United States Department of the Interior
Bureau of Land Management

Environmental Assessment DOI-BLM-ID-T020-2012-0005-EA

Burley Field Office
Crossing Permit Authorization
Environmental Assessment

U.S. Department of the Interior
Bureau of Land Management
Twin Falls District
Burley Field Office
15 E 200 S
Burley, ID 83318
Phone: (208) 677-6600
FAX: (208) 677-6699

BLM

Contents

CHAPTER 1, PURPOSE AND NEED FOR ACTION

BACKGROUND

The Bureau of Land Management (BLM) Burley Field Office (BFO) is proposing to issue livestock Crossing Permits to qualified applicants beginning March 2012. The regulations at 43 CFR Sec. 4130.6-3 describe Crossing permits.

> "A crossing permit may be issued by the authorized officer to any applicant showing a need to cross the public land or other land under Bureau of Land Management control, or both, with livestock for proper and lawful purposes. A temporary use authorization for trailing livestock shall contain terms and conditions for the temporary grazing use that will occur as deemed necessary by the authorized officer to achieve the objectives of this part."

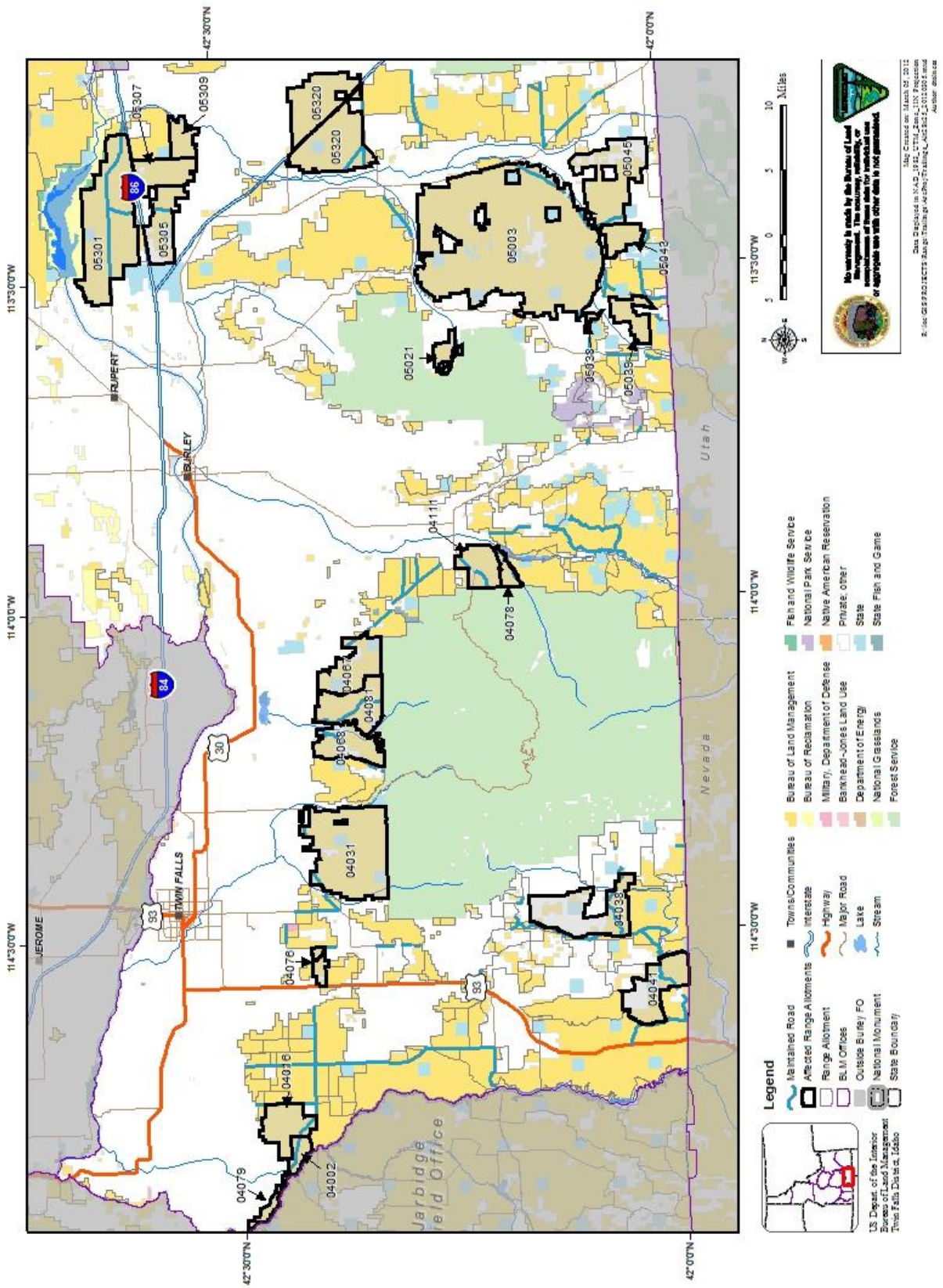
Qualified applicants, consisting of permittees and non-permittees, frequently request to trail livestock across BLM-managed lands for a variety of reasons. These reasons primarily include, (1) moving livestock to and from grazing allotments on BLM managed lands, (2) moving livestock to and from grazing allotments on state, private, or other federally managed lands. Livestock operators must obtain a crossing permit from the appropriate BLM jurisdiction prior to trailing livestock on public lands. Recent administrative appeals and a subsequent settlement agreement have reemphasized that BLM must analyze and disclose to the public the effects of permitted trailing activities as required by the National Environmental Policy Act (NEPA).

On October 13, 2011, the BLM BFO solicited applications for crossing permits. The applications received were for trailing routes where livestock operators have trailed in the past and would like to continue to trail, and where they may trail in the future. The majority of trailing events that occur within the BFO occur along main arterial transportation routes that are maintained on a schedule by federal, state or county governments. These transportation routes may be graveled and wide enough for one vehicle to travel along or paved with two lanes for traffic. Portions of the proposed trailing events occur along these routes, as well as other trailing events identified through internal scoping. Since the BLM does not regulate the uses that occur along these routes, the BFO will not issue Crossing Permits where livestock trail within the roadways of these routes. However, the BFO recognizes that livestock may be forced away from the route by traffic or may have to pass through an adjacent gate where the trailing route crosses a cattle guard. Figure 1 show where these maintained transportation routes occur on BFO BLM administered land.

The project area consists of portions of the allotments that are proposed to be crossed and other known trailing routes within the BFO identified through internal scoping. These proposed routes occur within the following allotments: Mule Creek #04044, Kerr-Lost Creek #04038, PVGA-Berger #04016, Kerr-Berger #04002, Lilly Grade #04079, Loughmiller #04076, Western Stockgrowers #04031, Dry Creek #04068, Cold Spring #04081, Buckhorn-Churchill #04067, Marion Group #04075, Warr-Pickett #04110, Mabey-Goose Creek #04078, Middle Hill #05021, Jim Sage #05033, Cole Lane #05038, Gully #05039, Narrow Seeding #05043, Clear Creek #05045, Warm Creek #05320, Yale #05303, Dale Pierce #05307, Kunau #05305and Highway Common #05301 (see Figure 1).

The BFO is divided into 228 grazing allotments on approximately 854,330 acres of BLM administered lands. Livestock grazing use occurs within the BFO year round. Generally, the lower elevation rangeland is grazed in the fall, winter, and spring. The higher elevation is generally grazed in the spring, summer, and fall. Trailing of livestock occurs at different times throughout the year to facilitate these general seasons of grazing use. Timing of trailing events may vary annually based on factors such as forage production, drought, resource conditions, weather, wildfire, and individual livestock operations. According to applications received, trailing events across BLM administered lands within the BFO range in distance from less than one mile to approximately 10 miles, and in duration from less than one hour up to six days.

Figure 1


Legend
Maintained Road
Affected Range Allotments
Range Allotment
BLM Offices
Outside Burley FO
National Monument
State Boundary
Towns/Communities
Interstate
Highway
Major Road
Lake
Stream
Bureau of Land Management
Bureau of Reclamation
Military, Department of Defense
Bankhead-Jones Land Use
Department of Energy
National Grasslands
Forest Service
Fish and Wildlife Service
National Park Service
Native American Reservation
Private; other
State
State Fish and Game
Miles
RUPERT
BURLEY
TWIN FALLS
JEROME
Utah
Nevada
Jarbidge Field Office
113°30'0"W
114°0'0"W
114°30'0"W
42°30'0"N
42°0'0"N

Livestock trailing is largely a transitory event. Very little grazing occurs when livestock are herded to their destination; however, some grazing occurs in areas where livestock overnight. For this reason, day long trailing effects are related to hoof impacts and not AUMs. The details of each particular trailing event vary depending on the individual livestock operator and the kind of livestock to be moved. Generally, cattle are trailed by cowboys on horseback; however, motorcycles or ATV's are also used by some operators. Cattle are first gathered into a herd and then driven at a slow pace in the direction of the intended trail. Once on the trail, cattle tend to spread out lengthwise in more of a single-file like formation, allowing them to travel in a relatively narrow area. When cattle overnight in holding pastures they tend to congregate near a water source unsupervised until the cowboys gather them the next morning. Sheep are generally trailed by one or two herders accompanied by two to four sheepdogs. A camp-wagon is moved from one location to another along the trail route (road) to supply shelter and carry food, water, and other items needed by the herders. Many sheep trailing operations include a water truck to deliver water to bedding areas, where herders supervise the band throughout the night, and also to pull the camp-wagon ahead to a new location. Sheep are trailed in bunches that generally follow roads as the trail route.

This EA is based on existing information found in the vegetative study and allotment files for the applicable allotments; Standards and Guidelines for Rangeland Health Assessments and associated Determinations as well as subsequent monitoring. Subsequent monitoring includes upland utilization, riparian photo point monitoring, upland trend photo point monitoring, riparian assessments, and recent validation of upland standards and guidelines site write-up areas. Standards and Guidelines evaluate land health holistically and then determine the causes of not meeting standards. According to the applicable determinations, trailing has not been determined as a causal factor for an allotment not meeting Standards and Guidelines for Rangeland Health within the project area. The Rangeland Health Evaluations and Determinations were completed as shown in Table 1.

TABLE 1
RANGELAND HEALTH EVALUATIONS AND DETERMINATIONS

ALLOTMENT NAME AND NUMBER	COMPLETION DATE
Mule Creek #04044	2004
Kerr Lost Creek # 04038	2002
PVGA-Berger #04016	2004
*Kerr-Berger #04002	2010
Lilly Grade #04079	2004
Loughmiller #04076	2006
Western Stockgrowers #04031	2004
Dry Creek #04068	Not complete
Cold Spring #04081	Not complete
Buckhorn-Churchill #04067	Not complete
Marion Group #04075	1999
Warr-Pickett #04110	2001
Mabey-Goose #04078	Not complete
Middle Hill #05021	2004

ALLOTMENT NAME AND NUMBER	COMPLETION DATE
Jim Sage #05033	2003
Almo Womackº #05003	2002
Cole Lane #05038	Not complete
Gully #05039	Not complete
Narrow Seeding #05043	Not complete
Clear Creek #05045	2001
Choke Cherryº #05003	2003
Cassia Creekº #05003	2003
Warm Creek #05320	2004
Yale #05303	2001
Dale Pierce #05307	1999
Kunau #05305	1999
Highway Common #05301	2004

ºThese allotments are now use areas within the Jim Sage Allotment #05003, per 2008 Grazing Permit Renewal Decision.
*Determination has not been completed.

Based on the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management (USDI, 1997), rangelands should either be meeting the eight Standards for Rangeland Health or making significant progress toward meeting the standards. Meeting the standards provides for the proper nutrient cycling, hydrologic cycling, and energy flow within the allotments' watersheds.

Table 2 displays whether these eight standards were being met within the allotments having Determinations. **M** = Meeting the Standard; **NM** = Not Meeting the Standard; **N/A** = the Standard is Not Applicable; **NMMP** = Not Meeting the Standard, but Making Significant Progress. The eight standards for Rangeland Health are Watersheds #1, Riparian Areas and Wetlands #2, Stream Channel/Floodplain #3, Native Plant Community #4, Seedings #5, Exotic Plant Communities, Other than Seedings #6, Water Quality #7 and Threatened and Endangered Plants and Animals #8.

TABLE 2
IDAHO STANDARDS FOR RANGELAND HEALTH ALLOTMENT SUMMARY

Idaho Standards For Rangeland Health								
Allotment	**#1**	**#2**	**#3**	**#4**	**#5**	**#6**	**#7**	**#8**
Mule Creek	M	NMMP	NMMP	M	M	N/A	NMMP	M
Kerr Lost Creek	M	M	NMMP	M	M	N/A	NMMP	M(Uplands) NMMP(riparian)
PVGA-Berger	M	NA	NA	NA	M	NA	NA	M
Lilly Grade	M	NA	NA	NA	M	NA	NA	M

Allotment	**#1**	**#2**	**#3**	**#4**	**#5**	**#6**	**#7**	**#8**
Loughmiller	M	NA	NA	NA	M	NA	NA	NM*
Western Stockgrowers	M	M	M	M	NM*	N/A	NMMP	NM*
×Marion Group	M	NA	NA	M	NM*	NA	NA	NM*
×Warr-Pickett	M	NM**	NM**	NM**	NM*	NA	NM**	NM**
Middle Hill	M	NM**	NMMP	M	NA	NA	M	M
×Jim Sage	M	NM**	NM**	NM*	NM*	NA	NM**	NM*
×Almo Womackº	M	NA	NA	NA	M	NA	NA	NM*
×Clear Creek	M	NA	NA	M	NA	NA	NA	M
×Choke Cherryº	M	NA	NA	NA	M	NA	NA	NM*
×Cassia Creekº	M	NA	NA	NA	NM**	NA	NA	M
Warm Creek	M	NMMP	NMMP	NM*	M	NA	NMMP	NM*
Yale	M	NA	NA	NA	M	NA	NA	NMMP
Dale Pierce	M	NA	NA	NA	M	NA	NA	NMMP
×Kunau	M	NA	NA	NM**	NM**	NA	NA	NM**
Highway Common	M	NA	NA	NA	M	NA	NA	NM*

×Permit(s) has/have been renewed in accordance with NEPA and 43 CFR 4160 since Determination was completed.
ºAre now use areas within the Jim Sage Allotment #05003.
*****Not Meeting the Standard and current livestock management is/was not a causal factor.
**Not Meeting the Standard and current livestock management is/was a causal factor.

Applicants proposing to trail livestock across BLM administered lands must submit their requests prior to the proposed trailing event. The Crossing Permit would identify the allotment(s) allowed to be trailed across, the period authorized (dates), and the number and kind of livestock. In addition, the Crossing Permit would describe terms and conditions specific to the trailing event, including but not limited to, the trail route, minimum distance of travel per day, and over-night areas. Further, the Crossing Permit may include avoidance stipulations based on resource concerns identified as design features.

PURPOSE AND NEED FOR ACTION

The purpose of the action is to respond to applications for Crossing Permits by identifying areas and terms and conditions for authorizing trailing of livestock across BLM BFO administered lands. BLM is required, under the Federal Land Policy and Management Act and the Taylor Grazing Act to respond to requests for livestock trailing across BLM administered lands. There is a need for this action because livestock producers must move their livestock across BLM administered lands to facilitate proper grazing management of BLM grazing allotments; as well as to facilitate movement of livestock to and from private, state, or other federally administered lands. Issuance of Crossing Permits authorizing trailing of livestock across BLM administered lands would be in accordance with 43 CFR 4130 and 4160.

DECISION TO BE MADE

The Burley Field Manager will decide whether to issue Crossing Permits authorizing the trailing of livestock across BLM administered lands within the BFO, determine whether Crossing Permits would occur along trailing routes and corridors identified in the Proposed Action or within typical trailing routes and corridors plus the additional routes and corridors identified in Alternative 2. If Crossing Permits are issued, the Burley Field Manager will also decide whether to include specific terms and conditions as part of the authorization.

CONFORMANCE WITH APPLICABLE LAND USE PLAN

Authorizing trailing permits is in conformance with the 1982 Twin Falls Management Framework Plan and the 1985 Cassia Resource Management Plan. These plans allocate livestock forage for grazing within the applicable allotments of the BFO. It is reasonable to assume that livestock trailing is an action connected to livestock grazing and, therefore, trailing is in conformance with these plans to manage public lands administered by the BFO. This action would not result in a change in the scope of resource use or a change in the terms, conditions, and decisions of the approved plans.

RELATIONSHIP TO STATUTES, REGULATIONS OR OTHER PLANS

On August 12, 1997 the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management were approved by the Secretary of the Interior. The applicable Standards and Guidelines Assessments and Determinations for the allotments identified in the proposed action were completed as shown in Tables 1 and 2. Subsequent livestock management practices must be in conformance with the approved standards and guidelines.

Authorizing trailing permits for these allotments is in conformance with all other applicable statutes, regulations and plans (Taylor Grazing Act of 1934, Federal Land Management and Policy Act of 1976, Public Rangeland Improvement Act of 1979, and 43 CFR Part 4000, Group 100).

Specific guidance regarding the BLM's responsibilities to conserve ESA listed and candidate species is provided in BLM Manual 6840 – Special Status Species Management (Idaho BLM, 2000). The Special Status Species population and habitat evaluations within the project area are within conformance of the 6840 policy.

Authorizing trailing permits is in accordance with the Migratory Bird Treaty Act, as amended. It is also in accordance with Executive Order 13186, dated January 11, 2001.

Instruction Memorandum 2009-006 directs the BLM to use completed Local Working Group plans and the Conservation Plan for the Greater Sage-grouse in Idaho (State Plan) as a reference resource to support and guide NEPA analyses and decisions affecting sage-grouse or sage-grouse habitat on Idaho BLM lands. As stated in the State Plan, completed Local Working Group plans should be considered first when addressing local sage-grouse conservation issues. Some of the allotments are within the boundary of the Shoshone Basin Sage-Grouse Local Working Group and Southern Magic Valley Sage-Grouse Local Working Group. The East Shoshone Basin Management Area Cooperative Rangeland Management Plan (CRMP) was completed in October 2008. The plan describes resource issues, goals, objectives, and management guidelines for the East Shoshone Basin Management Area.

SCOPING, PUBLIC INVOLVEMENT, AND ISSUES

The BFO Interdisciplinary (ID) team assigned to prepare the EA for this Crossing Permit authorization met in 2011 and 2012 to identify issues internally and develop proposed management actions for these trailing applications. This project has been listed on the Idaho NEPA Register since January 18, 2012. A scoping information package was mailed to interested and affected publics on December 16, 2011 and comments were requested by December 30, 2012. The BFO subsequently received seven response letters from interested publics by or after the due date. Comments included suggestions for additional alternatives to the proposed action. As a result, two additional alternatives were considered but eliminated from detailed analysis (see Chapter 2). Other comments expressed concerns over the effects to livestock grazing, sensitive plant and animal species, native vegetation, riparian and wetland areas, wildlife, cultural resources, soils and the introduction and spread of noxious weeds and invasive plants. Other issues such as human health and safety were brought forward during scoping consisting of trailing having effects to air quality and the existence and spread of Q fever to people; however, these two issues will not be analyzed in detail (see below). Due to internal and external scoping, the width of trailing corridors and number of trailing events have changed within the Proposed Action and alternatives to limit the effects the proposed trailing events may have. Issues identified, but not analyzed are discussed below.

AIR QUALITY

Particulate matter is widespread throughout Idaho and sources include windblown dust, re-entrained road dust, smoke, industrial emissions, and motor vehicle emissions. In 2008 the air quality for Twin Falls County was rated good 96% of the days and moderate for 4% of the days (IDEQ, 2008).

Potential air quality impacts are expected to be minimal at best and confined to the immediate areas of the trailing events when livestock are actively being trailed. Emissions of carbon monoxide would occur if vehicles are used in the process. During periods of high winds dust may be blown during trailing. National Ambient Air Quality Standards (NAAQS) are not expected to be exceeded due to the overall short duration, distribution and limited number of trailing events and the low amount of pollutants emitted in the general area since these events have occurred in the past. For these reasons air quality will have no further analysis.

Q FEVER

The danger of Q fever is considered to be minimal on rangelands within the BFO. The risk on public lands to the users is limited, since Q fever has been directly correlated to occupational exposure involving veterinarians, meat processing plant workers, livestock farmers and researchers at facilities housing livestock. The important fact of the Q fever bacteria is that during the birthing process, the organisms are shed in high numbers within the amniotic fluids and placenta. Since birthing generally occurs on private lands where livestock are confined, public safety is not impacted when livestock trailing events occur on public land. For these reasons the existence and spread of Q fever will have no further analysis.

CULTURAL AND HISTORICAL RESOURCES

A Class I inventory, involving a review of existing cultural resource and site data within the BLM database, was conducted to identify cultural resources that may be affected by the proposed action. In addition to the Class I inventory, intensive (Class III) field surveys were completed in all areas where livestock will be concentrated, including bed grounds, overnight areas and trough locations. Based on the results of the Class I inventory, two segments of the California National Historic Trail, one segment of the Oregon National Historic Trail, 22 previously recorded sites and 11 isolated finds are located within the proposed trailing corridors. Of the previously recorded sites, 18 are lithic scatters of Native American origin and four are Euroamerican trash scatters or dumps.

