

**UNITED STATES DEPARTMENT OF THE INTERIOR
BLM, BOISE DISTRICT**

EA #DOI-BLM-ID-B010-2010-0016-EA Title Page

Applicant (if any):		Proposed Action: The use of prescribed fire to reduce hazardous fuel accumulation along approximately 931 miles of fenceline within the Birds of Prey NCA and 67 miles in the Bruneau Field Office (998 total miles).		EA No. DOI-BLM-ID-B010-2010-0016-EA
State: Idaho	County(s): Ada, Elmore	District: Boise	Field Office (s): Four Rivers, Owyhee, Bruneau	Authority: NEPA, FLPMA, PRIA
Prepared By: Fuels ID Team		Title: Various		Report Date: 12/31/2009

LANDS INVOLVED

Meridian	Township	Range	Sections	Acres
Boise	XXX	XXX	multiple	~ 25,000

<u>Consideration of Critical Elements</u>	N/A or Not Present	Applicable or Present, No Impact	Discussed in EA
Air Quality			x
Areas of Critical Environmental Concern	x		
Cultural Resources			x
Environmental Justice (E.O. 12898)		x	
Farm Lands (prime or unique)	x		
Floodplains	x		
Migratory Birds			x
Native American Religious Concerns		x	
Invasive, Nonnative Species			x
Wastes, Hazardous or Solid	x		
Threatened or Endangered Species			x
Social and Economic		x	
Water Quality (Drinking/Ground)		x	
Wetlands/Riparian Zones		x	
Wild and Scenic Rivers (Eligible)	x		
Wilderness Study Areas/Lands with Wilderness Characteristics	x		

**Environmental Assessment # DOI-BLM-ID-B010-2010-0016-EA
Snake River Birds of Prey National Conservation Area (NCA)
and Center Allotment Fenceline Prescribed Burn**

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Environmental Assessment # DOI-BLM-ID-B010-2010-0016-EA
Snake River Birds of Prey National Conservation Area (NCA) and Center
Allotment Fenceline Prescribed Burns

1.0 Introduction

The NCA was established to conserve, protect, and enhance raptor (birds of prey) populations and habitats. It contains the greatest concentration of nesting raptors in North America and the greatest density of prairie falcons in the world. Common ecological sites in the NCA are; Silty, Loamy, and Sandy loams with 7-10 inches of available annual precipitation. Large areas have burned repeatedly in wildland fires over the last 20-30 years, resulting in the vegetation on many acres across the NCA being dominated by invasive exotic annual forbs; Russian thistle (*Salsola tragus*), annual kochia (*Kochia scoparia*) and invasive exotic annual grasses such as cheatgrass (*Bromus tectorum*) and medusahead wildrye (*Taeniatherum caput-medusae*). These weed infested areas are symptomatic of a collapsed ecosystem where processes such as wildland fire are not within their historical range of variability and the conversion of sagebrush steppe and salt-desert shrub plant communities to annual grasslands has occurred. The current Land Use Plan (LUP) for the NCA was completed and signed in September 2008. The primary focus of this plan is the restoration of sagebrush steppe plant communities and associated ecological processes. This proposal also includes lands adjacent to the NCA in the Bruneau Field Office (BFO), the current BFO LUP was signed in 1982.

The proposed action in this environmental analysis is aimed at reducing hazardous fuels (tumbleweeds) along fencelines within the NCA and on lands adjacent to the NCA in the BFO area (See Maps #1-3).

In the fall and winter seasons, Russian thistle, annual kochia, and tumble mustard (which collectively are known as tumbleweeds), cure and are blown by the wind and accumulate on fencelines. During the summer months these dried out weeds become highly-flammable fuel. This occurs regularly within the Snake River Birds of Prey National Conservation Area (NCA) and in portions of the BFO. As the plant skeletons accumulate, they become dense enough to block the flow of wind. This pressure can bend fence posts, but most often entire stretches of fence are pulled out of the ground due to the pressure from wind, effectively rendering the fence useless. Additionally, the dense accumulation expands outward from the fenceline and can partially or entirely block roadways, causing public safety concerns and also block movement of wildlife. These highly flammable fuels often approach or exceed hazardous levels, and if ignited, pose a threat to surrounding natural resources, firefighter, and public safety.

In 2002 an environmental analysis was conducted and a decision was made to allow for the reduction of hazardous fuels using prescribed fire along approximately 100 miles of fence within the NCA. The fences covered by this decision were predominantly in the Simco Road and Swan Falls Road areas. Hazardous fuel accumulations along fences are very common throughout much of the NCA and Center allotment south of the NCA. The ability to reduce these hazardous fuels across an area considerably larger than the original area analyzed has become apparent.

1.1 Need for and Purpose of Action

The purpose of this proposed action is to reduce the build-up of hazardous fuels and subsequent wildland fire hazard along fencelines within the NCA and the Center Allotment in the Bruneau Field Office area thereby providing a safer environment to conduct suppression operations during wildland fires and extending the life of, and investment in, the fences. Prescribed burning is proposed because it can successfully reduce fuels, is the least labor intensive method, and when conducted on a regular schedule during the appropriate season, is a relatively low-risk, cost-effective method of hazard reduction. If burn plan objectives are met during prescribed fire operations and fuel build-up along fencelines is eliminated, the proposal would reduce the potential risk of future wildland fire spread, intensity, and spotting potential. Reducing the potential spread and intensity of wildland fire when it occurs is needed to create a safer environment for firefighting personnel conducting fire suppression operations during the summer months, to reduce the probability of wildland fire threatening the general public, and to help protect natural resource values at risk. Removal of these weeds is also needed to alleviate public safety concerns along major travel corridors such as Simco and Swan Falls Roads.

Decisions to be Made

The NCA and Bruneau Field Office Managers will be the signatories for decisions pertaining to this EA. Two separate decisions will be issued from this EA; one will be whether or not to implement prescribed burning along 780 miles of fenceline that are outside of occupied or potential habitat for slickspot peppergrass. The other decision(s) will be whether or not to implement prescribed burning along 218 miles of fenceline in potential or occupied slickspot peppergrass habitat. The decision(s) pertaining to the slickspot peppergrass habitat will occur following receipt of a biological opinion from the U.S. Fish and Wildlife Service, and will incorporate any mitigating measures or design features to reduce potential risks to slickspot peppergrass plants or habitat.

1.2 Summary of Proposed Action

The proposed action would reduce hazardous fuels build-up (tumbleweeds) along approximately 931 miles of fenceline within the NCA and 67 miles of fenceline within the BFO Center grazing allotment over multiple years using prescribed fire. Prescribed fire operations would be conducted by qualified BLM personnel in the late fall, winter, and spring months as needed.

1.3 Location and Setting

The project area is located directly south of the town of Kuna and extends east of the town of Mountain Home. The southern border extends south of the Snake River. The project area includes areas in Canyon, Ada, Elmore and Owyhee counties (see Map #4). Elevation ranges between 2,255 feet and 3,645 feet. Historical climate data on record with the Western Regional Climate Center indicate the average annual precipitation at Swan Falls Dam weather station to be 7.88 inches, at Kuna 2 NNE 10.06 inches, at Mountain Home 9.97 inches, and at Bruneau 7.67 inches.

Prescribed burning would potentially occur along fences within the NCA boundary, and those associated with the Center allotment in the BFO where significant tumbleweed accumulations occur on a regular basis. Please see Maps #1-3 for site specific locations.

1.4 Conformance with Applicable Land Use Plans

The Proposed Action is in conformance with the NCA Management Plan Record of Decision signed September 2008. Specifically the objective for Wildland Fire Ecology and Management states, “Protection of native plant communities is one of the highest priorities for fire suppression”. Listed management actions in this section include, “Use a combination of prescribed fire, herbicides and mechanical treatments where appropriate, on all vegetation treatment projects, including ESR” (page 2-28).

The Proposed Action is also in conformance with the Bruneau-Kuna Management Framework Plan of 1983. Specifically, under Watershed Goals it states, “Manage all watersheds to achieve stable and, where feasible/economical, strive to maintain or establish good perennial vegetation cover.” Under the Wildlife (Terrestrial) Goals it states, “Use prescribed burning as the primary tool; for habitat management.”

1.5 Relationship to Statutes, Regulations, and Other Requirements

NEPA/Other Related Documents	Sections/Pages	Date Approved
Fenceline Environmental Assessment	ID-095-2002-EA-025	2002
Slickspot Peppergrass Conservation Agreement	9.04, 9.07 (pg. 24)	2006
Boise District Fire Management Plan	pg. 138	2005
Montana/Idaho Airshed Group Operating Guide	all sections	2008
Biological Assessment of Fenceline Burning Effects on Slickspot Peppergrass	All sections	In prep.

The following laws, executive orders, regulations, manuals, and policies provide the foundation for management of public land:

- *The Federal Land Policy and Management Act, 1976 (FLPMA), Title IV, Section 402*
- *The National Environmental Policy Act, 1969, as amended (NEPA)*
- *BLM Planning Handbook, H-1601-1*
- *Endangered Species Act, 1973, as amended (ESA)*
- *BLM Special Status Species Management Manual, 6840*
- Cultural Resource Laws and Executive Orders

Executive Order 13186 (2001) – The order directs Federal land management agencies to ensure management actions conserve and protect migratory birds consistent with existing migratory bird conventions, the Migratory Bird Treaty Act (16 U.S.C. 703-711), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Fish and Wildlife Coordination Act (16 U.S.C. 661-666c), the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), and the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347).

