridor, and would be placed where visitors are likely to contact the wilderness or WSR boundary. Entrance signs would be larger than the boundary markers. Designated trails would not be signed except at the trailhead outside of the wilderness.

Kiosks containing one or two-paneled informational and interpretive signs would exist at access points, river put-ins and take-outs, along major roads, or at future staging areas. These signs would provide local and regional information about wilderness, WSR corridors, natural and cultural resources, regulatory information, and interpretation. Some of the kiosks may also include updated information and announcements, as well as visitor surveys with collection boxes. Redesigned interpretive and educational signs are planned for river put-in and take-out sites in FY 2013. Additional signs would be installed as visitor needs warrant and as funding permits.

1.5.3.10. Military Operations

According to Section 1503(b)(11) of the OPLMA, military overflights of wilderness areas, including low-level overflights, are not precluded or restricted. Ground-based military maneuvers and associated activities would not be permitted in wilderness areas except in support of emergency actions.

1.5.3.11. Management Action Tables

One of BLM's goals for wilderness management is to provide opportunities for solitude and primitive and unconfined recreation by limiting the number and type of land use restrictions that visitors must follow, while still maintaining compliance with wilderness and WSR policy. To that end, and pursuant to the discussions in the WMP, Table 1.8, "Proposed Wilderness Use Restrictions" (p. 60) contains a consolidated list of legislatively-required actions and proposed visitor use requirements, and indicates whether described actions or activities: 1) are a use restriction, 2) are authorized without further requirements, 3) require specific BLM authorization, or 4) are prohibited. Table 1.9, "Proposed BLM Wilderness and WSR Management Decisions" (p. 62) contains wilderness management decisions not specifically related to use regulation.

Table 1.8. Proposed Wilderness Use Restrictions

Management Restriction Category	Restrictions/Stipulations
Use is authorized	Motorized or mechanized vehicles and equipment (including helicopters) may be used in wilderness areas during emergencies involving search and rescue, the health or safety of individuals, or the rescuing of sick or stranded animals. Individuals must notify the BLM authorized officer immediately following completion of emergency activities. The removal of downed airplanes (or other vehicle accidents) and associated equipment, parts, or debris is not considered an emergency, and would require prior BLM authorization subject to a Minimum Requirements Analysis.
Use is authorized	Temporary, portable or "pop-up" blinds would be permitted only while occupied.
Use is authorized	Casual non-commercial surface collection (no digging) of small quantities (<20 lb) of renewable and non-renewable resources would be permitted (i.e., dead and down wood, fruit, vegetation, rock and mineral specimens, petrified wood, shed antlers, and common invertebrate and plant fossils).
Use is authorized	Personal, non-commercial trapping on foot or horseback would be permitted subject to state and federal regulations.
Use is restricted	Supplemental feed for riding and pack stock must be certified weed-free.
Use is restricted	Rock climbers may not destroy vegetation or damage rock faces to enhance a route, including chiseling or rock chipping, forcibly prying off rock, gluing, drilling, or otherwise affixing climbing bolts or other permanent artificial holds on rock.
Use is restricted	Upland campsites (those located outside of a WSR corridor) must be located at least 300 feet from natural springs or developed upland water sources (e.g., troughs, reservoirs, etc.) to limit potential conflicts with wildlife and livestock.
Use is restricted	Backcountry camping would be limited to 14 days in any one location. After 14 days, camps must be moved at least five miles from the previous campsite.
Use is restricted	Campers must pack-in/pack-out all food, trash, burned material, etc.
Use is restricted	Campers may not cut, break, or otherwise destroy standing live and dead trees or shrubs for firewood (or clear an area for a campsite, visitor convenience, or comfort, such as cutting out poison ivy). Only dead and down woody material may be used for firewood.

Management Restriction Category	Restrictions/Stipulations
Use is restricted	Campers in upland sites must either: 1) use a water-tight, portable toilet, the contents of which must be deposited in an Environmental Protection Agency (EPA)-approved dump station at the end of the trip, or 2) bury human waste in cat-holes dug at least 6" to 8" deep and 200 feet from water, trails, and campsites.
Use is restricted	All boaters, including kayakers, must carry and use a water-tight, portable toilet for both human and pet waste. Waste must be deposited in an Environmental Protection Agency (EPA)-approved dump station at the end of the trip. Any other system of disposing of waste must comply with current EPA regulations.
Use is restricted	WSR campers, hikers, and floaters are strongly encouraged to urinate directly into the river (not in or around campsites) to reduce impacts to limited streamside campsites.
Use is restricted	WSR campers must contain campfires in a metal fire pan or on a fire blanket raised off the ground. All unburned contents of the fire, including ash, must be removed from the river corridor.
Use is restricted	WSR campers must use biodegradable soap for personal use and dishwashing. Strain all dish and rinse water before scattering water broadly onto vegetated soil at least 200 feet from water, if possible.
Use is restricted	Groups and individuals embarking on single or multi-day float trips must complete a BLM registration form. Forms may be obtained at the river launch site, or from the BLM website: http://web.blm.gov/. The trip leader must retain a copy of the registration form throughout the trip, and must present the form to a BLM employee or Idaho Fish and Game officer upon request.
Use is restricted	Groups floating any of the WSRs would be limited to a maximum of 15 persons.
Use is restricted	Daily river launches would be limited to three (3) per WSR segment, no more than one of which may be commercially guided. Two additional private (non-commercial) launches would be permitted each day on the Bruneau River.
Use is restricted	Owners of non-motorized boats in Idaho (i.e., canoe, kayak, raft, driftboat, etc.) must display an Idaho Invasive Species Fund sticker on their vessel(s). Inflatable vessels under 10 feet in length are exempt from this requirement. If traveling into Oregon on the Owyhee River, a State of Oregon Aquatic Invasive Species Prevention permit is required for watercraft exceeding 10 feet in length.
Use requires authorization	Administrative access routes may not be maintained or repaired without BLM authorization.
Use requires authorization	Motorized or mechanized vehicles and equipment may be authorized in wilderness areas following a Minimum Requirements Analysis for: 1. Wildlife management projects; 2. Wildfire suppression; 3. Emergency stabilization and rehabilitation; and 4. Weed control projects.
Use requires authorization	Vertebrate fossils and cultural, archaeological, and historic sites and artifacts, including arrowheads, may not be damaged or removed without BLM authorization.
Use requires authorization	Recreational developments would be constructed, maintained, or repaired by BLM (as needed) along the North Fork Owyhee WSR outside of the Wilderness Area.
Use requires authorization	Reclamation of surface disturbances associated with the one mining claim in the Bruneau Canyon would be authorized subject to Federal regulations at 43 CFR 3809.
Use requires authorization	Research and monitoring activities and devices may be authorized subject to a Minimum Requirements Analysis if the information cannot be collected outside of wilderness.
Use requires authorization	New water or other developments could be permitted for livestock management or wildlife purposes if they are determined to be the minimum necessary to protect or preserve wilderness character.
Use requires authorization	Wildlife management proposals may be authorized subject to a Minimum Requirements Analysis.

Management Restriction Category	Restrictions/Stipulations
Use is prohibited	Motor vehicles are prohibited for livestock monitoring, herding, and gathering.
Use is prohibited	Motorized and mechanized travel and equipment are prohibited in wilderness areas, including, but not limited to: off-highway, over-snow, and other vehicles, chainsaws, power drills, suction dredges, generators, motorboats, bicycles, game carts, wagons, and wheelbarrows. Development of new access routes is also prohibited.
Use is prohibited	Livestock grazing is prohibited in burned areas until vegetative recovery objectives are met.
Use is prohibited	Personal property not associated with an active campsite may not be left unattended, including temporary blinds.
Use is prohibited	Traditional geocaching and letterboxing activities are prohibited.
Use is prohibited	Goats would not be permitted as pack stock to reduce the potential for disease transmission to bighorn sheep.
Use is prohibited	Collection of any resource, including shed antlers, for the purpose of commercial sale is prohibited.
Use is prohibited	Trapping that includes the commercial sale of fur, hides, or other animal products is prohibited.
Use is prohibited	Permanent hunting or photography blinds are prohibited.
Use is prohibited	Individuals may not dig, dam, or otherwise alter the flow and appearance of hot springs.
Use is prohibited	Ground-based military maneuvers and associated activities are prohibited except in support of emergency actions, as previously described.

Table 1.9. Proposed BLM Wilderness and WSR Management Decisions

Management Actions
BLM would continue to authorize livestock grazing in wilderness areas, and grazing would be administered subject to the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management. BLM would authorize livestock-related administrative access according to guidelines defined in Section 1.5.3.4, "Livestock Management" (p. 45) of the WMP. Authorizations would be subject to a Minimum Requirements Analysis, and if approved, would be added as terms and conditions to existing grazing permits. 1. Grazing permittees may be authorized motorized wilderness access for stockpiling of livestock salt and/or supplement. 2. Grazing permittees may be authorized to utilize motorized and mechanized vehicles and equipment for project or facility inspection, maintenance, or repair, including stockpiling of supplies. 3. Grazing permittees must be authorized to utilize motorized and mechanized vehicles and equipment for reservoir maintenance and repair on a case-by-case basis.
BLM would temporarily close or limit access to specific campsites or areas (at its discretion) when recreational or other activities are negatively affecting wilderness character or WSR values.
BLM would consider commercial enterprises proper for realizing wilderness recreational purposes if the enterprises: 1) are wilderness-dependent, 2) contribute to *Leave No Trace* or environmental education, and 3) do not degrade wilderness character. Enterprises currently meeting these criteria include commercial outfitting and guide services, and riding and pack stock rentals.
BLM would not place signs and structures in wilderness unless a Minimum Requirements Analysis determines that they are the minimum necessary for administration of the area as wilderness.
BLM would remove any unauthorized structures when encountered.

Management Actions
BLM would designate the following trails for both pedestrian and equestrian use: ● Parker Trail (east side of Big Jacks Creek Wilderness, Map 1.2, "Big Jacks Creek Wilderness Including Wild and Scenic Rivers" (p. 12)) 1.2 mi ● Tindall Trail (west side of Bruneau-Jarbidge Rivers Wilderness, Map 1.4, "Bruneau-Jarbidge Rivers Wilderness (South) Including Wild and Scenic Rivers" (p. 15)) 0.5 mi ● Roberson Trail - East (east side of Bruneau-Jarbidge Rivers Wilderness, Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14)) 0.7 mi ● Roberson Trail - West (west side of Bruneau-Jarbidge Rivers Wilderness, Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14)) 0.7 mi ● Little Jacks Creek Trail (northern end of Little Jacks Creek Wilderness, Map 1.5, "Little Jacks Creek Wilderness Including Wild and Scenic Rivers" (p. 17)) 6.1 mi ● Jarbidge River Trail (east side of Bruneau-Jarbidge Rivers Wilderness, Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14)) (below the Forks CG) approx. 1.0 mi. Designated trails would have a continuous, discernible tread consisting of native materials with common obstacles intended to maintain a primitive experience. Bridges or water crossings would not exist, but erosion control structures would be installed at the minimum design level if needed to protect the trail infrastructure or resources. Subject to environmental analysis, designated trails may be rehabilitated, rerouted, or improved according to the trail design specifications in Table 1.7, "Design Specifications for Wilderness Trails" (p. 58).
BLM would maintain, repair, or reroute three (3) portage trails along the Jarbidge River and two (2) portage trails along the Owyhee River, as needed, according to the minimum (primitive) safety standards in Table 1.7, "Design Specifications for Wilderness Trails" (p. 58).
BLM would prohibit new trail construction (other than portage trails) along WSR corridors within wilderness areas.
BLM managers may consider the full range of fire management strategies and tactics (ranging from monitoring to full suppression) to protect multiple values.
Avoid using water sources containing invasive species for suppressing fires in WSR corridors and wilderness areas. Use WSRs as the priority water source for suppressing fires in WSR corridors and wilderness areas to prevent cross-contamination and/or spread of aquatic invasive species.
Repairs to burned facilities or resources may be accomplished with the same or similar type of equipment that was authorized for suppression.
The following activities may be authorized during ES&R subject to a Minimum Requirements Analysis: 1. Install temporary emergency structures (i.e., fences, hydrologic monitoring devices). 2. Install erosion control (i.e., straw bales, wattles, mulch, etc.). 3. Repair or replace burned or damaged facilities (i.e., fences, boundary signs, water control structures, corrals, water developments, trails, etc.). 4. Stabilize and mitigate post-fire related degradation to cultural and historic sites and resources.
Authorized weed treatments would emphasize the control of small (<0.1 acre) infestations.

Management Actions
BLM would continue to issue SRPs to the following entities, as long as they provide services deemed necessary for realizing the recreational values of the wilderness areas, and as long as they operate within the terms and conditions of their SRP: 1. Licensed commercial outfitters and guides for activities involving: a. Hunting, b. Fishing, c. Pack trips, d. Hiking, e. Camping, and f. Nature viewing. 2. Entities whose mission includes the promotion of wilderness ethics, Tread Lightly!, Leave No Trace, or environmental education, and 3. Entities whose primary purpose is to support individuals with disabilities.
Up to a total of twelve (12) Special Recreation Permits (SRPs) would be issued to licensed commercial outfitters and guides for river floating, including a maximum of six (6) SRPs for the Bruneau River system and a maximum of six (6) SRPs for the Owyhee River system, as defined inTable 1.6, "Combined Commercial and Private (Non-commercial) Visitor Use Capacity of Floatable WSR Segments" (p. 55) of the WMP. The SRPs would restrict commercial launches to one per day on each WSR.
If a substantial increase in visitor use is observed for any specific WSR, or if visitor use is causing unacceptable impacts to wilderness character or WSR values, BLM would adjust the distribution of visitor use capacities to address the issue(s). This could affect the allocation between commercial and private users.
BLM will impose or adjust visitor use restrictions if monitoring shows a substantial increase in visitor use and/or indicates visitor use is causing unacceptable impacts to wilderness character or WSR values.
BLM would remove existing structures and installations if they: 1) are not associated with a valid existing right, 2) are not of historical or cultural value, or 3) are not the minimum necessary for the administration of the area as wilderness.
BLM would treat surface disturbances subject to a Minimum Requirements Analysis, using methods that have the least impact to wilderness character and WSR values.

