

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

**Environmental Assessment for to Renew a Special
Recreation Permit Management in the Group
Reenactment Zone of the LFO National
Historic Trails Destination Special Recreation
Management Area**

PREPARING OFFICE

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Special Recreation Management
Area**

**Prepared by
U.S. Department of the Interior
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Glossary

~~Council on Environmental Quality (CEQ):~~

~~a~~

~~Federal Land Policy and Management Act (FLPMA):~~

~~a~~

General Public Use:

Use that is not permitted by BLM under a commercial, competitive event, organized event or organized group Special Recreation Permit (SRP). Groups less than 25 people and 3 vehicles are considered general public use. Also known as casual use or non-permitted use.

Group Reenactment Zone :

Also known as the handcart trek area, Rocky Ridge area, or ~~NHTs~~ the area between Sixth Crossing and Rock Creek Hollow. This is one of two zones of the National Historic Trails Destination Special Recreation Management Area . The area is managed to facilitate opportunities for national visitors to conduct reenactments, while protecting and learning about the history of the National Historic Trail in the area.

~~Lander Field Office (LFO):~~

~~a~~

~~National Environmental Policy Act (NEPA):~~

~~a~~

~~National Historic Trail Act:~~

~~Commemorate historic (and prehistoric) routes of travel that are of significance to the entire Nation. They must meet all three criteria listed in Section 5(b)(11) of the National Trails System Act. Such Trails are established by Act of Congress. a~~

National Historic Trails (NHTs):

An extended, long-distance trail designated by Congress that is not necessarily managed as continuous but follows as closely as possible and practicable the original trails or routes of travel of national historic significance. The purpose of a National Historic Trail is the identification and protection of the historic route and the historic remnants and artifacts for public use and enjoyment. A National Historic Trail is managed to recognize the nationally significant resources, qualities, values, and associated settings of the areas through which such trails may pass, including the primary use or uses of the trail. Federal Protection Components associated with the National Historic Trail, including high potential historic sites, high potential route segments, and auto tour routes are identified by the National Trail administering agency through the trailwide Comprehensive Plan. Properties eligible for the National Register of Historic Places, which may also be Federal Protection Components, may be identified along the National Historic Trail, including segments of the National Historic Trail.

National Trails Management Corridor (NTMC):

Allocation established through the land use planning process, pursuant to Section 202 of FLPMA and Section 7(a)(2) of the National Trail System Act (“rights-of-way”) for a public land area of sufficient width to encompass National Trail resources, qualities, values, and associated settings and the primary use or uses that are present or to be restored. To determine the width of the National Trail Management Corridor, the BLM conducts an inventory

and analyzes the National Trail Right-of-Way as a key consideration. The location and management of the National Trail Management Corridor is governed by Federal Land Policy and Management Act. The BLM uses the term “corridor” to refer to the are of public land surrounding the National Trail “Right-of-Way” which is described in section 7(a)(2) of the NTSA. The term “corridor” is used to reduce confusion between the National Trail Rights-of-Way and FLPMA Title V rights-of-way.

Objective:

Specific desired outcomes for resources. Objectives are usually quantifiable and measurable and may have established time frames for achievement (as appropriate).

Recreation Benefits:

The result of a satisfying recreation experience that leads to an (a) improved condition, or (b) maintenance of a desired condition. These accrue from recreation participation, and are both short- and long-term and are realized on and off-site.

Recreation Experience:

Immediate states-of-mind resulting from participation in recreation opportunities that result in benefits.

Recreation Management Zone (RMZ):

A subdivision of a Recreation Management Area to further delineate specific recreation opportunities and recreation setting characteristics.

Resource Management Plan (RMP):

a Land use plans which govern BLM administered public lands, as required by Section 202 of FLPMA, and developed through the planning and environmental review process outlined in 43 CFR 1600 and 40 CFR 1500.

Special Recreation Management Area (SRMA):

The SRMA is an administrative unit where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance or distinctiveness; especially compared to other areas used for recreation.

Special Recreation Permit (SRP):

a An authorization that allows specified recreational uses of the public lands and related waters. Special recreation permits are issued as a means to manage visitor use and to protect natural and cultural resources and as a mechanism to authorize commercial, competitive, and vending use; organized group use and events; and individual or group use of special areas.

~~**Wyoming State Historic Preservation Office (SHPO):**~~

~~a~~

Background:

The Record of Decision and Approved Resource Management Plan (RMP, 2014) for the Lander Field Office (LFO) established a National Trails Management Corridor (NTMC) which identifies the management approach for the five congressionally-designated trails that traverse the southern part of the LFO. Four of these are National Historic Trails (NHTs).

The enabling legislation and purpose of the NHTs calls for striking a balance between protecting the historic resources while enhancing trail based recreation opportunities. Therefore, the NTMC established protection measures and Recreation Management Zones (RMZ) so that visitors may have a variety of recreational experiences. Map A.2, “Lander RMP Recreation Management Areas” provides a general map and description of these National Trail Recreation Management Areas. The Group Re-enactment Zone is located around the trails from Sixth Crossing to Rock Creek Hollow, with the objective of allowing visitors to have opportunities to realize experiences and benefits derived from group togetherness; see RMP Decision 7027 discussed below.

In 2005, the LFO issued a ten year Special Recreation Permit (SRP) to the Corporation of the Presiding Bishop (CPB) to conduct annual handcart re-enactments of the nineteenth century Mormon pioneers’ westward emigration. The 2005 Decision established a series of operational rules for all trail permitted users to limit adverse impacts to the trails from organized group use. Careful annual monitoring has shown that these rules and the permitted trekkers’ compliance have stopped the degradation that had occurred prior to 2005 from unregulated group use (click the following hotlink monitoring report or visit the project website to see the monitoring report)

The CPB has applied for a new ten year SRP to continue the group trekking on the Rocky Ridge section of trail during the summer months. The CPB requested more flexibility in terms of group size, season of use, the number of groups, and total number of permitted trekkers.

This Environmental Assessment (EA) analyzes three alternative responses to the CPB’s request, the No Action Alternative which does not address the RMP’s management framework for the Group Re-enactment Zone of the NTMC and two “action alternatives”:

1. The No Action Alternative, in which the LFO would deny the CPB’s permit. Use could continue as long as the participants are fewer than 26 people and 3 vehicles; BLM regulations require that a group of this size or more obtain an SRP. It is likely that the number of groups under ~~under~~ 26 people and the issuance of SRPs for smaller groups with ~~above~~ more than 26 people would increase in the absence of the CPB’s permit.
2. Alternative B would authorize CPB’s use subject to various limitations identified in Table 2.1, “Design Features Common to All Alternatives” and Table 2.3, “Indicators and Thresholds Used To Adjust Causal Factors as Necessary to eEnsure aAccomplishment of Lander RMP Objectives”. ~~The alternative would also establish s~~thresholds ~~which~~ would trigger a change in management if approached or exceeded. If monitoring data indicate that these triggers are reached as a result of the CPB’s permitted use, the LFO would impose identified modifications to the permit in order to bring it back into compliance.
3. Alternative C would permit the CPB’s use for a shorter period of time and ~~allow for~~ fewer groups on the trail at one time in comparison to Alternative B, and phase in use increases over a 5 year period so long as the thresholds were not exceeded. Alternative C would also have more restrictive ~~s~~thresholds than the alternative B. Table 2.1, “Design Features Common to All Alternatives” and Table 2.3, “Indicators and Thresholds Used To Adjust

Causal Factors as Necessary to Ensure Accomplishment of Lander RMP Objectives” below summarizes the specifics of each alternative.

Under Alternatives B and C, the CPB permit (and any other permitted users including groups larger than 26 under Alternative A) would be subject to the General Trekking Rules the BLM has applied since 2005. The Monitoring Report shows that several of the 2005 rules have been successful at limiting impacts to the trails from group use. The LFO has realized that the General Trekking Rules are necessary for any permitted group use.

This EA does not analyze an alternative to re-issue the permit solely focused on ~~with a strict focus to~~ visitation numbers independent of resource condition, as was done in the 2005 Decision. Implicit in the 2005 Decision was the assumption that controlling the number of visitors would have the effect of avoiding impacts. In fact, careful ~~Through~~ monitoring of resources before and after group use identified that application of the Group Use Terms and Conditions (See Appendix C, 2015 CPB Permit Terms and Conditions) prevented the kind of trail impacts that had occurred prior to 2005 and ~~t~~ the LFO concluded that ~~determined that~~ rigidly limiting visitation numbers had no clear cause and effect relationship to impacts to resources yet had the potential to limit recreational use. ~~Additionally the 2005 decision lacked regulatory tools to allow the agency to effectively respond should undesirable conditions occur. These shortcomings of the 2005 decision created a management scenario that was not effective at protecting resources nor achieving the visitor experience objectives. Therefore, a new permit overly focused on group size would not meet RMP management objectives and would thus not be compliant with the RMP. The full rationale for eliminating this alternative is explained more fully below in the Considered But Not Fully Analyzed Section.~~ In addition, since the earlier decision, the BLM has recognized the importance of adaptive management as a mechanism for the BLM to respond effectively should undesirable conditions occur.

The BLM has concluded that the 2005 Decision’s approach of just limiting numbers created a management scenario that was not effective at responding to impacts to resources but interfered with achieving the visitor experience and benefit objectives. Therefore, a new permit focused solely on group size with no adaptive management provisions would not meet RMP management objectives and would thus not be compliant with the RMP. The full rationale for eliminating this alternative is explained more fully below in the Considered But Not Fully Analyzed Section.

Alternatives B and C both incorporate continued monitoring of resource condition to ensure that the CPB’s group use does not result in meaningful degradation of trail resources. Both identify responsive management changes if the thresholds are reached. In contrast, under the No Action Alternative, the LFO would continue monitoring trail resources but would not establish thresholds. Undesirable conditions would be addressed on a case by case basis. Since the No Action Alternative will result ~~is~~ in an increase in general, non-permitted public use not subject to the General Trekking Rules, it will also increase vehicle traffic on those sections of the trail that are not closed to motorized travel. While Rocky Road segment is closed, most of the trek route and the trails themselves are open to motorized use. BLM’s response to identified trail damage could involve future consideration of restrictions such as closing the entire trails to all motorized vehicles during times when the soil conditions are wet.

This document has been structured so the first two chapters provide an executive summary of the entire document. Chapter 1 describes the need and project objectives, while Chapter 2 describes the alternatives for management and summarizes every major conclusion and supporting information from chapter 3. Chapter 3 then provides a detailed discussion of the affected environment, the methods used to analyze the impacts, and the impacts resulting from the various alternatives for management.

~~On March 28, 2005, the Bureau of Land Management (BLM) Lander Field Office signed the FONSI/Decision Record that identified the practices to be followed for group use of BLM administered public land between Sixth Crossing and Rock Creek Hollow and issued a Special Recreation Permit (SRP) to conduct handcart trekking activities (here by referred to as the 2005 decision). The 2005 decision actions and issues are as follows:~~

- ~~● Standards as to when a SRP will be required for group use of the National Historic Trails.~~
- ~~● Identified a SRP route, staging areas, and sanitation locations~~
- ~~● SRP season of use~~
- ~~● Authorized number of participants per season~~
- ~~● SRP Maximum group size~~
- ~~● Vehicle Use on the National Historic Trail~~
- ~~● Monitoring requirements~~
- ~~● Invasive species awareness and prevention~~

~~Map 1 of Attachment A shows the existing hand cart trekking route and support locations.~~

~~Since the 2005 decision, the Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints (CPB) has been the most frequent permittee of this area. This permittee has operated in accordance with the terms and conditions of the permit and has instituted a monitoring program to ensure that its guided groups are in compliance with the requirements of the SRP.~~

~~The 2005 decision allocated the CPB 5,000 visitors a year to conduct handcart reenactments on the National Trails between Sixth Crossing and Rock Creek Hollow. The 2005 decision reserved an additional 2,500 visitors per year for other users, including general public users (members of the public using the trekking area in smaller numbers which do not require a special recreation permit). The BLM believed that 7500 visitors was the carrying capacity of the area, based on informal monitoring collected during the 2004 season.~~

~~The 2004 use season was far from typical, with use levels swelling to 12,000 visitors. Moreover, most of these users were not restricted to the current SRP terms and conditions that minimize resource impacts. For instance, several groups during the 2004 season used motorized vehicles on the trail. At one point during the 2004 season, a BLM employee observed 30 vehicles traveling the trail in order to provide trek support. Since the 2005 decision, however, permitted users are not authorized to use vehicles on the trail. In hindsight, the concerns associated with the 2004 season that led to the adoption of the 7500 visitor limitation were less a factor of the total number of people and more a concern towards visitor behavior causing impact.~~

~~Based on the last 10 years of managing the permit, a typical year of visitation starkly contrasts with the 2004 season. Currently, there is very high compliance by CPB with all the terms and conditions of the permit. Support vehicles are limited to 4 per group, and typically CPB limits theirs to 2. These vehicles are only allowed to meet the trekkers at identified support locations along two tracks that bisect the National Historic Trails. In addition, CPB's compliance has substantially reduced off trail travel and other visitor behaviors that can cause unnecessary resource damage (such as littering).~~

~~Since the 2005 decision, demand from entities outside of the Mormon Church continues to be steady but very low, with only a few permits being issued since 2005. Finally, general public use (groups smaller than 26 visitors) occur at irregular intervals but peaks annually during the antelope hunting season (September through October).~~

~~Through regular monitoring the BLM and others have found that the current intensity of non-motorized use associated with the CPB permit has no clear correlation with physical impacts. In 2011, as a result of this finding, the BLM made a decision to award the CPB an additional 1,000 visitors per year. Since other permitted use remained low, the BLM considered this decision to be within the terms of the 2005 decision and rational, since total use would still not exceed the 7,500 level and therefore the supporting analysis and 2005 decision was determined to be adequate.~~

~~In 2014, the BLM signed a new Lander Field Office Record of Decision and Approved Resource Management Plan (RMP) which identified a desired resource condition for the national historic trails. These objectives, discussed below, are designed to ensure management supports the nature and purpose for which the trails were designated. The BLM has determined that the strict visitation allocations from 2005 were not based on a desired resource condition, and instead were tied to informal monitoring that occurred during an extreme and unmanaged use season. Additional analysis of visitor use to meet RMP objectives is needed.~~

~~With the CPB permit expiring on December 31st of 2015, there is also a need to address some shortfalls in the 2005 decision that the BLM has identified. For example, the static carrying capacity number for the area failed to recognize that physical impact from recreational use is loosely correlated to number of people using the trails and is likely more correlated to a complex interaction between the amount of use, type of use, the location of use, timing, and the behavior of the user (Cole, 1993). Monitoring has shown that one motorized user traveling off road in a riparian area or when the ground is saturated can cause more long-term damage than many non-motorized users staying on the trail when conditions are dry.~~

~~These findings call into question the necessity for a static visitational allocation at the SRP level when combined with terms and conditions placed on the CPB permit that limit the likelihood that visitor behavior does not adversely impact trail resources. This EA analyzes if these terms and conditions, which are not applied to the general public, are adequate to allow for additional CPB visitors and thus better achieve RMP goals for the area.~~

~~This Environmental Analysis (EA) analyzes potential impacts of a range of alternatives developed to improve management of this permit. The EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any "significant" impacts could result from the analyzed actions.~~

~~This EA is available for public comment. This comment process is an opportunity for the public to review the decision making process and to provide input. All public comments will become~~

~~part of the administrative record for this project and assist BLM in determining its next course of action in terms of both further use of the trekking area and the CPB permit renewal.~~

~~This document has been structured so the first two chapters provide an executive summary of the entire document. Chapter 1 describes the need and project objectives, while Chapter 2 describes the alternatives for management and summarizes every major conclusion and supporting information from chapter 3. Chapter 3 then provides a detailed discussion of the affected environment, the methods used to analyze the impacts, and the impacts resulting from the various alternatives for management.~~

The EA process (including public scoping) will provide evidence for determining whether to prepare a revised/supplemental EA, an Environmental Impact Statement (EIS) or a statement of “Finding of No Significant impacts” (FONSI). If additional analysis is not needed and a FONSI is developed, then a Decision Record (DR) will also be signed for the EA approving the selected alternative.

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Chapter 1. Purpose of and Need for Action :

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1.1 RMP Objectives Used To Evaluate Alternatives (Purpose):

~~The 2005 decision, discussed above, was a programmatic decision for several types of users of the National Historic Trails. The 2014 RMP identifies goals and objectives for the trails including for visitor uses. The RMP made trail Management Decision starting with Decision 7001. This RMP management requires new consideration of the issues addressed in the 2005 decision.~~

~~The 2005 decision also issued a permit for use by handcart trekkers. The CPB Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints (CPB) has applied to renew its Special Recreation Permit (SRP) Special Recreation Permit to conduct handcart treks on BLM administered lands along and adjacent to the National Historic Trails. The 2014 Lander Record of Decision and Approved Resource Management Plan (hereby referred to as the RMP), RMP provides direction to the issuance of SRPs SRPs by directing the BLM Lander Field Office to issue SRPs SRPs as a tool to achieve area specific planning goals, objectives, and decisions.~~

~~The handcart trekking CPB permit activities occurs within the National Historic Trails Destination SRMA: the Group Reenactment Zone of the RMP National Trails Management Corridor National Trails Management Corridor. The RMP's objectives for the area that are relevant and will be used to evaluate the renewal of the CPB permit include:~~

- 1. "Provide users with opportunities to view, experience, and appreciate examples of prehistoric and historic human use of the resources along the Congressionally Designated trails demonstrating how these resources are being managed: (1) in harmony with the environment, (2) in support of the nature and purposes for which the trail was designated, and (3) without detracting from the overall experience of the trail. "*
- 2. "Maintain and enhance the significant qualities of high-potential NHT NHT segments and sites as defined in the National Trail System Act. Avoid adverse effects (as defined in the National Historic Preservation Act and the State Protocol between the Wyoming BLM and the Wyoming State Historic Preservation Office) to intact NHT segments, their settings, and associated sites."*
- 3. "Protect remnants, ruts, traces, graves, campsites, landmarks, artifacts, and other remains associated with the NHTs to enhance historical research and public use and enjoyment. "*
- 4. "Manage the landscape (viewshed) associated with the NHTs so that visitors continue to get a sense of how this landscape influenced emigrants along the trails."*
- 5. "The Group Reenactment Zone of the National Historic Trails Destination Special Recreation Management Area is managed for organized groups and other trail enthusiast from across the nation to engage in cultural site visitation and learning, photography, and historic reenactments so that visitors realize the following outcomes:*

Experiences: Reflect on personal values, gaining an experience one can look back on, and teach and learn about history here.

Benefits: Increased opportunities for youth, greater spiritual growth, greater appreciation of cultural histories, increased understanding of history, stronger ties with family and friends, greater household awareness and appreciation of our cultural heritage, protection

of cultural sites, maintenance of distinctive historical recreation setting, and reduced human impact such as litter, vegetation trampling, and unplanned trails.

6. ~~The Group Reenactment Zone of the National Historic Trails Destination Special Recreation Management Area is managed for organized groups and other trail enthusiasts from across the nation to engage in cultural site visitation and learning, photography, and historic reenactments so that visitors realize the following outcomes:~~
- ~~Developing personal and spiritual values~~
 - ~~Gaining a memorable experience~~
 - ~~Increased opportunity for youth~~
 - ~~Greater appreciation and understanding of cultural histories~~
 - ~~Stronger ties with family and friends~~
 - ~~Improved protection of cultural sites~~

This EA analyzes ~~how each of these~~ the manner and degree to which these RMP RMP objective objectives are achieved under each alternative using the following points:

- The National Trails analysis ~~projects~~ forecast and compares the potential impact to the physical characteristics of the trails. This tracks progress towards Objectives 1, 2, 3, and 5.
- The cultural analysis compares and contrasts the potential adverse impacts to cultural and historic resources both related and unrelated to the trails. This tracks progress towards Objectives 2 and 3.
- The visual resource analysis utilizes the BLM's visual contrast rating process on permitted temporary structures to determine the level of visual contrast caused by these structures. This will track progress towards Objective 4.
- The recreation analysis ~~predict the desired outcomes under objectives 1 and 6.~~ forecasts and compares the manner in which the regulations facilitate or hinder the realization of the visitor outcomes identified in Objectives 1 and 6.

1.2. Underlying Need for Action:

~~The 2005 decision had three general tiers of implementation decisions: visitor use allocations, programmatic SRP management direction, and CPB permit specific decisions. Since the RMP provides new direction to the management of this area there is a~~ Monitoring data collected by the LFO demonstrates that the rigid visitation numbers that currently limit CPB activities no longer have a cause and effect relationship to impacts. This monitoring finding is likely due to effectiveness of other stipulations on the permit, such as not allowing vehicle use on the NHTs and the requirement for trekkers to stay on the trail. need to review these decisions in order to ensure these decisions make progress and comply with the objectives listed in Section 1.1. There is a need to develop thresholds and decisions to ensure the BLM is adaptively adjusting the CPB permit conditions that have a true cause and effect relationship to impacts and the achievement of RMP objectives.

~~There is also a need to respond to the CPB's request to renew the SRP while balancing the efficacy of the BLM's visitor management both at protecting trail resources and providing for the best realization of RMP identified desired outcomes. The CPB and other commenters have stated that group size limits, yearly visitation limits, number of groups per day limits, and groups per week limits reduce participation and cause family or social units to divide while on the trail which diminishes visitor enjoyment and adversely impacts some of the participants' sacred experiences.~~

~~On the other hand, the BLM has concluded that monitoring results show that many of the resource protection management discussed above (such as the limitation on motorized support vehicle use of the trails) should continue to be applied in the trekking area.~~

1.3. Conformance of the Project to the BLM Land Use Plan:

Alternative A, the No Action Alternative, does not conform to the Land Use Plan because it does not renew the CPB permit which results in extensive use and potential trail damage by individuals and groups without permits. Alternatives B and C on the other hand conform to and support the ~~RMP~~RMP goals, objectives, and management decisions. The manner and intensity that Alternatives B and C achieves these objectives varies accordingly and is further detailed in this document.

1.4. Laws, Regulations, or Other Documents that Influence the Scope of this Project:

The scope of the document and action alternatives is limited by several laws and policies. These regulations are generally detailed and further described in 43 CFR, Subtitle B – Regulations Relating to Public Lands.

Pursuant to Section 106 of the National Historic Preservation Act and BLM's programmatic agreement between the Wyoming State Historic Preservation Office (SHPO), the BLM has also consulted with SHPO prior to and during the development of this EA.

The BLM also consulted with the Wyoming Game and Fish Department (WGFD) for their input on wildlife issues and concerns, as well as consistency with Wyoming Executive Order 2015-004, *Greater Sage-grouse Core Area Protection*.

1.5. Public Input and Identification of Relevant Issues:

The BLM has used internal scoping, a 30 day public scoping period, and consultation to identify the relevant issues associated with this project. The BLM was also informed by scoping, consultation, and cooperating agency processes for the revision to the RMP.

An issue for purposes of NEPA analysis is an effect (or a perceived effect, risk, or hazard) on a physical, biological, social, or economic resource. BLM is directed by guidance, statute and regulation to describe the environment of area(s) to be affected by the alternatives under consideration. As an example, CEQ regulations direct BLM to concentrate efforts on important issues, especially the presence or absence of relevant issues. The identified important issues guide the formulation of the four alternatives.

The discussion of environmental impacts is therefore restricted to topics related to resources which are relevant to the decision.

1.5.1. Relevant Issues:

For the purpose of NEPA analysis, an “ issue” is a point of disagreement, debate, or dispute with a proposed action based on some anticipated environmental effect. A relevant issue is more than just a position statement, such as disagreement with SRPs on public lands. To be relevant and carried forward for analysis an issue should:

- be impacted or changed by the alternative(s);
- be within the scope of the analysis
- be amenable to scientific analysis rather than conjecture; and
- suggest different actions

The following relevant issues (framed in the context of a questions) are important to assist BLM in determining and disclosing the degree in which the alternative ~~achieves~~ supports the RMP objectives detailed in the Purpose and Need section of this document.

1. **National Trails and Related Sites:** What will be the physical impact to the National Historic Trail from the CPB permit activities and other users?

~~Trail Related and Non-trail related Historic and Cultural Resources: What will be the impacts to historic and cultural resources? (~~

2. **Visual Resources:** What will be the level of visual contrast created by temporary toilet structures authorized in support of the permit? ~~(This issue assisted BLM in determining the achievement of an objective of this document, further explanation is contained in section 1.1)~~
3. **Recreation and Visitor Services:** How will ~~trail users and visitor services~~ visitor enjoyment of recreation experiences and benefits established in the management objective for the Group Use Zone, as detailed in the RMP, be impacted by the decisions and SRP stipulations? ~~(This issue assists BLM in determining the achievement of several objectives of this document, further explanation is contained in section 1.1)~~
4. ~~**National Trails:** What will be the physical impact to the National Historic Trail? (This issue assists BLM in determining the achievement of an objective of this document, further explanation is contained in section 1.1)~~

Other relevant issues identified during the internal and external scoping process include:

5. **Wildlife Including Special Status Species:** What will be the impacts to mule deer, pronghorn antelope, and Special Status Species caused by short-term and lifecycle disruption associated with human presence?
6. **Non-trail Related Cultural Resources:** What will be the impact to the Non-trail related cultural resources from the activities occurring under the CPB permit, associated management decisions, and SRP stipulations?

Visitors Ability to Be Away from Other Groups: How much time during the trail use season (June-October) will visitors be able to avoid permitted groups? Solitary or small-group use of the trails is not identified specifically as an objective for this section of the historic trails (see RMP Decision 7027 et seq.), however some scoping comments cited concern with contacts with permitted groups.

8. Transportation: What will be the on and off site motorized traffic impacts to transportation features from the CPB activities?
- 9.

~~Additionally, the following relevant issues were identified during the internal and external scoping process:~~

- ~~10. **Wildlife Including Special Status Species:** What will be the impacts to mule deer, pronghorn antelope, and Special Status Species caused by lifecycle disruption associated with visitor use?~~
- ~~11. **Visitors Ability to Be Away from Other Groups:** How much time during the trail use season (June-October) will visitors be able to avoid permitted groups? While solitary or non-group use of the trails is not identified specifically as an objective for this section of the historic trails (see RMP Decision 7027 et seq.), several scoping comments identified diminution in enjoyment of non-group use because of group use under the trekking permit.~~
- ~~12. **Permit Compliance:** What will be the impact to permit stipulation compliance?~~
- ~~13. **Transportation:** What will be the on and off site motorized traffic loads and impacts to transportation features?~~

1.5.2. Issues and Resources Considered But Eliminated From Further Analysis:

All issues and resources presented in the table contained in Appendix B, *Affected Resources* Appendix B, *Affected Resources* were considered, but the BLM determined that many are not present at the site or not affected to a degree of importance that required analysis or the impacts did not vary by alternatives. These issues were not carried forward for further analysis.

~~For example, some p~~Public comment indicated a desire to change or alter the interpretation content in the area. This type of decision is not a component of the ~~SRP~~SRP management and therefore is outside the scope of this document. However, it is important to recognize that the RMP has identified a need to develop an interpretation plan for the entire National Trails Corridor. This future effort will include diverse interests in an effort to supply visitor demand for interpretation while ensuring the content and location supports the nature and purpose for which the trails were designated.

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Chapter 2. Description of the Alternatives for Management:

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2.1 Introduction to this Chapter

The NEPA directs the BLM to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources;..." (NEPA Section 102(2)(E)). The range of alternatives explores alternative means of meeting the purpose and need as described in Chapter 1.

Chapter 2 describes the alternatives and provides summary tables that compares the alternatives.

2.2. Alternatives for Management

2.2.1. Alternatives Carried Forward for Detailed Analysis

The summary of alternatives section allows the reader to compare and contrast the components of each alternative.