The Class III survey of the 22 livestock concentration areas associated with this action produced no sites. Historic trails located within trailing corridors were also examined for impacts associated with previous livestock travel. Due to the dispersed nature of the trailing events, no evidence of past impacts was noted. No bed grounds or overnight areas are located within 0.5 miles of the California National Historic Trail or Oregon National Historic Trail. While previously documented sites are located in the trailing corridors, the Euroamerican trash scatters are not considered to be eligible to the National Register of Historic Places (NRHP). For Native American lithic scatters to be considered eligible to the NRHP, buried, intact components need to be present. (Lithic scatters are defined as a sparse density of flaked stone debris without formal tools or temporally diagnostic elements). Because any ground disturbance associated with temporary livestock travel will be limited to extremely shallow depths, in previously disturbed surface soils, this action will have no effect on buried, intact cultural deposits that may contribute to a sites' eligibility to the NRHP. In many cases, livestock trailing will be restricted to improved roadways.

Based on the Class I and intensive field inventories, no historic properties are located within areas of heavy livestock concentration, including trough locations and bed grounds. As such, this action has no potential to affect historic properties.

CHAPTER 2, PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION

The BLM proposes to issue Crossing Permits to qualified applicants, authorizing the trailing of livestock across BLM administered lands within the BFO beginning in April 2012 according to proposed design features and terms and conditions. Applicants needing to trail livestock across BLM administered lands would be required to submit an application prior to trailing. The BFO is analyzing 13 applications as shown in Table 3 (Begin and end dates are approximate. See number of days column for duration). The Field Manager will consider each application and proposes to authorize the trailing of livestock incorporating considerations for season of use, resource conditions, special status species and their habitat, weather, wildfire, and drought. Each Crossing Permit would outline the allotment(s) to be trailed across, the period of use (dates), and the number and kind of livestock.

Figures 2-4 display the trailing routes that applicants have requested, the majority of which are well established routes that have been used in the past. Most routes would have a 0.25 mile wide corridor that would be used for trailing livestock based on the applications received, with exception of Routes 1, 4, 3, 5 and 16. Route 1 would have 0.5 mile wide corridor as applied for. Route 4 consists of a holding pasture where livestock are held overnight. Routes 3, 5 and 16 will have up to a two mile wide combined corridor. This two mile wide trailing corridor consists of multiple events by multiple applicants crossing multiple allotments and would allow trailing livestock to maneuver around grazing livestock. Proposed livestock trailing authorizations are mostly centered on roads; however corridors will be analyzed to account for potential bedding areas and the inevitable case where livestock are forced off of roads by traffic, cattle guards, fence, etc. Also, trailing corridors provide the livestock operator flexibility to avoid potential resource concerns while trailing along routes.

Figure 2

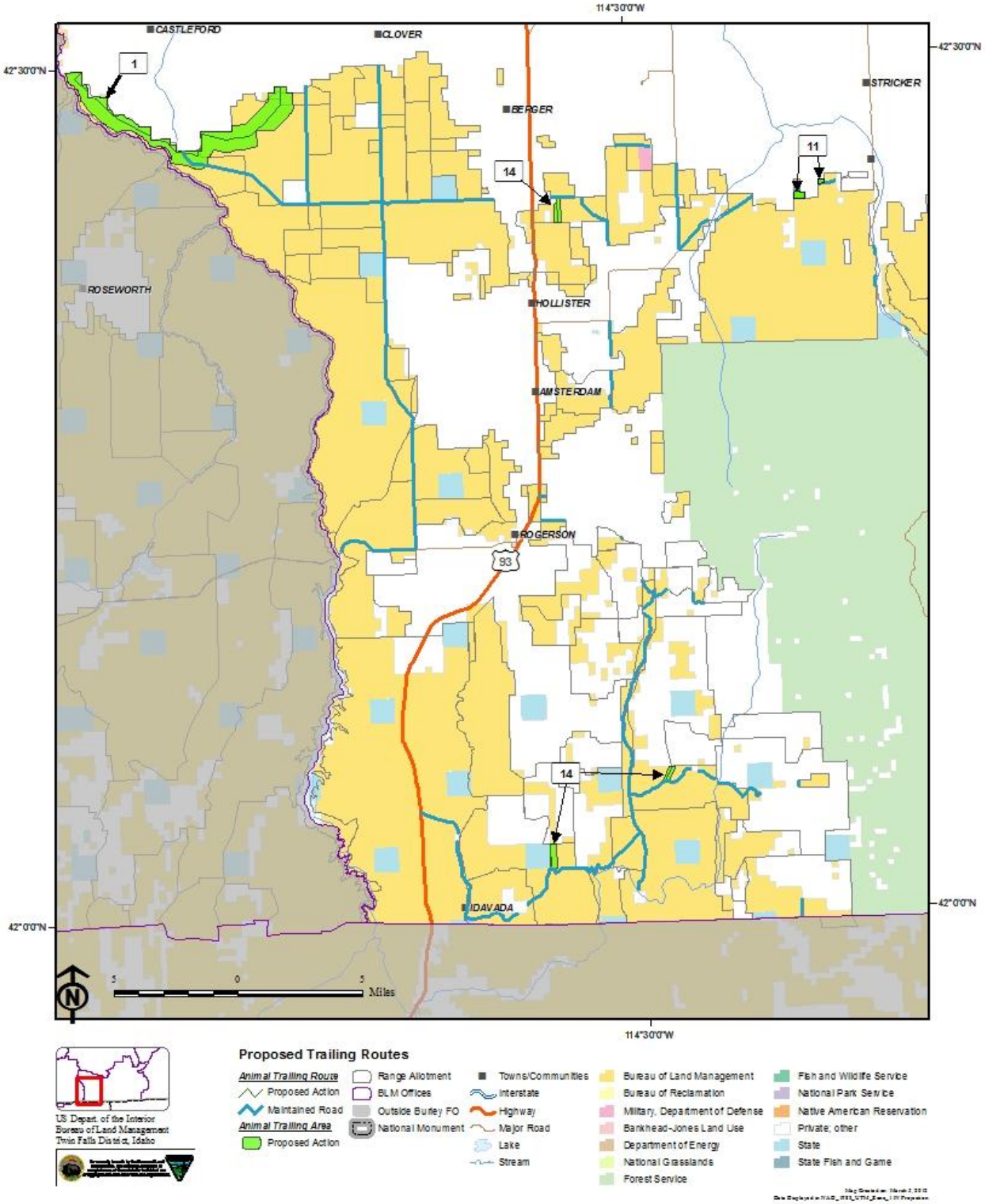

114°30'0"W
42°30'0"N
42°0'0"N
CASTLEFORD
CLOVER
STRICKER
BERGER
ROSEWORTH
HOLLISTER
AMSTERDAM
ROGERSON
IDAVADA
1
14
11
93
5 0 5 Miles
US Depart. of the Interior
Bureau of Land Management
Twin Falls District, Idaho
Proposed Trailing Routes
Animal Trailing Route
Proposed Action
Maintained Road
Animal Trailing Area
Proposed Action
Range Allotment
BLM Offices
Outside Burley FO
National Monument
Towns/Communities
Interstate
Highway
Major Road
Lake
Stream
Bureau of Land Management
Bureau of Reclamation
Military, Department of Defense
Bankhead-Jones Land Use
Department of Energy
National Grasslands
Forest Service
Fish and Wildlife Service
National Park Service
Native American Reservation
Private; other
State
State Fish and Game

Figure 3

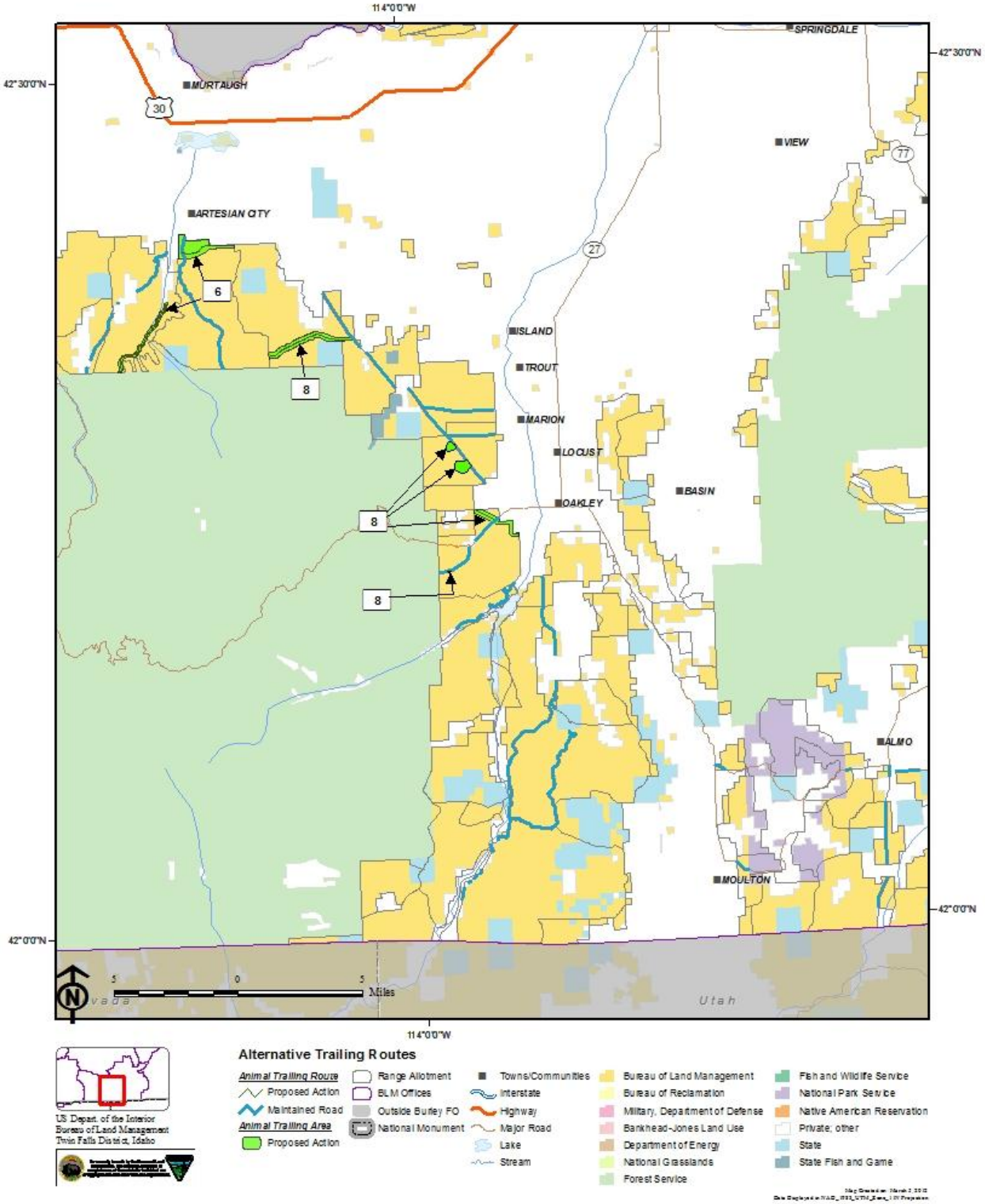

114°0'0"W
42°30'0"N
42°0'0"N
SPRINGDALE
MURTAUGH
VIEW
ARTESIAN CITY
ISLAND
TROUT
MARION
LOCUST
OAKLEY
BASIN
ALMO
MOULTON
30
77
27
6
8
8
8
5
0
5
Miles
Utah
Alternative Trailing Routes
Animal Trailing Route
Proposed Action
Maintained Road
Animal Trailing Area
Proposed Action
Range Allotment
BLM Offices
Outside Burley FO
National Monument
Towns/Communities
Interstate
Highway
Major Road
Lake
Stream
Bureau of Land Management
Bureau of Reclamation
Military, Department of Defense
Bankhead-Jones Land Use
Department of Energy
National Grasslands
Forest Service
Fish and Wildlife Service
National Park Service
Native American Reservation
Private; other
State
State Fish and Game
US Depart. of the Interior
Bureau of Land Management
Twin Falls District, Idaho

Figure 4

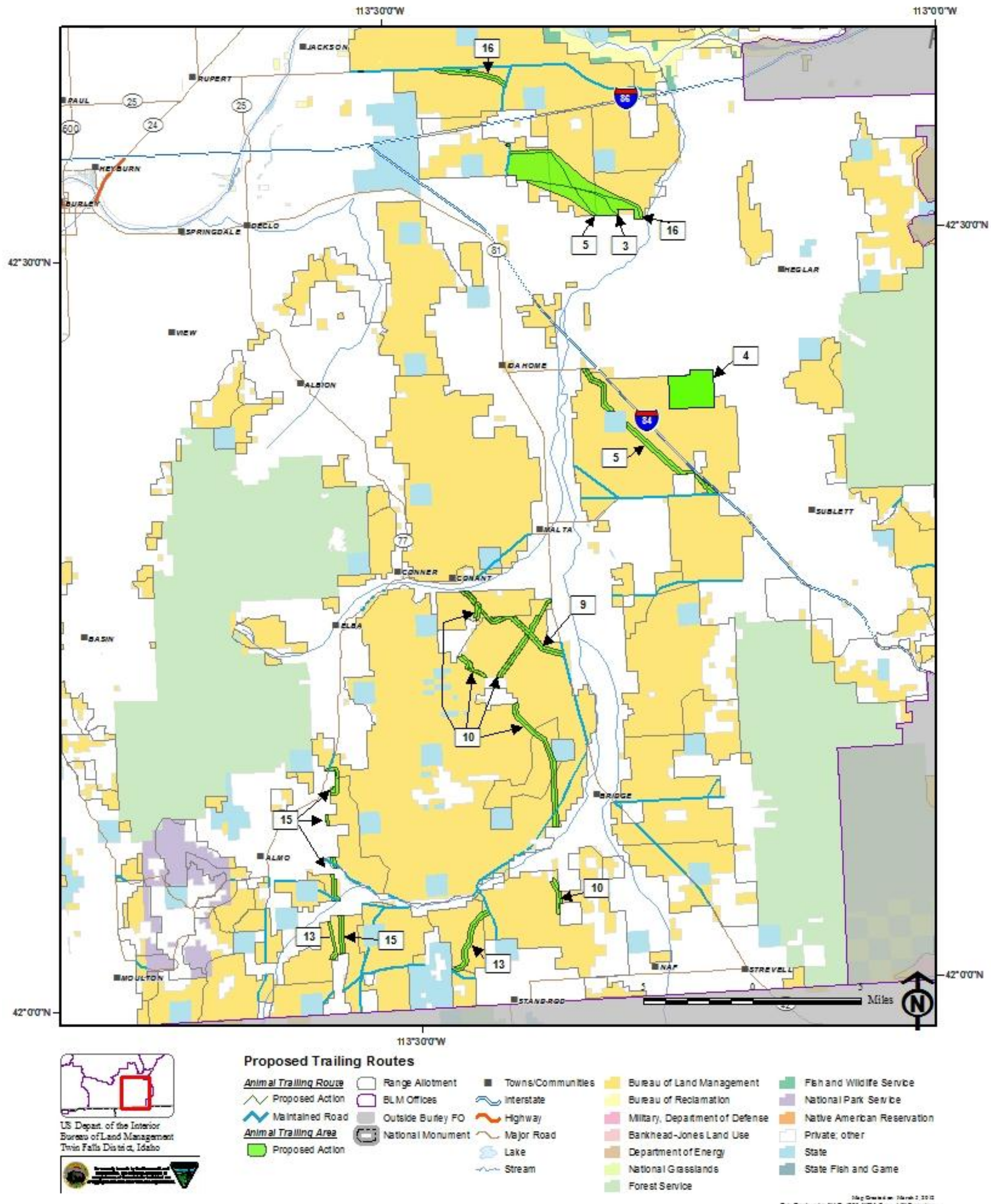

113°30'0"W
113°0'0"W
42°30'0"N
42°0'0"N
JACKSON
RUPERT
PAUL
HEYBURN
BURLEY
SPRINGDALE
DECLO
VIEW
ALBION
IDAHOME
HEGLAR
SUBLETT
MALTA
CONNER
CONANT
ELBA
BASIN
ALMO
BRIDGE
MOULTON
STANDROD
NAF
STREVELL
16
5
3
4
9
10
15
13
Miles
Proposed Trailing Routes
Animal Trailing Route
Proposed Action
Maintained Road
Animal Trailing Area
Proposed Action
Range Allotment
BLM Offices
Outside Burley FO
National Monument
Towns/Communities
Interstate
Highway
Major Road
Lake
Stream
Bureau of Land Management
Bureau of Reclamation
Military, Department of Defense
Bankhead-Jones Land Use
Department of Energy
National Grasslands
Forest Service
Fish and Wildlife Service
National Park Service
Native American Reservation
Private; other
State
State Fish and Game
US Depart. of the Interior
Bureau of Land Management
Twin Falls District, Idaho

TABLE 3
APPLICATIONS
PROPOSED ACTION

Application /Trailing Route Number	Applicant Name	Begin	End	Number of Days	Allotment Name & Number	Livestock Number	Livestock Kind	% PL	AUMs
1	Duelke Sheep Company	3/10	4/10	3	PVGA-Berger #04016	4800	Sheep	100	95
				3	Kerr-Berger #04038				
					Lilly Grade #04079				95
3	Bronson Sheep	5/1	5/2	2	Yale #05309	1000	Sheep	100	13
					Dale Pierce #05307				
					Kunau #05305				
4	Raft River Cattle Co.	9/23	9/24	2	Warm Creek #05320	320	Cattle	100	21
5	G.H. Mathews	4/5	4/15	2	Kunau #05305	160	Cattle	100	11
		10/15	12/15	2	Dale Peirce #05307	160			11
		5/1	5/12	1	Warm Creek #05320	133			4
		11/10	12/30	1		133			4
6	Tugaw Ranches	4/1	4/3	1	Cold Spring #04081	250	Cattle	100	8
		4/14	4/16	1		600			20
		10/8	10/12	1		600			20
		10/10	10/12	1	Dry Creek #04068	600			20
8	Pickett Ranch Sheep Co.	5/29	6/4	2	Buckhorn-Churchill #04067	1005	Sheep	100	13
					Marion Group #04075				
		5/30	6/4	2	Warr-Pickett #04110	1005			13
		4/29	5/4	2		1015			13
		6/11	6/15	2		1015			13
9	Denny Whitaker	11/1	12/15	1	Jim Sage #05033	250	Cattle	100	8
10	Richard Ward	1/10	1/10	1	Jim Sage #05033	70	Cattle	100	2
					Clear Creek #05045				
		1/12	1/12	1	Jim Sage #05033	100			3
		4/15	4/15	1		170			6
		11/8	11/8	1		80			3
		11/10	11/11	1		80			3
		11/14	11/14	1	Jim Sage #05033	70			2
					Clear Creek #05045				
11	Noh Sheep Company	12/3	12/3	2	Western Stockgrowers #04031	1000	Sheep	100	13
		2/3	2/3	2		1000			13

Application /Trailing Route Number	Applicant Name	Begin	End	Number of Days	Allotment Name & Number	Livestock Number	Livestock Kind	% PL	AUMs
13	Spencer Brothers	4/1	4/1	1	Gully #05039	100	Cattle	100	3
		6/1	6/1	1		100			3
		11/1	11/1	1		200			7
		12/15	12/15	1		200			7
		4/1	4/1	1	Narrows Seeding #05043	110			4
		10/15	10/15	1		110			4
		11/13	11/13	1		200			7
		12/30	12/30	1		200			7
14	Josh Williamson	4/1	5/1	1	Loughmiller #04076	140	Cattle	100	5
		10/1	11/1	1	Kerr-Lost Creek #04038	300			10
		10/1	11/15	1	Mule Creek #04041	100			3
15	Ron Ward	3/1	2/28	4	Gully #05039	200	Cattle	100	26
					Cole Lane #05038				
					Jim Sage #05033				
16	Forrest Arthur	10/1	11/30	2	Kunau #05305	2000	Sheep	100	26
					Dale Pierce #05307				
					Yale #05309				
		12/1	3/15	5	Dale Pierce #05307	2000			65
					Kunau #05305				
					Highway Common #05301				
TOTAL									**604**

Proposed design features and/or terms and conditions, for all applicable alternatives, to minimize impacts from the trailing of livestock include, but are not limited to:

- Trailing events occurring within the lesser of ½ mile or direct line of sight of occupied sage grouse leks from March 15 through May 1 would only be allowed from 9 am – 6 pm.

- No overnight use within ½ mile of occupied ferruginous hawk nests from March 1 to July 15.

- Cross country trailing events within 250 meters of occupied ferruginous hawk nests from March 1 to July 15 would be limited to one event per week.

- Trailing events involving domestic sheep or goats which occur within trailing routes 1, 1A or 8 would require the applicant to follow a BLM and Idaho Department of Fish and Game approved separation plan to protect bighorn sheep.

- When a trailing event occurs within a burn area, trailing would be in accordance with the applicable Emergency Stabilization and Rehabilitation (ESR) Plans or as authorized by the field manager.