1.6. Monitoring Program

Permitted livestock grazing in wilderness is administered under the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management (BLM 1997). Field offices would continue to monitor rangeland health as a process separate and apart from wilderness character monitoring; however, the results of rangeland health monitoring would be included in the periodic (every five year) wilderness character monitoring report. Rangeland health monitoring would measure and track actual livestock use, as well as ecological condition and trend. BLM range monitoring staff would be restricted to non-motorized and non-mechanized access. The effects to wilderness character from activities associated with range project maintenance and related access would be evaluated as part of the wilderness monitoring process.

The current wilderness monitoring strategy (BLM Manual 6340, Appendix C) evaluates impacts to the four wilderness qualities identified in the Wilderness Act - "untrammeled," "natural," "undeveloped," and "solitude or a primitive and unconfined type of recreation." These wilderness characters form the foundation of the monitoring protocol, and each character is divided into

monitoring questions, indicators, and measures to allow measurement of trends (Landres, Barns, Dennis, et al., 2008).

Wilderness monitoring activities would assess the effects to wilderness character and WSR values from visitor use, activities conducted under a valid existing right, activities conducted under BLM permit, natural disasters (i.e., wildfire, floods, insects, etc.), and management decisions. A single activity may affect several wilderness qualities or WSR values. For example, an activity such as weed control is intended to restore natural conditions over the long-term, but may diminish the untrammeled condition of the wilderness in the short-term. These two separate outcomes, the improvement of "naturalness" and decreased "untrammeled nature," would be monitored separately.

Separate activities undertaken for different purposes may cumulatively diminish the same qualities of wilderness character. For example, a trail may be designated to control visitor impacts on vegetation. In the same vicinity, a barrier may be constructed to protect sensitive resources from recreational impacts. Though the two activities are unrelated, both activities may adversely affect the "undeveloped" quality of wilderness character. Monitoring the effects of activities to multiple qualities of wilderness character would improve understanding of the overall effects on wilderness character.

The monitoring program would provide a greater understanding of the condition of each wilderness area. Effects of intentional, unintentional, and unauthorized activities would be captured. Information generated during wilderness monitoring would help managers determine:

- the current state of wilderness character;
- if and how wilderness character is changing over time;
- if and how stewardship actions are affecting wilderness character; and
- what stewardship priorities and decisions would best preserve and sustain wilderness character.

Monitoring would provide wilderness managers with information that would improve their evaluation of ongoing activities, as well as future proposals. Monitoring would not be used to compare conditions and changes in these six wilderness areas with other wilderness areas in the National Wilderness Preservation System or with each other.

Current BLM policy requires a wilderness character monitoring report to be prepared for each wilderness area at least every five years to assess trend(s) in wilderness character. While the enabling legislation is the same for all six wilderness areas, trends for each wilderness can only be evaluated relative to its unique natural features and special administrative provisions. At a minimum, the following items would be monitored to ensure that wilderness management decisions and authorized visitor use are not adversely affecting wilderness character or WSR values, and that undue impacts to other resources are occurring:

- designated trails,
- user-created trails,
- weed infestations and treatments,
- the effects of wildfire, fire suppression, and associated ES&R activities,

- the use of administrative routes for range project maintenance and salt delivery,
- reclamation of small-scale surface disturbances, including mining claims,
- recreational use of river portages for conformance to visual quality objectives and visitor safety,
- unauthorized use of motorized or mechanized vehicles and equipment,
- the effectiveness of existing signage and education, and
- expansion and dispersion of wilderness recreational activities.

Due to the remoteness of the six wilderness areas, and the fact that surrounding areas are predominately public land, are sparsely inhabited, and are managed principally for agricultural purposes, air quality would not be monitored.

If monitoring reveals that visitor use is damaging cultural resources, BLM staff, with Tribal and SHPO consultation, would develop a management strategy to minimize further damage, including, but not limited to education, signage, and natural barriers.

All field reports, photographs, and monitoring data would be maintained in the official file for each wilderness at the BLM Boise and Twin Falls District Offices.

1.6.1. WSR Monitoring

Since the WSR segments flow through designated wilderness areas, the WSR corridors would be monitored as part of the overall wilderness monitoring process. Monitoring of WSR corridors would include monitoring of water quality, as well as resource and recreation impacts. Water quality would be monitored at points upstream of and within designated corridors. Baseline water quality data was collected for all WSR segments in 2011 (Appendix E, *Water Quality* (p. 163)). This data will be compared to Idaho Department of Environmental Quality (IDEQ) water quality standards to determine the need for water quality mitigation actions.

Baseline streamflow monitoring began in 2012 and data will be used to develop federal water right claims, and will guide management decisions about the protection and enhancement of ORVs. It may be necessary to continue streamflow monitoring to refine calculations and ensure that flow levels adequately support ORVs. It should be noted that streamflow on the Owyhee River is regulated by a reservoir on the Duck Valley Indian Reservation, and flow on the South Fork Owyhee River is regulated upstream in Nevada by reservoirs and irrigation diversions.

Visitor use monitoring is integral to the protection and enhancement of the WSR ORVs. Monitoring would be designed to indicate whether ORVs are being impacted and guide actions that would be taken before visitor use capacities[3] are reached. If monitoring shows that visitor use is causing adverse effects to a WSR corridor(s), BLM could increase visitor use management, including but not limited to: 1) expanded outreach and education programs, 2) increased river patrol frequency, and 3) a mandatory permit system for all boaters.

[3]The maximum visitor use capacity is intended to protect the primitive and unconfined recreational setting and provide visitors with exceptional opportunities for solitude. It is also intended to protect the ORV's and the biophysical resource. It should measure social attributes such as the type and number of recreation users, visitor expectations, and encounters during a finite period.

1.6.2. Law Enforcement

BLM law enforcement rangers would enforce federal laws and regulations in wilderness areas. State and local law enforcement, BLM staff, contractors, and volunteers may indirectly assist BLM law enforcement by providing information regarding wilderness-related violations. Law enforcement rangers and other BLM staff would patrol the wilderness perimeter with motorized vehicles, and would conduct patrols within wilderness on foot or horseback. Motorized vehicles and equipment, including helicopters and fixed wing aircraft, may be used for temporary emergencies involving search and rescue operations, violations of law, and/or the pursuit of fugitives, and would be immediately followed up with notification to the appropriate BLM field manager.

1.7. Plan Evaluation

The WMP is a working document that would be reviewed periodically. The plan uses an adaptive management strategy that allows for plan revision when prescribed management actions or a change in the existing situation no longer meets wilderness management objectives. A revision of the WMP would be accomplished with public input. Minor corrections of typographic or cartographic errors would be made without public input by inserting an errata sheet. To the extent possible, affected land use plans would be amended as needed to conform to the legislative, regulatory, and policy requirements contained herein. Where it would not conflict with the enabling legislation or other pertinent laws and regulations, the WMP may be revised if necessary to conform to future land use planning documents or revisions.

1.8. Activities Associated with Plan Implementation

The following list reflects the implementation priority for management actions identified in this WMP. Actual implementation would be subject to staff and funding availability outside the control of this plan.

Ongoing Activities

- Maintenance of boundary and road closure signs.
- Visitor information and education.
- Wilderness and WSR monitoring:
  - Visitor use monitoring.
  - Resource condition monitoring.
  - Trail condition monitoring.
  - Wilderness character and WSR ORV monitoring.

Future Activities

The following list of activities must be part of the plan implementation; however, project-specific environmental analysis may not be required because they are analyzed in the EA associated with this WMP:

- Reclamation:
  - Vehicle routes not used for authorized administrative access.
  - Undesirable or highly impacted campsites.
  - Mining claim-related disturbance.
  - Unauthorized vehicular impacts.
- Signs:
  - Trailheads,
  - Vehicle access points, and
  - Off-site information signs.
- Consider implementing non-ground disturbing wildlife management activities.
- Maintain, modify, or remove unused or unnecessary livestock developments or other structures, including the metal granary on the north side of Crutcher Crossing.
- Control infestations of noxious weeds and non-native invasive plant species.
- Monitor noxious weeds and non-native invasive plant infestations and proactively treat small infestations to prevent large-scale landscape changes.
- Publish supplemental rules for visitor use standards established in the WMP.
- Issue Special Recreation Permits to permitted numbers of licensed commercial outfitters and guides for river floating.
- Issue an unlimited number of Special Recreation Permits to licensed outfitters and guides for hunting, fishing, and other commercial and group activities on an as-needed basis.

Subsequent Environmental Analysis

If in the future, conditions change sufficiently to warrant subsequent actions not already addressed in this WMP, additional environmental analysis may be required.

Chapter 2. Environmental Assessment — Owyhee Canyonlands Wilderness and Wild and Scenic Rivers Management Plan DOI-BLM-ID-B000-2011-0001-EA

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2.1. Introduction and Background

Section 1503 of the Omnibus Public Land Management Act (OPLMA) of 2009 (16 U.S.C. 7202) designated approximately 517,000 acres of wilderness in Owyhee County, Idaho, including the Big Jacks Creek, Little Jacks Creek, Bruneau-Jarbidge Rivers, North Fork Owyhee, Owyhee River, and Pole Creek Wilderness Areas. In addition, Section 1504 of the OPLMA designated 16 wild & scenic river (WSR) segments, totaling about 325 miles, all but about six miles of which lie within the boundaries of the designated wilderness areas. The OPLMA requires the wilderness areas to be managed in accordance with the Wilderness Act of 1964 (16 U.S.C. 7202).

Wilderness and WSR management actions described in the Wilderness Management Plan (WMP) form the Proposed Action analyzed herein. The Proposed Action will be analyzed against an alternative that would normally be considered a continuation of current management; however, that is not the case in this instance. Section 4(b) of the Wilderness Act requires administering agencies to preserve wilderness character. Likewise, Section 10(a) of the Wild and Scenic Rivers Act (WSR Act) of 1968 (16 U.S.C. 1271) requires agencies to administer designated WSR corridors in a manner that protects and enhances the outstandingly remarkable values that resulted in their designation. Land uses and activities that are inconsistent with this legislative guidance are prohibited within the designated areas.

BLM is required to manage the wilderness areas and WSRs according to standards that were not in effect when the lands were previously managed under FLPMA for multiple use. As such, a No Action Alternative (continuation of current management) does not exist, since new requirements were legislatively imposed through wilderness and WSR designation. As such, Alternative A is being termed the Minimal Management Alternative because it contains the minimum land use restrictions deemed necessary to protect and preserve wilderness character and WSR values, and to comply with applicable laws and regulations. Alternative A contains no discretionary management actions. Most of the management actions contained in the Minimal Management Alternative are also contained in the Proposed Action Alternative. The greatest difference between the two alternatives is that the Proposed Action contains discretionary actions that are not a part of the Minimal Management Alternative.

The analysis in this EA will focus mainly on the Proposed Action's discretionary management actions to determine: 1) whether the actions individually and cumulatively fulfill legislative requirements to protect and preserve wilderness character, and to protect and enhance WSR values, and 2) whether the actions individually or cumulatively involve significant environmental effects.

2.1.1. Purpose of and Need for the Proposed Action

The purpose of the WMP is to implement guidelines and actions designed to preserve wilderness character and protect and enhance WSR Outstandingly Remarkable Values (ORVs) by identifying conditions and opportunities that will be managed for over at least the next ten years, or as changes in wilderness character, WSR values, and/or resource conditions require.

The need for the Proposed Action stems from Section 4(b) of the Wilderness Act, which requires administering agencies to preserve wilderness character. In furtherance of this mandate, Section 1.4.C. of BLM Manual 6340 (Management of Designated Wilderness Areas) requires BLM District and Field Managers, among other things, to develop and implement land use and activity-level plans addressing wilderness areas that conform to the Wilderness Act, the establishing legislation, and BLM wilderness policies and guidance.

Section 3(d)(1) of the WSR Act requires administering agencies to prepare a comprehensive management plan to protect WSR values. The WSR Act requires the management plan to address resource protection, development of lands and facilities, user capacities, and any other necessary or desirable management practices.

According to Section 10(b) of the WSR Act, any portion of a WSR that is located within a wilderness area shall be subject to the provisions of both the Wilderness Act and the WSR Act, and in case of conflict between the provisions of the two Acts, the more restrictive provision(s) shall apply.

Based on the analysis herein, the BLM authorized officer will decide whether to manage the wilderness areas and WSR corridors strictly according to legislative and regulatory requirements, or whether to implement a management plan that provides heightened management and discretionary opportunities to ensure adequate protection and preservation of resources and values, as well as mitigation for existing and future impacts to those resources and values.

2.1.2. Decision to be Made

The WMP implements legislative and regulatory direction from the Wilderness Act, the WSR Act, and the OPLMA. Management actions common to both alternatives consist of restrictions on activities that could potentially affect wilderness character and/or WSR values. Use restrictions common to both alternatives implement legislative and regulatory direction to preserve wilderness character and to protect and enhance WSR values, and as such, will not be analyzed herein.

