

Trailing Environmental Assessment

DOI-BLM-ID-I040-2012-0028-EA

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ENVIRONMENTAL ASSESSMENT

DOI-BLM-ID-I040-2012-0028-EA

Salmon Field Office Trailing EA

Salmon Field Office

August 2013

Table of Contents

Background.....	1
Purpose of and Need for Proposed Action.....	1
Scoping, Issues, and Decision to be Made.....	1
Location of Proposed Action	2
Relevant Statutes, Regulations, or Other Plans	2
Alternative 1 – Proposed Action.....	2
Alternatives Considered but not Analyzed in Detail	9
AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	10
Vegetation.....	14
Invasive, Non-Native Species.....	18
Wildlife Resources including Threatened, Endangered, and Sensitive Animals and Migratory Birds.....	20
<i>Wildlife Habitat</i>	20
<i>Wildlife Species</i>	20
<i>Focal Special Status Animal Species</i>	21
<i>Migratory Birds, Raptors, and other Birds (including Special Status Species)</i>	24
<i>Big Game and other Mammals (including Special Status Species)</i>	25
<i>Amphibians and Reptiles (including Special Status Species)</i>	25
<i>Focal Special Status Animal Species</i>	25
Economic and Social Values	27
Tribal Treaty Rights and Interests.....	29
CUMULATIVE IMPACTS OF ALTERNATIVES.....	30
Vegetation.....	32

Invasive, Non-Native Species	33
Wildlife Resources including Threatened, Endangered, and Sensitive Animals and Migratory Birds	33
Economic and Social Values	36
Tribal Treaty Rights and Interests.....	37
The Contribution of the Alternatives to the Cumulative Impact	37
Works Cited	40
CONSULTATION AND COORDINATION	42

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Background

This environmental assessment (EA), developed by an interdisciplinary (ID) team, addresses proposed livestock crossing on lands managed by the Bureau of Land Management (BLM) Salmon Field Office. The ID team reviewed each application, which included the proposed crossing route(s), dates, number and kind of livestock, and trailing method(s) and timeframes. Potential issues and viable alternate routes, based on the location and terrain, were identified and discussed. This was done while still attempting to meet the needs of the applicant. Some of the alternative routes were not viable due to terrain, increased distance and more ground disturbance, or having to cross private land belonging to another private land owner. The applications identified routes which have been used for years and have proven to be the most direct and feasible route across public land to reach the intended destination of the applicant.

Allotments Covered by this Environmental Assessment:

The Crossing Permit applications considered by this EA cover portions of seven grazing allotments and pastures (Figures 1 - 3): Baldy Basin (Maybe Seeding Pasture), Sandy Creek (Sandy Creek Pasture), Rattlesnake (Rattlesnake Draw Pasture), NEF 3 (NEF 3 Pasture), Mill Creek (Mill Creek Pasture), Walters (Ferry Creek Pasture), and the Little Sawmill/S. Hayden allotments (Mill Creek Flat Pasture).

Purpose of and Need for Proposed Action

The purpose of the proposed action is to respond to permit applications from qualified applicants for livestock crossing/trailing across BLM administered lands. The BLM is required, under the Federal Land Policy and Management Act of 1976 and the Taylor Grazing Act of 1934, to respond to requests for livestock trailing/crossing across BLM administered lands.

Scoping, Issues, and Decision to be Made

A scoping information package was posted on the Salmon BLM website on 12/12/2011. No public scoping issues or comments were received.

The following issues were identified through internal ID team scoping:

- Noxious Weeds and Invasive Plants – Potential spread of noxious weeds or invasives.
- Greater sage-grouse – Potential impacts to sage-grouse during breeding and nesting periods.
- Tribal treaty rights and interests.
- Social/Economics - Potential impacts to grazing permittees if BLM denies their application for a crossing permit.

The Salmon Field Manager is the authorized officer responsible for the decisions regarding management of public lands within these seven allotments. Based on the results of the NEPA analysis, the authorized officer will issue a determination of the significance of the environmental effects and whether an environmental impact statement (EIS) would be required. If the authorized officer determines that it is not necessary to prepare an EIS, the EA will provide information for the authorized officer to make an informed decision whether to approve the applicants' applications to cross and if approved, which management actions, mitigation measures, and monitoring requirements will be prescribed for each of the seven allotments to ensure management objectives and Idaho S&Gs are met.

Location of Proposed Action

The proposed activities are located on BLM-managed lands in Lemhi County, Idaho, within T. 19 N., R. 30 E. (Caywood); T. 20 N., R. 24 E. (Hatch), and T. 16 N., R 24-25 E. (Johnson), Boise Meridian. The three sets of crossing routes are located south of Salmon, Idaho in the Baldy Basin Allotments (Caywood), the Sandy Creek and Rattlesnake Allotments (Hatch), and the NEF 3 Allotment, Mill Creek, Walters and Little Sawmill/South Hayden Allotments (Johnson).

Relevant Statutes, Regulations, or Other Plans

The crossing permit applications and all alternatives are consistent with the Taylor Grazing Act of June 1934, the Federal Land Policy and Management Act of 1976, as amended, and 43 CFR 4100.

The proposed activities are undertakings requiring review and evaluation pursuant to Section 106 of the National Historic Preservation Act (as amended), as defined by the implementing regulations found at 36 CFR 800.16(y).

The crossing permit applications are consistent with PACFISH direction and are in conformance with the Lemhi RMP (USDI BLM 1987).

ALTERNATIVES

Alternative 1 – Proposed Action

The BLM proposes to issue Crossing Permits to qualified applicants authorizing the trailing of livestock across BLM administered lands within the Salmon Field Office, beginning in the 2013 grazing year.

In each case, crossing would be permitted for one day for up to the entire herd, as indicated on the permit, within the applied-for dates. Figures 1 (Caywood), Figure 2 (Hatch) and Figure 3 (Johnson) display the trailing routes that would be used for the movement of livestock, for each allotment respectively. Cattle would be actively trailed and would not be left on the allotment

overnight. Active trailing would be done using horses, ATVs and/or motorcycles, and stock dogs within a 150-foot wide corridor along the routes indicated on the attached maps. Cattle would be trailed mainly along roads and/or existing trails.

Trailing along roads would be concentrated on the road prism footprint and roadside ditch; cattle could move off and then back onto the road if vehicles pass through the herd. Where off-road motorized vehicle use would occur, it would occur mostly along existing paths through the vegetation and/or along fence lines, although a small portion of off-road trailing would be done using ATVs and/or motorcycles. All off-road trailing would be concentrated within a 150-foot wide corridor along the routes shown in Figures 1 - 3.

Permit A, Caywood: BLM is proposing to issue a crossing permit to Joe Caywood. The applicant has applied to trail 200 head of cattle four days per year across 1.2 miles of public lands in the Maybe Seeding Pasture of the Baldy Basin Allotment (Table 1). The crossing permit would facilitate cattle movement to and from adjacent privately-owned lands. The term of the crossing permit would be 3/1/2013 to 2/28/2023. The livestock would be herded from private pasture to the north to private pasture to the south and vice versa within the 1.2 mile by 150-foot wide corridor depicted on Figure 1. Table 1 shows the number of acres in the allotments proposed to be crossed, and the percentage of the allotment where trailing would occur.

Table 1: Length of trailing route, allotment acreage, and total acres affected.

Allotment	Approx. Crossing Event Length (mi)	Allotment Acreage	Total Acres Crossed*	% of Allotment
Baldy Basin	1.2	11,607	22	<1

*Assuming a 150-foot wide trailing corridor

As proposed, each crossing event would occur over one day (24-hour period), on 4 separate days a year between May 14 and January 20 with approximately 200 cattle (Table 2). Trailing would be accomplished using horses, ATVs, motorcycles, and herding dogs. Approximately half of the trailing would occur along an existing 2-track road that parallels the fenceline and the other half would be cross-country along existing trails.

The mandatory terms and conditions of Joe Caywood’s crossing permit would appear as follows in Table 2.

Table 2: Caywood crossing permit mandatory terms and conditions

Allotment Number	Allotment Name	Livestock Number	Livestock Kind	Earliest Crossing	Latest Crossing	% PL	AUMs
06203	Baldy Basin	200	Cattle	5/14	1/20	100	28

OTHER TERMS AND CONDITIONS:

- Crossing will occur along the route outlined in the attached map.
- This permit authorizes active trailing using horses, ATVs and/or motorcycles, and stock dogs along the road prism and roadside ditch, or within a 150-foot wide corridor when trailing off-road, along the route indicated on the attached map.
- Cattle will be actively trailed and will not be left on the allotment overnight.
- A maximum of four crossing events will occur between the dates specified. Crossing will be restricted to a maximum of 200 livestock at one time. A maximum of 800 livestock will be allowed to cross the allotment in a year.

STANDARD TERMS AND CONDITIONS:

- Billing notices are issued which specify fees due. Billing notices, when paid, become part of the crossing permit. Fee payments are due on the date specified on the billing notice and **MUST** be paid in full prior to livestock crossing activities.
- This permit is issued solely for the purpose of moving livestock across public lands for proper and lawful purposes, as needed for the orderly administration of public lands. This permit confers no priority for renewal, and cannot be transferred or assigned.

Permit B, Hatch: BLM is proposing to issue a crossing permit to Don Hatch. The term of the permit would be from 03/01/2013 to 02/28/2023. The cattle would be herded along the route depicted on Figure 2. During each crossing period indicated in Table 4, a maximum of 50 cattle would be authorized to cross along the designated crossing route (at one time). The total trailing route would be approximately 2.2 miles in length (Table 3). Trailing would follow existing two-track roads and would also be cross-country in the Sandy and Rattlesnake allotments. All trailing would be done using horses and dogs. Table 3 shows the number of acres in the allotments proposed to be crossed, and the percentage of the allotment where trailing would occur.

Table 3: Length of trailing route, allotment acreage, and total areas affected

Allotment	Approx. Crossing Event Length (mi)	Allotment Acreage	Total Acres Crossed*	% of Allotment
Sandy Creek	1.7	4,325	31	<1
Rattlesnake	0.5	2,385	9	<1

*Assuming a 150-foot wide trailing corridor.

The Crossing Permit for Donald Hatch would appear as follows in Table 4.