Table 2.1. Design Features Common to All Alternatives

Alternative A-No Action	Action Alternative B	Action Alternative C
Design Features Common to All Alternatives		
Use integrated pest management including mechanical/chemical treatments to control weeds. Reseed or replant as necessary to promote vegetative growth in consultation and cooperation with interested parties.		
Prohibit surface-disturbing activities within 500 feet of surface water, riparian-wetland areas, and playas unless activities are determined to be necessary and when impacts can be mitigated.		
Prohibit surface-disturbing and disruptive activities within identified big game crucial winter range from November 15 to April 30 and within identified big game parturition areas from May 1 to June 30 unless the Authorized Officer grants a prior written exception, waiver, or modification.		
Prohibit surface disturbing and/or disruptive activities that have the potential to cause destruction of reproductive nests, eggs or young of migratory birds will be prohibited during the period of May 1 to July 15. The Authorized officer may grant a prior written exception if a survey (following BLM protocol) reveals that no nesting migratory birds exist in the project area.		
Avoid pygmy rabbit habitat.		
Cultural materials on public lands may not be removed, damaged, disturbed, excavated or transferred without BLM permit. No alternative proposes authorizing such a permit. Therefore users of the public lands and BLM employees and volunteers are not authorized to disturb archeological and historical values, including, but not limited to, petroglyphs, ruins, historic buildings, and artifacts.		
As detailed in the Lander RMP, Competitive Event SRPs will not be issued within the National Trails Corridor.		
Additional permit stipulations will be applied as necessary to ensure resource protection and human/health and safety.		
A SRP is required when the threshold of 3 or more vehicles or 26 or more people are met throughout the public land administered by the Lander Field Office, including activities within the NHTs. Organized use by groups below the identified thresholds may require a SRP if its determined the activity warrants additional management.		

Alternative A-No Action	Action Alternative B	Action Alternative C
<p><u>Vehicle Support Associated with SRPs in the area are limited to the following:</u></p>		
<ul style="list-style-type: none"> • <u>No motorized vehicles (such as support or toilet servicing vehicles) will be operated on the NHTs.</u> • <u>Vehicle use is limited to routes designated below or in subsequent SRP operating plan.</u> • <u>Access to the trekker’s route and NHTs is limited to designated locations at the 1) Snow Fence Road, 2) the H-AC Road staging area, 3) the Lewiston Lakes Road, 4)Gilespie Place Road, 5) Lewiston County Road, and 6) Strawberry Creek Road.</u> • <u>A maximum of two motor vehicles per 100 participants, not to exceed 4 per group</u> • <u>No vehicles are permitted to follow groups</u> • <u>The use of dual-wheeled vehicles is not allowed off of the Hudson Atlantic City (H-AC) Road, except to access the Sage Creek Campground from the H-AC Road staging area.</u> • <u>No motor vehicles will be operated on routes not identified as an access route on the individual SRP. Including but not limited to: Ellis Ranch , Rocky Ridge, Giles pie Place</u> 		
<p><u>Exceptions to these restrictions are limited to responding to medical situations or emergencies.</u></p>		
<p><u>NHT related SRPs in the area will be limited to the trek route, support locations, and restroom locations Detailed on Map 1 of Appendix A.</u></p>		
<p><u>The terms and conditions applied to the CPB permit, will also be applied to other SRPs in the area. See Appendix C, 2015 CPB Permit Terms and Conditions</u></p>		

Table 2.2. Alternatives Carried Forward for Detailed Analysis

Alternative A- No Action	Action Alternative B	Action Alternative C
CPB Permit not renewed	CPB Permit Renewed	
<p><u>Since this alternative does not renew the CPB permit, thresholds and permit adjustments are not applied.</u></p>	<p><u>Less restrictive thresholds, see Table 2.3, “Indicators and Thresholds Used To Adjust Causal Factors as Necessary to eEnsure aAccomplishment of Lander RMP Objectives ”</u></p>	<p><u>Stricter resource thresholds, see Table 2.3, “Indicators and Thresholds Used To Adjust Causal Factors as Necessary to eEnsure aAccomplishment of Lander RMP Objectives ”</u></p>
	<p><u>The action alternatives adjust the following permit stipulations as necessary to address the cause and meet the performance thresholds contained in tableTable 2.3, “Indicators and Thresholds Used To Adjust Causal Factors as Necessary to eEnsure aAccomplishment of Lander RMP Objectives ”</u></p>	
<p><u>Since this alternative does not renew the CPB permit, stipulations on the permit are not applied.. The BLM will evaluate placing these stipulations on other permits if necessary to alleviate resource concerns or ensure authorized activities comply with the RMP.</u></p>	<p><u>July 1 – September 15</u></p>	<p><u>July 15 — September 15</u></p>
	<p><u>Up to 4 groups per day (2 groups on either side of Rocky Ridge). The average groups per day for the entire trekking season will not exceed 3.</u></p>	<p><u>Up to 2 groups per day (1 either side of Rocky Ridge). Since only 2 are authorized there is no “average” limitation.</u></p>
	<p><u>5 days per week. All trekking must end by 4:00 PM Friday, no trekking on weekends.</u></p>	<p><u>3 days per week (Tuesday-Thursday). No limits on hours of use</u></p>
	<p><u>July 1–August 31: Maximum of 2000 participants per week.</u></p> <p><u>September 1–September 15: Maximum of 1000 participants per week</u></p>	<p><u>Same as Alternative B, except use season starts on July 15.</u></p>
	<p><u>Up to 350 individuals per group including support personal.</u></p>	<p><u>Same as B, except to be incrementally increased to 350 individuals per group over 5 years so long as performance thresholds are acceptable.</u></p>
	<p><u>4000–8000 visits per year, including support personal. The five year average visitation will not exceed 7000 visits.</u></p>	<p><u>Incrementally increase annual visitation to 7,000 visitors per year over 5 years, so long as performance thresholds remain at acceptable levels. After 5 years and so long as performance thresholds are acceptable, 4000–8000 visits per year, including support personal. The five year average visitation will not exceed 7000 visits.</u></p>

Table 2.3. Indicators and Thresholds Used To Adjust Causal Factors as Necessary To Ensure Accomplishment of Lander RMP Objectives

National Historic Trail Physical Impact Matrices				
Based on annual monitoring of 23 NHT sites before and after trekking season.				
Physical Impact Indicator	2007–2015 Baseline Condition	Threshold Proposed For Alt. A	Threshold Proposed For Alt. B	Threshold Proposed For Alt. C
<u>Widening of trail width trend:</u> Number of NHT monitoring sites where a widening trend of trail width can be observed before a management adjustment is required	<u>3 out of 23 sites or <10%</u>	<u>This alternative does not renew the CPB permit and therefore performance thresholds for the permit are not applied.</u>	<u>5 out of 23 sites or <20%</u>	<u>3 out of 23 sites or <10%</u> (Same as Baseline)
<u>Widening of average track width trend:</u> Number of NHT monitoring sites where a widening trend in average track width can be observed before a management adjustment is required	<u>1 out of 23 sites or <5%</u>		<u>5 out of 23 sites or <20%</u>	<u>1 out of 23 sites or <5%</u> (Same as Baseline)
<u>Deepening trend in rut depth:</u> Number of NHT monitoring sites where a deepening trend in rut depth can be observed before a management adjustment is required	<u>1 out of 23 sites or <5%</u>		<u>5 out of 23 sites or <20%</u>	<u>1 out of 23 sites or <5%</u> (Same as Baseline)
<u>Decreasing trend in width of trail vegetation:</u> Number of NHT monitoring sites where a decreasing trend in total width of trail vegetation can be observed before a management adjustment is required	<u>3 out of 23 sites or <10%</u>		<u>5 out of 23 sites or <20%</u>	<u>3 out of 23 sites or <10%</u> (Same as Baseline)
<u>Downward trend in total height of trail vegetation:</u> Number of NHT monitoring sites where a downward trend in the total height of trail vegetation can be observed before a management adjustment is required.	<u>0 out of 23 sites or <5%</u>		<u>5 out of 23 sites or <20%</u>	<u>0 out of 23 sites (Same as Baseline)</u>
<u>Expansion of barren ground at staging areas:</u> Cumulative percentage expansion of barren ground at staging areas adjacent to the NHT before a management adjustment is required.	<u>No expansion documented</u>		<u>Not to exceed 2.65% of existing barren ground over the life of the permit at any single staging area</u>	<u>Management activities will be adjusted if any expansion at any site is observed</u>

Recreation Outcomes and Setting Impact Matrices				
Performance thresholds to ensure recreation experience and benefits identified in RMP are being realized.				
<u>Indicator</u>	<u>Baseline Condition</u>	<u>Threshold Proposed For Alt. A</u>	<u>Threshold Proposed For Alt. B</u>	<u>Threshold Proposed For Alt. C</u>
<u>Visitor enjoyment of recreation experiences and benefits established in the management objective for the Group Use Zone as detailed in the RMP.</u>	<u>Last visitor survey was done in 2006 in support of the RMP. Permit restrictions were identified in scoping as being an encumbrance to the experience.</u>	<u>This alternative does not renew the CPB permit and therefore performance thresholds for the permit are not necessary.</u>	<u>Once during the 10 year lifespan of the permit, visitor assessments/surveys will be conducted. Mean response rate that indicates anything below a higher than average realization rate will trigger a management adjustment.</u>	
<u>Encounters with permitted groups on the NHT (CPB authorized trekkers and other permitted groups) per day during the approved use season.</u>	<u>Does not exceed 3, from July 1–15, and does not exceed 5 for the remainder of the season.</u>		<u>Not to exceed 5</u>	<u>Not to exceed 3</u>
<u>Mean group size per use season</u>	<u>Does not exceed 200</u>		<u>Not to exceed 200</u>	

If the thresholds proposed for Alternative B and C are approached or exceeded, the causal factor(s) will be identified and BLM will develop a management response based on the direction contained in the table below.

Table 2.4. Potential Remedial Action and Notification Requirement

<u>Identified Casual Factor</u>	<u>Remedial Action Example</u>	<u>Additional Analysis or Notification Requirement</u>
<u>Impact caused by an identified SRP use or use(s) that can be addressed without additional notifications.</u>	<ul style="list-style-type: none"> <u>Alter/restrict permit activities through additional stipulation</u> <u>Reduced visitation allowance</u> <u>Reduced groups per day</u> <u>Reduced group size</u> <u>Increase education</u> 	<u>Each of these actions will not require additional notification and analysis under the National Environmental Policy Act (NEPA) because the annual evaluation findings produced from the monitoring of thresholds contained in Table 2.3, “Indicators and Thresholds Used To Adjust Causal Factors as Necessary to Ensure Accomplishment of Lander RMP Objectives”, as well as the analysis in this document and the RMP, serves as adequate analysis and public disclosure.</u>
<u>Impact caused by an identified SRP use or use(s) that cannot be addressed without additional notifications</u>	<ul style="list-style-type: none"> <u>Permit termination</u> <u>Changes to the permit that will result in new surface disturbances</u> <u>Reductions in CPB permit use levels below minimum levels specified in Table 2.1, “Design Features Common to All Alternatives” of this document</u> 	<u>Each of these actions will require additional notification and analysis under the National Environmental Policy Act (NEPA) and other relevant BLM laws/policy.</u>

Identified Casual Factor	Remedial Action Example	Additional Analysis or Notification Requirement
Impact caused outside of trekking season by an identified general public activity or use that can be addressed without additional notifications.	<ul style="list-style-type: none"> • <u>Increased education and enforcement</u> 	<p><u>The monitoring and evaluation findings, this document, and the RMP serves as adequate analysis and public disclosure to institute these actions without additional analysis.</u></p>
Impact caused outside of trekking season by an identified general public activity or use that cannot be addressed without additional notifications.	<ul style="list-style-type: none"> • <u>Seasonal restrictions of motorized vehicle use</u> • <u>Changes to the threshold where permit is required.</u> • <u>Requiring a permit of all users</u> • <u>Any change resulting in new surface disturbance</u> • <u>Additional restrictions/rules</u> 	<p><u>Each of these actions will require additional notification and analysis under the National Environmental Policy Act (NEPA) and other relevant BLM laws/policy.</u></p>

2.2.2. Alternatives Considered But Eliminated From Further Analysis:

According to page 52, Section 6.63 of the BLM National Environmental Policy Handbook (1790–1), the BLM can dismiss alternatives if one or more of the following factors are met:

Elimination Criteria 1: It is ineffective, it would not respond to the purpose and need, as detailed in Section 1.1, “RMP objective Objectives Used To Evaluate Alternatives (Purpose): ” and Section 1.2, “Underlying Need for Action: ”.

Elimination Criteria 2: It is technically or economically infeasible.

Elimination Criteria 3: It is inconsistent with the basic policy objectives for the management of the area such as not in conformance with the Land Use Plan, as detailed in Section 1.3, “Conformance of the Project to the BLM Land Use Plan:”.

Elimination Criteria 4: Its implementation is remote or speculative.

Elimination Criteria 5: Its substantially similar in design to an alternative that is analyzed.

Elimination Criteria 6: It would have substantially similar effects to an alternative that is analyzed.

Several action alternatives were considered but later eliminated from further analysis because they met one or more of the criteria contained above:

Continuation of Present Management.

Chapter 2 Description of the Alternatives for Management:

Alternatives Considered But Eliminated From Further Analysis:

Under this alternative the CPB permit would be managed in a similar fashion to Alternatives B and C except instead of instituting performance thresholds, rigid permit stipulations are placed on annual visitation, group size, and groups per day.

The visitor use limit and portioning system of this alternative sets a rigid threshold that calls for adjusting permitted use if total visitation (the sum of SRP and general public visitation) exceeds the 7,500 visitor limit. Such a reduction in permitted use would ultimately facilitate an increase in general public users who are not held to the permit stipulations designed to reduce impact, such as limitations on seasons of use and motorized vehicles. This increase in general public use could result in increases in impact on the National Historic Trail. Therefore, the benefits of this alternative were found technically infeasible for protecting trail resources (elimination criteria 2).

Finally, such a rigid number does not provide for a balance between protection for trail resources and facilitation of the desired visitor outcomes established in the Resource Management Plan. For these reasons this alternative was eliminated from further analysis because it is ineffective at making progress towards the purpose and need of this document (elimination criteria 1) and the objectives for the area detailed in the Lander Resource Management Plan (elimination criteria 3).

Reduced CPB permit numbers

This alternative reduces the CPB permit portion of 6,000 people per day to 2,000 and reduces the maximum group size to 100 individuals. The analyses of Alternative A details the impacts of not renewing the CPB permit and Alternatives B and C provides for reduced levels should resource conditions warrant such a reduction. To date, BLM monitoring has shown that there is no clear cause and effect relationship with rigid visitation thresholds and impacts. Additionally, BLM monitoring indicates that it is speculative to assume that small reductions in CPB permit numbers will correlate to any change in resource condition. This finding is further supported by (Cole 2004) who summarized that “at high use frequencies, even large differences in use frequency typically result in minor differences in impact”. Therefore this alternative was eliminated from future consideration because it has substantially similar effects to Alternatives A, B, and C (elimination criteria 5 and 6) and its implementation is speculative (elimination criteria 4).

Closing some or all of the area to human presence. This proposed alternative would implement a special rule to close some or all of the area to human presence. This alternative was eliminated from further analysis because it does not respond to the purpose and need (elimination criteria 1). Such action is also inconsistent with the Land Use Plan for the area (Elimination Criteria 3) which identifies the group use zone for higher intensities of recreational use and group reenactments.

Establishing a permit requirement for all users. Under this alternative the BLM Wyoming State Director designates the area as a special management area (in accordance with 43 CFR 2932) requiring all recreational users to obtain a permit prior to recreating in the area. This permit requirement would drastically limit or reduce the amount of use occurring in the area. Currently such a limit or reduction is not necessary, as physical resource trends on the trail indicate little to no change and the recreation experiences and benefits being realized are not being impacted by general public use. As a result, this alternative would not be responsive to the purpose and need of the document (elimination criteria 1) and is inconsistent with the Land Use Plan (elimination criteria 3).

Allow motorized vehicles to travel across Rocky Ridge or close it to handcars. Some public comments requested a review of the management of Rocky Ridge with a consideration to allow motorized vehicles to travel over it or to close the ridge to handcars. The decision to close Rocky

Ridge and manage the area for group use, including handcart use was included and analyzed in the RMP. This alternative was eliminated from further analysis because it does not respond to the purpose and need (elimination criteria 1). Such action is also inconsistent with the Land Use Plan for the area (Elimination Criteria 3) which identifies the group use zone for higher intensities of recreational use and group reenactments.

Provide off-NHT trekking opportunities and reduce CPB visitation allowance.

A few public comments indicated a desire for an alternative that reduced CPB visitation on the Rocky Ridge section by providing additional trekking opportunities off of Rocky Ridge. Other public comments suggested a rest rotation system of the CPB permit use of Rocky Ridge. There are currently several alternative trekking opportunities in the immediate Rocky Ridged area. Well over 30,000+ visitors a year conduct treks in these areas. Despite this off-site opportunity as well as the vast development of off-site opportunities in other states, the demand on the Rocky Ridge section remains because of the importance of the Rocky Ridge area to the history of the trail. Also, the reduction proposed for such an alternative is dismissed for similar reasons as other reductions or closures discussed in this section. Therefore this alternative was eliminated from future consideration because it has substantially similar effects to Alternatives A, B, and C (elimination criteria 5 and 6), its implementation is speculative (elimination criteria 4), it does not respond to the purpose and need (elimination criteria 1) and is inconsistent with the Land Use Plan for the area (Elimination Criteria 3) .

2.3. Alternatives Summary

2.3.1. Summary of Impacts

The comparison of alternatives section allows the reader to compare and contrast the alternatives. This comparison includes the achievement of project objectives as detailed in Section 1.1, “RMP objective Objectives Used To Evaluate Alternatives (Purpose): ” and a comparison of relevant resource impacts as detailed in Section 1.5.1, “Relevant Issues:” .

Table 2.5. Summary of Objective Achievement

<u>Objective Indicator discussed in Section 1.1, “RMP objective Objectives Used To Evaluate Alternatives (Purpose): ”</u>	<u>Alternative A-No Action</u>	<u>Action Alternative B</u>	<u>Action Alternative C</u>
<u>Trend in motorized vehicle use on the NHTs</u>	<u>Increasing</u>	<u>No Change, no CPB vehicle use allowed on NHT</u>	<u>Same as Alternative B</u>
<u>NHTs Total Width Trend</u>	<u>Increasing without thresholds to limit change</u>	<u>Static or decreasing on greater than 80% of trekking route on NHT .</u>	<u>Static or decreasing on 90% of the trekking route on NHT.</u>
<u>NHTs Rut depth Trend</u>	<u>Increasing without thresholds to limit change</u>	<u>Static or decreasing on greater than 80% of trekking route on NHT .</u>	<u>Static or decreasing on greater than 95% of trekking route on NHT .</u>
<u>Track width Trend</u>	<u>Increasing without thresholds to limit change</u>	<u>Static or decreasing on greater than 80% of trekking route on NHT .</u>	<u>Static or decreasing on greater than 95% of trekking route on NHT .</u>
<u>Center Vegetation Height</u>	<u>Decreasing without thresholds to limit change</u>	<u>Static or increasing on greater than 80% of trekking route on NHT .</u>	<u>Static or increasing on greater than 90% of trekking route on NHT .</u>
<u>Center Vegetation Width</u>	<u>Decreasing without thresholds to limit change</u>	<u>Static or increasing on greater than 80% of trekking route on NHT .</u>	<u>Static or increasing on greater than 90% of trekking route on NHT.</u>

Objective Indicator discussed in Section 1.1, "RMP objective Objectives Used To Evaluate Alternatives (Purpose): "	<u>Alternative A-No Action</u>	<u>Action Alternative B</u>	<u>Action Alternative C</u>
<u>Visual Contrast of temporary structures</u>	<u>Short term, moderate</u>	<u>Short term visual impact with low levels of contrast at a distance, moderate from 100 yards or less.</u>	<u>Same as Alternative B. .</u>
<u>Permit restrictions affect on opportunities for group togetherness</u>	<u>Groups larger then 200 individuals will divide or reduce participants</u>	<u>Groups larger then 350 individuals will divide or reduce participants</u>	<u>During 5 year phase in period groups will be forced to divide or reduce participation. After 5 years, groups larger then 350 individuals will divide or reduce participants</u>
<u>Realization of Recreation Experiences and Benefits identified in RMP for the area</u>	<u>Reduced</u>	<u>Improved</u>	<u>Improved</u>

Table 2.6. Summary of Impacts to Relevant Issues from Each Alternative

<u>Issue</u>	<u>Alternative A-No Action</u>	<u>Action Alternative B</u>	<u>Action Alternative C</u>
<u>Number and duration of wildlife lifecycle disruptions</u>	<u>Highest</u>	<u>Lower than A, but 2 disruptions per use day higher than Alternative C.</u>	<u>Lowest</u>
<u>Encounters with other groups description</u>	<u>Several (greater than 2) encounters with general public users per day. Up to 4 encounters per day with permitted groups of up to 200 individuals. No encounters with large groups on weekends.</u>	<u>Up to 2 encounters per day with general public groups. Up to 4 additional encounters per day with CPB groups as large as 350 individuals. No encounters with large groups from 4:00 PM Friday through Sunday.</u>	<u>Up to 2 encounters with general public groups. Up to 2 encounters per day with CPB groups as large as 350 individuals. No encounters with large groups Friday through Monday.</u>
<u>Daylight Hours during public access period where users can expect to be away from large groups</u>	<u>Decreasing, less than 73% of daylight hours will be available to be away from groups.</u>	<u>No change. 73% of daylight hours will be available to be away from groups</u>	<u>Increasing, 87% of daylight hours will be available to be away from other groups.</u>
<u>Vehicle use on adjacent transportation features</u>	<u>Increasing by an unknown amount greater then Alternative B.</u>	<u>Increasing by 20 vehicles per year.</u>	<u>Same as B except increase will be phased over 5 years.</u>

~~2.4. Introduction to this Chapter:~~

~~The NEPA directs the BLM to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources;..." (NEPA Section 102(2)(E)). The range of alternatives explores alternative means of meeting the purpose and need as described in Chapter 1.~~

Chapter 2 Description of the Alternatives for Management:

Introduction to this Chapter:

2.5. ~~Decisions Common to All Alternatives~~

2.5.1. ~~Design Features Common to All Alternatives:~~

~~Standard operating procedures including RMP requirements and stipulations required by law or policy are considered to be design features that are common to all action alternatives. The table below identifies some of these design features that are relevant to the Purpose and Need; all are RMP required management.:~~

Table 2.7. ~~Design Features Common to All Alternatives:~~

Issue	Design Feature Description
Invasive/Noxious Species	Use integrated pest management including mechanical/chemical treatments to control weeds. Prescribed fire would be used only in areas with more than 12" of annual precipitation. Reseed or replant as necessary to promote vegetative growth in consultation and cooperation with interested parties.
Riparian Resource	Prohibit surface disturbing activities within 500 feet of surface water, riparian wetland areas, and playas unless activities are determined to be necessary and when impacts can be mitigated.
Mule Deer and Pronghorn Antelope	Prohibit surface disturbing and disruptive activities within identified big game crucial winter range from November 15 to April 30 and within identified big game parturition areas from May 1 to June 30 unless the Authorized Officer grants a prior written exception, waiver, or modification.
Special Status Species (Migratory Birds and Sagebrush obligates)	Prohibit surface disturbing and/or disruptive activities that have the potential to cause destruction of reproductive nests, eggs or young of migratory birds will be prohibited during the period of May 1 to July 15. The Authorized officer may grant a prior written exception if a survey (following BLM protocol) reveals that no nesting migratory birds exist in the project area.
Special Status Species (Pygmy Rabbit)	Avoid pygmy rabbit habitat.
Cultural Resources	There is a potential for buried cultural and paleontological resources to be present in the project area. Immediately report any cultural and/or paleontological resource (historic or prehistoric site or object or fossil) discovered by the BLM, or any person working on their behalf, on public or Federal land to the authorized officer. Upon discovery, the BLM will suspend all operations in the immediate area of such discovery until the Authorized Officer evaluates the discovery and provides a written authorization to proceed taking appropriate actions to prevent the loss of significant cultural or scientific values.
	Cultural materials on public lands may not be removed, damaged, disturbed, excavated or transferred without BLM permit. No alternative proposes authorizing such a permit. Therefore users of the public lands and BLM employees and volunteers are not authorized to disturb archeological and historical values, including, but not limited to, petroglyphs, ruins, historic buildings, and artifacts.

2.5.2. ~~Programmatic SRP Management Direction Common to All Alternatives~~

~~The 2005 decision and the Lander RMP made several SRP management decisions for the handcart trek area that are in the nature of administration of permits that should be carried forward under all alternatives. These decisions apply to all SRPs in the National Trail Management Corridor~~

~~including the CPB permit. The BLM has broad authority under its SRP regulations for regulating permits to meet resource objectives.~~

Table 2.8. ~~Decisions Common to All Alternatives~~

Item	Decision Description
Thresholds Requiring A Permit	A SRP is required when the threshold of 3 or more vehicles or 26 or more people are met throughout the public land administered by the Lander Field Office, including activities within the NHTs. Organized use by groups below the identified thresholds may require a SRP if its determined the activity warrants additional management. The BLM has the authority under its regulations to establish thresholds for requirement SRPs.
Organized Group SRP Use Season	The season of use for organized group use, including handcart trekking, will be from July 1st to September 15th. The NTMC in the group use zone is entirely within greater sage grouse Core Area. Group use before July 1st would constitute disruptive use that is prohibited by Decision 4105 and would violate Decision 6077. Use after September 15th would constitute disruptive activities in the Hunt Areas identified in Decision 6084.
Organized Group SRP Days of the Week	The days of the week for operating handcart treks will be Monday through Friday. The RMP requires that the BLM continue to allow for all recreation activities in SRMAs and RMZs (Decision 6076). The BLM is exercising its discretion in recreation management to limit group use to support other uses.
Vehicle Use in Support of Organized Group SRPs	<p>As part of the 2005 decision, the BLM identified motorized vehicle management for group trekking in the Group Re-enactment Zone. Monitoring data since that time have indicated that these rules have benefited resource objectives and are within the BLM's regulatory authority. The SRP renewal application does not seek to revise these regulations. The BLM has determined that a modification of this management would not meet the requirements of Decisions 7028 and 7029 for the Group Re-enactment Zone and thus would not comply with the RMP:</p> <ul style="list-style-type: none"> ● No motorized vehicles (such as support or toilet servicing vehicles) will be operated on the NHTs. ● Vehicle use is limited to routes designated below or in subsequent SRP operating plan. ● Access to the trekker's route and NHTs is limited to designated locations at the 1) Snow Fence Road, 2) the H-AC Road staging area, 3) the Lewiston Lakes Road, 4)Gilespie Place Road, 5) Lewiston County Road, and 6) Strawberry Creek Road. ● A maximum of two motor vehicles per 100 participants ● No vehicles are permitted to follow groups ● The use of dual-wheeled vehicles is not allowed off of the Hudson Atlantic City (H-AC) Road, except to access the Sage Creek Campground from the Hudson to Atlantic City Road staging area. ● No motor vehicles will be operated on routes not identified as an access route on the individual SRP. Including but not limited to: Ellis Ranch, Rocky Ridge, Giles pie Place <p>Exceptions to these restrictions are limited to responding to medical situations or emergencies.</p>
SRP Stipulations to Reduce Impact	Additional permit stipulations will be applied as necessary to ensure resource protection and human/health and safety. This requirement is part of the BLM's regulations and the RMP requirement that authorized recreation on public lands meets human health and safety objectives. See Goal SR 3 and Objectives 3.1, 3.2, and 3.3.
Competitive Event SRPs	As detailed in the Lander RMP, Competitive Event SRPs will not be issued within the National Trails Corridor.