The following management categories contain discretionary management actions that address issues identified during scoping:

- Wildfire management,
- Emergency stabilization and rehabilitation,
- Noxious weed and non-native invasive plant management,
- Livestock grazing-related activities,
- Recreation management,
- Research and monitoring,
- Mining-related reclamation,
- Wildlife and fisheries management.

The EA will focus on the potential environmental effects of discretionary management actions, as well as their effect on wilderness character and WSR values. Based on their potential effects, the authorized officer will decide whether to implement some or all of the proposed discretionary actions.

2.1.3. Compliance with Laws, Regulations, Executive Orders, and State Statutes

Management actions contained in the WMP comply with requirements of the Wilderness Act, the WSR Act, and the enabling OPLMA, as well as other applicable laws, regulations, and executive orders.

2.1.4. Conformance to BLM Policy Manuals and Handbooks

The WMP conforms to the requirements and management direction contained in the following BLM and Departmental policy manuals and handbooks:

- BLM Manual 1626 - Travel and Transportation Manual
- BLM Manual 6220 - National Monuments, National Conservation Areas, and Similar Designations (Public)
- BLM Manual 6340 - Management of Designated Wilderness Areas.
- BLM Manual 6400 - Wild and Scenic River Policy and Program Direction for Identification, Evaluation, Planning and Management
- BLM Manual 8561 - Wilderness Management Plans
- BLM Handbook H1742-1 - Burned Area Emergency Stabilization and Rehabilitation
- Departmental Manual 620 DM 3 - Wildland Fire Management Burned Area Emergency Stabilization and Rehabilitation

2.1.5. Consistency with Existing BLM Land Use Plans

As discussed in Section 1.2.3, "Consistency with Existing BLM Land Use Plans " (p. 6) of the WMP, the Proposed Action conforms to the goals, objectives, and decisions of the Bruneau Management Framework Plan (1983), the Jarbidge Resource Management Plan (1987), and the Owyhee Resource Management Plan (1999). The plan is also consistent with the goals and objectives being proposed in the Revised Jarbidge Resource Management Plan, currently under development.

2.1.6. Scoping and Alternative Development

In June 2011, public meetings were held in Boise, Grandview, Murphy, Nampa, and Twin Falls, Idaho, to present Wilderness and WSR policy and BLM management objectives for these areas. The meetings provided a forum for public input regarding specific wilderness and WSR issues. The BLM also published several newsletters discussing Wilderness and WSR policy and the development of the WMP. BLM also posted information on multiple websites about the planning process, which provided the public with another venue for submitting comments or information regarding their use of and interest in these areas. Additionally, BLM staff consulted directly with affected livestock operators and other individuals and organizations interested in wilderness and WSR issues. The proposed action addresses relevant internal and public issues and concerns. See

the WMP (Section 1.3.3, "Wilderness Issues Being Addressed" (p. 25) and Section 1.4.3, "WSR Issues to be Addressed " (p. 36)) for a detailed description of the issues identified.

Based on an analysis of the issues raised during public and internal scoping, the BLM Interdisciplinary Team identified nine significant issues that are summarized in Table 2.1, "Issues Discussed in the Wilderness Management Plan" (p. 74).

Table 2.1. Issues Discussed in the Wilderness Management Plan

Issue Statement	Resolution
Structures associated with historic and valid existing land uses may not preserve wilderness character or WSR ORVs.	Authorized in Proposed Action and includes mine reclamation and the removal of unneeded range improvements and an existing historic granary.
Management actions associated with wildfire may affect wilderness characteristics.	Management guidelines included in Proposed Action.
Long boundary perimeters increase the amount of wilderness that may be impacted by human-influenced changes to vegetative structure and composition in areas immediately adjacent to the wilderness areas, especially following large-scale wildfires.	Management guidelines included in Proposed Action.
Human activities may increase noxious weed and invasive plant infestation and spread.	Management guidelines included in Proposed Action.
Numbers of wilderness visitors may increase, resulting in site-specific impacts to wilderness character and/or WSR values.	Management guidelines included in Proposed Action.
The notoriety and popularity of wilderness areas resulting from their designation may increase visitation to a level that poses a risk to designated Areas of Critical Environmental Concern (ACEC), Outstanding Natural Areas (ONA), or Research Natural Areas (RNA).	Management guidelines included in Proposed Action. Guidelines within wilderness and WSRs are usually more stringent than these designated areas.
Upstream water rights that may be issued in the future could reduce streamflows needed to protect ORVs identified for affected river segments.	Management guidelines included in Proposed Action. Claims for instream flow were filed with the state of Idaho in December 2012.
Continued livestock grazing-related activities, including access to and maintenance of existing structures (i.e., springs, pipelines, fences, reservoirs, etc.), may adversely affect naturalness and undeveloped wilderness character and WSR values.	Management guidelines included in Proposed Action and provided for in the OPLMA.
Mineral exploration and extraction activities within valid existing mining claims may adversely affect naturalness and undeveloped wilderness character and WSR values.	Management guidelines included in Proposed Action.

2.2. Description of Alternatives

Wilderness areas and WSRs are designated by Congress for the purpose of protecting and preserving wilderness character and protecting and enhancing WSR values. BLM must manage various land uses and activities consistent with the purposes for which the Wilderness Areas and WSRs were designated. Land uses and activities that are inconsistent with guidance provided by the Wilderness Act, the WSR Act, the OPLMA, and House Report No. 101-405 are prohibited within the affected areas.

Based on the above guidance, a true No Action Alternative cannot exist, since BLM is required to manage designated wilderness areas and WSRs according to standards that were not in effect prior to their designation. Alternative A is described as the Minimal Management Alternative

because it contains the minimum land use restrictions deemed necessary to protect and preserve wilderness character and WSR values, and to comply with applicable laws and regulations. Alternative A contains no discretionary management actions. Most of the land use restrictions are also incorporated in the Proposed Action Alternative. The difference between the two alternatives is that the Proposed Action includes discretionary management actions designed to preserve wilderness character and protect and enhance WSR ORVs, including: 1) addressing the effects of past human activities, 2) managing or responding to natural processes, such as wildfire, and their effects on wilderness character, and 3) providing limited authorizations for otherwise prohibited activities.

2.2.1. Management Actions Common to Both Alternatives

The following management actions are either expressly authorized by the enabling legislation or are baseline land use authorizations and/or restrictions deemed necessary for the proper management of the designated wilderness areas and WSRs. As such, the actions are incorporated in both alternatives. Table 1.8, "Proposed Wilderness Use Restrictions" (p. 60) contains a consolidated list of legislatively-required actions and proposed visitor use restrictions, and indicates whether a use: 1) is authorized without further requirements, 2) is authorized, but restricted in some manner, 3) requires prior BLM authorization, or 4) is prohibited. Table 1.9, "Proposed BLM Wilderness and WSR Management Decisions" (p. 62) contains BLM wilderness management decisions not specifically related to use regulation.

1. Pursuant to OPLMA Section 1503(b)(3), livestock grazing would continue to be authorized in allotments located wholly or partially in wilderness areas at the approximate stocking level that existed prior to designation, consistent with Section 4(d)4 of the Wilderness Act and the guidelines in Appendix A of House Report 101-405. Grazing would continue to be administered subject to the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management.

2. Reservoir maintenance and repair using motorized and mechanized vehicles and equipment would be authorized in wilderness areas on a case-by-case basis to prevent or respond to existing or impending reservoir failure and associated resource damage that would degrade wilderness character. Permittees would be required to request specific authorization for each instance of reservoir maintenance or repair.

3. Motorized or mechanized vehicles and equipment (including helicopters) may be used in wilderness areas during emergencies involving search and rescue, the health or safety of individuals, or the rescuing of sick or stranded animals. Individuals must notify the BLM authorized officer immediately following completion of emergency activities. The removal of downed airplanes (or other vehicle accidents) and associated equipment, parts, or debris is not considered an emergency, and would require prior BLM authorization subject to a Minimum Requirements Analysis.

4. Pursuant to Section 4(c) of the Wilderness Act, the use of motor vehicles for livestock monitoring, herding, and gathering is prohibited.

5. Livestock grazing would be prohibited in burned areas until vegetative recovery objectives are met.

6. Existing structures and developments would be removed if they: 1) are not associated with a valid existing right, 2) are not of historical or cultural value, or 3) are not the minimum necessary for the administration of the area as wilderness.

7. Personal property not associated with an active campsite may not be left unattended.

8. Traditional geocaching and letterboxing would be prohibited.

9. Supplemental feed for riding and pack stock must be certified weed-free, as defined by Idaho Department of Agriculture Administrative Rules (IDAPA 02.06.31 - Noxious Weed Free Forage & Straw Certification Rules).

10. Goats would not be permitted as pack stock to reduce the potential for disease transmission to California bighorn sheep.

11. Collection of any resource, including shed antlers, for the purpose of commercial sale would be prohibited.

12. Casual non-commercial surface collection (no digging) of small quantities (<20 lb) of renewable and non-renewable resources would be permitted (i.e., wood, fruit, vegetation, rock and mineral specimens, petrified wood, shed antlers, and common invertebrate and plant fossils) unless or until it results in unacceptable effects to wilderness character or WSR ORVs.

13. Vertebrate fossils and cultural, archaeological, and historic sites and artifacts, including arrowheads, may not be damaged or removed without BLM authorization.

14. Campers may not cut, break, or otherwise destroy standing live and dead trees or shrubs for firewood (or clear an area for a campsite, visitor convenience, or comfort, such as cutting out poison ivy). Only dead and down woody material may be used for firewood.

15. Campers in upland sites must either: 1) use a water-tight, portable toilet, the contents of which must be deposited in an Environmental Protection Agency (EPA)-approved dump station at the end of the trip, or 2) bury human waste in cat-holes dug at least 6” to 8” deep and 200 feet from water, trails, and campsites.

16. Rock climbers may not destroy vegetation or damage rock faces to enhance a route, including chiseling or rock chipping, forcibly prying off rock, gluing, drilling, or otherwise affixing climbing bolts or other permanent artificial holds on rock.

17. Permanent hunting or photography blinds are prohibited.

18. Temporary, portable or “pop-up” blinds would be permitted only while occupied.

19. Recreational developments would be permitted, maintained, repaired, or replaced by BLM (as needed) along the North Fork Owyhee WSR outside of the Wilderness Area.

20. Up to a total of twelve (12) Special Recreation Permits (SRPs) would be issued to licensed commercial outfitters and guides for river floating, including a maximum of six (6) for the Bruneau River system and a maximum of six (6) for the Owyhee River system, as defined in Table 1.6, “Combined Commercial and Private (Non-commercial) Visitor Use Capacity of Floatable WSR Segments” (p. 55). Commercially guided river launches would be restricted to one per day on each WSR.

21. BLM would continue to issue SRPs to the following entities, as long as they provide services deemed necessary for realizing the recreational values of the wilderness areas, and as long as they operate within the terms and conditions of their SRP:

    a. Licensed commercial outfitters and guides for activities involving:

        i. Hunting,

        ii. Fishing,

        iii. Pack trips,

        iv. Hiking,

        v. Camping, and

        vi. Nature viewing.

    b. Entities whose mission includes the promotion of wilderness ethics, *Tread Lightly!*, *Leave No Trace*, or environmental education, and

    c. Entities whose primary purpose is to support individuals with disabilities.

22. Ground-based military maneuvers and associated activities are prohibited except in support of emergency actions, as described in #3 above.

23. Groups and individuals embarking on single or multi-day float trips must complete a BLM registration form. Forms may be obtained at the river launch site, or from the BLM website: http://web.blm.gov/. The trip leader must retain a copy of the registration form throughout the trip, and must present the form to a BLM employee or Idaho Fish and Game officer upon request.

24. Groups floating designated WSRs are limited to a maximum of 15 persons.

25. Owners of non-motorized boats in Idaho (i.e., canoe, kayak, raft, driftboat, etc.) must display an Idaho Invasive Species Fund sticker on their vessel(s). Inflatable vessels under 10 feet in length are exempt from this requirement. If traveling into Oregon on the Owyhee River, a State of Oregon Aquatic Invasive Species Prevention permit is required for watercraft exceeding 10 feet in length.

26. All boaters, including kayakers, must carry and use a water-tight, portable toilet for both human and pet waste. Waste must be deposited in an Environmental Protection Agency (EPA)-approved dump station at the end of the trip. Any other system of disposing of waste must comply with current EPA regulations.

27. Individuals may not dig, dam, or otherwise alter the natural flow and appearance of hot springs.

28. To reduce impacts to limited streamside campsites, visitors are strongly encouraged to urinate directly into the river, not in or around campsites.

29. WSR campers must use biodegradable soap for personal use and dishwashing. Strain all dish and rinse water before scattering water broadly onto vegetated soil at least 200 feet from water, if possible.

30. WSR campers must pack-in/pack-out all food, trash, waste, burned material, etc.

31. WSR campers must contain campfires in a metal fire pan or on a fire blanket raised off the ground to protect the soil from scarring and ash. All unburned contents of the fire, including ash, must be removed from the river corridor.

2.2.2. Alternative A – Minimal Management

The Minimal Management Alternative represents the baseline condition of managing designated wilderness areas and WSRs with the fewest restrictions possible consistent with legislatively authorized activities, as well as those deemed necessary to protect and preserve wilderness character and protect and enhance WSR ORVs. Requirements or restrictions imposed in this alternative are those that are either: 1) specifically mandated by legislation, or 2) are designed to preclude or minimize, but not treat, the impacts of human use on wilderness areas and WSRs.

Alternative A includes the following management actions in addition to the common management actions identified in Section 2.2.1, "Management Actions Common to Both Alternatives" (p. 75) above:

1. Off-road and over-snow travel and development of new routes would be prohibited, and existing administrative routes would not be maintained or repaired.