BLM is required to consult with Native American tribes to “help assure (1) that federally recognized tribal governments and Native American individuals, whose traditional uses of public land might be affected by a proposed action, will have sufficient opportunity to contribute to the decision, and (2) that the decision maker will give tribal concerns proper

consideration” (U.S. Department of the Interior, BLM Manual Handbook H-8120-1). Tribal coordination and consultation responsibilities are implemented under laws and executive orders that are specific to cultural resources which are referred to as “cultural resource authorities,” and under regulations that are not specific which are termed “general authorities.” Cultural resource authorities include: the National Historic Preservation Act of 1966, as amended (NHPA); the Archaeological Resources Protection Act of 1979 (ARPA); and the Native American Graves Protection and Repatriation Act of 1990, as amended (NAGPRA). General authorities include: the American Indian Religious Freedom Act of 1979 (AIRFA); the National Environmental Policy Act of 1969 (NEPA); the Federal Land Policy and Management Act of 1976 (FLPMA); and Executive Order 13007-Indian Sacred Sites. The proposed action is in compliance with the aforementioned authorities.

Southwest Idaho is the homeland of two culturally and linguistically related tribes: the Northern Shoshone and the Northern Paiute. In the latter half of the 19th century, a reservation was established at Duck Valley on the Nevada/Idaho border west of the Bruneau River. The Shoshone-Paiute Tribes residing on the Duck Valley Reservation today actively practice their culture and retain aboriginal rights and/or interests in this area. The Shoshone-Paiute Tribes assert aboriginal rights to their traditional homelands as their treaties with the United States, the Boise Valley Treaty of 1864 and the Bruneau Valley Treaty of 1866, which would have extinguished aboriginal title to the lands now federally administered, were never ratified.

Other tribes that have ties to southwest Idaho include the Bannock Tribe and the Nez Perce Tribe. Southeast Idaho is the homeland of the Northern Shoshone Tribe and the Bannock Tribe. In 1867 a reservation was established at Fort Hall in southeastern Idaho. The Fort Bridger Treaty of 1868 applies to BLM’s relationship with the Shoshone-Bannock Tribes. The northern part of the BLM’s Boise District was also inhabited by the Nez Perce Tribe. The Nez Perce signed treaties in 1855, 1863 and 1868. BLM considers off-reservation treaty-reserved fishing, hunting, gathering, and similar rights of access and resource use on the public lands it administers for all tribes that may be affected by a proposed action.

2.0 Description of Proposed Action and Alternatives

2.1 Alternative A - No Action

The no action alternative would consist of cessation of prescribed fire treatments occurring along fencelines outlined in ID-095-2002-EA-025 Fenceline Environmental Assessment. In the future no fencelines would be burned and hazardous fuel build-up would not be reduced within the Birds of Prey NCA and Bruneau Field Office area.

2.2 Alternative B - Proposed Action

The proposed action is to use prescribed fire to reduce hazardous fuel accumulation associated with the build-up of exotic invasive species along approximately 931 miles of fenceline within the NCA and 67 miles within the BFO Center grazing allotment (see Maps #1-3). Ignition operations would occur during late fall, winter, or early spring when risk of escape would be low due to high moisture content of adjacent vegetation. Ignition of hazardous fuels would not

continue if adjacent vegetation is out of the “green-up” stage or is “cured” to ensure that fire does not spread beyond the defined unit. Multiple engines would work each day in various locations over the course of approximately one month in an effort to complete a portion of the project annually. Ignition is expected to require 1 to 8 hours per day to complete, depending on site conditions at individual units. Several operational periods may be required to accomplish all segments in need of treatment in a given year. Staffing for the prescribed burns would include a minimum of six firefighters and two fire engines up to a maximum of twenty firefighters and six fire engines depending on the number of resources available to complete the years’ work and the number of fences in need of treatment. At the maximum rate of daily accomplishment engines and firefighting personnel would be grouped into three groups of two engines each across different fenceline units. Ignition would be ground based using hand ignition devices including drip torches, a terra-torch, and/or fussee launching pistols. Flammable material used for ignition in the terra torch would consist of a gas/diesel mixture with a gelling agent such as Flash 21 to make the mixture gel. Drip torches would contain the gas/diesel mixture only.

Daily accomplishments would vary depending on multiple factors including site conditions, weather, and available resources but could vary from half a mile up to thirty miles given favorable conditions. Accumulations of weeds, (predominantly Russian thistle), along both sides of a fenceline would be burned. Wooden fence posts, nesting boxes, and utility equipment would be cleared of debris and foamed or wetted down prior to ignition at the Burn Bosses’ discretion. Project units would be along fences with a 100ft area of impact on each side of the fence. The average width of the burned area along a fence line is 40 feet (20 feet on either side). Fire intensity would be high following ignition but the duration of this intensity would be short-lived and fuel would typically move into the smoldering phase of combustion within 2-5 minutes. Holding procedures would be at the discretion of the holding boss, with the engines following ignition personnel to provide a rapid suppression response to any fire outside of the unit boundaries. Any creeping of fire into plant litter and or duff adjacent to the burn would be extinguished immediately by fire personnel and there would be no potential for escape by the time personnel leave the prescribed fire area. In the event of an escaped prescribed fire, general suppression techniques for spot fires and slop-overs outside the burn units would be used.

Soil conditions during burning operations would be either frozen or firm. Disturbance caused by project vehicles would be kept to a minimum. Project vehicle travel would be restricted to roads and existing trails or within 100 feet on either side fencelines whenever possible. Prescribed burning personnel would comply with the Montana/Idaho Airshed Group requirements for smoke management. The decision to burn on a particular day would be based in part on whether the meteorologist with the Montana/Idaho Airshed Group approves the day’s smoke emissions based on local atmospheric conditions and other planned prescribed fire operations in the immediate region.

Slickspot peppergrass is an annual or biennial plant listed in 2009 by the US Fish and Wildlife Service (USFWS) as a threatened species (74 FR 194). Populations of slickspot peppergrass (*Lepidium papilliferum*) have been documented along portions of the 998 miles of proposed fenceline burning within the NCA and Center grazing allotment. Approximately one-fifth (218

miles) of the proposed fenceline in the NCA and Center grazing allotment is currently identified as occurring on occupied or potential habitat for slickspot peppergrass (see Maps #5-6). Occupied habitat is defined as a one-half mile radius from element occurrences (EOs). Potential habitat was initially delineated by soil mapping, and is now in the process of being refined with ground surveys for slickspots. Following surveys, if no slickspots are found to occur in an area, it is withdrawn as potential habitat. Where slickspots are found, monitoring is conducted for three years with normal climatic conditions to determine if plants occupy the slickspot.

The Boise District BLM has entered into formal consultation with the USFWS to address potential effects of the proposed action on slickspot peppergrass plants and habitat. Approximately 780 miles of fenceline proposed to be burned is located outside of potential or occupied habitat and therefore are not included in the consultation process. Locations of slickspots and element occurrence (EO) locations within 100 ft of fences in the project area would be identified on a map and included in the burn plan in advance of annual ignition operations. Operational equipment and personnel would avoid driving or walking through these areas with slickspots during ignition operations.

Several other plant species on the BLM Special Status list occur within close proximity to fences, especially south of the Snake River and west of Swan Falls Dam. Ignition operations would be seasonally restricted in these areas (Map #7) to occur between November and February, which is generally prior to plant emergence to avoid direct impacts to the species.

There would be no fenceline prescribed burning activities within one-half mile of occupied golden eagle or prairie falcon nest sites during the months of January, February, March, or April. No fenceline prescribed burning activities within one mile of occupied ferruginous hawk nest sites would occur during the months of January, February, March, or April. Burning within one-half mile (golden eagle, prairie falcon) or one mile (ferruginous hawk) of these nest sites would occur in the fall, which is outside the breeding season and would minimize the potential for disturbance of these birds to negligible levels. At unoccupied ferruginous hawk nest tree/platform enclosures, tumbleweeds would be pulled away and burned in piles to protect trees and platforms.

No fenceline prescribed burning activities would occur within the Guffey Butte/Black Butte Historical Preservation District during any season (see Map #8 for Historical Preservation District location).

New fences within the NCA or Center allotment established during emergency rehabilitation and stabilization activities following wildland fire would be evaluated for tumbleweed build-up on a regular basis and would be included in the prescribed burning rotation if needed following completion of required clearances and the determination of NEPA adequacy (DNA) process.

3.0 Affected Environment and Environmental Consequences

3.1 Air Quality

3.1.1 Affected Environment – Air Quality

Limited data is available on the air quality of the Birds of Prey NCA because no air quality stations are operating within its' boundaries. Northern Ada County surrounding Boise is directly north of the project area and is designated a Limited Maintenance Area for both Carbon Monoxide (CO) and Particulate Matter (PM₁₀) by the Idaho Department of Environmental Quality (IDEQ). Data gathered at a field study station directly south of the project area near Silver City in Owyhee County (CH2M Hill 1994, pp3-69 to 3-70) indicates that levels for particulate matter are well below the current federal and state 24-hour standard of 150 µg/m³. Other pollutants across the project area, though not monitored, are believed to be below the federal and state standards due to a lack of emission sources.

Sources affecting air quality across the project area include BLM prescribed fires, Idaho Army National Guard training activities, and gravel/other material operations (fugitive dust from roads, construction, crushing, sieving, and other related operations). Other activities that remove vegetation and create fugitive dust include vegetation treatments using a plow and/or drill, livestock grazing, and off-highway vehicle use.

