



**U.S. Department of the Interior**  
Bureau of Land Management  
Wyoming State Office

Lander Field Office

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## **ENVIRONMENTAL ASSESSMENT for the Proposed Special Recreation Permit to Conduct Handcart Treks on Bureau of Land Management Administered Public Lands Between Sixth Crossing and Rock Creek Hollow**



### MISSION STATEMENT

It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

BLM/WY/PL-04/023+1220

ENVIRONMENTAL ASSESSMENT

For The

PROPOSED SPECIAL RECREATION PERMIT

To Conduct

HANDCART TREKS ON BLM ADMINISTERED PUBLIC LANDS

BETWEEN SIXTH CROSSING and ROCK CREEK HOLLOW

LOCATION: LANDER FIELD OFFICE

Within

FREMONT COUNTY

Prepared by the

BUREAU OF LAND MANAGEMENT

LANDER FIELD OFFICE

Lander, Wyoming

April 29, 2004

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## **INTRODUCTION**

### **Background Information**

In November of 2002, the Bureau of Land Management's (BLM) Lander Field Office received a Special Recreation Permit (SRP) application from the Church of Jesus Christ Latter Day Saints (Church), Farm Management Company, Mormon Handcart Historic Sites, to manage organized groups of handcart trekkers along a segment of the Oregon, Mormon Pioneer, California, and Pony Express National Historic Trails (NHTs). This activity would be non-exclusive use of the public lands, therefore current and other recreational uses would still occur. The proposed route of approximately 26 miles departs from Church property at Sixth Crossing, near Sweetwater Station, to Church property at Rock Creek Hollow, southeast of Atlantic City.

On January 28, 2003, a public scoping period of 30 days was initiated by the Lander Field Office, asking for comments from the public and affected agencies on the proposed SRP application, prior to the preparation of an environmental assessment (EA). The public and agencies were asked to provide comments on the issues identified in the scoping letter or any other issues associated with the proposed activity. A detailed plan of operations and two maps for the proposed activity were provided to assist in reviewing and providing comments on the SRP application.

Issues identified in the scoping letter and new issues developed from the comments received on the proposed SRP for organized handcart trekking to be addressed in the EA include the following:

- Route selection
- Season of use
- Total number of participants per trekking season
- Trek group size
- Vehicle use on the trails (new issue)
- Vehicle staging areas
- Trekker campsites (new issue)
- Sanitation – portable toilets, portable/disposable toilets
- Impacts to other public land users
- Impacts to wildlife
- Impacts to historic/cultural resources
- Monitoring of the impacts to natural and historic/cultural resources
- Monitoring of the activity for compliance to the terms of the permit
- Permit requirements of the applicant (new issue)
- Permit requirements for other organized groups
- Recreational experience (new issue)
- Fees for all permittees
- Concurrent recreational uses

## **NEED FOR THE PROPOSED ACTION**

The 1976 Bicentennial wagon train and later the 1990 Wyoming Centennial wagon train increased the public interest in the history of the emigrant trails in Wyoming. Public interest in the NHTs dramatically increased during the first in a series of sesquicentennial (150 year) reenactments along the NHTs starting in 1993 with the Oregon Trail wagon train. In 1997, the Mormon Pioneer Trail wagon train and in 1999, the California Trail wagon train, added to the interest in the historic trails that crossed east to west through the state of Wyoming. Additional interest in the NHTs has been observed since 1996, when the Church purchased the historic Sun Ranch, near Devils Gate. The Church's development of the Martin's Handcart Visitor Center, adjacent campgrounds and the BLM's and Church's joint development of the Martin's Cove Trail have dramatically increased interest in the NHTs. The Church also acquired historic property at the 6<sup>th</sup> Crossing of the Sweetwater River, near Sweetwater Station. At this location the Church has also developed visitor facilities, including a welcome center and a campground.

In the past, the NHTs segment between Sixth Crossing and Rock Creek Hollow had been utilized by trail enthusiasts ranging from individuals and groups made-up of both non-Church and Church members. These trips to view and experience the NHTs were conducted informally. The trail excursions were small and the organizers did not seek, nor were they required, to obtain a permit for use of BLM administered public lands. Following the 1997 Mormon Pioneer Trail wagon train, the trails saw a dramatic increase in visitation. In 1999, the Church Educational System was issued a five year SRP to conduct small group vehicle tours of the NHTs across BLM administered public lands in Wyoming. They also conducted small group handcart treks as part of their authorization in the area between U.S. Highway 287, near Sweetwater Station, and Rock Creek Hollow.