Table 4: Hatch crossing permit mandatory terms and conditions

Allotment Number	Allotment Name	Pasture	Livestock Number	Livestock Kind	Earliest Crossing	Latest Crossing	% PL	AUMs
06226	Sandy Creek	Sandy Creek	50	Cattle	5/20	5/27	100	2
06226	Sandy Creek	Sandy Creek	50	Cattle	8/6	8/14	100	2
06228	Rattlesnake	Rattlesnake Draw	50	Cattle	5/20	5/27	100	2
06228	Rattlesnake	Rattlesnake Draw	50	Cattle	8/6	8/14	100	2

OTHER TERMS AND CONDITIONS:

- Crossing will occur along the route outlined on the attached map.
- This crossing permit authorizes active trailing using horses and stock dogs along the road prism and roadside ditch, or within a 150-foot wide corridor when trailing off-road, along the route indicated on the attached map.
- Cattle will be actively trailed and will not be left on the allotment overnight.
- A maximum of two crossing events will occur: one in May and one in August.
- Crossing will be restricted to 50 cattle during each crossing event (across the two allotments), for a maximum of 50 head for each permitted timeframe.

STANDARD TERMS AND CONDITIONS:

- Billing notices are issued which specify fees due. Billing notices, when paid, become part of the crossing permit. Fee payments are due on the date specified on the billing notice and **MUST** be paid in full prior to livestock crossing activities.
- This permit is issued solely for the purpose of moving livestock across public lands for proper and lawful purposes, as needed for the orderly administration of public lands. This permit confers no priority for renewal, and cannot be transferred or assigned.

Permit C, Johnson

BLM is proposing to issue a crossing permit to Steven Johnson. The term of the permit would be from 03/01/2013 to 02/28/2023. The cattle would be trailed along the routes depicted on Figure 3. The crossing route length would total 6.9 miles, although crossings of different lengths would be used during different timeframes (Table 5 and Table 6). As proposed, crossings would occur once over each period indicated in Table 6, with up to 200 cattle crossing during each crossing event. Cross-country trailing would be done using horses and dogs. ATVs and/or motorcycles would only be used on existing roads.

The Table 5 shows the number of acres in the allotments proposed to be crossed, and the percentage of the allotment where trailing would occur.

Table 5: Length of trailing route, allotment acreage, and total acres affected.

Allotment	Approx. Crossing Event Length (mi)	Allotment Acreage	Total Acres Crossed*	% of Allotment
NEF 3	0.5	167	9	5
Mill Creek	0.8	293	15	5
Walters	1.3	1,407	24	1.7
Little Sawmill/S. Hayden	4.3	25,901	78	<1

*Assuming a 150-foot wide trailing corridor

The mandatory terms and conditions of Steven Johnson’s crossing permit would appear as follows in Table 6.

Table 6: Johnson crossing permit mandatory terms and conditions

Allotment Number	Allotment Name	Pasture	Livestock Number	Livestock Kind	Earliest Crossing	Latest Crossing	% PL	AUMs
06243	NEF 3	NEF 3	200	Cattle	3/1	1/10	100	14
06210	Mill Creek	Mill Creek	200	Cattle	3/1	1/10	100	14
06211	Walters	Ferry Creek	200	Cattle	3/1	1/10	100	14
					6/1	8/15	100	7
06209	Little Sawmill/S. Hayden	Mill Creek Flat	200	Cattle	6/15	7/15	100	7
					6/1	8/15	100	7

OTHER TERMS AND CONDITIONS:

- The proposed crossing routes and permitted timeframes by route are outlined on the attached map.
- Maximum number of crossing events are: NEF 3 (2), Mill Creek (2), Walters (3), Little Sawmill/S. Hayden (2), as indicated on the attached map.
- Crossing will be restricted to a maximum of 200 cattle during each crossing period for each allotment.

- Cattle will be actively trailed and will not be left on the allotment overnight. Active trailing will be done using horses, ATVs, and/or motorcycles and stock dogs. Cross-country trailing will be done using horses and dogs. ATVs and/or motorcycles will only be used on existing roads.

STANDARD TERMS AND CONDITIONS:

- Billing notices are issued which specify fees due. Billing notices, when paid, become part of the crossing permit. Fee payments are due on the date specified on the billing notice and **MUST** be paid in full prior to livestock crossing activities.
- This crossing permit is issued solely for the purpose of moving livestock across public lands for proper and lawful purposes, as needed for the orderly administration of public lands. This crossing permit will not confer any priority for renewal, and cannot be transferred or assigned.

The three proposed crossing permits are summarized in Table 7 and Table 8.

Table 7: Summary of the three proposed crossing permits

Application Serial Number	Permittee	Allotment	Pasture	Trailing Period	Trailing Events per Period	Number/ Kind per event
Permit A I0402012015	Caywood	Baldy Basin	Maybe Seeding	5/14 – 1/20	4	200 cattle
Permit B I0402012014	Hatch	Sandy Creek	Sandy Creek	5/20 – 5/27 8/6 – 8/14	1	50 cattle
Permit B I0402012014	Hatch	Rattlesnake	Rattlesnake Draw	5/20 – 5/27 8/6 – 8/14	1	50 cattle
Permit C I0402012016	Johnson	NEF 3	NEF 3	3/1 – 1/10	2	200 cattle
Permit C I0402012016	Johnson	Mill Creek	Mill Creek	3/1 – 1/10	2	200 cattle
Permit C I0402012016	Johnson	Walters	Ferry Creek (cross-pasture route)	3/1-1/10	2	200 cattle
Permit C I0402012016	Johnson	Walters	Ferry Creek (east routes)	6/1-8/15	1	200 cattle

Application Serial Number	Permittee	Allotment	Pasture	Trailing Period	Trailing Events per Period	Number/Kind per event
Permit C I0402012016	Johnson	Little Sawmill/S. Hayden	Mill Creek Flat (NE to SW route across sections 2, 11, and 10)	6/15-7/15	1	200 cattle
Permit C I0402012016	Johnson	Little Sawmill/S. Hayden	Mill Creek Flat (SW to NE route from section 10 to fenceline in section 11)	6/1-8/15	1	200 cattle

- Off-road use of ATVs and/or motorcycles would only occur in the Baldy Basin Allotment (0.6 miles).
- Use of ATVs and/or motorcycles would not occur in the Sandy Creek and Rattlesnake allotments (Table 8).
- Off-road use of ATVs and/or motorcycles would not occur in the NEF 3, Mill Creek, Walters, and Little Sawmill/South Hayden allotments, but they would be used on roads that exist along the crossing routes in these allotments (Table 8).
- Up to 69% of all trailing would be done using ATVs and/or motorcycles (up to 7.1 of 10.3 total miles), and 31% would be done using horses and dogs only (3.2 of 10.3 total miles) (Table 8).
- Of all motorized trailing, approximately 92% (6.5 of the 7.1 motorized miles) would occur along existing roads, and about 8% (0.6 of the 7.1 motorized miles) would occur cross-country along existing cattle trails and/or along fencelines (Table 8).
- Of all trailing, about 6% (0.6 of 10.3 miles) would be off-road using ATVs and/or motorcycles (Table 8).
- Horses and dogs could be used anywhere.

Table 8: Crossing route type and motorized and non-motorized trailing activities

Allotment	Pasture	Crossing on Roads (miles)	Off-road Crossing (miles)	Total Crossing Distance (miles)	ATV and/or Motorcycle Use (miles)	Horses and Dogs Only (miles)
Baldy Basin	Maybe	0.6	0.6	1.2	1.2	0

Allotment	Pasture	Crossing on Roads (miles)	Off-road Crossing (miles)	Total Crossing Distance (miles)	ATV and/or Motorcycle Use (miles)	Horses and Dogs Only (miles)
	Seeding					
Sandy Creek	Sandy Creek	0.6	1.1	1.7	0	1.7
Rattlesnake	Rattlesnake Draw	0.5	0	0.5	0	0.5
NEF 3	NEF 3	0.5	0	0.5	0.5	0
Mill Creek	Mill Creek	0.4	0.4	0.8	0.4	0.4
Walters	Ferry Creek	1.3	0	1.3	1.3	0
Little Sawmill South Hayden	Mill Creek Flat	3.7	0.6	4.3	3.7	0.6
Totals		7.6	2.7	10.3	7.1	3.2

Alternative 2 - No Action Alternative

BLM would deny the applications and crossing permits would not be issued.

Alternatives Considered but not Analyzed in Detail

The ID team considered three additional alternative that were not analyzed in detail as follows.

- 1) The ID team considered alternative routes to those shown on Figures 1 – 3. The alternative routes were not analyzed in detail because no reasonable alternative to cross public land was available to move cattle across public lands and meet the permittees’ logistical and financial needs.
- 2) The ID team considered an alternative that would require all crossing to take place without the use of motorized vehicles. This alternative was dismissed as unreasonable because: a) a number of the routes the applicants proposed to trail along were existing roads and the team agreed that disallowing the permittee to use motorized vehicles along an open and existing road was unreasonable because the rest of the public are allowed to use motorized vehicles along the same route, and b) where off-designated route trailing would occur, it would occur on established well-defined trailing routes.
- 3) The ID team also considered using trucks to transport livestock, however, satisfactory trucking routes do not exist or they do not run the entire route to the destination pastures, therefore trucking was considered an unreasonable alternative. In addition, the BLM cannot

require the permittees to utilize one particular manner of livestock transport over another on non-BLM lands.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section provides a description of the general environmental setting and resources within that setting that could be affected by the alternatives. In addition, the section presents an analysis of the direct, indirect, and cumulative environmental impacts likely to result from the implementation of the various alternatives. The resources considered in the analysis are listed in Table 9.

General Setting

The Salmon Field Office is divided into 84 grazing allotments on 492,000 acres of BLM administered lands. Livestock grazing use occurs on public lands within the Salmon Field Office from April 21 to February 28. Generally, the lower elevation rangeland in the field office is grazed in the spring, fall and winter. The higher elevations are grazed in the spring, summer, and fall. Livestock trailing occurs at different times throughout the year to facilitate these general seasons of grazing use. Furthermore, timing of trailing events may vary annually based on factors such as forage production, drought, resource conditions, weather, wildfire, and individual livestock operations. Trailing events across BLM administered lands within the Salmon Field Office range in distance from less than one mile to approximately ten miles, and in duration from less than two hours to one day per crossing event.

Grazing permittees or other livestock producers that need to trail livestock across BLM administered lands submit their written crossing application prior to the proposed trailing event. When issued, a crossing permit outlines the allotment(s) to be trailed across, the period of use (dates), and the number and kind of livestock. In addition, the authorization would describe terms and conditions specific to the crossing event, including the trailing route. The terms and conditions may also include avoidance areas (e.g. recently burned areas, vegetation projects), when appropriate, based on resource concerns.