NO ACTION (ALTERNATIVE 1)

Under this alternative, Crossing Permits would not be issued and the trailing of livestock across BLM administered lands within the BFO would not be authorized. Applicants would have to find other means to reach their destination. One likely option for applicants would be to transport their livestock by truck and trailer. This may require traveling longer distances on local roads with truckloads of livestock.

ALTERNATIVE 2

The BLM proposes to establish additional trailing routes and corridors in conjunction with the typical routes identified within the Proposed Action, with a corridor of up to 0.25 miles wide (see Figures 5-7), with the exception of Routes 4, 3, 5 and 16 as described in the Proposed Action. This alternative would also change Route 1 to 1A. This change would consist of narrowing the corridor from 0.5 miles to 0.25 miles wide and widening a portion to approximately 0.75 miles and either limiting the number of livestock to 2,400 sheep or reducing the duration of the trailing event across the Lilly Grade Allotment. This would reduce the likelihood of the trailing event affecting permitted livestock grazing in this small allotment.

Proposed livestock trailing authorizations are focused on roads; however corridors will be analyzed to allow for potential bedding areas and the inevitable case where livestock are forced off of roads by traffic, cattle guards, fence, etc. Corridors provide the livestock operator flexibility to avoid potential resource concerns while trailing within designated routes. The BLM would issue Crossing Permits to qualified applicants authorizing the trailing of livestock across BLM administered lands within these established corridors beginning in March 2012.

Figure 5

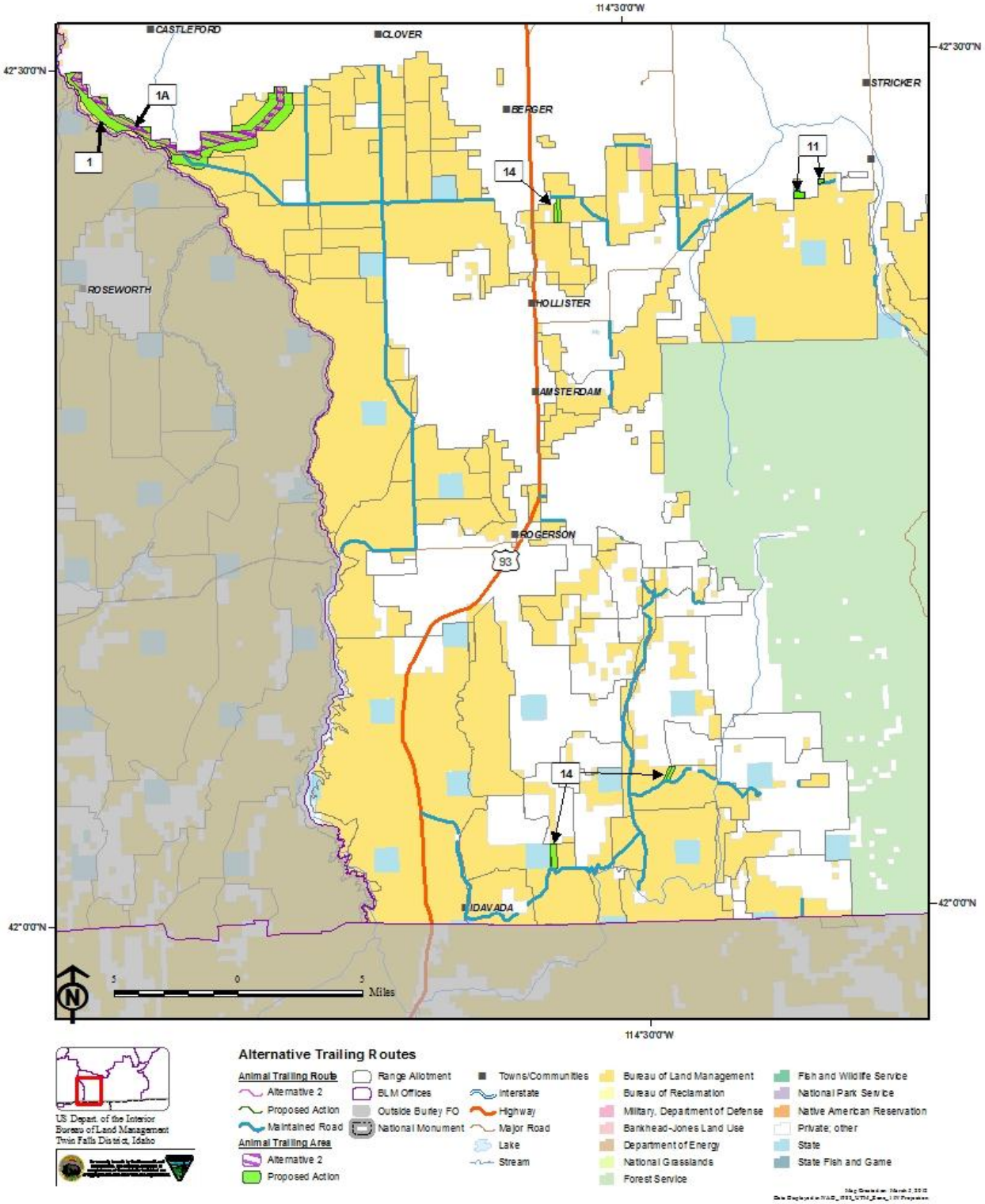

114°30'0"W
42°30'0"N
42°0'0"N
CASTLEFORD
CLOVER
STRICKER
BERGER
ROSEWORTH
HOLLISTER
AMSTERDAM
ROGERSON
IDAVADA
1A
1
14
11
93
5
0
5
Miles
US Depart. of the Interior
Bureau of Land Management
Twin Falls District, Idaho
Alternative Trailing Routes
Animal Trailing Route
Alternative 2
Proposed Action
Maintained Road
Animal Trailing Area
Alternative 2
Proposed Action
Range Allotment
BLM Offices
Outside Burley FO
National Monument
Towns/Communities
Interstate
Highway
Major Road
Lake
Stream
Bureau of Land Management
Bureau of Reclamation
Military, Department of Defense
Bankhead-Jones Land Use
Department of Energy
National Grasslands
Forest Service
Fish and Wildlife Service
National Park Service
Native American Reservation
Private; other
State
State Fish and Game

Figure 6

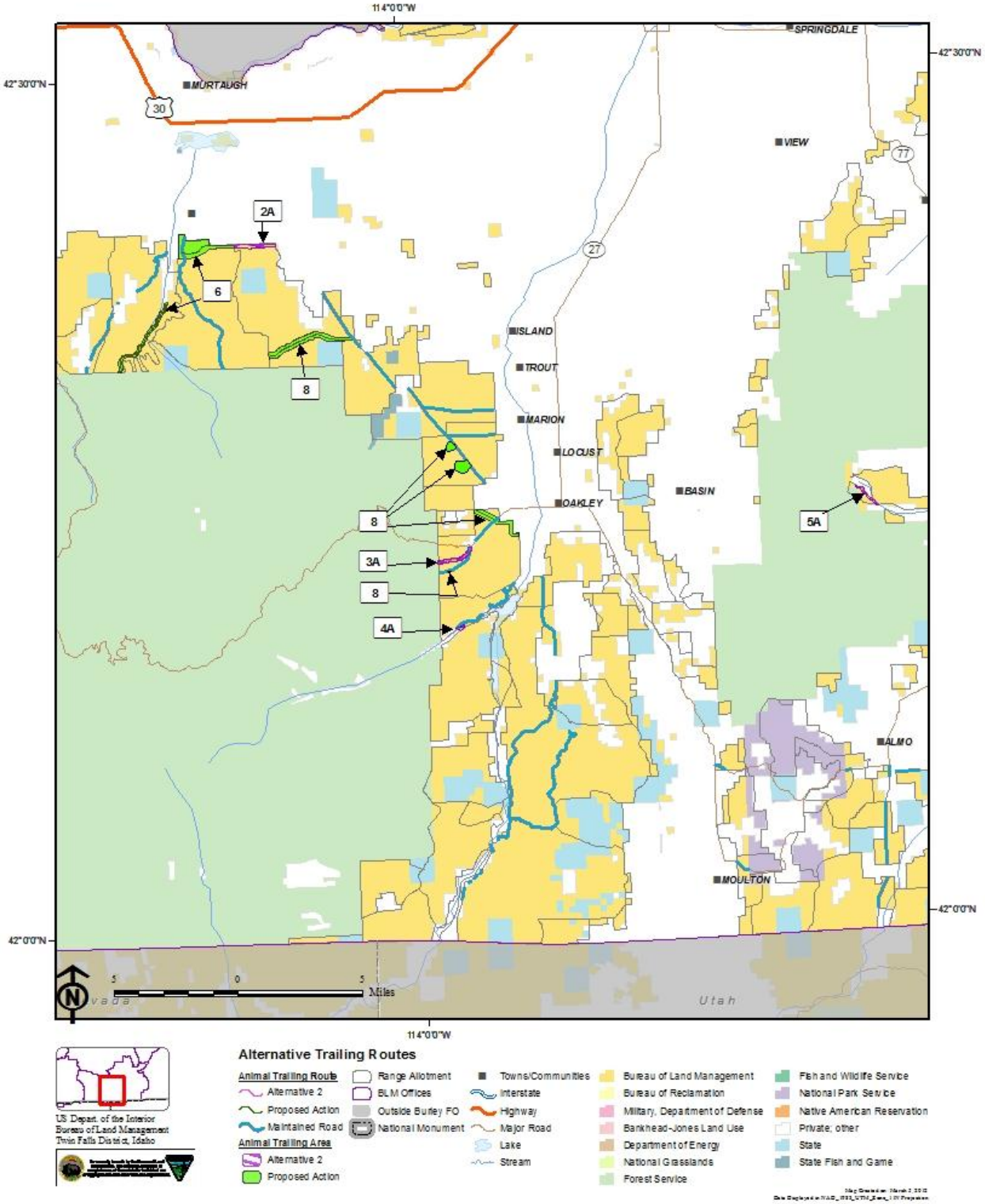

114°0'0"W
42°30'0"N
42°0'0"N
SPRINGDALE
MURTAUGH
VIEW
ISLAND
TROUT
MARION
LOCUST
OAKLEY
BASIN
ALMO
MOULTON
30
77
27
2A
6
8
3A
4A
5A
5
0
5
Miles
Utah
US Depart. of the Interior
Bureau of Land Management
Twin Falls District, Idaho
Alternative Trailing Routes
Animal Trailing Route
Alternative 2
Proposed Action
Maintained Road
Animal Trailing Area
Alternative 2
Proposed Action
Range Allotment
BLM Offices
Outside Burley FO
National Monument
Towns/Communities
Interstate
Highway
Major Road
Lake
Stream
Bureau of Land Management
Bureau of Reclamation
Military, Department of Defense
Bankhead-Jones Land Use
Department of Energy
National Grasslands
Forest Service
Fish and Wildlife Service
National Park Service
Native American Reservation
Private; other
State
State Fish and Game

Figure 7

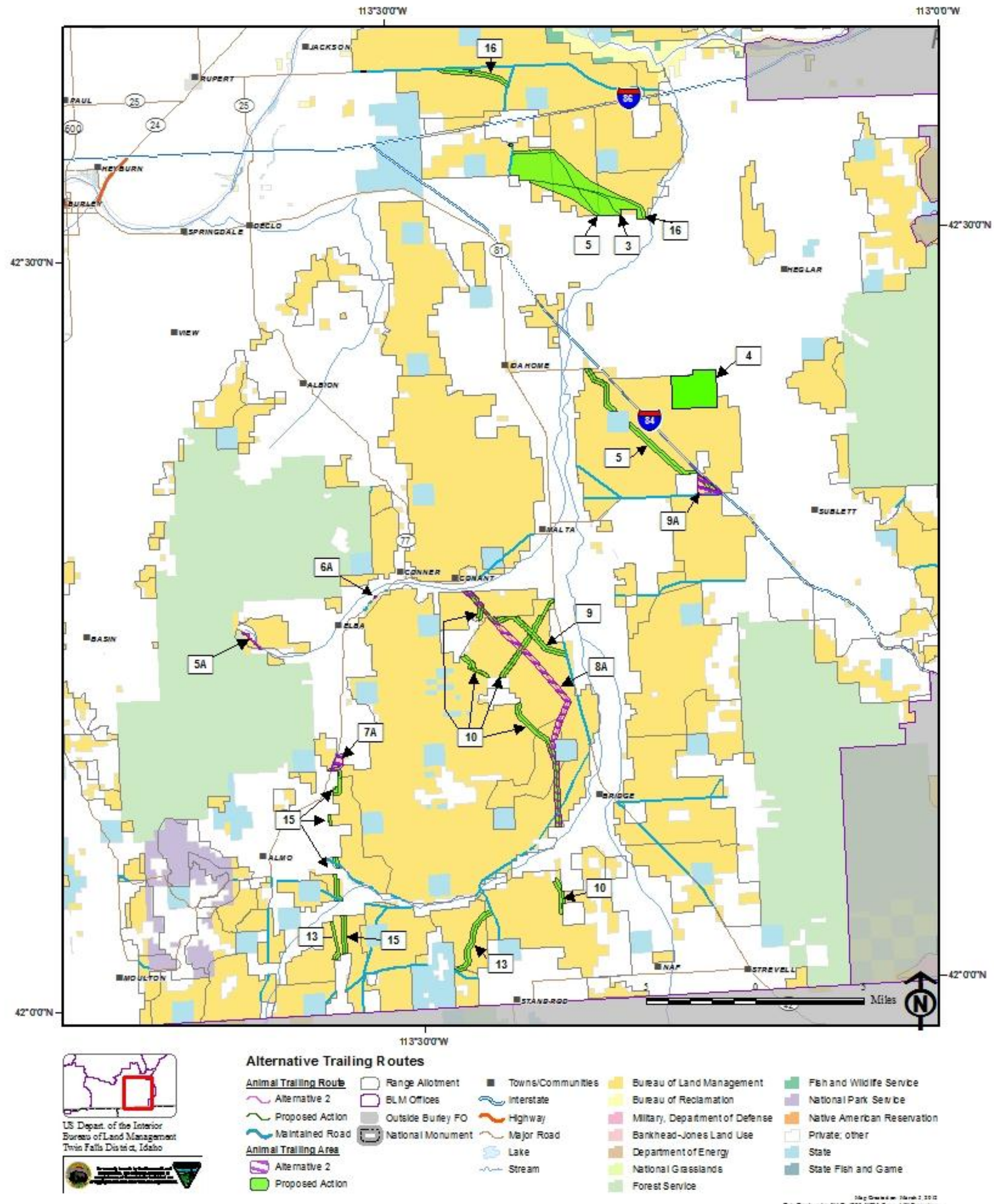

113°30'0"W
113°0'0"W
42°30'0"N
42°0'0"N
JACKSON
RUPERT
PAUL
HEYBURN
BURLEY
OAKLEY
SPRINGDALE
DECLO
VIEW
ALBION
IDAHOME
MALTA
CONNER
CONANT
ELBA
BASIN
ALMO
BRIDGE
NAF
STREVELL
MOULTON
STANDROD
HEGLAR
SUBLETT
16
5
3
4
9A
6A
5A
9
8A
10
7A
15
13
Miles
N
Alternative Trailing Routes
Animal Trailing Route
Alternative 2
Proposed Action
Maintained Road
Animal Trailing Area
Alternative 2
Proposed Action
Range Allotment
BLM Offices
Outside Burley FO
National Monument
Towns/Communities
Interstate
Highway
Major Road
Lake
Stream
Bureau of Land Management
Bureau of Reclamation
Military, Department of Defense
Bankhead-Jones Land Use
Department of Energy
National Grasslands
Forest Service
Fish and Wildlife Service
National Park Service
Native American Reservation
Private; other
State
State Fish and Game
US Depart. of the Interior
Bureau of Land Management
Twin Falls District, Idaho

Table 4 identifies routes and corridors within this alternative that will allow any qualified applicant to trail cattle or sheep during specific seasons according to proposed design features and terms and conditions. The seasons are related to the dates within the Proposed Action, per applications received, and were chosen because of the events may vary annually based on factors such as forage production, drought, resource conditions, weather, wildfire, and individual livestock operations. Limits to the number of livestock per year that would be authorized to trail within a specific route and corridor are also identified in Table 4. These limits are based on how specific each trailing route and corridor is to each applicant and how potential future applications for trailing may be able to utilize these proposed routes and corridors. Qualified applicants proposing to trail livestock across BLM BFO administered lands would be required to submit an application prior to trailing. The Field Manager would consider each application and may issue Crossing Permits incorporating considerations for season of use, resource conditions, special status species and their habitat, weather, wildfire, and drought. Each Crossing Permit would describe the allotment(s) to be trailed across, the period of use (dates), and the number and kind of livestock. Furthermore, terms and conditions specific to each trailing event would be identified that would include the trailing corridor to be used, minimum distance of travel per day, and over-night areas.

TABLE 4
BURLEY FIELD OFFICE
ALTERNATIVE 2

Route Number	Applicant	Season	Allotment Name & Number	Livestock Number	Livestock Kind
3	Any	Spring	Yale #05303	1000	Sheep
4	Any	Summer/Fall	Warm Creek #05320	320	Cattle
5	Any	Spring/Fall/ Winter	Warm Creek #05320	266	Cattle
			Kunau #05305	320	
			Dale Pierce #05307		
6	Any	Spring/Fall	Cold Spring #04081	1450	Cattle
		Fall	Dry Creek #04068	600	
8	Any	Spring/Summer	Buckhorn-Churchill #04067	1005	Sheep
			Marion Group #04075		
			Warr-Pickett #04110	3035	
9	Any	Fall/Winter	Jim Sage #05033	250	Cattle
10	Any	Spring/Fall/ Winter	Jim Sage #05033	570	Cattle
			Clear Creek #05045	140	

Trailing Route Number	Applicant	Season	Allotment Name & Number	Livestock Number	Livestock Kind
11	Any	Spring/Summer/ Fall/Winter	Western Stockgrowers #04031	4000	Sheep
				500	Cattle
13	Any	Spring/Summer/ Fall/Winter	Gully #05039	600	Cattle
			Narrows Seeding #05043	620	
14	Any	Spring	Loughmiller #04076	140	Cattle
		Fall	Kerr-Lost Creek #04038	300	
			Mule Creek #04041	100	
15	Any	Spring/Summer/ Fall/Winter	Gully #05039	400	
			Cole Lane #05038		Cattle
			Jim Sage #05033		Cattle
16	Any	Spring/Fall/ Winter	Highway Common #05301 Kunau #05305 Dale Pierce #5307 Yale #05303	4000	Sheep
1A	Any	Spring	PVGA-Berger #04016	2400/4 nights 4800/3 nights	Sheep
			Kerr-Berger #04038		
			Lilly Grade #04079		
2A	Any	Spring/Fall	Buckhorn-Churchill #04067	1450	Cattle
3A	Any	Fall	Warr-Pickett #040110	50	Cattle
4A	Any	Fall	Mabey-Goose Creek #04078	140	Cattle
5A	Any	Spring/Fall	Middle Hill #05021	400	Cattle
6A	Any	Spring	Unallocated Parcel	100	Cattle
7A	Any	Spring/Fall	Jim Sage #05033	400	Cattle
8A	Any	Spring/Summer/ Fall/Winter	Jim Sage #05033	500	Cattle
9A	Any	Spring/Fall/ Winter	Warm Creek #05320	266	Cattle

Spring = March-May
Summer = June-August
Fall = September-November
Winter = December-February

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

One commenter proposed an alternative to require trailing stay on existing roads and trails only. This alternative was considered but eliminated from detailed analysis because most of the proposed trailing events occur on roads and livestock tend to stay on roads because it is the easiest and quickest path to travel, so the effects to affected resources would be similar to the Proposed Action.

One commenter proposed an alternative to require all applicants to truck their livestock instead of authorizing Crossing Permits. This alternative was considered but eliminated from detailed analysis because the BLM does not issue permits for the trucking of livestock. Trucking would be an effect and a likely option of the No Action alternative for some applicants.

CHAPTER 3, AFFECTED ENVIRONMENT

The Burley Field Office manages approximately 854,330 acres of public land in south-central Idaho. The project area includes approximately 20,000 acres of public land within Twin Falls and Cassia Counties. The project area can be described as the foothills and valleys surrounding several small mountain ranges.

There are a variety of natural landscapes within the field offices, differing in elevation and precipitation. Elevation ranges from a low of approximately 3,900 feet along the rim of Salmon Falls Creek to approximately 6,300 feet in the foothills of the South Hills. Average annual precipitation varies from 6 inches or less in the Raft River drainage to 16 inches or more annually in higher elevation areas. Most of the precipitation falls during the winter and spring months. Mean temperatures vary from 15 degrees Fahrenheit in January to 94 degrees Fahrenheit in July.

During the analysis process, the interdisciplinary team considered several resources and supplemental authorities. The interdisciplinary team determined through internal and external scoping that the resources discussed below would be affected by the proposed action or alternatives.

SOILS

The overall health of watersheds is dependent on soils, which serve to capture, store, and redistribute water, support plant growth, and drive nutrient cycling. The ability of soils to function in rangeland ecosystems is a factor of the soil's physical, biological, and chemical properties. These properties can be affected by the amount and timing of seasonal activities. In late winter to early summer soils in the area can be wet due to increased precipitation and the amounts of precipitation vary widely across the project area. When soils are wet, they become more susceptible to compaction. However when soils are firm (e.g. dry or frozen) in summer through winter months, they are more tolerant to effects of activities, especially if these activities occur infrequently.