From 1999 to 2000, the Church Educational System was authorized to conduct handcart treks under a Letter of Agreement for Non-Commercial Recreational Use of Public Lands with the Lander Field Office. In 2001, the Church Farm Management Company (FMC) became the signatory to the letter of agreement. Visitor use during this timeframe increased from under 1,000 people per season (June 10<sup>th</sup> – August 15<sup>th</sup>) in 1999 to over 2,500 in 2001. During this same time period in 2002 visitor use increased to approximately 12,000 which included handcart participants and support personnel. In addition, it was estimated that an additional 2,000 non-trekking visitors were on the NHT at Rocky Ridge (BLM Lander Field Office Recreation Management Information System, 10/15/2002). Due to the increase in numbers and the resultant impacts to the natural, historical, and cultural resources, the FMC was advised at a meeting on February 5, 2002, that a SRP would need to be issued to authorize future handcart trekking on the BLM administered public lands. At this meeting, the FMC advised the BLM that they were already into the planning of 2002 handcart use and it would be difficult to meet the SRP requirements for the summer of 2002. It was agreed that the FMC would continue the authorization under the Letter of Agreement for 2002 use, but would apply for a SRP to

conduct handcart treks in 2003. In the fall of 2002, the FMC submitted an application for a SRP to authorize handcart trekking along the NHTs.

In January 2003, a scoping letter was sent to interested publics asking for comments on the proposed FMC SRP to conduct organized handcart treks on BLM administered public lands between Sixth Crossing and Rock Creek Hollow. The treks would start and end on Church owned property. An attempt was made to complete the environmental analysis, decision record and issue the SRP prior to the start of the 2003 handcart trekking season that was to start in mid-June. By the end of April it was realized that this timeframe was not going to be met so a decision was made to authorize another season of trekking under the terms of a Letter of Agreement for 2003 use. A use level of 7,500 trek participants and support personnel was agreed upon, however, due to additional restrictions placed on season of use (due to a nesting ferruginous hawk and inclement weather creating muddy road conditions) actual use in 2003 was 6,345. This figure was represented by 1,135 ½-day, 2,470 1-day, and 1740 2-day trekkers and support personnel.

### **Permit Requirements of the Applicant**

The following provides background information on the BLM's policy for issuing SRPs.

Special recreation permits (SRPs) are authorizations which allow for specific, nonexclusive, permitted recreational uses of the public lands. They are issued as a means to manage visitor use and protect recreation and other resources, while minimizing adverse resource and cultural impacts, and to reduce user conflicts. The authority for the BLM to issue SRPs is contained in the Federal Land Policy and Management Act of 1976, as amended, Public Law 94-579 (43 U.S.C. 1701 et seq.). Additional authorities are contained in the Land and Water Conservation Fund Act of 1965, as amended, the National Trails System Act of 1968, as amended, Title 43 CFR, Subpart 2932 – Special Recreation Permits for Commercial Use, Competitive Events, Organized Groups, and Recreation Use in Special Areas. BLM Manual 2930 provides policy and program direction for issuing and administering SRPs as a means of authorizing special recreational uses on the public lands. More detailed procedures are contained in the Special Recreation Permit Handbook (H-2930-1).

The issuance of SRPs is required when the recreational activity is either: commercial, competitive use, vending, within special use areas, or organized group activities and event uses. The NHTs became special use areas when Congress designated them as national historic trails. Furthermore, the 1987 Resource Management Plan (RMP) for the Lander Field Office identified the NHTs as a Special Recreation Management Area that would require special management and control measures for the protection of the trail resources. The proposed handcart trekking activity as contained in the SRP application is considered a recreational organized group activity within a special use area. This category of recreational use is defined as a structured, ordered, consolidated, or scheduled event on, or occupation of, public lands for the purpose of recreational use that is not commercial or competitive. Based on the level of activity occurring, and on this

definition and Bureau policy, a SRP is required for the proposed handcart trekking recreational activity.

Issuing a SRP is a discretionary action by the authorized officer (Lander Field Manager). Applications for uses requiring a SRP may be denied based upon factors such as moratorium issued as part of planning decisions; the results of an environmental analysis; other resource values; an allocation system; public health and safety; the applicant's past performance; or the ability of the managing office to issue, manage, and monitor the proposed use. Additional factors considered prior to an SRP application being approved include conformance with applicable laws and with the RMP for the Lander Field Office. The analysis of the proposed activity in an environmental assessment (EA), potential conflicts with other uses, protection of other resource values, public health and safety, the applicant's past performance, and the ability of the managing office to issue, manage, and monitor the proposed use are also considered prior to approval of an application. The EA to be completed will be commensurate with the level of use and potential environmental and social impacts. For the purpose of the proposed handcart trekking SRP, a determination to prepare a full environmental analysis, including public scoping, was reached early in the application process. Other factors considered in the SRP permitting process include existing recreation conflicts in the proposed area of operations, diversity of services provided to the public, number of similar services already offered, and whether the public land area is sufficient to accommodate the proposed use without relying on adjacent non-public lands. The desired use level of the proposed area of operations is also taken into account. This use level is determined in the RMP or in recreation/historic/cultural resource plans, or in their absence, through analysis of resources and visitor use for the area using the recreation opportunity spectrum (ROS), limits of acceptable change (LAC), or other valid methods.