2. Motorized or mechanized vehicles and equipment would not be authorized for:

    a. Project or facility inspection, maintenance, or repair;

    b. Delivery of livestock salt and/or supplement;

    c. Wildlife management proposals;

    d. Wildfire suppression;

    e. Emergency stabilization and rehabilitation; and

    f. Weed control projects.

3. Pedestrian or equestrian trails would not be designated, maintained, or repaired.

4. No new water or other developments would be permitted for livestock or wildlife purposes.

5. Research and monitoring structures and devices would not be authorized.

2.2.3. Alternative B – Proposed Action

The Wilderness Management Plan (WMP) is the Proposed Action and incorporates the common management actions identified in Section 2.2.1, "Management Actions Common to Both Alternatives" (p. 75). In addition, the Proposed Action incorporates discretionary management actions, discussed in Section 2.2.3.1, " " (p. 79) through Section 2.2.3.8, "Recreation" (p. 83), to address otherwise prohibited uses in a manner that best preserves wilderness character and protects and enhances WSR ORVs. Future proposals not discussed herein would be evaluated through a Minimum Requirements Analysis (Arthur Carhart National Wilderness Training Center

2011) to determine if they utilize the minimum tools needed to protect or enhance wilderness character or WSR values.

2.2.3.1. Fire Management

In response to wildland fire, managers would consider the full range of fire management strategies and tactics to achieve multiple objectives, based on factors such as fuel loading and fire behavior, the safety of human life and property, and protection and/or enhancement of wilderness character and WSR ORVs.

Fire management activities would be implemented according to BLM Manual 6340, Section 1.6.C.7.b.i-iii, which provides for management flexibility according to the applicable RMP and Fire Management Plan, but limits the goals of those activities to the protection of wilderness character and the maintenance or reestablishment of the natural role of fire. Wildfire would be managed to meet fire management objectives using minimum impact suppression techniques (MIST) wherever possible, while providing for the safety of firefighters and the public. Where feasible, fire would be managed without motorized or mechanized vehicles or equipment.

Prescribed fire could be used to reestablish the natural role of fire in the ecosystem, as described in BLM Manual 6340, Section 1.6.C.7.c. It might also be authorized, where warranted by the U.S. Fish and Wildlife Service, to enhance habitat for threatened, endangered, and candidate species. Both of the following conditions must be met prior to approving prescribed fire in a wilderness area:

- The natural role of fire cannot be returned solely by reliance on wildfire, or, relying on wildfires might create unacceptable risks to life, property, or natural resources outside the wilderness; and

- The use of fire or other fuel reduction treatments outside of wilderness is not sufficient to reduce the risks from wildfire within the wilderness to life, property, or natural resources outside the wilderness.

Motorized or mechanized vehicles and equipment may be authorized to meet fire management objectives following the approval process outlined in Section 1.5.3.1.1, “Fire Suppression Actions” (p. 40). The authorized officer’s approval must be documented in wilderness monitoring reports. Support operations, such as helibases, helispots, and staging areas would normally be located outside of wilderness, unless BLM grants specific authorization following a Minimum Requirements Analysis.

2.2.3.2. Emergency Stabilization and Rehabilitation (ES&R)

ES&R activities in burned areas would be conducted as part of the fire incident, where possible. If authorized fire suppression activities result in resource damage, repair of the damage would generally be planned and implemented by the suppression incident organization prior to demobilization. Repairs to damaged sites or resources may occur with the same or similar type of equipment that was used for suppression. For example, if motorized, earth-moving equipment was used to construct fire lines, then similar equipment would be authorized to recontour and rehabilitate the area.

ES&R activities in wilderness would follow the guidance below, and may be more intensive when post-fire processes threaten ecological integrity or wilderness character.

1. While natural recovery of native plant species is preferable, planting or seeding would be used when objectives to protect wilderness character or WSR ORVs cannot be successfully accomplished through natural recovery.

2. The first priority when seeding or planting would be to use native weed-free materials that match site potential as described by ecological site descriptions or complementary reference sites. When native material of local or regional genetic stock is unavailable or would not accomplish objectives, then other options may be evaluated.

3. If native species are unavailable, non-natives weed-free materials would be considered for emergency stabilization if the site was previously dominated by invasive species and an assisted succession pathway towards natives is planned and implemented, which promotes the rehabilitation of native vegetation and meets at least one of the following three criteria:

    a. the natural biological diversity of the treated area would not be diminished; or

    b. exotic and naturalized species can be confined within the treated area; or

    c. ecological site inventory information, if available, indicates that a site would not support reestablishment of a species that was historically a part of the natural environment.

The authorized officer may approve the following otherwise prohibited activities on a case-by-case basis following a Minimum Requirements Analysis:

- The use of motorized/mechanized equipment similar to that used during suppression.
- Installation of temporary post-fire emergency structures (i.e., fences, hydrologic monitoring devices).
- Erosion control techniques that prevent or minimize soil movement and loss (i.e., straw bales, wattles, mulch, etc.).
- Repair or replacement of facilities or structures that were burned or damaged by wildfire or suppression activities (i.e., fences, boundary signs, water control structures, corrals, water developments, trails, etc.).
- Stabilization and mitigation of post-fire related degradation to cultural resources including archaeological sites, cultural landscapes, traditional cultural properties, and historic structures.

2.2.3.3. Noxious Weeds and Non-Native Invasive Plant Management

When a vegetation treatment is deemed appropriate following an environmental analysis and a Minimum Requirements Analysis, management activities would emphasize protection and enhancement of wilderness character.

According to Section 1.6.C.15.f. of BLM Manual 6340, BLM would implement management actions designed to move toward natural vegetative composition and processes that reflect what would likely have developed with minimal human influence, including manipulation of vegetation

through prescribed fire, chemical or mechanical treatments, or introduced biological agents. Actions considered would include those needed to: 1) recover a federally listed endangered, threatened, or candidate species, 2) control non-native species, and 3) restore degraded areas where natural processes alone would not recover the area from the effects of past human intervention.

Noxious and invasive weed treatments would emphasize the control of small (<0.1 acre) infestations that have the potential to spread and displace native plants. Small infestations would be treated predominately with hand tools or a backpack sprayer. Larger infestations would be considered separately, since they could involve several treatment applications or tactics considered to have a greater impact. While many noxious weeds and non-native invasive plants cannot effectively be treated without specific herbicides and/or biological agents, to the extent possible, treatment methods would be prioritized as follows, though it is likely that treatment combinations would be necessary in some situations:

- Manual removal with hand tools.
- Herbicides applied by backpack and/or pack stock (horse, mules, or llamas).
- Biological control.
- Herbicides applied aerially or with motorized equipment, where control is feasible, where control impacts may be quickly and readily rehabilitated, and where the infestation is of such size that herbicide(s) cannot be effectively applied without motorized equipment. Use of motorized equipment would require a Minimum Requirements Analysis.
- Alternative treatments, including targeted grazing by livestock.

2.2.3.4. Livestock Management-Related Activities

In addition to emergency situations, the occasional use of motorized and mechanized vehicles and equipment may be authorized, as described below, to manage livestock grazing at a level similar to what existed prior to wilderness designation. Terms and conditions would be added to grazing permits to specify the timeframe during which vehicular access would be authorized, as well as the specific administrative route(s) and the type(s) of vehicles to be used. Where authorized, vehicles would be restricted to existing administrative routes.

1. Salt and mineral supplement may be delivered into wilderness areas via motor vehicle in quantities sufficient to ensure only one motorized entry annually. Subsequent distribution of stockpiled salt would be accomplished by foot, horseback, or pack stock.
2. Motorized and mechanized activities for range project inspection and maintenance may occur one time per year prior to livestock entry. Where the project is a let-down fence, one additional entry would be authorized following livestock removal. Maintenance would be accomplished as needs are discovered (i.e., during project inspection) using a pick-up or off-highway vehicle carrying larger quantities of supplies into the wilderness. For larger repair or reconstruction projects, motorized vehicles may be authorized to stockpile supplies at distribution points in the wilderness, thereafter distributed by pack stock. Requests for additional motorized access to complete larger projects would be evaluated through a Minimum Requirements Analysis.

3. Reservoir maintenance and repair may occur within wilderness areas as necessary to prevent or respond to existing or impending failure and associated resource damage. Since frequency of repairs may range from 10 to 50 years, permittees would be required to request specific authorization for each instance of reservoir maintenance or repair. Maintenance or repairs would be limited to the previously disturbed site and would not increase storage capacity from historic levels.

The use of motorized or mechanized vehicles and equipment for livestock herding, monitoring, or gathering would be prohibited, as would cross-country and over-snow vehicular travel.

No new water or other developments would be permitted for livestock management purposes unless they are determined (through an environmental analysis and a Minimum Requirements Analysis) to be the minimum necessary to protect or preserve wilderness character.

2.2.3.5. Research and Monitoring

Following a Minimum Requirements Analysis, research and monitoring activities and devices may be authorized if: 1) the required information cannot be collected outside of wilderness, and 2) the activities are restricted to non-motorized, non-mechanized, and non-ground disturbing methods.

Water monitoring devices have been determined to be necessary to calculate and describe flows on ungauged WSR stream segments that are critical to the support of flow-dependent WSR values, such as fisheries and recreation. Water monitoring devices would be authorized if they do not obstruct the "free-flowing" character of the affected WSR. The devices would be installed for the purpose of providing data to help refine streamflow measurements needed by the Department of Justice to file and refine federal water right claims. Once necessary data is collected, authorized monitoring devices would be removed.

2.2.3.6. Mining-related Reclamation

Surface disturbances related to the one remaining mining claim in the Bruneau Canyon near Indian Hot Springs would be addressed subject to the requirements of 43 CFR Subpart 3809 (Surface Management), which regulates the types and amounts of surface disturbance and reclamation that occur within mining claims. Pursuant to 43 CFR 3809.11(c), mining claimants must file a Plan of Operations prior to conducting surface disturbing operations. BLM resource specialists would review the Plan of Operations to ensure that it incorporates appropriate measures to minimize and treat the effects to wilderness character and WSR values.

Soil and vegetation disturbance associated with five recently relinquished mining claims in the same area would be addressed pursuant to requirements in the above ES&R and weed management sections. Resource surveys and consultation would first be completed to determine whether reclamation is feasible, or if the reclamation activities themselves would simply cause additional soil and vegetation disturbance and thus add to the problem of noxious weeds and non-native invasive plant establishment. If reclamation is determined to be appropriate, a Minimum Requirements Analysis would be conducted to decide the best and most compatible course of action. All necessary care would be taken to ensure the least impacts to wilderness character and WSR values.

2.2.3.7. Wildlife and Fisheries Management

Wildlife management proposals would be evaluated through a Minimum Requirements Analysis to determine if they are necessary for the administration of the area(s) for the purpose of the Wilderness Act. The following activities would be permitted to correct unnatural conditions resulting from human influence, but only when they contribute to the preservation of wilderness character.

- Facility maintenance or repairs.
- Habitat enhancement to address impacts of human activities on fish or wildlife populations.
- Research on fish and wildlife populations and habitats.
- Wildlife population surveys.
- Wildlife transplants (i.e., removal, augmentation, or reintroduction).
- Wildlife damage control to address: 1) impacts to federally listed endangered, threatened, or candidate species, 2) transmission of diseases or parasites that affect wildlife and humans, or 3) serious livestock damage.

Authorized activities would be conducted on foot or with riding and pack stock, unless BLM determines through a Minimum Requirements Analysis that the use of motorized or mechanized vehicles and equipment is the minimum tool necessary for the preservation of wilderness character. An environmental analysis and associated decision document would be needed for proposals involving ground disturbance or the temporary use of a structure.

2.2.3.8. Recreation

2.2.3.8.1. Visitor Use Capacity

To reduce potential conflicts between private and commercial river use, daily river launches would be limited to three (3) groups per WSR segment, no more than one of which may be commercial. Two additional private (non-commercial) launches would be permitted each day on the Bruneau River.

Groups floating any of the WSRs would be limited to a maximum of 15 persons.

2.2.3.8.2. Special Recreation Permits

Up to a total of twelve (12) Special Recreation Permits (SRPs) would be issued at any one time to licensed commercial outfitters and guides for river floating, including a maximum of six (6) SRPs for the Bruneau River system and a maximum of six (6) SRPs for the Owyhee River system.

SRPs would restrict commercial river launches to one per day on each WSR. If a substantial increase in visitor use is observed for any specific WSR, or if visitor use is causing unacceptable impacts to wilderness character or WSR values, BLM would adjust the distribution of visitor use capacities to address the issue(s). This could affect the allocation between commercial and private users.

BLM would continue to issue SRPs to the following entities, as long as they provide services deemed necessary for realizing the recreational values of the wilderness areas, and as long as they operate within the terms and conditions of their SRP:

1. Licensed commercial outfitters and guides for activities involving:
    a. Hunting,
    b. Fishing,
    c. Pack trips,
    d. Hiking,
    e. Camping, and
    f. Nature viewing.
2. Entities whose mission includes the promotion of wilderness ethics, *Tread Lightly!*, *Leave No Trace*, or environmental education, and
3. Entities whose primary purpose is to support individuals with disabilities.

SRPs for outfitter and guide operations (new, renewed, or amended) within wilderness areas may or may not require environmental analysis, depending on the scope and scale of their proposals. At BLM's discretion, SRPs that have not been used within a 3-year period would be revoked.