The soils within the project area are diverse, variable, and complex. As with all soils, their makeup and composition are dependent on parent material, climate, location, topography, aspect, elevation, and time and age in place. The project area contains a variety of soil types, mostly a mixture of loam. Soil depth ranges from shallow to very deep.

Erosion of soils from wind and water results in a loss of topsoil which reduces the ability of the soil to function and sustain productivity for future use. Water erosion most often occurs from infrequent intense rainfall events in areas with greater slopes and limited vegetative cover. Wind erosion is mainly a concern following wildfire. The majority of the planning area contains soils with slight to severe potential for water and wind erosion. Erosion resulting in rill and gully formation is estimated to be low over most of the planning area.

According to Table 2, Standard 1 Watersheds was met on every allotment that had a Determination completed. During field visits, other allotments appear to have no evidence of accelerated erosion. Rills, water-flow patterns, pedestals and/or terracettes, gullies and wind-scoured, blowout and/or deposition areas were not observed.

VEGETATION

Upland vegetation in the project area is diverse and contains both seeded and native plant communities. Seeded vegetative communities were seeded mainly with a crested wheatgrass mix after wildfires or to control invasive plant species. Seeded rangelands across the project area vary in the amount of shrub cover. The native plant communities are occupied by shrub-steppe vegetation. Low elevation shrub steppe dominate the project area and are characterized by Wyoming big sagebrush, basin big sagebrush, low sagebrush, bitterbrush, gray and green rabbitbrush, with native grass (bluebunch wheatgrass, Idaho fescue, Thurber's needlegrass and Sandberg's bluegrass), forb, and biological crust understory. Native plant communities across the project area are diverse and can be characterized by the types and quantities of sagebrush that makes up the dominant shrub component of the plant community.

Potential impacts to vegetation result from herbage removal and trampling. The amount and timing of forage removal determines the plants ability to maintain productivity and vigor (Holechek et al. 2004 page 235). When the amount of forage or timing of forage removal occurs to the point where the vegetation becomes less productive, over time a change in vegetative composition may occur.

Standards 4 Native Plant Community and 5 Seedings were either met or not met in different allotments within the project area (See Table 2). It was determined in the Warr-Pickett, Cassia Creek and Kunau Determinations that current livestock management was the causal factor for Standards 4 and/or 5 not being met. Where this was determined, either permits were renewed with changes to livestock management or grazing systems were adjusted and projects were installed to help these standards to make progress towards being met. Trailing was not identified as a causal factor for not meeting standards on any allotment within the project area.

RIPARIAN AREAS AND WETLANDS

Potentially affected riparian areas within the project area include Cassia Creek, Dry Creek, Little Cottonwood Creek and Trapper Creek. Dry Creek is the only riparian area affected by the Proposed Action. Livestock trailing in these areas is adjacent to the streams and the trails cross Cassia and Dry Creeks. Riparian vegetation along these streams consists of willows, dogwood, cottonwood, aspen, currant, alder, sedges, rushes and various forbs.

The 0.6 miles of Cassia Creek occurring on BLM is in the Middle Hill Allotment (Route 5A). This section of creek was placed in a riparian pasture in 1990 in order to improve its condition. During a 2002 evaluation the creek was found to be functioning-at-risk (FAR), nearly proper functioning condition (PFC), with an upward trend. An old road crosses the creek near the lower end of the BLM segment and then parallels the stream for the remainder of the reach. Trailing has occurred along this road for many years since it links Forest Service and private lands in the

area. Cassia Creek is listed on the State of Idaho's 303(d) list of impaired waterbodies for exceeding water temperature criteria. The area of the stream immediately adjacent to the road crossing was in the poorest condition during the 2002 assessment partially due to the presence of a recently drained beaver pond, however this location has improved (see Figures 8 & 9).

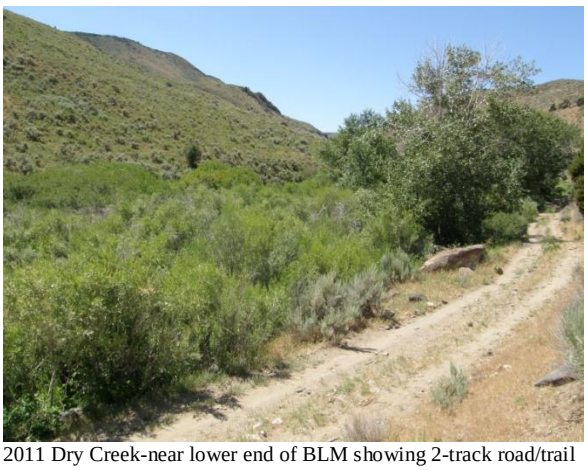
Figures 8 & 9

2002 Cassia Creek-low end of BLM looking upstream from road/trail crossing

2009 Cassia Creek-low end of BLM (retake of photo to left)

Approximately 3.2 miles of the main and middle forks of Dry Creek occur on BLM lands in the project area within the Dry Creek Allotment (Route 6). A two-track road runs the length of this reach and crosses the creek in two locations. Dry Creek is listed on the State of Idaho's 303(d) list of impaired waterbodies for exceeding water temperature criteria. Riparian area condition was assessed in 2007 and found the middle fork to be FAR (with upward trend) while the main stream was assessed in two locations and found to be either PFC or FAR (with upward trend). All segments along Dry Creek show upward trend in condition and are nearly at or above PFC (see Figures 10 & 11). Trailing has occurred along this road for many years since it links Forest Service and private lands in the area.

Figures 10 & 11



2011 Dry Creek-near lower end of BLM showing 2-track road/trail

2011 Dry Creek-near lower end of BLM

About 1.5 miles of Little Cottonwood Creek flows through the Warr Pickett Allotment with 1.2 miles occurring along a two-track road used for trailing (Route 3A). This road crosses the creek twice along the trailing route. Because of irrigation water rights, the creek is known to dry up and becomes intermittent in the late summer when water is diverted for irrigation purposes. This stream was assessed in 1998 and found to be FAR or non-functional (NF) due to livestock causes. After completing the field work for the evaluation the Burley Field Office proposed and built the Little Cottonwood Riparian Pasture Fence (EA #ID024-EA-99-052) in order to improve riparian area and water quality conditions. Because the stream channel/floodplain and riparian vegetation standards were not met (i.e. not in proper functioning condition), due to heavy, season-long livestock use, it was likely that water quality criteria were not being achieved and therefore standard #7 was also not met, although the stream is not identified on the 303(d) list. The following photographs depict post-determination monitoring of Little Cottonwood Creek and the progress which has been made with respect to riparian area condition in the Warr Pickett Allotment under current management. This includes the presence of trailing which has occurred along this road for many years as it links private and Forest Service lands. Specifically, BLM has found improved bank conditions and regeneration of woody species. Increased streamside shade, more stable streambanks and less intensive livestock use is expected to be resulting in improved water quality through reduced sediment and nutrient loads and by moderating water temperature. Although this stream has not been reassessed recently, monitoring continues to show that trend is upward and likely indicates that all portions of the creek have improved since the NF rating of 1998 (see Figures 12 & 13).

Figures 12 & 13

Little Cottonwood Creek Oct. 2000 (photo courtesy of Western Watersheds Project)

Little Cottonwood Creek Aug. 2008. Note numerous new willows.

Approximately 0.2 miles of Trapper Creek occurs within the project area within the Mabey-Goose Creek Allotment (Route 4A). This reach of stream was assessed in 2007 and found to be PFC with an upward trend (see Figure 14). A main county road parallels the stream through this reach and is used for trailing of livestock between private and Forest Service lands. The BLM parcel along this road has occasionally been used as a stopover for trailing livestock. Trapper Creek is listed on the State of Idaho's 303(d) list of impaired waterbodies for nutrients, bacteria and flow alteration. The BLM manages less than ½ mile of the 15 miles of this creek. It is unlikely that the good conditions found on public land could contribute much further improvement to water quality.

Figure 14

Trapper Creek 2011. Showing road along creek.

NOXIOUS WEEDS AND INVASIVE PLANTS

Noxious weeds and invasive plants can displace native plants, degrade wildlife habitats, reduce recreational opportunities, and impact water quality, runoff and sedimentation. When noxious weeds and invasive plants are introduced into an area they can quickly dominate the landscape and become difficult to control. Noxious weeds and invasive plants are highly aggressive, highly competitive and can form large monocultures that would replace native plant species over time. Noxious weeds and invasive plants that become established in a particular area tend to lead to a decline in natural resource values including: a decline in native plant diversity, a decline in wildlife habitat and the reduction of forage for livestock and native ungulates. Infestations can also reduce impact property and aesthetic values and reduce recreation enjoyment.

Potential impacts to the spread of noxious weeds and invasive plants appear to occur in areas where there are frequent events of human and/or animal activity or when seeds are spread by the wind. Due to the high density of public activity and private land, infestations of noxious weeds and invasive plants can be found within the BFO. Some infestations are confined to roadways and are being actively treated. Road corridors throughout the BFO are inspected for noxious weeds and invasive plants. Based on current field and GIS inventory data, infestations and treatments of noxious weeds and invasive plants have occurred throughout portions of the project area. Noxious weeds and invasive plants that have been observed are: Diffuse knapweed, Russian knapweed, white top, scotch thistle, musk thistle, Canada thistle, field bindweed, black henbane, houndstongue, cheatgrass, medusahead, halogeton and rush skeleton weed.

THREATENED, ENDANGERED AND SENSITIVE WILDLIFE

There are no listed Threatened or Endangered animal species (including fish) that would be directly or indirectly affected by this action. Several BLM sensitive species would be affected including sage grouse, pygmy rabbit, sage sparrow, Brewer's sparrow, loggerhead shrike, ferruginous hawk, California bighorn sheep, northern leatherside chub and Yellowstone cutthroat trout.

Greater sage-grouse – Sage-grouse are a sagebrush obligate species. USFWS determined that the greater sage-grouse is warranted for listing under the Endangered Species Act but has precluded listing until a later date and has placed this species on its list of candidate species. Range wide, greater sage-grouse currently occupy approximately 56% of their historic range (Connelly et al. 2004). Sagebrush is the main component of the adult sage-grouse diet throughout the year, and sagebrush is especially important during winter (Connelly et al. 2000, Wallestad et al. 1975). Forbs are consumed by hens during pre-laying and by all age and sex classes during summer. Insects are critical for juveniles during the first 3-4 weeks of life, with forbs increasing in the diet as the juveniles' age. Areas having better forb and invertebrate availability appear to have better grouse productivity (Drut et al. 1994). Sage-grouse occupy lek, nesting, late brood rearing, and winter habitats within the project area and are mostly found in areas that have an adequate sagebrush-steppe habitat or where sagebrush seedlings established through rehabilitation provide food.

Sage-grouse are dependent on large, contiguous areas of sagebrush habitat that support adequate sagebrush canopy cover and perennial grass and forb understories for breeding, brood-rearing, and wintering (Connelly, et al. 2000; Connelly, et al. 2004; Idaho Sage-grouse Advisory Committee 2006). Sage-grouse populations in areas where formerly extensive sagebrush habitat is broken into small patches are at risk from increased predation and loss of habitat. As patches of sage-grouse habitat are lost, the ability of the landscape to support sage-grouse is reduced. Sagebrush patches within large expanses of grass-forb dominated habitat may be effectively smaller than the patch size since these patches apparently receive much less use along their edge (Shepherd III 2006). The loss of habitat patches and wildlife movement corridors reduces connectivity and genetic interchange between sage-grouse populations (Idaho Sage-grouse Advisory Committee 2006).

Even though acres affected by the proposed trailing are small, proposed trailing covers a large area because of it is composed primarily of linear features. Therefore, it is necessary to consider the effects to sage grouse on a broad scale. The project area encompasses two sage grouse local working group areas which share a division that appears to be biologically significant. Sage-grouse populations on the western side of the project area fall within the Shoshone Basin Local Working Group area while sage grouse populations on the Eastern half side of the project area fall within the South Magic Valley Working Group area. As an index for population condition, the most suitable and available information to use includes Lek Survey Route data collected by the Idaho Department of Fish and Game (IDFG) during 1996-2011. These data provide annual estimates of male lek attendance across years and there is one route located in each planning area. Lek routes are considered more robust than lek counts because they are believed to represent part or all of a single breeding population. Based on this information, sage-grouse populations in the Shoshone Basin appear to have slipped slightly from an average male lek attendance of 117 (1996-2000) to 107 (2009-2011). The sage-grouse populations in the South Magic Valley (based on the Birch Creek Lek Route) appear to have risen from an average male lek attendance of 23 (1996-2000) to 74 (2009-2011). Although the sage-grouse populations appear to have changed slightly over the course of a decade, these populations have fluctuated widely with the Birch Creek Lek Route varying between 9 and 103 males and the Shoshone Basin Lek Route varying between 61 and 264 males. However, because these populations appear to have widely fluctuating numbers, assessing the trend is difficulty. Therefore, the best that can be said for these populations is that they appear to be relatively stable.

There are six sage-grouse leks within ½ mile of trailing routes. These routes include 6, 8, 10, 13 and 14 of both alternatives as well as route 3A in Alternative 2. Trailing use of routes 6, 8 and 3A would not affect leks because the trailing would occur outside the lek season (March 15- May 1).

There are 4,975 acres of key sage-grouse habitat within the trailing routes (see figure). Key sage grouse habitat contains a minimum of 10% or greater sagebrush cover. Other sage grouse habitat includes 7,374 acres of restoration class RI which consists of perennial grasses with a shrub cover of less than 10 %, 268 acres of restoration class R2 (invasive annual grassland) and 954 acres of restoration class R3 (conifer encroached habitats). Sage-grouse may use all of these habitats; however, they are most likely to be found in key habitat, or within restoration habitat that is adjacent to key habitat

Habitat quality varies not only between areas based on whether they meet the 10 % shrub cover requirement for key habitat but also among different areas having key habitat. For instance, an area could have greater than 10% shrub cover which would be sufficient for winter habitat or brood rearing, however it would not meet the guideline of 15 % shrub cover for nesting habitat. Habitat condition as described during Standards and Guidelines Evaluations (where completed) for sage grouse were considered for trailing routes which cross key sage grouse habitat. Although some allotments were not meeting Standard 8, these allotment evaluations did not identify trailing as a causal factor for not meeting this standard.

Pygmy Rabbits –Pygmy rabbits occur in dense tall patches of big sagebrush and have been found in the project area within the Gully, Jim Sage and Clear Creek allotments where their habitat appears to be most abundant. They may also occur within the Lilly Grade Allotment however, occupancy has not been confirmed there. Sagebrush is a critical component of their habitat which they use for concealment of burrows and during foraging. Sagebrush is also an important component of their winter diet. Trailing livestock could affect pygmy rabbits through disturbance and possibly crushing their burrows.

Sage sparrow - This species prefers large patches of vegetation with high sagebrush cover (Knick and Rotenberry 1995). However, at least one study has shown that this species will accept the loss of up to 50% of the shrubs to wildfire or prescribed fire, provided the landscape pattern is a mosaic of burned and unburned areas (Petersen and Best 1985). Sage sparrow breed almost exclusively in sagebrush (especially big sagebrush), or sagebrush mixed with other shrubs. This species could occur throughout the project area but areas having greater sagebrush cover such as the key sage grouse habitat (7,374 acres) are expected to have the greatest potential for occupancy.

Brewer's sparrow - This species requires extensive tracts of open shrub lands including sagebrush, plains, alpine meadows, and valleys with low shrubbery. Brewer's sparrow nest in arid sagebrush-grassland habitat; nests are built in sagebrush and small shrubs, usually near the ground. Brewer's sparrows forage in sagebrush habitat, although wetlands and shrubby ravines may also be important insect foraging areas during the nesting season. Brewer's sparrows appear to be more influenced by shrub cover than patch size. This species could occur throughout the project area but areas having greater sagebrush cover such as the key sage-grouse habitat (7,374 acres) are expected to have the greatest potential. Some Brewer's sparrows appear to successfully nest in habitats dominated by other shrub types such as rabbitbrush.

Loggerhead shrike - This species prefers open habitat characterized by grasses and forbs of low stature interspersed with bare ground and shrubs or low trees (Deschant et al. 2002). Loggerhead shrikes use prairies, pastures, sagebrush, desert, and fencerows or shelterbelts of agricultural fields, as well as old orchards, riparian areas, open woodlands, farmsteads, suburban areas, mowed road rights-of-way, abandoned railroad rights-of-way, cemeteries, golf courses, reclaimed strip mines, and open juniper savannahs (Woods and Cade 1996). Scattered shrubs or trees, particularly thick or thorny species, serve as nesting substrates and hunting perches.

Fences, utility wires, grasses, and forbs also may be used as perches. Thorny shrubs, trees, and barbed wire fences also serve as impaling stations (sites where loggerhead shrike can attach large prey for eating). This species could occur throughout the project area but areas having greater sagebrush cover such as the key sage grouse habitat (7,374 acres) are expected to have the greatest potential.

Ferruginous hawk – This species occurs in sagebrush steppe habitat, especially where isolated juniper are available for nesting. Nesting occurs in juniper but can also occur on the ground. There are several ferruginous hawk nests in the project area and are common on surrounding lands. Ferruginous hawks are neo-tropical migrants that generally are only present during the breeding season (March 1 – July 15). Their local diet consists primarily of rabbits and rodents, especially ground squirrels (Thurow et al. 1980). Potential threats to ferruginous hawks include fire, human disturbance and development. Fire can affect ferruginous hawks if it reduces the quality of the sagebrush such that prey abundance is reduced. Ferruginous hawks are susceptible to human disturbance through flushing or nest abandonment primarily if disturbance occurs during the incubation period (White and Thurow 1987). White and Thurow (1987) recommended a 250 meter buffer for short term disturbances which they stated should reduce 90% of flushing by ferruginous hawks. Olendorff (1993) further recommends that prolonged activity should be 800 meters line of sight of the nest or 400 meters from the nest with an intervening visual buffer. Olendorff defined prolonged activity as occurring from ½ hour to several days.

California Bighorn sheep – This species can be found in Population Management Unit (PMUs) on Jim Sage Mountain and in the South Hills. California bighorn sheep populations in these areas have resulted from reintroduction efforts. The Idaho Bighorn Sheep Management plan identified two Population Management Units within the project area (IDFG 2010). The Jim Sage PMU includes 56 square kilometers of habitat and has the capacity to support 107 bighorn sheep and a current estimate of 79 bighorn sheep. The South Hills PMU includes 35 square kilometers of habitat and has the capacity to support 66 bighorn sheep although the last survey conducted in 2008 located only 12 bighorn sheep. Potential threats to these populations include disease, predation and conifer encroachment. Disease risk consists primarily of pneumonia which they can acquire through contact with domestic sheep. Conifer encroachment in the project area primarily consists of Utah juniper expansion. Predation risk is primarily due to mountain lions which can affect smaller more isolated populations of bighorn sheep such as those occurring in the project area.

Northern Leatherside Chub - The northern leatherside chub is a rare desert fish in the minnow family that occurs in northern Utah and Nevada, southern and eastern Idaho, and western Wyoming. Northern leatherside chub occur in small desert streams between elevations of approximately 4,100 and 9,000 feet, with low to moderate velocities. Within the project area, northern leatherside chub have been found in Trapper Creek (Alternative 2 Route 4A). The particular stretch of the creek that leatherside chub were found in includes the overnight use area that livestock may occupy. However, there are no indications that grazed areas are negatively impacting Northern leatherside chub (76 FR 63444).

Yellowstone cutthroat trout - The Yellowstone Cutthroat trout (YCT) is one of ten subspecies of cutthroat trout that are native to the western U.S. (Behnke 1992). In Idaho, YCT trout historically occurred in the Snake River watershed from the headwaters downstream to Shoshone Falls. The exact distribution of historically occupied streams is unknown but it is hypothesized that most streams in the upper Snake River were occupied by YCT. The YCT evolved apart from the rainbow trout and redband trout and lack isolating mechanisms that would allow them to co-exist with other trout species. Information on the current status of YCT indicates that populations have declined from historic levels largely due to influences of introduced non-native fish species and habitat degradation. YCT are present within the Burley Field Office in portions of the Goose Creek, Big Cottonwood Creek, Dry Creek, and Raft River Watersheds. The BLM considers YCT as a Sensitive species that is range-wide/globally imperiled. Within the project area, YCT could potentially be affected within the Dry Creek watershed.

MIGRATORY BIRDS

Migratory bird species of conservation concern (migratory birds) which occur within the project area were analyzed for potential effects. Only those migratory birds that may be affected are described here. The species which might be affected by this project include burrowing owl, grasshopper sparrow, long-billed curlew, Swainson's hawk, Northern harrier, short-eared owl and red-naped sapsucker.

Burrowing owl - This species is on the BLM watch list. Burrowing owls prefer grasslands and concentrate near agriculture in southern Idaho. Burrowing owls have been observed within the project area using burrows.