~~2.6. Detailed Description of the No Action Alternative:~~

~~2.6.1. Alternative A No Action Alternative Introduction:~~

~~Alternative A continues the use allocation visitation limit and programmatic SRP management direction contained in the 2005 decision. This alternative does not close the trail to permitted use or general public use; therefore overall visitation levels will remain unchanged. The CPB permit would not be issued; instead, activities would be authorized, if at all, under individual SRPs on a case by case basis subject to the conditions discussed in section 2.2 as decisions common to all alternatives and the programmatic SRP management decisions discussed in section 2.3.3, as well as the conditions discussed in section 2.3.3. Finally, under the No Action Alternative, the BLM would not renew the CPB permit which would not resolve the issues identified in the purpose and need or make progress towards the Land Use Plan.~~

~~2.6.2. Visitor Use Allocation visitation Limit Under the No Action Alternative~~

~~This alternative continues the use allocation visitation limit set in the 2005 decision. Under Alternative A the total number of visitors (general public plus permitted use) to BLM administered NHT segment from Sixth Crossing to Rock Creek Hollow (the handcart trekking area) would not exceed 7,500 visitors per season.~~

~~Since this alternative does not renew the CPB permit, no portion of this allocation visitation limit will be allotted to CPB permitted activities. On a first come first serve basis BLM SRP use will constitute 6,000 of 7,500 visitor allocation visitation limit. If demand for SRP use exceeds available capacity a lottery system will be implemented to issue SRPs. Additionally, if yearly visitation exceeds the 7,500 number, adjustments to user group categories, other than general public use, the SRP visitation portion would be made for decreased the following year.~~

~~2.6.3. Programmatic SRP Management Direction Under the No Action Alternative~~

~~In addition to the management common to all alternatives items detailed in section 2.2 this alternative continues the programmatic SRP management direction established in the 2005 decision including:~~

- ~~● 6,000 visits per year will be portioned to SRP use.~~
- ~~● Permitted group size will not exceed 200 individuals including support personal.~~
- ~~● Permitted groups per day will not exceed 4 per day (2 either side of Rocky Ridge) between July 1–July 15th and 8 per day (4 either side of Rocky Ridge) between July 16 and September 15. Each group must remain separated by at least 1 hour.~~
- ~~● This alternative will not institute a participants per week threshold.~~

~~2.6.4. CPB Permit Decisions Under the No Action Alternative~~

~~The no action alternative does not renew the CPB permit. No additional decisions for the CPB permit will be implemented under Alternative A.~~

~~2.7. Description of Action Alternatives:~~

~~2.7.1. CPB SRP Renewal Decisions Common to All Action Alternatives~~

~~Table 2.9. Decisions Common to All Action Alternatives~~

Item	Decision Description
CPB Permit Status	Each action alternative proposes to renew the CPB permit to conduct handcart activities.
Route	The Trek Route options will remain the same as detailed in the 2005 decision, see attached maps.
Support and Restroom Location and Access	The support/restroom locations and access will remain the same as detailed in the 2005 decision, see attached maps.
Other Permit Stipulations to Reduce Impact	See Attachment. Several additional permit stipulations will be applied to the CPB permit to ensure resource protection and human/health and safety.

~~2.7.2. Description of Alternative B (Proposed Action)~~

~~2.7.2.1. Alternative B Proposed Action Introduction:~~

~~Alternative B does not impose a visitor use allocation/visitation limit, but the programmatic SRP management direction will be similar to Alternative A. This alternative increases the annual CPB allocation/visitation portion from its current level of 6,000 to 7,000 per year. The alternative does not close the trail to permitted use or general public use, therefore overall visitation levels will remain unchanged. A large portion of that visitation (7,000 of 7,500 use allocation) will be under the guise and stipulations of the CPB permit and subjected to the conditions discussed below as well as the actions common to all alternatives in section 2.2, as well as the conditions discussed in section 2.4.2.2 and 2.4.2.3.~~

~~2.7.2.2. Visitor Use Allocation/Visitation Limit Under the Proposed Action~~

~~Alternative B would not impose a visitation limit/visitor use allocation. Total visitation is not limited and, therefore, SRP use is/would not be adjusted in response to visitation.~~

~~2.7.2.3. Programmatic SRP Management Direction Under the Proposed Action~~

~~In addition to the items detailed in section 2.2 (This alternative institutes the following SRP management decisions: :~~

Chapter 2 Description of the Alternatives for Management:

CPB Permit Decisions Under the No Action Alternative

~~● All SRPs will not be limited to a visits per year threshold portion. All request for permits found to be in compliance with the RMP and the items detailed in section 2.2 and this section other relevant planning decisions will be issued.~~

- ~~● Permitted group size will not exceed 350 individuals including support personal.~~
- ~~● Permitted groups per day will not exceed 8 per day (4 on either side of Rocky Ridge) between July 1 and September 15. Each group must remain separated by at least 1 hour.~~

~~2.7.2.4. CPB Permit Decisions Under the Proposed Action~~

~~Under Alternative B, the CPB permit will be renewed with the following additional conditions:~~

- ~~● The CPB permit will be capped at limited to 7,000 visits per year.~~
- ~~● The CPB permit is a limited to 4 groups per day per (2 either side of Rocky Ridge) between July 1 through September 15th. Each group must remain separated by at least 1 hour.~~
- ~~● The CPB permit will be limited to 2,000 participants per week from July 1 to August 31; not to exceed 1,000 for any one week from September 1-15; and total use not to exceed 7000 the yearly limit listed above.~~

~~2.7.3. Description of Alternative C~~

~~2.7.3.1. Alternative C Desired Condition Alternative Introduction:~~

~~Alternative C does not impose a visitor use allocation visitation limit, but instead institutes resource thresholds that can trigger a management response. The programmatic SRP management direction will be similar to Alternative A. This alternative increases the annual CPB allocation visitation limit. The alternative does not close the trail to permitted use or general public use, therefore overall visitation levels will remain unchanged. A large portion of that visitation (7,000 visits) will be under the terms and conditions of the CPB permit, the design features common to all, and the following metrics:~~

~~2.7.3.2. Use Allocation Under Alternative C~~

~~Instead of a visitor use allocation Alternative C requires that the following conditions and metrics be considered as a measure of whether the objectives established in the RMP including desirable conditions are being met:~~

- ~~● From the period of xx-xx, the average group encounters per day on the Historic Trail in the permit area will not exceed xx.~~
- ~~● The majority of monitoring sites on the NHT will show a xx trend for all parameters.~~
- ~~● Permitted groups will continue to show a high (90-100% compliance rate) with all SRP terms and conditions.~~

~~If these standards are approached or exceeded, the causal factor(s) will be identified and if it is the permitted visitor use, that use will be adjusted.~~

Table 2.10. Title

Identified Casual Factor	Remedial Action	Additional Analysis or Notification Requirement
SRP Use	<ul style="list-style-type: none"> Alter/restrict permit activities through additional stipulation Reduced visitation Reduced groups per day Reduced group size Increase education Permit termination 	<p>The monitoring and evaluation findings, this document, and the RMP serves as adequate analysis and public disclosure to institute these actions without additional analysis.</p>
	<ul style="list-style-type: none"> Modifications of decisions contained in sections 2.2.1, 2.2.2, and 2.4.1 of this document. Changes to the permit that will result in new surface disturbances Reductions in CPB permit below minimum levels specified in section 2.4.4.4 of this document 	<p>Each of these actions will require additional notification and analysis under the National Environmental Protection Act (NEPA) and other relevant BLM laws/policy.</p>
General Public Use	<ul style="list-style-type: none"> Increased education and enforcement 	<p>The monitoring and evaluation findings, this document, and the RMP serves as adequate analysis and public disclosure to institute these actions without additional analysis.</p>
	<ul style="list-style-type: none"> Seasonal restrictions of motorized vehicle use Changes to the threshold where permit is required. Requiring a permit of all users Any change resulting in new surface disturbance Additional restrictions/rules 	<p>Each of these actions will require additional notification and analysis under the National Environmental Protection Act (NEPA) and other relevant BLM laws/policy.</p>

2.7.3.3. Programmatic SRP Management Direction Under the Preferred Alternative

In addition to the items detailed in section 2.2 this alternative This alternative institutes the following specific SRP management decisions:

- BLM SRPs will not be limited to a visits per year threshold portion. All request for permits in compliance with the RMP and the items detailed in section 2.2 and this section will be issued the decisions in this document will be issued.
- Permitted group size will not exceed 350 individuals including support personal.
- Permitted groups per day will not exceed 8 per day (4 either side of Rocky Ridge) between July 1 and September 15. Each group must remain separated by at least 1 hour.

~~2.7.3. CPB Permit Decisions Under the Preferred Alternative~~

~~Under Alternative B the CPB permit will be renewed with the following specific additional (section 2.2, 2.4.2.2, 2.4.2.3) conditions:~~

- ~~• The visitor use on the CPB permit will allow use by a range between 4,000–8,000 visitors per year, including support personal. The CPB five year average visitation will not exceed 7,000 visitors, including support personal.~~
- ~~• The CPB permit will be allowed 1–4 groups per day per (1–2 either side of Rocky Ridge) between July 1 and September 15th. The average groups per day for the entire trekking season will not exceed 2.~~
- ~~• The CPB permit will be limited to 2000 visitors per week from July 1 to August 31; not to exceed 1000 for any one week from September 1–15.~~

~~2.8. Alternatives Considered But Eliminated From Further Analysis:~~

~~The BLM may dismiss alternatives if: According to page 52, Section 6.63 of the BLM National Environmental Policy Handbook (1790–1) BLM can dismiss alternatives if one or more of the following factors are met:~~

~~Elimination Criteria 1: It is ineffective, it would not respond to the purpose and need, as detailed in Section 1.1, “RMP objective Objectives Used To Evaluate Alternatives (Purpose):” and Section 1.2, “Underlying Need for Action:”.~~

~~Elimination Criteria 2: It is technically or economically infeasible.~~

~~Elimination Criteria 3: It is inconsistent with the basic policy objectives for the management of the area such as not in conformance with the Land Use Plan, as detailed in Section 1.3, “Conformance of the Project to the BLM Land Use Plan:”.~~

~~Elimination Criteria 4: Its implementation is remote or speculative.~~

~~Elimination Criteria 5: Its substantially similar in design to an alternative that is analyzed.~~

~~Elimination Criteria 6: It would have substantially similar effects to an alternative that is analyzed.~~

~~Several action alternatives were considered but later eliminated from further analysis because they met one or more of the criteria contained above:~~

~~Continuation of Present Management.~~

~~Under this alternative the CPB permit would be managed in a similar fashion to Alternatives B and C except for the following:~~

- ~~• Instead of performance standards, rigid permit stipulations are placed on annual visitation, group size, and groups per day.~~

- ~~6,000 visits per year will be portioned to CPB permit activities.~~
- ~~Group size will be limited to 200 individuals.~~
- ~~The CPB permit is allotted 2 (1 group either side of Rocky Ridge) groups per day between July 1 July 15th and 4 (2 either side of Rocky Ridge) per day between July 16 September 15. Each group must remain separated by at least 1 hour.~~
- ~~This alternative will not institute a participants per week threshold.~~
 -

~~The visitor use limit and portioning system of this alternative sets a very rigid threshold that calls for adjusting permitted use if total visitation (the sum of SRP and general public visitation) exceeds the 7,500 visitor limit. Such a reduction in permitted use would ultimately facilitate an increase in general public users who are not held to the permit stipulations designed to reduce impact, such as limitations on seasons of use and motorized vehicles. This increase in general public use could result in increases in impact on the National Historic Trail therefore the benefits of this alternative was found technically infeasible at protecting trail resources (elimination criteria 2).~~

~~Finally, such a rigid number does not provide for a balance between protection for trail resources and facilitation of the desired visitor outcomes established in the Resource Management Plan. For these reasons this alternative was eliminated from further analysis because it is ineffective at making progress towards the purpose and need of this document (elimination criteria 1) and the objectives for the area detailed in the Lander Resource Management Plan (elimination criteria 3).~~

~~Continuation of present management with reduced CPB permit numbers~~

~~This alternative reduces the CPB permit portion of 6,000 people per day to 2,000 and reduces the maximum group size to 100 individuals. The analyses of alternative A details the impacts of not renewing the CPB permit and Alternatives B and C provides for reduced levels should resource conditions warrant such a reduction. To date, BLM monitoring has shown that there is no clear cause and effect relationship with rigid visitation thresholds and impacts. Additionally, BLM monitoring indicates that it is speculative to assume that small reductions in CPB permit numbers will correlate to any change in resource condition. This finding is further supported by Cole 2004 who summarized that “at high use frequencies, even large differences in use frequency typically result in minor differences in impact”. Therefore this alternative was eliminated from future consideration because it is has substantially similar effects to alternatives A, B, and C (elimination criteria 5 and 6) and its implementation is speculative (elimination criteria 4).~~

~~**Closing some or all of the area to human presence.** This proposed alternative would implement a special rule to close some or all of the area to human presence. This alternative was eliminated from further analysis because it does not respond to the purpose and need (elimination criteria 1). Such action is also inconsistent with the Land Use Plan for the area (Elimination Criteria 3) which identifies the group use zone for higher intensities of recreational use and group reenactments.~~

~~**Establishing a permit requirement for all users.** Under this alternative the BLM Wyoming State Director designates the area as a special management area (in accordance with 43 CFR 2932) requiring all recreational users to obtain a permit prior to recreating in the area. This permit requirement would drastically limit or reduce the amount of use occurring in the area. Currently such a limit or reduction is not necessary, as physical resource trends on the trail indicate little to no change and the experiences and benefits being realized are not being impacted by general public~~

~~As a result, this alternative would not be responsive to the purpose and need of the document (elimination criteria 1) and is inconsistent with the Land Use Plan (elimination criteria 3).~~

~~Continuation of Present Management.~~

~~Under the present management alternative the visitor use allocation and programmatic SRP management would be the same as detailed under alternative A.~~

~~Under this alternative the CPB permit would be renewed with the following 1 (in addition to those detailed in section 2.2, 2.4.2.2, 2.4.2.3) conditions:~~

- ~~●~~
- ~~● 6,000 visits per year or 80% of the visitor use allocation will be allotted to CPB permit activities~~
- ~~●~~
- ~~● The CPB permit is allotted 2 (1 group either side of rocky ridge) of the 4 groups per day per day between July 1– July 15th and 4 (2 either side of Rocky Ridge) of the 8 per day between July 16– September 15. Each group must remain separated by at least 1 hour.~~
- ~~● This alternative will not institute a participants per week threshold.~~
- ~~○~~

~~Under this Alternative, the visitor use allocation and programmatic SRP management is the same as that detailed for Alternative A, and the CPB permit management is similar to Alternative C. Therefore this alternative was eliminated from further analysis because it is similar in design to Alternatives A and C (elimination criteria 5).~~

~~Additionally, the visitor use allocation of this alternative sets a very rigid limitation that calls for adjusting permitted use if total visitation (the sum of SRP and general public visitation) exceeds the 7,500 visitor threshold. Such a reduction in permitted use would ultimately facilitate an increase in general public users who are not held to the permit stipulations designed to reduce impact, such as limitations on seasons of use and motorized vehicles. This increase in general public use could result in increases in impact on the National Historic Trail and therefore the benefits of this alternative was found technically infeasible at protecting trail resources (elimination criteria 2).~~

~~Finally, such a rigid number does not provide for a balance between protection for trail resources and facilitation of the desired visitor outcomes established in the Resource Management Plan. For these reasons this alternative was eliminated from further analysis because it is ineffective at making progress towards the purpose and need of this document (elimination criteria 1) and the objectives for the area detailed in the Lander Resource Management Plan (elimination criteria 3).~~

~~Reduction in CPB Permit Numbers~~

~~This alternative reduces the CPB permit from 6,000 people per day to 2,000 and reduces the maximum group size to 100 individuals. The analyses of alternative A details the impacts of not renewing the CPB permit and Alternative C provides for reduced levels should resource conditions warrant such a reduction. Additionally, BLM monitoring indicates that it is speculative to assume that small reductions in CPB permit numbers will correlate to any change in resource condition. This finding is further supported by Cole 2004 who summarized that “at high use frequencies,~~

~~even large differences in use frequency typically result in minor differences in impact. Therefore this alternative was eliminated from future consideration because it has substantially similar effect to alternatives A and C (elimination criteria 5 and 6) and its implementation is speculative (elimination criteria 4).~~

~~2.9. Summary of Alternatives~~

~~The summary of alternatives section allows the reader to compare and contrast the components of each alternative. The comparison table below breaks these components by the areas of concern presented in Section 1.2, “Underlying Need for Action: ”.~~

Table 2.11. ~~Summary of Alternatives by Areas of Concern~~

Decision Area	Alternative A-No Action	Action Alternative B	Action Alternative C
Use Allocation			
Use Allocation	This alternative continues the use allocation set in the 2005 decision. Under Alternative A the total number of visitors (general public plus permitted use) to BLM administered NHT segment from Sixth Crossing to Rock Creek Hollow would not exceed 7,500 visitors per season.	No use Allocation	Resource standards (in addition to the objectives established in the RMP) used to adjust permitted and general public uses and activities as necessary to ensure desirable conditions.
Programmatic SRP Management Direction			
Thresholds Requiring A Permit	A SRP is required when the threshold of 3 or more vehicles or 26 or more people are met throughout the public land administered by the Lander Field Office, including activities within the NHTs. Organized use by groups below the identified thresholds may require a SRP if its determined the activity warrants additional management.		
Season of use	The season of use for organized group use, will be from July 1st to September 15th.		
Days of the Week	The days of the week for operating handcart treks will be Monday through Friday.		
Motorized Vehicle Use	<ul style="list-style-type: none"> ● No motorized vehicles (such as support or toilet servicing vehicles) will be operated on the NHTs. ● Vehicle use is limited to routes designated below or in subsequent SRP operating plan. ● Access to the trekker's route and NHTs is limited to designated locations at the 1) Snow Fence Road, 2) the H AC Road staging area, 3) the Lewiston Lakes Road, 4)Gilespie Place Road, 5) Lewiston County Road, and 6) Strawberry Creek Road. ● A maximum of two motor vehicles per 100 participants ● No vehicles are permitted to follow groups ● The use of dual-wheeled vehicles is not allowed off of the Hudson Atlantic City (H AC) Road, except to access the Sage Creek Campground from the H AC Road staging area. ● No motor vehicles will be operated on routes not identified as an access route on the individual SRP. Including but not limited to: Ellis Ranch , Rocky Ridge, Gilespie Place <p>Exceptions to these restrictions are limited to responding to medical situations or emergencies.</p>		
Additional Stipulations	Additional permit stipulations will be applied as necessary to ensure resource protection and human/health and safety.		

Decision Area	Alternative A-No Action	Action Alternative B	Action Alternative C
Competitive Events	As detailed in the Lander RMP, Competitive Event SRPs will not be issued within the National Trails Corridor.		
Other (non-CPB) Permits	On a first come first serve basis SRP use will constitute 6,000 of 7,500 visitor allocation.	Additional SRPs will not be limited to a visits per year threshold. All request for permits in compliance with the RMP and the items detailed in section 2.2 and this section will be issued.	Same as Alternative C
Group Size	Permitted group size will not exceed 200 individuals including support personal.	Permitted group size will not exceed 350 individuals not including support personal.	Same as Alternative C
Permitted Groups per day	Permitted groups per day will not exceed 4 per day (2 either side of Rocky Ridge) between July 1-July 15th and 8 per day (4 either side of Rocky Ridge) between July 16-September 15. Each group must remain separated by at least 1 hour.	Permitted groups per day will not exceed 8 per day (4 either side of Rocky Ridge) between July 1-September 15. Each group must remain separated by at least 1 hour.	Same as Alternative C.
CPB Permit Decisions			
Permit Status	CPB Permit not renewed	CPB Permit Renewed	
Trek Route	No authorized Trek Route	Same as the 2005 decision and detailed on Map 1 of Appendix A	
Support/Restroom locations and access	No authorized support and restroom locations	Same as the 2005 decision and detailed on Map 1 of Appendix A	
Visitors per year	The CPB permit is not renewed. 0 visits or 0% of the visitor use allocation will be allotted to the CPB permit activities.	7,000 visits per year will be allotted to CPB permit activities	The CPB permit will range between 4,000-8,000 visits per year, including support personal. The CPB five year average visitation will not exceed 7,000 visits, including support personal.

Decision Area	Alternative A-No Action	Action Alternative B	Action Alternative C
CPB groups per day	The CPB permit is not renewed, and will not have groups on the trail.	The CPB permit will be allowed 4 groups per day per (2 either side of Rocky Ridge) between July 1-September 15th. Each group must remain separated by at least 1 hour. .	The CPB permit will be allowed 1-4 groups per day per (1-2 either side of Rocky Ridge) between July 1-September 15th. Each group must remain separated by at least 1 hour. The average groups per day for the entire trekking season will not exceed 2.
CPB Participants per week	This alternative will not institute a participants per week threshold.	The CPB permit will be limited to 2000 participants per week from July 1 to August 31; not to exceed 1000 for any one week from September 1-15; and total use not to exceed the visits per year thresholds indicated above.	Same as Alternative C.

~~2.10. Summary of Impacts~~

~~The comparison of alternatives section allows the reader to compare and contrast the alternatives. This comparison includes the achievement of project objectives as detailed in Section 1.1, “ RMP objective Objectives Used To Evaluate Alternatives (Purpose): ” and a comparison of relevant resource impacts as detailed in Section 1.5.1, “Relevant Issues:”~~

Table 2.12. ~~Summary of Objective Achievement~~

Objective Indicator discussed in Section 1.1, “ RMP objective Objectives Used To Evaluate Alternatives (Purpose): ”	Alternative A No Action	Action Alternative B	Alternative C
Total TrailWidth Trend			
Rut depth Trend			
Track width Trend			
Center Vegetation Height			
Center Vegetation Width			
Number of Cultural and historic resources adversely affected			
Visual Contrast of temporary structures			
Visitor Realization of Desired Outcomes			

Table 2.13. ~~Summary of Impacts to Relevant Issues from Each Alternative~~

Issue	Alternative A-No Action	Action-Alternative B	Action-Alternative C
Number and duration of wildlife lifecycle disruptions			
Permit compliance			
Transportation			

Chapter 3. Affected Environment and Environmental Consequences

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3.1. Introduction:

3.1.1. General Impact Analysis Assumptions and Guidelines:

This section provides an in-depth discussion of the relevant and potentially affected resources which forms the analytical basis for comparison of the alternatives. The section organizes the resources as identified in Chapter 1.0, Section 1.5.1, Relevant Issues and compares the general current conditions to impacts between the Action Alternatives and No Action Alternative. Design Features identified in Chapter 2.0 have been incorporated into the analysis as a means to reduce or eliminate adverse impacts and will be discussed in further detail.

Direct impacts are those that are caused by the action and occur at the same time and place. Indirect impacts are those impacts that are caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable. Sometimes it is difficult to separate these impacts, and so the impacts may be described together.

Finally, in order to facilitate impact analysis this document assumes the following:

- ~~Visitor use will increase in the JBR area regardless of alternative.~~
- ~~Compliance with the terms and the conditions of the permit will continue to be high.~~
- ~~Off trail travel is more likely to occur in locations or along trail sections that fail to provide visitors the access, connectivity, or experiences they desire. (Widman, 2010)~~
- ~~BLM conducted a literature review of studies that investigated the likelihood of visitors to stay on the trail. The review found that 95–100% cyclist stay on trails, and 75%–97% of pedestrian/horseback users (including those with leashed and unleashed dogs) stay on the trail. (Lezberg 2011; Lucas 1980; Hockett et. al. 2010 ; Fotie et. al. 2006 ; VanderWoude, 2008)~~
- ~~The likelihood of visitors leaving a trail decreases as the slope of the surrounding terrain increases, with the likelihood decreasing to below 10% on slopes greater than 40%.~~
- ~~The majority (86%) of off-trail visitors will remain within 10 feet of the trail. (Lezberg 2011)~~
- ~~Designed trails can use perception and feeling (Safety, Efficiency, Harmony, and Playfulness) to improve the trail experience and encourage people to stay on the trail. (Parker 2004)~~
- ~~Designed trails weave into their sites, use natural features to improve sustainability and visitor enjoyment, and helps engender respect, appreciation, and stewardship for trails and natural resources. (Parker 2004)~~
- ~~The impacts to environments from recreation demonstrate an curvilinear relationship between the amount of use and amount of impact. This means incremental increases in amount of use have a pronounced effect on the amount of impact suggesting t that heavy dispersed use has more impact then heavy focused use on hardened sites (Cole, 1993).~~
- ~~Limiting the amount of group use, limiting destructive activities, influencing behaviors, concentrating use, utilizing or creating hardened sites, and shielding areas from use reduces environmental impacts from recreation. (Cole, 1993)~~

- Impacts from recreation are created by a complex relationship between (1) the amount of use, (2) type of recreation activity, (3) the behavior of the recreationists, (4) the spatial distribution of use, and (5) temporal distribution of use. (Cole 1993)
- Cole 2004 summarized that “at high use frequencies, even large differences in use frequency typically result in minor differences in impact”. This finding has been supported by monitoring of the CPB permit which showed that an increase in annual visitation from 5,000 to 6,000 trekkers/year resulted in no change in the amount of impact.
- Monitoring has shown that the CPB volunteers positively influences visitor behavior to comply with the permit conditions. The likelihood of impact increases if the group size or use is too large for CPB to manage or users are not managed under the CPB permit.
- If the CPB permit were to be removed, visitor demand for the area will stay the same or increase.

3.1.2. Cumulative Impacts:

Cumulative impacts refer to impacts on the environment which result from the incremental impacts of the action when added to other past, present and reasonably foreseeable future actions. The Cumulative Impacts Analysis Area (CIAA) will be defined here for the sake of this analysis.

The geographic scope of the cumulative impact analysis ~~area includes~~ for most of the relevant issues is the entire National Trails Management Corridor within the Lander Field Office ~~the area referred to as the Lower Twin Creek Watershed (a 6th level hydrologic unit).~~ The cumulative impact area for the wildlife resource is a 2 mile buffer either side of the trek route.

The ~~NTMC is watershed~~ encompasses similar resource values, competing land uses, and areas that provided opportunities and needs for management actions. The ~~watershed~~ NTMC is the largest ~~CIAA~~ cumulative impact analysis area for all of the affected resources, so by analyzing cumulative impacts for the ~~watershed~~ largest area, all past, present, and reasonable foreseeable actions impacting other resources will be captured. ~~Therefore this unit provide a suitable cumulative impact analysis area.~~ The analysis applies to all BLM administered lands in this unit, the analysis will also consider past, present, and future actions occurring on private lands contained within the unit as well.

The following actions will be considered past actions to be considered for cumulative impact analysis:

- Disturbances from ~~historic oil and gas~~ mineral exploration, which began in the mid to late 1950s.
- ~~Disturbance from Derby Dome Oil Field, an existing oil field primarily on private land.~~
- Disturbances from facilities (fences, water developments) to facilitate livestock grazing.
- Increased utilization of motorized vehicles and a subsequent increase in the number of areas disturbed to accommodate these vehicles
- Increased presence of noxious/invasive weeds.
- ~~Vegetation treatments to enhance shrub species~~

~~Reasonable foreseeable actions planned in the Lower Twin Creek Watershed include:~~

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~~● Increased restrictions on all mineral extraction and exploration as a result of management decisions detailed in the Land Use Plan and the Governors Executive order for Greater sage-grouse.~~

- ~~● Increased restrictions to maintain visual resources~~
- ~~● Increased restrictions on Right of Ways~~
- ~~● Continued reclamation of oil and gas disturbances~~
- ~~● Continued treatment of Noxious/Invasive Species by BLM and Fremont County Weed and Pest~~
- ~~● Closure of the Johnny Behind the Rocks area to motorized vehicles~~
- ~~● Establishment of up to 50 miles of trail within the JBR area, estimated at approximately 12 acres of disturbance.~~
- ~~● Increased visitor use in Johnny Behind the Rocks, visitor use outside of JBR will increase slowly.~~
- ~~● Reduced motorized vehicle impacts as travel management decisions are implemented.~~

~~Most of the above items are actions or impacts detailed and analyzed during the Land Use Planning process for the Lander Field Office. The following issues represent the resources that show the highest likelihood of demonstrating cumulative impacts from the alternatives and past actions: Vegetation and Soil, and the undesirable spread of Noxious/Invasive Weeds, Riparian, Wildlife, and Cultural Resources~~

The BLM anticipates that realty and mineral activities in the entire NTMC will occur less frequently in the future than was the case in the past because the RMP limits those types of activities. In the period from 1987-2014, only a 0.25 mile buffer on either side of the trails was protected from development and none of the viewshed of the trail was protected. Current NTMC management is far more restrictive so as to protect trail resources including the trails' visual setting. The reasonable foreseeable management actions anticipated include:

- 1,123 acres and the ruts and swales of the trails and ten feet on either side are proposed for withdrawal from locatable mineral entry. Existing withdrawals including 833 acres at Rocky Ridge will be maintained.
- Open to oil and gas development subject to no surface occupancy (NSO)
- Closed to geophysical exploration
- Closed to phosphate leasing
- Mineral material sales are allowed only if they meet the nature and purpose of the trails
- Avoided for rights of ways except in designated utility corridors
- Electric transmission lines are allowed only in designated utility corridors
- Industrial scale wind energy development is not allowed
- Visual resource management class II

While existing oil and gas leases in the Bison Basin area of the NTMC are not subject to the NSO stipulation, they are subject to the five percent surface disturbance cap and the average of one energy development per square mile limit in RMP Decision 4109. Any proposed project will need to meet the visual resource Class II objectives which require that any level of change to the characteristic landscape will be low. A visual simulation will be required before any authorization will be granted so that the adverse impacts to the setting can be analyzed.