### **Duration of permit**

The duration of a SRP for organized groups is determined by the type of permit and other factors, such as, if the event recurs annually, with no changes in use, area, or number of participants. The authorized officer may issue a permit for up to 10 years with annual validation after two years of acceptable performance under annual permits. The authorized officer considers the following factors when determining if a permit should be renewed:

- a. The permittee has satisfactorily met the requirements of the previous permit, including an acceptable performance evaluation. Also considered is conformance with applicable laws and regulations on all Federal, State, or county administered lands.
- b. The continued use is consistent with the RMP, or other plans, including the desired use level, and there are no overriding use authorizations to the permitted activity.

## **Permit Requirements for Other Organized Groups**

The need for other groups to be authorized for their recreational activity within the same general area of the public lands proposed for the organized handcart treks was an issue that generated many comments during the scoping period. As with the handcart trekking use, a permit is required when a recreational organized group or event activity is a structured, ordered, consolidated, or scheduled event on, or occupation of, public lands for the purpose of recreational use that is not commercial or competitive in areas that require additional stipulations or monitoring of the activity. The area of the proposed handcart trekking route, including Rocky Ridge, the Gilesie Place, and other segments of the NHTs warrant such stipulations and monitoring. Permits are required on all BLM administered public lands for commercial outfitters (e.g., hunting, fishing, wagon train trips, horseback riding, mountain biking, handcart trekking, etc.). Currently there are 10 commercial outfitters and one non-commercial outfitter authorized to operate within the area of the proposed handcart treks. Competitive events (e.g., mountain bike races, horse endurance rides, shooting or archery competitions, etc.) on BLM administered public lands also require a SRP, however, no permits of this nature have been issued for activities specifically designed to utilize the NHTs.

It is the policy of the BLM that the requirement to obtain a permit may only be waived if:

- a) the use or event begins and ends on non-public lands, traverses less than one mile of public land, and poses no threat of appreciable damage to public land resources;
- b) BLM sponsors or co-sponsors the use. This includes any activity or event that BLM is involved in organizing and hosting, or sharing responsibility for, arranged through authorizing letters or agreements; or
- c) the use is an organized group activity or event that 1) is not commercial; 2) is not publicly advertised; 3) poses no appreciable risk for damage to public land or related water resource values; and 4) requires no specific management or monitoring.

It is the opinion of the BLM that the proposed handcart trekking activities does not meet the permit waiver requirements as stated above.

Other recreational group activities or events may require specific management or monitoring of the activity and would therefore require a SRP. The issuance of permits for these other activities would be handled on a case-by-case basis. The decision on the permit requirement would be based on the Bureau's policy regarding SRP issuance and would ultimately lie with the Lander Field Manager.

## **Fees for all Permittees**

The BLM Director (Washington Office) establishes fees, including minimum annual fees, for SRPs for organized group activities or events. The Director may adjust the fees (to be published in the Federal Register) as necessary to reflect changes in costs and the market, using the following types of data:

- 1) The direct and indirect cost to the government;
- 2) The types of services or facilities provided by the government; and
- 3) The comparable recreation fees charged by other Federal agencies, non-Federal agencies, and the private sector located within the service area.

The standard fee for organized groups or events is \$4.00 per person, per day, or \$80.00 for the group, whichever is greater. See Appendix B for several examples of calculating fees owed, based upon the standard fee formula.

For organized group activities or events, the BLM may charge a fee for recovery of costs to the agency for analyses and permit processing instead of the SRP fee if:

- a) the BLM needs more than 50 hours of staff time to process a SRP for an organized group or event use in any one year, and
- b) the BLM anticipates that permit fees on the fee schedule for that year will be less than the costs of processing the permit. However, it is anticipated that permit fees on the fee schedule (\$4/person/day) for the proposed handcart trekking activity will be greater than the costs of processing the permit. Therefore, a cost recovery fee will not be used for the handcart trekking permit.

The BLM authorized officer may waive SRP fees only for those SRPs issued for research/scientific, therapeutic, or administrative use directly related to management of the permit area or if the event or activity is co-sponsored by the BLM. The key factor in determining a fee waiver is whether the activity itself, rather than the sponsoring institution, qualifies for a waiver. Non-profit, educational, or public agency status is not, on its own, a basis for waiving fees. The proposed handcart trekking activity does not qualify for a fee waiver under this BLM policy. Any fees collected from SRPs are retained by the permit issuing field office for use in management of the recreation program in that office (i.e., purchase/install signage, develop interpretive panels, hire seasonal employees to monitor recreational visitor use, etc.)