3.1.2 Environmental Consequences – Air Quality

Alternative A – No Action

The No Action alternative would not result in direct impacts to air quality. However, the build-up of hazardous fuels along fencelines could make the containment of wildland fire more difficult and dangerous making larger wildland fires across the NCA and BFO more probable. A large wildland fire occurring during the hot months of the year could result in large quantities of smoke in the air for extended period of time. Smoke from a wildland fire event could potentially negatively affect the air quality of IDEQ designated PM₁₀ limited maintenance areas and/or impact zones such as the city of Boise.

Alternative B- Proposed Action

The removal of tumbleweeds from fencelines using prescribed fire would cause short-term localized adverse impacts to air quality during and immediately following implementation activities. These effects would likely last two or three hours but could last as long as 24 hours if smoke settles into lower elevation areas over night. Smoke production would range from 0.73 to 43.6 tons of PM₁₀ and 0.24 to 14.5 tons of PM_{2.5} in a twenty-four hour period depending on how many miles of fenceline is burned during any one operational period. Burning within prescription and participating in the Montana Idaho Airshed Group Prescribed Fire Program would keep airshed emission levels within the IDIQ's air quality standards.

3.2 Cultural Resources

3.2.1 Affected Environment – Cultural Resources

Parts of the NCA and parts of the BFO have been surveyed for cultural resources for decades. Large scale surveys performed after wildland fires and prior to re-seeding projects have recorded a wide variety of historic and prehistoric sites within the NCA and the BFO. Previous surveys have also been conducted along proposed fencelines, roadways and for other projects. Recorded site types include: the Guffey Butte – Black Butte Archaeological District (see Map #8), lithic scatters, can scatters, bottle scatters, cairns, camp sites, other types of sites and isolated artifacts.

3.2.2 Environmental Consequences – Cultural Resources

Alternative A – No Action

The No Action alternative would result in no direct impacts to cultural resources. However, an indirect impact could be the build-up of hazardous fuels along fencelines that could make the containment of wildland fire more difficult and dangerous to fight while making larger wildland fires across the NCA and the BFO more probable. A large wildland fire occurring during the hot months of the year could result in higher burning temperatures that would consume and scorch a larger number of cultural sites and adversely impact those sites more intensively. The scope of these fires would be a landscape size with a high intensity of effects and a long duration of impacts.

Alternative B - Proposed Action

The direct impacts to cultural resources caused by the burning of tumbleweeds along the fencelines could include consumption of burnable artifacts, partial burning of some artifacts and scorching of other artifacts. Another direct impact would be the driving and parking of vehicles required to plan, ignite, burn and mop up for these prescribed burns. These negative impacts are local in scope and judged to be of high intensity and of short duration.

The indirect impacts to cultural resources caused by the burning of tumbleweeds along fencelines could include uncovering hidden cultural resource sites as the vegetation is burned away. This removal of vegetation could be positive as it would allow additional sites to be recorded in the cultural resource database, but it could also trigger unauthorized artifact collecting as a negative impact to cultural resources.

The Proposed Action is designed to exclude burning within the Snake River Canyon and the Guffey Butte – Black Butte Archaeological District therefore; there would be no impacts to these areas during the burning of tumbleweeds.

The prescribed fires are not expected to adversely impact the characteristics that define lithic scatters, can scatters, bottle scatters and cairns. Some of the recorded sites have already been burned in previous wildland fires.

3.3 Soils

3.3.1 Affected Environment – Soils

Soils within the NCA occur on nearly level to strongly sloping basalt plains and alluvial terraces, and were formed in alluvium and residuum derived from sedimentary materials and loess. Surface soil textures range from loams and silt loams to sandy loams. Duripans are common at differing depths in the soil profiles. Wind and/or water erosion potential ranges from low to high depending on surface texture and slope. Many areas throughout the NCA are in a degraded ecological condition where invasive annual grasses and weedy annual forbs dominate and soils are exposed to accelerated rates of wind erosion.

Biological soil crusts occur on the soil surface in the open spaces between vascular plants within portions of the native shrub areas of the NCA. They are composed of cyanobacteria, green algae, lichens, mosses, micro fungi, and other bacteria. These crusts function as living mulch helping to retain soil moisture and discouraging weed and annual grass germination and growth. They help to stabilize and protect soil surfaces from erosive forces, fix atmospheric nitrogen, and contribute to soil organic matter. The crusts are able to persist for several years in areas dominated by cheatgrass, but overtime biological soil crusts become severely depleted or lost, especially where the fire return interval is reduced to less than 10 years.

3.3.2 Environmental Consequences – Soils

Alternative A – No Action

The No Action alternative would directly affect any biological crusts on soils immediately adjacent to fencelines by allowing tumbleweeds to build up and create shaded zones where the reception of sunlight and moisture is inhibited. The build-up of hazardous fuels along fencelines could make the containment of wildland fire more difficult and dangerous making larger wildland fires across the NCA and BFO more probable. A large wildland fire occurring during the hot months of the year could result in accelerated loss of topsoil to erosion processes and the mortality of biological crusts across thousands of acres (especially mosses and lichens). These areas are often invaded by annual grasses and weeds following wildland fire making biological crusts even more susceptible to mortality and/or loss from wildland fire in the future.

Alternative B - Proposed Action

Biological soil crusts are generally killed when ground fires are of high intensity and/or long duration. Frequent fire can prevent recovery of lichens, mosses, and most cyanobacteria (Whisenant 1990, Eldridge and Bradstock 1994). Mechanical disturbance by humans and vehicles can reduce lichen/moss cover and species richness of crusts (Harper and Marble 1988, West 1990, Johansen 1993, Eldridge and Greene 1994, Ladyman and Muldavin 1996). Compaction of soils can influence soil water and nutrient-holding capacity, which can lead to changes in soil crust community species composition. Crust disruption often destabilizes underlying soils, leaving adjacent crusts vulnerable to burial by wind and water-moved sediments which can kill mosses and lichens (Campbell 1979). The proposed action would negatively affect the biological crusts on soils which occur directly within or immediately adjacent to the project units. The loss of crusts within this 200 foot wide zone along fencelines could occur due to shortened fire return intervals, mechanical disturbance, soil compaction, and

burial. Repeated prescribed fire in the same locations would prevent the establishment and/or recovery of crusts. Fuel loads along fencelines can be heavy in some years yet dried tumbleweeds burn quickly so fire would kill many lichens and mosses but would not be present in one location long enough to completely sterilize the soil. Soil disturbance and compaction would primarily occur where fire engines and ignition personnel travel. In many locations travel would be restricted to existing two-track roads adjacent to fencelines where crusts are already absent. Some crusts immediately adjacent to areas of mechanical disturbance could become buried under wind or water moved soil.

3.4 Vegetation including Special Status Species and Invasive Annuals/Noxious Weeds

3.4.1 Affected Environment – Vegetation

Native shrubs including Wyoming big sagebrush (*Artemisia tridentata* var. *wyomingensis*), basin big sagebrush (*Artemisia tridentata* var. *tridentata*), winterfat (*Krascheninnikovia lanata*), and shadscale (*Atriplex confertifolia*) comprise an estimated 37% of the vegetation cover in the NCA. Less common native shrubs within these plant communities include rabbitbrush (*Chrysothamnus* spp.), broom snakeweed (*Gutierrezia sarothrae*), Gardner saltbush (*Atriplex gardneri*), bud sagebrush (*Picrothamnus desertorum*), greasewood (*Sarcobatus vermiculatus*), and spiny hopsage (*Grayia spinosa*). Downy brome (*Bromus tectorum*) an invasive annual grass otherwise known as “cheatgrass” and bur buttercup (*Ceratocephala testiculatus*) dominate the understory of approximately 4% of these shrub covered areas and can be found as a co-dominant or minor component across the rest of this acreage. Native grass species include Sandberg’s bluegrass (*Poa sandbergii*), bluebunch wheatgrass (*Pseudoroegneria spicata*), bottlebrush squirreltail (*Elymus elymoides*), Indian ricegrass (*Achnatherum hymenoides*), Thurber’s needlegrass (*Achnatherum thurberianum*), and Basin wildrye (*Leymus cinereus*). Common native forbs include larkspur (*Delphinium* spp.), globemallow (*Sphaeralcea grossulariifolia*), and milkvetch (*Astragalus* spp.).

Approximately 7% of the NCA has been seeded following wildland fire since 1995. Emergency stabilization and rehabilitation seedings established prior to 1995 included crested wheatgrass (*Agropyron cristatum*), while post-1995 seedings included Russian wildrye (*Psathyrostachys juncea*) and Siberian wheatgrass (*Agropyron fragile*). Sagebrush seed has been broadcast onto seeded areas since the late 1980’s, and four-wing saltbush (*Atriplex canescens*) was added to the seed mixes in some areas. Forage kochia (*Bassia prostrata*) has been seeded along several major roadways as “greenstrips” to aid in the control of wildland fire, and across hundreds of rehabilitated acres.

The remaining 56% of the NCA is comprised of areas where wildland fire and/or other disturbances have eliminated shrubs and most perennial grasses. Cheatgrass and other exotic plants such as Russian thistle, bur buttercup, halogeton (*Halogeton glomeratus*), and annual mustards (*Brassica* spp.) dominate. Approximately 3% of these areas have been classified as bare ground.

Vegetation composition on lands within the Bruneau Field Office is very similar to the NCA. Wyoming big sagebrush is currently the dominant overstory species across approximately 71 %

of the Center allotment. Several fires burned across this area over the last 20 years and consequently the remaining 29% of this area is composed of a mosaic of introduced and native perennial grasses, cheatgrass, and other exotic plants.