Grasshopper sparrow - Grasshopper sparrow is a grassland species that in some areas likely benefit from some shrub cover and some patchy bare ground (Vickery 1996). Breeding occurs from June through the middle of August (Vickery 1996). Nests are cryptically built on the ground close to grass (Vickery 1996). This species is on the BLM watch list. The project area contains suitable habitat.

Long-billed curlew - This species is on the BLM watch list. It is a shore bird but is primarily an upland grassland species during their nesting season. Long-billed curlews have been observed nesting throughout grassy portions of the project area.

Swainson's hawk – This species is on the BLM watch list. Swainson's hawks are a neotropical migrant which could be present in the project area during the breeding season (March – September). They are strongly associated with agriculture in both their summer range in North America and their winter range in South America (Schmutz 1984). Nesting occurs in trees. The only known observation of Swainson's Hawks nesting in the project area is an occurrence of nesting that ended when the nest tree burned in 1999.

Northern harrier – Northern harriers use rangelands in southern Idaho yearlong. They are relatively abundant in shrub steppe habitats, especially where dense but low vegetation is found. (Macwhirter and Bildstein 1996). Northern harriers are generalists, feeding mostly on small rodents and birds.

Short-eared owl - This species is on the BLM watch list. Short-eared owls are the most widespread species of owls. They are primarily a grassland species that hunt voles and nest in grasslands. Short-eared owls appear to prefer tall dense ungrazed grasslands for nesting, but also appear to hunt in most other open habitats (Wiggins et al. 2006). Short-eared owls have not been observed in the project area but could occur because the habitat exists.

Red-naped Sapsucker - This species is on the BLM watch list. They occur in mixed coniferous forests and aspen and cottonwood groves, where they feed on tree sap and nest in tree cavities (Walters et al. 2002). Red-naped sapsucker habitat in the Warr Pickett Allotment can be found along the natural reaches of Little Cottonwood Creek. Trailing could affect the habitat of red-naped sapsuckers if livestock prevent young aspen shoots from regenerating and establishing.

LIVESTOCK GRAZING

Livestock producers move their livestock across BLM-administered lands to facilitate proper grazing management of BLM grazing allotments, and to facilitate movements of livestock to and from private, state, or other federally administered lands. Trailing of cattle or sheep occurs at different times throughout the year. Timing of trailing events vary annually based on factors such as forage production, drought, resource conditions, weather, wildfire, court decisions, and individual livestock operations.

The BFO is divided into 228 grazing allotments on approximately 854,330 acres of BLM administered lands with 220 grazing authorizations. Livestock grazing occurs within the project area year round. Generally, the lower elevation rangeland is grazed in the fall, winter, and spring. The higher elevations are grazed in the spring, summer, and fall. Approximately 133,250 AUMs of active use are authorized to livestock within the BFO; 85% of the AUMs are allocated to cattle, 15% to domestic sheep, and less than 1% to domestic horses.

There are 33,102 active permitted AUMs (cattle, sheep and horse combined) authorized for the allotments within the project area. This is approximately 29% of the total authorized AUMs for the BFO. Trailing AUMs within these allotments amounts to approximately .006% of the total authorized AUMs. Livestock trailing is largely a transitory event. Very little grazing occurs when livestock are herded to their destination; however, some grazing occurs in areas where livestock overnight. For this reason, day long trailing effects will be related to hoof impacts and not AUMs. Some trailing occurs where the overnight stop occurs on private land. These impacts will also be related to hoof impacts. AUMs will be discussed where overnight stops are scheduled to occur on public land. Table 7 shows the permitted and overnight AUMs for each alternative within the allotments of the project area.

TABLE 7
PERMITTED AUMS AND OVERNIGHT AUMS
WITHIN THE PROJECT AREA BY ALLOTMENT

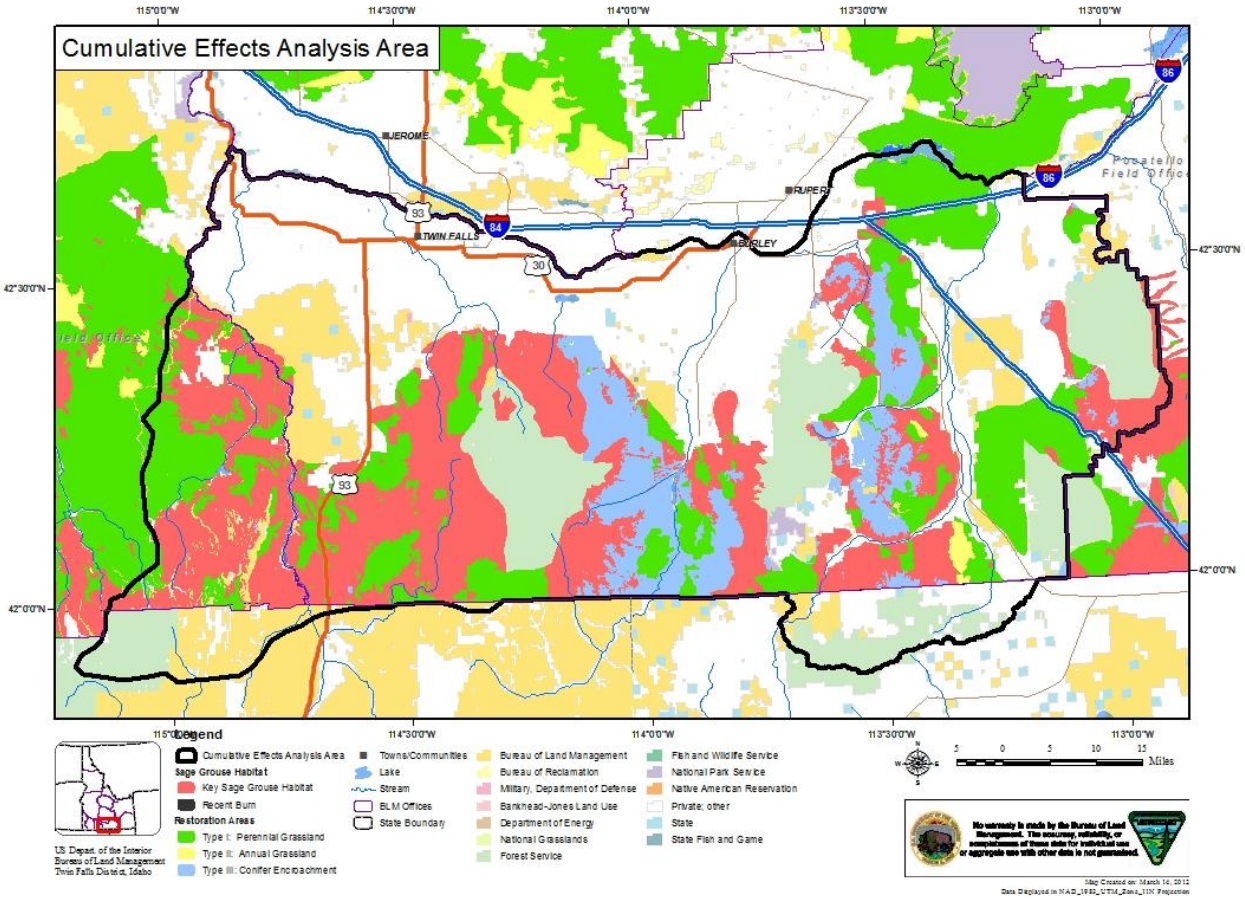
Allotment	Permitted AUMs	No Action AUMs	Proposed Action AUMs	Alternative 2 AUMs
Mule Creek	1,334	0	0	0
Kerr Lost Creek	1,724	0	0	0
PVGA-Berger	3,156	0	95	47
Kerr-Berger	353	0	0	0
Lilly Grade	186	0	95	47
Loughmiller	616	0	0	0
Western Stockgrowers	2,695	0	26	86
Dry Creek	729	0	0	0
Cold Spring	419	0	0	0
Buckhorn-Churchill	543	0	0	0
Marion Group	862	0	13	13
Warr-Pickett	486	0	39	39
Mabey-Goose	54	0	0	0
Middle Hill	417	0	0	0
Jim Sage	5,274	0	0	0
Cole Lane	130	0	0	0
Gulley	122	0	0	0
Narrow Seeding	463	0	0	0
Clear Creek	560	0	0	0
Warm Creek	3,880	0	21	21
Yale	1,290	0	39	39
[1]Dale Pierce		0	26	26
Kunau	2,319	0	13	13
Highway Common	5,749	0	27	27
TOTAL	**33,102**	**0**	**394**	**358**

[1]According to the 1985 Cassia RMP, the Dale Pierce Allotment is to be managed as a buffer or relief use area to be grazed as needed by those whose normal use area has been impacted by natural disaster or is being rested as a result of rehabilitation practices. Therefore, AUMs are not allocated to this allotment.

CHAPTER 4, ENVIRONMENTAL CONSEQUENCES

The Cumulative Effects Analysis Area (CEAA) for soils, vegetation, noxious weeds and invasive plants, wetland & riparian areas and livestock grazing within the project area are bound to the affected allotment boundaries. The IDT determined to be this boundary was appropriate for analyzing the cumulative impacts because of shared common resources. Examples of these resources include common permittees, wildlife habitat and vegetation. The spatial bounds for cumulative impacts to wildlife; including BLM sensitive species includes the habitat of the known populations of sage grouse which may be affected by the project. The boundary is mostly contained within the Burley Field Office south of the Snake River, but extends into Utah within the Raft River Watershed, and into Nevada and the Jarbidge Field office in the Salmon Falls Watershed (see figure 8).

Figure 8



Past, present and future actions in the CEAAs are the same for each alternative. Because the direct and indirect effects of the Proposed Action and Alternative 2 are limited geographically and limited in duration, the cumulative effects of the alternatives are not expected to measurably differ. Past, present and reasonably foreseeable future actions affecting these resources in the CEAAs include livestock trailing along main arterial transportation routes and other lands, livestock grazing, range improvement projects, wildfire suppression, post-fire rehabilitation, vegetation treatments, recreation, infrastructure, mining, transmission lines and other Rights-of – ways (ROW) including energy development.

SOILS

No Action

The No Action alternative is expected to have minimal change and/or maintain the current healthy soil conditions found within the project area. The direct impacts of the trailing events i.e., trailing, concentrated use areas and presence of livestock would most likely not be measureable within the project area because applications for Crossing Permits would be denied. However, some of the applicants would be able to trail along main arterial transportation routes, but no overnighting would occur. Although trailing has occurred within the project area, Standard 1 Watersheds was met in all allotments where Determinations were completed and there have been no observations of accelerated erosion in the other allotments (see Table 2).

Proposed Action

Effects to soils from hoof action may occur during overnight stops when livestock are concentrated in areas until the next morning. However, most of the overnight stops are along roads or around troughs or other range improvements where soil compaction has already occurred due to maintenance and/or construction work or permitted grazing activities. Routes and corridors where trailing, concentrated use areas and presence of livestock occur when soils are likely wet from precipitation may cause soil compaction when livestock trailing events occur away from main transportation routes. Depending on the amount of moisture and the number of livestock within a corridor during this time of year, compaction may decrease the soil's ability for water infiltration and permeability, causing areas of bare ground and possible noxious weed and invasive plant infestation. The effects to soils are minimized because the majority of these trailing events occur on transportation routes where soils are compacted and void of vegetation and are less than one day in duration. When a trailing event occurs along a main transportation route, livestock may be forced away from the route by traffic or may have to pass through an adjacent gate when the trailing event intersects with a cattle guard. When this occurs livestock are adjacent to the road and once the traffic is clear or they are through the gate trailing resumes on the route.

Most of the applicant proposed trailing routes occur along a main transportation route. According to the allotment determinations shown in Table 2, Standard 1 Watersheds was met where a determination was complete. On allotments where the determination has not been completed, there have been no observations or documentation that trailing, concentrated use

areas or presences of livestock have caused any detrimental effects to soils. Figures 14 and 15 are photos of various overnight areas within proposed corridors. Since trailing has occurred in the past along most of the proposed routes and soils have already been compacted, direct and indirect effects to soils from livestock trailing events would be similar to the No Action alternative, i.e., minimal change.

New routes that have been applied for during the 2012 grazing season are:

- #14 in the Mule Creek Allotment
- #16 in portions of the Kunau, Dale Pierce, Yale and Highway Common Allotments

The effects are expected to be similar for these new routes as they are for the existing routes. The trailing along the new routes would occur during the late fall and winter months when soils are most likely frozen and firm. Soil disturbance from trailing is less likely to occur this time of year, even when trailing occurs away from transportation routes. Therefore, trailing along these new routes is expected to result in slight increases in soil compaction within the project area.

Figure 14. Route 11. Sheep overnight area near livestock corrals

Figure 15. Route 4. Cattle overnight area near a water trough

Alternative 2

Effects to soils from this alternative are expected to be similar to the Proposed Action. In addition to the routes identified in the Proposed Action, Alternative 2 proposes other routes and corridors where trailing events have occurred. This alternative also proposes to authorize trailing on all routes and corridors with cattle or sheep during specific seasons according to site specific design features to protect potential resource concerns that may occur along these routes. Routes and corridors where trailing, concentrated use areas and presence of livestock occur during spring (mid-March through mid-June), when soils are likely wet, may cause soil compaction when livestock trailing events occur away from main transportation routes. Depending on the amount of moisture and the number of livestock within a corridor during this time of year, compaction may decrease the soil's ability for water infiltration and permeability, causing areas of bare ground and possible noxious weed and invasive plant infestation. The effects to soils are minimized because the majority of these trailing events occur on transportation routes where soils are compacted and void of vegetation and are less than one day in duration. Standard 1 Watersheds was met on every allotment that had a determination completed. During field visits, other allotments appear to have no evidence of accelerated erosion.

Direct and indirect impacts may be minimized when these trailing events occur during the summer (mid-June through mid-September) and fall/winter months (mid-September through mid-March) when soils are likely dry, firm and/or frozen and are less likely to be compacted. Although trailing events may cause compaction during this time of year, there have been no observations of trailing, concentrated areas and presence of livestock causing impacts to soil site stability or accelerated erosion.

Cumulative Effects

Other actions affecting soils in the CEAA include livestock trailing along main arterial transportation routes and other lands, livestock grazing, range improvement projects, wildfire suppression, post-fire rehabilitation, vegetation treatments, recreation, mining, transmission lines and other ROW including energy development.

Another trailing corridor within the BFO is the Magic Stock Driveway ROW. This ROW is located in Twin Falls County and begins in the Berger Resource Conservation Area, following existing roads through the Shoshone Basin to the Idaho/Nevada boundary, with overnight holding pastures in or adjacent to other allotments within the ROW. The Magic Stock Driveway ROW will be analyzed in more detail in the Shoshone Basin Grazing Permit Renewal. Trailing events also occur along existing transportation routes throughout the BFO for short duration and intensity, which has led to acceptable soil conditions.

Livestock grazing occurs throughout the project area and is essentially the basis for the purpose and need of this project. Grazing of both cattle and sheep occur on surrounding public and non-public lands. Grazing affects soils through the concentrated use, mainly around range improvements. When this occurs, soils become compacted and can modify the vegetation through foraging and trampling. Generally, this adverse effect is only concentrated around areas of high use such as near troughs or gates. However, the landscape on public land as a whole is managed for suitable range conditions. A review of allotments affected by the project revealed that the allotments, where trailing is occurring, are meeting Standard 1 (Watersheds).

Range improvement projects such as fences and water developments implemented to improve livestock distribution can cause small temporary localized soil disturbances, like vegetation removal that reduces the available soil cover during construction. Long-term reduction of vegetation can occur within the immediate area of projects due to soil compaction and/or concentrated livestock use, thus reducing cover. This effect is expected to be minimal in comparison to what is available for cover throughout the entire project area. These disturbances can be stabilized over the long term by seeding disturbed areas.

Fire suppression may employ methods such as dozing or burning (in advance of the fire) to create a fuel break. This direct disturbance to soil may result in temporary bare ground. This effort can stop fire progression which could protect soils from high severity fires. Areas disturbed through suppression efforts and areas burned by wildfires are often rehabilitated through post-fire rehabilitation efforts. These efforts are expected to restore soil stabilizing vegetation.

Vegetation treatments can improve and/or maintain soil site stability where implemented. The 2010 Burley Landscape Sage-grouse Restoration Project is a juniper thinning and fuels reduction project where trees will either be cut with chainsaws or removed through the use of a masticator. The purpose of this project is to reduce fuels and improve or maintain habitat at a landscape level for sage-grouse and other sagebrush-obligate BLM sensitive wildlife species within the project area. Juniper thinning can cause soil disturbance where a masticator is driven to grind trees into mulch. This mulch provides soil cover. Other juniper thinning projects include Wildland Urban Interface (WUI) projects where encroaching juniper is cut, masticated or burned to prevent catastrophic wildfires that can damage soil conditions. The Berger Grazing Conservation Area is currently being considered for vegetation treatment. These proposed treatments would reduce shrub cover and invasive plants using a variety of methods, which may include both chemical and mechanical methods. This project was recently scoped and the ID team is currently developing alternatives. No decision has been made. Some treatment methods may disturb soils during implementation by reducing cover for a short period of time.

Recreation such as Off Highway Vehicle (OHV) use, mountain biking, horseback riding or concentrated hiking can remove vegetation and expose soils to wind and rain, thus increasing erosion. There are only a few areas where recreation activities are exposing small areas of soil.

The SWIP (authorized) and Gateway West (proposed) projects are transmission lines with routes and/or alternatives passing through the cumulative effects area and a wind energy farm is proposed on private land near Rogerson, ID. Some soil would be removed for construction and operation, including for the purpose of tower placement and new roads. Areas used for construction but not needed for operation would be reseeded to match surrounding vegetation to help stabilize the soil. Mining on public land includes decorative rock, geothermal, and gravel pit operations. Mining operations disturb and remove soils. Disturbances vary from short term testing by digging small holes to longer term (10 years or greater) activity. Operations typically minimize disturbance and reclaim soil to replace and restore at a later date. Other existing ROW such as pipelines, roads and existing transmission lines have disturbed soils and there is occasionally disturbance resulting from maintenance of these existing facilities. Construction and maintenance activities disturb a much smaller area than the original project footprint.

VEGETATION

No Action

The No Action alternative is expected to have minimal change and/or maintain the current vegetative conditions found within the project area. The direct impacts of the trailing events i.e., trailing, concentrated use areas and presence of livestock would not occur within the project area because applications for Crossing Permits would be denied. Although trailing has occurred within the project area, trailing has not been determined as the causal factor for not meeting Standards 4 (Native Plant Community) and/or 5 (Seedings). Also, there have been no observations of trailing events causing poor vegetative conditions in the other allotments where Standards and Guidelines have not been completed.

Proposed Action

Effects to vegetation may occur during overnight stops when livestock are concentrated in areas until the next morning. Forage consumption and trampling of vegetation due to hoof action is more likely to occur at these concentrated areas than when livestock are actively being trailed along a route. However, most of the overnight stops are along roads or around troughs or other range improvements where vegetation has already been impacted due to maintenance and/or construction work or permitted grazing (see Figures 16 & 17). When a trailing event occurs along a main transportation route livestock may be forced away from the route by traffic or may have to pass through an adjacent gate when the trailing event intersects with a cattle guard. Where livestock are trailed away from main transportation routes, vegetation appears healthy. Routes and corridors where trailing, concentrated use areas and presence of livestock occur during the critical growth period for plants can cause impacts as a result from herbage removal and trampling. This may cause vegetation to become less productive, over time and a change in vegetative composition may occur.