## **Recreational Experience**

The BLM's goal in the management of recreation resources is to provide opportunities for the public to obtain satisfying experiences while recreating on the public lands. The recreationist attains these satisfying experiences by participating in preferred recreation

activities in preferred surroundings or settings. The BLM manages settings to provide opportunities for recreation experiences and the benefits those experiences produce for individuals and society. This is done while still providing for the protection of the natural, cultural, and historic resources on the public lands. By managing the natural resource setting, and the activities within it, the BLM provides the opportunities for recreation experiences to take place. Recreation opportunities can be expressed in terms of three principal components: the activities, the setting, and the experience. Combinations of activities, setting, and the probable experience opportunities have been arranged in a continuum called the Recreational Opportunity Spectrum (ROS). This spectrum is divided into six classes ranging from Primitive to Urban (i.e., Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roaded Natural, Rural, and Urban, see Appendix A for a description of the six classes). Based on these six classes, ROS provides a framework for stratifying and defining classes of outdoor recreation opportunity environments. The ROS helps focus attention on the fact that recreation management is concerned primarily with producing experiences for people.

Because the ROS has explicit definitions of different recreation opportunities, it facilitates comparisons between different alternatives. It also helps to match the recreation user group's specific preferences for settings and experiences with places that will likely fulfill these preferences. It can also identify uses that are incompatible with the setting that is being used for the activity. Further, it can identify what specific actions might be needed in order to achieve allocations of recreation uses.

### **Concurrent Recreational Uses**

The NHTs and the surrounding area within the project area receive a variety of recreational uses throughout the year. While the area is not readily accessible when covered with snow, occasional use for snowmobiling, cross country skiing and snowshoeing does occur. Depending on the spring/fall snows and rains, portions of the area can be accessible in late-May and early June, though mid to late-June is more common. The use season continues through the summer months, through October and into early November. During this time non-commercial recreational activities in the area include hiking, mountain biking, horseback riding, sight-seeing, rock hounding, fishing, and upland game and big game hunting. A visit to the NHTs is high on many people's minds when exploring the historic features in the area. Many of these recreational activities require the use of motor vehicles (e.g., trucks, SUVs, ATVs, and motorcycles) to access the area or are used extensively for the recreational activity.

### **Trek Leader Training**

The following is a summary of the training provided by the Church to the handcart trek leaders.

The Church has produced a comprehensive handbook for trek leaders. It contains specific information on both the Martin's Cove and Sixth Crossing facilities. It contains

the following specific information for use by the handcart trekkers along the proposed route from Sixth Crossing to Rock Creek Hollow.

#### Trek Options from Sixth Crossing –

Four trekking options are suggested. Two include a 2-day trek, utilizing either the BLM campsite or the proposed Sage campsite (approximately 1.5 miles north of Rocky Ridge). The other two options are for a one-day trek, from the proposed staging area (adjacent to the Hudson-Atlantic City Road, approximately two miles north of Rocky Ridge) to Rock Creek Hollow, and a 1/2 – day trek to Rocky Ridge and returning to the proposed staging area.

#### Rules for the BLM trekker’s campsite –

- 1) Two vehicles per group. All other cars must be parked at the proposed staging area along the Hudson-Atlantic City Road.
- 2) No motor homes or buses are allowed on the BLM campsite.
- 3) No open fires.
- 4) Remove all trash; no dumpster is provided. Pick up all litter you find. Be good campers.
- 5) There is no water at the campsite. Bring your own.

Other information in the handbook deals with personal clothing and safety, hydration and first aid treatments. Items specific to the handcart treks include pick-up/drop-off points, “trek ethics” such as pulling to the side of or in some cases even off the trail to let other public lands visitors pass by, handcart loading suggestions, and proper use of the hand carts. Also contained in the handbook are several maps of the Church facilities at Martin’s Cove, Sixth Crossing, and at Rock Creek Hollow.

### **CONFORMANCE WITH LAND USE AND HISTORIC TRAILS PLANS**

**The 1987 Resource Management Plan (RMP) for the Lander Resource Area** (Lander Field Office) was prepared to provide a comprehensive framework for managing public lands and resources within the Lander Field Office. The RMP states the following in regard to recreational use and management of the NHTs in the proposed handcart trekking activity area:

#### **Recreation Management**

Recreational use will continue to be monitored throughout the resource area. Area personnel will supervise recreational use and provide enforcement of recreation-oriented regulations and special designations. Monitoring and use supervision will be accomplished by patrolling high-use areas and contacting users in the field. Special efforts will be made to ensure compliance with the terms of special recreation-use permits, authorizing commercial guide/outfitter

services, permits for tours of the Oregon/Mormon Pioneer National Historic Trails, and special designations dealing with recreation such as the 14-day camping limit on public lands and off-road vehicle designations.

Off-highway vehicle designations for the NHTs and other primitive two-track roads within the historic trails corridor are limited to existing roads. There is no authorized cross-country travel (travel off of existing roads) by motor vehicles.