Several plants on the Idaho State Noxious Weed List are known to occur within the project area. These include rush skeletonweed (*Chondrilla juncea*), whitetop (*Cardaria draba*), Russian knapweed (*Acoptilon repens*), diffuse knapweed (*Centaurea diffusa*), Scotch thistle (*Onopordum acanthium*) and Canada thistle (*Cirsium arvense*). Known occurrences are monitored and/or treated through the Boise District BLM noxious weed program.

Special Status Species - Slickspot peppergrass (*Lepidium papilliferum*), a federally threatened plant species is the only threatened or endangered plant species known to occur in the project area. Approximately one-fifth of the total project area is currently considered either occupied or potential habitat (218 miles of fenceline). A small area in the northern portion of the Center allotment has also been identified as potential habitat for slickspot peppergrass (based upon soil survey information) however, no populations are known to occur here or nearby.

There are 24 element occurrences (EO) of slickspot peppergrass within the NCA, not all of which occur along fencelines. Management areas (MA) for slickspot peppergrass have been designated to include most of the EOs in southwestern Idaho. The Management Area with the highest concentration of EOs occurs in the northwestern portion of the NCA. The narrow edaphic requirements of slickspot peppergrass restricts where it can grow. Slickspots inhabited by slickspot peppergrass formed during the Pleistocene epoch and possess unique properties, they are identified by having a near-surface layer of soluble sodium salts, a thin vesicular surface crust and a shallow well developed argillic (clay) horizon (Fisher et.al.1996).

Known threats to slickspot peppergrass and habitat across its range are invasive exotic annual plants, fire, development, and livestock. Frequent wildfires favor the increase of invasive exotic annual plants, and weaken perennial plants by limiting their ability to fully recover and eventually results in mortality. Conversely, annual plants typically complete their lifecycle before fires occur, and seeds are in place to establish a new generation of annuals. The overall trend of slickspot peppergrass is downward (74 FR 194).

Within the project area, approximately 15-20 % of slickspot peppergrass habitat has become dominated by invasive non-native annual grasses and forbs. The conversion of this amount of habitat to unsatisfactory condition elevates the need to protect the remaining areas of intact habitat.

The U.S. Fish and Wildlife Service (USFWS) considers all of Idaho to be within the potential range of Ute ladies'-tresses (*Spiranthes diluvialis*), a federally threatened orchid species that occurs in spring, seep, and riparian habitats. However, due to the difficulty in narrowly defining potential habitat for this species, the USFWS has chosen to apply a loose definition and requires Section 7 consultation in only three counties of southeast Idaho or in areas where the plant is actually found (USFWS 2002). Surveys for this plant are recommended prior to authorizing federal actions in southwest Idaho, but not required. Habitat for Ute ladies'-tresses does not occur in the project area.

Other special status plant species known to occur within, or immediately adjacent to the project area are;

EOs	Common Name	Scientific Name	Status
5	Mulfords milkvetch	<i>Astragalus mulfordiae</i>	Type 2
7	Packards buckwheat	<i>Eriogonum shockleyi</i> var <i>packardiae</i>	Type 2
2	Malheur prince's plume	<i>Stanleya confertiflora</i>	Type 2
9	Wovenspore lichen	<i>Texosporium sancti-jacobi</i>	Type 2
7	Greeley's wavewing	<i>Cymopterus acaulis</i> var <i>greeleyorum</i>	Type 3
5	Matted cowpie buckwheat	<i>Eriogonum shockleyi</i> var <i>shockleyi</i>	Type 3
10	Spreading gilia	<i>Ipomopsis polycladon</i>	Type 3
48	Davis peppergrass	<i>Lepidium davisii</i>	Type 3
7	Annual brittlebush	<i>Psathyrotes annua</i>	Type 3
4	American wood sage	<i>Teucrium canadense</i> var <i>occidentale</i>	Type 3
1	Janishs penstemon	<i>Penstemon janishiae</i>	Type 3
18	Desert pincushion	<i>Chaenactis stevioides</i>	Type 4
7	White eatonella	<i>Eatonella nivea</i>	Type 4
26	White-margined wax plant	<i>Glyptopleura marginata</i>	Type 4
8	Rigid threadbush	<i>Nemacladus rigidus</i>	Type 4
6	Spine-noded milkvetch	<i>Peteria thompsoniae</i>	Type 4
28	Snake River milkvetch	<i>Astragalus purshii</i> var <i>ophiogenes</i>	Type 5

Plants with Type 2 status are species that have a high likelihood of being listed in the foreseeable future due to their global rarity and significant endangerment factors. Plants with Type 3 status are species that are globally rare with moderate endangerment factors. Plants with Type 4 status are species that are generally rare in Idaho with small populations or localized distribution and currently have low threat levels. Type 5 status plants include species that may be added to the sensitive species list depending on new information concerning threats and species biology or statewide trends. Type 5 species are not considered BLM sensitive species, and associated sensitive species policy guidance does not apply.

3.4.2 Environmental Consequences - Vegetation

Alternative A – No Action

The No Action alternative would directly affect all vegetation immediately adjacent to fencelines by allowing tumbleweeds to build up and create shaded zones where the reception of sunlight and moisture is inhibited. The build-up of hazardous fuels along fencelines could make the containment of wildland fire more difficult and dangerous making larger wildland fires across the NCA more probable. A large wildland fire occurring during the hot months of the year could result in the mortality of any remaining native shrub stands across thousands of acres. These areas are often invaded by annual grasses and weeds following wildland fire making native grasses, forbs, and shrubs even more susceptible to mortality and/or loss from wildland fire in the future.

Special Status Species - Impacts to slickspot peppergrass and other special status plant species under this alternative would include the continued degradation of intact habitat along fencelines from the persisting accumulation of tumbleweeds. The amount of accumulated plant material would continue to eliminate the potential for native plant communities to grow near the fencelines by blocking sunlight and water. Additionally, the accumulation of weed skeletons would deposit seeds along fencelines and once germinated would compete with any native or perennial species that might persist. In the event of an ignition source under the proper environmental conditions, the mass of plant material would burn readily and the fire would likely spread to intact native vegetation, resulting in a loss of habitat.

Not burning the accumulations of tumbleweeds along fencelines would have a negative effect on slickspot peppergrass and other special status plant species that occur within the project area by allowing the seed source from invasive exotic annual forbs to continue to accumulate and spread. Russian thistle, annual kochia, and tumble mustard (*Sisymbrium altissimum*) occur commonly throughout the project area and in some areas are the dominant vegetation. The lifecycle and adaptations of these plants make them very successful at seed dispersal and enhance their ability to invade areas. These early colonizers create an especially large threat to special status plants which are not adapted to be generalists.

Alternative B- Proposed Action

In many areas throughout the NCA native grasses and forbs are depleted or no longer exist. In the project area where a perennial plant community exists, fences do not typically become full of tumbleweeds; rather the weeds become lodged amongst the shrubs. Therefore, burning and/or trampling by vehicles and/or personnel is unlikely to occur as a result of the proposed action in these areas. The invasion of cheatgrass, noxious weeds, and weedy forbs (bur buttercup, Russian thistle, tumble mustard, annual kochia) could occur in those few areas where perennial plants are lost could due to the implementation of the proposed action. Wyoming big sagebrush, basin big sagebrush, winterfat, and shadscale are easily killed by extreme heat and fire and would decrease in cover and density in areas where shrubs occur within twenty to thirty feet on either side of a fenceline (Fischer et al. 1996, Wambolt and Payne 1986, Pellant and Reichert 1984, Banner 1992). Rabbitbrush re-sprouts following fire, however repeated treatments over time could reduce its' cover and density along fencelines as well. Fencelines are cleared of shrubs during construction so shrub density and cover in most project units is already low or not present.

Populations of noxious weeds may increase following fenceline burning. The BLM will monitor burned areas for new occurrences and treat them upon discovery and in subsequent years to ensure the proposed action does not result in the spread of these species in the project area.

Special Status Species – The Boise District BLM has entered into formal consultation with the USFWS to address potential effects of the proposed action on slickspot peppergrass plants and habitat along approximately 218 miles of fenceline. This portion of fencing proposed for burning occurs within occupied or potential slickspot peppergrass habitat and will not be treated until consultation is complete. Slickspot and element occurrence (EO) locations within 100 ft of fences in the project area would be identified on a map and included in the burn plan in advance

of annual ignition operations. Operational equipment and personnel would avoid driving or walking through areas with slickspots during ignition operations.

Burning tumbleweeds off fencelines will result in high intensity heat on the soil surface for a short period of time. Slickspot peppergrass seeds, which could potentially be present on the soil surface, may be negatively affected. There is a lack of literature to show the effects of fire on slickspot peppergrass seeds, however, since they require a freeze period prior to germination to scarify the seed coat, it is assumed that the seed coat is rather durable and may not be fatally effected by a relatively quick burn over.

Burning accumulations of tumbleweeds along fencelines would benefit slickspot peppergrass and other special status plant species that occur within the project area by reducing the amount of seed source from invasive non-native annual forbs. Burning during November through February, prior to emergence, would sufficiently reduce potential impacts to special status plants with an annual growth form. The potential impacts to other special status perennial plants would be outweighed by the benefits of controlling the amount and distribution of tumbleweeds. Burning operations would occur prior to the growth period of these plants and areas with intact sagebrush would not be directly ignited, thereby limiting potential impacts. Areas where intact slickspot peppergrass habitat exists (i.e., native plant community) adjacent to a fence would be withdrawn from consideration to burn, in part because these areas pose too great a risk of fire escaping and damaging intact habitat. Intact habitat is critical to maintaining special status plants. The loss of this habitat has occurred across the project area in the recent past, and fence burning across the project area as a whole would be a proactive step to attempt to protect and maintain existing habitat.