Figure 16. Route 8. Sheep overnight area near maintained county road

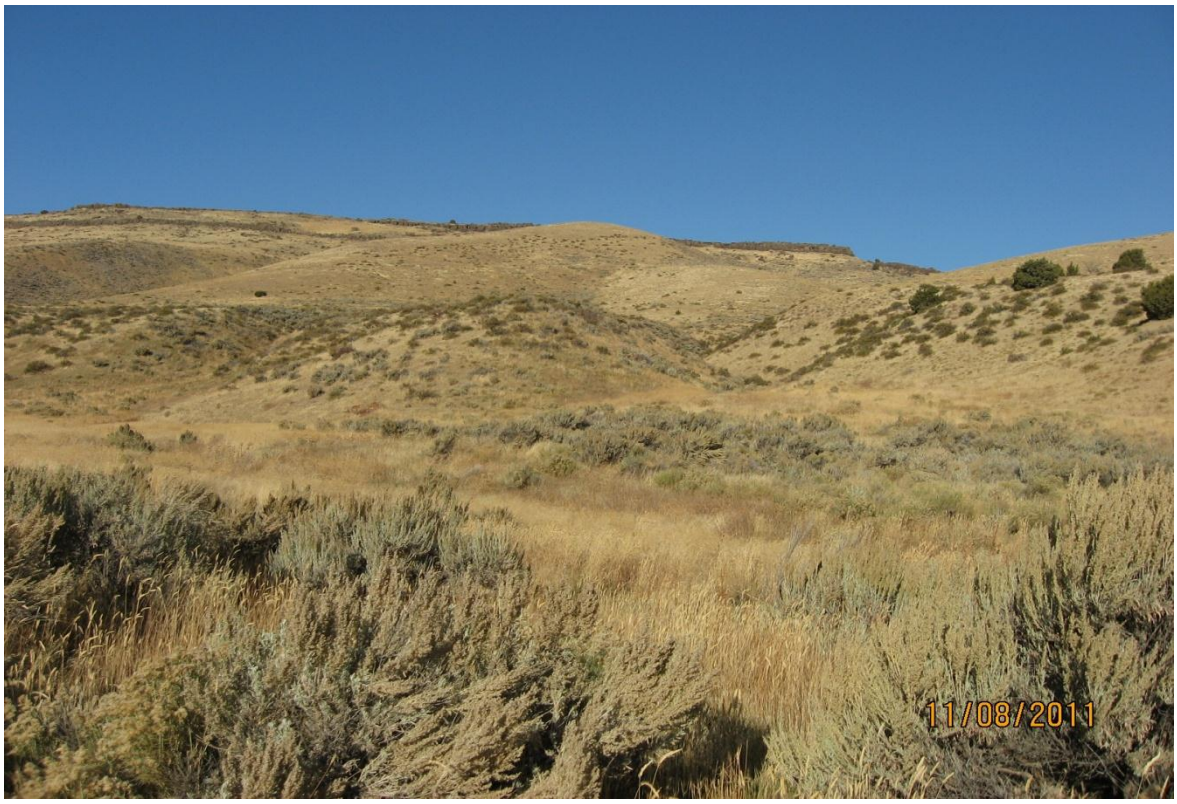


Figure 17. Route 8. Sheep trailing area within a corridor

Most of the applicant proposed trailing routes occur along a main transportation route. Outcomes of the allotment determinations are shown in Table 2. Where standards were not met, livestock trailing was not a causal factor. If any of the standards were not met either permits were renewed with changes to livestock management or grazing systems were adjusted and projects were installed to help these standards make progress towards being met. On allotments where the Determination has not been completed, there have been of no observations or documentation that impacts from trailing, concentrated use areas or presences of livestock have caused detrimental effects to vegetation. Since trailing has occurred in the past along most of the proposed typical trailing routes, direct and indirect effects to vegetation from trailing events would be similar to the No Action alternative, i.e., minimal change.

Direct and indirect effects are expected to be similar for new proposed routes as they are for the existing routes. The trailing along the new routes would occur during the late fall and winter months when vegetation is dormant. Impacts to vegetation from trailing are less likely to occur this time of year, even when trailing occurs away from transportation routes.

Alternative 2

In addition to the routes and corridors identified in the Proposed Action, Alternative 2 proposes other routes and corridors where trailing events have occurred. Effects of this alternative are expected to be similar to the Proposed Action. This alternative also proposes to authorize trailing on all routes and corridors with cattle or sheep during specific seasons according to

site-specific design features to protect potential resource concerns that may occur along these routes. Effects to vegetation would mainly occur during overnight stops when livestock are concentrated in areas until the next morning (see Figure 18). Routes and corridors where trailing, concentrated use areas and presence of livestock occur during spring (March through June), the critical growth period for plants, would have the same effect on vegetation as the Proposed Action. Although vegetation may be eaten or trampled, most events are less than one day in duration and livestock are crossing the most direct route to get to their destination along a main transportation routes. These transportation routes where trailing events occur, compacted soil and are void of vegetation. Also, all routes, with the exception of #14 and 16, have occurred in the past and there have been no observed effects to vegetation due to trailing events.

Figure 18. Route 1A. Alternative sheep overnight area near livestock corrals

Effects would be minimized when these trailing events occur during the summer (July through September) and fall/winter months (October through February) when vegetation is dormant. Although trailing events may cause trampling during this time of year, there have been no observations of trailing, concentrated areas and presence of livestock causing detrimental effects to the health of vegetation communities.

Cumulative Effects

Other actions affecting vegetation compared to all alternatives in the CEAA include livestock trailing along main arterial transportation routes and other lands, livestock grazing, range improvement projects, wildfire suppression, post-fire rehabilitation, vegetation treatments, recreation, mining, transmission lines and other ROW including energy development.

Another trailing corridor within the BFO is the Magic Stock Driveway ROW. This ROW is located in Twin Falls County and begins in the Berger Resource Conservation Area, following existing roads through the Shoshone Basin to the Idaho/Nevada boundary, with overnight holding pastures in or adjacent to other allotments within the ROW. The Magic Stock Driveway ROW will be analyzed in more detail in the Shoshone Basin Grazing Permit Renewal. Trailing events also occur along existing transportation routes throughout the BFO for short duration and intensity, which has led to acceptable vegetative conditions.

Livestock grazing occurs throughout the project area. Grazing of both cattle and sheep occur on surrounding public and non-public lands. Grazing affects vegetation through the concentrated use, mainly around range improvements. When this occurs, soils become compacted and can modify the vegetation through foraging and trampling. Generally, this adverse effect is only concentrated around areas of high use such as near troughs or gates. However, the landscape on public land as a whole is managed for suitable range conditions. A review of allotments affected by the project revealed that the allotments, where trailing is occurring, are meeting and/or not meeting Standards 4 (Native Plant Communities) and/or 5 (Seedings). On allotments where these standards were not met, livestock trailing was not a causal factor.

Range improvement projects such as fences and water developments, implemented to improve livestock distribution, can cause small temporary localized vegetation removal that reduces the available forage during construction. Long-term reduction of vegetation can occur within the immediate area of projects due to soil compaction and/or concentrated livestock use, thus reducing forage and cover. This effect is expected to be minimal in comparison to what is available for forage and cover throughout the entire project area.

Fire suppression may employ methods such as dozer or hand line construction to create a break in fuel. Fuel break construction removes all vegetation in small areas. Fuel breaks are used to stop fire progression which could protect adjacent vegetative communities from burning. Areas disturbed through suppression efforts and areas burned by fires are often rehabilitated through post-fire rehabilitation. These efforts are expected to restore perennial vegetation and minimize the infestation of undesirable vegetation, such as noxious weeds and invasive plants.

Vegetation treatments can improve and/or maintain vegetative conditions where implemented. The 2010 Burley Landscape Sage Grouse Restoration Project is a juniper thinning and fuels reduction project where trees will either be cut with chainsaws or removed through the use of a masticator. The purpose of this project is to reduce fuels and improve or maintain habitat at a landscape level for sage grouse and other sagebrush obligate BLM sensitive wildlife species. Juniper thinning can cause vegetation disturbance where a masticator is driven to grind trees into mulch. Where masticating occurs, seed is flown in the area and the mulch provides cover

for the seeded species. Other juniper thinning projects include Wildland Urban Interface (WUI) projects where encroaching juniper are cut, masticated or burned to prevent wildfires that can further damage vegetative communities. The Berger Grazing Conservation Area is currently being considered for vegetation treatment. These proposed treatments would reduce shrub cover and invasive plants using a variety of methods, which may include both chemical and mechanical methods. This project was recently scoped and the ID team is currently developing alternatives. No decision has been made. These short term disturbances cause temporary impacts to vegetation during implementation. However, these projects may be rehabilitated and/or rested from grazing to allow vegetation to recover and/or establish.

Recreation activities such as OHV use, mountain biking, hiking or horseback riding occur within the project area. These activities affect vegetation near existing and/or new roads or trails by crushing or trampling perennial vegetation in isolated areas and may introduce new or expand existing noxious weeds and invasive plant populations. The BLM would continue to monitor and control noxious weeds and invasive plants in the project area.

The SWIP (authorized) and Gateway West (proposed) projects are transmission lines with routes and/or alternatives passing through the cumulative effects area and a wind energy farm is proposed on private land near Rogerson, ID. Some vegetation would be removed for construction and operation, including for the purpose of tower placement and new roads. Areas used for construction but not needed for operation would be reseeded to match surrounding vegetation. Mining on public land includes decorative rock, geothermal, and gravel pit operations. Mining operations disturb and remove vegetation. Disturbances vary from short term testing by digging small holes to longer term (10 years or greater) activity. Operations typically minimize these disturbances by reclaiming the area and restoring it with perennial vegetation at a later date. Other existing ROW such as pipelines, roads and existing transmission lines have removed or damaged vegetation and there is occasionally removal or damage of vegetation resulting from maintenance of these existing facilities. Maintenance activities disturb a much smaller area then the original project footprint.

RIPARIAN AREAS AND WETLANDS, INCLUDING WATER QUALITY

No Action

The effects of not allowing livestock to trail along Cassia, Trapper, Dry and Little Cottonwood Creeks is expected to be similar to the alternatives below because of the limited amount of trailing occurring along these creeks and due to the presence of roads which eliminates much of the potential for affecting these stream systems. The one exception would be Trapper Creek where livestock were proposed to overnight one time per year. Not allowing this event would eliminate some of the livestock use that occurs along this creek which may allow for slightly quicker progress to occur. Since, the stream is already in PFC and continuing to improve with the presence of trailing, there is expected to be little change occurring through no action. Also, the small amount of additional fecal input and stirring up of sediment for all of the potentially affected riparian areas, primarily at the road crossings would not occur.

Proposed Action

Dry Creek:

Dry Creek is currently near or at PFC and management is continuing progress to reduce sediment and improving water quality. According to the BLM's rangeland health evaluation, trailing of livestock between private and Forest Service lands is not affecting the riparian vegetation, stream channel or water quality conditions. One livestock trailing event per year, occurring for several hours, has not resulted in measurable effects to this system, likely due to the presence of the road which is the primary path that livestock take. Most of the length of this stream is thickly vegetated making for easier traveling along the road. Due to this, vegetation removal along the riparian zone is expected to be unnoticeable. The one road crossing of the creek likely incurs some fecal input and is disturbed by livestock hooves as they trail down the road so some sediment would be stirred up but this not expected to result in any measurable effect lasting much longer than the trailing event. The stream is making progress towards PFC and the potential natural community with the presence of livestock during the normal season of use which is approximately five weeks during Spring within the Dry Creek Allotment and several more hours of livestock presence is therefore not meaningful when describing effects of livestock along this creek. Trailing has occurred along this stream while riparian progress was occurring.

Alternative 2

Dry Creek:

Effects to Dry Creek are the same as described in the Proposed Action.

Cassia Creek:

In 2002 Cassia Creek was assessed to be in FAR condition (nearly PFC with some areas at PFC) and was showing improvement. Public management of the area near the creek is resulting in reduced sediment and improved water quality. This has occurred as a result of the creation of a riparian pasture in 1990 to better manage livestock. The effect of trailing livestock down the road, once or twice per year for several hours is expected to result in some minor level of consumption of the riparian vegetation since some of the creek is not as difficult to walk along as Dry Creek and some livestock may wander away from the road. The road crossing of the creek and some wandering livestock elsewhere would likely disturb some sediment and input some fecal matter but this is not expected to result in any measurable effect lasting much longer than the trailing event which would be a few hours. The stream is at or making progress towards PFC and the potential natural community with the presence of livestock during the normal season of use, Spring through Fall, within the Middle Hill Allotment and several more hours of livestock presence is therefore not meaningful when describing effects of livestock along this creek.

Little Cottonwood:
The Little Cottonwood Riparian Pasture Fence built in 1999 following the rangeland health evaluation process should ensure that the riparian system (vegetation and streambanks) along Little Cottonwood Creek continues to progress toward proper functioning condition (PFC) thereby reducing sediment and improving water quality. Significant progress has occurred within the allotment as can be seen in the comparison photographs included in the affected environment section. This progress has occurred with the presence of trailing. These photographs depict improved streambank conditions and streamside cover which are the result of reduced livestock utilization and trampling within the riparian area. The effect of trailing livestock down the road, for several hours once per year is expected to result in some minor level of use of the riparian vegetation and input of a small amount of fecal matter, since some of the creek is not as difficult to walk along as Dry Creek and some livestock may wander away from the road. The two road crossings of the creek and some wandering livestock elsewhere would likely disturb some sediment but this is not expected to result in any measurable effect lasting more than the trailing event which would be a few hours. The stream is making progress towards PFC and the potential natural community with the presence of livestock for two weeks within the riparian pasture of the Warr-Pickett Allotment and several more hours of livestock presence is therefore not meaningful when describing effects of livestock along this creek.

Trapper Creek:
In 2007 Trapper Creek was found to be in PFC along the 0.2 mile reach where trailing occurs. One livestock trailing event per year, occurring for one night, has not resulted in measurable effects to this system. Trailing and overnighting livestock is expected to result in more use of the riparian area vegetation and input some additional fecal matter which may slightly hinder riparian area and water quality progress however the stream is already in PFC and continuing to improve with the presence of trailing so this potential, slight decrease in progress has not been measurable. Furthermore, the timing of use will be after the growing season when plants are dormant which would decrease any effect to the vegetation.

Cumulative Effects

There are no known adverse cumulative impacts to riparian areas/wetlands or water quality associated with allowing the Proposed Action and Alternative 2 levels of livestock trailing. Livestock is not measurably hindering improvement of riparian area and stream channel conditions. PFC conditions and significant progress towards PFC along Little Cottonwood, Trapper, Dry and Cassia Creeks are occurring with the presence of livestock trailing. The improvement in riparian area and stream channel function should also be resulting in a reduction of sediment and improving overall water quality.

There is likely a small increment of sediment entering these stream systems from road runoff and at the stream crossings; however, no significant sources are currently known. Recreation including OHVs occurs within these drainages although it is widely dispersed and relatively infrequent and adds little if any additional sediment or nutrients to the stream systems.

Livestock grazing on private land also occurs along Trapper, Cassia and Dry Creeks. Some increment of the minor effects to water quality described above would be added to those occurring downstream or would add to affects coming from upstream for a short time.

The increments described above when added to that from either the Proposed Action or Alternative 2 would not be of sufficient magnitude to curtail achievement of water quality standards within these drainages because these systems are already at or near PFC and all are improving in condition and resulting in improved water quality.

NOXIOUS WEEDS AND INVASIVE PLANTS

No Action

The potential use of trucking to move livestock as a result of denying crossing permit applications could result in the minimal spread or introduction of noxious or invasive weeds. The direct impacts of trailing events i.e., trailing, concentrated use areas and presence of livestock would not occur within the project area because applications for Crossing Permits would be denied.

Proposed Action

No change in the amount of noxious weeds and invasive plants due to livestock trailing is expected under the Proposed Action. Known infestations are found on roads that are not trailing routes and there are trailing routes that do not have known infestations. Therefore, there is limited evidence that trailing is a substantial addition to the spreading of noxious weeds and invasive plants. Also, trailing events occur infrequently throughout the year, are of short duration, are not the only use occurring along roads and have occurred in the past. Known infestations are being actively treated and road corridors throughout the area are inspected.

Alternative 2

In addition to the routes identified in the Proposed Action, Alternative 2 proposes other routes and corridors where trailing events have occurred. This alternative also proposes to authorize trailing on all routes and corridors with cattle or sheep during specific seasons according to site specific design features. No change in the amount of noxious weeds and invasive plants due to livestock trailing is expected under this alternative. Known infestations are predominantly confined to road corridors and are not as prevalent within the grazed native or seeded plant communities outside of these corridors. Since trailing events occur infrequently throughout the year, are of short duration, are not the only use occurring along roads and have occurred in the past, livestock trailing would not be expected to affect the spread of noxious weed and invasive plants. Also, known infestations are being actively treated and road corridors throughout the area are inspected.

Cumulative Effects

Other actions affecting the spread of noxious weeds and invasive plants within the CEAA include livestock trailing along main arterial transportation routes and other lands, livestock grazing, range improvement projects, wildfire suppression, post-fire rehabilitation, vegetation treatments, recreation (and other human use), mining, transmission lines and other ROW including energy development.

Another trailing corridor within the BFO is the Magic Stock Driveway ROW. This ROW is located in Twin Falls County and begins in the Berger Resource Conservation Area, following existing roads through the Shoshone Basin to the Idaho/Nevada boundary, with overnight holding pastures in or adjacent to other allotments within the ROW. The Magic Stock Driveway ROW will be analyzed in more detail in the Shoshone Basin Grazing Permit Renewal. Trailing events also occur along existing transportation routes throughout the BFO for short duration and intensity, which has led to acceptable range conditions. Known noxious weeds and invasive plants within the project area are being actively treated. These infestations are not known to be increasing in size or spreading as a result of livestock trailing events. The BLM and associated counties monitor and treat infestations annually.

Livestock grazing occurs throughout the project area. Grazing of both cattle and sheep occur on surrounding public and non-public lands. Grazing affects soils through the concentrated use around range improvements. When this occurs, soils become compacted and can modify the vegetation through foraging and trampling and provide an opportunity for the spread of noxious weeds and invasive plants. Generally, this adverse effect is only concentrated around areas of high use such as near troughs or gates. However, the landscape on public land as a whole is managed for suitable range conditions.

Range improvement projects such as fences and water developments, implemented to improve livestock distribution, can cause small temporary soil disturbances which may provide an opportunity for the spread of noxious weeds and invasive plants after construction. Long-term disturbances can occur within the immediate area of projects due to soil compaction and/or concentrated livestock use, thus reducing forage and cover. Sites are monitored and any noxious weeds and invasive plants found are treated as appropriate.

Fire suppression may employ methods such as dozer or hand line construction to create a break in fuel. This direct disturbance in soil may result in temporary bare ground which can promote the opportunity for the spread of noxious weeds and invasive plants. This effort can stop fire progression which could inevitably protect adjacent areas from potentially becoming infested with noxious weeds and invasive plants. Areas disturbed through suppression efforts and areas burned by fires are often rehabilitated through post-fire rehabilitation and monitored of infestations. These efforts are expected to restore soil stabilizing vegetation and reduce the risk of introduction and spread of noxious weeds and invasive plants.

Vegetation treatments can improve and/or maintain vegetative conditions and limit the ability for noxious weeds and invasive plants to proliferate due to increased competition with native and/or desirable species, where implemented. The 2010 Burley Landscape Sage Grouse Restoration Project is a juniper thinning and fuels reduction project where trees will either be cut with chainsaws or removed through the use of a masticator. The purpose of this project is to reduce fuels and improve or maintain habitat at a landscape level for sage grouse and other sagebrush obligate BLM sensitive wildlife species. Juniper thinning can cause vegetation and soil disturbance where a masticator is driven to grind trees into mulch. However, this is implemented when soils are frozen and vegetation is dormant, limiting disturbance. Where masticating occurs seed is flown in the area and the mulch provides cover for the seeded species. Other juniper thinning projects include WUI projects where encroaching juniper are cut, masticated or burned to prevent catastrophic wildfires that can further damage vegetative communities. The Berger Grazing Conservation Area is currently being considered for vegetation treatment. These proposed treatments would reduce shrub cover and invasive plants using a variety of methods, which may include both chemical and mechanical methods. This project was recently scoped and the ID team is currently developing alternatives. No decision has been made. This project would potentially reduce the overall infestations of invasive species, such as halogeten and cheatgrass.

Recreation activities such as OHV use, site seeing, mountain biking, hiking or horseback riding occur within the project area. These activities could affect soils and vegetation near existing and/or new roads or trails by crushing or trampling perennial vegetation in isolated areas and may introduce new or expand existing noxious weeds and invasive plant populations. These types of recreation activities could introduce and spread existing noxious weed and invasive plant seeds accumulated from outside the project area. The BLM would continue to monitor and control noxious weeds and invasive plants within the project area.

The SWIP (authorized) and Gateway West (proposed) are transmission lines with routes and/or alternatives passing through the cumulative effects area and a wind energy farm is proposed on private land near Rogerson, ID. Some vegetation would be removed for construction and operation, including for the purpose of tower placement and some new roads. This direct removal of vegetation and associated vehicular transportation could increase the area to susceptibility and allow for the spread of noxious weeds and invasive plants into new areas. Areas used for construction, but not needed for operation will be reseeded to match surrounding vegetation and the project area will be closely monitored and treated for noxious weeds and invasive plants. Mining on public land include decorative rock, geothermal, and gravel pit operations. Mining operations disturb and remove soils and rock, exposing bare ground and increasing the susceptibility of these areas to noxious weeds and invasive plants. Disturbances vary from short term testing by digging small holes to longer term (10 years or greater) activity. Operations typically minimize these disturbances by reclaiming the area and restoring it with perennial vegetation at a later date. Mining areas are monitored and maintained weed free by operators. Other existing ROW such as pipelines, roads and existing transmission lines have disturbed soils and there is occasionally disturbance resulting from maintenance of these existing facilities which may increase the potential for noxious weed and invasive plant spread. Maintenance activities disturb a much smaller area then the original project footprint.