### **Cultural/Natural History**

Management actions will protect and maintain significant cultural resources located in the Lander Resource Area. The significant resources, including the Oregon/Mormon Pioneer National Historic Trails and associated sites will receive enhanced protection. The 1986 Oregon/Mormon Trail Management Plan is referenced in the RMP.

**The 1986 Wyoming BLM Oregon/Mormon Pioneer National Historic Trails Management Plan** was prepared to describe how the BLM proposes to carry out the responsibility for protecting and interpreting the trail resources under its jurisdiction.

The guidance in the national historic trails plan, along with the decisions in the RMP, on the specific trail segments and associated historic sites provides the framework for future management and protection of the trails. The management decisions outlined in the Plan are consistent with the decisions in the RMP. The Plan outlines consistent statewide guidance for the protection, use, and management of the trails. The management plan focuses on general methods that protect and maintain important trail values, while allowing public use and enjoyment of the trails. The Plan considers the effects of BLM management of the trails on adjacent private landowners. The Plan clearly states that use of privately owned trail segments or sites are to be contingent on the permission of the affected landowner. Traditional land uses of BLM administered trail portions that are compatible with protection of trail resources will continue to be allowed.

**General management** objectives within the 1986 Plan that are directly related to the proposed handcart treks include the following:

- 1) All historic sites and cross-country segments of the trails on federal lands should be managed to protect and interpret their historic values.
- 2) Existing land uses within the sites and segments identified which are compatible with historic preservation and public use will be continued. Existing uses which may be incompatible with historic preservation of sites and trail segments will be monitored and, if necessary, modified to make them as compatible as possible.
- 3) Special consideration will be given to uses permitted along fragile trail resources. Some are too fragile to withstand any use by vehicle or foot travel, while others are more durable. The kinds and extent of uses permitted will be

determined on a case-by-case basis. Use of trail resources will be monitored to determine if adjustments in use are needed.

- 4) Off-road vehicle (off-highway vehicle) use guidelines will be identified commensurate with public access needs, the capability of the trails to handle use, and other resource use needs.
- 5) After appropriate protection measures have been completed, most sites and segments should be accessible and available for public use and enjoyment, to the extent that such accessibility does not impact upon historical values.
- 6) Actions that facilitate or enhance the public use of the sites and segments should not be made until adequate management capability has been implemented to assure their protection. For example, public access will not be improved and areas will not be popularized if the result would be damage to trail resources and historic sites.
- 7) The trails will accommodate hiking, horseback riding, pleasure driving, limited recreational vehicle use, camping, picnicking, and sightseeing, where compatible with historic and natural resources and intermingled private lands and interests. A continuous route may be identified for trekking purposes on the trails. The route need not always follow the trails, especially in areas of predominantly private lands or fragile trail resource. It could follow other roads or other appropriate detour routes.
- 8) Public use areas will be identified along the trails. These include campsites, interpretive sites, access points, etc. Public use facilities will be simple in design and kept to a minimum, be consistent with sound carrying capacity principles, and be planned and located so as to harmonize with their surroundings. Facilities will be cost effective and constructed only when resource protection needs, safety hazards or significant public use justifies the expenditure.

**Management constraints** identified in the plan that place a limitation on what the BLM can do in terms of trail management includes:

- 1) The intensity of management will be directly related to funding levels.
- 2) Historic and cultural preservation laws will constrain to some degree the development and use of the trails.
- 3) Trail management will incorporate consideration of concerns such as effects on private lands, level of use, access, etc.
- 4) The historic sites and trail segments are very fragile and nonrenewable. Excessive development and improper use could cause irreparable harm to the resources.
- 5) The BLM has a limited capability to monitor use and enforce laws on the public lands.
- 6) Protection, interpretation, development, and management are to be based on the cultural, historical, natural, and recreational values found along the trails.

Additional issues from the 1986 Oregon/Mormon Pioneer National Historic Trails Management Plan include:

**Monitoring and Use Supervision** – monitoring recreational use will occur through the use of volunteers or seasonal employees patrolling the trails and historic sites, including visitor contact and interpretation, as time and budgets permit.

**Special Recreation Permits** – Permits will be required for all commercial use of the trails and all noncommercial groups exceeding 10 people or 5 vehicles in size. This does not include excursions to developed sites (e.g., Split Rock Interpretive Site, Devils Gate Interpretive Site, etc.) or short trail segments by groups or individuals. Permittees will be required to coordinate the tour with affected private landowners as a condition of the permit.

**Cross Country Trekking** – Trekking along the trails is considered a normal public use of these cultural resources. Trekking occurs on foot, horseback, and may also involve wagons or handcarts to re-enact the pioneer emigrant experience. The BLM will continue to allow this use on the public lands so long as it does not damage physical trail resources. Larger groups and commercial outfitters will be required to have a Special Recreation Permit. If trekking causes physical damage to trail resources that trail segment may be closed to such use and trekkers will be detoured around those segments. Motor vehicle use will continue to be authorized where it presently occurs on the trails as long as this does not damage trail resources. If damage does occur the trails may be closed to motor vehicle use.