2.2.3.8.3. Trail Designation and Management

The following trails would be designated for both pedestrian and equestrian use to enhance visitor use and experience:

1. Parker Trail - east side of Big Jacks Creek Wilderness, Map 1.2, "Big Jacks Creek Wilderness Including Wild and Scenic Rivers" (p. 12), 1.2 miles
2. Tindall Trail - west side of Bruneau-Jarbidge Rivers Wilderness, Map 1.4, "Bruneau-Jarbidge Rivers Wilderness (South) Including Wild and Scenic Rivers" (p. 15), 0.5 miles
3. Roberson Trail East - east side of Bruneau-Jarbidge Rivers Wilderness, Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14), 0.7 miles
4. Roberson Trail West - west side of Bruneau-Jarbidge Rivers Wilderness, Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14), 0.7 miles
5. Little Jacks Creek Trail - northern end of Little Jacks Creek Wilderness, Map 1.5, "Little Jacks Creek Wilderness Including Wild and Scenic Rivers" (p. 17), 6.1 miles
6. Jarbidge River Trail - east side of Bruneau-Jarbidge Rivers Wilderness, Map 1.3, "Bruneau-Jarbidge Rivers Wilderness (North) Including Wild and Scenic Rivers" (p. 14), (below the Forks CG) approx. 1.0 miles

Trails would be natural and unmodified, consisting of native materials with common obstacles intended to maintain a primitive experience. Trail blockages from rock-fall or tree-fall would be cleared periodically if they pose a public safety hazard. Structures, such as waterbars, would be installed at the minimum necessary design level if needed to protect the trail infrastructure and resources from significant erosion or sloughing. Bridges or water crossings would not be constructed. Route signs or markers would exist only at trailheads outside of wilderness boundaries.

Three portage trails along the Jarbidge River and two along the Owyhee River would be maintained, repaired, or rerouted, as needed to a minimum (primitive) safety standard.

2.3. Affected Environment

The affected environments in the six wilderness areas and 16 WSR segments are described in Section 1.3.2, "Descriptions of the Owyhee Canyonlands Wilderness Areas" (p. 8) and Section 1.4.2, "WSR Descriptions" (p. 28) of the Wilderness Management Plan.

2.4. Environmental Consequences

2.4.1. Resources/Concerns Considered for Analysis

Table 2.2, "Resources/Concerns Considered for Analysis" (p. 85) identifies issues that have been evaluated for potential direct, indirect, or cumulative impacts due to implementation of the Proposed Action. Some of these items are being considered to ensure compliance with laws, Executive Orders, or regulations that impose requirements on all federal actions. Other items are relevant to the management of public lands in general, and to the BLM Boise and Twin Falls Districts in particular.

Table 2.2. Resources/Concerns Considered for Analysis

Resource or Concern	Analyzed (Y/N)	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	N	Proposed action would not increase air pollutant concentrations.
Cultural Resources	N	Proposed ground-disturbing projects would be subject to a Minimum Requirements Analysis, as well as a National Historic Preservation Act, Section 106 review, including SHPO and Tribal consultation. Affected areas would be inventoried to identify possible cultural resources, and if approved, activities must avoid cultural resources.
Environmental Justice	N	No minority or low-income groups would be affected by disproportionately high and adverse health or environmental effects.
Fire Management	Y	Fire suppression and management actions may affect wilderness.
Fish and Wildlife	Y	Proposed Action may affect fish and wildlife populations or habitat.
Rangeland Health	N	The three Idaho Resource Advisory Councils developed the 1997 Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management. The Range program is responsible for ensuring that authorized livestock grazing is administered consistent with the approved standards, including determination of appropriate stocking rates and seasons of use.

Resource or Concern	Analyzed (Y/N)	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Livestock Grazing-related Activities	Y	The OPLMA provides for continued livestock grazing in wilderness areas. Appendix A of House Report 101-405 describes allowable uses and maintenance of range developments in wilderness.
Noxious Weeds and Non-native Invasive Plants	Y	Actions incorporated in the Proposed Action would allow noxious and invasive weeds to be treated to reduce the potential for spread.
Land Uses	N	Land uses are affected by Wilderness and WSR designation, not the WMP.
Migratory Birds	N	Following BLM's management guidance for the Migratory Bird Treaty Act would prevent or diminish impacts.
Mineral Resources	Y	Five mining claims were recently relinquished in the Bruneau-Jarbidge Rivers Wilderness, leaving BLM liable for potential reclamation. Activities within the one remaining mining claim are subject to 43 CFR 3809 regulations.
Native American Religious Concerns	N	No specific concerns are known.
Paleontologic Resources	N	No sites of high scientific value are known.
Recreation Uses	Y	Proposed user restrictions and trail designation may affect recreational use of the areas.
Special Designations Other Than Wilderness	Y	The Camas and Pole Creeks Archaeological District affects a portion of the Pole Creek Wilderness. Other wilderness areas are affected by ACEC, ONA, and WSR designations.
Special Status Animal Species	Y	The endangered Bruneau hot springsnail and the threatened bull trout exist within the Bruneau-Jarbidge Rivers Wilderness. Other state-listed sensitive species and their habitats also exist in one or more of the six wilderness areas, including greater sage-grouse, California bighorn sheep, Columbia spotted frog, and pygmy rabbit.
Special Status Plant Species	Y	A number of BLM and state-listed special status plants exist in the wilderness areas.
Vegetation/Soils/Watershed	Y	Fire management, ES&R, weed management, reclamation, and recreational activities may affect soils and vegetation.
Vegetative Resources (Forest or Seed Products)	N	The Wilderness Act does not allow forest or seed products to be sold. It is not possible to track or measure individual gathering impacts.
VRM	N	The proposed action is consistent with VRM Class I management objectives for wilderness. The proposed action would not result in a level of change to the landscape that would be noticeable from access roads.
Hazardous or Solid Wastes	N	No hazardous or solid wastes are known or anticipated.
Water Quality (Drinking Water)	N	No effect. Herbicides potentially used for tamarisk control are approved for use in aquatic areas.
Water Resources (Water Rights)	N	BLM is subject to state of Idaho water right laws.

The Wilderness Act requires land managers to preserve wilderness character. Likewise, the WSR Act requires managers to protect and enhance WSR ORVs. As such, both alternatives contain basic and requisite land use restrictions designed to carry out this legislative direction by precluding or minimizing, but not treating, the effects of human use on wilderness areas and WSRs. The Proposed Action includes discretionary measures designed to address the effects of natural and human-caused impacts on these areas.

This environmental analysis focuses on the environmental effects of the discretionary actions described in Alternative B, while also describing their effect on wilderness character and WSR

ORVs. Since wilderness character and WSR ORVs reflect the natural and undeveloped nature of designated areas, they are representative of the resources that would normally be considered in the effects analysis section of an environmental document.

The cumulative effects analysis considers the past, current, and potential future conditions of resources affected by a given action as the result of past, ongoing, and future foreseeable actions. The enabling legislation limits the management of wilderness character and WSR ORVs to the areas incorporated within the designated boundaries. Environmental Impact Statements (EIS) associated with BLM's wilderness suitability recommendations include detailed environmental effects analyses that have been incorporated into this analysis. The referenced EIS analyses include: Owyhee Wilderness Plan Amendment, 1983; Owyhee Proposed MFP Amendment – Wilderness, 1986; Jarbidge Wilderness, 1987; and Jacks Creek Wilderness, 1989.

The effects analysis is in a question and answer format to better focus on the potential effects of proposed actions on wilderness character and WSR ORVs. Specifically, the analysis will determine if discretionary actions proposed in the WMP will affect WSR ORVs or the natural, untrammeled, and undeveloped character of wilderness, including associated opportunities for solitude or primitive and unconfined recreation.

2.5. Fire Management

What are the potential effects of managing wildfire in wilderness areas and WSRs?

Impacts that result from managing wildfire within wilderness areas or WSR corridors are complex. If approved, wildfire management would be based on situational factors and would begin with activities that are the minimum necessary to accomplish objectives. As such, MIST would be used whenever possible to minimize impacts to wilderness character, ORVs, and environmental/social resources. If more aggressive actions were deemed necessary (including prohibited uses) (see Table 1.3, "Delegation of Authority for Approving Fire Management Related Activities in Wilderness Areas" (p. 41) of WMP), there would be an expected increase in disturbance to soils, vegetation, and wildlife. Localized impacts to vegetation and soils would occur from motorized suppression activities. Dozers or other heavy equipment would normally be used only when there is an immediate threat to life and property. It is expected that retardant would be used more frequently. Retardant would impact aesthetics in the short-term, but would reduce the need for surface disturbance and the long-term effects from fireline construction.

The Minimal Management Alternative would not allow prohibited uses within a wilderness area or WSR, which would eliminate the impacts associated with normal suppression tactics. However, limiting suppression to the use of MIST would substantially increase fire size, which would increase the spread of invasive species or noxious weeds. As seen in Figure 2.1, "Fire Frequency 1957–2012" (p. 89), multiple fires have occurred in the northern most portions of the Bruneau-Jarbidge Rivers and Big Jacks Creek wilderness areas. This fire history correlates to Figure 2.2, "Owyhee Wilderness Areas National Vegetation Classification Standard Macrogroups" (p. 90) that illustrates the presence of exotic annual grasses (cheatgrass) in similar locations.

Natural: Fire suppression detracts from the natural role of fire as an ecological process. Suppression activities impact soils, vegetation, wildlife, and possibly cultural resources. Fireline construction, even using MIST, would disturb soils and displace vegetation, and would change the natural course of a wildfire. Although, fire suppression and fireline construction degrade the

natural character, the activity would reduce the infestation and spread of noxious weeds and non-native invasive plants. The degree of effect would depend on the current ecological condition of the affected area(s). The use of MIST would limit suppression-related impacts to soil and vegetation, and thus better balance the degradation to naturalness by minimizing the spread and density of noxious or invasive weeds and maintaining native vegetation diversity.

Untrammeled: Activities associated with fire suppression, including road blading to facilitate access, cause trammeling. When compared to the range of possible trammeling actions, the use of MIST would be the minimum requirement once a decision to suppress a fire to preserve other wilderness characteristics is made. A reduction in ground-disturbing actions that aggressively manipulate ecological processes would minimize trammeling effects.

Undeveloped: Using MIST would minimize or eliminate the use of equipment that would modify the environment. MIST would specifically eliminate the use of motorized and mechanized vehicles and equipment within wilderness. The undeveloped character would not be substantially affected by managing fire using MIST. The use of fire suppression equipment and activities would degrade this character.

Outstanding opportunities for solitude and primitive and unconfined recreation: The presence of fire suppression resources, even those using MIST, would reduce solitude in the short-term. Area closures that may be instituted during and following a wildfire would adversely affect unconfined recreation.

What are the potential effects of using prohibited uses (motorized and mechanized, landing aircraft) to manage wildfire in wilderness areas and WSRs?

Wildfire management effects are complex, and would be approved based on situational factors. Management would begin with activities that are the minimum necessary to accomplish objectives. If more aggressive actions are deemed necessary (including prohibited uses) (Table 1.3, "Delegation of Authority for Approving Fire Management Related Activities in Wilderness Areas" (p. 41) of WMP), there would be an expected increase in effects to resources such as vegetation, wildlife, soils, and weeds. The use of motorized and mechanized vehicles and equipment for suppression would cause localized, but long-term impacts to soils and vegetation. Table 1.3, "Delegation of Authority for Approving Fire Management Related Activities in Wilderness Areas" (p. 41) of the WMP identifies possible suppression-related activities with increasing impacts. Fire retardant would impact aesthetics, but would reduce surface disturbance, thus improving vegetative recovery.

The Minimal Management Alternative would not authorize actions considered a prohibited use, and would thus preclude impacts associated with normal, motorized suppression tactics. The tradeoff would be an expected increase in burned acreage inside and outside wilderness. The consequence of increased fire size is the higher risk for the spread of invasive species or noxious weeds. As seen in Figure 2.1, "Fire Frequency 1957–2012" (p. 89), the fire history illustrates that multiple fires have occurred in the northern portions of the Bruneau and Big Jacks wilderness areas. This fire history correlates to Figure 2.2, "Owyhee Wilderness Areas National Vegetation Classification Standard Macrogroups" (p. 90) that illustrates the presence of exotic annual grasses (cheatgrass) in similar locations.

Natural: Fire suppression detracts from the natural role of fire as an ecological process. Motorized and mechanized vehicles and equipment would have localized, short-term impacts to naturalness. However, the use of motorized and mechanized vehicles and equipment would

reduce fire size and intensity, thereby reducing effects to native vegetation, and reducing the infestation and spread of noxious weeds or invasive plants. The suppression of natural fire to preserve other important natural characteristics provides a balance that would minimize impacts to vegetation community composition and structure and hasten recovery of affected vegetation communities that support important special status species' habitats.

Untrammeled: Fire suppression causes trammeling. Prohibited uses, including vehicles and equipment, are more efficient, but aggressively manipulate ecological processes that cause longer-term trammeling effects.

Undeveloped: Preserving this quality keeps areas free from growing mechanization and prevents a noticeable imprint of "man's work". The use of any prohibited, motorized, or mechanized activity degrades this characteristic even though there may be benefits to another wilderness character.

Outstanding opportunities for solitude and primitive and unconfined recreation: The use of motorized and mechanized vehicles and equipment adversely affect solitude and primitive experiences in the short-term. These actions would also be a movement away from the use of traditional skills. Prohibited uses (specialized equipment) would be more efficient at minimizing the intensity and size of the fire, which in turn, would minimize the exposure of visitors to an interruption in their solitude and primitive wilderness experience.