3.5 Wildlife including Special Status Species

3.5.1 Affected Environment – Wildlife

Habitat and species diversity in the Center Allotment closely reflect the NCA and effects of the alternatives would be the same. The one exception is greater sage-grouse, which no longer occur with the NCA but this species occupies habitat in the southern portion of the Center Allotment. Additionally, habitat for raptor nesting in the Bruneau River Canyon (northern boundary of Center Allotment) resembles habitat found in the Snake River Canyon. For these reasons, the Center Allotment is not discussed separately in the wildlife portion of this EA except in regards to sage-grouse.

The NCA supports a great diversity of wildlife species, including several Special Status Species (SSS) that exist in the diverse habitat types present in the NCA. The NCA was established in 1993 to conserve, protect, and enhance the densest known nesting population of raptors in North America and their habitats. The raptors are attracted to the area for the abundant numbers of prey and available nesting habitat. In addition to having the highest density of raptors in North America, the NCA is also noted for having one of the highest densities of ground squirrels ever recorded, and the Piute ground squirrel is a critical food source during late winter, spring, and early summer for many of the NCA raptor species – most notably prairie falcons. No pygmy rabbits are known to inhabit the NCA, although they have been documented in the past. A few greater sage-grouse have been documented in the NCA on the north side of I-84, but none are

known or thought to exist in the NCA south of I-84. A complete description of species and their associated habitats can be reviewed in the Snake River Birds of Prey National Conservation Area Final EIS (2008).

While the NCA provides habitat for over 300 wildlife species, the species included in this EA are representative of species guilds. A guild is a group of species that utilize habitat or resources in a similar manner that may or may not be closely related. For this EA, the following guilds will be used:

- Golden eagle is used to represent potential effects to resident raptors;
- Prairie falcon is used to represent potential effects to migratory raptor species;
- Greater sage-grouse is included in the analysis but it does not represent a guild of species;
- Brewer's sparrow is used to represent migratory landbird species;
- Yellow-billed cuckoo is discussed in this EA because suitable habitat may occur within the boundaries of the NCA (along the Snake River corridor). However, this species is not included in the analysis because the proposed action would not affect suitable habitat;
- Woodhouse's toad is used to represent potential effects to amphibians;
- Longnose snake is used to represent potential effects to reptiles;
- Piute ground squirrel is used to represent potential effects to fossorial (burrowing) and semi-fossorial mammals;
- Black-tailed jackrabbit is used to represent potential effects to above ground small mammals;
- Pronghorn antelope is used to represent potential effects to larger mammals;
- Bruneau Hot Springsnail is discussed in this EA because of its proximity to the Center Allotment but it is not included in the analysis because the proposed action will not impact the species;
- Bull trout is discussed in this EA because of its proximity to the Center Allotment but it is not included in the analysis because the proposed action would not impact the species or designated critical habitat.

In addition to simply representing their respective guilds, these species were chosen because of their importance in the ecosystem, their listing status, or their potential to utilize the cover provided by the thick conglomerations of Russian thistle that have accumulated along fence lines. Current conditions and the effects analysis apply to all species within a guild. Riparian and aquatic species were not included in the analysis because none or a negligible amount of these habitats would be affected by the proposed actions.

Since 1979 over 300,000 acres of upland shrub habitat has been lost to fire in the NCA. This has led to drastic changes in habitat conditions (see section 3.4 above) and reduced population numbers for many species of wildlife in the NCA, including prey species for raptors. Currently, thousands of acres provide marginal to poor habitat conditions for most species in the NCA. The buildup of tumbleweeds along fence lines provides little, if any suitable habitat for most species but the edge is likely used by some wildlife.

Tumbleweeds have been removed in various areas along fencelines in an effort to determine if the masses of weeds were being utilized by wildlife. There were no visible signs of wildlife use

and burrows that were uncovered appeared old and unused, which indicates they were likely established before the tumbleweeds built up along the fencelines. The weeds are so thick in some areas that they likely act as a barrier to some species such as jackrabbit, coyote, bobcat, deer and antelope.

There is sparse to no vegetation growing below or in the accumulations or masses of tumbleweeds along the fencelines. Since desirable vegetation is not able to grow along the fencelines that are choked with tumbleweeds, suitable habitat for wildlife is not able to develop.

Current Condition of Guild Populations and Their Habitat

Golden Eagle (Information taken from the NCA FEIS 2008) – In the NCA, eagle productivity is closely associated with the black-tailed jackrabbit population cycle. When rabbit numbers are high, eagle productivity is also high; more pairs lay eggs, more pairs are successful, and more young fledge (Steenhof *et al.* 1997, pp 354-360). Good jackrabbit habitat is an important component of good eagle habitat in the NCA. Other important eagle prey in the NCA includes Nuttall's cottontail, ring-necked pheasant, yellow-bellied marmot, and Piute ground squirrel (USDI 1979a, p 73, Steenhof and Kochert 1988, p 44). The golden eagle is a resident species and mostly hunts within two miles of its nest (Dunstan *et al.* 1978, p 98; and Marzluff *et al.* 1997b, pp 673-686).

The number of golden eagle pairs showed a slight but significant negative trend between 1971 and 2004, but the decline has not been continuous. The number of nesting pairs remained relatively stable—between 34 and 35—from 1971 to 1976. The number of pairs decreased to 29 pairs between 1977 and 1979 and remained stable from 1979 to 2004, ranging between 29 and 32 (Kochert and Steenhof 2005, p 5). In 2004, 29 pairs of eagles nested in the NCA.

There was a major decline in productivity documented during the mid-1980s that was attributed to catastrophic wildfires that occurred primarily between 1981 and 1985 (Kochert *et al.* 1999, p 17). At about the same time black-tailed jackrabbits, the eagles' main prey, experienced a cyclic decline in numbers (Steenhof *et al.* 1997, p 350). Wildfires may have accentuated the severity of the rabbit decline in the 1980s, and rabbit numbers are not reaching the highs they once did. The total number of young eagles fledged annually has remained relatively stable since the late 1990s. Data suggest that the less productive territories have become vacant, and that the remaining core of pairs continues to be productive (Kochert and Steenhof 2005, p 7). Radio telemetry studies showed that eagles use burned habitats less than expected in relation to their abundance; they avoid grass habitats (Marzluff *et al.* 1997b, p 687). Eagles appear to have compensated for the loss of shrub habitat by expanding their ranges, using alternative habitats, and preying less on jackrabbits and more on alternate prey (Marzluff *et al.* 1997b, p 681 and Kochert *et al.* 1999, p 1).

Prairie Falcon (Information taken from the NCA FEIS 2008) – Prairie falcon nesting densities are higher in the NCA than anywhere else in the world. In a good year, more than 200 pairs nest in the NCA. In some parts of the Snake River Canyon, prairie falcon pairs nest within 330 ft. of each other.

Prairie falcon pairs are not evenly distributed throughout the NCA. Mean number of falcon pairs in each six-mile stretch of the NCA has ranged from 2 to 41. The west end of the NCA (near Halverson Lake and Swan Falls Dam) supports the highest density, with six-mile units' no. 5 and 6 containing the most pairs. These two stretches have the highest cliffs, provide optimal habitat, and are almost fully saturated in all years. Number of pairs in stretches with intermediate densities in the central portion of the NCA varied considerably; these stretches empty and fill as the overall prairie falcon population decreases and increases (Kochert and Steenhof 2004a).

Some have estimated that the NCA provides habitat for up to 5% of all the prairie falcons in North America (USDI 1979, pp 2-10). Numbers of nesting prairie falcon pairs have changed over the years, ranging from 159 to 217 pairs. However, there is no evidence for a declining trend. The number of pairs found in 2002 (217) and the number estimated in 2003 (204) were similar to numbers found in the 1970s (Kochert and Steenhof 2004, Table 6). As with nesting densities, falcon productivity has shown wide swings since the fires of the early 1980s, but unlike abundance, productivity may be on a downward trajectory. Prairie falcons do not shift readily from ground squirrels to alternate prey, and when ground squirrel abundance is low, they pay the price in lower reproduction (Steenhof and Kochert 1988, p 41 and Steenhof *et al.* 1999, pp 33-36).

Although nesting pair numbers were near all-time highs, success and productivity of prairie falcons in 2002 and 2003 were below the long-term mean, and in 2003 these measures were the third lowest recorded in 17 years of monitoring from 1974 to 2003 (Kochert and Steenhof 2004). Lower and more variable falcon productivity may reflect population changes of their main prey species. Ground squirrel abundance fluctuates more in disturbed grasslands dominated by exotic plant species, and the proportion of the NCA comprised of these grassland habitats has increased markedly over the past 20 years. Recent droughts have resulted in lower ground squirrel densities, particularly in areas dominated by exotic annuals (Steenhof *et al.* 2004, p 2). Drought and climatic changes may be affecting ground squirrel chronology and abundance that may, in turn, be affecting falcon productivity (Kochert and Steenhof 2004).