This management will restrict development; any development that occurs because of existing rights must be designed to be as unobtrusive as possible.

In addition, the NTMC has been identified by the BLM as an appropriate location for offsite mitigation to occur. If adverse impacts to public lands occur in other areas, the strong and permanent protections in the NTMC make it a suitable site for project proponents to improve any degraded areas in the NTMC. Mitigation projects would help to reduce or eliminate areas that have been damaged through prior actions.

Finally, the RMP has stated that it will retain in federal ownership all public lands currently owned and will seek to acquire additional lands from willing sellers if funds are available.

~~3.2. Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species~~ National Trails and Related Sites

~~3.2.1. Affected Environment of Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species~~ National Trails and Related Sites

~~For analysis purposes the vegetation sites of the JBR area can be grouped into two major categories shrubland/grassland and rockland /juniper.~~

~~Approximately 50% (2,637 acres) of the JBR area is characterized as shrubland/grassland. Shrublands consist of shrubs, grasses, and forbs including the various sagebrush species, antelope bitterbrush, skunk bush sumac, Needle and thread grass, and Indian ricegrass. Pocewicz et. al (2009) found that Basin Shrublands, such as those that exist within the JBR area, are one of the least protected and most threatened habitat types in Wyoming. These sites are important foraging habitats for domestic livestock and ungulates (such as antelope and mule deer) and provide year round habitat for numerous sage brush obligate species.~~

~~The remainder of the JBR area is characterized as a rockland/juniper vegetation site. This site consists of limited amounts of shrubs, grasses, and forbs, but is dominated by bare ground, rock, and/or juniper. These sites provide some hiding and thermal cover for a variety of species, but are not regarded to be as important as shrublands due to their low productivity and forage value.~~

~~General and detailed soil information for the JBR area can be found in the *USDA NRCS Soil Survey of Fremont County, Wyoming, Lander Area, 1980*. The soils of the area have been strongly influenced by the local geology, following zones of occurrence that parallel the Wind River Mountains trending from the northwest to the southeast.~~

Table 3.1. Affected Soils and Trail Limitation

Areas of Concern	Impacted Soil Name	Path and Trail Limitation
Johnny On Top Terminus	Cotha-Blazon-Rock outcrop association	Both of these soil types have features that are moderately favorable for paths and trails. Some limitation may exist due to slope steepness and/or the dustiness of the material.
Interior Between the Red Ridge Trail and the Dry Well Road	Thermopolis-Sinkson association	These limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected (USDA 1980)
Red Ridge Terminus		

The noxious/invasive species can spread by a number of vectors, but the most relevant vector to this analysis is unintentional transportation by trail users. Trail users can spread these species by accidentally collecting seeds on their clothing, equipment, and/or animals while traveling through an area with a seed source. The user or animal drops these seeds through gravity or stock defecation. The likelihood of these species establishing is then substantially increased in areas of disturbance and/or reduced native plant production and vigor.

JBR area has a variety of noxious and secondary weeds present. The noxious weeds present are: houndstongue (*Cynoglossum officinale*), leafy spurge (*Euphorbia esula*), hoary cress (*Cardaria draba* & *C. pubescens*), Russian knapweed (*Centaurea repens*), musk thistle (*Carduus nutans*), quackgrass (*Agropyron repens*), and Canada thistle (*Cirsium arvense*). Along the Highway 287 right-of-way can also be found perennial sowthistle (*Sonchus arvensis*) and spotted knapweed (*Centaurea maculosa*). Annual mustards and cheatgrass occur along the highway right-of-way, but also can be found along most dirt roads and areas of heavy historic livestock use.

The BLM weed control program in the Lander Field Office operates under a cooperative agreement with the Fremont County Weed & Pest District for noxious weed treatment, inventory, monitoring, and record keeping. Further, this area is part of the Popo Agie Weed Management Area (PAWMA) which operates under an interagency Memorandum of Understanding and a strategic Weed Management Plan.

A description of the four National Historic Trails (NHTs) and major sites near the project area follows here:

Introductions

National Historic Trails (NHTs) and related sites are present within the project area, and their presence is a major factor in this EA. The affected NHTs are the Oregon NHT, the Mormon Pioneer NHT, the California NHT, and the Pony Express NHT. These four NHTs all follow the same route through this part of Wyoming and do not diverge from each other until they are well over the Continental Divide in southwestern Wyoming. This means that all of the 350,000+ people and million+ animals who traversed these trails in the mid-1800’s passed over the same track and route within the project area.

The NHTs are nationally significant resources that have been afforded a high degree of protection by the BLM. Brief descriptions of each of the affected NHTs and each of affected NHT related site follow here:

The National Historic Trails Corridor

The Oregon, Mormon Pioneer, California, and Pony Express NHTs are four nationally significant historic trails that follow the Sweetwater River from Independence Rock to Burnt Ranch. These

trails mark the mid-1800s period of mass migration for pioneering Americans who headed west. The Congressional designation of these trails as NHTs reflects their nationally recognized status as symbols of one of the most important and influential movements of people in United States history.

The four routes converge onto one general route and are managed as a unit through much of Wyoming, including in the current analysis area. The NPS and the BLM have long described the Oregon, Mormon Pioneer, California, and Pony Express Trails and its variants in central and western Wyoming as some of the best remains of these NHTs left in the United States. These trails include long stretches of well-preserved ruts, swales, and mostly intact historical settings. In fact, the entire section of the four NHTs within the Sweetwater Valley was designated as a High Potential Segment, which deserves the highest level of protection and preservation.

The Oregon National Historic Trail

The Oregon NHT is a portion of the transcontinental route that was a migration route for prehistoric and early historic groups, and later became the main highway for European-American emigrants looking for new land and a new beginning in the largely unsettled western territories. This westward movement occurred primarily from the 1840s through the 1860s, but the Oregon Trail remained in use as a wagon trail as late as 1912. Estimates of the number of pioneers who used the trail range from 350,000 to 500,000. Most of the emigrants traveled with wagon trains, spending an average of 6 months walking and riding over the arduous route. At least 20,000 people died along the various emigrant trails during this period.

The use of the Oregon Trail and its contribution to settlement and development in the west are an important part of American history. Congress recognized this in 1978 by designating the Oregon Trail as an NHT. Under this status, the federally administered portions of the Oregon NHT are protected from unwarranted impacts and are maintained for public enjoyment and use. The entire section of the Oregon Trail within the current study area is designated as a High Potential Segment, which deserves the highest level of protection and preservation.

The Mormon Pioneer National Historic Trail

In the midst of the migration to Oregon and California, there was a smaller migration headed toward Utah. Most of these emigrants were Mormons (members of the Church of Jesus Christ of Latter-Day Saints), which was founded in 1830. The Mormon emigrants' goal was to get to the Great Salt Lake Valley, where the new center of the Mormon Church had been established.

In 1846/1847, an advance party led by church leader Brigham Young headed west from Illinois and chose their new home in the Great Salt Lake Valley. The route these first pioneer Mormons used is the Mormon Pioneer NHT. In the two decades following their pioneering trek, thousands of Mormons from the eastern United States and Europe traveled to Utah to live in the Great Salt Lake Valley.

The route the Mormons used to get as far as mid-Nebraska differed from the Oregon Trail, but when the two trails met on the Platte River they basically followed the same route from there to Fort Bridger in southwest Wyoming. The Mormon Pioneer Trail complements the Oregon Trail as a major symbol of the nation's expansion. Whereas the Oregon Trail contributed to development in the far western states, the Mormon Pioneer Trail was one of the major factors in the initial development of the interior West. Congress observed the importance of the Mormon Pioneer Trail by designating it as an NHT in 1978. As with the Oregon Trail, the Mormon Pioneer Trail is now afforded protection from unwarranted disturbances and is maintained for public enjoyment and

The entire section of Mormon Pioneer Trail within the current study area is designated as a High Potential Segment, which deserves the highest level of protection and preservation.

The California National Historic Trail

Following the Oregon Trail to Fort Bridger, and then continuing west through Utah and Nevada, a small number of emigrants blazed trails into California as early as 1841. In 1846, the number of people headed to California is estimated to have been about 1,500. In 1848, gold was discovered in the Sierra Nevada Mountains of California, and by 1849, those moving to California exceeded those headed for Oregon. In 1850 alone, an estimated 44,000 emigrants arrived in California, and as many as 250,000 people traveled the California Trail from 1841 through 1868.

The California Trail complements the Oregon Trail as a symbol of our nation's expansion. Emigration along the California Trail established a 2,400-mile transportation, commerce and communications route and helped secure the West for the United States. Therefore the trail's social, political, and economic contributions to the fledgling United States are highly significant.

Congress observed the importance of the California Trail by designating it an NHT in 1999. As with the Oregon and Mormon Pioneer Trails, the California Trail is now afforded protection from unwarranted disturbances and is maintained for public enjoyment and use. The entire section of the California Trail within the current study area is designated as a High Potential Segment, which deserves the highest level of protection and preservation.

The Pony Express National Historic Trail

By 1860, the population and commerce of the West had grown, civil war loomed, and fast, reliable communications between East and West became critical. The freighting firm of Russell, Majors & Waddell, hoping for a profitable federal postal contract, devised a relay system of riders, stations, and stock handlers to move light mail quickly between St. Joseph, Missouri, and San Francisco. This system, popularly known as the Pony Express, launched on April 3, 1860.

Although the Pony Express was efficient and popular, it was not profitable due to high overhead costs, and the enterprise never secured a government contract. It was also not competitive with transcontinental telegraph route, which was substantially completed in 1861. The Pony Express was forced to discontinue service in November 1861, after operating for only a year and a half.

Nevertheless, the Pony Express is significant in American history because it proved the viability of an all-season, central overland route for fast communications between East and West; it played a vital role in aligning California with the Union; and it ensured timely transcontinental communications during the first year of the Civil War before completion of the transcontinental telegraph (NPS 1999).

The Pony Express Trail follows the Oregon Trail through the current study area. Although driven out of business by the transcontinental telegraph after a year and a half, it remains part of our national history as an important American achievement. Congress observed the importance of the Pony Express Trail by designating it an NHT in 1999. As with the other NHTs, the Pony Express NHT is now afforded protection from unwarranted disturbances and is maintained for public enjoyment and use. The entire section of the Pony Express Trail within the current study area is designated as a High Potential Segment, which deserves the highest level of protection and preservation.

Important Trail Related Sites

Sixth Crossing

Sixth Crossing is one of the nine crossings of the Sweetwater River that the emigrants had to endure during their trip through the Sweetwater Valley. Sixth Crossing is in the vicinity of modern Sweetwater Station, and was an important camping spot for the emigrants. It is at the beginning of the current study area, and is currently owned and managed by the LDS Church .

Sixth Crossing is especially important in LDS Church history because it is the location where the Willie's Handcart Company, travelling much too late in the season, was first met by rescuers from Salt Lake City. By the time the Willie's Company got to Sixth Crossing, in late October of 1856, they could go no further. At this point, they were starving, exhausted, and suffering from exposure, and had already lost many in their company. They camped in the willows by the river, and suffered several more deaths while there. The rescuers, who showed up on October 21, helped them to keep moving toward Salt Lake City, and on November 9 the survivors finally made it to the Salt Lake Valley.

After the emigration period, this area was settled by ranchers, who used the river bottoms to grow hay and the surrounding uplands to graze their livestock. Today, the LDS Church operates a visitor's center, campground, missionary village, a trekking loop trail, and a working ranch.

Rocky Ridge

Rocky Ridge is a historic site associated with all four of the NHTs, and is located about halfway from Sixth Crossing to the end of the current study area at Rock Creek Hollow . Rocky Ridge was a landmark of a different sort for the emigrants. This area, approximately 12 miles southwest of Sixth Crossing, was a spot where the emigrants were forced to leave the lowlands along the Sweetwater River and cross a high, barren and rocky ridgeline north of the river. Many of the pioneers' diaries speak of the rough, jarring ride they endured and the difficulty of the steep climb over the ridge. The area today still exhibits rust stains on the rocks from the iron-tire wheels of the early wagons. The Rocky Ridge area is isolated and retains much of its historical and natural character.

After the 1870s, Rocky Ridge reverted to minimal use by ranchers, hunters, and trail enthusiasts. However, in the 1990s, commemorative anniversary wagon trains increased the popularity of the NHTs and Rocky Ridge, and use began to increase. By 2000, use of Rocky Ridge had increased dramatically, and the site began to be adversely affected. By 2005, vehicle use over Rocky Ridge had been prohibited, and non-vehicular use was beginning to be better managed to protect the historical character of the site. At present, use is being carefully monitored, and the site appears to be stable and starting to heal.

Radium Springs (early 1840's-1869)

Gilespie Place is a historic site associated with the four NHTs and later mining and settlement history of the area. This site is located along the Oregon/Mormon/California Trail, just east of the historical mining camp of Lewiston. Gilespie Place consists of two standing structures, several foundations with wall remains, and a flowing spring. The site, located along a major transportation route, was associated with several historical events of Wyoming's early territorial and state history.

The earliest historical use of the site probably occurred during the Oregon/Mormon Pioneer Trail era, when emigrants passed through the region in the 1840s. Although there are no known emigrant-diary accounts of this site, the site's spring (Radium Spring) was probably often used as

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In addition, there was probably some overnight emigrant camping at the site.

Radium Spring probably continued to be used by travelers over the entire emigrant trail era. In the 1880s, mineral exploration began in earnest in the Lewiston Mining District, which included the Radium Spring area. Although no records are available, there was probably some small-scale exploration in the local area.

Structures were built at the site after the turn of the 20th Century, but there is no record of exactly when they were constructed. Artifactual evidence points to pre-1920s dates of occupation for at least some of the structures.

Rock Creek Hollow (early 1840's-1869)

Rock Creek Hollow is a historic site mostly associated with the Mormon Pioneer NHT . This site (formerly known as Willie's Handcart Rescue Site) was one of the locations where the Willie's Handcart Company took shelter after being rescued in the fall/winter of 1856. The hollow, located approximately 6 miles west of Giles Pie Place, lies in the narrow floodplain of Rock Creek, near the spot where the Oregon/Mormon/California Trail crosses the creek.

Rock Creek Hollow commemorates the disaster that happened to the Willie's Handcart Company in October and November of 1856. The same storm that trapped the Martin's Handcart Company also overtook Willie's Handcart Company. The Willie's Company was overtaken by the storm and took shelter in several different areas, including Rock Creek. More than 70 people from this company died during the disaster, including several people at Rock Creek.

Following the emigration period, Rock Creek was probably explored as part of the 1870's South Pass gold mining boom, and placer exploration undoubtedly occurred along it. In the 1930's and 1940's, a major dredging operation to extract gold from the bottom of the creek extended from Atlantic City all the way to Rock Creek Hollow. Its large dredging piles of soil and cobbles can still be seen just north of the Rock Creek Hollow campground. The Mormon Church has developed the private land at this site as a religious/historical site, and a campground, but the BLM portion to the south is mostly untouched and appears much as it did in the 1850s.

Other National Trail related sites

A files search came up with 17 other National Trail related sites, mostly historic artifact scatters that signify some type of event along the Trails during their period of use. More trail related sites are expected to be present throughout the project area, even though artifact collecting of these types of sites has occurred since the mid-1800's.

Post-Emigration Period Use and Condition of the NHTs

Since the 1870's, use of the NHTs dropped dramatically because other quicker modes of transportation (such as the transcontinental railroad) became possible. Once the emigrant traffic dropped, the NHTs became regional or local transportation routes used mostly by ranchers, miners, and local commercial traffic. After 100 years of this low use, the damaged lands along the NHTs have largely healed, although they still exhibit many scars from the emigration period. It wasn't until the late 1990's that use started to increase again, this time due to a rediscovery of the NHTs by modern heritage tourists. LDS Church members especially came to view the NHTs as areas to follow the footsteps of the pioneer emigrants and experience some of the hardships the emigrants encountered as they slowly moved across central Wyoming.

By 2005, the heavy heritage trekking and overuse in the project area was adversely impacting the NHTs in several different ways.

- Trail ruts, traces, and fringes were being widened, deepened and trampled by high amounts of foot and vehicle traffic;
- Vegetation and soils around staging and toilet areas were being trampled, disrupted and denuded;
- The visual and audible settings of the NHTs (usually ones of solitude and remoteness) were being disrupted by high numbers of visitors, port-a-potties stations, vehicles, and even the introduction of portable sound systems.

To deal with this overuse, in 2005 the BLM instituted a NHT trekking permit system with several conditions to reduce or eliminate impacts to the NHTs

- Trek leaders and escorts were trained to ensure that the NHTs were cared for and not unduly impacted
- The number of trekkers on the NHTs per day and per season was regulated;
- The days of use for organized treks were regulated;
- Trekkers on the NHTs were not allowed wander off of the established trail track;
- Locations and use of staging areas, rest stops, toilet facilities, and camping areas were regulated;
- The numbers of vehicles supporting the trekkers was reduced as well as not allowed on the NHTs;
- The route over Rocky Ridge was closed to all vehicle traffic;
- And finally, a monitoring program was instituted to measure impacts on trail ruts and traces over the heavy trekking segment;

Soon after the permit and monitoring program were instituted, impacts to the NHTs in the project area began stabilizing, and this stabilization has continued up into 2015.

The group use zone encompasses a roughly 25-mile stretch of the NHT route. This 25-mile stretch runs from Sweetwater Station to Rock Creek, in central Wyoming. According to BLM condition class mapping, the condition of the NHTs route in the area is very good – mostly two track trails (often combined with ruts and swales) with vistas that are not much changed from the mid-1800's. A few segments of the NHT route in the project area have been impacted by 1950's-1970's blading or other impacts, and these segments are considered to be in poor or fair shape.

~~3.2.2. Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites~~ **under Alternative A- No Action:**

~~3.2.2.1. Direct and Indirect Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites~~ **under Alternative A- No Action:**

~~Alternative A does not authorize the construction of trails and therefore results in no initial disturbance to vegetation and soils. However, since this alternative does not provide visitors the access, connectivity, or experiences they desire, adverse impacts to vegetation and soils are expected to result from wandering visitors attempting to connect the trail system (Widman, 2010).~~

~~Under Alternative A, 148 acres within the three areas of concern will continue to be impacted by social trailing and vegetation trampling. Eventually a trail will establish, but it is predicted that without proper design the trail will have several unsustainable sections and therefore braiding will occur either side of the trail caused by users avoiding rutted, muddy, sandy, or impassable sections of trail. It is estimated that an area greater than 0.66 acres of shrublands will be damaged as a result of this alternative. This is an area somewhat larger than 1/2 of an American football field. These areas will experience reduced native vegetation diversity and vigor, as well as increases in less desirable plants and noxious/invasive species.~~

~~The entire 148 acres could be susceptible to soil disturbance in the form of compaction, displacement, and loss of soil fertility. Since this alternative does not include specialized planning, design, or installation of a trail it is predicted that several unsustainable social trails will result in further soil loss through erosion and gullying.~~

~~The impacts to vegetation and soils will decrease native vegetation and vigor, as well as cause further loss of soils. These impacts will cause several sites to be vulnerable to the establishment of noxious and invasive species. Transport of seeds is more likely in this alternative as visitor traveling off trail will be more likely to collect and carry seed sources on their clothing, equipment, or animals. This decrease of native rangeland productivity, vigor, and fertility coupled with human travel will increase the presence and spread of undesirable noxious and invasive species.~~

With a change from one well-regulated permit of 6000 people to many small groups trekking under individual trekking permits, there will be a lack of knowledge about sensitive resources, plus a lack of supervision under this alternative. That could increase threats to National Trails and related cultural resources – from damage to the National Trails to the collecting of NHT related artifacts. For instance, trekkers without proper supervision could easily cause damage to NHT ruts, swales, and surrounding vegetation by veering off of the established route, making new routes, or by travelling during wet times when new impacts to the ruts and swales would more easily occur.

Rocky Ridge has already suffered from visitors moving loose rocks away from the trail route and by the trampling down of soils and vegetation while stopping at the “Lower Monument” and the “Upper Monument”. This type of impact could easily increase in the future if proper supervision is lacking. Similarly, in the early 2000’s, some groups managed to travel the route during wet periods and caused impacts to historic ruts and swales. The strong possibility that these groups would likely rest and camp in new areas along the project route would also have an expected

detrimental effect to NHT related cultural resources. The chances of people wandering around these new areas, finding NHT related resources, and damaging them is expected to increase under this alternative.

Impacts could also occur from the collection of NHT related artifacts. It would be very difficult for the BLM to train all of the various individual trek leaders to successfully enforce stipulations designed to protect NHT related resources.

Under this alternative, the BLM would also experience reduced funding for monitoring activities on the trekking routes, because less user fees would be collected from the smaller groups. This would likely contribute to an increase of impacts to NHT related cultural resources.

The lack of restrictions on the time of year that groups could conduct treks could also have a detrimental effect on NHT related resources. Groups trekking in June or even May would have a higher potential for damaging NHT ruts and swales if the weather was wet or snowy.

3.2.2.2. Cumulative Impacts to ~~Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species~~ National Trails and Related Sites under Alternative A- No Action:

The 2014 Lander RMP's extensive protections for NHT related resources will minimize new surface disturbing activities, including limitations on roads and surface occupancy and development of oil and gas (see above under Section 3.1.2). Any disturbances that are authorized will also need to conform to visual resource management Class II objectives. Because of the very limited potential for adverse impacts to both NHT and non-NHT related activities, the BLM did not identify any cumulative impacts that needed to be analyzed under any alternative.

3.2.3. Impacts to ~~Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species~~ National Trails and Related Sites under Alternative B:

3.2.3.1. Direct and Indirect Impacts to ~~Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species~~ National Trails and Related Sites under Alternative B:

Under the constraints detailed in Alternative B, impacts to National Trail related cultural resources are expected to be less than in Alternative A, but more than Alternative C. This is because, under its current permit, the LDS Church has developed a structure of rules and guidelines that have been successfully implemented to protect NHT related resources along the project route. This includes insuring that the trekkers do not stray off the NHT they are walking on, and instilling in them a sense of wanting to protect the surrounding landscape and resources they see. Although Alternative B would immediately increase the total number of trekkers and the group sizes traveling over the landscape, the likelihood for impacts to NHT related resources is moderate-to-low. This is because the LDS Church would still maintain the level of compliance and respect that they have now. This statement is predicated on the assumption that the Church would commit to increasing the number of supervisors on the treks, if necessary to handle larger numbers of trekkers.

Chapter 3 Affected Environment and Environmental Consequences

Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites under Alternative B:

The higher allowable levels of impacts to NHT ruts, could allow more impacts under Alternative B than Alternative C to occur before BLM would react and attempt to reduce effects.

~~Since Alternative B results in the least amount of social trailing or off trail travel, it will also have the least amount of disturbance in shrubland/grassland vegetation communities. As such it is anticipated that Alternative B will result in a total of 0.15 acres of disturbance to shrubland/grassland communities, which is an area less than 1/10 of an American football field.~~

~~Alternative B will result in the displacement of 176 cubic yards of topsoil due to trail bed construction activities. Some of the topsoil will be scattered down hill of the construction site, while some of it will be reused to assist with rehab of unused trails and/or located in areas where it will not impact important shrublands. Alternative B includes specialized planning, design, and installation of a trails which will result least amount of soil loss due to erosion.~~

~~Alternative B will cause some sites directly adjacent to the trail to be vulnerable to the establishment of noxious and invasive species. However, since this alternative results in the least amount of off trail travel and provides users with a path clear of vegetation, collection and transport of seed sources is less likely in this alternative than Alternative A. In addition, treatment of the trail corridor by Fremont County Weed and Pest will be more effective and regular than the social travel areas resulting from Alternative A.~~

3.2.3.2. Cumulative Impacts to ~~Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species~~National Trails and Related Sites under Alternative B:

~~The cumulative impacts documented for Alternative B will be similar to those documented for Alternative A, except the magnitude of the additive impact of Alternative B to the CIAA will be less than that from Alternative A. The Cumulative Impacts to National Trails and Related Sites under Alternative B will be the same as those detailed for Alternative A.~~

3.2.4. Impacts to ~~Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species~~National Trails and Related Sites under Alternative C:

3.2.4.1. Direct and Indirect Impacts to ~~Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species~~National Trails and Related Sites under Alternative C:

~~Alternative C authorizes construction of 0.53 miles of new trails resulting in approximately 0.85 acre of initial vegetation disturbance in the form of vegetation removal within the construction corridor, as well as reduced water storage capacity and vigor directly adjacent to the trail. This alternative utilizes the longest distance of existing social trails including some sections of unsustainable trail. Social trailing is expected to occur on either side of three unsustainable section of trail along the interior and the Red Ridge terminus trails. Typically social trailing to avoid rutted, eroded, or muddy trail sections occurs 10 feet either side of a trail (Lezberg 2011), therefore an additional 0.57 acres under Alternative C will receive impacts to vegetation and soils resulting from visitors attempting to circumvent these unsustainable sections.~~

Under the constraints detailed in Alternative C, impacts to National Trails and related cultural resources are expected to be less than in Alternatives A and B. This is because the performance thresholds under Alternative C are more strict than those under alternative B. Alternative C also has mechanism that would incrementally increase the total number of trekkers and the group sizes over a 5 year period, with yearly monitoring to quickly discern if new impacts are occurring. For this reason, the chance for impacts to NHT related resources is low-very low. This is because the BLM believes that 1) the LDS Church would be still able to maintain the level of compliance and respect that they have now, and 2) the monitoring would quickly show if new impacts were occurring, and these could quickly be addressed. As with Alternative B, this statement is predicated on the assumption that the Church would commit to increasing the number of supervisors on the treks if necessary to handle larger numbers of trekkers.