Table 9: Resources considered in the impact analysis

Resource	Not Present	Present Not Impacted	Present Impacted	Impacts
Mineral Resources		X		Mineral Resources may be located in the area, however would not be impacted by the Proposed Action or Alternatives because trailing through mineral sources would not occur.
Soil Resources			X	Impacts to Soil Resources would be negligible directly, indirectly and cumulatively. Impacts to the soil resource, such as compaction or disturbance of biological soil crust, would be immeasurable because trailing would mostly occur along existing roads and established livestock trails where the existing soil surface was altered by road-building or past trailing activities; impacts from the proposed action along these disturbed surfaces would be immeasurable.
Paleontological Resources	X			Paleontological Resources are not documented in the areas of proposed routes.
Floodplains	X			There are no floodplains in the proposed crossing routes.
Vegetation			X	Impacts are disclosed below under <i>Vegetation</i> .
Forest Resources	X			Forest resources would not be impacted because livestock trailing would not occur in forested habitats.
Wetlands and Riparian Zones	X			There are no wetlands or riparian zones in the proposed crossing routes.
Invasive, Non-Native Species			X	Impacts are disclosed below under <i>Invasive, Non-Native Species</i> .
Threatened, Endangered, and Sensitive Plants	X			Documented sensitive plants populations are not present along the proposed trailing routes; sensitive plant populations would therefore not be affected by trailing activities.

Resource	Not Present	Present Not Impacted	Present Impacted	Impacts
Air Quality		X		Potential impacts would include emissions from vehicles/equipment during livestock movement. Impacts are anticipated to be very localized (roughly project boundaries), of short duration (hours to one day) and low intensity (regulatory air quality standards met), and therefore are being considered negligible.
Water Quality	X			There are no stream crossings in the proposed crossing routes.
Fisheries	X			There are no fish-bearing streams in the proposed crossing routes.
Threatened, Endangered, and Sensitive Fishes	X			There is no occupied TES fish habitat, designated critical habitat, or Chinook salmon essential fish habitat in the proposed trailing routes.
Wildlife Resources			X	Impacts are disclosed below under <i>Wildlife Resources including Threatened, Endangered, and Sensitive Animals and Migratory Birds.</i>
Threatened, Endangered, and Sensitive Animals			X	Impacts are disclosed below under <i>Wildlife Resources including Threatened, Endangered, and Sensitive Animals and Migratory Birds.</i>
Migratory Birds			X	Impacts are disclosed below under <i>Wildlife Resources including Threatened, Endangered, and Sensitive Animals and Migratory Birds.</i>
Range Resources		X		Range resources would not be impacted because active trailing would result in negligible amounts of forage being consumed; permitted AUMs would not be reduced.
Economic and Social Values			X	Impacts are disclosed below under <i>Economic and Social Values.</i>
Existing and Potential Land Uses		X		Existing and Potential Land Uses would not be impacted by the Proposed Action or Alternatives. Current authorized uses

Resource	Not Present	Present Not Impacted	Present Impacted	Impacts
				would continue and any potential new uses would be evaluated as required.
Access		X		Access to lands in the area would continue and would not be impacted by the Proposed Action or the Alternatives. The public would still be allowed to access public lands where authorized, i.e., easements and rights-of-way.
Prime and Unique Farmlands	X			There are no prime and unique farmlands located within the project area.
Wastes, Hazardous and Solid	X			There are no hazardous or solid wastes located within the project area nor would any result from the proposed action or alternatives.
Environmental Justice	X			There are no minority or low income populations located within the area of the proposed action or alternatives.
Cultural Resource		X		Section 106 review revealed no cultural resources present within the areas of potential effect of the proposed trailing routes. Each route would be monitored after trailing as a component of Section 106 compliance.
Tribal Treaty Rights and Interests			X	Impacts are disclosed below under <i>Tribal Treaty Rights and Interests</i> .
Native American Religious Concerns	X			The BLM is not aware of specific ceremonial sites or resources associated with ceremonial practices in the proposed project area.
Recreational Use		X		Impacts to recreation would be negligible directly, indirectly, and cumulatively. The proposed action would have a negligible effect on recreation resources because of the short duration of the trailing events; there would be little opportunity for recreational use to intersect with trailing events.

Resource	Not Present	Present Not Impacted	Present Impacted	Impacts
Visual Resources		X		Impacts to visual resources would be negligible directly, indirectly, and cumulatively. Visual Resource impacts would be negligible because trailing would predominantly occur along existing roads or cattle trails; impacts to visual resources would be difficult to detect.
Areas of Critical Environmental Concern (ACEC)	X			There are no ACECs located within the area of the proposed action or alternatives.
Wilderness/WSA	X			There are no WSAs located in the area of the proposed action or alternatives.
Wild and Scenic Rivers	X			There are no Wild and Scenic Rivers within the area of the proposed action or alternatives.
Wild Horse and Burro HMAs	X			There are no Wild Horse and Burro HMAs within the Salmon Field Office area.

Vegetation

Affected Environment

Semi-desert shrubland and grassland

This land cover class includes natural vegetation dominated or characterized by shrub and/or herb species having structural or functional adaptations to prevent or reduce water loss by transpiration. This land cover class includes various ecological sites. Much of the semi-desert type is dominated by Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) with a bluebunch wheatgrass (*Pseudoroegneria spicata*) dominated understory in the lower, drier elevations. As the elevation and amount of precipitation increases, there is a shift to mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) with an Idaho fescue (*Festuca idahoensis*) dominated understory. The other third is a mix of other vegetation types, with the majority of these being three-tip sagebrush (*Artemisia tripartita*) with an understory of Idaho fescue, and low sagebrush (*Artemisia arbuscula*) with a bluebunch wheatgrass understory. These two types tend to occur in the transition areas between the Wyoming big sagebrush sites and the higher elevation, moister sites that support mountain big sagebrush. Low sage occurs on shallow rocky soils. Alkaline sites in the foothills support shadscale (*Atriplex confertifolia*) and greasewood

(*Sarcobatus vermiculatus*). Forbs typically found in these systems include, but are not limited to, various species each of *Antennaria* (pussytoes), *Eriogonum* (buckwheat), *Erigeron* (fleabane or daisy), *Castilleja* (indian paintbrush), *Arenaria* (sandwort), *Astragalus* (milkvetch), *Mertensia* (bluebells), *Crepis* (hawksbeard), *Penstemon* (beardstongue) and *Phlox*.

Under the *Idaho Standards for Rangeland Health* (USDI-BLM, 1997), Standard 4 (Native Plant Communities) is currently being met on each of the allotments.

Baldy Basin Allotment: This allotment is located in the northern portion of the Salmon FO, approximately 23 miles southeast of Salmon, Idaho in the Lemhi valley near Tendoy, Idaho. The allotment affected by the request is included in the Improve (I) category of selective management in the 1987 Lemhi Resource Management Plan (RMP) (USDI-BLM, 1986). The RMP describes “Category I” allotments as: “Most of the public lands in the allotment are proposed for retention; range condition and trend are unsatisfactory; site potential for improvement is high; resource conflicts are high; opportunities exist for positive economic return from public investments; and present management appears to be unsatisfactory.” (USDI-BLM, 1986) (Appendix B, p. B-1).

A Standards and Guidelines Determination was completed in May 2008. When the determination was signed, the existing grazing management practices and/or level of grazing on the Baldy Basin Allotment were not achieving all applicable Idaho Standards for Rangeland Health and did not conform to the Guidelines for Livestock Grazing Management. The allotment did not meet health standard for Std. 2 Riparian Areas and Wetlands, Std. 3. Stream Channel/Floodplain, and Std. 5 Seedings. Achieving or making significant progress towards these standards is required of all uses of public lands as stated in 43 CFR 4180.1. As a result, the grazing management on the allotment was changed to accommodate deferment in the Seedings and season of use limitations on the riparian area.

Sandy Creek and Rattlesnake: The area subject to this proposal is located in the southwest portion of the Salmon FO, approximately 18 miles south of Salmon, Idaho in the Lemhi River valley. The allotments affected by the request are included in the Maintain (M) category of selective management in the 1987 Lemhi Resource Management Plan (RMP). The RMP describes “Category M” allotments as: “Most of the public lands in the allotment are proposed for retention; the range condition and trend are satisfactory; site potential for improvement is moderate or low; resource conflicts are moderate or low; opportunities exist for positive economic return from public investments; and present management appears satisfactory. Generally, these allotments have no significant resource problems and present management is achieving management goals.” (USDI-BLM, 1986) (Appendix B, p. B-1).

A Standards and Guidelines Determination was completed on both the Sandy Creek and Rattlesnake Allotments in June of 1998. When the determination was signed, the existing grazing management practices and/or level of grazing on the two allotments were achieving or

making significant progress toward the Idaho Standards for Rangeland Health and conformed with the Guidelines for Livestock Management. Achieving or making significant progress towards these standards is required of all uses of public lands as stated in 43 CFR 4180.1.

NEF 3: The area subject to this proposal is located in the southwest portion of the Salmon FO, approximately 45 miles south of Salmon, Idaho in the upper Lemhi River valley. The allotment affected by the request was not categorized when the Lemhi RMP was completed because it did not exist at that point in time (the allotment was formed after the Lemhi RMP was issued and permitted use began in 1988). A Standards and Guidelines Determination was completed on the NEF 3 Allotment in September of 2004. When the determination was signed, the existing grazing management practices and/or level of grazing on the allotment was achieving or making significant progress toward the Idaho Standards for Rangeland Health and conformed with the Guidelines for Livestock Management. Achieving or making significant progress towards these standards is required of all uses of public lands as stated in 43 CFR 4180.1.

Mill Creek: The area subject to this proposal is located in the southwest portion of the Salmon FO, approximately 45 miles south of Salmon, Idaho in the upper Lemhi River valley. The allotment affected by the request is included in the Custodial (C) category of selective management in the 1987 Lemhi RMP. The RMP describes “Category C” allotments as: “Most of the public lands in the allotment are proposed for retention or disposal; range condition and trend are satisfactory; site potential for improvement is low or moderate; resource conflicts are low or moderate; opportunities do not exist for positive economic return from public investments or are constrained by technology or economic factors; and present management appears satisfactory” (USDI-BLM, 1986) (Appendix B, p. B-3).