Greater Sage-grouse (Information taken from the NCA FEIS 2008) – Greater sage-grouse are considered extirpated from nearly the entire area of historic habitat within the NCA. Birds were observed north of Interstate 84 during 2010 within the NCA boundaries but no leks have been identified. Overall, habitat within the NCA has been altered to a point that it would likely never be able to support sage-grouse except in isolated areas along the periphery of the NCA, such as north of I-84. The NCA FEIS states “The NCA is an excellent example of “significant changes in disturbance regimes”. Sagebrush stands are cut off from other sage-grouse habitat by agricultural, commercial, and urban development, rural subdivisions, highways, utility corridors, off highway vehicle areas, areas that have burned, and areas that have been “rehabilitated”. Also, perennial and intermittent streams that once flowed across the NCA are now captured by the Mountain Home, Indian Creek and Blacks Creek Reservoirs, and as such, except for the Snake River, surface water rarely flows across the NCA. In addition to the above, the NCA supports levels of recreation, military, and other uses that would preclude the viable reestablishment of sage-grouse populations, even if suitable habitat were available.”

The southern third of the Center allotment does include key habitat for greater sage-grouse that contains an undetermined status lek, with the nearest active leks residing within two miles in the

southern portion and within four miles in the northern portion (across the Bruneau River). At this time, Russian thistle is not as prevalent in the southern portion of the allotment, so there are no areas of fenceline that have accumulations of tumble weeds and no treatments are proposed near any active leks.

Brewer's Sparrow (Information taken from the NCA FEIS 2008) – In the NCA, Brewer's sparrows are common nesting birds in big sagebrush stands. However, their breeding population has suffered from the loss of shrubs and fragmentation of shrub stands. These sparrows prefer an abundance of shrub cover, and within a given habitat patch, the probability of their occurrence increases with increases in total shrub cover. Knick and Rotenberry (1996, p 7) found Brewer's sparrows at 83 of 119 sites studied from 1992 to 1995. Breeding Bird Surveys indicate a significant 5.1%/year decline in Brewer's sparrow in Idaho (Sauer *et al.* 2008), but Schoeberl (2003, p 25) considered it common on his study area, which was partially in the Center Allotment and near the NCA. Doremus (unpublished data) observed rapid fluctuations in the number of Brewer's sparrow breeding territories from 1992 to 2003 in a 60 acre site in an old big sagebrush stand.

Yellow-billed Cuckoo – (Information taken from the NCA FEIS 2008) Yellow-billed cuckoos have only been observed recently on a few of the islands in the Snake River with tree overstory and shrub understory. A 2004 survey for the species in Idaho (USDI 2005b) found the cuckoo as a rare migrant and summer resident. There are no documented nests in southwestern Idaho. Several sites in the NCA may be suitable for development of yellow-billed cuckoo habitat (USDI 2005b, p 4). The yellow-billed cuckoo is considered a rare, sometimes erratic visitor and breeder in the Snake River Valley of southwestern Idaho. They have been heard on islands in and near the NCA. Due to the species' affinity to thick riparian shrub and cottonwood gallery habitat, there would be minimal if any fenceline burning in suitable cuckoo habitat. If fenceline burning were to occur in suitable habitat, impacts to habitat would be minimal due to the time of year (winter or early spring) and conditions under which fire would be initiated. Additionally, because the yellow-billed cuckoo is considered a rare migrant and summer resident in southwest Idaho, impacts to the species would be negligible and the species will not be discussed further in this document.

Woodhouse's Toad (Information taken from the NCA FEIS 2008) – The Woodhouse's toad (western sub-species) are found in sagebrush deserts, grasslands, desert streams, woods, valleys, floodplains, farms, and city backyards (Stebbins 1966, p 61). Thirty-three Woodhouse's toads were caught in drift fence traps during a four year study in the NCA; twenty-two in riparian habitat and 11 in talus slopes (Diller and Johnson 1982, p 103). As a side note, no western toads were observed during the four year study.

Longnose Snake (Information taken from the NCA FEIS 2008) – In Idaho, the longnose snake is limited to the lower Snake River Valley (Groves 1989, p 9). It is found in deserts, prairies and brush-land (Stebbins 1966, p 162), and is most abundant in areas of loose soils through which it can burrow. It has also been seen in tall grassy areas like the TWMA (J. Doremus pers. obs.).

Piute Ground Squirrel (Information taken from the NCA FEIS 2008) – Piute ground squirrels are found in the Great Basin and Columbia Plateau of Utah, Nevada, California, Oregon, and

Idaho (Yensen and Sherman 2003, p 14). They are critical food of prairie falcons and important food for red-tailed hawks, ferruginous hawks, other raptors, and common ravens (USDI 1979a, p 82; Marti *et al.* 1993, p 8).

They dig burrows for shelter and in the NCA, mostly on the north side of the Snake River (USDI 1979a, p 28), are usually found in conjunction with deep loess soils that can be excavated easily and do not readily collapse (Johnson and Melquist 1975, pp 164-165). Piute ground squirrels in the NCA are active during the day, but come above ground for only about six months or less in a year, emerging from torpor in January or February. In years when their food supply is adequate, they mate, produce young, double their body weight, and retreat underground to once again undergo torpor in late June to early July when summer temperatures rise and the plants they depend upon for food dry up.

Smith and Johnson (1985, p 174) found that Piute ground squirrels feed heavily on native and exotic grasses, but they also consume grass seeds, especially in late seasons of drought years (USDI 1979a, p 28; Van Horne *et al.* 1997, pp 527-528 and Van Horne *et al.* 1998, p 295). Over the long term, shrub habitats clearly provide a more favorable and stable environment than grass habitats for squirrels (Yensen and Quinney 1992, p 269; Van Horne *et al.* 1997, pp 304-305 and Steenhof *et al.* 2004, p 16).

Black-tailed Jackrabbit (Information taken from the NCA FEIS 2008) – Black-tailed jackrabbits reach their highest densities in the NCA near big sagebrush and black greasewood stands (Smith and Nydegger 1985, p 701, and Knick and Dyer 1997, pp 75- 84). From 1977 to 1989, black-tailed jackrabbit densities averaged 0.12/acre for all habitat types and 0.25/acre for big sagebrush habitats (Doremus *et al.* 1989, pp 91-92). Habitat for black-tailed jackrabbits has been significantly reduced since 1980 because of wildfires that burned large areas of sagebrush (USDI 1996, p 58). Densities during low population years (mid-1980s) ranged from 0.02 to 0.4/acre, and from 0.5 to 0.9/acre in high population years; peaks of the black-tailed jackrabbit population cycle have decreased from 1971 to 1996 (USDI 1996, p 56).

Pronghorn Antelope (Information taken from the NCA FEIS 2008) – Pronghorn are found throughout the NCA. Their distribution is limited by lack of water and poor condition rangeland. During the warm months pronghorn are found near irrigated agriculture, where there is water and green feed available. During the cold months they are found across the table lands, especially where preferred kochia is available as forage. Currently there are about 50 resident pronghorn in the NCA. During the winter 200-300 pronghorn may be found in the area.

The loss of shrubs, native grasses, and forbs has greatly reduced habitat available for big game. Most of the NCA's ephemeral streams were captured by construction of the Indian Creek, Blacks Creek, and Mountain Home Reservoirs. As such, available range for big game, especially deer and pronghorn has been significantly reduced because of a lack of surface water. Many habitats are dominated by cheatgrass or bur buttercup and other invasive weedy species that lack the nutrition of native grasses and forbs. Also, food and water for big game are further reduced when agricultural land is subdivided or no longer irrigated.

Travel and fence crossing for large mammals such as pronghorn antelope and mule deer is hampered by the large accumulations of tumbleweeds, making fence crossing very difficult or causing increased travel in search of a place to cross fences. Antelope generally do not jump fences but squeeze under or between the wires, so when tumbleweeds obscure the wires, fence crossing becomes much more difficult and dangerous for the species.

Bruneau Hot Springsnail – The Bruneau hot springsnail (springsnail in this document is in reference to the endangered Bruneau hot springsnail) is an endangered springsnail species that only exists in small, flowing geothermal springs and seeps along an approximately 8-kilometer (5-mile) reach of the Bruneau River and within the lower portion of Hot Creek containing perennial water. The species is found in a narrow elevation range of 803.7 to 815.7 meters (2,636.9 to 2,676.1 feet). The springs that the species inhabits have been disappearing due to increased domestic water usage. The main threat to the springsnail is the continued dropping of the water table. There are no Bruneau hot springsnails in the NCA but their habitat is adjacent to a portion of the Center Allotment (see Map #9).

The amount of fenceline associated with the Center Allotment in proximity to springsnail habitat is minimal. There are no fences in the Center Allotment closer than 150 feet from occupied springsnail habitat. The edge of the Bruneau River Canyon is steep and rocky, and functions as a natural livestock barrier so no burning would occur along the rim except where fences run to the edge. Therefore the fences to be burned are not close enough to springsnail habitat to cause any effects. The determination of no effect is based on the following rationale:

- fire from burning accumulated tumbleweeds along fencelines is of short duration,
- there is minimal fenceline near springsnail habitat, not closer than 150 feet,
- there would be minimal soil disturbance, and there would be upland and riparian vegetation between the burned fenceline and occupied springsnail habitat that would act as a barrier to sediment movement.

Because of this, analysis of effects to Bruneau hot springsnail is not necessary and this species will not be discussed further in this document.

Bull Trout – This species is listed as Threatened under the Endangered Species Act of 1973. Bull trout do not exist within the NCA and are mainly found upstream of the Center Allotment in the Jarbidge and Bruneau Rivers. Bull trout in this system are migratory and their use of habitat is not well known but the Bruneau River bordering the Center Allotment is identified as critical habitat (see Map #9). Bull trout would only be present in this section of river during winter months due to their affinity for cold water.