### **Management Actions for the Trails**

Specific actions for individual trail segments and historic sites within the proposed handcart trekking activity area were developed in the Plan as follows:

Rocky Ridge – Limited interpretive signs of a non-obscuring character should be placed at Rocky Ridge. Low profile interpretive signs should be placed near the crest of the ridge where iron rust marks from pioneer wagon wheels are still visible on the rock outcrops. This would enhance appreciation of the site by parties traveling over the trail, but would not detract from the significant natural character of the area. The area will continue to have a limited ORV (OHV) designation of vehicle travel which is limited to existing roads and vehicle routes.

Radium Springs (Gilesie Place) – The buildings will be fenced to protect them from cattle and vandalism. A rustic designed interpretive sign will be placed at the site to inform visitors about its history. The structures will be stabilized to prevent further deterioration.

## **PROPOSED ACTION and ALTERNATIVES**

The Proposed Actions for the various issues were determined from the Plan of Operations as submitted by the Church for the special recreation permit for handcart trekking. The Proposed Action and Alternatives described below provide an array of actions that can be compared for analysis purposes. In the proposed action and all alternatives, with the exception of Alternatives 1 and 2, Vehicle Use on the NHTs, support vehicles would not be permitted to follow along with the trekkers. The Proposed Action and Alternatives are organized by eight topics (Route Selection, Season of Use, Number of Participants Per Trekking Season, Trek Group Size, Vehicle Use on the National Historic Trails, Trekker Staging Areas, Trekker Campsite, and Sanitation) and 18 issues identified for analysis in this EA, found on Page 1 of this document. The issues of permit requirements of the applicant and other organized groups, and fees for all permittees were addressed on Pages 3 - 6.

Alternatives suggested for inclusion in this EA and the rationale for dropping them from further discussion are listed below:

- 1) Allow for unlimited use of the public lands for trekking activities – this action is not consistent with BLM policy for the management of the public lands and resources in a sustainable manner.
- 2) Do not charge fees for organized groups – as stated previously, it is BLM policy to charge a user fee for organized groups in special management areas and when monitoring of the use is necessary to protect the resources of the public lands (CFR 2930-1).
- 3) Use an existing, though faint, two-track road adjacent and parallel to the Hudson-Atlantic City Road as an alternative to use of the Hudson-Atlantic City Road – this faint two-track road is considered a historic trail that was utilized during the NHTs era and/or during the early 20<sup>th</sup> century connecting the Sweetwater Valley with South Pass City via the Lewiston Mining District. Opening this two-track road to trekking use could cause irreparable damage to it by destroying the vegetation cover that now protects it. Once a faint two-track road becomes visible the occurrence of motor vehicle use is likely to follow even if signed to prevent such use. At this time it is preferred to avoid increasing use of faint two-track roads for trekking activities.

**ROUTE SELECTION** – The proposed action and alternative routes are shown on three maps labeled Proposed Trekking Route for the 2-Day, 1-Day, and ½-Day treks (located in front of Appendix A). The routes are located on portions of the NHTs, existing primitive two-track roads, or improved dirt/gravel roads. Obtaining permission to use private lands or Wyoming State lands is the responsibility of the permittee.

**2-Day Treks, Proposed Action** - The 2 –day treks have two separate methods of transporting their provisions (food, water, camping gear, and personal gear). The self-contained trekkers would carry all their provisions in the handcarts without the use of additional vehicle support (see exceptions below under Vehicle Staging Areas, Trekker Campsite), while the vehicle-supported trekkers would rely on a support vehicle(s) to haul most of their provisions. The proposed route for both the 2-day self-contained and 2-day vehicle-supported handcart treks would originate on Church property at their Sixth Crossing facilities where trekkers would receive their handcarts. The trek route would leave Church property and enter BLM administered public land on an existing primitive two-track road. The route then enters a parcel of private land owned by The Nature Conservancy (TNC) followed by a ¼ mile segment of Wyoming State Land before re-entering TNC lands. Upon leaving the second private parcel, the route re-enters BLM administered public land and heads northwesterly to the Hudson-Atlantic City Road (BLM Road 2302). The route follows this improved road before heading along the eastern Silver Creek Reservoir Road to the ridge above the reservoir. At this point the two types of trekking groups take different routes that are described below.

**Self-contained trek group** – from above the reservoir, this group would continue across the reservoir dam on an existing primitive two-track road to the designated BLM trekker’s campsite to spend the night. The route continues on an existing primitive two-track road over to the Lower Monument where the route joins up with the NHTs.

**Vehicle-supported trek group** – from above the reservoir this group would travel northwest along the western Silver Creek Reservoir Road to the Hudson-Atlantic City Road (BLM Road 2302). The route follows this improved road to the proposed staging area and then follows an existing primitive two-track road to the proposed Sage Campsite, located on Wyoming State Land, where the trekkers would spend the night. The route continues on an existing primitive two-track road over to the Lower Monument where the route joins up with the NHTs.