A Standards and Guidelines Determination was completed on the Mill Creek Allotment in August of 2000. When the determination was signed, the existing grazing management practices and/or level of grazing on the allotment was achieving or making significant progress toward the Idaho Standards for Rangeland Health and conformed with the Guidelines for Livestock Management. Achieving or making significant progress towards these standards is required of all uses of public lands as stated in 43 CFR 4180.1.

Walters: The area subject to this proposal is located in the southwest portion of the Salmon FO, approximately 45 miles south of Salmon, Idaho in the upper Lemhi River valley. The allotment affected by the request is included in the Improve (I) category of selective management in the 1987 Lemhi RMP. The RMP describes “Category I” allotments as: “Most of the public lands in the allotment are proposed for retention; range condition and trend are unsatisfactory; site potential for improvement is high; resource conflicts are high; opportunities exist for positive economic return from public investments; and present management appears to be unsatisfactory. An allotment may be placed into the Improve category if one or more of the four resource-specific criteria are applicable” (USDI-BLM, 1986) (Appendix B, p. B-2).

A Standards and Guidelines Determination was completed on the Walters Allotment in 2010. When the determination was signed, the existing grazing management practices and/or level of grazing on the allotment was achieving or making significant progress toward the Idaho Standards for Rangeland Health and conformed with the Guidelines for Livestock Management. Achieving or making significant progress towards these standards is required of all uses of public lands as stated in 43 CFR 4180.1.

Little Sawmill/S. Hayden: The area subject to this proposal is located in the southwest portion of the Salmon FO, approximately 30 miles south of Salmon, Idaho in the upper Lemhi River valley. The allotment affected by the request is included in the Improve (I) category of selective management in the 1987 Lemhi RMP (USDI-BLM, 1986). The RMP describes “Category I” allotments as: “Most of the public lands in the allotment are proposed for retention; range condition and trend are unsatisfactory; site potential for improvement is high; resource conflicts are high; opportunities exist for positive economic return from public investments; and present management appears to be unsatisfactory. An allotment may be placed into the Improve category if one or more of the four resource-specific criteria are applicable” (USDI-BLM, 1986) (Appendix B, p. B-2).

A Standards and Guidelines Determination was completed on the Little Sawmill/South Hayden Allotment in 1998. When the determination was signed, the existing grazing management practices and/or level of grazing on the allotment was achieving or making significant progress toward the Idaho Standards for Rangeland Health and conformed with the Guidelines for Livestock Management. Achieving or making significant progress towards these standards is required of all uses of public lands as stated in 43 CFR 4180.1.

Alternative 1 - Proposed Action, Direct/Indirect Impacts:

Because cattle would be actively moving, little forage consumption would occur during the trailing events, particularly as cattle trail along roads. Any forage consumption that would occur, would have little influence on vegetative composition because cattle would not be consuming the amount of forage they would if they were normally grazing a particular area. Impacts from this level of use would be hard to detect, especially since half the trailing would occur in fall when plants are dormant. Cattle are considered “grazers” and prefer a grass-dominated diet, although forbs and shrubs are consumed to a higher degree when green grass is not available. Incidental grazing impacts by cattle would occur along the trailing route and would be difficult to discern from the surrounding area. Cattle show a strong avoidance of shrubs high in volatile oils, such as juniper, rabbitbrush, and various sagebrush species because they lack mechanisms to reduce the toxic effects of these volatile oils (Holochek, Peiper, & Herbel, 1989). Cattle are unlikely to consume shrubs during active trailing. However, cattle may occasionally graze on shrubs during trailing when shrubs comprise a higher percentage of site plant community composition. During the trailing event, livestock could consume a small amount of vegetation, redistribute

nutrients and plant seeds, and trample sagebrush and other plants (Miller, Svejcar, & West, 1994) (West, 1996).

Livestock would mainly walk along existing trails or pathways and would take the easiest route through sagebrush-dominated areas; they would avoid walking directly through shrubs in most cases. Overall impacts to vegetation would be negligible because cattle would be actively trailed and would not be allowed to drift and graze as they would under normal grazing use circumstances. Although cattle may consume small amounts of vegetation as they are trailed through the allotment, the amount of forage consumption and trampling would be negligible. Portions of plants that have broken off or been trampled could be evident along the trailing route, but long-term degradation of plant communities would not occur. Where cattle are trailed along existing roads, impacts to vegetation would be imperceptible because trampling and incidental forage intake would be minimized. Where trampling or breakage occurs, there could be an increase in vascular plant litter and an increase in resource availability (light, nutrients, water) for herbaceous vegetation. This decrease in competition from shrubs would benefit herbaceous vegetation.

The majority of ATV and/or motorcycle use (92%) would occur on existing roads and roadside ditches. Along these roads there would be no impacts to vegetation from ATVs and/or motorcycles; vegetation along the roadside ditches could be damaged. Where off-road ATV or motorcycle use would occur (8% of all motorized trailing), it would mostly occur along existing paths through the vegetation and along fencelines that are already somewhat devoid of vegetation from past trailing activities. Because most trailing would occur where vegetated surface area is minimal, minor impacts to vegetation (such as breakage and crushing) from ATV or motorcycle use would occur. About 31% of all trailing would be done using horses and herding dogs; impacts from non-motorized trailing would be less than motorized trailing and would be minimal.

The overall level of impact to vegetation of crossing activities would be negligible and difficult to discern at the allotment level, as cattle would be actively driven across the allotments, reducing the amount of time and minimizing forage consumed by livestock. Impacts from this level of use would be hard to detect.

Alternative 2 - No Action, Direct/Indirect Impacts:

Crossing permits would not be issued, and trailing-related impacts to vegetation would not occur. Many of the existing pathways and trail treads from livestock trailing would slowly heal and re-vegetate.

Invasive, Non-Native Species

Affected Environment

While most of the assessment area consists of intact native vegetation, a number of noxious weeds and invasive plants are present. These include spotted knapweed, cheatgrass, leafy spurge, houndstongue, Canada, musk, bull and Russian thistles, halogeton, black henbane and other less aggressive, yet non-native species such as Kentucky bluegrass and smooth brome, mustards and other “barnyard type “ of annual weeds. Despite localized areas of weed infestation along travel routes and disturbed areas, much of the assessment area remains relatively weed-free.

Noxious weed infestations requiring treatment occur in the allotments. Treatment has consisted of herbicide application and the use of biological agents, such as *Rhinocyllus conicus*, which attacks the seedheads of musk thistle; *Cyphocleonus achates*, a root-boring insect that targets spotted knapweed; and *Apthona* spp., a flea beetle used for leafy spurge control. Herbicide application is coordinated between the BLM, Salmon-Challis National Forest (SCNF) and Lemhi County under a strategic plan managed by the local Lemhi Cooperative Weed Management Area (LCWMA).

Alternative 1 – Proposed Action, Direct/Indirect Impacts:

Trailing activities would result in a negligible to minor impact due to the fact that cattle would be actively trailed across the allotments and would not be left on the allotments overnight. The opportunity for livestock ingestion of noxious weeds while trailing would be minimal, since cattle would be actively trailed and would have little to no opportunity to graze. The opportunity for viable weed seeds to be transported to new locations by attaching to hair or getting stuck in soil on hooves and transported by animal movement would still be present but the amount of land exposure to trailing cattle would be small.

Along the trailing route, trailing activities could influence composition of vegetation because trampling of vegetation, coupled with soil disturbance, could weaken the ability of those systems to fend off weed invasion. By reducing the structural integrity of plant communities and increasing soil exposure from disturbance, niches can be created where highly competitive and aggressive non-native species can become established. Motorized equipment use, especially cross country in the process of trailing cattle, has the potential to transport and deposit weed propagates on to public lands from seeds being carried in the undercarriage and in mud deposits clinging to the vehicles in use.

Generally, livestock ingestion of weeds during the rosette stage and up to seed stage puts stress on the plants and weakens their ability to produce viable seed for that growing season thus inhibiting or slowing down rate of spread. However, it is possible that even incidental grazing of the plants could actually stimulate additional root growth and increase seed production as long as the plant is not reduced to the point of fixing carbon for survival rather than storage or reproduction. Depending on the species, incidental grazing of weeds after seed ripe could spread

weeds by the passing of viable weed seeds thru the digestive system and re-depositing them on the land at another location. Viable weed seeds could also be transported to new locations by attaching to hair or getting stuck in soil on hooves and transported by animal movement.

Repeated trampling related to trailing, could result in the decrease in cover of desirable plant species through crushing and breakage, and vegetative removal. Soil disturbance could create areas of bare soil for weed seed to germinate, which over time, could result in undesirable plant communities becoming established.

Livestock could transport weed propagates from existing infestations on private lands to public lands as the trailing event begins, or if livestock leave the allotment, are exposed to weed infestations and return later in the season. Livestock may also transport weed seeds by walking through existing weed infestations and spreading weed propagates outside of the established infestations as they trail through the allotment. Although these allotments are currently grazed, livestock trailing could result in a slight risk of introduction and spread of noxious weeds; this risk is small because of the limited duration of the trailing activities (only portions about 15 days a year), the limited geographic area where trailing would occur (about 10 miles of trailing routes), and the timing of the trailing activities (some of the trailing occurs when weeds are dormant).

Alternative 2 - No Action, Direct/Indirect Impacts:

There would be no impacts to invasive, non-native species under this alternative because no crossing would be authorized.

Wildlife Resources including Threatened, Endangered, and Sensitive Animals and Migratory Birds

Affected Environment

Wildlife Habitat

The wildlife habitats within the crossing areas include primarily Semi-Desert Shrubland and Mesic Shrubland (riparian). Overviews of upland and riparian vegetation communities within the areas are discussed above.

Wildlife Species

Many wildlife species utilize a variety of habitats in the area. These habitats provide forage, nesting substrate, and cover for a variety of bird, mammal, amphibian and reptile species common to the area. Although all of the species are important members of native communities and ecosystems, most are common and have wide distributions within the area, state, and region. Consequently, the relationship of most of these species to the area is not discussed here in the same depth as species upon which the BLM places management emphasis.

There is one threatened mammal species listed under the Endangered Species Act (ESA) in the area, the Canada lynx. In addition the wolverine has been proposed for listing by the USFWS Endangered Species Program (USDI-USFWS, 2013). BLM, USFWS, and Idaho Department of Fish and Game (IDFG) also maintain an active interest in other special status species that have no legal protection under the ESA. BLM special status species are: 1) species listed or proposed for listing under the ESA, and 2) species requiring special management consideration to promote their conservation and reduce the likelihood and need for future listing under the ESA (USDI-BLM, 2008), which are designated as sensitive by the BLM State Director(s). Special status wildlife species discussed in this document include those listed on the Idaho BLM State Sensitive Species List (USDI-BLM, 2003) and those afforded protection under the Bald and Golden Eagle Protection Act (BGEPA) (US, 1940) with potential to occur within the area.