Like the springsnail, there is a minimal amount of fenceline in proximity to bull trout habitat and there would be no effect to bull trout or designated critical habitat from the proposed action. The determination of no effect is based on the following rationale:

- fire from burning accumulated tumbleweeds along fencelines is of short duration,
- there is minimal fenceline near bull trout critical habitat, not closer than 150 feet,
- there would be minimal soil disturbance, and there would be upland and riparian vegetation between the burned fenceline and the Bruneau River that would act as a barrier to sediment movement.

Therefore, analysis of effects to bull trout is not necessary and this species will not be discussed further in this document.

3.5.2 Environmental Consequences - Wildlife

Alternative A – No Action

The No Action Alternative would not improve conditions for wildlife. Several thousand acres along fencelines with thick accumulations of tumbleweed would provide little to no useable habitat for most species of wildlife and would inhibit development of suitable habitat. Movement of wildlife, especially large mammals would continue to be impeded and fence crossing would be more hazardous in areas with tumbleweed accumulations. Large accumulations of tumbleweed may lead to increased intensity and severity wildfire leading to further degradation of habitat.

Golden Eagle – Since no prescribed burning would occur, there would be no direct effects to eagles or other species of this guild. The 25,047 acres proposed for treatments would stay covered with tumbleweed that would prevent desirable vegetation from establishing, which reduces habitat for prey species. This would require eagles to hunt at greater distances from some nest sites and would likely reduce productivity.

Prairie Falcon – Effects would be similar to the golden eagle guild with no direct effects from project activities but there would be indirect effects from reduced habitat for prey species.

Greater Sage-grouse – At the current time, there would be no impacts to sage-grouse by not burning the fencelines as described in the No Action alternative because the current proposal is outside of known sage-grouse use areas. Russian thistle and the associated problems created along fencelines are usually associated with areas that have burned and therefore are lacking suitable habitat for sage-grouse.

Brewer's Sparrow – Utilization of existing masses of tumbleweeds by this species guild is negligible. Not burning the fencelines reduces the potential for desirable species of vegetation to establish. The large accumulations of fuels on fencelines could also make fires more difficult to put out and lead to greater loss of suitable habitat in the NCA.

Woodhouse's Toad – Habitat for woodhouse toad and species in this guild would not improve in the 25,000 acres along fencelines that are proposed for treatment in Alternative B.

Longnose Snake – There would be no improvement to habitat and tumbleweed accumulations would remain, providing little to no useable habitat for species in this guild.

Piute Ground squirrel – The masses of tumbleweeds provide minimal to no suitable habitat for Piute ground squirrels and habitat conditions would not improve for Piute ground squirrel without removing tumbleweeds. Tumbleweed accumulations at fencelines keep grasses and forbs from being able to grow, which would be utilized by this guild if available.

Black-tailed Jackrabbit – This species prefers sagebrush habitat and the masses of tumbleweeds along fencelines provide minimal to no suitable habitat for this guild. Accumulations are so thick in some areas that they affect the ability of jackrabbits to move throughout the area. Without removal of tumbleweed accumulations, habitat conditions would not improve for this guild.

Pronghorn Antelope – Fencelines with big buildups of tumbleweeds are negatively impacting antelope by reducing suitable habitat and forage, and by impairing travel through the NCA. Antelope have difficulty passing through fences, but the tumbleweeds make it more difficult and likely force the animals to find places where there are not heavy accumulations along fencelines. Habitat conditions would not improve for this guild without treatment of the fencelines.

Alternative B- Proposed Action

The proposed action would have negligible effects to wildlife and wildlife habitat because few species utilize the accumulations of tumbleweed and there would be minimal loss to suitable habitat within the proposed burn units due to project design including the time of year for treatments, sufficient personnel present, accessibility of the proposed treatment areas, and keeping fire within the burn prescription. Because the prescribed fires will occur early in the year, the likelihood of direct effects to wildlife would be lessened because many species may still be at den sites, hibernating, or have not returned from their southern migration. As with any prescribed or natural fire, wildlife mortalities could occur but due to the type of fuels being burned (non-habitat) and the time of year, wildlife mortalities are expected to be minimal. Likewise, engine support during burning activities could cause wildlife mortalities and disturbance but the Standard Operating Procedures built into the proposed action would lessen this likelihood.

Golden Eagle – Since no prescribed burning would occur within a half mile of nest sites from January through July, there would be no impacts to nesting eagles. Fall burning that may occur near cliffs and nesting territories would likely occur in late September through December. Eagles may be temporarily displaced from a location during burning activities but the effect would be short lived, likely lasting less than two hours. Overall, direct effects would be negligible to golden eagles. Habitat for prey species would be expected to improve over time if sagebrush is able to re-establish in areas along fencelines where it has been extirpated by fire and accumulations of tumbleweed.

Prairie Falcon – Effects would be similar to golden eagle as there would be no burning within a half mile of prairie falcon nesting territories from January through July.

Greater Sage-grouse – As previously stated, the proposed action is currently outside Key habitat and areas known to be utilized by sage-grouse and therefore no effects would be expected to this species. However, if treatment areas change over the life of this EA to include areas near leks with an occupied or undetermined status, or in areas with sage-grouse use, surveys and timing restrictions would be implemented to reduce the likelihood of disturbance (see Standard Operating Procedures).

Brewer's Sparrow – There may be negative effects to some species of this guild. Effects may include loss of nests and disturbance, however, loss of nests is expected to be minimal and disturbance would be of a short duration, likely lasting no longer than 20–30 minutes. Few if any of the species of this guild would nest in the tumbleweed accumulations on fencelines, but nests could be impacted where sagebrush is growing in close proximity to fencelines.

Woodhouse's Toad – During the time of year that burning would occur, this species and those of this guild would likely be hibernating or near riparian areas for breeding. Terrestrial amphibians are usually active during the night and underground during the day, which would also help to protect this species in the unlikely event that they were located along one of the proposed fenceline burn areas.

Longnose Snake – Burning that occurs before April would not affect species from this guild during most years because they would still be in their dens. Additionally, there would likely be few impacts to this guild even if burning occurred in April or May since tumbleweed accumulations along fencelines provide little to no habitat for prey species. Reptiles may use the tumbleweed accumulations for cover on a limited basis but most species seek shelter in burrows or rocky areas.

Piute Ground squirrel – Negative effects to this species from the proposed treatments would be negligible because when disturbed, they seek cover in their burrow systems. Burning of the accumulated tumbleweeds would improve habitat by creating more open space and allow more grass and forbs to grow, providing more forage for this guild.

Black-tailed Jackrabbit – This species and the associated guild would benefit from the proposed treatment by making travel through fencelines easier and opening areas for desirable vegetation to establish. Burning the accumulated tumbleweeds would have minimal direct effects because few species of this guild utilize the fenceline accumulations.

Pronghorn Antelope – This guild of species would benefit from the proposed action because travel would be less restricted and getting through fencelines would be less stressful and have lower energy costs. Fragmentation caused by the tumbleweed accumulations would be reduced. Temporary displacement or disturbance of animals not lasting more than a few hours may occur during implementation activities. Additionally, the burned areas could provide foraging opportunities once the weeds have been removed.

3.6 Cumulative Impacts

Cumulative impacts result from a proposed action in combination with other projects and/or activities in the analysis area. Such impacts may develop simultaneously with implementation of the project or incrementally over time.

Scope of Analysis

The 600,630 acre NCA and 67,626 acre Center grazing allotment in the Bruneau Field Office were used as the analysis area for cumulative impacts. The timeframe for analysis includes activities which have happened since 1980 to create current conditions, reasonably foreseeable

future actions that could occur within the next three years, and the appropriate time frame for the impacts associated with those actions (generally 10 years from present).

Current Conditions

The majority of the area has burned and approximately 50% of the area burned at least once since 1980. Between 1980 and 2009, 922 wildland fires were reported within the project area. Fifty-six percent of the fires in the NCA and 38% in the Center allotment were human caused. The fires in the NCA averaged 673 acres in size and fires in the Center Allotment averaged 2,445 acres. One hundred thirty-six fires were greater than 500 acres in that same time period. As a result of fire activity, annual and perennial grass and forb communities dominate, with remnant shrub communities accounting for approximately 37% of the area. Emergency stabilization and rehabilitation actions are often implemented following wildland fire. Approximately 40,000 acres have been seeded with both native and non-native grasses, forbs, and shrubs since 1990.

In addition to fenceline prescribed burning on BLM lands, private landowners also periodically conduct fenceline burns. It is estimated that 50 miles of private fenceline are treated on a yearly basis.

There are 5 Slickspot Peppergrass Management Areas within the BOP NCA and 24 element occurrences (EOs). Approximately 140 miles of fenceline cross or are adjacent to the Management Areas or EOs. A total of 218 miles of fenceline within the project area fall within either Management Areas, Eos, or potential habitat.

Thirteen species of noxious weeds, in 674 locations, were documented by BLM between 2002 and 2009. Sixty-three percent of the occurrences were treated either chemically, mechanically, or biologically.

Public lands within the project area are primarily used for livestock grazing and dispersed recreation (OHV, shooting). There are 35 grazing allotments within the NCA. There are no small OHV open areas and use in the remainder of the area is either limited to designated roads and trails or closed to public use (Orchard Training Area), although travel management planning has not been completed for the area. Adjacent private lands are used primarily for irrigated agriculture or secondarily as open range. Residential development adjacent to the BOP NCA includes a handful of subdivisions but is primarily associated with agricultural uses.

There are at least 2,055 miles of roads and trails in the BOP NCA and Center allotment. There are 274 miles of major road that bisect the NCA and Center allotment including Interstate 84, but the majority of the roads are unimproved dirt roads.