~~Alternative C will disturb 0.66 acres shrubland/grassland vegetation communities, which is an area equivalent to 1/2 of an American football field. These areas will demonstrate reduced native vegetation diversity and vigor, as well as increases in less desirable plants and noxious/invasive species. Alternative C disturbs less shrublands than Alternative A, but more than Alternative B.~~

~~Alternative C will result in the displacement of 77 cubic yards of topsoil due to trail bed construction activities. Some of the topsoil will be scattered down hill of the construction site, while some of it will be reused to assist with rehab of unused trails and/or located in areas where it will not impact important shrublands. Alternative C has some trail sections that will not be established through specialized planning, design, and installation which will result in some soil loss due to erosion.~~

~~Alternative C will cause some sites directly adjacent to the trail to be vulnerable to the establishment of noxious and invasive species. Since this alternative will provides users with a path clear of vegetation, seed transport will be less likely in this alternative than Alternative A. In addition, treatment of the trail corridor by Fremont County Weed and Pest will be more effective and regular than those social travel areas resulting from Alternative A.~~

~~Off trail travel to avoid unsustainable sections will decrease native vegetation and vigor, as well as cause further loss of soils. These impacts will cause these localized sites to be vulnerable to the establishment of noxious and invasive species. Transport of seeds is less likely in this alternative than Alternative A, but will occur at a higher rate than Alternative B. Visitors who do travel off trail will be more likely to collect and carry seed sources on their clothing, equipment, or animals than Alternative B. This decrease of native rangeland productivity, vigor, and fertility coupled with human travel will increase the establishment and spread of undesirable noxious and invasive species.~~

3.2.4.2. Cumulative Impacts to ~~Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species~~ National Trails and Related Sites under Alternative C:

~~The cumulative impacts documented for Alternative C will be similar to those documented for Alternative A, except the magnitude of the additive impact of Alternative C to the CIAA will be substantially less than that from Alternative A, but more than B. Alternative C will result in cumulative impacts that are the same as Alternatives A and B.~~

Chapter 3 Affected Environment and Environmental Consequences

Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites under Alternative C:

~~3.3. Twin Creek Riparian Resource~~ Visual Resource:

~~3.3.1. Affected Environment of the Twin Creek Riparian Resource~~ Visual Resource:

~~In the JBR area there is a private spring source and wet meadow system that feeds into Twin Creek through a culvert that runs underneath US Highway 287. The Wyoming Department of Environmental Quality found the Twin Creek drainage to have excess sediment, which causes the drainage not to support portions of its DEQ designated use of cold water game fisheries, non game fisheries, and aquatic life other than fish.~~

~~The spring source is impacted by heavy grazing from domestic livestock, motorized vehicle traffic, and trail users. Each of these uses displace soil into the spring source and reduce soil stabilizing vegetation, which then contributes to sediment loads in Twin Creek. The impacts from trail users is a result of a lack of connectivity between the Johnny On Top trail and the main JBR parking lot.~~

~~Currently visitors who are trying to connect the JOT trail to the JBR parking lot cross this spring source. This crossing distance is approximately 100 feet. Visitors traveling through this spring source wander in an attempt to cross the saturated soils, in doing so, they increase the amount of sediment in the water system and trample vegetation essential to soil stability.~~

~~This existing condition is not in compliance with Land Use Plan which states:~~

~~Take appropriate actions to protect all Wyoming surface water designated uses including but not limited to fisheries, aquatic life, drinking water supplies, recreation, and agriculture, and to control all potential causes of impairment.~~

The area of the trekking permit is located within a Class II Visual Resource Management area. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

The Lander RMP exempted temporary structures from VRM analysis and stipulations, but within the NHT corridor the RMP provided an additional objective for the visual environment of the NHT which stated:

“Manage the landscape (viewshed) associated with the NHTs so that visitors continue to get a sense of how this landscape influenced emigrants along the trails.”

The viewers capability to detect human caused disturbance to visual resources is directly correlated to the level at which the structure or disturbance contrast with the natural landscapes form, line, color, and texture. Modern structures that have high amounts of contrast can be seen from long distances and then modernize the experience further by introducing visible elements that are seen in urban areas. For these reasons and for analysis purposes, it will be assumed that as the level of contrast increases, so to does the likelihood that the disturbance detracts from the visitors ability to get a sense of how the landscaped influenced emigrants along the trail. This analysis will utilize the visual resource contrast rating process to determine the level of contrast created by temporary structures.

At 5 support locations along the trekking route, the CPB is authorized to place temporary port-a-potty structures to provide for human waste services. These port-a-pottys receive a façade treatment in order to make the structures appear like the rustic mining shacks within the area. The characteristic environment of the locations of the 5 temporary structures is variable but rather typical of Wyoming Basin Physiographic province. The area is generally described as some rolling hillsides dominated by sage grays and earthen browns. The grays and browns are intermittently broken by bands of green. The horizon line is a very dominant line within the viewshed and attracts the viewer's attention. The National Historic Trail and other two-tracks create a line that focuses the viewers attention down the route to the strong skyline. Any exposed area or disturbance appears earthen brown however, if herbaceous vegetation is still present at the site the area will present a strong tan color. These disturbance areas are patchy and irregular in shape, sometimes the roads contain a band of disturbance along either side of the track.

3.3.2. Impacts to the ~~Twin Creek Riparian Resource~~ Visual Resource under Alternative A- No Action:

3.3.2.1. Direct and Indirect Impacts to the ~~Twin Creek Riparian Resource~~ Visual Resource under Alternative A- No Action:

~~As visitor use increases over time it is projected that Alternative A will result in a long term increase in the amount of sediment being fed into Twin Creek by the private spring source. Visitor use in this wet area will lead to erosion, soil compaction, sedimentation, multiple trails where only one is needed, and unhappy trail users. In addition, travel in saturated soil areas causes problems for users, who then tend to wander in order to avoid water and mud holes. The wandering nature of this use increases the area being damaged. Visitors will disturb soil and trample soil stabilizing vegetation which increasing turbidity. This increase in sedimentation and lack of action to address problems associated with a riparian resource will not comply with the Land Use Plan.~~

Prior to the establishment of the CPB permit, numerous small groups conducting reenactment activities placed standard port-a-pottie facilities at the predetermined location displayed on Map A.1, "Trek Route and Support Locations". It is assumed that under this alternative the same situation would occur on a random basis for several short time periods during the season. These port-a-potties will not receive the façade treatment currently applied and therefore will be a light tan with a white roof but could also be blue or gray.

Since Alternative A has many small permittees that will not have the resources to place façade on their port-a-potties, the level of contrast introduced by these structures will detract from the visitor experiences and introduce an obvious modern intrusions that could be seen for long distances. The port-a-potties will create a strong color contrast, a moderate texture contrast, and introduce multiple vertical line elements into an environment that is dominated by horizontal lines. In total the current visual impact of the temporary structures constitutes a short term moderate contrast.

3.3.2.2. Cumulative Impacts to the ~~Twin Creek Riparian Resource~~ Visual Resource under Alternative A- No Action:

~~This alternative will increase turbidity and sedimentation in the entire CIAA.~~

Chapter 3 Affected Environment and Environmental Consequences

Impacts to the Twin Creek Riparian Resource Visual Resource under Alternative A- No Action:

The extensive protections for visual resources within the National Historic Trail Corridor directed by the Lander RMP will minimize new visual contrast to the trail viewshed. Some new contrast may occur in the area of designated ROW corridors near Jeffrey City, but this contrast will be collocated with similar man-made structures on the landscape.

Since there will be a lack of new landscape contrast in the trails corridor, users will continue to get a sense of how this landscape influenced emigrants along the trails. However, under this alternative the level of contrast of the temporary port-a-potties will reduce this opportunity in the area surrounding these facilities and during the time period that these facilities are out on the landscape.

3.3.3. Impacts to the ~~Twin Creek Riparian Resource~~ Visual Resource under Alternative B:

3.3.3.1. Direct and Indirect Impacts to the ~~Twin Creek Riparian Resource~~ Visual Resource under Alternative B:

Alternatives B and C both allow for the short term installation of port-a-potties with façades that resemble an old miners cabin (see Appendix D, *Photo of Temporary Outhouse*). These façades are located in 5 areas. Each of these areas are locations where the trail is bisected by an access road. This allows the pumping and maintenance trucks to access the facility without driving on the NHT. The façades are created from round timbers and have a half roof that covers all port-a-potties. ~~By connecting the JOT trail to the JBR parking lot this alternative will reduce the amount of visitor use across the private spring source which will result in a reduced amount of sediment being carried into Twin Creek. As a result this alternative will have a beneficial impact to the Twin Creek riparian resource. The spring source will continue to contribute sediment into Twin Creek as a result of the other uses (documented in the affected environment) that are not within BLM's control.~~ No part of the port-a-potty can be seen from the trail.

The color of the façades and the shadows created by the 3-D texture repeats the colors of the natural environment. The scale and form of the façades in the sagebrush landscape do create a moderate contrast particularly when the viewer is close, but as the viewer moves away the façade's color allows them to be backdropped by larger landforms. Linear vertical elements are introduced at each corner, but the majority of the structure is dominated by the horizontal lines created by the wood log surface. These horizontal lines repeat the direction of the dominant skyline and therefore cause the structure to only create a low contrast with the existing lines of the landscape.

Overall the contrast of the façades is dependent upon the distance of the observer. At close distance (100 yards or less) the contrast level is moderate, but after 100 yards the contrast moves to low and eventually becomes unnoticeable. The character of the intrusion mimics other log structures in the area and therefore is not as out of place as port-a-potties without a façade. Alternative B is less likely to detract from the visitor experience and introduces less of a "modern intrusion" than Alternative A.

3.3.3.2. Cumulative Impacts to the ~~Twin Creek Riparian Resource~~ Visual Resource under Alternative B:

~~This alternative result in no net increase in turbidity and sedimentation in the CIAA.~~

The façades deployed under this Alternative and the extensive protections for visual resources within the National Historic Trail Corridor directed by the Lander RMP will minimize new visual contrast to the trail viewshed. Some new contrast may occur in the area of designated ROW corridors near Jeffrey City, but this contrast will be collocated with similar man-made structures on the landscape. Since there will be a lack of new landscape contrast in the trails corridor, users will continue to get a sense of how this landscape influenced emigrants along the trails.

3.3.4. Impacts to the ~~Twin Creek Riparian Resource~~ Visual Resource under Alternative C:

3.3.4.1. Direct and Indirect Impacts to the ~~Twin Creek Riparian Resource~~ Visual Resource under Alternative C:

The ~~beneficial~~ impacts to the ~~Twin Creek Riparian resource~~ Visual Resource will be the same under Alternative C as those detailed for Alternative B.

3.3.4.2. Cumulative Impacts to the ~~Twin Creek Riparian Resource~~ Visual Resource under Alternative C:

The cumulative impacts to the ~~Twin Creek Riparian resource~~ Visual Resource will be the same under Alternative C as those detailed for Alternative B.

3.4. ~~Wildlife Recreation Experiences and Benefits (including special status species):~~

3.4.1. Affected Environment:

~~The JBR area is home to numerous wildlife species including big game, small mammals, songbirds, and reptiles. Species utilizing the area are typically sagebrush or juniper obligates. The species and their habitat most likely to be affected by this action are contained in the table below:~~

Table 3.2. ~~Affected Wildlife Species and Associated Habitats~~

Name	Affected Habitat Description
Pronghorn Antelope	<p>The JBR area provides year long habitat for pronghorn antelope. Antelope typically prefer flat to gentle rolling topography, but also sometimes occupy areas with an intermixing of ridges and drainages. Since antelope count on their eye sight and extreme speed burst to elude predation, the shrublands of JBR provide both cover and foraging habitat. In contrast the juniper rocklands are avoided in most circumstances, but may be used as transition areas.</p> <p>Studies in Wyoming indicate that big sagebrush (<i>Artemisia tridentata</i>) occupies up to 90% of the diet of wintering pronghorn antelope. During summer the pronghorn diet becomes more balanced with a mix of rabbit brush (<i>Chrysothamnus sp.</i>), big sagebrush, and other grasses and forbs. (Cook, 2002)</p>

Mule Deer	<p>The JBR area provides year long and crucial winter habitat for mule deer. Mule deer utilize the cliff bands and juniper thickets of JBR for thermal cover both for shade from the hot summer sun and escape from the cold winter temperature. In contrast the shrublands of JBR provide important foraging habitat.</p> <p>Studies conducted in Wyoming indicate that the following plants (occurring at JBR) are especially important to mule deer in winter: sagebrush (<i>Artemisia spp.</i>), antelope bitterbrush (<i>Purshia tridentata</i>), and rabbitbrush (<i>Chryosthamnus sp.</i>) Conversely shrubby cinquefoil (<i>Potentilla fruitecosa</i>) and a variety of forbs are important to mule deer during the summer. (Olson, 1992)</p>
Special Status	
Ferruginous Hawk	<p>Ferruginous hawks hunt prey that occupy basin prairie shrubs and grasslands. Rock outcrops provide perching and nesting habitat for this sensitive species.</p>
<p>Sage brush obligates:</p> <p>Greater Sage grouse</p> <p>Sage Thrasher</p> <p>Loggerhead Shrike</p> <p>Sage Sparrow</p> <p>Brewer's Sparrow</p> <p>Pygmy rabbit</p>	<p>The four bird species occupy basin prairie shrubs. While the pygmy rabbit will also occupy the basin prairie and riparian shrubs. These areas provide breeding, foraging, and cover habitat for these species. As discussed earlier in the document the areas affected by the alternatives are not considered suitable sage grouse habitat. However, the JBR area may provide some occasional transition habitat for these birds.</p>
Other Migratory Birds	<p>Migratory birds occupy a myriad of habitat types but those potentially affected in the JBR area are those who occupy basin prairie shrub species.</p>
<p>Special Status Plant:</p> <p>Fremont Bladderpod</p> <p>Rocky Mountain Twinpod</p>	<p>The Fremont Bladderpod prefers rocky limestone slopes and ridges between 7000' - 9,000' in elevation.</p> <p>The Rocky Mountain Twinpod prefers sparsely vegetated, rocky slopes of limestone, sandstone or clay between 5,600' - 8,300' in elevation</p>

The wildlife of JBR is very dependent upon the shrubland/grassland vegetation communities, and therefore a disturbance in these communities constitutes a direct adverse impact to wildlife habitat. Some existing habitat disturbances in the JBR area include: constructed trails, user created trails, roads, noxious/invasive weeds, livestock grazing and trailing, and reclaimed oil and gas.

Over the last 5 years visitation to JBR has increased the instances of wildlife disruptions from visitors has also increased. Wildlife can be disrupted by visitors if they encounter, hear, or smell recreational users. These disruptions tend to spike with the heavier use season of JBR in the spring and fall. Life cycle disruptions also occur during the winter months but at a much lower rate than the high visitor use seasons. It is anticipated that these disruptions may cause wildlife to displace to areas away from a trail or parking lot.

As stated earlier in the purpose and need of this document, the CPB permit takes place in an area recognized by the Lander RMP as the Group Reenactment Zone of the National Trails Destination SRMA. The outcome objective for this zone provides clarity as to the future recreation management direction for the area. The objective is stated below:

Objective: *Sustain or enhance the Group Reenactment RMZ (37,241 acres) for organized groups and other trail enthusiasts to engage in cultural site visitation and/or learning, photography, and historic reenactments, so that participants in visitor assessments/surveys report a higher*

than average (mean average of 4.0 on a 5-point scale) realization of the experience and benefit outcomes listed below:

- **Experiences:** reflect on personal values, gaining an experience one can look back on, and teach and learn about history here.
- **Benefits:** Increased opportunities for youth, greater spiritual growth, greater appreciation of cultural histories, increased understanding of history, stronger ties with family and friends, greater household awareness and appreciation of our cultural heritage, protection of cultural sites, maintenance of distinctive historical recreation setting, and reduced human impacts such as litter, vegetation trampling, and unplanned trails.

The last visitor survey in this area was done in 2007 in preparation for the Lander RMP. The outcomes identified in the objective above were derived from visitor demand identified in the survey as well as the public input process for the RMP. The survey also garnered some additional visitor information relevant to the manner in which the permit is currently managed and its linkage to the realization of the outcomes. The 2007 survey found that 58.2% of respondents indicated that “too many people” was “not a problem”, and only 2.3% of respondents felt that BLM should “restrict amount of use” and 54.2% of respondents wanted BLM to maintain the current amount (4–8 contacts/day) of contacts with other groups.

The analysis of the 2015 scoping comments associated with this document found similar results as the 2007 survey. Unlike the survey, the scoping comments did not follow a scripted set of questions and therefore participants provided the information they felt was important to the CPB permit renewal process. 88% of scoping comments identified recreational experiences and benefits as important to this permit, 61% of respondents included outcomes that corresponded to the objective set in the RMP.

The item most often identified in scoping as being an encumbrance to the outcomes in the objective was the visitation caps, group size limit, and number of groups per day limits on the CPB permit. Respondents indicated that the limits caused groups to be forced to split-up, artificially create age-level restrictions on youth participants, and limit number of participants per household. These impacts directly conflict with the outcome objective for the area, specifically the benefits of increased opportunity for youth and stronger ties with family and friends.

~~3.4.2. Impacts to Wildlife under All Alternatives:~~

~~Under all alternatives visitors will continue to disrupt the life cycles of the affected wildlife species. These disruptions are more likely in Alternative A than B or C because in Alternative A visitors will be more likely to wander off trail and into places where wildlife might go to avoid users and/or habitats that were intended for avoidance, such as known breeding, birthing, or nesting sites. Under all alternatives these disruptions will continue to occur primarily in the spring and fall of each year.~~

~~Wildlife responses to disturbance can be categorized as active or passive. The active response is typically manifested as an increase in body functions such as heart rate, blood flow, and metabolism. In contrast the passive response is reflected in decreased activity in order to avoid detection. Each of these responses place extra stress on wildlife and can reduce survival, birth rates, and/or overall physical health of the impacted wildlife species. (Weir, 2000)~~

3.4.3. Impacts to ~~Wildlife~~ Recreation Experiences and Benefits under Alternative A:

3.4.3.1. Direct and Indirect Impacts to ~~Wildlife~~ Recreation Experiences and Benefits under Alternative A:

~~While Alternative A does not authorize new disturbance it is anticipated that social trailing as a result of a lack of logical trail connections will occur. As such the Alternative will indirectly result in a disturbance of approximately an area greater than 0.66 acres of important ungulate (mule deer and antelope), sagebrush obligate, and migratory bird habitat. This disturbance is further characterized in see Section 3.2.2.1, “Direct and Indirect Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites under Alternative A- No Action.” Habitat disturbances cause individual and species displacement, social disruption, habitat avoidance, direct and indirect mortality, and population effects.~~

~~In addition, the greater amount of social trailing and off trail travel, the greater the potential for negative impacts to special status plants species. Especially when travel occurs in areas of suitable habitat.~~

~~The habitat impacts of Alternative A are not expected to be widespread enough to result in measurable population effects to the wildlife of Johnny Behind the Rocks. However, this alternative will result in an increased likelihood of animal displacement and habitat fragmentation.~~

Since this alternative does not renew the CPB permit it is expected that numerous random groups will form and continue to conduct reenactments in the area. Under Alternative A the encounters with other groups per day will increase and be the highest out of all alternatives. Considering that 54.2% of the 2007 survey respondents indicated a desire to maintain the current amount of contacts with other groups, this increase could interfere with the participants realization of the desired outcomes.

This alternative will also result in an increase in groups that do not follow the protective principles that the CPB deploys and an increase in groups that are not under permit. These groups have a much higher likelihood of unknowingly causing new impacts to the trail corridor which conflicts with the outcome objective for the area, specifically the benefits of: protection of cultural sites, maintenance of distinctive historical recreation setting, and reduced human impacts such as litter, vegetation trampling, and unplanned trails.

Finally alternative A does not institute a monitoring protocol to ensure the desired outcomes identified in the objective are realized. This means that agency will be slow to react to changing conditions, management implications, and visitor trends that conflict with the visitors realization of the outcome objective.

3.4.3.2. Cumulative Impacts to ~~Wildlife~~ Recreation Experiences and Benefits under Alternative A:

~~The cumulative impacts documented in Section 3.2.2.2, “Cumulative Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites under Alternative A- No Action.” adequately qualify the Cumulative Impact to wildlife habitat within the CIAA. The small yet additive loss of habitat from this alternative will primarily impact~~

~~mule deer, pronghorn antelope, sagebrush obligates, and migratory birds at the individual (not population) level.~~

Alternative A will decrease the opportunities for large groups within the Group Reenactment Zone. The reduction in large group opportunities will combine with the RMP management in the Seminoe Cutoff portion of the trail, which is focused on providing opportunities for solitude, and reduce large group opportunities across the majority of the trail corridor. A discussion of the RMP visitor management for the NHT follows.

Map A.2, “Lander RMP Recreation Management Areas” displays the NHT visitor management direction from the Lander RMP.

The RMP established two distinct NHT-focused Special Recreation Management Area (SRMA) within the National Trails Corridors. The NHT Destination SRMA (62,331 acres) and the NHT Undeveloped SRMA (92,598 acres). These SRMAs were established to accommodate the diversity of customer demand for NHT-based recreation opportunities.

The NHT Destination SRMA was focused on meeting national visitor and community demand for trail opportunities. Two distinct zones were identified to supply this demand within the corridor, the Group Reenactment Zone (37,233 acres) was established to provide group reenactment opportunities, while the Highway Zone (25,098 acres) was established to provide heavy interpretive opportunities in a landscape that was easily accessible, had existing developed facilities, and on a landscape that was resilient to human impacts. Ultimately the destination SRMA is established to facilitate heavy visitation of the NHTs in a manner that protects the trail resource.

The Antelope Hills National Trails Recreation Management Zone encompassed the Seminoe Cutoff area of the trail. The SRMA was focused on meeting local customer and partner demand to maintain trail opportunities associated with the experience of enjoying solitude and exploring the trail alone or in small groups. Large group use in this area will not occur, and the BLM will continue to take management actions to ensure average group size and the number of encounters stays low.

3.4.4. Impacts to ~~Wildlife~~ Recreation Experiences and Benefits under Alternative B:

3.4.4.1. Direct and Indirect Impacts to ~~Wildlife~~ Recreation Experiences and Benefits under Alternative B:

~~As a result of authorized trail building, Alternative B will disturb approximately 0.15 acres of important ungulate (mule deer and antelope), sagebrush obligate, and migratory bird habitat. The total disturbance from alternative B is assumed to be less than alternatives A or C because it is predicted that off-trail travel will not occur at a rate that will cause braiding or social trails. The total disturbance is further characterized in Section 3.2.3, “Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites under Alternative B.”~~

~~The habitat impacts of alternative B are not expected to be widespread enough to result in measurable population effects to the wildlife of Johnny Behind the Rocks. Importantly, since~~

Chapter 3 Affected Environment and Environmental Consequences

Impacts to ~~Wildlife~~ Recreation Experiences and Benefits under Alternative B:

~~Alternative B reduces the potential for off-trail travel it will have a higher potential to protect sensitive plant species than Alternative A. This alternative will result in a slight increase in the likelihood of animal displacement and habitat fragmentation.~~

Alternative B allows for increases in the maximum participants per year and maximum group size, this will alleviate the need for groups to split-up or restrict participation. This change will facilitate improved realization of the outcome objective for the area, specifically the benefits of increased opportunity for youth and stronger ties with family and friends.

Alternative B allows for an increase in the number of groups per day from July 1–15, but the encounters with other groups per day will remain similar to the current levels from July 15–September 15. Considering that 54.2% of the 2007 survey respondents indicated a desire to maintain the current amount of contacts with other groups, it is anticipated that the increase from July 1–15th will not constitute a large enough change to conflict with the realization of the outcomes, and will provide more flexibility to participants and scheduling.

This alternative will result in an increase in groups that follow the protective principles that the CPB employs and an increase in groups that are under permit. This will result in groups that have a much lower likelihood of causing new impacts to the trail corridor which will enhance the realization of benefits contained in the objective including: protection of cultural sites, maintenance of distinctive historical recreation setting, and reduced human impacts such as litter, vegetation trampling, and unplanned trails.

Finally Alternative B does institute a monitoring protocol to ensure the desired outcomes identified in the objective are realized. This means that agency will be able to adjust to changing conditions, management implications, and visitor trends that conflict with the visitors realization of the outcome objective.

3.4.4.2. Cumulative Impacts to ~~Wildlife~~ Recreation Experiences and Benefits under Alternative B:

~~The cumulative impacts documented in Section 3.2.3.1, “Direct and Indirect Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites under Alternative B:” adequately qualify the Cumulative Impact to wildlife habitat within the CIAA. The small yet additive loss of habitat from this alternative will primarily impact mule deer, pronghorn antelope, sagebrush obligates, and migratory birds at the individual (not population) level.~~

As Map A.2, “Lander RMP Recreation Management Areas” demonstrates the visitor management decisions in the RMP sought to accommodate a wide range of visitor demands for NHT-based recreation opportunities. As discussed above, Alternative B improves the opportunities for group reenactments. As such, the positive impacts of Alternative B will combine with the visitor management directed from the RMP and improve the diversity of trail opportunities across the entire trail corridor.

3.4.5. Impacts to ~~Wildlife~~ Recreation Experiences and Benefits Under Alternative C:

3.4.5.1. Direct and Indirect Impacts to ~~Wildlife~~ Recreation Experiences and Benefits Under Alternative C:

~~As a result of authorized trail building and some off-trail travel to avoid unsustainable trail sections, Alternative C will disturb approximately 0.66 acres of important ungulate (mule deer and antelope), sagebrush obligate, and migratory bird habitat, which is less than alternatives A but more than Alternative B. This disturbance is further characterized in Section 3.2.4, "Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites under Alternative C:".~~

~~The habitat impacts of Alternative C are not expected to be widespread enough to result in measurable population effects to the wildlife of Johnny Behind the Rocks. Importantly, since Alternative C reduces the potential for off-trail travel it will have a higher potential to protect sensitive plant species than Alternative A but less so than Alternative B. However, this alternative will result in some a slight increase in the likelihood of animal displacement and habitat fragmentation.~~

Since Alternative C reduces the season of use, days of use, and the groups per day from those allowed currently it is projected that in the short term this alternative would result in more groups splitting up, creating age-level restrictions on youth participants, and limits on the number of participants per household. These impacts directly conflict with the outcome objective for the area, specifically the benefits of increased opportunity for youth and stronger ties with family and friends.

However, Alternative C does propose a phased growth in maximum group size and annual visitation over a five year time frame. Once these phased increases reach the maximum amounts, Alternative C would have similar positive impacts as discussed for Alternative B, by alleviating the need for groups to split-up or restrict participation. This change will facilitate improved realization of the outcome objective for the area, specifically the benefits of increased opportunity for youth and stronger ties with family and friends.

3.4.5.2. Cumulative Impacts to ~~Wildlife~~ Recreation Experiences and Benefits Under Alternative C

~~The cumulative impacts documented in Section 3.2.4.2, "Cumulative Impacts to Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites under Alternative C:" adequately qualify the Cumulative Impact to wildlife habitat within the CIAA. The small yet additive loss of habitat from this alternative will primarily impact mule deer, pronghorn antelope, sagebrush obligates, and migratory birds at the individual (not population) level.~~

Cumulative impacts to recreation experiences and benefits under Alternative C will be similar Alternative B.

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*Impacts to Wildlife Recreation Experiences and
 Benefits Under Alternative C:*

~~3.5 Cultural Resources and Tribal and Native American Religious Concerns:~~ Wildlife:

~~3.5.1. Description of Affected Cultural Resources and Tribal and Native American Religious Concerns:~~ General Wildlife and Habitats:

~~Class III intensive cultural resource inventories for the project areas were conducted by BLM archaeologists in the Spring/Summer of 2013 covering a total of 20.6 acres. The inventory areas were inspected on foot with field personnel covering a corridor of 100 feet from the proposed trail centerlines.~~

~~The Class III inventories identified cultural resources within the project areas, including ones eligible for inclusion on the National Register of Historic Places (NRHP). National Register properties have significance to the history of their community, the state, or the nation. Cultural resources that occur within the project area include: prehistoric lithic scatters, camps, religious sites, and historic ranches.~~

~~All of the sites are described in full detail in the 2014 cultural survey report (Hazen McCreary, 2014) which is on file with the BLM Lander Field Office. These sites are summarized in Table Below:~~

Table 3.3. ~~Cultural Sites in the Area of Potential Effect~~

<u>Site Number</u>	<u>Site Type</u>	<u>NRHP Eligibility</u>
48FR3651	Prehistoric Site	Eligible
48FR3751		
48FR2359	Prehistoric and Historic Site	Destroyed
48FR7019	Prehistoric Site	
48FR7209		
48FR7467		Eligible
48FR468		

~~On 8/28/2013 and 9/6/2013 the BLM and tribal representatives from the Shoshone and Arapaho Tribes visited the project areas. The purpose of the consultation was to obtain tribal input about the project and identify sites of religious or cultural significance that may exist within the project area. Two sites were identified by the tribal representatives as having cultural and religious significance.~~

The NHT trekking route lies within seasonal and yearlong habitats for numerous wildlife species including big game, predators, small mammals, birds, amphibians and reptiles. Many species inhabiting the area include sagebrush-obligate birds and mammals, as sagebrush habitat is the most dominant habitat within the Landscape. Numerous raptor species including ferruginous, red-tailed, northern harrier, and Swainson’s hawks, golden eagles, prairie falcons, and burrowing and great horned owls occur along the route. Other non-game mammals commonly observed are coyotes, badger, cottontail and jackrabbits, ground squirrels, voles and mice. Songbirds are also common and vary by habitat type with sparrows, meadowlark and horned lark most often seen in sagebrush and saltbush areas and warblers, swallows, and flycatcher species observed in riparian habitats. Greater sage-grouse is a common game bird found throughout the proposed NHT trekking route. Some of these species are discussed further in the sensitive species section below.