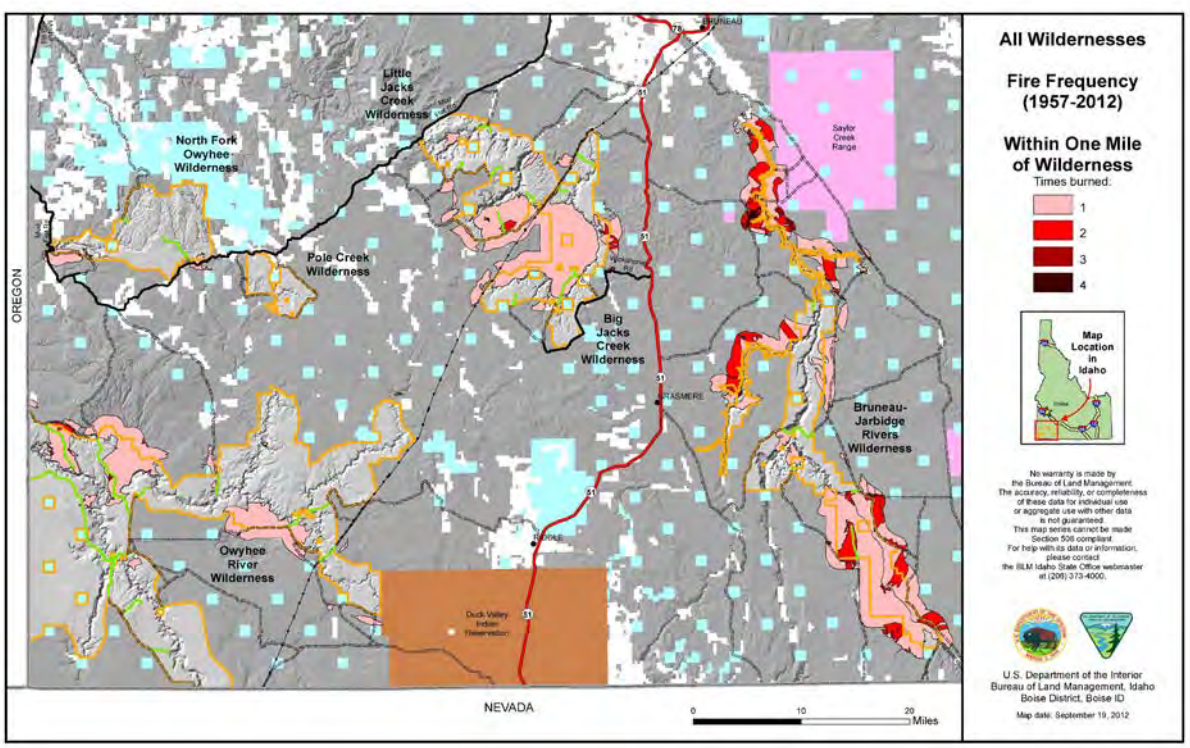

Figure 2.1. Fire Frequency 1957–2012

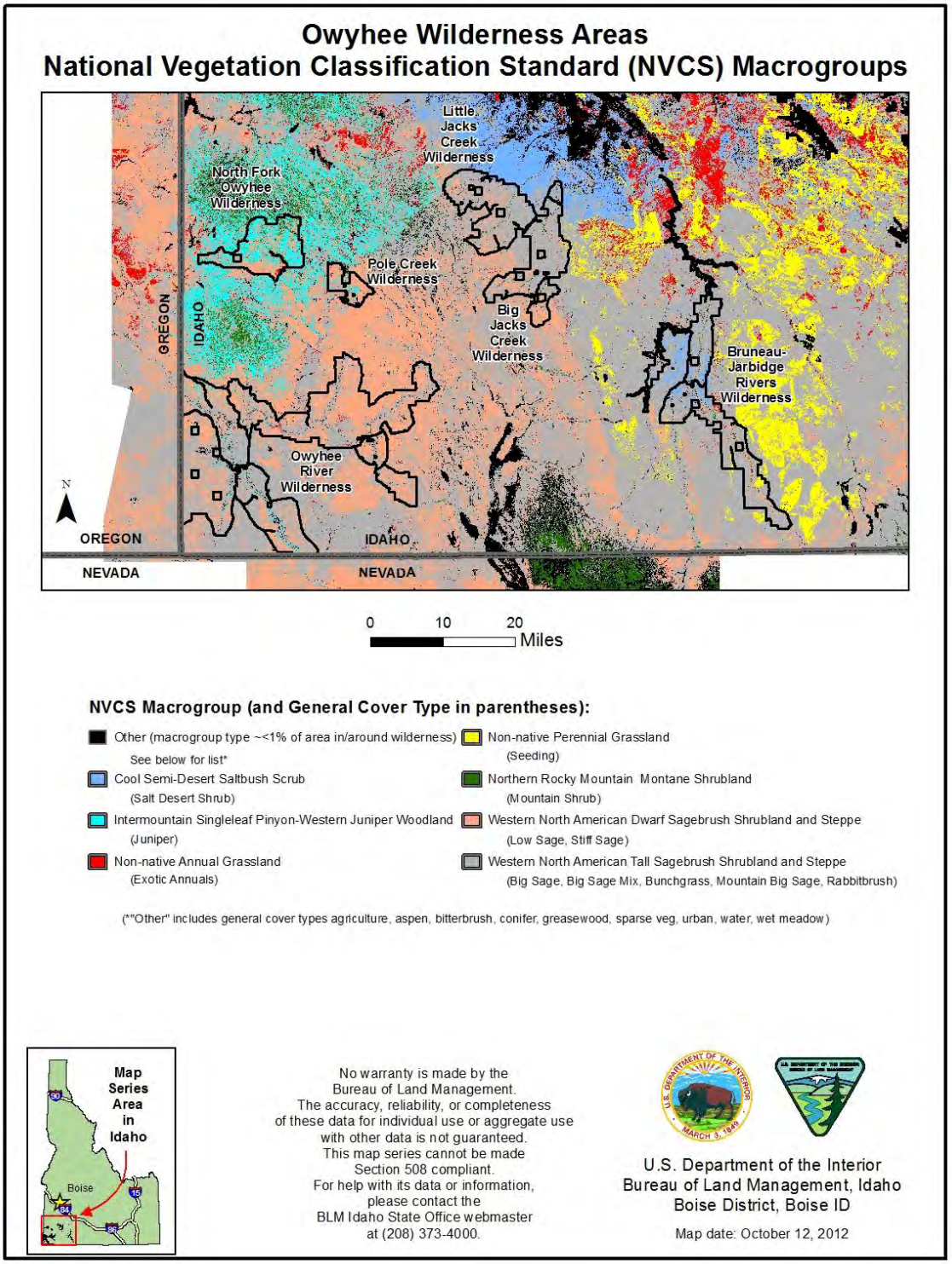

Figure 2.2. Owyhee Wilderness Areas National Vegetation Classification Standard Macrogroups

2.6. Emergency Stabilization and Rehabilitation (ES&R)

What are the potential effects of implementing ES&R actions following wildfire?

The Normal Fire Emergency Stabilization and Rehabilitation Plan (NFRP) and associated Environmental Assessment (EA) describe the goal of ES&R, which is to emulate pre-fire ecosystem structure, function (including the re-establishment of the natural fire cycle), diversity, resiliency, and dynamics consistent with approved management plans, or to establish a stable ecosystem in which native species are well represented. The purpose for the NFRP is to streamline development and implementation of ES&R plans, actions, and procedures to facilitate orderly and timely treatments that are consistent with the urgent nature of wildland fire protection priorities. Potential environmental effects of implementing standard ES&R actions are fully described in the NFRP and associated EA (or subsequent documents), which encompass the Owyhee Canyonlands wilderness areas.

The Proposed Action provides guidance for implementing ES&R treatments in wilderness. ES&R actions would:

1. reduce erosion and soil loss,
2. minimize the spread of noxious and invasive weeds,
3. enhance vegetative recovery to support special status species,
4. protect resources from the effects of livestock grazing during recovery,
5. repair, replace, or construct facilities that are essential to public health and safety, livestock management, or cultural sites, and
6. ensure that treatments are considered that minimize threats to downstream values.

The Minimal Management Alternative would not allow ES&R treatments in wilderness areas unless needed to reduce threats to human life or property. Vegetation would be allowed to recover naturally. The Proposed Action would potentially minimize the spread of noxious weeds and invasive plant infestations, while the Minimal Management Alternative would result in an increase in weed populations, with associated effects to vegetation and wildlife habitat. The Minimal Management Alternative would protect the untrammeled and undeveloped wilderness character, and the outstanding opportunities for solitude and primitive and unconfined recreation, but would degrade soils, vegetation, and other natural and social resources usually associated with the natural wilderness character.

Natural: The Proposed Action would degrade the natural character by imposing actions (some of which would be motorized or mechanized) to stabilize or improve ecological conditions. The desert-like conditions in the wilderness areas would result in a slower ecological response. Depending on the current ecological health of affected areas, some qualities of the natural character would be degraded, while other qualities could be improved. For example, protecting soil productivity would preserve vegetative health, protect against weed infestations, and hasten native plant and animal recovery.

The Minimal Management Alternative would prohibit most ES&R activities, which would result in greater degradation to the natural wilderness character through loss of soil productivity,

increased risk of noxious weed and invasive species infestation and spread, and damage to cultural sites.

Untrammeled: Because ES&R projects manipulate the ecosystem, the Proposed Action would degrade the untrammeled wilderness character. The greatest and longest-lasting trammeling effects would occur from ground disturbance, such as blading, drill seeding, planting, fence construction, motorized herbicide application, etc. Aerial seeding and herbicide application would have few trammeling effects. The Minimal Management Alternative would prohibit most ES&R activities and thus have few or no trammeling effects.

Undeveloped: ES&R actions would temporarily degrade the undeveloped character. Specific actions may include applying ground cover or seed, installing or repairing fences to preclude human and livestock use of treated areas, constructing erosion control devices, and other standard treatments.

Outstanding opportunities for solitude and primitive and unconfined recreation: ES&R actions would include multiple temporary impacts to solitude during work activities. Construction of temporary fences to close treated areas to humans and livestock to enhance rehabilitation would cause short-term impacts to primitive and unconfined recreational experiences.

2.7. Noxious Weeds and Non-native Invasive Plants

What are the potential effects of managing noxious weeds and non-native invasive plants in wilderness areas and WSRs?

In general, the management actions would apply standard operating procedures (BLM 2007) that focus on preventing the spread of weeds by vehicles and equipment. Noxious weed and invasive plant detection would be enhanced over the Minimal Management Alternative through both a greater emphasis on regular monitoring and the allowance of greater flexibility in using a variety of tools for treatment. The Proposed Action incorporates decisions and methods to treat weeds or invasive species through a step-down procedure that becomes increasingly aggressive depending on the situation.

The Proposed Action would enhance BLM's ability to control, contain, or eliminate certain invasive grasses and prevent an annual grass fire cycle that could further harm native vegetation. If post-fire ES&R activities should fail, then noxious and invasive weeds may increase in burned areas. However, successful projects would minimize post-fire weed establishment and expansion.

The ongoing and anticipated increase in recreational activities may contribute to the spread of noxious and invasive species. Limiting the supplemental feeding of riding and pack stock to certified, weed-free feed would decrease their contribution to weed infestation problems.

Rehabilitating small-scale surface disturbances would include methods such as soil decompaction, scarification, and pitting that could stimulate the growth of noxious and invasive weeds. Vegetation restoration projects may cause small, local disturbances that increase noxious and invasive weed populations. Motorized access could be authorized for ES&R, wildlife management, range project maintenance, or fire management; all of which could exacerbate weed establishment and spread.

Although healthy rangelands are less vulnerable to weed infestations, livestock can carry and disseminate noxious and invasive weed seeds. Monitoring of high risk areas, including salt licks

and watering sites, would help to identify possible infestations and allow for timely actions to minimize their effects. Livestock would normally be excluded from burned and reseeded areas to prevent livestock from trampling and grazing young plants until recovery objectives have been met (BLM 2008b).

The adaptive management provided for in the Proposed Action for managing weeds and invasive plants, combined with proper grazing management, would optimize the protection and restoration of wildlife habitat. Vegetation treatments and proper grazing management would help re-establish and maintain a balanced mixture of vegetation age classes and types essential for the habitat needs of wildlife species within the wilderness areas.

Natural: The Proposed Action incorporates guidelines to minimize or prevent the spread of noxious weeds and invasive species in wilderness areas. Successful implementation of these guidelines should substantially minimize the effects of modern civilization, thus preserving the natural wilderness character and protecting the ORVs.

The Minimal Management Alternative would neither prevent nor treat the infestation and spread of weeds and invasive species, and therefore, would neither preserve the natural wilderness character nor protect the ORVs.

Untrammeled: Noxious and invasive weed control activities would cause trammeling. The greatest and longest-lasting trammeling effects would occur from projects that include ground disturbance, such as blading, drill seeding, planting, motorized herbicide application, etc. Aerial seeding and herbicide application would have little or no trammeling effect.

The Minimal Management Alternative would cause few or no trammeling effects because prohibited uses identified in the Wilderness Act would be precluded.

Undeveloped: The Proposed Action would allow for larger treatment areas, thus having a greater positive effect on controlling weed and invasive plant populations. Motorized or mechanized activities, including motorized aerial and ground-based herbicide delivery, and mechanized equipment, would degrade the undeveloped character. Weed treatments that use backpack or horsepack delivery would not degrade this character.

While the Minimal Management Alternative would not adversely affect the undeveloped character, it would severely limit the number of acres that could be treated. This would likely result in a greater influx of noxious and invasive weeds, thus requiring more aggressive methods at a later date that include prohibited uses, which would further degrade the undeveloped character.

Outstanding opportunities for solitude and primitive and unconfined recreation: Noxious weed and invasive species treatments would temporarily impair opportunities for solitude and primitive and unconfined recreation. The use of any detect and destroy methods would include employees and/or equipment in the wilderness, which would degrade this character.