Future Actions

Wildland fires will continue to burn within the project area over the next three years. The number of acres that will burn is unknown but is expected to be similar to the previous ten years (56,302 acres from 2000 through 2009). The continued loss of native shrub cover will occur however in smaller amounts compared to the last 30 years since almost three fourths of the shrub cover in the NCA has already been lost during this time period. Seventy percent of lands within the Center Allotment, on the other hand, continue to have sagebrush as the dominant overstory

species. As wildland fires occur emergency stabilization and rehabilitation actions will be implemented on some of the burned acreage including drill seeding of grasses and forbs and aerial seeding of native shrub species. The number of acres where these types of actions will occur is unknown and dependent on the amount and intensity of wildland fire as well as available funding. There were 11,760 acres receiving ESR treatments over the last ten years and it is reasonable to assume that a similar yearly average number of acres would be rehabilitated following wildland fire over the next three years.

The Resource Management Plan for the Birds of Prey NCA (2008) emphasizes the need for restoration activities in order to protect and enhance raptor, raptor prey, and other wildlife species' habitats. It calls for 230,000 acres of proactive restoration treatments over the life of the plan (20+ years). These treatments would primarily consist of chemical and/or biological control of noxious weeds and invasive annuals, rangeland drill seeding, and aerial seeding of native and functional non-native plant species. Environmental analysis for these activities would likely begin in the fall of 2010 and take a year to complete. Six thousand acres of proactive restoration treatment is estimated to occur over the next three years.

With increased human population growth in and around Ada, Canyon, and Elmore counties in the future the need for additional infrastructure is anticipated. New roads, transmission, and utility corridors will likely be proposed both through and adjacent to the NCA. Currently the Gateway West electrical powerline proposal is in the process of being analyzed and one of the alternatives lays out a route through the northern portion of the NCA.

The NCA currently contains 32 grazing allotments with 44,000 permitted AUMs per year. The approximate average actual use over the past 10 years has been 28,500 AUMs due to changes in plant communities and the number and size of wildland fires. Livestock class includes cattle and sheep. General season of use for NCA allotments is as follows: April 1 to June 30; October 15 to December 14; and December 15 to March 31

Approximately 8,000 to 10,000 soldiers train on the Idaho Army National Guard Orchard Training Area each year. The primary military training period occurs between April and July however training activities can occur during any month of the year. Most of the training involves firing weapons on established ranges. All live weapons firing is conducted in a 53,000 acre Impact Area. Nested within the Impact Area is a 3,400 acre Artillery Impact Area where the bulk of unexploded ordnance is found. The 85,000 acres surrounding the Impact Area is used for military maneuver training but only 35% of this acreage is used for off-road maneuvers. Heavy maneuver exercises are restricted to non-shrub areas. Convoy movements are restricted to established roads and training is scheduled to avoid excessive use of any one area. One five acre site on State of Idaho land is used for excavation practice.

Recreational uses within the NCA are predominately dispersed activities and include off-highway use, recreational shooting, wildlife viewing, geocaching, and horseback riding. Use occurs year-round with visitor use highest in the spring and early summer months. Reliable estimates of visitor use throughout the area are difficult however the best estimate is an average of 175,000 recreational visitor use days a year.

Environmental Consequences – Cumulative Impacts

The combined permanent vegetation loss related to the proposed action, other identified projects, and wildland fire is unknown. Vegetation loss associated with this project would be primarily due to trampling and compaction during prescribed fire operations (vehicle and foot traffic along fencelines) and not due to the prescribed fire directly. This loss is estimated to be less than 1,000 acres over the next three years (0.002% of the NCA and Center allotment). Wildfire frequency and size would be expected to increase over the long term as population levels increase but the amount of vegetation loss over the next three years is unknown. New powerlines and roads could be additional sources of fire starts. The cumulative impact of this project on vegetation loss would not be significant due to the very small incremental loss of vegetation associated with fenceline prescribed fire activities.

Given the minimal negative impacts to some wildlife species, the effects from this project, when combined with any from the potential past, ongoing, and foreseeable future projects within the analysis area, will not cumulatively have a negative impact on those species appreciably greater than described by direct and indirect effects from the fenceline burning. Conversely, beneficial impacts to wildlife species from this project will partially mitigate any negative effects that could result from other projects within the cumulative effects area and timeframe.

Burning segments of the fencelines along with all the other projects and impacts noted above will have a cumulative effect on cultural resources. Some segments of the fence will never be burned because that fence segment does not have a tumbleweed problem. But, some segments will be burned yearly, while other segments will only be burned when necessary. These yearly prescribed burning activities combined with other projects on public and private lands will have a cumulative effect on cultural resources. Some of the cumulative impacts will have negative effects to cultural resources while other impacts will cause a positive effect.

Some cumulative negative impacts to cultural resources could be caused by the following:

- Wildland fires and fire-fighting activities consume, crush and move artifacts
- Wildland fires leave artifacts exposed to unauthorized collecting
- Private property owners burn their fencelines, fire may consume artifacts
- Biological, chemical and mechanical weed treatments can crush and move artifacts, and leave the artifacts exposed to unauthorized collecting
- Grazing animals can crush, move, bury and unbury artifacts. Spring developments, troughs, ponds and other grazing associated activities can impact cultural resources.
- Roads, trails and ATV use have impacted cultural resources by their construction and use. They also allow more people to access more lands for more potential for unauthorized artifact collecting and vandalism to cultural resources.
- Population growth, more roads and more utility corridors are likely to impact cultural sites with construction.
- The Idaho Army National Guard Orchard Training Area could impact cultural resource sites and artifacts with people, military maneuvers and constructed projects.
- A few recreationists may also engage in unauthorized artifact collecting and vandalism, while others may cause inadvertent vandalism by accidentally driving an ATV through a prehistoric camp.

Some cumulative positive impacts to cultural resources would be caused by the following:

- Wildland fires could expose cultural sites to be recorded and added to the database.
- Private property owners burn their fencelines, fire may expose artifacts to be recorded.
- Biological, chemical and mechanical weed treatments can initiate cultural resource surveys to record artifacts and cultural sites.
- Grazing animals can unbury artifacts that can then be recorded. Spring developments, troughs, ponds and other grazing associated activities can initiate cultural resource surveys.
- Population growth, more roads and more utility corridors are likely to initiate cultural resource surveys.
- The Idaho Army National Guard has a cultural resource program to help preserve and protect cultural resources. They also have a proactive program to survey all acres within the OTA.
- Some recreationists may decrease unauthorized artifact collecting and vandalism just by them being around or by being witnesses that report crimes to BLM Law Enforcement Rangers
- Emergency stabilization and rehabilitation projects would create additional cultural resource surveys and record newly discovered cultural resource sites

No negative direct or indirect effects to special status plants would be expected from the proposed action, therefore there would be no cumulative effects to special status plants.

Smoke production from prescribed fire operations would be expected to have minimal short-term impacts and no long-term impacts to air quality and the existing air quality across the NCA and Center Allotment is considered good. Therefore cumulative impacts from prescribed burning and other smoke/dust producing activities are not expected to exceed the PM₁₀ national ambient air quality standards or negatively impact any IDEQ identified PM₁₀ maintenance areas/impact zones.

4.0 Consultation and Coordination

Chapter 7 consultation has been initiated with the US Fish and Wildlife Service (the Service) for slickspot peppergrass (*Lepidium pappaliferum*) and a Biological Assessment is under preparation.

BLM staff met with the Shoshone Paiute Tribe on December 16th, 2010 in a government to government consultation process, and provided Shoshone Paiute Tribal representatives with archaeology, botany, and wildlife clearance reports for the project.

4.1 List of Preparers

List of Preparers	Title	Responsibility
Sarah Heide	Fire Use Specialist, BLM	Project Lead, Vegetation, Soils, Air Quality
Kathi Kershaw	Ecologist, BLM	Vegetation, Special Status Plants
Matt McCoy	NEPA Specialist, BLM	NEPA Compliance
Michael McGee	Wildlife Biologist, BLM	Wildlife, Special Status Animals
Dianna Sampson	GIS Specialist, BLM	GIS Analysis and Maps
Dean Shaw	Archaeologist, BLM	Cultural Resources

4.2 List of Agencies, Organizations, and Individuals Consulted

- Ada County Highway District
- Elmore County Highway District
- Idaho Conservation League
- Idaho Department of Fish and Game (IDFG)
- Idaho Department of Lands (IDL)
- Idaho National Guard
- Shoshone-Paiute Tribes
- Verlin Gingerich (livestock grazing permittee)
- Western Watersheds Project

4.3 Public Participation

External scoping was conducted in January 2010, in the form of letters and maps sent to adjacent landowners and interested organizations, tribes, and individuals. The project appeared in the online Four Rivers Field Office Schedule of Proposed Actions in December 2009 and January 2010. A copy of this EA is available upon request from:

BUREAU OF LAND MANAGEMENT
Boise District Four Rivers Field Office
3948 Development Avenue
Boise, Idaho 83705-5389.

Scoping packages were distributed to adjacent landowners and to the following agencies, organizations, companies, tribes, and individuals:

Ada County Commissioners
Ada County Highway District
Elmore County Commissioners
Elmore County Highway District
Idaho Army National Guard
Idaho Conservation League
Idaho Department of Environmental Quality
Idaho Department of Fish and Game
Idaho Department of Lands
Livestock grazing permittees within the Center Allotment of the Bruneau Field Office
Livestock grazing permittees within the Birds of Prey NCA
Shoshone Paiute Tribes
Western Watersheds Project

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6.0 **Maps**