Nearly all wildlife species depend on riparian and wetland areas to varying degrees for their water forage, and hiding cover needs. Riparian habitats typically support the greatest variety of birds and mammals due to the presence of water and the species and structural diversity of the plant community. Wildlife diversity in upland habitats is significantly affected by the presence and condition of riparian areas as many species are dependent on both upland and riparian habitats to meet their habitat requirements. Segments of the NHT trekking route intersect or are adjacent to riparian areas as do support vehicle access roads and rest areas.

3.5.2. Description of Affected Big Game Wildlife and Habitats :

Big game species are common along the NHT trekking route. Most of the NHT corridor along the proposed trek route is within moose crucial winter range and a small portion, near the CPB's headquarters, is in mule deer crucial winter range. Deer and elk migration routes have been identified along portions of the trekking route.

Mule deer and pronghorn populations within their respective herd units are below population objectives established by the WGFD. Habitats are relatively intact with localized energy development and agricultural developments scattered throughout the herd units. Based on WGFD's 2014 data, pronghorn populations for the Beaver Rim herd unit is approximately 24 % below the population objectives. The South Wind River mule deer herd unit is approximately 26% below the proposed population objective.

3.5.3. Description of Affected BLM Sensitive Species Including Greater Sage-grouse and Habitats :

Special status species include species listed or proposed for listing under the Endangered Species Act (ESA) and species designated internally as BLM sensitive. Actions or activities that could impact ESA-listed species require consultation with the U.S. Fish and Wildlife Service (USFWS) which has responsibility of managing listed species to curtail population and habitat loss. Wyoming BLM-sensitive wildlife and plant species are to be managed such that the species and the habitat on which they depend are conserved and BLM authorized actions do not contribute to the need for listing of the species under the ESA. There are no known threatened or endangered species along the NHT trekking route.

The immediate area along the NHT trekking route provides habitat for known populations of several BLM-sensitive wildlife species including mountain plover, ferruginous hawk, burrowing owl, sage thrasher, loggerhead shrike, Brewer's sparrow, sage sparrow, and Greater sage-grouse. Many sagebrush obligate birds breed and nest in the area during spring and early summer. Riparian obligate BLM-sensitive wildlife species in the area include the long-billed curlew, northern leopard frog, and great basin spade foot.

There are three active Greater sage-grouse leks known to occur within 1 mile of either side of the NHT trekking route. The route crosses within one-quarter mile of two occupied leks. All of the area surrounding the proposed trekking route is within Greater sage grouse priority habitat. Priority habitat includes breeding, nesting, brood rearing and winter seasonal habitats.

Healthy riparian vegetation is important for concealing and providing forage for the Greater sage grouse and other sensitive species, which depend on these areas during mid-late summer and early fall. Sage grouse utilize riparian areas extensively during the late brood rearing phase of

their life cycle and they are important in maintaining population size. As mentioned above, the NHT trekking route intersects numerous wetlands and streams.

3.5.4. Impacts to Wildlife under All Alternatives:

Numerous impacts to wildlife as a result of non-consumptive outdoor recreation have been documented and show that human disturbances can result in changes in wildlife physiology, behavior, reproduction, population level and species composition and diversity. Disturbances or disruptions related to various recreation activities that influence wildlife responses include: recreationist behavior, impact predictability, frequency and magnitude, timing and location.

Research has shown that the greatest recreational impacts to wildlife occur as a result of the existence and use of roads and trails. Recreational activities along the NHT trekking route could impact wildlife, specifically, sagebrush obligate birds such as the Greater sage-grouse, mule deer and pronghorn.

Activities such as group trekking can contribute to the fragmentation of wildlife habitats. However, the primary impact to wildlife from hiking or trekking along the NHT corridor would include disruptions resulting in wildlife leaving the corridor area or altering patterns of use. Recreation activities along road and trail corridors may lead to wildlife avoiding habitats close to these corridors. Fragmentation of the landscape may occur if avoidance of disturbance corridors prevents wildlife from using land on either side of the corridor.

Most recreational studies have documented immediate rather than short or long-term responses of wildlife to human disturbances. These immediate responses generally apply to individual wildlife rather than populations. Nonetheless, long-term behavioral changes can also occur. Examples may include abandonment of preferred habitats or changes in food sources. Disturbance by humans can cause nest abandonment, decline in parental care, shortened feeding times and lower reproductive success. Recreational use as proposed on portions of the NHT trekking route can disrupt wildlife in many ways particularly by displacing animals from an area.

Although displacement from preferred environments would be the most obvious adverse effect, other impacts might include increased energetic stresses and changes in activity budgets (e.g. shorter time to forage or provide parental care). Disturbance would be dependent on the species sensitivity and environment and could include time of day, season, previous exposure or experience, social structure and cover/terrain. The response could be passive or active, where the fight or flight behaviors are typified.

~~Cultural Resources and Tribal and Native American Religious Concerns~~ Wildlife: Under Alternative A- No Action:

~~Cultural Resources and Tribal and Native American Religious Concerns~~ General Wildlife and Habitats: Under Alternative A- No Action:

~~Direct impacts to cultural resources from this alternative may include disturbance of previously undetected, buried, cultural resources through social trailing activities and or illegal~~

~~collection/vandalism. Alternative A increase visitor presence across 144 acres, which may result in an opportunity for illegal collection of cultural artifacts, vandalism/damage to sites, and/or looting of cultural properties. However, under the No Action Alternative, construction would not occur and therefore the no effect on cultural resources would be expected to occur beyond those resulting from wandering visitors and social trail.~~

Recreationist behavior and predictability would be more uncertain and variable under the No Action Alternative than under the other alternatives resulting in potentially more disturbance to wildlife. The frequency, magnitude and the timing of disturbance all could potentially be greater under this alternative because the demand for visitor use would remain high and the number of groups, both with or without SRPs, could be higher than either the Alternatives B or C. Consequently, disruptions to wildlife and displacement from seasonal habitats, particularly along certain segments of the NHT, would be greater under this alternative.

Motorized use would be greater under the No Action Alternative than under the other two alternatives. Motorized use, including motorized recreation can potentially impact wildlife, possibly more than some non-motorized recreation. In one study mule deer disturbed by all-terrain vehicles altered feeding and spatial use patterns, while undisturbed animals maintained normal usage. Numerous studies have documented impacts to big game causing them avoid areas where motorized vehicle use is prevalent. When motorized vehicle use and non-motorized use occur in the same area, the combined disturbance to wildlife could be compounded.

Under the No Action Alternative, disruptions to wildlife could occur during spring, summer or fall. With regards to sagebrush obligate birds, including the Greater sage-grouse, trail use could result in disruptions to seasonal activities such as breeding, nesting, and brood rearing activities. Repeatedly flushing birds from nests may cause nest failure or abandonment from preferred foraging areas. Similarly, disruptive activities could displace chicks from suitable habitats adjacent to the trekking route.

During late summer, riparian areas provide late brood rearing habitat for sage grouse and other terrestrial and avian species. The trekking route intersects numerous riparian areas that provide habitat for wildlife. Recreational activities, including trekking and motorized vehicle use within or adjacent to riparian areas could displace wildlife from these important habitats.

Recreational activities under the No Action Alternative would be disruptive to mule deer, pronghorn and their fawns. Pronghorn in particular are easily displaced from an area due to motorized vehicle use and non-motorized recreation. In one study mule deer and pronghorn exhibited a 70% probability of flushing within 100 m of a hiking trail. In the same study, pronghorn did not habituate to largely predictable recreation use (i.e. trail hiking) over a 3 year period. Motorized and non-motorized activities during the spring in parturition areas would be disruptive to pronghorn and their young of the year. Activities later in the summer could displace animals, particularly from riparian areas, during that time period.

If the general public uses the NHT for recreation, including trekking and motorized vehicle use, in greater numbers and in unpredictable ways as would be likely under the No Action alternative, the potential adverse impacts, including displacement, would be greater than under other two action alternatives.

~~3.5.5.7. Cumulative Impacts to Cultural Resources and Tribal and Native American Religious Concerns~~ **Wildlife: Under Alternative A- No Action:**

~~No cumulative impacts are expected as a result of this Alternative.~~

Riparian areas provide seasonal habitat for a variety of species including greater sage grouse and big game. Livestock grazing has degraded many riparian areas along the NHT corridor, resulting in reduced cover and a decrease in desirable forage species. Livestock grazing has also been attributed to changes in the hydrology of some of the riparian systems resulting in a "drying effect" of the soils and a change in plant species composition. All these changes to riparian systems can have adverse impacts to wildlife, particularly during the hot summer months. Until changes in livestock management on these riparian system occur, these systems will continue to be impacted by grazing. Adverse impacts to riparian areas by livestock will have adverse cumulative impacts to sage grouse and big game, at least in the short term. These cumulative impacts would be similar for all three alternatives, but would be slightly greater under the No Action alternative.

~~3.5.6. Impacts to Cultural Resources and Tribal and Native American Religious Concerns~~ **Wildlife Under Alternative B:**

~~3.5.6.1. Direct and Indirect Impacts to Cultural Resources and Tribal and Native American Religious Concerns~~ **Wildlife Under Alternative B:**

~~Significant cultural properties are located within the area. Tribal representatives have expressed concern that the trail layout proposed under Alternative B for the JOT connector would encroach upon sites of religious and cultural significance. As such, this alternative would affect the aspects of integrity for which the cultural resources were deemed eligible for inclusion to the National Register of Historic Places (NRHP). As a result of the above, this alternative will result in a finding of Adverse Effect to significant cultural resources.~~

Recreationist behavior and predictability would be more certain and less variable under the Alternative B than under the No Action Alternative. The frequency and magnitude of potential disruptive activities to wildlife would be fewer under this alternative compared to the No Action Alternative due to CPB's permit stipulations. The number of permitted groups allowed on the proposed NHT trekking route would likely be fewer under the Propose Action than under the No Action alternative. Furthermore, authorizing the proposed CPB permit would relieve much of the public demand to use this section of the NHT during the summer. Authorizing the CPB's use under a SRP would help minimize adverse impacts to wildlife by applying seasonal and weekly timing restrictions, limiting group size, and prohibiting motorized vehicle use.

As mentioned above, motorized vehicle use by the CPB will not be allowed on NHT under the Alternative B. Impacts associated with motorized use would be fewer under this alternative than under the No Action Alternative. Disruptions to wildlife due to motorized vehicle use, particularly along certain segments of the proposed trek route such as in or adjacent to riparian areas would be fewer under this alternative.

Alternative B would be less disruptive to nesting and early brood rearing sage grouse and other sage brush obligate birds because the season of use would not start until after June 30th. Proposed

trekking activities could cause disruptions to Greater sage-grouse and other wildlife using riparian areas along the proposed trekking route including displacement from these important habitats.

As with the No Action Alternative, Alternative B would be disruptive to big game animals but impact to the young fawns would be less due to the later season of use being proposed.

3.5.6.2. Cumulative Impacts to ~~Cultural Resources and Tribal and Native American Religious Concerns~~ Wildlife Under Alternative B:

~~This alternative would incrementally add to the number of religious and cultural sites with unnatural visual and auditory impacts. The CIAA has an unknown amount of site eligible for inclusion to the NRHP, these sites continue to be impacted by motorized vehicle use, livestock grazing, and other unmitigated impacts. This alternative incrementally adds to the number of eligible sites adversely affected by human caused variables. These continued adverse effects will slowly degrade the quality and quantity of sites eligible for the inclusion to the NRHP within the CIAA.~~

The cumulative impacts to wildlife under Alternative B will be similar to those discussed for Alternative A.

3.5.7. Impacts to ~~Cultural Resources and Tribal and Native American Religious Concerns~~ Wildlife Under Alternative C:

3.5.7.1. Direct and Indirect Impacts to ~~Cultural Resources and Tribal and Native American Religious Concerns~~ Wildlife Under Alternative C:

~~Alternative C proposes the least amount of surface disturbance and utilizes the existing disturbance for the longest amount of time. Maximizing the use of existing disturbance would lessen the chances of encountering previously undetected buried cultural deposits through construction activities.~~

~~Tribal Representatives felt that the trail layout proposed under Alternative C for the JOT trail would adequately buffer sensitive cultural resources from potential adverse impacts. The JOT connector proposed for this alternative maintains an appropriate level of avoidance from known significant cultural resources and adequately protects the aspects of integrity that contribute to the eligibility of the sites for inclusion in the NRHP. This Alternative, in conjunction with the Decisions Common to All outlined previously in this EA, would create a finding of No Adverse Effect to significant cultural resources.~~

As with the Alternative A , recreationist behavior and predictability would be more certain and less variable under alternative C than under the No Action alternative. The frequency and magnitude of potential disruptive activities to wildlife would be fewer than under the other two alternatives due to SRP stipulations. Compared to the Alternative B, the number of groups per day and number of days per week permitted would be fewer, and the season of use would be shorter. As with Alternative B, authorizing the CPB permit would relieve public demand to use this section of the NHT which would help to minimize adverse impacts to wildlife.

Unlike the No Action Alternative, impacts associated with motorized vehicle use along the trekking route would not be an issue. Disruptions to wildlife and displacement from seasonal

habitats along segments of the NHT trekking route would be fewer under this alternative than under the other two alternatives seasonal and weekly timing stipulations and smaller group size.

Alternative C would be less disruptive to nesting and early brood rearing sage grouse and other sagebrush obligate birds because trekking along the route would not begin until July 15th. Trekking activities could cause some disruption and displacement to Greater sage grouse and big game animals using riparian areas during the summer but these adverse impacts would be fewer under this alternative.

As with the other two alternatives, Alternative C would be disruptive to big game animals but the impact to mule deer and pronghorn fawns would be less due to the shorter season of use, smaller group sizes, and the restricted number of days that trekkers would use the trail.

3.5.7.2. Cumulative Impacts to ~~Cultural Resources and Tribal and Native American Religious Concerns~~ Wildlife Under Alternative C:

~~Since this alternative has negligible direct impacts to cultural resources, there will be no cumulative impacts to the CIAA as a result of this alternative.~~

The cumulative impacts to wildlife under Alternative B will be similar to those discussed for Alternative A.

3.6. ~~Recreation Opportunities and Visitor Services~~ Non-trail Related Cultural Resources

3.6.1. Description of Affected Non-Trail Related Cultural Resources:

Very little archeological or historical inventories have been done along the project area route and not many non-trail related sites are known from the area. A files search showed that only three prehistoric sites (a lithic scatter, a campsite, and a stone circle site) and two non-trail related historic sites (a ranch headquarters and a mining settlement) have been recorded within ½ mile of the project area route. More non-trail related sites are expected to be present, especially where the project area route is close to the Sweetwater River, and also where historic mining-related activities have occurred (such as in the Lewiston and Rock Creek areas).

Descriptions of some of the most important non-trail related sites are presented here:

Gilespie Place (the non-trail related period for this site is 1880's-1920's)

Gilespie Place is a historic site associated with the four NHTs and the later mining and settlement history of the area. This site is located along the Oregon/Mormon/California Trail corridor, just east of the historical mining camp of Lewiston. Gilespie Place consists of two standing structures, several foundations with wall remains, and a flowing spring. The site, located along a major transportation route, was associated with several historical events of Wyoming's early territorial and state history.

The earliest historical use of the site probably occurred during the Oregon/Mormon Pioneer Trail era, when emigrants passed through the region in the 1840s. Although there are no known

emigrant-diary accounts of this site, the site's spring (Radium Spring) was probably often used as a convenient water source. In addition, there was probably some overnight emigrant camping at the site.

Radium Spring probably continued to be used by travelers over the entire emigrant trail era. In the 1880s, mineral exploration began in earnest in the Lewiston Mining District, which included the Radium Spring area. Although no records are available, there was probably some small-scale exploration in the local area.

Structures were built at the site after the turn of the 20th Century, but there is no record of exactly when they were constructed. Artifactual evidence points to pre-1920s dates of occupation for at least some of the structures. This evidence corresponds to newspaper accounts of a Mrs. S. F. Gillespie having settled on 160 acres in the immediate area sometime around 1910 (BLM 2009a).

Touted as "Wyoming's Copper Queen," Mrs. Gillespie seems to have been heavily involved in mining ventures in the local area around Lewiston. During this period, the spring was claimed to have radium in its waters and was advertised to have healthful properties.

Several structures in fair-to-good condition still exist at the site.

Lewiston Mining Camp

Lewiston is a historic mining camp that founded in the late 1870's and lasted until the 1920's . This camp was established as a gold-mining area where several mines were developed (to a moderate degree), and at least one mill was built to process the area's ore. Lewiston is similar to the mining areas of nearby South Pass in that relatively small amounts of gold were found and mining was often slowed by lack of good ore, distance from suppliers and markets, and water problems.

Much of the site is on private land, and though several dilapidated buildings still exist at the site, most of the original buildings have collapsed or have been transported to other locations. Mostly what remains now are small mines with tailings piles, and sometimes log structure.

Rock Creek Hollow (the non-trail related period for this site is 1930's-1940's)

Rock Creek Hollow is a historic site mostly associated with the Mormon Pioneer NHT . This site (formerly known as Willie's Handcart Rescue Site) was one of the locations where the Willie's Handcart Company took shelter after being rescued in the fall/winter of 1856. The hollow, located approximately 6 miles west of Gillespie Place, lies in the narrow floodplain of Rock Creek, near the spot where the Oregon/Mormon/California Trail crosses the creek.

Rock Creek Hollow commemorates the disaster that happened to the Willie's Handcart Company in October and November of 1856. The same storm that trapped the Martin's Handcart Company also overtook Willie's Handcart Company. The Willie's Company was overtaken by the storm and took shelter in several different areas, including Rock Creek. More than 70 people from this company died during the disaster, including several people at Rock Creek.

Following the emigration period, Rock Creek was probably explored as part of the 1870's South Pass gold mining boom, and placer exploration undoubtedly occurred along it. In the 1930's and 1940's, a major dredging operation to extract gold from the bottom of the creek extended from Atlantic City all the way to Rock Creek Hollow. Its large dredging piles of soil and cobbles can still be seen just north of the Rock Creek Hollow campground. The Mormon Church has

developed the private land at this site as a religious/historical site, and a campground, but the BLM portion to the south is mostly untouched and appears much as it did in the 1850s.

~~3.6.2. Description of Affected Recreation Opportunities and Visitor Services:~~

~~For a more in depth discussion of the existing recreation opportunities and visitor services see the following sections of this document: Section 1.1, “ RMP objective Objectives Used To Evaluate Alternatives (Purpose): ” and Section 1.2, “Underlying Need for Action: ”:~~

~~Purpose built trails are defined as trails that are constructed to provide specific connectivity, recreation experience, and or access. With the exception of the Red Ridge Trail and the Johnny on Top trail most of the current trail system at Johnny Behind the Rocks is not purpose built. Rather the majority of the trail system has formed around two tracks, cowpaths, and social trails.~~

~~As a result of the lack of purpose built trails, visitors and partners have indicated a need for more constructed single track trails built to challenge users skills while also connecting key use areas. Therefore it is assumed that visitor satisfaction with the current system could be improved with an increase in purpose built trails.~~

~~Over the last 5 years any and all surface disturbance to support non motorized trails in the Johnny Behind the Rocks area has been focused at creating sustainable trails. In terms of non motorized trails, sustainability means:~~

~~“...creating and maintaining trails that are going to be here for a long time. Trails with tread that won't be eroded away by water and use. Trails that won't affect water quality or the natural ecosystem. Trails that meet the needs of intended users and provide a positive user experience....” (USDA 2007)~~

~~A literature review (USDA, 2007; IMBA 2007; Parker 2004) and BLM's experience in the Johnny Behind the Rocks area finds that typically trails are constructed in a sustainable manner if the trail meets all of the following guidelines:~~

~~Guidelines for a Sustainable Non-motorized Trail~~

- ~~● Has a 5% outsloped tread~~
- ~~● Has an average grades between 5-10%~~
- ~~● Contains frequent grade reversals~~
- ~~● Traverses along a sideslope~~
- ~~● Has a trail tread that does not exceeds half the side slope~~
- ~~● Adapts to soil texture~~
- ~~● Prevents off trail travel by using natural anchors, edges, and gateways to keep users on trail~~
- ~~● Harmonizes with the landscape~~
- ~~● Is playful with the surrounding landscape~~

- ~~Allows users to move efficiently through a landscape~~
- ~~Provides for a level of safety commensurate with the trails difficulty rating~~
- ~~Provides logical connections within the greater system~~
- ~~Provides access to areas or terrain features that users desire~~

~~Trails that meet these guidelines provide for a trail tread that resist erosive factors, eliminates the need for off-trail travel, all while providing for the users in a manner that causes the trail to be a part of the destination.~~

~~Most of the trails in the JBR area demonstrate these principles, however, as discussed through-out this document the trails that are being addressed as part of this EA do not meet all of these principles and are not sustainable. For a specific discussion as to why the Johnny On Top and Red Ridge trail do not meet these principles see Section 1.2, “Underlying Need for Action: ”:~~

3.6.3. Impacts to ~~Recreation and Visitor Services~~ Non-trail Related Cultural Resources Under Alternative A:

3.6.3.1. Direct and Indirect Impacts to ~~Recreation Opportunities and Visitor Services~~ Non-trail Related Cultural Resources Under Alternative A:

~~Since this alternative does not result in new purpose built trails nor adds trails to the existing system it is predicted that visitor satisfaction with this Alternative will be low. The JOT and Red Ridge trail will continue to not provide logical connectivity, access, nor experience visitors desire. As a result visitors will continue to wander and create unsustainable social trails in all of the areas of concern. This Alternative will not make progress towards objectives 1-3 as outlined in Section 1.1, “ RMP objective Objectives Used To Evaluate Alternatives (Purpose): ” and is therefore considered to not be in compliance with the Land Use Plan, see Section 1.3, “ Conformance of the Project to the BLM Land Use Plan:”:~~

With a change from one well-regulated permit for 6000 people to many small groups trekking under individual trekking permits, there will be a lack of knowledge about sensitive resources plus a lack of supervision under this alternative. That could increase the threats to non-trail related cultural resources – from the collecting of prehistoric and historic artifacts to the damage of historic structures and features. For instance, the Gilesie Place, a collection of early 20th century log structures, could be damaged through vandalism, and through artifacts at the site being collected or moved out of context. It would likely be very difficult for BLM to train all of the various individual trek leaders to successfully enforce stipulations designed to protect cultural resources.

Under this alternative, the BLM would also experience reduced funding for monitoring activities on the trekking routes, because less user fees would be collected from the smaller groups. This would likely contribute to an increase of impacts to non-trail related cultural resources.

In addition, the strong possibility that these groups would likely rest and camp in new areas along the project route would also have an expected detrimental effect to non-trail related cultural resources. The chances of people wandering around these new areas, finding prehistoric or historic resources and then collecting or damaging them is expected to increase under this alternative.

~~3.6.4. Impacts to Recreation Opportunities and Visitor Services~~ Non-trail Related Cultural Resources Under Alternative B:

~~3.6.4.1. Direct and Indirect Impacts to Recreation Opportunities and Visitor Services~~ Non-trail Related Cultural Resources Under Alternative BA:

~~Alternative B adds 1.2 miles of new purpose-built trail and adds a total of 1.68 miles to the existing JBR trail network. This alternative maximizes the use of the landscape features in order to create ideal sustainable trails that provide visitors with the access, connectivity, and experience they desire from the Red Ridge and JOT trail. As such, it is predicted that visitor satisfaction with the implementation of this alternative will be high.~~

~~Visitors will naturally want to stay on the trails Red Ridge and JOT trails because the new connector trails will provide for the visitors motivations for being traveling to JBR. In addition, this alternative maximizes the use of natural anchors, edges, and gateways in a manner that forces visitors to stay on the trail.~~

~~As a result of the above, Alternative B is expected to make the most progress towards objectives 1-3 as outline in Section 1.1, “RMP objective Objectives Used To Evaluate Alternatives (Purpose):”.~~

Under the constraints detailed in Alternative B, impacts to non-trail related cultural resources are expected to be less than in Alternative A, but possibly more than Alternative C. This is because, under its current permit, the LDS Church has developed a structure of rules and guidelines that have been successfully implemented to protect resources along the project route. This includes insuring that the trekkers do not stray off the trail they are walking on, and instilling in them a sense of wanting to protect the surrounding landscape and resources they see. Although Alternative B would immediately increase the total number of trekkers and the group sizes traveling over the landscape, impacts to non-trail related resources is low. This is because the CPB would be still able to maintain the level of compliance and respect that they have now. This statement is predicated on the assumption that the Church would commit to increasing the number of supervisors on the treks, if necessary to handle larger numbers of trekkers.

~~3.6.5. Impacts to Recreation Opportunities and Visitor Services~~ Non-trail Related Cultural Resources Under Alternative C:

~~3.6.5.1. Direct and Indirect Impacts to Recreation Opportunities and Visitor Services~~ Non-trail Related Cultural Resources Under Alternative C:

~~Alternative C adds 0.53 miles of purpose-built trail and adds a total of 1.43 miles of trail to the existing JBR trail network. This alternative maximizes the use of existing disturbances in order to reduce new surface disturbance, but also provide for trail connectivity in all of the areas of concern. The impacts of this alternative to recreation opportunities and visitor services varies by the area of concern.~~

~~In the JOT terminus area this alternative provides for a trail layout that meets all sustainable trail principles. Therefore, the beneficial impacts of this trail layout will be similar to those detailed for Alternative B.~~

~~The impacts of Alternative C varies from Alternative B primarily due to the trail layout proposed for the interior and the red ridge terminus area. In these locations the proposed layout utilizes existing unsustainable sections of trail as well as portions of two-track roads that do not provide for the access and experience users desire. Additionally users will be not enjoy their trail experience in areas where the trail is forced down two-track roads that are too steep and sandy to provide for desired efficiencies and/or lack harmony with surrounding landscape due to the width and unnatural straightness of the road.~~

~~These negative impacts to recreation opportunities and visitor services as a result of alternative C will occur in localized areas and for short periods of the users trail experience. As a result it is predicted that users will travel off trail 10 feet either side of 2 unsustainable sections of trail in the interior and red ridge terminus areas. For these reasons, user satisfaction with the implementation of this alternative is expected to be higher then Alternative A, but lower then Alternative B.~~

~~As a result of the impacts documented above this Alternative is expected to make more progress towards objectives 1-3 as outlined in Section 1.1, “ RMP objective Objectives Used To Evaluate Alternatives (Purpose): ” then Alternative A, but will not be as effective as Alternative B.~~

Under the constraints detailed in Alternative C, impacts to non-trail related cultural resources are expected to be less than in both Alternatives A and B. This is because, under its current permit, the LDS Church has developed a structure of rules and guidelines that have been successfully implemented to protect resources along the project route. This includes insuring that the trekkers do not stray off the trail they are walking on, and instilling in them a sense of wanting to protect the surrounding landscape and resources they see.

Alternative C also has mechanism that would only incrementally increase the total number of trekkers and the group sizes over a 5 year period, with yearly monitoring to quickly discern if new impacts are occurring. For this reason, the chance for impacts to non-trail related resources is very low. This is because 1) the LDS Church would be still able to maintain the level of compliance and respect that they have now, and 2) the monitoring would quickly show if new impacts were occurring. As with Alternative B, this statement is predicated on the assumption that the Church would commit to increasing the number of supervisors on the treks, if necessary to handle larger numbers of trekkers.