The Minimal Management Alternative would not impair this character as frequently, however, non-motorized and non-mechanized treatments of larger infestations may reflect a more obvious human intervention that has a longer-lasting effect. The Minimal Management Alternative would include employees and/or equipment in the wilderness every five years as opposed to the Proposed Action that is expected to include detect and destroy activities annually for very short periods of time.

2.8. Livestock Grazing-related Activities

What are the potential effects of authorizing continued livestock grazing in wilderness areas and WSRs?

Section 1503(b)(3) of the OPLMA provides for continued livestock grazing "…subject to such reasonable regulations, policies, and practices as the Secretary considers necessary…"

Section 1 of Appendix A of House Report 101-405 states in pertinent part the following:

> *"There shall be no curtailment of grazing in wilderness areas simply because an area is…designated as wilderness…Any adjustments in the numbers of livestock permitted to graze in wilderness areas should be made as a result of revisions in the normal grazing and land management planning and policy setting process, giving consideration to legal mandates, range condition, and the protection of the range resources from deterioration.*
>
> *It is anticipated that the numbers of livestock permitted to graze in wilderness would remain at the approximate levels existing at the time an area enters the wilderness system…"*

Since the WMP requires that livestock grazing be administered consistent with the Idaho Standards for Rangeland Health and Guidelines for Livestock Management, the Proposed Action should not cause a change in the condition of the vegetative resources. While we recognize that ecological conditions in some areas could be improved, adherence to the Idaho rangeland health standards would include periodic monitoring to ensure that livestock are not adversely affecting the ecosystem. Both alternatives prohibit the use of motorized or mechanized vehicles and equipment for livestock monitoring, herding, and gathering. As such, livestock grazing that meets Idaho rangeland health standards is consistent and compatible with the protection and preservation of wilderness character and with the protection and enhancement of WSR ORVs. Grazing within WSR corridors would be held to a higher standard to ensure that grazing does not adversely effect ORVs, including scenic, fish, and recreation.

Limited vegetation treatments integrated with proper grazing management would improve the overall ecological condition of sagebrush-bunchgrass sites as well as the understory vegetation of climax juniper sites in the North Fork Owyhee Wilderness. Soil and vegetation disturbance would decrease from reduced use of motor vehicles.

Though constraints on vehicles and equipment would not prohibit maintenance of existing facilities or response to emergency situations, it would hinder livestock monitoring and management by both operators and BLM staff. Both alternatives would inhibit the trend toward mechanization and efficiency in livestock monitoring and management. The Proposed Action would allow for the minimum motorized access needed for livestock grazing-related purposes, but the Minimal Management Alternative would provide no allowance except in emergencies.

The lack of motorized access for project maintenance or salt delivery under the Minimal Management Alternative would make it difficult for permittees to support the same number of AUMs without impacts to the vegetative resources within their allotments, which would impact the economic viability of their operations.

Natural: Livestock grazing conducted within rangeland health standards should have minimal effects to naturalness, except for the long-term effects around livestock concentration areas, such as salt licks and water sources.

Under either alternative, livestock grazing that occurs within constrained river canyon areas, limited though it may be, could result in overgrazing of riparian vegetation, incised "cow paths" along the banks, manure-strewn streamside campsites, and streambank trampling and shearing, all of which degrade WSR ORVs, including recreation, fish and scenic values. Due to lack of motorized access for livestock monitoring, vegetation may tend to be locally overgrazed, especially around riparian and wetland areas.

There is a potential for livestock to continually transport weed seeds into wilderness. Because of the "edge effect" discussed in the WMP, this risk is likely to increase over time. The only difference between the two alternatives is that the Proposed Action would seek to treat weed infestations.

Untrammeled: Livestock grazing, salt delivery, and project maintenance manipulate the environment and cause trammeling effects, especially along administrative travel routes and at livestock concentration points. Since grazing occurred long before wilderness designation, trammeling should not increase substantially, but the effect would be greater in the Proposed Action due to more vehicular use.

Undeveloped: Under either alternative, grazing should not affect the undeveloped wilderness character; however, the presence of grazing-related structures and improvements (i.e., fences, springs, reservoirs, pipelines, water troughs, etc.) detracts from the undeveloped wilderness character. Permanent structures and projects would have the same adverse effect in both alternatives.

Outstanding opportunities for solitude and primitive and unconfined recreation: Livestock are regarded by some individuals as being unnatural intruders on the native ecosystem, and thus, an impact to their solitude. This effect is aggravated at livestock concentration areas. These effects would be similar in both alternatives and would be considered localized, temporary, and recurring effects specific to the grazing season and to the affected pasture(s). Temporary effects would include livestock-related impacts within WSR corridors that detract from both solitude and unconfined primitive recreation, while also degrading recreation, fish, and scenic WSR ORVs.

What are the potential effects of authorizing occasional and limited use of motorized and mechanized vehicles and equipment for livestock grazing-related activities in wilderness areas?

The Proposed Action provides specific guidance for the maintenance and repair of livestock grazing-related facilities. Regular maintenance of range improvements and facilities would be distinguished from emergency operations. The Proposed Action is a result of efforts to work with wilderness grazing permittees under the guidance of Section 2 of the Congressional Grazing Guidelines (Appendix A of House Report 101-405, 1990) to identify and define the "rare and temporary" use of motorized vehicles that is considered the minimum necessary to support the livestock grazing activities provided for by the OPLMA.

Constraints on the use of vehicles and equipment under both alternatives would hinder livestock monitoring and management by both permittees and BLM staff, and would inhibit the trend toward mechanization and efficiency in livestock management. The Proposed Action would

allow for the minimum required motorized access for livestock grazing-related purposes, but the Minimal Management Alternative would provide no allowance except in emergencies. This would potentially reduce the number of AUMs that could be supported in affected allotments without adverse effects to vegetative resources, which would adversely affect the economic viability of some operations.

Natural: The use of motorized and mechanized vehicles and equipment for salt delivery and range project maintenance on existing administrative routes would cause short-term, localized, and minor impacts to the natural character by leaving tire tracks and ruts, and by suppressing vegetative establishment in the tracks. Vehicles would introduce non-native and weedy species into the wilderness, which could aggravate ongoing long-term and region-wide ecological impacts to native plant communities and habitat. Although, the Minimal Management Alternative would provide an avenue for weed infestation and spread through the use of horses, the level of influence on natural vegetation would be less (possibly much less) than the Proposed Action. Horses would also cause less soil compaction than vehicles.

Untrammeled: The use of motorized and mechanized vehicles and equipment for salt delivery and range project maintenance on existing routes would be considered a continued and long-term, but minor trammeling effect. Although legislatively protected, livestock management reflects man's influence on the landscape. The Minimal Management Alternative's greater restriction on vehicles and equipment would have fewer trammeling effects.

Undeveloped: The continued use of motorized and mechanized vehicles and equipment for salt delivery and range project maintenance under the Proposed Action would inhibit revegetation of administrative routes, and would maintain ongoing temporary and short-term effects to the undeveloped character for as long as permittees continue their current operations. The Minimal Management Alternative would have less short- and long-term impact due to much more limited use of motorized/mechanized vehicles and equipment.

Outstanding opportunities for solitude and primitive and unconfined recreation: The Proposed Action's allowance of motorized and mechanized vehicles and equipment would result in localized short-term and recurring effects to wilderness solitude. Limiting the use of motorized and mechanized vehicles and equipment to the minimum necessary would increase the reliance on primitive skills, including the use of riding and pack stock. The Minimal Management Alternative would protect this character more than the Proposed Action.

2.9. Recreation Management

What are the potential effects of designating, maintaining, and repairing trails?

Designated trails minimize environmental impacts and safety hazards, but reduce primitive and unconfined recreational experiences and outstanding opportunities for solitude by creating focused areas of concentrated public use. The six upland trails and five portage trails designated in the Proposed Action are currently used at levels high enough to warrant maintenance to protect resources and enhance visitor safety. The Parker and Roberson East trails each currently have erosion-based issues that warrant repair, which would be addressed pursuant to design criteria contained in the Proposed Action. The Minimal Management Alternative would leave the trails in their current degraded state, thus continuing and possibly exacerbating ongoing resource damage and safety concerns.

Two of the upland trails reflect the expectation for the system. The Tindall Trail has an estimated 73 visits per year based on 502 days of data collection. The Roberson East Trail has an estimated 226 visits per year based on 537 days of data collection. It is estimated that the other trails receive use levels similar to or less than these two trails. Maintenance and repair of the trails supports this level of use in a sustainable and safe way.

The Minimal Management Alternative would not designate trails. As such, visitors would continue to use their preferred routes. However, unmanaged trail use would create braided trails in response to eroded and muddy conditions, resulting in increased impacts to water quality, riparian health, and cultural resources. Also, BLM could be found wholly or partially liable for injuries incurred by persons using eroded or otherwise damaged trails (designated or not).

Natural: Trail designation would not affect broader ecological processes within wilderness areas. Site-specific emergency repairs, including construction of water bars, would have a long-term, localized and minor effect to the natural character. Trail maintenance would protect and preserve WSR recreation and fisheries ORVs by reducing erosion and resulting effects to off-site areas and water quality. The Minimal Management Alternative would continue the status quo and would not address resource issues such as excessive soil erosion due to a poorly located trail or lack of sufficient drainage.

Untrammeled: Trail maintenance that is limited to removal of fallen trees or rocks that pose safety hazards would not cause trammeling. Site-specific repairs, including construction of water bars, would impose a trammeling effect. The effect(s), however, would be negligible, and repairs would protect and preserve WSR recreation and fisheries ORVs by reducing erosion and resulting effects to off-site areas and water quality. Both alternatives would negatively affect this character because of the ongoing human influences on the environment. The effects of the Proposed Action would result from trail maintenance and repairs, while effects of the Minimal Management Alternative would result from eroding trails that result in trail braiding by users.

Undeveloped: Construction of waterbars would cause negligible to minor effects to the undeveloped wilderness character. The Minimal Management Alternative would have no effect on the undeveloped character.

Outstanding opportunities for solitude and primitive and unconfined recreation: Designated trails reduce primitive recreational experiences for visitors. They may also reduce opportunities for solitude by focusing visitor use into smaller areas.

What are the potential effects of restricting visitor activities in wilderness areas and WSRs?

Human activities, of whatever nature, have impacts on natural resources. Resource degradation adversely affects wilderness character and WSR ORVs. Without some level of management, visitor activities would cause increasing effects to wilderness and WSR values as activity levels increase. In both alternatives, visitor restrictions would reduce impacts to resources, and thus preserve and protect wilderness character and WSR values. Setting visitor capacity limits on floatable WSR segments in the Proposed Action would reduce crowding and help prevent user conflicts. These capacity limits sustain public access and enjoyment of the wilderness or WSRs while protecting or managing impacts to natural resources.

Natural: Visitor concentration areas would cause a negligible and localized effect to the natural wilderness character.

Untrammeled: Both alternatives impose use restrictions that reduce trammeling effects. By restricting the size and number of groups floating the WSRs, the Proposed Action would minimize soil and vegetation trampling and disturbance in streamside campsites in the short-term. By not setting visitor capacity limits, the Minimal Management Alternative would exacerbate user conflicts and related resource damage, potentially increasing trammeling effects.

Undeveloped: No effect.

Outstanding opportunities for solitude and primitive and unconfined recreation: Restrictions on visitor use in both alternatives would negatively affect primitive and unconfined recreation. Limits on group size and numbers in the Proposed Action would aid in preserving solitude by ensuring that river floaters experience fewer user contacts and conflicts. Limits on visitor numbers would also minimize related effects to wildlife, and would protect WSR water quality and outstandingly remarkable fisheries and scenic values. Within WSR corridors, outstanding opportunities for solitude and primitive recreation would be adversely affected by increasing visitor numbers in the Minimal Management Alternative.

2.10. Research and Monitoring

What are the potential effects of authorizing research or monitoring?

Watersheds upstream from the WSRs lie in three states (Idaho, Nevada, and Oregon) and consist of multiple jurisdictions, including private, state, and federal lands. Future upstream water developments would impair streamflows that support the identified WSR ORVs. High flows maintain the habitat (channel scouring and cleaning, deposition of nutrients into riparian areas, etc.) that supports the viability of fish populations. High flows also support recreational opportunities, primarily through boating. Low flows are necessary to support cold water biota during the dry, summer season by providing the habitat (i.e., pools, substrate, hiding cover) needed for the year-long survival of aquatic species. This is particularly important for the Bruneau and Jarbidge rivers, which are designated critical habitat for the threatened bull trout.

The biological needs for sufficient instream flow extend beyond the needs of fish. Other aquatic life and terrestrial wildlife depend on adequate instream flow to fulfill their biological requirements. Tennant (1976) found that maintaining 10% of the average flow provides for short-term survival of most aquatic life forms; maintaining 30% base flow provides good survival conditions for most aquatic life forms; and maintaining 60% base flow provides excellent to outstanding habitat for most aquatic life forms while they grow.

Aquatic macroinvertebrate survival is dependent on the extent, persistence, and quality of habitat (Waddle and Holmquist 2011). The extent, persistence, and quality of habitat is dependent on the volume of water in a stream. In their modeling effort, Waddle and Holmquist (2011) showed a loss of 26% of the wetted area as the discharge decreased from 0.085 to 0.014 m3/s. They also found clear, small decreases in percent of fauna represented by mayflies, stoneflies, and caddis flies and stonefly abundance with decreasing discharge and velocity, but change rates were greatest at low discharge. They did not find a change in the expected number of species with changes in discharge and velocity.