Two birds are listed as candidates under the ESA, and 4 mammals, 13 birds, one reptile and one amphibian with special status potentially could occur within the area. With the exception of a few well-studied species, current occurrence and population data for most special status animal species within the area are limited due to a deficiency of surveys and directed research.

Therefore, only a few focal special status animal species will be discussed in detail individually. The USFWS has determined that wolverine, yellow-billed cuckoo and greater sage-grouse warrant listing under ESA (i.e., candidate species) but have been precluded due to higher priorities. These species will be discussed in greater detail because they occur or possibly could occur within the area, and they have been the subject of targeted surveys and periodic species-specific monitoring studies. Other special status animal species, migratory birds, raptors, and species of socio-economic importance (e.g., big game) will be included in a general discussion by taxonomic groupings.

Focal Special Status Animal Species

Canada lynx: In Idaho, the Canada lynx inhabits montane and subalpine coniferous forests typically above 4000 ft. Habitat used during foraging is usually early successional forest. Dens are usually in mature forests. Individuals are wide-ranging and require large tracts of forest. The Canada lynx preys on the snowshoe hare, particularly during the winter, as well as a variety of birds and other small mammals (IDFG, 2005). The surrounding Salmon-Challis National Forest no longer has the Canada lynx included on the list of protected species expected to occur on the forest and no longer consults on Canada lynx for their projects. There are historic records of Canada lynx in the Field Office area, but none within the proposed crossing areas, though there are some at higher elevations within the Baldy Basin and Little Sawmill/South Hayden Allotments. The only proposed crossing route that enters a Canada Lynx Analysis Unit (LAU) is the route on the Little Sawmill/South Hayden Allotment, that route crosses portions of the Mill-Big 8 Mile and the Hayden Basin LAUs. The total distance of the route within the LAUs is 5,000 feet, of which 1,200 are within mapped habitat. Field verification shows the routes within sage steppe habitat and not within lynx habitat.

Wolverine: In February of 2013, the USFWS proposed the wolverine for threatened status under the ESA (USDI-USFWS, 2013). In that proposal they described the primary threat to the wolverine as the loss of habitat and shrinking range due to climate warming. Secondary threats, including harvest and loss of genetic diversity due to small effective population sizes could become significant as habitat is lost due to the primary threat. The USFWS found no evidence to suggest that current levels of transportation infrastructure development or residential development are a threat or will become one in the future. Land management activities (principally timber harvest, wildland firefighting, prescribed fire, and silviculture) can modify wolverine habitat, but this generalist species appears to be little affected by changes to the vegetative characteristics of its habitat.

The wolverine requires extensive tracts of land to accommodate large home ranges and extensive movements. The primary habitat during winter is mid-elevation conifer forest, and summer habitat is subalpine areas associated with high-elevation cirques. Summer use of high-elevation habitats is related to the availability of prey and den sites and human avoidance. Lower elevation forests likely contain the greatest amount of ungulate carrion in winter. Den sites are often in large boulder or talus fields in subalpine cirques (IDFG, 2005). The SFO does not have any records of wolverines near the crossing routes.

Greater sage-grouse: The greater sage-grouse is a sagebrush-obligate species that requires large areas of relatively undisturbed sagebrush steppe habitat. Sage-grouse were once abundant and concomitant with sagebrush steppe ecosystems across western North America (Schroeder, Young, & Braun, Sage grouse (*Centrocercus urophasianus*), 1999); currently, however, their distribution has been reduced to nearly half of what it was historically (Schroeder, et al., 2004). Despite long-term population declines, sage-grouse persist across more than 250,000 miles² of the sagebrush ecosystem (Schroeder, et al., 2004). Within this requisite sagebrush landscape, important seasonal habitats (e.g., wet meadows, higher elevation mesic shrublands) are also necessary (Connelly, Schroeder, Sands, & Braun, 2000).

Because sage-grouse are still broadly distributed, dependent on a diversity of heterogeneous seasonal habitats, and some populations are wide-ranging, they are expected to be vulnerable to changes to the sagebrush ecosystem. In addition, the maintenance of viable sage-grouse populations is of special concern to state and federal resource managers across the species' present range, and their persistence is important in the socio-political, economic, and environmental realms (Sands & Smurthwaite, 1992). On March 5, 2010 the USFWS submitted a new finding to the Federal Register which found that listing the greater sage-grouse was warranted but precluded by the need to take action on other species facing more immediate and severe extinction threats.

The crossing areas are located in the Western Association of Fish and Wildlife Management Agencies (WAFWA) Snake River Plain Management Zone (MZ), a large population that includes portions of Nevada, Oregon, Idaho, Montana, and Utah (Stiver, et al., 2006). The

Snake-Salmon-Beaverhead population within the Snake River Plain MZ (Garton, Connelly, Horne, Hagen, Moser, & Schroeder, 2011) includes a large portion of east-central Idaho. Of the five subpopulations identified by Connelly et al. (2004) within the population, the Lemhi-Birch Idaho subpopulation overlaps the crossing areas.

Generally, habitat conditions have deteriorated or been altered to some degree throughout the entire distribution of sage-grouse. This has caused local extirpations or declines in sage-grouse populations throughout their historical range. Connelly et al., (2004) conducted a population analysis by state and not by management zone, population, or subpopulation; annual rates of change for sage-grouse in Idaho suggest a long-term decline for sage-grouse in Idaho. More recently, Garton et al. (Garton, Connelly, Horne, Hagen, Moser, & Schroeder, 2011) conducted a population analysis of the Northern Great Basin population based on data from 1965 to 2007. During the assessment period, the proportion of active leks decreased and average number of males per active lek declined by 17 percent (Garton, Connelly, Horne, Hagen, Moser, & Schroeder, 2011). Although the Garton et al. 2011 analysis is more detailed than the Connelly et al. (2004) analysis, both indicated similar trends for sage-grouse populations in the Snake River Plain MZ.

Recently, Idaho BLM initiated a modeling effort to identify preliminary priority sage-grouse habitat (PPH) within the Snake River Plain MZ (Makela & Major, 2012). Priority habitat includes breeding, late brood-rearing, and winter concentration areas. Because priority habitat areas have the highest conservation value for maintaining the species and its habitat, it is BLM policy (as per WO IM 2010-071) to identify these areas in collaboration with respective state wildlife agencies. All of the crossing routes cross PPH and some also cross a portion of Priority General Habitat (PGH). The Idaho BLM has also modeled areas that appear to be of higher relative importance for conservation of greater sage-grouse based on lek connectivity, habitat based persistence probability and breeding bird density. The habitat near the Baldy Basin crossing route is of relatively high importance and the routes in the NEF #3 and Mill Creek, Walters and Little Sawmill/South Hayden are of relative lower importance.

Most of the habitat with the crossing corridors are currently identified by Idaho as “key” greater sage-grouse habitat. Key habitat consists of generally intact sagebrush that provides sage-grouse habitat during some portion of the year by the (Idaho Sage-grouse Advisory Committee, 2006). Portions of the habitat within the crossing corridors in the Walters, Mill Creek and Little Sawmill/South Hayden Allotments are mapped by the Challis Sage Grouse Local Working Group (CSGLWG) as nesting, summer and winter habitat. The CSGLWG has included habitat within crossing corridors in the Baldy Basin Allotment in the Mid Lemhi Priority Area; this is an area where the group felt there was a high priority for protection and restoration (CSGLWG, 2007).

Yellow-billed cuckoo: Suitable habitat for the yellow-billed cuckoo is considered to be a large block (minimum of 25 acres to upwards of 99 acres) of cottonwood canopy and a thick willow

understory (Federal Register, 2001). This type of habitat is rare within the SFO area, and does not occur along any of the proposed crossing routes.

Migratory Birds, Raptors, and other Birds (including Special Status Species)

A variety of special status bird species occur or are likely to occur within the crossing areas. The majority of these species are associated with shrub steppe, grassland or riparian habitats. Brewer's sparrow and sage thrasher are heavily reliant on sagebrush steppe for nesting and foraging. Green-tailed towhees are less reliant on sagebrush but are dependent on shrubland habitat. Brewer's blackbird, calliope hummingbird, and willow flycatcher typically are associated with riparian areas.

Further consideration is given to avian species afforded special management emphasis under the Migratory Bird Treaty Act (MBTA). As of 2010, under a signed Memorandum of Understanding with the USFWS, the BLM has a responsibility to "as practical, protect, restore, and conserve habitat of migratory birds, addressing the responsibilities in Executive Order 13186". The habitat in the general area of the proposed crossing may provide foraging and nesting habitat for up to 185 species of migratory birds.

The North American Bird Conservation Initiative (NABCI) is a comprehensive instrument by which government agencies, such as the BLM, and private partners can promote and achieve integrated continental bird conservation as specified by Executive Order 13186 and the BLM-USFWS MOU. One product of the NABCI is the designation of Bird Conservation Regions (BCR) across North America. BCRs are ecologically distinct regions with similar avian communities, habitats, and management concerns developed as the primary unit within which issues are resolved, sustainable habitats are designed, and priority projects are initiated. Within BCRs, regional partnerships, or joint ventures, identify Bird Habitat Conservation Areas (BHCA) in which to deliver and implement state or local bird conservation plans. All of the crossing routes are within the Great Basin BCR. Within the BCR, partner agencies and organizations have compiled a list of continentally important bird species, based on a variety of bird initiatives and plans.

Riparian habitats support the most diverse migratory bird communities in the arid and semiarid portions of the Intermountain West. While some migratory bird species use a wide variety of habitats, others are more specialized. Several species can successfully nest and raise multiple broods during a single breeding season if suitable conditions exist. Grasslands and shrub steppe provide nesting and foraging habitat for the majority of migratory bird species within the crossing areas. Most of these ground nesting or shrub-dependent species rely on the vegetative structure and cover found in these habitat types for successful breeding.

An assortment of raptor species occur or potentially occur near the crossing areas. The shrub steppe habitat provides nesting and foraging substrate for many species. Generally, raptors return to areas in which they have nested in the past, often using the same nesting territories. Nesting activities may be initiated in mid-February to late April depending upon species. Nest occupation

continues until chicks are fledged, which usually occurs from early June to mid-August. Raptor nesting is expected to occur in suitable habitats within the area. Eagle species are afforded additional protection under the Bald and Golden Eagle Protection Act. Bald eagle activities within the area are concentrated along the Lemhi River, and are usually not in the areas proposed for crossing.