THREATENED, ENDANGERED AND SENSITIVE WILDLIFE (INCLUDING FISH)

No Action

Direct and Indirect Effects – Under the no action alternative, BLM Sensitive wildlife could be affected if livestock operators decide to move their livestock either by trailing around public land or by moving livestock across public land using trucks instead of trailing across public land. Effects to BLM sensitive animals would vary depending on the time of year, the method of movement and the location. Effects to BLM sensitive animals from trucking might include disturbance as trucks drive by and possibly injury if animals attempt to cross in front of trucks. The magnitude of the effect is unknown but depends on the numbers of trucks used, the speed at which trucks could safely travel and the habitat through which the trucks will be used. Despite the uncertainty for the magnitude, the effects are expected to be minimal because some trucking does occur already and there does not appear to be any adverse effects from this activity. Also, trucking livestock at the level needed for this area is not expected to dramatically increase above levels already occurring. Trailing livestock around public land could potentially affect BLM sensitive wildlife through disturbance, trampling nests, and modification of habitat. If livestock are moved around public land, it is expected that there may be more opportunities for disturbance, because trailing around public land is expected to increase trailing routes, depending on the habitat type crossed. However, trampling is expected to be a rare occurrence because most of the trailing would likely occur within and along roads where few birds are expected to be nesting. Furthermore, there would be no effect to any BLM sensitive migratory birds if the livestock are moved outside the nesting period (March 1 – July 30). Sage-grouse could be affected outside the nesting period if the birds are disturbed by trailing around public land. Even though some trailing around public land might require operators to cover more ground, it is expected that there will be less sage-grouse habitat crossed because much of the trail routing proposed involves allotments adjacent to an agricultural interface. If trailing around public land occurs within sage grouse habitat, some trailing could occur where there are sage grouse leks. Also, trailing could occur where ferruginous hawks nest on private land. If this were to happen, there would be no time restrictions protecting these resources as stipulated in the proposed action. Habitat modification could entail small amounts of vegetation removal along paths where trailing livestock are concentrated. Generally, the animals are not expected to consume much vegetation when they are moving. More vegetation may be consumed during periods of rest such as at overnight locations. The amount of vegetation consumed in one night is not expected to reduce habitat quality over the long term and the area of use is expected to be small. The overall result of vegetation removal through trailing is expected to demonstrate little change in the vegetation composition and cover, such that there will be little effect on BLM sensitive species from trailing around public land. There are no certain effects to BLM sensitive fish from the No Action because trucking would not add any measurable effect to the creeks, but it is unclear whether trailing around public land would occur in areas where BLM sensitive fish are found. If trailing around public land is the mode of movement for livestock and it does occur in BLM sensitive fish habitat, the effect would be similar to the effects to these species on public land described under the other alternatives.

Proposed Action

Trailing within proposed trailing routes would have variable effects to BLM sensitive wildlife depending on the amount of livestock being moved through an area, the class of livestock, the number of days required, the habitat type being crossed, the condition of the habitat, the availability of roads within the corridor and the time of year crossing occurs. Even though the corridors are relatively wide, effects from trailing are not expected to span the whole corridor width. Rather, the livestock would be pushed along a much narrower path and thus the area of disturbance would be relatively small in width.

Sage-grouse can be affected by trailing through disturbance of individual or groups of birds, habitat modification and potential nest disturbance. Stipulations which prevent trailing within ½ mile of sage grouse leks during critical display periods will prevent sage grouse from being disturbed while they are mating. Key sage-grouse habitat (having greater than 10% sagebrush cover) is the habitat type which might be most affected by trailing through disturbance of individuals or nests. This is because sage grouse are most likely to be found in key habitat. The suitability of key habitat for sage grouse is variable depending on cover type and amount. Some may be suitable for year round sage grouse occupancy while other sites may only be suitable for winter. As livestock move through an area occupied by sage grouse, the birds may flush or walk out of the way of the oncoming livestock. The period during which a nest may be disturbed is expected to be relatively short (less than 30 minutes) and the birds could then reoccupy the site. If trailing through nesting habitat occurs, there is a possibility for a nest to be trampled or for a hen to flush from her nest. There is little expected potential for this effect to occur because cattle tend to avoid areas of dense sagebrush and would likely remain on or along roads where sage grouse do not nest (Fritz 2011, Owens et al. 1991). Also, trailing would only occur on a small portion of the available suitable nesting habitat. Generally these effects are not expected to be harmful to sage grouse because most of the trailing will occur along roads, within grasslands, or spatially and temporally outside sage grouse seasonal habitat use areas. Sage-grouse could also be affected by habitat modification, however little habitat modification is expected because livestock will mostly be traveling down roads and they do not eat much while trailing.

Overnight use by cattle is expected to occur near troughs where sites are already impacted by cattle. These areas are relatively small in comparison to available habitat, and so there is no expected adverse effect to sage-grouse from cattle concentration during overnight use in these areas that have already been modified. Grazing, trampling and vegetation removal would occur in overnighting areas. Overnight use areas proposed for domestic sheep occur outside sage-grouse nesting habitat so overnight use is not expected to have any effect.

Similar to sage-grouse, there will be little effect on pygmy rabbit, sage sparrow, Brewer's sparrow and loggerhead shrike. Effects to these species could occur primarily where trailing crosses key sage-grouse habitat due to the abundance of sagebrush in these sites. Trailing route 10 occurs along a road located in known pygmy rabbit habitat. This particular trail has a road from which is not expected that livestock would stray. Pygmy rabbits could be disturbed and it is possible that a burrow could be crushed, however it is not expected that any rabbits would be injured. Burrow openings that are trampled could easily be replaced by the rabbits which

typically have more than one entrance into their burrows. Sensitive birds could be disturbed and flush from their nests when livestock are trailed through shrub covered areas. Damage to nests is not expected because most of the trailing will follow roads and outside the potential nesting habitat. Also, sage sparrows and Brewer's sparrows build their nests in well covered/protected portions of shrubs to which livestock are not likely to have access (Baicich and Harrison 1997). Loggerhead shrikes nest may be more vulnerable because they tend to build their nests on outer portions of shrubs, but any nest destruction would still be considered rare if it were to occur (Baicich and Harrison 1997).

Where livestock overnight, vegetation removal and disturbance of songbird nests or pygmy rabbit burrow areas may be more likely, however these areas are expected to be small and along roads where disturbances may already be fairly prevalent. Also, there is expected to be little overnight use in sagebrush or other shrub dominated landscapes.

Ferruginous hawks could be disturbed by the proposed action if trailing occurred near their nest during the nesting period. The result of such disturbance could vary from temporary flushing and return to the nest to total abandonment. As proposed, most trailing events occur outside the nesting period for ferruginous hawks or away from known occupied nests. Also, stipulations that prevent overnighting within ½ mile of occupied nests and frequency of events within 250 meters of nests should prevent nests from abandonment.

California bighorn sheep could be affected by trailing livestock through disturbance and potential disease transmission. While no specific stipulations or protective measures are established to prevent disturbance, there is no domestic sheep trailing within bighorn sheep PMUs. Disease transmission could occur if wild bighorn sheep contact infected domestic sheep or goats. Pneumonia is the most virulent disease of concern and the result of transmission could lead to a die-off. Similar to disturbance, there is no expectation for disease transmission to occur based on the locations of the proposed trailing corridors outside bighorn sheep PMUs. However, the stipulation requiring sheep or goat operations to follow a BLM and IDFG approved separation plan will make the trailing events as safe as possible for bighorn sheep. These separation plans are already in place to protect bighorn sheep from grazing and the results of monitoring show that there have not been any issues.

Trailing along Dry Creek is expected to occur in Yellowstone Cutthroat trout habitat. This species is sensitive to water quality, however, there is little expected effect to the creek from this action. There is a road which the cattle would likely use since this is the path of least resistance. The creek is rated at or near properly functioning condition and is littered with downed logs and lined with abundant willows and other riparian vegetation. Therefore, cattle are expected to mostly move along the road. Cattle may find access to the creek to drink but the overall habitat is expected to remain untouched. Yellowstone cutthroat trout are not expected to be harmed. Overall, adding restrictions to trailing to protect BLM sensitive species is expected to improve conditions.

Alternative 2

Effects to BLM sensitive wildlife from Alternative 2 would be similar to the proposed action. Narrowing trailing route 1 and reducing the number of livestock or the duration should reduce any effects that may occur. Route 11 would allow approximately double the number of livestock. It is unclear whether more numbers will actually be used because the capacity of grazing in surrounding lands is not expected to change but if more livestock are allowed to trail there may be more disturbance or habitat modification caused to BLM sensitive species and their habitats. However, this route would stay the same and therefore the impact area would stay the same such that there would be no new area being affect by increasing numbers for this route. The additional routes included in this alternative are areas where trailing has been ongoing, but where no applications have been received. Effects from adding these additional routes are expected to be similar to those described for the proposed action.

Trailing and overnight use on Trapper Creek could result in some sediment pushed in the water and vegetation removed along the creek. This effect will be limited by having a set number of livestock which can be trailed. After the livestock are moved from the creek, water quality will quickly return to its original condition. Vegetation will recover, little riparian vegetation browsing is expected because of the duration and the preference for grasses. This activity is ongoing and riparian health assessments have shown that the creek is improving as well as having achieved a properly functioning condition rating. Northern Leatherside chubs occur here but they are known to have a high tolerance for these activities and thus are not expected to be affected.

Trailing along Little Cottonwood would occur in red-naped sapsucker habitat. Livestock may trample or browse some young aspen. Recruitment of aspen is important for sapsuckers to provide continuous habitat in the future. However, the trailing is primarily down a road which is likely to reduce the tendency to browse on aspen. No effect is expected on occupied nest cavity trees and the birds would not be disturbed because trailing would occur outside the nesting season. Overall, conditions are improving for the riparian vegetation and young aspen are continuing to regenerate and establish.

Little adverse effect on BLM sensitive animals is expected and stipulations protecting these resources are expected to improve conditions. Similar to the Proposed Action, Alternative 2 is expected to have minimal effect to BLM sensitive species and their habitats.

Cumulative Effects

Other actions affecting BLM sensitive wildlife within the CEAA include livestock trailing along main arterial transportation routes and other lands, range improvement projects, livestock grazing, wildfire suppression, post-fire rehabilitation, vegetation treatments, recreation, mining including geothermal, transmission lines and other ROW including energy development.

Another trailing corridor within the BFO is the Magic Stock Driveway ROW. This ROW is located in Twin Falls County and begins in the Berger Resource Conservation Area, following existing roads through the Shoshone Basin to the Idaho/Nevada boundary, with overnight holding pastures in or adjacent to other allotments within the ROW. The Magic Stock Driveway ROW will be analyzed in more detail in the Shoshone Basin Grazing Permit Renewal. Trailing events also occur along existing transportation routes throughout the BFO for short duration and intensity, which has led to acceptable range conditions and habitat for

BLM sensitive species. This effect is considered past, present and future. Livestock following these trails are known to stay on the roads and there is little effect on the vegetation along these routes. These routes follow common travel corridors which sensitive wildlife may already be avoiding due to other activities. The amount of habitat affected is similar to the amount being proposed to trail or which would be crossed through moving cattle around public lands. Impacts would be concentrated along a narrow path that occurs in a vast open landscape.

Range improvement projects such as fences and water developments, implemented to improve livestock distribution, can affect BLM sensitive wildlife in a variety of ways. Fences could affect sage grouse by potentially creating a collision hazard which could injure or kill these species when they attempt to cross or become entangled. Fence posts could create new perch sites from which birds of prey could rest and use to find sage grouse or other BLM sensitive birds (such as sage grouse, Brewer's sparrow, sage sparrow and loggerhead shrike). However, these species occur mostly in sagebrush habitat which provides abundant cover and often grows at or above the height of fence posts, so little aid in predation is expected. Water developments may provide water to BLM sensitive species in areas where water is scarce. Areas around water developments tend to concentrate livestock so these areas are expected to experience vegetation removal through grazing and trampling at the highest rate within grazing allotments. Thus these areas, though small, are expected to become unavailable for nesting. However, the impact of fences and water development can extend well beyond the area of disturbance because these range improvements help even out the effects of grazing and protect highly sensitive habitat types such as riparian. Therefore, the overall effect of range improvements may be beneficial where grazing occurs.

Fire suppression may employ methods such as dozer or hand line construction to create a break in fuel. This direct disturbance in soil may result in temporary bare ground which can reduce vegetation useful for shrub nesting birds. This effort can stop fire progression which could inevitably protect larger areas of suitable habitat. Areas disturbed through suppression efforts and areas burned by fires are often rehabilitated through post-fire rehabilitation. These efforts are expected to restore vegetation and inevitably improve the likelihood that these areas once again become suitable for BLM sensitive species.

Vegetation treatments in the past were most often designed to improve forage for livestock, primarily cattle. Most of these grassland restoration practices employed a variety of disturbance methods including fire, herbicide and mechanical (plowing) methods followed by seeding the disturbed landscape with mostly non-native grass mixes that were dominated by crested wheatgrass. In some cases, similar treatments were employed to restore degraded landscapes or areas dominated by undesirable non-native vegetation such as areas dominated by cheatgrass or halogeton. Documentation of all of these past treatments is not complete however, most of the areas have been recorded. The result of these treatments is well

documented. There have been declines in many shrub nesting species where habitat has been lost. Over time, this practice diminished as range values changed. Some areas may have experienced repetitive disturbance because sites dominated by grasslands eventually become repopulated with shrubs which historically were undesirable on rangelands. This practice also largely stopped and in some areas, native grasses are becoming more prominent in the landscape. However, there are some areas such as the Berger Grazing Conservation Area that are currently being considered for vegetation treatment. Proposed treatments to reduce shrub cover and invasive plants using a variety of methods potentially include both chemical and mechanical methods. This project was recently scoped and the ID team is currently developing alternatives. No decision has been made. This particular area provides little utility for sage grouse so if treatments occur effects are expected to be minimal. Also, the amount of vegetation treatment proposed will be limited when compared to treatments in the past. Within this landscape, shrub nesting birds such as Brewer's sparrow and loggerhead shrike have become common. These species are expected to continue to persist if any treatments do occur.

Other vegetation treatments include restoration of cheatgrass dominated landscapes. The effects of these treatments are expected to improve habitats for all of the BLM sensitive birds. Within the south hills, goose creek and Albion valley (Jim Sage and Cotterel ranges), the BLM is conducting juniper management projects to reduce the amount of juniper encroachment for the wildland urban interface as well as for sage grouse. Juniper encroached areas are unsuitable for sage grouse and are avoided by these birds. The juniper provides high perch sites for raptors and may cause an increase in predation. Juniper invades the landscape quickly and would eventually crowd out shrubs and grasses which sage grouse require in their habitat. Similarly, shrub nesting birds would experience habitat loss if not for these projects. The 2010 Burley Landscape Sage Grouse Restoration Project is a juniper thinning and fuels reduction project where trees will either be cut with chainsaws or removed through the use of a masticator. The purpose of this project is to maintain habitat for sage grouse and other sagebrush obligate BLM sensitive wildlife species as well the California Bighorn Sheep that occur in the Jim Sage Mountains. The effect of this project is expected to eventually restore almost 40,000 acres of sagebrush steppe habitat.

Recreation activities such as OHV use, mountain biking, hiking or horseback riding occur within the project area. These activities could affect wildlife in similar ways as trailing and possibly at the same intensity. Animals could be disturbed and nests could be trampled from these ongoing activities just as easily as through trailing.

The SWIP (authorized) and Gateway West (proposed) are transmission lines with routes and/or alternatives passing through the cumulative effects area. These projects could disturb wildlife through construction activities and a small amount of habitat is expected to be lost with the construction and use of roads and the installment of towers. The EIS for the SWIP transmission line indicated that adverse effects to sage-grouse were unavoidable.

Wind Energy projects are in various stages within the project area but most are in the pre-development stage. There are some currently operating wind energy projects west of Burley within farmlands, and there are several proposals for projects in other areas on private and public land. Starting from the east, there are projects proposed south of Lake Walcott on

private land. Moving west, there is the Cotterel Wind Energy project which was approved in 2005. The project proponent has applied for a relinquishment of their ROW so this project would not be built. There is another project proposed on private land near Rogerson, ID. The status on development of this project is unknown. A project in the Jarbidge Field Office called China Mountain has been suspended. So far, the projects that have been constructed pose risk only to Ferruginous Hawks of the BLM sensitive species affected by this trailing project. If any of the other projects do occur, BLM sensitive species could be affected by disturbance during construction activities, collision hazards with wind turbines (especially ferruginous hawks) and habitat modification. Vegetation would need to be removed for construction and operation. This direct removal of vegetation and associated vehicular transportation could reduce the habitat available for BLM sensitive species and could cause adverse impacts on sage grouse populations. Because sage grouse could be affected adversely by wind development on China Mountain, new NEPA would be conducted prior to authorizing trailing events where they occur in the Shoshone Basin.

Mining on public land includes decorative rock, geothermal, and gravel pit operations. Mining operations disturb and remove vegetation, soils and rock, exposing bare ground and decrease the amount of vegetation available for sage grouse. Most of the decorative rock mining occurs in the Oakley Basin area near Oakley, ID on private land. There are a few small operations occurring on nearby public lands. Sage grouse are known to use this area and have not demonstrated any decline. Increase in mining activity in this area is expected to be minimal. Gravel pit operations occur throughout the project area. These projects remove vegetation and soil generally in small areas 10-50 acres and expansion is fairly slow. Operations typically minimize these disturbances by reclaiming the area and restoring it with perennial vegetation at a later date. Mining areas are monitored and maintained weed free by operators.

Other existing ROWs such as pipelines, roads and existing transmission lines have disturbed soils and there is occasionally disturbance of vegetation resulting from maintenance of these existing facilities which may temporarily decrease available habitat for BLM sensitive species.

Livestock grazing occurs throughout the project area. Grazing of both cattle and sheep occur on surrounding public and non-public lands. Grazing affects BLM sensitive species through the disturbance of individuals or groups of animals. When this occurs, the animals may tolerate some disturbance or may move into new areas. There is some risk from livestock trampling on ground nesting species or disturbing nests which occur in shrubs but the amount of disturbance or trampling is expected to be minor. Grazing can also modify the vegetation through foraging and trampling and can affect the suitability of the habitat for sage-grouse and other BLM sensitive species. Generally, this adverse effect is only concentrated around areas of high use such as near troughs or gates. However, the landscape on public land as a whole is managed for suitable habitat where it is available for sage-grouse and other BLM sensitive species. A review of allotments affected by trailing revealed that the allotments where trailing is occurring are all either meeting standards for BLM sensitive wildlife and fish, moving in the direction of meeting standards or changes have occurred whereby improved conditions are expected.

Where private land is managed alongside public land within allotments, the same can be said about these lands. The management of private land or state land outside BLM allotments is unknown but the amount of public land appears to be enough to support populations of BLM sensitive species across most of the landscape.

As stated in the affected environment section, there appears to be sufficient habitat for BLM sensitive species within the project area and surrounding lands within the sensitive animal CEAA. For instance, there are approximately 695,553 acres of key sage grouse habitat within the CEAU in Idaho. With future projects occurring such as the Burley Landscape Project improving nearly 40,000 acres of public land for BLM sensitive species as well as small to moderate increases in adverse habitat loss from other projects or fire, the small amount of harm expected from any of the alternatives to BLM sensitive species is not expected to cause any reduction in populations or habitat of any BLM sensitive wildlife species or fish.

MIGRATORY BIRDS

No Action

Under the no action alternative, migratory birds could be affected if livestock operators decide to move their livestock by trailing around public land or by moving livestock using trucks instead of trailing across public land. Effects to migratory birds would vary depending on the time of year, the method of movement and the location. Effects to migratory birds from trucking might include disturbance as trucks drive by and possibly injury if animals attempt to cross in front of trucks. The magnitude of the effect is unknown but depends on the numbers of trucks used, the speed at which trucks could safely travel and the habitat through which the trucks will be used. Despite the uncertainty for the magnitude, the effects are expected to be minimal because some trucking does occur already and there does not appear to be any adverse effects. Also, trucking livestock at the level needed for this area is not expected to dramatically increase above levels already occurring. Trailing livestock around public land could potentially affect migratory birds through disturbance, trampling nests, and modification of habitat. If livestock are moved around public land, it is expected that there may be more opportunities for disturbance or nest trampling, depending on the habitat type crossed. However, trampling is expected to be a rare occurrence. Furthermore, there would be no effect to any migratory birds if the livestock are moved outside the nesting period (March 1 – July 30). Because burrowing owls nest most often near the wildland-agricultural interface, it is expected that there would be some disturbance to burrowing owls. Disturbance of burrowing owls is not expected to be harmful because their nests are underground. They do not depend as much on vegetation for cover and are less vulnerable to trampling. Other species such as grasshopper sparrow, long-billed curlew and northern harrier are ground nesting species and are considered vulnerable to disturbance and nest trampling. It is possible for nests to be trampled, however the project area and amount of trailing is not expected to cause trampling because trailing will mostly occur on roads where they are available and otherwise would only occur on a small portion of the available habitat for these species. Because Swainson's hawks primarily nest in trees, it is expected that they would only suffer a short duration disturbance that is not expected to cause any long term harm or nest abandonment.

Proposed Action

The proposed action could affect migratory birds of conservation concern through disturbance, depending on the habitat type crossed. However, trampling is expected to be a rare occurrence. Furthermore, there would be no effect to any migratory birds if the livestock are moved outside the nesting period (March 1 – July 30). Disturbance of burrowing owls is not expected to be harmful because their nests are underground and so they do not depend as much on vegetation for cover and are less vulnerable to trampling. Other species such as grasshopper sparrow, long-billed curlew and northern harrier are ground nesting species and are vulnerable to disturbance and nest trampling when trailing occurs through grasslands. However, the project area (trailing routes) and amount of trailing is not expected to cause trampling because trailing will mostly occur on roads (which includes most of the trailing that will occur) and otherwise would only occur on a small portion of the available habitat for these species. Because Swainson's hawks primarily nest in trees they would only suffer a short duration disturbance that is not expected to cause any long term harm or nest abandonment.