3.7. Description of Affected Environment of Visitor Health and Safety

3.7.1. Affected Environment of Visitors Ability to be Away from Large Permitted Groups

~~As discussed in Section 1.2, “Underlying Need for Action: ”, the main visitor health and safety issue occurring at JBR is the use of the Highway by pedestrians attempting to return to the JBR parking lot from the JOT terminus. This situation exposers visitors to the potential to be hit by vehicles or debris kicked up by passing vehicles. In addition, the likelihood highway traffic getting into an accident is increased as vehicle operators become distracted by the pedestrian traffic.~~

The timeframe when most general public visitors can visit the trail without having to be concerned with getting their vehicle stuck or causing resource damage is June 15–October 15. This is a total of 123 days or, assuming 12 hours of daylight per day, the equivalent of 1,476 daylight hours.

Organized group use is currently allowed from July 1–September 15. The CPB permit is allowed to conduct activities during weekdays only, and must end all trekking activities by 4:00PM each Friday. In addition, most CPB trek groups begin around 9:00 AM and end by 6:00PM on weekdays, except Friday. Additionally, the CPB has never had a trek group on the trail in September. Therefore, under current management there are 79 days (948 daylight hours) during the trail visitation period when no trek group is on the trail. Additionally, visitors can find themselves away from large groups 3 daylight hours per day during the 44 days (132 daylight hours) with trek groups on the trail. As a result of the limitations on the CPB permit, it is projected that a total of 1,080 or 73% of the daylight hours during the trail use season are available to be away from large groups.

3.7.2. Impacts to ~~Visitor Health and Safety~~ Visitors Ability to be Away from Other Groups under Alternative A:

3.7.2.1. Indirect and Direct Impacts to ~~Visitor Health and Safety~~ Visitors Ability to be Away from Other Groups ~~+~~ Under Alternative A:

Without the CPB permit it is projected that several smaller groups will form and conduct activities in the area. More groups will be out on weekends and during the traditionally slower months of June, September, and October. With more groups on the trail, the available time away from other groups, currently 73% of daylight hours, will decrease. ~~Alternative A will result in the continued exposure of pedestrian or non-motorized traffic to highway traffic. Over time as use increases at JBR so too will the likelihood of injury and or property damage. Injuries, death, and/or property damage could occur to both pedestrian and motorized vehicle operators. As a result this Alternative will not make progress towards objective 4 as outlined in Section 1.1, “RMP objective Objectives Used To Evaluate Alternatives (Purpose): ” and is therefore considered to not be in compliance with the Land Use Plan, see Section 1.3, “Conformance of the Project to the BLM Land Use Plan:”-. As a result , Alternative A will result in the least amount of available daylight hours during the trail uses season where groups can be avoided.~~

3.7.2.2. Cumulative Impacts to the Visitors Ability to be Away from Other Groups under Alternative A- No Action:

Since this alternative reduces visitors ability to be away from other groups in the Group Reenactment Zone, this will reduce the opportunity to avoid groups within the entire trails corridor. Opportunities to be away from other groups will also decrease as a result of the visitor management direction set in the Highway Zone. The opportunity to avoid groups will remain high in the Seminoe Cutoff portion of the trail because of the visitor management direction set in the RMP for the Antelope Hills National Trails RMZ.

3.7.3. Impacts to ~~Visitor Health and Safety~~ Visitors Ability to be Away from Other Groups under Alternative B:

3.7.3.1. Indirect and Direct Impacts to ~~Visitor Health and Safety~~ Visitors Ability to be Away from Other Groups under Alternative B:

~~Alternative B will provide a trail that connects the JOT trail with the main JBR parking lot. In doing so, it is anticipated that visitors will not continue to travel the highway corridor thus alleviating the visitor health and safety problems associated with mixing pedestrian traffic with highway traffic. Therefore, this alternative makes progress towards objective 4 as outlined in Section 1.1, “ RMP objective Objectives Used To Evaluate Alternatives (Purpose): ”.~~ Alternative B does not change the allowed season of use nor the days and hours of use on the current CPB permit. In addition, Alternative B will not result in groups being scheduled in September. Therefore, the time away from trek groups will not change as a result of Alternative B. As detailed in the affected environment, a total of 1,080 daylight hours or 73% of the daylight hours during the trail use season will continue to be available for visitors to be away from large groups.

3.7.3.2. Cumulative Impacts to the Visitors Ability to be Away from Other Groups under Alternative B:

Under Alternative B the visitors ability to avoid other groups within the group use area will not change from the current condition. Opportunities to be away from other groups will decrease as a result of the visitor management direction set in the Auto Tour Route Zone. The opportunity to avoid groups will remain high in the Seminole Cutoff portion of the trail because of the visitor management direction set in the RMP for the Antelope Hills National Trails RMZ. Overall under this alternative, visitors to the trails corridor will continue to have a large amount of time where they can avoid other visitors in the Group reenactment zone as well as the Antelope Hills Zone.

3.7.4. Impacts to ~~Visitor Health and Safety~~ Visitors Ability to be Away from Other Groups under Alternative C:

3.7.4.1. Indirect and Direct Impacts to ~~Visitor Health and Safety~~ Visitors Ability to be Away from Other Groups under Alternative C:

~~The impacts to Visitor Health and Safety under Alternative C will be the same as those documented for Alternative B.~~ Alternative C reduces the allowed season of use and the days and hours of use for the CPB. This management will result in 103 days (103 days*12 hours/day=948 daylight hours) during the trail visitation period when no trek group is on the trail. Additionally, users will have 3 daylight hours available to be away from groups during the 20 days (20 days*3 hours/day=132 daylight hours) with trek groups on the trail. Under Alternative C a total of 1,296 hours or 87% of the daylight hours during the trail use season will provide an opportunity for visitors to be away from other groups. This is an increase of 14% over Alternative B.

Chapter 3 Affected Environment and Environmental Consequences

Impacts to Visitor Health and Safety Visitors Ability to be Away from Other Groups under Alternative B:

3.7.1.2 Cumulative Impacts to Visitors Ability to be Away from Other Groups under Alternative C:

Under Alternative C the visitors ability to avoid other groups within the group use area will increase. Opportunities to be away from other groups will decrease as a result of the visitor management direction set in the Highway Zone. The opportunity to avoid groups will remain high in the Seminole Cutoff portion of the trail because of the visitor management direction set in the RMP for the Antelope Hills National Trails RMZ. Overall under this alternative, visitors to the trails corridor will see an increase in the amount of time they can avoid large groups both in the reenactment zone as well as the Antelope Hills Zone.

3.8. ~~Access~~Transportation

3.8.1. Description of Affected ~~Access~~Transportation Features

The table below describes the affected transportation routes and the estimated amount of vehicles and vehicle passes resulting from the CPB activities. Importantly, no vehicles associated with the CPB permit are allowed on the National Historic Trail, except that portion of the trail that overlaps the bladed and maintained Lewiston County Road (CR 511).

Table 3.4. Summary of Vehicles in Support of CPB Permit

Approved Route	Route Type and Condition	Number of CPB Vehicle trips per Year	Number of CPB Vehicle Passes per Year
Hudson Atlantic City Road to Sage Campground	Crowned and ditched BLM road receiving annual maintenance.	376	616
Strawberry Creek Road	Two-track with limited maintenance to prevent resource damage. A new bridge spanning Strawberry Creek was installed in 2006.	136	136
Starting at Rock Creek Hollow on Fremont County Road 511 to 22 to 514, to 515 ending at highway 28.	Crowned and ditched network of Fremont County Roads receiving heavy biannual maintenance	376	616
Snow Fence Road	Two-track with limited maintenance to prevent resource damage. Good condition	136	272
Lewiston Lakes Road	Two-track with limited maintenance to prevent resource damage. Travel during muddy season, not associated with CPB permit, has caused rutting and braiding.	136	272

Approved Route	Route Type and Condition	Number of CPB Vehicle trips per Year	Number of CPB Vehicle Passes per Year
Gillespie Place Road	Two-track with limited maintenance to prevent resource damage. Travel during muddy season, not associated with CPB permit, has caused rutting and braiding.	136	272
County Road 511 From intersection with the Strawberry Creek Road to Support location at Strawberry Creek Crossing	County Road Receiving annual maintenance.	136	272

3.8.2. Impacts to ~~Access~~ Transportation Features under Alternative A:

3.8.2.1. Indirect and Direct Impacts to ~~Access~~ Transportation Features under Alternative A:

~~Alternative A will not connect the JOT trail to the main JBR parking lot. As such, visitors will continue to trespass on private lands; this amount of use will increase as JBR becomes more popular among trail users. Conflicts between trail users and adjacent private landowners could occur if these landowners express desires to restrict access or preclude the use of the private property. This condition will not make progress towards objective 4 as outlined in Section 1.1, “RMP objective Objectives Used To Evaluate Alternatives (Purpose): ” and is therefore considered to not be in compliance with the Land Use Plan, see Section 1.3, “Conformance of the Project to the BLM Land Use Plan.”~~ As stated earlier, Alternative A will result in several groups below the permit threshold as well as several smaller permitted groups. It is expected that the amount of passenger vehicles associated with these groups will increase because fewer groups will be utilizing busses to deliver participants to drop-off locations. In addition, it is likely that vehicle use will increase during periods when the soil is saturated because many of these non-permitted groups will not be subjected to the timing limitations currently placed on permitted use. The use conditions created by Alternative A will cause an unknown amount of traffic increase as well as an increase in roadbed damage and soil loss which will also increase maintenance needs.

3.8.3. Impacts to ~~Access~~ Transportation Features under Alternative B:

3.8.3.1. Indirect and Direct Impacts to ~~Access~~ Transportation Features under Alternative B:

In order to accommodate another 1,000 visitors per year, Alternative B will increase ~~Alternative B will connect the JOT trail to the main JBR parking lot. As such, the amount of use on private land will be drastically reduced. Some use may still occur, but the system will not depend on the private land for critical connections. In addition, this alternative will eliminate all need for~~

~~all travel across private land. This alternative does make substantial progress towards objective 4 as outlined in~~ Section 1.1, “ RMP objective Objectives Used To Evaluate Alternatives (Purpose): ”-traffic by at least 20 busses more per year and 5 support vehicles. This increase in busses will occur on the Hudson Atlantic City Road to Sage Campground, as well as the County Roads that lead into Rock Creek Hollow. Since both these routes are utilized as an out and back trip the number of trips on each route will increase by 40 trips per year per route. The increase in support vehicles will occur on all routes listed in the affected environment.

3.8.4. Impacts to ~~Access~~ under Alternative C:

3.8.4.1. Indirect and Direct Impacts to Transportation Features ~~Access~~ under Alternative C:

Traffic levels under Alternative C will be Similar to Alternative B which will also result in the same level of impact to transportation features.

3.8.5. Unavoidable Adverse Impacts (All Resources):

NEPA section 102(c) mandates disclosure of “any adverse environmental effects which cannot be avoided should the proposal be implemented.” These are impacts for which there are no mitigation measures or impacts that remain even after the implementation of mitigation measures. Implementation of the Proposed Action would result in unavoidable adverse impacts to some resources.

The CEQ 40 CFR 1500.2(e) defines unavoidable adverse impacts as those that cannot be avoided due to constraints in alternatives. These impacts do not have to be avoided by the planning agency, but they must be disclosed, discussed, and mitigated, if possible.

In general, development and surface disturbing activities, including those from mineral extraction and energy development, would result in unavoidable adverse impacts, including soil compaction and erosion, loss of vegetative cover, spread of INNS, disturbance to and displacement of , and visual intrusions on the landscape. Conversely, proposed restrictions on some activities, such as OHV use, energy development and livestock grazing, intended to protect sensitive resources and resource values, would result in unavoidable adverse impacts to some users, operators and permittees by limiting their ability to use public lands and potentially increasing their operating costs.

3.9.1. Unavoidable Adverse Impacts Under All Alternatives:

- Continued trampling ~~and social trailing across 148 acres~~ of center strip vegetation within two-tracks and the NHTS
- Disturbance, compaction and displacement of soils along and adjacent to the travel routes and the NHTS
- Continued disruptions to the life-cycles of various ~~wildlife~~ wildlife species

3.10. Relationship of Short-Term Uses and Long-Term Productivity (All Resources):

The CEQ establishes (40 CFR 1502.16) that the balance or trade-off between short-term uses and long-term productivity needs to be defined in relation to the activity in question. The decision maker and members of the public need a clear sense of what they are gaining or losing in both the short and long-term. For the purpose of this analysis, the short-term is considered three to five years, whereas the long-term is 20+ years.

3.10.1. Relationship of Short-Term Uses and Long-Term Productivity Under Alternative A- No Action:

The short-term uses of the environment as a result of this alternative include those typically found when land management agencies do not actively manage public use of a site. In the short-term impacts to natural resources seem relatively small, as change occurs slowly. However, overtime impacts will increase and move to undesirable locations. The short-term benefit of avoiding new soil and vegetation disturbance will be offset in the long-term by continued and growing user created impacts and disturbances.

3.10.2. Relationship of Short-Term Uses and Long-Term Productivity Under Alternative B:

Short-term impacts associated with ~~construction~~ activities are described elsewhere in Chapter 3 (environmental consequences) and include effects to the natural and cultural resources. These can be compared to the long-term benefits of the alternative which include decreased off-trail ~~and road use~~ and well as improved visitor experiences ~~and safety~~. In addition, the alternative limits long-term disturbances to vegetation and soil resources in the immediate area of previously disturbed sites of the trail, which will, in turn, benefit the long-term productivity of the areas outside the trail corridor.

3.10.3. Relationship of Short-Term Uses and Long-Term Productivity Under Alternative C:

~~The short term uses of the environment as a result of the proposed action include those typically found with recreation facility development. However, since this alternative seeks to locate trails on existing disturbances short term disturbance amounts associated with this alternative are similar to those described for alternative A. The impacts to long term productivity under this alternative will resemble Alternative A in the interior and red ridge terminus areas. Where off trail use will continue to impact vegetation productivity. In the JOT area the long term productivity will more resemble alternative B where off trail use is decreased and visitor experiences and safety are improved. The short-term uses of the environment as a result of this alternative are similar to those Under Alternative B.~~

3.11. Irreversible and Irretrievable Commitments of Resources (All Alternatives):

NEPA Section 102(2c) and Section 1502.16 of the CEQ NEPA implementing regulations require that the discussion of environmental consequences include a description of, “any irreversible or irretrievable commitment of resources which would be involved in the proposal should it be implemented.”

Irreversible commitments are those that cannot be reversed, except perhaps in the extreme long term. Examples of irreversible impacts would be species extinction, ore extraction, and logging of an old growth forest.

Irretrievable commitments are those that are lost for a long period of time. Extraction of oil, gas, sand or gravel would constitute irretrievable impacts because these salable minerals cannot be renewed in the ground within a reasonable time frame.

Impacts from some actions can be both irreversible and irretrievable for some resources. Management actions most likely to result in irreversible and/or irretrievable impacts include those related to development and surface disturbance such as mineral extraction and energy development.

3.11.1. Irreversible and Irretrievable Commitments of Resources Under All Alternatives:

Table 3.5. Irreversible and Irretrievable Commitments of Resources Under All Alternatives

Affected Resource	Irreversible Commitment	Irretrievable Commitment
Vegetation and Soil, and the Undesirable Spread of Noxious/Invasive Species National Trails and Related Sites	No	No
Twin Creek Riparian Resource Visual Resource	No	No
Wildlife Recreation Experiences and Benefits	No	No
Cultural Resources and Tribal and Native American Religious Concerns Wildlife	No	No
Recreation Opportunities and Visitor Services Non-trail Related Cultural Resources	No	No
Visitor Health and Safety Visitors Ability to be Away from Other Groups	No	No

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Chapter 4. Consultation and Coordination

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4.1. Persons, Groups, and Agencies Consulted:

Table 4.1. List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Jared Oakleaf	Outdoor Recreation Planner	Project lead, Author
Tim Vosburg	Wildlife Biologist	Wildlife
Craig Bromley	Archeologist	Cultural and Paleontological
Kristin Yannone	Planning and Environmental Coordinator	Writer Editor

4.2. Summary of Public Participation:

~~There was no public scoping or involvement process applied to this action apart from posting the Environmental Assessment on the BLM NEPA Register. However, this EA will be available for public comment for a 15 day period.~~ Coordination was conducted with the CPB, the Wyoming State Historic Preservation Office, the Oregon California Trails Association, and the Alliance for Historic Wyoming. In addition, the Lander Field Office solicited public input on this project on July 10, 2015. The coordination as well as the thirty-day comment period provided the BLM with public input on the alternatives for consideration, issues to analyze, as well as the potential impacts to consider.

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Appendix A. Maps



Map 1: Trek Route and Support Locations

Legend

Trek Route Options

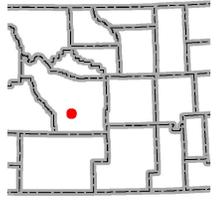
- Blue line: 1 or 2 day
- Grey line: 1.2, or 1/2 day
- Pink line: 1/2 day only

Vehicle Support Routes

- Thick grey line: Support/Maintenance Vehicle Access
- Green line: Toilet Maintenance Only

Support and Restroom Locations

- Black star: On NHT Support/Restroom
- Pink diamond: Off NHT Restroom
- Green triangle: Off NHT Support
- Black circle with dot: Off NHT Vehicle Parking

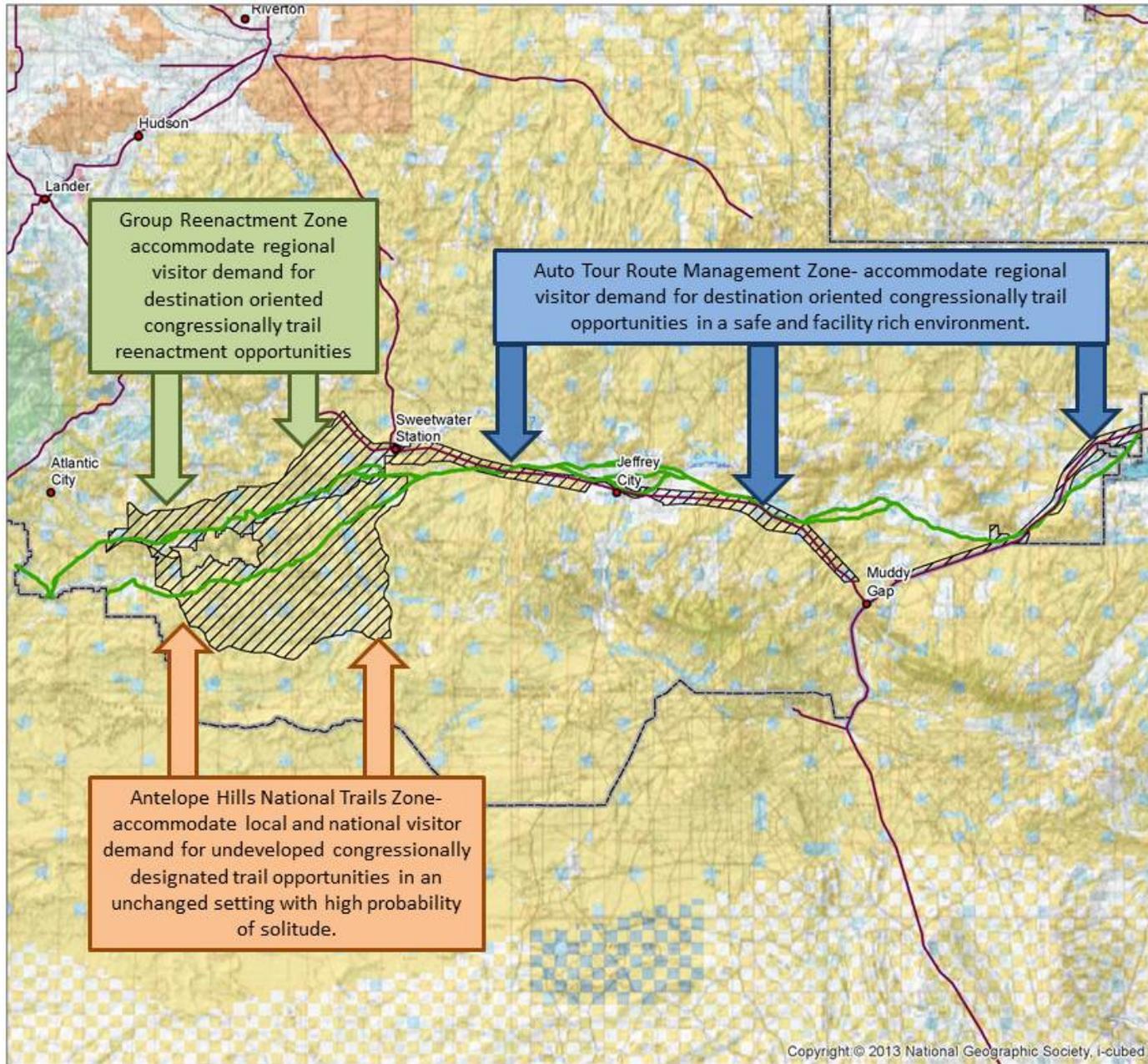


Date: 7/2/2015

No warranty is made by the Bureau of Land Management (BLM) for use of the data for purposes not intended by BLM.

Environmental Assessment for Renew a Special Recreation Permit Management in the Grouse Reenactment Zone of theon the

Map A.1. Trek Route and Support Locations



Map A.2. Lander RMP Recreation Management Areas

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Appendix B. Affected Resources

B.1. Affected Resources

B.1.1. Project Information

Description: Project and alternatives as described in Chapter 2 of this Document.

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

- NP = not present in the area impacted by the proposed or alternative actions
- NI = present, but not affected to a degree that detailed analysis is required
- PI = present with potential for relevant impact that need to be analyzed in detail in the EA

Table B.1. Affected Resources Form

Determination	Resource	Rationale for Determination
Physical Resources		
NI	Air Quality and Greenhouse Gas Emissions	The project does not authorize actions that will contribute to large amounts of new emissions.
PI	Soils	While low the impacts to soils are analyzed as a linked issue with National Trails and Transportation.
PI NI	Water Resources/Quality (drinking/surface/ground)	The project does not authorize actions that will affect cause point or non-point water resources sources of water contamination. In addition, the installation of temporary port-a-potties and other best management practices and SRP stipulations is adequate to alleviate concerns for water resources.
NP	Lands with Wilderness Characteristics	The project does not propose surface disturbance within or in view of an area with wilderness character.
Mineral Resources		
NI	Geology / Mineral Resources/Energy Production	The Lander Land Use Plan RMP restricts actions associated with the extraction of mineral resources within the area. Approximately 10 acres will be impacted by human activity along and adjacent to open roads and trails. This impact will not vary by alternative.
Fire and Fuels Management		
NI	Fuels/Fire Management	The project does not authorize activities that will change or alter fuels/fire management strategies.
Biological Resources		
NI	Vegetation Excluding Federally Listed Species	Based on the monitoring information, this action impacts very small amounts of vegetation through trampling of rhizomonous grasses. Since the renewal of this permit does not no alternative authorizes new surface disturbance and the will not occur as a result of any alternative, and therefore the and disturbance to rhizomonous grasses is expected total less then 5 acres
NI	Forest, Woodlands, and Aspen Communities	The project does not propose disturbance of woodlands or forests.

PI NI	Invasive Species/Noxious Weeds	All alternatives limit the spread and establishment of Noxious Weeds and Invasive Species by: not authorizing new disturbance to native vegetative species, by applying permit conditions that minimize the user caused spread, and implementing integrated pest management to treat identified populations.
PI NI	Riparian—Wetland/Floodplain Resource	<u>No alternative authorizes new use or surface disturbance on federal riparian areas or wetlands.</u>
PI	Fish and Wildlife Excluding Federally Listed Species	Human activities in association with authorized activities and use of the area could result in lifecycle disruptions.
PI	Special Status Species (Fish, Wildlife, and Plants)	Human activities in association with authorized activities and use of the area could result in lifecycle disruptions. No special status plants or fish are affected by the alternatives.
NP	Wild Horses and Burros	The project does not propose surface disturbance in an area with Wild Horses.
Heritage Resources		
PI	Cultural Resources	All alternatives, including the no action alternative, places users within a variable distance of important cultural resources. This factor will be analyzed in detail for each alternative.
PI	Native American Religious Concerns	Any impacts to Native American Religious Concerns will be analyzed as a linked issue with impacts to cultural resources.
NI	Paleontology	No known paleontologic resource is located within the project area.
NI PI	Visual Resources	The Class II management objective for the area will be met under all alternatives. No alternative proposes actions that will create more than a weak contrast with the existing landscape. This determination was made based on: 1) the minimal nature of the existing and proposed disturbance, 2) the natural tendency of sustainable trails to repeat the characteristic landscape, and 3) the ease at which landscapes hide trails from viewers.
Land Resources		
PI	Lands/Realty/Access	<u>The Lander Record of Decision restricts lands and reality actions in order to support the nature and purpose of the trail.</u>
PI	Renewable Energy	The Lander Record of Decision closes this area to renewable energy projects. As a result of the EIS decision and a lack of potential, no foreseeable conflicts in the short term or long term exist between renewable energy projects and recreational use of the area.
PI	Rights-of-way and corridors	No impacts to ROWs are expected to result from the Alternatives. As no ROWs or corridors exist within the project area. Furthermore, the final EIS of the Lander Land Use Plan excludes a large part of the area from new ROWs.
PI	Travel Management	Issues with travel management are linked to those detailed in the Access and Recreation sections. <u>transportation section</u>
NI	Livestock Grazing	Actions proposed within this EA do not adjust stocking rates nor livestock distribution.
PI	Recreation	Each alternative has the potential to impact visitor satisfaction and ability to realize the targeted experiences and benefits contained in the various visitor management objectives of the RMP.

Special Designations		
NP	Congressionally Designated Trails	The project occurs on and within view of Congressionally Designated Trails and/or the National Trails Management Corridor.
NP	Wilderness/WSA	The project does not propose surface disturbance within or in view of Wilderness Study Areas. No designated Wilderness exist within the LFO.
NP	Wild and Scenic Rivers	The project does not propose surface disturbance near or within view of eligible or recommended suitable Wild and Scenic Rivers.
NP	Areas of Critical Environmental Concern	<u>A portion of this activity occurs in the South Pass Historic Landscape Area of Critical Environmental Concern. In the area of the permit the ACEC was intentionally located around the National Historic Trails for the purpose of managing for important historic and scenic resources. In designating the ACEC around the Group Use RMZ, the Lander Field Office recognized that group use in this area was compatible with the ACEC objectives. However, since the main focus of the ACEC in this area is on the National Historic Trails and the associated landscape, this issue will be analyzed as a linked issue to impacts to: National Trails, Visual Resources, and Cultural and Historic Resources.</u>
NP	BLM Natural Areas	No <u>designated</u> natural areas exist in the Lander Field Office
Socioeconomic Resources		
NI	Socio-Economics	While the project has a loose link to Socio-Economic resources this link cannot be traced in a manner that will result in meaningful differences among the alternatives.
NI	Health and Safety	<u>The potential for health and safety issues exist anytime the public uses public land, but the various terms and conditions of the permit, as well as the BLM and CPB oversight of the permit will ensure that visitors are not exposed to unsafe conditions. No serious health and safety issues have been identified since the inception of this permit in 2005.</u>
NI	Environmental Justice	Nothing in this decision authorizes impacts at an amount that would disproportionately effect/impact low income or minority populations.
NP	Wastes (hazardous or solid)	There are no hazardous or solid wastes known to occur in the site. In addition, there is no action considered in this document that creates these waste material.

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Appendix C. 2015 CPB Permit Terms and Conditions

Terms and Conditions for Organized Group Use on BLM Administered Public Lands in the Lander Field Office, Wyoming

In addition to the stipulations contained on Form 2930-1, Special Recreation Application and Permit, the Lander Field Office Bureau of Land Management (BLM) in Wyoming has established the following terms and conditions to protect the land or resources involved, reduce user conflicts, and/or minimize health and safety hazards. These stipulations are made a part of the permit. Failure to comply may result in the loss of permit privileges.