Big Game and other Mammals (including Special Status Species)

Several special status mammal species have been documented or have the potential to occur within the proposed crossing areas. The areas have long supported populations of a wide variety of big game species. Rocky Mountain elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus hemionus*), and pronghorn (*Antilocapra americana*) use portions of the areas yearlong. However, some areas are used specifically as seasonal ranges (i.e., spring, summer, fall, and winter). Most elk and mule deer winter on the BLM-managed lands and then move to higher elevations during the summer months. Mule deer and pronghorn are common year-round in the uplands.

Amphibians and Reptiles (including Special Status Species)

Several special status amphibians and reptiles, including the western toad and common garter snake, have the potential to occur within the crossing areas. Loss and degradation of riparian/wetland habitats are the most serious threats to the maintenance of viable populations of these species.

Alternative 1 - Proposed Action, Direct/Indirect Impacts:

Livestock trailing would have little effect on wildlife. There could be some wildlife displacement as livestock move across an allotment, but since the livestock would be actively pushed and would not be on the allotment overnight the displacement and removal of grass (forage and cover) through grazing would be minimal.

Focal Special Status Animal Species

Canada lynx: The crossing will not occur within lynx habitat and will not affect lynx or their habitat.

Wolverine: The SFO does not have any records of wolverines within two miles of the crossing routes. The USFWS and Wildlife Conservation Society have mapped wolverine habitat based on persistence of late spring snow, primary wolverine habitat and female dispersal areas. The crossing will not occur within modeled habitat for wolverine. Wolverines are unlikely to be in the area of the crossing given the sage steppe habitat type. There will be no effects to wolverine from the crossings.

Greater sage-grouse: The early season of crossing applied for in the allotments would occur during the breeding and nesting season for greater sage-grouse. The only route that comes into close proximity to a sage-grouse lek (>1 mile) is the route in the Little Sawmill/South Hayden

Allotment, which will not be used before 6/1 and will not affect breeding sage-grouse. Because active trailing would occur along existing roads or cattle trails, impacts to hiding cover and vegetative structure and composition would be negligible. Since the cattle would be actively trailed, the chance of displacing or otherwise disturbing nesting sage-grouse would be minimal, though the possibility exists, especially in the Mill Creek, Walters and Little Sawmill/South Hayden Allotment where the cattle will be crossing nesting habitat.

Under this alternative, there could be minor impacts to pygmy rabbits and other small mammals from trailing through the allotments due to the large numbers of cattle, but this would be mitigated by active trailing along existing roads for the majority of the crossing. Impacts occurring in pygmy rabbit habitat would result from removal of vegetation (mostly cover) and potentially from collapse of burrows from livestock, this potential impact would only be within the Mill Creek, Walters and Little Sawmill/South Hayden Allotments as the other allotments do not support pygmy rabbits.

The crossing would take place mostly in semi-desert shrubland habitat. The impact to riparian vegetation, and thus the wildlife that rely on it would be negligible. Livestock trailing would not affect other cover types.

Displacement impacts to wildlife, including sensitive species and migratory birds, under this alternative would be expected to be minimal. Population numbers and trends would be expected to continue on the same trajectory, which differs by species.

Herbaceous vegetation provides forage and concealment cover for wildlife species particularly during the spring breeding period when calving, fawning, nesting, and rearing of young occurs. Incidental grazing could occur during active trailing; this would reduce the height and amount of herbaceous vegetation. This would be limited to the trailing routes, most of which are along existing cattle trails or roads, where vegetative structure and composition is already altered to some degree. The presence of livestock and the movement of livestock between areas of use would result in the direct disturbance or displacement of some wildlife from preferred habitats, nesting/birthing sites, or water sources. Both the disturbance and displacement of wildlife and the reduction of herbaceous forage and cover could limit the productivity and reproductive success of some species, although these impacts are not expected to occur to any discernible degree.

Alternative 2- No Action, Direct/Indirect Impacts:

No crossing permits would be issued, and livestock trailing-related impacts to wildlife would not occur.

Economic and Social Values

Affected Environment

Economics

Lemhi County, Idaho is a rural area with an estimated population of 7,936. Most of the population is concentrated in and around the communities of Salmon, North Fork, Tendoy, Lemhi, and Leadore. Historically, the Lemhi County economy was based on mining activity which caused population and job numbers to fluctuate over time.

Major employers in Lemhi County in 2013 included the Discovery Care Center, LLC, Lemhi County, Idaho Department of Fish and Game, QB Corporation, Salmon Public Schools #291, Saveway Market, Inc., Steele Memorial Hospital and the U.S. Government. Nonfarm payroll jobs for 2011 were dominated by the Government (34%), Trade, Utilities and Transportation (15%), Leisure and Hospitality (12%), Educational and Health Services (10%), and Professional and Business Services (9%) (Idaho Department of Labor, Will Jenson, 2013). This data reflects covered employment, which includes jobs subject to state and federal unemployment laws.

In June 2013, the total employment of the civilian labor force was 3,113 with the total unemployed of 368. The average annual unemployment rate in 2011 for Lemhi County is 10.6% compared to 6.4% for the State of Idaho and 7.6% for the U.S. (Idaho Department of Labor, Will Jenson, 2013).

Lemhi County's basic economic sectors are services and retail (tied to tourism and ranch/farm activities), government, agriculture (ranching), mining, and construction. Government, including schools, is a basic sector of the economy in many small, rural economies like Salmon because it brings personal income and tax revenues from the state and federal levels into the community (Idaho Department of Labor, Will Jenson, 2013). Lemhi County's estimated per capita income in 2011 was \$30,733, compared with an average of \$32,881 for Idaho and \$41,560 nationally. This is an increase in per capita income of approximately \$8,500 since the year 2002 (Idaho Department of Labor, Will Jenson, 2013).

Many of the agricultural operations in the county involve public lands ranching; these ranches generally utilize BLM forage to support their cattle operations from spring through fall and into winter in some cases. The BLM authorizes AUMs on an annual basis. The established preference limit for AUMs on BLM lands in the Salmon Field Office area is 52,632 AUMs. However, the average actual use AUMs for the last five years has been much lower due to factors such as drought, financial limitations on the part of operators, or implementation of grazing practices to improve range conditions. In fiscal year 2012, the Salmon Field Office authorized 48,690 AUMs of forage; the three crossing permits being analyzed in this EA involve 200 cattle (Permit A), 50 cattle (Permit B), and 200 cattle (Permit C) for active trailing.

Fees charged by BLM for grazing are calculated using the formula required under BLM grazing regulations found at 43 CFR 4130.8-1(a)(1) and are considerably less than those charged for private grazing land. Currently, using the same formula, an AUM is valued by the BLM and the Forest Service at \$1.35. The fee charged on Idaho state lands in the area is \$5.12 per AUM. The average fee for private grazing land in Idaho ranges from \$12 to \$22, with a state average of \$15 per AUM (Williams, 2011). Access to and use of federal lands for grazing purposes is highly coveted by area livestock producers as a source of relatively inexpensive forage, even though additional management costs are usually incurred in the use of public lands that are included in the fees for private lands.

Social

A variety of local individuals and organizations have shown interest in public land management through input received during the scoping process for other BLM proposals. Many of their comments focus on wildlife and water issues. These groups indicate the condition of resources on public lands is important to their supporters because they value these resources for wildlife, recreation, education, scenic qualities, wilderness, open space, and a variety of other reasons. During the scoping process for this EA, no public comments were received.

Ranching is an important part of the history, culture and economy of Lemhi County. There are many challenges facing ranchers today, including changes in federal regulations, economic issues and changing land uses. Ranchers and permittees may face increasingly stressful social situations as they try to balance their traditional lifestyles with demands from government agencies and other public land users such as recreationists.

Alternative 1 - Proposed Action, Direct/Indirect Impacts:

Under this alternative, applicants would be permitted to move their livestock across the public land allotments utilizing the routes (Figure 1 - 3) and dates they applied for, including Other Terms and Conditions. Under this alternative, the applicant would still have the ability to move their livestock when and where needed.

Ranching operations and traditions associated with the ranching communities of Lemhi County would continue as they have been. The ability to move livestock from one ranch to another, or from the ranch to public land grazing allotments, would continue. Socio-economic benefits of ranching would continue; ranches would continue to sell livestock and support local families and ways of life.

Alternative 2 - No Action, Direct/Indirect Impacts:

Crossing permits would not be issued. Under this alternative, permittees would incur the added expense of finding and implementing an alternate route that does not cross BLM managed public

lands, or would not be able to graze their BLM allotment. This would cause economic hardship to the permittees because the forage available on the BLM allotments comprises a large amount of the forage they utilize throughout the year. These permittees, and the family members and/or employees they support, would be affected because of the extra costs and effort that would be incurred if the permittees needed to find alternate forage, if available.

Tribal Treaty Rights and Interests

Affected Environment

The 1868 Fort Bridger Treaty, between the United States and the Shoshone and Bannock Tribes, reserves the Tribe's right to hunt, fish, gather, and exercise other traditional uses and practices on unoccupied federal lands.

The federal government has a unique trust relationship with federally-recognized American Indian Tribes including the Shoshone-Bannock Tribes. The BLM has a responsibility and obligation to consider and consult on potential effects to natural resources related to the Tribes' treaty rights or cultural use. Resources or issues of interest to the Tribes that could have a bearing on their traditional use and/or treaty rights include: tribal historic and archaeological sites, sacred sites and traditional cultural properties, traditional use sites, fisheries, traditional use plant and animal species (including bighorn sheep and sage-grouse), noxious and invasive, non-native species, air and water quality, wildlife, access to lands and continued availability of traditional resources, land status, and the visual quality of the environment.

The assessment areas are located on unoccupied federal lands outside of the ceded boundary. Therefore, Tribal treaty rights, as defined, are applicable.