Alternative 2

Effects to migratory birds from Alternative 2 would be similar to the proposed action, reducing the size of the area available for trailing and the number of livestock allowed for Route 1 (changed to Route 1A) is expected to reduce disturbance effects. There may be more trailing under Alternative 2 for Routes 13, 15, and 16 and thus more disturbance or potential habitat modification. However, the resulting effects of this possible increase in trailing would be minimal as the routes and paths that livestock would follow would be the same. Therefore, any additional trailing would have minimal effect to migratory birds and their habitats.

Cumulative Effects

Other actions potentially affecting migratory birds within the CEAA include livestock trailing along main arterial transportation routes and other lands, range improvement projects, grazing, wildfire suppression, post-fire rehabilitation, vegetation treatments, recreation, mining (including geothermal), transmission lines and other ROW including energy development.

Another trailing corridor within the BFO is the Magic Stock Driveway ROW. This ROW is located in Twin Falls County and begins in the Berger Resource Conservation Area, following existing roads through the Shoshone Basin to the Idaho/Nevada boundary, with overnight holding pastures in or adjacent to other allotments within the ROW. The Magic Stock Driveway ROW will be analyzed in more detail in the Shoshone Basin Grazing Permit Renewal. Trailing events also occur along existing transportation routes throughout the BFO for short duration and intensity, which has led to acceptable range conditions and habitat for migratory bird species of conservation concern. This effect is considered past, present and

future. Livestock following these trails are known to stay on the roads and there is little effect on the vegetation along these routes. These routes follow common travel corridors which migratory birds may already be avoiding for other activities. The amount of habitat affected is similar to the amount being proposed to trail or which would be crossed through moving cattle around public lands. Impacts would be concentrated along a narrow path that occurs in a vast open landscape.

Range improvement projects such as fences and water developments can affect migratory birds in a variety of ways. Fences could affect short eared owls or other migratory birds by creating a collision hazard which could injure or kill these species when they attempt to fly through and become entangled. Water Developments may provide water to migratory birds in areas where water is scarce. Areas around water developments tend to concentrate livestock so these areas are expected to experience vegetation removal through grazing and trampling at the highest rate within grazing allotments. Thus these areas, though small, are expected to be unusable for most grass nesting birds. However, the impact of fences and water development can extend beyond well beyond the area of disturbance because these range improvements help even out the effects of grazing and protect sensitive habitat types such as riparian areas. Therefore, the overall effect of range improvements may be beneficial where grazing occurs.

Fire suppression may employ methods such as dozer or hand line construction to create a break in fuel. This direct disturbance in soil may result in temporary bare ground which can reduce vegetation useful for nesting birds. This effort can stop or slow fire progression which could inevitably protect larger areas of suitable habitat. Areas disturbed through suppression efforts and areas burned by fires are often rehabilitated through post-fire rehabilitation. These efforts are expected to restore vegetation and improve the likelihood that these areas once again become suitable for migratory birds.

Vegetation treatments in the past were most often designed to improve forage for livestock, primarily cattle. Most of these grassland restoration practices employed a variety of disturbance methods including fire, herbicide and mechanical (plowing) methods followed by seeding the disturbed landscape with mostly non-native grass mixes that were dominated by crested wheatgrass. In some cases, similar treatments were employed in attempt to restore degraded landscapes or areas dominated by undesirable non-native vegetation such cheatgrass or halogeton. Documentation of all past treatments is not complete, however, most of the areas have been recorded. The result of these treatments is well documented. There have been increases in habitat for many grassland nesting species such as short-eared owls, northern harrier and long-billed curlew. Over time, this practice diminished as range values changed. Some areas may have experienced repetitive disturbance because sites dominated by grasslands eventually become repopulated with shrubs which historically were undesirable on rangelands. This practice also largely stopped and in some areas, native grasses are becoming more prominent in the landscape. Because of succession and the cease of such activities, there has been a loss of grassland habitat so the amount currently available may more closely resemble that which occurred prior to these treatments. However, there are some areas such as the Berger Grazing Conservation Area that are currently being considered for vegetation treatment.

Proposed treatments to reduce shrub cover and invasive plants using a variety of methods potentially include both chemical and mechanical methods. This project was recently scoped and the ID team is currently developing alternatives. No decision has been made. This particular area provides habitat for grassland species. Reducing shrub cover could potentially increase available habitat for grassland nesting migratory birds.

Other vegetation treatments include restoration of degraded cheatgrass dominated landscapes. The effects of these treatments are expected to improve habitats for migratory birds. Recreation activities such as OHV use, mountain biking, hiking or horseback riding occur within the project area. These activities could affect wildlife in similar ways as trailing and possibly at the same intensity. Animals could be disturbed and nests could be trampled from these ongoing activities.

The SWIP (authorized) and Gateway West (proposed) projects are transmission lines with routes and/or alternatives passing through the cumulative effects area. These projects could disturb wildlife through construction activities and a small amount of habitat is expected to be lost with the construction and use of roads and the installment of towers. Powerlines could be a collision hazard risk to migratory birds.

Wind energy projects are in various stages within the project area but most are in the pre-development stage. There are some currently operating wind energy projects west of Burley within farmlands, and there are several proposals for projects in other areas on private and public land. There are projects proposed south of Lake Walcott on private land. The Cotterel Wind Energy project was approved in 2005. The project proponent has applied for a relinquishment of its right of way. There is another project proposed on private land near Rogerson, ID. The status on development of this project is unknown. The China Mountain wind energy project has been deferred until the completion of Resource Management Plan ammendments to protect sage-grouse. So far, the only BLM sensitive species expected to be affected by existing wind energy projects within the CEAA is the ferruginous hawk. If any of the other projects do occur, BLM sensitive species could be affected by disturbance during construction activities, collision hazards with wind turbines (especially long-billed curlew, Swainson's hawks, northern harrier and short-eared owl) and habitat modification. Vegetation would be removed for construction and operation, including for the purpose of turbine placement and some new roads. This direct removal of vegetation and associated vehicular transportation could reduce the habitat available for migratory birds

Mining on public land includes decorative rock, geothermal, and gravel pit operations. Mining operations disturb and remove vegetation, soils and rock, exposing bare ground and decrease the amount of vegetation available for sage grouse. Most of the decorative rock mining occurs in the Oakley Basin area near Oakley, ID on private land. There are a few small operations occurring on nearby public lands. Increase in mining activity in this area is expected to be minimal. Gravel pit operations occur throughout the project area. These projects remove vegetation and soil generally in small areas 10-50 acres and expansion is fairly slow. Operations typically minimize these disturbances by reclaiming the area and restoring it with perennial vegetation at a later date. Mining areas are monitored and maintained weed free by operators.

Other existing ROWs such as pipelines, roads and existing transmission lines have disturbed soils and there is occasionally disturbance of vegetation resulting from maintenance of these existing facilities which may temporarily decrease available habitat for migratory birds.

Grazing occurs throughout the project area. Grazing of both cattle and sheep occur on surrounding public and non-public lands. Grazing affects migratory birds through the disturbance of individuals or groups of animals. When this occurs, the animals may tolerate some disturbance or may move into new areas. There is some risk from livestock trampling on ground nesting species but the amount of disturbance or trampling is not expected to be great. Grazing can also modify the vegetation through foraging and trampling and can affect the suitability of the habitat for migratory birds. Generally, this adverse effect is only concentrated around areas of high use such as near troughs or gates. However, the landscape on public land as a whole is managed for suitable habitat where it is available for migratory birds. Where private land is managed alongside public land within allotments, the same can be said about these lands. The management of private land or state land outside BLM allotments is unknown but the amount of public land appears to be enough to support populations of migratory birds across most of the landscape.

As stated in the affected environment, there appears to be sufficient habitat for migratory birds in the project area and surrounding lands within the sensitive animal CEAA. For instance, there are 448,036 acres of R1 habitat (perennial grasslands) within the Idaho portion of the CEAA. Therefore, this project when added to all the effects of all the past, present and future projects, is expected to continue to allow populations of these species to flourish.

LIVESTOCK GRAZING

No Action

The No Action alternative is expected to result in little change to livestock grazing within the project area. The direct impacts of the trailing events i.e., trailing, concentrated use areas and presence of livestock would not occur within the project area because applications for Crossing Permits would be denied. Some applicants may transport livestock by truck and trailer. This may require traveling longer distances on local roads with truckloads of livestock and is likely to result in additional cost to the operator. Also, trailing would continue on non-public land.

Proposed Action

Effects to livestock grazing would mainly occur during overnight stops when livestock are concentrated in areas for several hours. When livestock are overnighted they consume more forage than they do while actively trailing. This forage consumption and trampling of vegetation, due to hoof action, is utilizing AUMs. However, most of the overnight stops are along main transportation routes or around troughs or other range improvements where forage is already impacted due to maintenance and construction work or permitted grazing. Also, as stated in the Purpose and Need, these trailing events allow applicants to move their livestock across BLM administered lands to facilitate proper grazing management on other grazing allotments. Route 1 as proposed when trailing across the Lilly Grade Allotment would be

approximately 50% of the total active AUMs. This may affect the ability of the permittee to fully utilize the total AUMs on this allotment, because it is unlikely that this much additional forage will be available.

Most of the trailing routes applicants have proposed occur along main arterial transportation routes. Since trailing has occurred in the past along most of the typical routes, direct and indirect effects to current livestock grazing from trailing events, concentrated use areas and presence of livestock would be similar to the No Action alternative, i.e., minimal change.

Table 3 shows the total amount of AUMs that could be billed from trailing within the allotments of the project area. The AUMs billed from trailing are 2% of the total active AUMs of the allotments within the project area and .006% of the total active AUMs for the entire BFO. The AUMs billed during a trailing event are different from the active AUMs billed from permitted grazing except when livestock overnight, as described above. As stated in Chapter 1, trailing events range in distances from less than one mile to approximately 10 miles, and in duration from less than one hour up to six days. The applicant is billed in accordance with 43 CFR 4130.8-1(c), …" In calculating the billing the grazing fee is prorated on a daily basis and charges are rounded to reflect the nearest whole number of animal unit months," which creates a bill for a minimum of one day even if the actual trailing event lasts less than a day (e.g., trailing for only two hours is still calculated as one day).

Although six of the 16 trailing events (1, 2, 3, 8, 11 and 16) extend for more than one day, the entire trailing event does not occur on any one allotment more than three days total or two nights. Livestock are trailed to their overnight area for the evening and then continue on the route the following morning, counting two days billed. On allotments where the Determination has not been completed, there have been no observations or documentation that effects from trailing, concentrated use areas or presences of livestock have caused any of the Standards for Rangeland Health from not being met within the project area.

Alternative 2

In addition to the routes identified in the Proposed Action, Alternative 2 proposes other routes and corridors where trailing events have occurred. This alternative also proposes to authorize trailing on all routes and corridors with cattle or sheep during specific seasons according to site specific design features. Limits to the number of livestock that would be authorized to trail within a specific route and corridor are based on how specific each trailing route and corridor is to each applicant and how potential future applications for trailing may be able to utilize these proposed routes and corridors.

Effects to livestock grazing would be similar to the Proposed Action and mainly occur during overnight stops when livestock are concentrated. When livestock are overnighted they consume and trample more forage than they do while actively trailing. This forage consumption and trampling of vegetation, due to hoof action, is utilizing AUMs. However, most of the overnight stops are along main transportation routes or around troughs or other range improvements where forage, or AUMs, is already impacted due to maintenance and/or construction work or permitted grazing. Also, as stated in the Purpose and Need, these trailing events allow applicants to move their livestock across BLM administered lands to facilitate proper grazing management on other grazing allotments.

Cumulative Effects

Other actions affecting livestock grazing in the CEAA include livestock trailing along main arterial transportation routes and other lands, range improvement projects, wildfire suppression, post-fire rehabilitation, vegetation treatments, recreation, and mining, transmission lines and other ROW including energy development.

Another trailing corridor within the BFO is the Magic Stock Driveway ROW. This ROW is located in Twin Falls County and begins in the Berger Resource Conservation Area, following existing roads through the Shoshone Basin to the Idaho/Nevada boundary, with overnight holding pastures in or adjacent to other allotments within the ROW. Operators trail livestock along this ROW to and from their permitted grazing allotments to facilitate proper grazing management. The Magic Stock Driveway ROW will be analyzed in more detail in the Shoshone Basin Grazing Permit Renewal. Trailing events also occur along existing transportation routes throughout the BFO for short duration and intensity, which has led to acceptable range conditions.

Range improvement projects such as fences and water developments can cause small temporary localized vegetation removal that reduces the available forage during construction. Long-term reduction of vegetation can occur within the immediate area of projects due to soil compaction and/or more concentrated use, thus reducing livestock forage. This effect is expected to be minimal in comparison to what is available for forage and cover throughout the entire project area.

Fire suppression may employ methods such as dozer or hand line construction to create a break in fuel. This direct disturbance in vegetation may result in the destruction of vegetation in small areas. This effort can stop fire progression which could inevitably protect vegetation from fires. Areas disturbed through suppression efforts and areas burned by fires are often rehabilitated through post-fire rehabilitation. These efforts are expected to restore perennial vegetation and protect the area from the infestation of undesirable vegetation, such as noxious and invasive plants. Livestock may be excluded from rehabilitated areas until specific objectives are reached. This may change the management of specific allotment(s) or reduce livestock numbers and/or season of use until objectives are met.

Vegetation treatments can improve and/or maintain vegetative conditions and livestock distribution by making more forage available. The 2010 Burley Landscape Sage Grouse Restoration Project is a juniper thinning and fuel reduction project where trees will either be cut with chainsaws or removed through the use of a masticator. The purpose of this project is to reduce fuels and improve or maintain habitat at a landscape level for sage grouse and other sagebrush obligate BLM sensitive wildlife species. Juniper thinning causes vegetation disturbance where a masticator is driven to grind trees into mulch. Where masticating occurs, seed is flown in the area and the mulch provides cover for the seeded species. Other juniper thinning projects include WUI projects where encroaching juniper are cut, masticated or burned to prevent catastrophic wildfires that can damage vegetative communities. Projects that need to be seeded will have the same effects to livestock grazing as fire suppression and rehabilitation. The Berger Grazing Conservation Area is currently being considered for vegetation treatment. These proposed treatments would reduce shrub cover and invasive plants using a variety of methods, which may include both chemical and mechanical methods. This project was recently scoped and the ID team is currently developing alternatives. No decision has been made. After implementation areas treated may need rest from grazing. This would temporarily interrupt ongoing grazing management and treated areas recover.

Recreation activities such as OHV use, mountain biking, hiking or horseback riding occur within the project area. These activities could affect livestock forage near existing and/or new roads or trails by crushing or trampling perennial vegetation in isolated areas and may introduce new or expand existing noxious and invasive plant populations. The BLM would continue to monitor and control noxious and invasive plants in the project area.

The SWIP (authorized) and Gateway West (proposed) are transmission lines with routes and/or alternatives passing through the cumulative effects area and a wind energy farm is proposed on private land near Rogerson, ID. Some vegetation would be removed for construction and operation. Areas used for construction but not needed for operation will be reseeded to match surrounding vegetation. Mining on public land include decorative rock, geothermal, and gravel pit operations. Mining operations disturb and remove vegetation. Disturbances vary from short term testing by digging small holes to longer term (10 years or greater) activity. Operations typically minimize these disturbances by reclaiming the area and restoring it with perennial vegetation at a later date. Other existing ROW such as pipelines, roads and existing transmission lines have disturbed vegetation and there is occasionally disturbance resulting from maintenance of these existing facilities. These ROW may reduce the available forage of livestock. Vegetation is removed during construction. In some area where vegetation is removed, permanent facilities and roads will continue to be void of vegetation and cause slight reductions in the overall amount of forage. Areas where vegetation is removed, but that are not part of the permanent footprint of the ROW facility are restored with perennial vegetation and will again provide forage.

CHAPTER 5, CONSULTATION AND COORDINATION

TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

Burley Field Office Permittees
Barry Duelke
Prairie Falcon Audubon, Julie Randall
Alliance for the Wild Rockies Ecosystem Defense
Shoshone-Bannock, Chad Coulter
Shoshone-Bannock, Land Use Policy Commission Chairman
Committee for Idaho's High Desert, Steve Jacubowicz
Idaho Department of Agriculture
Idaho Department of Environment Quality
Idaho Department of Fish & Game
Idaho Department of Lands
Idaho Department of Parks and Recreation
Jake Vawser
Katie Fite
Western Watersheds Project, Ken Cole
Western Watersheds Project, Jon Marvel
Jim Prunty
John Haxby
Kathy Cooper
Federal Land Advisory Group

LIST OF PREPARERS

Jason Theodozio, Rangeland Management Specialist
Jeremy Bisson, Wildlife Biologist
Scott Sayer, Natural Resource Specialist
Suzanne Henrickson, Archaeologist
Jim Tharp, Assistant Field Manager

CHAPTER 6, REFERENCES

Baicich, P.J. and C.J.O. Harrison. 1997. A Guide to the Nests, Eggs, and Nestlings of North American Birds. Academic Press. San Diego, CA. 347 pp.

Behnke, R. J. 1992. Native Trout of western North America. American Fisheries Society Monograph 6.

Connelly, J. W., S. T. Knick, M. A. Schroeder, and S. J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats. Western Association of Fish andWildlife Agencies. Unpublished Report. Cheyenne, Wyoming.

Connelly, J. W., M. A. Schroeder, A. R. Sands and C. E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.

Dechant, J.A., M.L. Sondreal, D.H. Johnson, L.D. Igl, C.M. Goldade, M.P. Nenneman, A.L. Zimmerman, and B.R. Euliss. 2002. Effects of management practices on grassland birds: Loggerhead Shrike. Northern Prairie Wildlife Research Center, Jamestown, ND. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.

Drut, M. S., W. H. Pyle, and J. A. Crawford. 1994. Diets and food selection of sage grouse chicks in Oregon. Journal of Range Management 47: 90-93.

Holechek, J.L., Pieper, R.D. and Herbel, C.H. 2004. Range Management Principles and Practices. Fifth edition. Pearson Education, Inc., Upper Saddle River, New Jersey.

Idaho Department of Environmental Quality. 2008. 2008 Air Quality Monitoring Data Summary. Available from http://www.deq.idaho.gov.

Idaho Department of Fish and Game. 2010. Bighorn sheep management plan 2010. Idaho Department of Fish and Game, Boise, USA.

Idaho Sage-grouse Advisory Committee. 2006. Conservation Plan for the Greater Sage-grouse in Idaho.

Macwhirter, R. Bruce and Keith L. Bildstein. 1996. Northern Harrier (Circus cyaneus), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/210doi:10.2173/bna.210

Olendorff, R.R. 1993. Status, biology, and management of ferruginous hawks; a review. Raptor Res. and Tech. Asst. Cen., Spec. Rep. U.S. Department of Interior, Bureau of land Management. Boise, ID. 84pp.

Owens, M.K., K.L. Launchbaugh and J.W. Holloway. 1991. Pasture characteristics affecting spatial distribution of utilization by cattle in mixed brush communities. Journal of Range Management 44:118-123.

Knick, S.T., and J.T. Rotenberry. 1995. Landscape characteristics of fragmented shrubsteppe habitats and breeding passerine birds. Conservation Biology 9:1059-1071.

Petersen, K.L., and L.B. Best. 1985. Nest-site selection by Sage Sparrows. Condor 87:217-221.

Saab, V.A., C.E. Bock, T.D. Rich, D.S. Dobkin. 1995. Livestock grazing effects in western North America *in* Martin, T.E., and D.M. Finch, eds. Ecology and management of Neotropical migratory birds: a synthesis and review of critical issues. Oxford University Press, New York,NY. pp. 311-353.

Schmutz, J. K. 1984. Ferruginous and Swainson's hawk abundance and distribution in relation to land use in southeastern Alberta. J. Wildl. Manage. 48:1180-1187.

Shepherd, III, J. F. 2006. Landscape-scale habitat use by Greater Sage-Grouse (*Centrocercus urophasianus*) in southern Idaho. Ph.D. dissertation, University of Idaho, Moscow, ID.

Thurow, T.L. C.M. White, R.P. Howard and J.F. Sullivan. 1980. Raptor ecology of Raft River Valley, Idaho. U.S. Department of Energy, EGG-2054, Idaho Falls, ID.

Vickery, P.D. 1996. Grasshopper Sparrow (Ammodramus savannarum), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the http://bna.birds.cornell.edu/bna/species/239

Walters, Eric L., Edward H. Miller and Peter E. Lowther. 2002. Red-naped Sapsucker (Sphyrapicus nuchalis), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/663bdoi:10.2173/bna.663

Wallestad, R. O., J. G. Peterson, and R.L. Eng. 1975. Foods of adult sage grouse in central Montana. Journal of Wildlife Management 39:628-630.

White, C.M. and T.L. Thurow. 1985. Reproduction of Ferruginous hawks exposed to controlled disturbance. The Condor 87:14-22.

Wiggins, D.A., D.W. Holt, and S.M. Leasure. 2006. Short-eared Owl (Asio flammeus), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/062

Woods, C.P., and T.J. Cade. 1996. Nesting habitat of the loggerhead shrike in sagebrush. The Condor 98:75-81.