1. General

- a. This ~~Special Recreation Permit~~ **Special Recreation Permit (SRP)** is for use of specific BLM-administered public lands in Wyoming only. Rights of access to privately owned lands, state lands, or public lands under any other jurisdiction other than the BLM **are not** granted or implied by this permit. Obtaining permission for access to or use of any non-BLM lands is the sole responsibility of the permittee. The permittee must provide proof of obtaining the necessary permission for the use of privately owned lands, state lands, or public lands under any other jurisdiction other than the BLM.
- b. Issuance of a permit by BLM does not guarantee the permittee's use of specific public lands, nor does it grant the permittee exclusive use of any area of BLM administered public land. Trek participants and support personnel shall not interfere with other public land user's access and use of the public lands, including use of the historic trail and its corridor. For example: the trekkers are to "step off" the trail to allow other publics to pass on by the trek group.
- c. The public lands will generally remain available on a first-come, first-served basis to as many other commercial, organized groups, and private users as allowed by the BLM. Nothing herein implies that the first permittee into any area has been authorized an exclusive use privilege.
- d. Issuance of an ~~SRP~~ **SRP** does not authorize the permittee to have free use of public facilities such as BLM managed, developed campgrounds. Use of these fee areas requires the payment of all fees as is required for the general public.
- e. Permittee is responsible for all actions of employees and trek participants, including support personnel while on the public lands. If the permittee's performance, including the actions of employees and trek participants, is found to be out of compliance with the terms and conditions, the authorized officer can modify, suspend, revoke, or terminate this permit at any time.
- f. BLM reserves the right to close various sites, trail segments, and/or areas of the public land to prevent resource damage, use conflicts, and to promote visitor safety.
- g. No alterations to the permitted use area will occur without first obtaining written permission from the authorized officer to revise the permit. The placement or construction of make-shift graves or grave markers is not permitted along the trek route, including BLM administered public lands or any other lands managed by another entity.

- h. No alterations or side trips to the permitted use route will occur without first obtaining written permission to revise the authorized route or use locations.
- i. Only signs authorized in writing by the BLM will be permitted on public lands.
- j. A schedule of planned trek group use shall be provided to the authorized officer no later than two weeks prior to the first scheduled trek group use of the BLM administered public lands. This schedule shall contain the date, group name, length of trek (1/2-day, 1-day, or 2-day), estimated number of participants, and the planned number of handcarts to be used.
- k. A post use report (forms to be provided by the BLM) must be returned to the authorized officer, along with any fees due (at a rate of \$5.00/person/day), to be agreed upon by BLM and the permittee.
- l. If payment of fees due is not received by the due date, then a late fee will be added to the permittee's bill.
- The late fee will be assessed 15 days after the due date of the bill.
 - The late fee is calculated at 10% of the amount due or \$25 whichever is greater, not to exceed \$250.
 - If the late payment and bill are not paid within 15 days, a series of demand letters will be issued with additional interest (at the current Federal Reserve rate), administrative fees (\$15 per letter) and an administrative penalty of 6% of the principle amount due.
 - After 180 days, if the bill has not been paid, then it is turned over to the U.S. Treasury Department for collection.
 - Any bill that has accrued late fees or interest is paid applying the money collected first to interest and penalties, then to principle.
- m. To assist in the tracking of visitor use of the BLM administered public lands, a final post use report detailing the dates of use, group name, length of trek (1/2-day, 1-day, or 2-day), actual number of participants, and the number of handcarts used shall be provided to the authorized officer within two-weeks of the conclusion of the use season.
- n. Permittee shall provide a copy of the authorization with the terms and conditions to the leader of each trek group. Trek leaders shall have this copy available on all excursions and will show evidence of the authorization to any BLM employee upon request.
- o. The permittee shall assume the lead for scheduling handcart treks and conducting an orientation of the route and permit provisions with group leaders. This coordination effort is limited to Church sponsored treks as authorized by this permit. The purpose of this scheduling is to avoid over-use and damage of the trail resource and to limit potential user conflicts between handcart trek groups and among handcart trek groups and other recreationists.
- p. For each individual trek group an orientation briefing shall be given to trip leaders no more than one day in advance of the scheduled trek. This pre-trek orientation is required as an effort to inform trek leaders of the terms and conditions in affect for use of the BLM administered public lands and the lands of the other entities along the trek route. The trek leaders will be responsible for passing this information on to participants to inform them of the designated route, hiking conditions, limitations on support vehicle use, portable toilet requirements, and the possible

presence of other public land users along the route. Also, there are certain natural hazards that could be encountered that present risks to participants. All participants must be advised of the conditions which might be encountered along the designated route.

q. The permittee shall make a request to the Fremont County Weed and Pest District to provide annual training in alien/invasive species awareness and prevention to the trek group leaders enrolled in the trek leadership training program.

r. Support personal are authorized to visit the lower monument at Rocky Ridge with 2 vehicles or less per group. Visits to the lower monument will not occur while trekkers are in the Rocky Ridge vicinity. This vehicle use is authorized solely for the purpose of allowing support personal to see Rocky Ridge and the Lower Monument.

s. Women's pulls will only be allowed at the "Y hill before the Hudson Atlantic City Road" and on Rocky Ridge. Spectators of the Women's pull will only be allowed at the Y hill prior to the Hudson Atlantic City Road location (not on National Historic Trail); all spectators and support personal must remain on the two track and stay at the top of the hill. No vehicles will be allowed at this location.

2. Season of Use

a. The season of use for trekking shall be July 1 – September 15. Trekking, with or without handcarts, shall be limited to Monday – Friday, with use on Fridays to be concluded by 4 PM. These dates shall apply to all groups, regardless of size that receive handcart support from the permittee (including groups less than 26 participants).

b. During wet weather conditions, the permittee shall be responsible for determining whether use of the authorized route should be cancelled due to wet/muddy conditions and take the necessary actions (i.e., cancel trekking activities) to protect the public lands prior to receiving notice from the Lander Field Office to cancel scheduled use of the trekking route.

3. Route Selection (see attached map)

Routes other than those described below shall not be used until written authorization is given by the BLM Lander Field Office for use of any new route segment.

a. **2-Day Treks: Day-one** - starting on Church property at Sixth Crossing the route will utilize the NHTs and other two-track roads westward to the Hudson-Atlantic City Road (H-AC Road). The route continues on the H-AC Road for approximately four miles to the designated H-AC Road staging area. From the H-AC Road staging area the route continues on to the Church operated Sage Creek Campground. **Day-two** - from the campground the route utilizes an existing two-track road to the Lower Monument. The route follows the NHTs over Rocky Ridge, through McLean Meadows, past the Gilesie Place, crossing Strawberry Creek to follow the Lewiston Fremont County Road to Rock Creek Hollow.

b. **1-Day treks:** From the H-AC Road staging area, the 1-day route follows the same route as day-two of the 2-day trek route described above.

c. **1/2-Day treks:** From the H-AC Road staging area the 1/2-day route follows the same route from the H-AC Road staging area as the 1-day route to the Upper Monument on Rocky Ridge. The 1/2-day route will return to the staging area from Rocky Ridge, via the reverse route (i.e.,

Rocky Ridge to the Lower Monument, through the Sage Creek Campground and on to the H-AC Road staging area).

4. Number of Participants per Season

- a. The permittee will be allowed up to 6,000 participants per season. The number of participants shall include trek group support personnel as well as trekkers. It may be necessary to schedule additional visitors in order to achieve 6,000 visitors.
- b. Participants receiving logistic support (i.e., handcarts) from the permittee shall be counted toward the 6,000 maximum participants (i.e., Mormon Handcart Historic Sites participant reservations, and those individuals/groups below the threshold of 26 participants). The exception is that the individual BLM issued ~~SRP~~SRP participants shall not count toward the 6,000 participants, regardless of whether handcarts are provided.

5. Maximum Group Size*

(alternatives developed in support of this document)

6. Vehicle Uses on the National Historic Trails and Trek Route

- a. Use of motor vehicles in support of permitted organized group use is restricted to:
 - A maximum of two motor vehicles per 100 participant, not to exceed 4 per group.
 - No vehicles shall accompany (i.e., follow along with the trekkers) on the trekking route, which includes the National Historic Trails (NHTs), other two-track routes, and the Hudson-Atlantic City Road (H-AC Road).
 - The use of buses (i.e., school buses, charter buses) to transport participants to the H-AC Road staging area is authorized. Buses shall not be parked at the staging area overnight. No buses are permitted on the H-AC Road west of the staging area, nor shall they be driven into the Sage Creek Campsite. Buses shall return to U.S. Highway 287 via the H-AC Road.
 - The use of dual-wheeled vehicles is not authorized off of the H-AC Road, except to access the H-AC Road staging area and Sage Creek Campground.
 - The use of semi-truck and trailer units, RV/motor homes, truck/van units such as U-Haul or Ryder vehicles, or other large multi-axel vehicles are not authorized on the H-AC Road.
 - Access to the trekker's route for support purposes is limited to the designated locations at the 1) Snow Fence Road; 2) the trekker's route two-track road at, but not on, the H-AC Road; 3) the H-AC Road staging area; 4) the Lewiston Lakes Road at the NHTs; 5) The GilesPie Place Road at the NHTs (not the actual historic buildings at the GilesPie Place, or at Radium Springs, or on Deep Creek); and 6) the Lewiston Road (Fremont County Road 511) near the Strawberry Creek Crossing. (see map for locations)
 - Support vehicles stopping at the trekker's route two-track road at, but not on, the H-AC Road shall park off of the H-AC Road along the first 75' of the two-track road. Vehicles shall not park on the H-AC Road.
 - No vehicles will be operated on any portion of the NHTs. This includes the operation of vehicles on the NHTs to access the western side of Rocky Ridge.

● No support motor vehicles will accompany or stop with the trek groups along the H-AC Road.

● The Ellis Ranch Road (Ranch Access Road) shall not be used as a motorized vehicle support route.

b. Exceptions to the use of motorized vehicles on the routes described above are limited for the express purpose of responding to an emergency situation involving the participants. An emergency situation includes search and rescue operations in cases of injured or ill persons. Emergency use of vehicles shall be conducted in the manner that is least disturbing to the soils and vegetation on or along the vehicle route(s) used. Support vehicles assigned as medical units shall abide by vehicle use restrictions unless expressly responding to an emergency situation.

c. The completion of the Post-Use-Permit will require, within 10 calendar days of the use, the reporting of each incident where motor vehicles were used on the NHTs or other portions of the trekking route for the purpose of responding to an emergency situation involving any of the participants, including support personnel.

d. An OHV closure order implemented on the NHTs from near the Lower Monument, over Rocky Ridge, to the western edge of the BLM administered public land in Section 28, T29N, R97W, shall be adhered to by the permittee and its trek participants. The closure will include the main NHTs route and the NHT variant from the top of Rocky Ridge west to its return to the main NHTs near the public/private land boundary as described above.

e. During use of the H-AC Road by trekkers, signs shall be placed in advance of trek use advising motor vehicle users of the potential of meeting trekkers and handcarts along the roadway. The sign wordage shall be approved by the BLM in advance of their placement. These signs will be placed at identified locations, as determined by the BLM, prior to the use of the H-AC Road by trek groups from July 1 – September 15. The signs shall be removed immediately following the last scheduled use of the H-AC Road. For example: the first trek group is scheduled to use the H-AC Road on July 1 at 11 AM. The advisory signs should be in place by not later than 10 AM on July 1. The last group is scheduled to finish using the road by 3 PM on the September 6. The signs should be removed by 4 PM on September 6.

f. The use of ATVs or other motor vehicles by trek groups or the permittee to monitor the activities along the trek route is not authorized by this permit. The use of mountain bicycles, foot access, and horse use (see # 10 below for guideline for use of livestock along the trek route) is permitted for monitoring purposes by the trek groups and/or permittee.

7. Staging Area

At the intersection of the H-AC Road and the access road leading to the Sage Creek Campground a staging area will be available for use by individuals and groups as a temporary parking and unloading area. Use of the staging area will be limited to the area delineated by barrier posts/timbers. Use of areas outside of the delineated staging area for parking of vehicles and unloading of passengers is not authorized. No overnight camping will be permitted either on the ground, in tents, cars, trucks, campers, trailers, or RVs. Parking of vehicles at the staging area shall not exceed 3 days in length. No additional staging areas are authorized on BLM administered public land by this permit. No staging shall be conducted at the Lower Monument, Lewiston Lakes Road/H-AC Road intersection, Snow Fence Road, Strawberry Creek/Fremont County Lewiston Road intersection or other locations other than the designated H-AC Road staging area.

8. Sanitation

a. The BLM will provide disposable portable toilets to groups volunteering to test the feasibility of their use on organized group treks. An evaluation on the use of the disposable portable toilets will be used in determining the feasibility of using these units in place of the industrial portable toilets currently in use along the handcart trekking route.

b. The temporary placement of industrial portable toilets will be authorized near the NHTs on BLM administered public lands and on other lands (private or state), with advance permission to place the units on the other lands, in such a manner that will reduce visual and resource impacts. The permittee shall be responsible for obtaining permission from the appropriate private landowner or state entity for placement of the portable toilets on non-BLM lands. The authorized locations for placement of these toilets will be limited to the following sites near the trekking route and the NHTs:

- Along the Snow Fence Road, north of the NHTs (BLM)
- On state land east of the Ranch Access Road (Wyoming State Lands)
- Along the Lewiston Lakes Road, north of the NHTs (Woolery Ranch private land)
- Along the Gilesie Place Road, north of the NHTs, at least 500' from Deep Creek (BLM)
- At Strawberry Creek crossing, south of the creek/east of the NHTs, near the Lewiston County Road (private land)

c. No toilet servicing motor vehicles will be authorized to drive along segments of the NHTs. Access to the toilets for servicing purposes shall be along non-NHT route segments (i.e., Snow Fence Road, Ranch Access Road to two-track road leading to state land toilets, the Gilesie Place Road, and the Lewiston County Road).

d. The permittee shall provide temporary historically compatible visual mitigation screening at all toilets locations at the above listed placement sites. The visual mitigation method used shall reduce the visual impacts from the use of the industrial portable toilets along the NHT corridor. Mitigation measures used may include the use of rustic wood materials to construct siding, construction and use of authentic replicas of covered wagons, sheep herder's wagons, and/or cabins that are authentic to the historic period of the mid-1800s (i.e., miner's cabin from the Lewiston Lakes Road west or a log cabin between Sixth Crossing and Sage Creek Campground). Guidance on the construction techniques to mitigate visual impacts will be available from the BLM, with assistance from the National Park Service and the Wyoming State Historic Preservation Office. Prior to the placement of the screening facilities, approval of the design, materials, and construction method must be obtained by the permittee from the authorized officer. The screening facilities and toilets must be removed from the trek route within five (5) days following the conclusion of the last trek group's use or no later than September 15.

9. Day Use, Overnight Camping, and the Use of Fires on Public Lands

a. The authorized route and day-use areas will be maintained in a neat and clean condition with no litter. When trek groups vacate an area, the area should be left in a natural state.

b. Use of water sources (reservoirs, springs, streams, creeks, and water developments) for swimming; wading; bathing; etc. is not authorized by this permit.

c. The discharge of fire works is prohibited year round on BLM administered public lands.

d. All litter and garbage will be removed. No litter or garbage will be buried.

e. Cutting or removing any live plant material is prohibited.

f. The use of BLM administered public lands for overnight camping is not authorized by this permit. The permittee or participants will not establish a campsite for overnight use on public lands without first notifying and receiving written approval from the authorized officer.

g. The building and tending of campfires by trek groups or the permittee is prohibited on BLM administered public lands.

10. Guidelines for Livestock Use

The use of livestock along the trek route and NHTs corridor shall follow the principles of the Leave No Trace Outdoor Skills and Ethics, Backcountry Horse Use outdoor skills and ethics program. A summary of this Leave No Trace program for livestock use is provided below:

a. Livestock use will be permitted on roads and trails. Use for cross country travel shall be done in the least impacting manner.

b. Livestock will remain under control of the permittee or trek groups all times.

c. When forage for livestock is provided by the permittee or trek groups, it must be certified weed free by the Fremont County Weed and Pest Control office or other authorized certification entities. Evidence of proper certification must be available upon request on all excursions.

d. Livestock shall not be tied to trees or other vegetation for extended periods. Use of the highline method or hobbles is encouraged to prevent trampling the plants and/or root systems around the vegetation.

11. Leave No Trace and Tread Lightly Programs

The BLM recognizes and endorses the principles of Leave No Trace and Tread Lightly as appropriate wildland recreational use ethical behavior for the public. It is highly encouraged that the permittee adopt these principles and use them in conducting their operations. These principles of Leave No Trace and Tread Lightly are recommended as a guide to minimizing signs of visitation to the expansive and varied BLM administered public lands and are intended to support and complement BLM regulations. Additional information on the Leave No Trace and Tread Lightly programs is available at the Lander Field Office. Summaries of both programs are listed below.

LEAVE NO TRACE

Plan Ahead and Prepare

- Become aware of the permit requirements for your activity. Attending trek leadership training is a good way to obtain information.
- Prepare for extreme weather. It's not unusual to have afternoon thunderstorms, rain, and/or snow as well as hot dry conditions in the summer. And don't forget about the WIND!

- Be familiar with the hazards that may exist on the public lands, such as badger holes, rattlesnakes, barbed wire on fence gates and other hazards. Plus, be aware of dehydration, heat exhaustion or heat stroke.
- Be prepared for medical emergencies by being first aid trained and equipped. Prevent the emergency from occurring before it happens. Don't accept dehydration from lack of drinking adequate amounts of water or bonking from the lack of eating food as the norm. Require the trekkers to drink before they're thirsty and eat before they're hungry. An IV drip at the end of the day should not become common practice.
- Schedule your trip to avoid times of high use. Visit in smaller groups. The quality of the recreational experience is often tied directly to the size of a group. Large groups can be a logistic nightmare, as compared to smaller groups.
- You can reduce litter at the source by repackaging food to minimize waste. This will result in fewer waste products that you'll need to carry with you. It can also lessen the instances of trash ending up on the ground or being blow into Nebraska.
- Make it simple. Elaborate activities and meals can require additional logistics and support vehicles, which can lead to increased impacts to the historic values and recreational experiences you came to enjoy.
- Use a map and compass to reduce or eliminate the need for flagging, rock cairns, or paint makers to mark the route.

Travel and Camp on Durable Surfaces

- Concentrate use on existing trails. Don't deviate from the approved and designated route.
- Walk on the trail, even when it is wet or muddy. Often it is best when encountering a wet or muddy spot on the trail to walk through it rather than walk around it. Walking around these spots will result in damage to vegetation and the widening of the road or trail. This widening of the trail diminishes the historic setting of the trails.
- Avoid using places where impacts are just beginning. Don't add to the destruction of vegetation and soils.
- Trekkers using the Hudson-Atlantic City Road should stay to the far right hand side to allow vehicles to safely pass on by.

Dispose of Waste Properly

- Pack it in, pack it out. Inspect your route and rest areas for trash, food, and litter. Pack out all trash, food, and litter.
- Use the portable toilets provided. Do not use the "bushes". The number of trek participants each season requires the use of the portable toilets. In 2005 the BLM will offer groups the use of portable disposable toilets on a voluntary basis. Groups will be providing valuable feedback on the feasibility of using these units.

Leave What You Find

- Preserve the past, observe cultural and historic features and artifacts, but leave them as you found them so others can experience the feeling of discovery as you did.

- Do not build rock cairns or grave markers. The national historic trails have been referred to as a “linear graveyard”. Respect the fact that hundreds of pioneers made the ultimate sacrifice with their lives by not defacing the historic trails with modern-day markers.
- Leave rocks, plants and other natural objects as you find them. Allow others that follow in your foot steps to discover the naturalness of the historic trails.
- Avoid introducing or transporting non-native species. Throughout the west invasive weed species are getting established and competing with the native vegetation.

Minimize Campfire Impacts

- Where fires are permitted, use established fire rings or fire pans. There are no fires permitted along the trek route on the BLM administered public lands.

Respect Wildlife

- Observe wildlife from a distance. Do not approach them. Wildlife can be in the mating, nesting, or raising young during the trek season. Don’t add to their stress levels.
- Never feed wildlife. Feeding wildlife damages their health, alters their natural behaviors, and exposes them to predators and other dangers. It can also expose you to diseases that wildlife can carry.
- Always protect wildlife by storing food, toiletries and trash in a secure manner.

Be Considerate of Other Visitors

- Respect other visitors and protect the quality of their recreational experience.
- Be courteous. Yield the trail or road to other users. If a vehicle approaches your group along the trail you can move off the trail enough to allow them to pass on by.
- When taking a break you can move off the trail to allow others the opportunity to pass on by. Be careful to select areas that are less likely to be impacted by trampling from foot prints (i.e., dry grass, rocky areas, or existing campsites).
- Let nature’s sounds prevail. Avoid loud voices and noises. Sounds carry a long distance along the trek route. The noises one group creates can impact the quality of the experience other visitors to the national historic trails are seeking. Respect the choice of others to experience quiet and solitude.

TREAD LIGHTLY!

Travel only where permitted.

Know what areas/roads/trails are open to vehicles.

Respect the rights of others.

Be considerate of others on the roads/trail that you travel. Vehicles yield the right-of-way to bicycles, hikers, and horses.

Educate yourself.

Obtain information on your destination before you go. If you have questions contact the managing agency of the area(s) you are visiting.

Avoid streams, meadows, wildlife areas, etc.

Be aware of wildlife habitat. Crashing through underbrush or across open meadows upsets the balance of nature, destroys nesting sites, and disturbs wildlife.

Drive and travel responsibly.

Use common sense. Avoid muddy roads and trails and stay out of meadows and wetlands.

The historic trails are an irreplaceable national treasure. The use of the historic trails and other public and private lands needs to be done in a sustainable manner. "Loving it to death" by irresponsible use could lead to tighter restrictions on recreational uses. Together, the permittee, trekkers, other users, and the BLM can protect these historic trails for future generations to enjoy and experience our national heritage.

Appendix D. Photo of Temporary Outhouse

*Appendix D Photo of Temporary Outhouse
Project Information*





*Appendix D Photo of Temporary Outhouse
Project Information*

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Appendix E. Detailed Description of Projected Traffic Increases as a Result of CPB Permit

Table E.1. Detailed Calculations of Vehicles in Support of CPB

Approved Route	Vehicle Type	Vehicle Use	Type of Trip	Number of Vehicle trips/year	Number of Passes/year
Hudson Atlantic City Road to Sage Campground- Crowned and ditched BLM road receiving annual maintenance.	Passenger Bus (50 people per bus)	Delivers participants to Sage Creek Campground	Out and back to Highway 287	120 (6,000 people per year/50 people per bus)	120*2 passes=240
	Support Vehicles	Resupplies trekkers at predetermined locations see Map A.1, "Trek Route and Support Locations"	Through travel from highway 287 to Strawberry Creek Road.	120 (30 groups per year*4 vehicles per group)	120*1 passes=120
	Pumper Truck	Cleans and pumps temporary toilets located at predetermined locations see Map A.1, "Trek Route and Support Locations"	Through travel from highway 287 to Strawberry Creek Road.	16 (Twice a week for 8 weeks)	16*1 pass=16
	Other logistical support	Delivers camping equipment or other participants not supported by buses to Sage Creek Campground	Through travel from highway 287 to Strawberry Creek Road	120 (30 groups per year*4 vehicles per group)	120*2 passes=240
	Total Increased Traffic on Route in Support of CPB Permit			376	616
Strawberry Creek Road- Two-track with limited maintenance to prevent resource damage, new bridge spanning strawberry creek.	Support Vehicles	Resupplies trekkers at predetermined locations see Map A.1, "Trek Route and Support Locations"	Entire route from Start at Hudson Atlantic City Road to End at Lewiston County Road.	120 (30 groups per year*4 vehicles per group)	120
	Pumper Truck	Cleans and pumps temporary toilets located at predetermined locations see Map A.1, "Trek Route and Support Locations"	Entire route from Start at Hudson Atlantic City Road to End at Lewiston County Road.	16 (Twice a week for 8 weeks)	16
	Total Increased Traffic on Route in Support of CPB Permit			136	136

Appendix E Detailed Description of Projected Traffic Increases as a Result of CPB Permit Project Information

Approved Route	Vehicle Type	Vehicle Use	Type of Trip	Number of Vehicle trips/year	Number of Passes/year
Fremont County Road 511 to 22 to 514, to 515 ending at highway 28.	Support Vehicles	Resupplies trekkers at predetermined locations see Map A.1, "Trek Route and Support Locations"	Through travel beginning from the intersection with the Strawberry Creek Road and County Road 511 ending at highway 28.	120 (30 groups per year*4 vehicles per group)	120
	Pumper Truck	Cleans and pumps temporary toilets located at predetermined locations see Map A.1, "Trek Route and Support Locations"	Through travel beginning from the intersection with the Strawberry Creek Road and County Road 511 ending at highway 28.	16 (Twice a week for 8 weeks)	16
	Passenger Bus (50 people per bus)		Out and Back from start at highway 28 to Rock Creek Hollow	120 (6,000 people per year/50 people per bus)	120*2 passes=240
	Other logistical support		Out and Back from start at highway 28 to Rock Creek Hollow	120 (30 groups per year*4 vehicles per group)	120*2 passes=240
	Total additional traffic on route in support of CPB permit			376	616
Snow Fence Road	Support Vehicles	Resupplies trekkers at predetermined locations see Map A.1, "Trek Route and Support Locations"	Out and back travel from the Hudson Atlantic City Road	120 (30 groups per year*4 vehicles per group)	120*2 passes=240
	Pumper Truck	Cleans and pumps temporary toilets located at predetermined locations see Map A.1, "Trek Route and Support Locations"	Out and back travel from the Hudson Atlantic City Road	16 (Twice a week for 8 weeks)	16*2 passes= 32
	Total additional traffic on route in support of CPB permit			136	272

Appendix E Detailed Description of Projected Traffic Increases as a Result of CPB Permit Project Information

Approved Route	Vehicle Type	Vehicle Use	Type of Trip	Number of Vehicle trips/year	Number of Passes/year
Lewiston Lakes Road	Support Vehicles	Resupplies trekkers at predetermined locations see Map A.1, "Trek Route and Support Locations"	Out and back travel from the Hudson Atlantic City Road	120 (30 groups per year*4 vehicles per group)	120*2 passes=240
	Pumper Truck	Cleans and pumps temporary toilets located at predetermined locations see Map A.1, "Trek Route and Support Locations"	Out and back travel from the Hudson Atlantic City Road	16 (Twice a week for 8 weeks)	16*2 passes= 32
	Total additional traffic on route in support of CPB permit			136	272
Gillespie Place Road	Support Vehicles	Resupplies trekkers at predetermined locations see Map A.1, "Trek Route and Support Locations"	Out and back travel from the Hudson Atlantic City Road	120 (30 groups per year*4 vehicles per group)	120*2 passes=240
	Pumper Truck	Cleans and pumps temporary toilets located at predetermined locations see Map A.1, "Trek Route and Support Locations"	Out and back travel from the Hudson Atlantic City Road	16 (Twice a week for 8 weeks)	16*2 passes= 32
	Total additional traffic on route in support of CPB permit			136	272
County Road 511 From intersection with the Strawberry Creek Road to Support location at Strawberry Creek Crossing.	Support Vehicles	Resupplies trekkers at predetermined locations see Map A.1, "Trek Route and Support Locations"	Out and back travel from the Hudson Atlantic City Road	120 (30 groups per year*4 vehicles per group)	120*2 passes=240
	Pumper Truck	Cleans and pumps temporary toilets located at predetermined locations see Map A.1, "Trek Route and Support Locations"	Out and back travel from the Hudson Atlantic City Road	16 (Twice a week for 8 weeks)	16*2 passes= 32
	Total additional traffic on route in support of CPB permit			136	272