Alternative 1 – Proposed Action, Direct/Indirect Impacts:

The three applied-for trailing routes have been utilized by livestock during yearly trailing operations for several decades. Permits A and B follow a mix of dirt two-track roads and cross-county trails; permit C follows a mix of dirt two-tracks and/or gravel roads and cross-county trails (Table 8). Where repeated cross-country trailing has occurred in the past, it has resulted in pathways and trail treads along the trailing routes, particularly across upland settings. Of all trailing, 26% would occur cross-county; most trailing (74%) would occur on existing dirt two-tracks or gravel roads. During one-day trailing events as described in the terms and conditions section, livestock would mainly trail along existing roads (74% of trailing). When trailing cross-county (24% of trailing), they would trail along established pathways and would take the easiest route through sagebrush-dominated areas; they would avoid walking directly through dense shrubs in most cases. Depending on the existing amount of use in each allotment, impacts to plants near these pathways that may be valued as treaty rights resources would be localized and minor.

As livestock move across an allotment, the trailing would result in short-term minor displacement of wildlife, or disturbance of breeding or nesting birds (including sage-grouse) important as treaty rights resources; this short-term disturbance is not expected to affect breeding or nesting success.

Alternative 2 - No Action, Direct/Indirect Impacts:

Under this alternative, no crossing permits would be authorized. Many of the existing pathways and trail treads from livestock trailing would slowly heal and re-vegetate. There would be no disturbances to flora or fauna important as treaty rights resources.

CUMULATIVE IMPACTS OF ALTERNATIVES

This section discloses the incremental impact that the alternatives are anticipated to have when considered in the context of impacts associated with past, present, and reasonably foreseeable future actions that have occurred, or are likely to occur, in the three Cumulative Impacts Assessment Areas (CIAA) that were developed. Although these actions probably do not account for all of the actions that have or are likely to occur, GIS analysis, agency records, and professional judgment suggest that they have contributed to the vast majority of cumulative impacts that have occurred in the CIAAs.

For all of the resources affected by the alternatives described in this document, the past, present, and reasonably foreseeable actions in the CIAAs are described in Table 10 and Table 11. The temporal boundary when analyzing cumulative impacts is 10 years.

1. The Baldy Basin, Sandy Creek, Kenney Creek, Rattlesnake, Mill Creek, Walters, NEF 3, and Little Sawmill/S. Hayden allotments comprise the CIAA for vegetation, invasive, non-native species, wildlife excluding sage-grouse, and tribal treaty rights and interests. Total acreage of this CIAA is 46,955.

Table 10: Past, present, and reasonably foreseeable actions in the CIAA.

Type of Activity	Past and Present	Reasonably foreseeable
Range Allotments	Portions of: 8 BLM Allotments 4 State Managed Parcels	Portions of: 8 BLM Allotments 4 State Managed Parcels
Range Improvements	Fences - 123 miles Water locations - 63	No new proposals
Seedings	1,102 acres	No new proposals
Weed Treatments	Approx. 78 acres	Approx. 78 acres
Wildfire	7,248 acres	unknown
Prescribed Fire	0 acres	0 acres

Type of Activity	Past and Present	Reasonably foreseeable
Agricultural Development	123 acres	0 acres
Urban & Other Developed Lands	163 acres	0 acres
Power Lines	6 miles	0 acres
Roads**	19 miles	0 acres
Primitive Roads	78 miles	0 acres
Trails	10 miles	0 acres

* Information provided in this table and the associated narrative as derived from the best current datasets. No warranty is made by the Bureau of Land Management (BLM). The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

**road = formerly called a two-wheel drive road; primitive road = four-wheel drive road and four-wheel drive technical road; and trail = all-terrain vehicle (ATV) route.

Aggressive wildland fire suppression on federal lands is anticipated to continue into the foreseeable future.

A travel management plan will be completed in the reasonably foreseeable future that will designate a route network of existing roads and trails on public lands managed by the BLM. Minor route rehabilitation would occur on some roads that are designated closed and minor modifications and maintenance would occur on some roads that are designated open.

2. **The Lemhi-Birch Creek Idaho greater sage-grouse sub-population boundary** (Connelly, et al., 2004) expanded to include the adjacent mapped key habitat (CSGLWG, 2007) is the CIAA for the greater sage-grouse (Table 11).

Table 11: Past, present, and reasonably foreseeable actions in the sage-grouse CIAA

Type of Activity	Past and Present	Reasonably foreseeable
Number of Allotments	Portions of: 69 BLM Allotments 24 USFS Allotments 49 State Managed Parcels	Portions of: 69 BLM Allotments 24 USFS Allotments 49 State Managed Parcels
Range Improvements	Fences-784 Miles Water locations-535	Fences-7 miles Water locations-4
Seedings	4,521 acres	250 acres
Weed Treatments	5,733 acres	5,733 acres
Timber Harvest	189 acres	0 acres
Hazardous Fuel Reduction	NA	0 acres
Wildfire	11,896 acres	unknown

Type of Activity	Past and Present	Reasonably foreseeable
Prescribed Fire	6,088 acres	0 acres
Agricultural Development	42,800 acres	0 acres
Urban & Other Developed Lands	9,720 acres	0 acres
Power Lines	285 miles	0 miles
Roads**	520 miles	0 miles
Primitive Roads	940 miles	0 miles
Trails	65 miles	0 miles
Irrigation Diversions	429	0

* Information provided in this table and the associated narrative as derived from the best current datasets. No warranty is made by the Bureau of Land Management (BLM). The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

**road = formerly called a two-wheel drive road; primitive road = four-wheel drive road and four-wheel drive technical road; and trail = all-terrain vehicle (ATV) route.

3. Lemhi County is the CIAA for Socio-Economic resources.

Relevant past present and reasonably foreseeable actions in the CIAA include public and private lands livestock grazing, irrigated and dry-land agricultural production, private and government employment, commerce and community functions related to community sustenance, and community value of the western lifestyle.

Vegetation

Past livestock grazing has influenced the composition of vegetation due to dietary preference and selectivity of forage by livestock. Livestock grazing can impact plants by removing the leaf area available for photosynthesis, removing of growing points, and reducing the ability of the plant to maintain a favorable shoot to root balance.

Livestock grazing can mechanically impact vegetation through trampling. This is especially true in areas of livestock congregation (e.g. salt licks, water sources, and trails between foraging and watering areas) that potentially would be devoid of vegetation. The most intensively used areas are associated with 63 watering locations, which have led to the long-term destruction of native vegetation across an estimated 32-acre area, or less than 0.1%, of the CIAA. Native vegetation has also likely been affected to some degree by trailing along the 123 miles of fencing that exist across the CIAA. The approximately 119 acres of disturbance associated with fences was mostly associated with installation; current disturbance is more likely to be locally intense, but periodic and is associated with trailing along fencelines or congregation of cattle in corners or near gates; this comprises about 0.25% of the CIAA.

Vegetation management (weed treatments and seedings) has impacted about 1090 acres or about 2% of vegetation within the CIAA. Wildfire is known to have occurred on approximately 7,248

acres within the CIAA (15% of the CIAA). In the short-term, these events disturbed vegetation. However, the long-term impact has been an increase in perennial species that provide residual cover and litter. Treatments and wildfire have promoted site stability and development of vegetative communities that are resilient and respond more characteristically to natural disturbance agents, leading to long-term healthy productive native plant communities.

Land use conversion has impacted vegetation across approximately 286 acres of the CIAA. Impact associated with agricultural development has resulted in the replacement of natural vegetation with agricultural species across approximately 123 acres or about 0.25% percent of the CIAA. Another 163 acres is classified as “urban or other developed lands” and comprises about 0.35% of lands within the CIAA; native vegetation on these lands has been all but replaced.

Infrastructural development, in the form of road construction, has resulted in the removal of native vegetation across an estimated 259 acres of the CIAA (107 miles and assuming an average 20-foot width between roads, primitive roads, and trails). This comprises approximately 0.6% of the CIAA.

Invasive, Non-Native Species

Generally, invasive species have been introduced to the CIAA in crop seed, as ornamentals, or as “hitchhikers” on vehicles or animals. Past actions that are most responsible for the establishment of invasive species in the CIAA are agricultural and infrastructural development and unregulated livestock grazing, road construction and mining activities. These activities have provided the greatest amount of ground disturbance, thus allowing invasive species to become established. Any activities that remove native vegetation and expose bare soil are likely to create niches where there is a potential for weed invasion. With transport vectors such as vehicles, equipment, livestock and people, there is potential for weed propagules to find their way to and establish in the CIAA. Treatment activities are currently ongoing to control or contain existing infestations, and noxious weed infestations appear to be declining.

There are 72 noxious weed and invasive species locations mapped across ownerships in the CIAA for an approximate total of 780 acres, or about 2.5% of the total acreage within the CIAA.

Wildlife Resources including Threatened, Endangered, and Sensitive Animals and Migratory Birds

Livestock grazing, and the infrastructure to support it, has the biggest footprint on wildlife habitat in the CIAAs. More localized impacts have occurred through conversion of habitat, vegetative treatments and infrastructure not directly related to livestock grazing management.

For semi-desert shrubland habitat, past livestock grazing has influenced the composition of vegetation. Historically there were more AUMs authorized on most of the public lands in the

CIAA area than there are today. In addition to the removal of forage and cover for wildlife there has been infrastructure developed to support the utilization of the CIAA by cattle. This infrastructure has removed and altered habitat or made it more difficult for wildlife to move between habitats. The most intensively used areas are associated with 15 watering locations, which have led to the long-term destruction of native vegetation across an estimated 8-acre area, or less than 0.05%, of the CIAA. Native vegetation has also likely been affected to some degree by trailing along the 38 miles of fencing that exist across the CIAA. The approximately 37 acres of disturbance associated with fences was mostly associated with installation; current disturbance is more likely to be locally intense, but periodic and is associated with trailing along fencelines or congregation of cattle in corners or near gates; this comprises about 0.1% of the CIAA.

The fences can also be a passable movement barrier to wildlife on the landscape, especially on private lands where many fences are constructed of woven wire and near impossible for wildlife to pass. All fences, but especially fences with more than three wires, can entangle wildlife leading to death.

Vegetation management, including weed treatment and prescribed burns has impacted about 267 acres or approximately 0.8% of vegetation within the CIAA. Wildfire is known to have occurred on approximately 7,279 acres within the CIAA (23% of the CIAA). In the short-term, these treatments disturbed vegetation, but treatments have promoted site stability and development of vegetative communities that are resilient and respond more characteristically to natural disturbance agents, leading to long-term healthy productive native plant communities, which benefit wildlife.

Land use conversion has impacted vegetation across approximately 445 acres of the CIAA. Impact associated with agricultural development has resulted in the replacement of natural vegetation with agricultural species across approximately 122 acres or about 0.4% percent of the CIAA. Another 323 acres is classified as “urban or other developed lands” and comprises approximately 1% of lands within the CIAA; native vegetation on these lands has been all but replaced. While the agricultural conversion does provide habitat for some native wildlife species, the acreage that has been converted to urban or developed lands provides very little habitat for wildlife species.