Following the NHTs to the top of Rocky Ridge, both types of trekking groups continue along the NHTs through private lands owned by Woolery Ranch, Inc. The route continues west along the NHTs past Lewiston Lakes and McLean Meadows and enters a ¼ mile length of Church private land before it enters a mile long stretch of state land. It continues into BLM administered public lands past the Gilesie Place (Radium Springs) and into the Lewiston Mining District. There is one patented mining claim (private land) at the crossing of Strawberry Creek before the route follows the Lewiston Road (a maintained Fremont County road) that leads into the Church facilities at Rock Creek Hollow.

**2-Day Treks (self-contained and vehicle-supported), Alternative 1** - Both the self-contained and vehicle-supported trek groups would leave the Sixth Crossing facilities and follow the Proposed Action route to the eastern Silver Creek Reservoir Road where the two types of trekking groups take different routes to their respective campsites. The self-contained groups follow the route as contained in the Proposed Action. The vehicle-supported group would continue along the Hudson-Atlantic City Road (BLM Road 2302)

through the proposed BLM staging area, overnight at the Sage Campground, and then follow the route as contained in the Proposed Action.

**2-Day Treks (self-contained and vehicle-supported), Alternative 2** - Both the self-contained and vehicle-supported trek groups would leave the Sixth Crossing facilities and follow the Proposed Action to the eastern Silver Creek Reservoir Road. By following the road toward Silver Creek Reservoir both trek groups would continue across the reservoir dam on an existing primitive two-track road and on into the BLM Trekker's campsite for an overnight stay. The route continues on an existing primitive two-track road over to the Lower Monument where the route joins up with the NHTs.

**1-Day Treks, Proposed Action** - Trekkers would leave the proposed staging area along the Hudson-Atlantic City Road (BLM Road 2302) and follow the existing two-track road to the Lower Monument where they would connect with the NHTs. The NHTs route is then followed over Rocky Ridge to Rock Creek Hollow.

No alternative is proposed for 1-Day Treks due to the elimination of the Silver Creek Reservoir proposed staging area from consideration (see Trekker Staging Areas, Page 16).

**1/2-Day Treks, Proposed Action** - Trekkers would leave the proposed staging area along the Hudson-Atlantic City Road (BLM Road 2302) and follow the existing two-track road to the Lower Monument where they would connect with the NHTs. They would then travel to the monument at Rocky Ridge and return via the same route.

**1/2-Day Treks, Alternative 1** - Trekkers would leave the proposed staging area along the Hudson-Atlantic City Road (BLM Road 2302) and follow the existing two-track road to the Lower Monument where they would connect with the NHTs. They would then travel to the monument at Rocky Ridge. The route would continue west over Rocky Ridge to the Lewiston Lakes Road. The route would continue north to the Hudson-Atlantic City Road (BLM Road 2302). Easterly travel along the improved road would return the trekkers to the proposed staging area.

## **SEASON OF USE**

Due to unforeseen weather conditions and the possible need to restrict access to the NHTs, the BLM will determine yearly whether the roads and NHTs are sufficiently dry prior to granting the permittee authorization to begin conducting handcart treks.

**Proposed Action** – The season of use is proposed from June 1<sup>st</sup> through September 30<sup>th</sup> of each year, Monday through Friday.

**Alternative 1** – The season of use would begin June 15<sup>th</sup> and continue through August 15<sup>th</sup> Monday through Friday.

**Alternative 2** – The season of use would be flexible to match the conditions on the ground, such as, weather related trail conditions. The earliest use would be authorized beginning on June 15<sup>th</sup>, Monday through Friday. The use season would end the Friday prior to the Labor Day weekend in September.

### **NUMBER OF PARTICIPANTS PER TREKKING SEASON**

**Proposed Action** – A maximum number of handcart trek participants (trekkers and support personnel) would be set at 7,500 for each use season. During the abbreviated 2003 use season (additional restrictions were placed on season of use due to a nesting ferruginous hawk and inclement weather creating muddy road conditions, thus the use season was shortened by 13 days) of June 28<sup>th</sup> to August 15<sup>th</sup>, 6,345 trekkers and support personnel (Church reports indicate from 7-10% of this total were support personnel) were comprised of 1,135 ½-day, 2,470 1-day, and 1,740 2-day participants. Through monitoring of use activity and associated impacts, the number of participants could be adjusted downward, but never to exceed 7,500, for the following year to meet management objectives for recreation use and protection of the cultural and historic values along the NHTs.

**Alternative 1** – A maximum number of handcart trek participants (trekkers and support personnel) would be set at 5,000 for each use season. Through monitoring, the number of participants could be adjusted (up or down) for the following year to meet management objectives for recreation use and protection of the cultural and historic values along the NHTs.