Natural: Information gained from research and monitoring would enhance decision-making regarding the effects of recreation and livestock grazing to naturalness to protect and preserve ecological patterns and processes. For instance, collecting streamflow data in the 16 WSR

segments would allow BLM to protect fish populations and aquatic habitat by establishing a priority claim to the waters of the state of Idaho that would prevent future water developments from diminishing required stream flows. This, in turn, would protect wildlife populations and habitats that rely on the existing aquatic systems.

Untrammeled: Installation of monitoring devices would impose a trammeling effect in the short-term. Information gained from water monitoring would aid in developing water right claims that would preserve minimum flows needed to support ORVs, and indirectly keep wilderness areas free from the effects of modern human control and manipulation from upstream water developments.

Undeveloped: The installation of monitoring devices would temporarily disturb the undeveloped wilderness character. The effect would be mitigated by the requirement that the devices be installed in a manner that is unobtrusive. Information gained from monitoring would aid BLM in protecting and preserving other wilderness and WSR values.

Outstanding opportunities for solitude and primitive and unconfined recreation: The Proposed Action allows research and monitoring activities when they benefit wilderness management. Research and monitoring activities may adversely affect solitude and primitive recreation temporarily during installation and operation. However, information gained from the activities would be used to improve overall wilderness and WSR management.

2.11. Mining-related Reclamation

What are the potential effects of mining-related reclamation activities in wilderness?

Natural: Soils and vegetation have been disturbed by past mineral exploration and development. Affected areas contain infestations of noxious and invasive weeds, as well as structures and discarded equipment, all of which detract from the natural character. Soil and vegetation disturbance associated with potential reclamation activities would continue adverse effects to the natural character, at least in the short-term. Successful restoration would improve naturalness in the long-term. Due to the potential for additional weed establishment and spread, however, improvement to the natural character would be minor and localized.

Untrammeled: Treatments aimed at removing abandoned structures and equipment, closing the mining claim access road, and rehabilitating mining-related soil and vegetation disturbance would impose trammeling effects in the short-term, but would serve to restore the untrammeled character in the long-term by removing or minimizing the effects of man dominating the landscape. Positive effects would take years to realize.

Undeveloped: The equipment necessary to restore the natural topography and condition of the landscape would degrade the undeveloped quality temporarily during the work. Closing and rehabilitating the mining claim access road and removing abandoned structures and equipment would help to restore the undeveloped character.

Outstanding opportunities for solitude and primitive and unconfined recreation: Reclamation activities would temporarily degrade wilderness solitude; however, a fully reclaimed site would improve visitor safety and increase opportunities for primitive and unconfined recreational experiences.

2.12. Wildlife and Fisheries Management

What are the potential effects of authorizing wildlife management activities in wilderness areas?

Natural: In general, wildlife management activities, including transplants (i.e., removal, augmentation, or reintroduction) would have a short-term effect on the natural wilderness character. Wildlife actions, however, would be designed to preserve the diversity of wildlife and the resilience of special status species, and as such, would serve to protect and preserve the natural character in the long-term.

Untrammeled: Habitat alteration needed to address adverse impacts of human activities on fish or wildlife populations would cause trammeling effects. The time period would depend on the type of alteration and how quickly the affected area responded to the treatment. The use of motorized equipment and landing of aircraft would also cause short-term trammeling.

Undeveloped: The use of motorized equipment, the landing of aircraft, and the development of facilities would degrade the undeveloped character in the short- or long-term, depending on the type of facility or structure.

Outstanding opportunities for solitude and primitive and unconfined recreation: The use of motorized equipment, landing of aircraft, or the temporary use of a structure would adversely affect wilderness solitude in the short-term. Installations would affect the primitive wilderness experience of visitors.

2.13. Cumulative Effects

The purpose of the cumulative effects analysis for the Proposed Action is to evaluate the combined, incremental effects of human activity within the scope of the project. The Council on Environmental Quality (CEQ) regulations define scope and state that connected actions, cumulative actions, and similar actions should be included in the effects analysis (40 CFR 1508.25). With the exception of wildfire suppression, noxious weed and invasive species management, and emergency stabilization and rehabilitation, the scope of the cumulative effects analysis will be restricted to an area that includes a one-mile buffer around each of the wilderness areas. The one-mile distance equates to the proximity of human activities that may affect wilderness character. This distance was chosen to represent the visual and sound intrusion that could be carried to and from canyon edges due to topography, as well as the heightened risk of wildfire, weed invasion, and non-native seedings that are currently in close proximity to the wilderness.

Actions related to wildfire suppression, noxious weed and invasive species management, and emergency stabilization and rehabilitation will include a scope that encompasses lands within the Lower Snake River region that pose a threat to wilderness character.

The 1997 CEQ Handbook Guidelines for Assessing and Documenting Cumulative Impacts states that the cumulative effects analysis can be focused on issues and resource values identified during scoping that are of major importance. Relevant issues identified for this project include the following:

Past actions (includes activities that have occurred since designation in 2009):

- Large wildfires that threaten wilderness and non-wilderness
- Jacks Fire Suppression and ESR (Big and Little Jacks Creek Wilderness)
- East Rock Fire Suppression and ESR (Bruneau-Jarbidge Wilderness)
- Kinyon Road Fire Suppression and ESR (Bruneau-Jarbidge Wilderness)
- Grasshopper Fire Suppression and ESR (North Fork Owyhee Wilderness)
- Fence repair and construction
- Livestock grazing operations
- Sign installation
- Streamflow monitoring device installation
- Whickney Tree Communication Site removal

Current and ongoing activities:

- Livestock grazing operations
- Monitoring (USGS and BLM)
- Commercial outfitting and guiding
- River floating and camping
- Hunting and fishing

Future actions (includes those that are reasonably foreseeable within the project area):

- Large wildfires that threaten wilderness and non-wilderness values
- Inholding acquisitions
- Upstream water development
- Development of a parking area along Mud Flat Road near Little Jacks Creek Wilderness
- Fuel treatments and fire breaks
- Travel Management Plan for Owyhee County
- Maintenance and repair of river access routes.

There are few activities in the Proposed Action that, when combined with other activities, result in a cumulative impact. These include:

1. Actions that may include motorized incursions.
2. Actions that may disturb soils, vegetation, or other natural or cultural resources.
3. Actions pertaining to land acquisition, and private and state land access and development.

Motorized wilderness incursions cause direct and indirect effects usually associated with noise and/or visitor experience and may affect untrammeled, undeveloped, solitude, and primitive wilderness character. Such operations pertain to grazing, mining, emergency access situations, wildfire suppression, emergency stabilization and rehabilitation, treatment of large weed infestations, or vegetation manipulation. An example of the direct effect would be a permittee entering a pasture to repair fence damage or for a large salt delivery. An estimated average of 200 incursions per year would occur within the wilderness areas, and the impact would be localized or limited in scope to the affected pasture(s) and area adjacent to the pasture (effects would not be realized outside of an estimated one-mile radius from the motorized activity, and no more than one mile from the wilderness boundary).

Cumulative impact may result from activities that occur simultaneously even when separated by space (up to one mile). However, there is a low probability for this cumulative impact to occur due to the low frequency of motorized incursions into the wilderness. The impact is considered negligible and is related mostly to authorized livestock operations. An example of the cumulative impact would be a hunter traveling within a mile from the permittee at the same time and just outside the wilderness. The combined actions would result in an annual cumulative effect within a localized portion of wilderness (pasture).

Authorized actions in wilderness may involve disturbance to soils, vegetation, or other natural or cultural resources. Actions considered for their contribution to cumulative impacts to natural resources include wildfire suppression, emergency stabilization and rehabilitation, large weed treatments, and livestock concentration areas. An example of the direct effect would be the application of sagebrush seed to 200 acres of wilderness to improve habitat for greater sage grouse.

A cumulative impact would only occur when two activities overlap in both time and space. There is a low probability for that to occur because such actions occurring within wilderness or WSR must be authorized by BLM. In addition, livestock grazing operations must adhere to the Idaho Rangeland Health Standards designed to prevent effects to vegetation community and ecosystem health. The cumulative effect could be described through an example in which a livestock concentration area is located within the same 200-acre seeding project area.

Other actions within wilderness that may have a direct effect include land acquisition, and private and state land access and development. An example of the direct effect would be the acquisition of land that contains a tributary stream to one of the WSRs. BLM's acquisition of this property reduces or eliminates the likelihood of subsequent water development that would reduce streamflow.

A cumulative impact may only occur if the two activities overlap in time and are connected through space. An example would involve a water right claim to develop a substantial water source upstream from the wilderness or WSR. The combination of an upstream water development and the acquisition of a property along the same WSR would cumulatively impact the streamflow needed to protect ORVs. By design, BLM taking action to secure water rights, monitor streamflow, etc. would help sustain wilderness and WSR values for future generations. The WMP does not allow water developments or land acquisitions without an environmental analysis that would reduce to a negligible level the potential for a cumulative effect.

In conclusion, cumulative impacts associated with past, present, or reasonably foreseeable actions within the analysis area would have an estimated negligible, but positive effect. When added to other foreseeable actions in the analysis area, management actions included in the Proposed

Action Alternative would preclude, minimize, or mitigate natural and human-caused impacts to natural resources and wilderness character.

2.14. Consultation and Coordination

2.14.1. List of Preparers

TJ Clifford, Outdoor Recreation Planner, Boise District

Casey Steenhoven, Park Ranger, Boise District

Seth Flanigan, NEPA Specialist, Boise District

John Sullivan, Supervisory Resource Management Specialist, Boise District

Gabriella Bermudez-Koch, Writer/Editor, Boise District

2.14.2. List of Reviewers

Arnie Pike, Field Manager, Bruneau Field Office

Brian Davis, Field Manager, Jarbidge Field Office

Loretta Chandler, Field Manager, Owyhee Field Office

Aimee Betts, Assistant Field Manager, Bruneau Field Office

Codie Martin, Assistant Field Manager, Jarbidge Field Office

Michele McDaniel, Assistant Field Manager, Owyhee Field Office

Dave Draheim, Outdoor Recreation Planner, Bruneau Field Office

Max Yingst, Outdoor Recreation Planner, Jarbidge Field Office

Ryan Homan, Outdoor Recreation Planner, Owyhee Field Office

Evan Worthington, Park Ranger, Boise District

Shane Wilson, Park Ranger, Jarbidge Field Office

Bruce Schoeberl, Wildlife Biologist, Bruneau Field Office

Michael Haney, Wildlife Biologist, Jarbidge Field Office

Jim Klott, Wildlife Biologist, Jarbidge Field Office

Brad Jost, Wildlife Biologist, Owyhee Field Office

Dave Mays, Fisheries Biologist, Bruneau Field Office

Kate Forster, Fisheries Biologist, Jarbidge Field Office

Lois Palmgren, Archaeologist, Bruneau Field Office

Jeff Ross, Archaeologist, Jarbidge Field Office

Kelli Barnes, Archaeologist, Owyhee Field Office

Thomas Stewart, Botanist, Jarbidge Field Office

Holly Beck, Natural Resource Specialist, Bruneau Field Office

Elizabeth Corbin, Natural Resource Specialist, Owyhee Field Office

Richard Jackson, Natural Resource Specialist, Owyhee Field Office

Kavi Koleini, Ecologist, Bruneau Field Office

David Keeler, Geologist, Bruneau Field Office

Forrest Griggs, Geologist, Owyhee Field Office

Mike Boltz, Rangeland Management Specialist, Bruneau Field Office

Jon Haupt, Rangeland Management Specialist, Bruneau Field Office

Ken Crane, Supervisory Rangeland Management Specialist, Jarbidge Field Office

Erik Kriwox, Rangeland Management Specialist, Jarbidge Field Office

Krystle Pehrson, Rangeland Management Specialist, Jarbidge Field Office

Tina Ruffing, Supervisory Rangeland Management Specialist, Owyhee Field Office

Lisa Claxton, Realty Specialist, Jarbidge Field Office

Justin Boeck, Lead Range Technician (Fire), Boise District

Brandon Brown, Supervisory Fire Management Specialist, Twin Falls District

Julie Hilty, Fire Ecologist, Twin Falls District

Dan Young, Land Surveyor, Boise District

Stan French, Supervisory Land Surveyor, Idaho State Office

Dick Todd, Realty Specialist, Idaho State Office

Fred Price, Water Rights Specialist, Idaho State Office

Robin Fehlau, Outdoor Recreation Planner, Idaho State Office

Terry Heslin, Outdoor Recreation Planner, Idaho State Office

Eric Mayes, NEPA Specialist, Idaho State Office

Judy Zuckert, Natural Resource Specialist, BLM Washington Office

2.15. Public Involvement

Public meetings were hosted by the BLM in the summer of 2011 to inform the public of the policies and regulations associated with Wilderness and Wild & Scenic River management. Input was solicited during these meetings and for several weeks afterward concerning wilderness-related issues and concerns, as well as the development of alternatives and management actions proposed in the WMP.

Additionally, the BLM consulted with affected livestock grazing permittees regarding their needs for access to manage livestock and maintain currently-authorized range improvement projects in wilderness allotments. These meetings resulted in the proposed actions associated with Livestock Management (Section 2.2.3.4, "Livestock Management-Related Activities" (p. 81)) in the WMP.

2.16. Agencies and Persons Consulted

The following agencies, organizations, and individuals were briefed or consulted with during preparation of the Draft WMP:

U.S. Geological Survey

Shoshone-Paiute Tribes

Owyhee Initiative Inc. Board of Directors

Owyhee County Commissioners

The grazing permittees in the grazing allotments discussed in Appendix D, *Wilderness Range Project Inventory Report* (p. 123) were consulted during development of the Wilderness Range Project Inventory Report.

Additional coordination or consultation with agencies, organization, and tribes will occur prior to the publication of the final decision.