Infrastructural development, in the form of road construction (roads, primitive roads, and trails), has resulted in the removal of native vegetation across an estimated 138 acres of the CIAA (57 miles - assuming an average 20-foot width). This comprises approximately 0.4% of the CIAA that no longer provides habitat for wildlife.

Riparian areas and wetlands provide habitat for wildlife with an ecological importance exceeding the proportion of the landscape they comprise. For riparian-wetlands and stream habitats, the most substantial impacts have been from private irrigation diversions. This practice has

decreased stream flows or completely dewatered some stream channels on public land in the CIAA, reducing or eliminating riparian vegetation, stream channel function and some wildlife habitat. The conversion of lands to agricultural uses has further affected riparian areas and springs located on private lands. The area within the CIAA that is private agricultural land is anticipated to remain as such under any of the alternatives analyzed. The irrigation practices have removed riparian vegetation that is important cover and forage for wildlife, especially migratory birds and sensitive species. Some of the habitat has been replaced by riparian vegetation along ditches, but this habitat does not usually have the complexity or width of the natural systems that were lost. A small percentage of open ditches has been converted to pipelines in the past twenty years which has caused this riparian habitat and source of water of wildlife to decrease within the CIAA.

Greater Sage-Grouse

The cumulative impact analysis area (CIAA) is the Lemhi-Birch ID subpopulation (Connelly, Knick, Schroeder, & Stiver, 2004), expanded to include the adjacent mapped key habitat (CSGLWG, 2007). While this subpopulation has been described, and we will use it for this analysis, greater sage-grouse have been known to move in and out of this subpopulation from both the north and south. Greater sage-grouse rely primarily on semi-desert shrubland, but riparian habitat can be important for late brood rearing habitat when the vegetation in the semi-desert shrublands dry out. Greater sage-grouse rarely use high montane or sparsely vegetated areas. The CIAA encompasses approximately 558,942 acres and all of the Lemhi-Birch ID subpopulation of greater sage-grouse as identified by Connelly. Within that acreage, approximately 60% are public lands managed by the BLM, 25% are private lands, 11% are National Forest Lands managed by the SCNF and 4% are State of Idaho Lands managed by the Idaho Department of Lands.

There are currently 21 active greater sage-grouse leks within the CIAA, none of which are directly impacted by the alternatives. In 2010 there were 384 males counted on the leks with an average male attendance per lek of 18. The peak count occurred in 2007 when 461 males were counted and the average male attendance per lek was 22. The maximum male attendance per lek was in 1962 when 118 males were counted on only 2 leks.

Within the CIAA approximately 42,800 acres have been converted to agricultural lands, mostly from semi-desert shrublands and riparian areas. Agricultural lands can provide important late brood rearing habitat for greater sage-grouse, though many of the birds in the CIAA move to higher elevations during that time of the year. A large portion of the conversion has occurred by decreasing the riparian habitat along the main Lemhi River, which probably offered little greater sage-grouse habitat before conversion. Conversions from native plant communities to agricultural lands that have most affected sage-grouse have occurred in nesting and wintering habitat. These agricultural fields do not support nesting and wintering habitat, but they can

sometimes support actual breeding habitat prior to and during the nesting season. This amounts to approximately 8% of the CIAA.

In addition to the agricultural conversion, approximately 9,720 acres have been converted to urban areas. These acres provide little to no habitat value to greater sage-grouse. Within the CIAA this accounts for approximately 2% of the acreage, granted as with the agricultural development a percentage of these acres did not provide habitat before development either. Other infrastructure associated with urban development within the CIAA includes 285 miles of power lines, 1,525 miles of roads, and 429 irrigation diversions. These power lines and roads tend to be associated with one another and many of the miles of both lay within the urban conversion described above. If we assume a 20 foot average width for roads, approximately 3,693 acres (<1%) within the CIAA do not support vegetation due to the roads. The influence of the power lines is difficult to calculate since greater sage-grouse may avoid power lines and the poles may provide nesting structures for predators like ravens or hunting perches for birds of prey. The irrigation diversions themselves do not impact greater sage-grouse, but the changes in water on the landscape caused by the diversions can. If the water is being diverted into ditches, then the habitat along the ditches can replace some of the habitat lost along the dewatered streams, if the water is placed in a pipe then the succulent plants important to greater sage-grouse during the late brood rearing season will not be available.

Most of the semi-desert shrubland and riparian areas in the CIAA, that have not been converted to urban or agricultural lands, are grazed at some point during the year. On public lands managed by the BLM within the CIAA there are approximately 2,183 acres (<1%) excluded from grazing, the other acres are grazed, though some areas may be rested for a year or more at a time. To help manage livestock there are 786 miles of fence in the CIAA, with a minimum of 85 of those miles within 1.25 miles of an active greater sage-grouse lek, and while a sage-grouse fence strike has not been recorded within the CIAA it could happen, especially near leks. All of the public lands managed by the BLM within the CIAA have been assessed for Idaho Standards for Rangeland Health. Currently, all allotments are meeting or making significant progress towards meeting those standards. Allotments that were not meeting at the time of their assessment and determination have had livestock management changes that have resulted in significant progress towards meeting standards.

Economic and Social Values

The economic and social values in the CIAA have been impacted to some degree and will continue to be impacted by past, present, and future actions in the CIAA. As population numbers fluctuate due to job availability and seasonal populations, so would the economics of the goods and services offered and purchased in the CIAA. Over the years, the need for manual labor to complete agricultural jobs has been reduced as a result of new technology and

machinery. This affects the population numbers and job availability as workers need to leave the CIAA to find work.

Tribal Treaty Rights and Interests

The CIAA is predominantly federally managed land – both by the BLM and the Forest Service – which is considered “unoccupied” land in terms of the Treaty Rights trust responsibilities assumed by the Federal government.

Past and present actions within the CIAA have impacted these Treaty Rights and interests on several fronts. The spread of invasive plants and noxious weeds and well over a century of livestock grazing have affected the distribution and abundance of plant and animal species in both upland and riparian settings that are traditionally important to the Tribes. Impacts to these species have included habitat fragmentation, disturbance, and disease.

An important aspect of the Tribes’ Treaty Rights interests entails access to “unoccupied” federally managed land. In the past, and continuing into the present, transfer and sale of federal land, issuance of land use permits, and unauthorized use of public lands have impacted the Tribes’ ability to access these lands. Livestock trailing events have not historically deterred or impacted access to federal lands.

The proposed action and the alternative in this document address the potential issuance of crossing permits and effects upon landscape health on federal lands within the CIAA. Detailed discussions of cumulative impacts to Treaty Rights resources of interest to the Shoshone-Bannock Tribes, including impacts to wildlife, vegetation, and the spread of invasive and noxious weeds, are analyzed in detail within those specific sections elsewhere within this document.

The Contribution of the Alternatives to the Cumulative Impact

The objective of this final section of the document is to disclose the differing impacts that each alternative would incrementally add to or subtract from the total effect of past, present, and reasonably foreseeable actions discussed in the prior section. As indicated in Table 12, the implementation of the various alternatives would affect the current condition of the CIAA in different ways.

Table 12: Contribution of the alternatives to the Cumulative Impact

Resource	Alternative 1	Alternative 2
Upland Vegetation	Slight impacts to vegetation would occur from trailing along the 10.3 miles of trailing routes. These additive impacts (limited to 0.4% of the entire CIAA) would be imperceptible at this scale. There would be very little to no additive impact to vegetation from the 8.3 miles (of 11 total miles) of trailing along existing roads. The remaining 2.7 miles of cross-country trailing could result in minimal impacts to approximately 49 acres or about 0.1% (one-tenth of 1%) of the CIAA.	No impacts would occur; vegetation would eventually recolonize existing trails. Areas previously denuded from trailing activities would heal and return to a more natural state; additive effects would be difficult to discern because of the small footprint.
Invasive/Non-Native Species	Slight impacts to invasive/non-native species would occur from trailing activities. Increased activity within vegetative communities may weaken the natural defenses that plant communities have in fighting off weed invasion. The spread of weed propagates in hoofs, hair and digestive systems would result in an additive threat of invasion to the native plant systems from livestock.	No impacts would occur; areas previously affected from trailing events would heal and return to a more natural state. The lack of disturbance and spread of weed propagates in hoofs, hair and digestive systems would reduce the threat of invasion to the native plant systems from livestock.
Wildlife Resources including Threatened, Endangered, and Sensitive Animals and Migratory Birds	Impacts to wildlife would be negligible because cattle would be trailing along existing roads or trails and because trailing events would be short in duration and would occur intermittently, as described in the proposed action.	No impacts would occur; vegetation would eventually recolonize existing trails a very slight benefit to wildlife would occur.
Economic and Social Values	Slight impacts to economic and social values would occur from issuing crossing permits; this is	Financial impacts would occur for the permittees who graze cattle on the federal lands. These permittees

Resource	Alternative 1	Alternative 2
	because permittees would be able to trail and utilize their federal permits. Impacts at the CIAA level would be difficult to detect.	would either have to replace federal AUMs with private AUMs or hay or reduce their herds. Impacts at the CIAA level would be difficult to detect.
Tribal Treaty Rights	Minor, short-term impacts could occur because there would be a slight localized reduction in the abundance and diversity of floral and faunal treaty rights resources.	No impacts would occur; vegetation would eventually recolonize existing trails.

Summary

No significant individual or cumulative impacts would be anticipated as a result of any of the alternatives described above.

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CONSULTATION AND COORDINATION

Persons and Agencies Consulted

In December 2011, the project was entered into the BLM E-Planning site and the scoping package was placed on the BLM website requesting comments by January 3, 2012. No comments were received during the public scoping period.

This environmental assessment was prepared by the resource specialists in Table 13.

Table 13: List of Preparers

Section of EA	Specialist
Upland Vegetation	Kyra Povirk
Invasive, Non-native Species	Chris Tambe
Wildlife/TES Animals/Migratory Birds	Vincent Guyer
Fisheries/TES Fisheries/Wetlands-Riparian Zones/Floodplains/Water Quality	Lucy Littlejohn
Economic and Social Values	Scott Feldhausen
Cultural Resources/Native American Religious Concerns/Indian Trust Resources/Tribal Treaty Rights/Paleo. Resources	Steven Wright

Team Lead

Date

NEPA Reviewer

Date