**Alternative 2** – A maximum number of handcart trek participants (trekkers and support personnel) would be set at 2,500 for each use season. Through monitoring, the number of participants could be adjusted (up or down) for the following year to meet management objectives for recreation use and protection of the cultural and historic values along the NHTs.

### **TREK GROUP SIZE**

**Proposed Action** – Maximum number of participants (trekkers and support personnel) per trek group would be 400. The Church recommends 10 people per handcart.

**Alternative 1** – Maximum number of participants (trekkers and support personnel) per trek group would be 200. The Church recommends 10 people per handcart.

**Alternative 2** – Maximum number of participants (trekkers and support personnel) per trek group would be 100. The Church recommends 10 people per handcart.

## **VEHICLE USE ON THE NHTs**

**Proposed Action** - Exclude the use of motor vehicles on the NHTs. Any support vehicles (2 vehicles per 100 trekkers) would meet the trekkers at designated spots along the route and would not accompany the trekkers along the trekker's route. They would carry extra water, food, first aid supplies, etc. The only exception for driving on the NHTs would be while engaged in an actual medical emergency requiring vehicle support. The designated locations for support vehicles to meet up with the trekkers are 1) the Ellis Ranch Road; 2) the Hudson-Atlantic City Road at the eastern Silver Creek Reservoir Road; 3) the proposed staging area along the Hudson-Atlantic City Road; 4) on the Lewiston Lakes Road near the private land portable toilets; 5) on the Gilesie Place Road near the NHTs; and 6) along the Fremont County Lewiston Road. The vehicles would park off of the Ellis Ranch Road on an existing two-track, on the eastern Silver Creek Road, and on the access roads near the NHTs. Parking of vehicles would be done to avoid blocking the movement of other vehicles. The type of vehicle to be used would be limited to single axel (not dual axels) standard 2WD or 4WD (e.g., SUVs, pickup trucks).

**Alternative 1** - Limit the use of motor vehicles to one vehicle for carrying heavy supplies and one vehicle for emergency purposes. They would follow behind the trekkers on the NHTs.

**Alternative 2** - Allow individuals with disabilities the opportunity to "experience" the trail via motorized vehicles while accompanying trek groups.

## **TREKKER STAGING AREAS**

**Proposed Action** – A staging area would be developed along the Hudson-Atlantic City Road (BLM Road 2302) at the large BLM information sign and the Lower Monument Road to accommodate the unloading of trek participants for the 1/2- day and 1-day trekking groups. Development of the site would include delineation of the parking area with barriers and signage. Currently, there are no plans to surface (gravel) the area used for parking of vehicles. Vehicle use of the site would generally occur during dry soil conditions. If the site was wet so too would the Hudson-Atlantic City Road and authorized travel to the site would be suspended. The staging area could also be used for the short-term parking of vehicles associated with the self-contained trekkers camped at the BLM trekker's campsite and some of the over-flow vehicles from the proposed Sage Campsite.

**Alternative 1** - The makeshift staging area located at the same site as the proposed staging area will continue to be allowed to be used as it has in the past (similar to a No Action alternative). No effort will be done to manage its use as a parking area.

No other alternative trekker staging areas are discussed in this document. A potential alternative staging area was considered at a location above Silver Creek Reservoir, but

was dropped due to the failure of this location to be cleared during a cultural resources survey in 2000. Therefore, the site will not be considered as an alternative staging area. The survey was initiated at the request of an existing commercial outfitter permittee that desired an approved campsite at this location.

### **TREKKER CAMPSITE**

Two campsite locations are proposed for use by the handcart trekkers. They are the existing BLM Trekker Campsite, and the proposed Sage Campsite, located on Wyoming State Lands. The Church has applied to the Wyoming State Lands and Investments Board for a lease to develop a campsite on Wyoming State lands. The approval of the lease application, design, development, and use of this facility is not included in the federal action of issuing the SRP as the decision on this campsite lies with the Board. While the SRP would be for non-exclusive use of public lands, BLM policy allows for the reservation of campsites for commercial outfitters and organized groups at the rate of \$155.00 per site per season. To guarantee that the trekker's campsite is available for their use throughout the trekking season the applicant would need to reserve the site. Signs would then be posted identifying the site as reserved for handcart trekker use.

#### **BLM Trekker Campsite**

**Proposed Action** – The existing undeveloped (no permanent facilities) BLM trekker's campsite would be used by self-contained handcart groups only. These groups are to be fully self-contained, including personal gear, tents, sleeping bags, food, water, and commercially available portable/disposable sanitation facilities. No support vehicles would be permitted to enter the campsite, except those needed to respond to a medical emergency. This emergency vehicle(s) would be staged at the proposed Hudson-Atlantic City staging area or at the Sage Campground. Communication to summon an emergency vehicle to the campsite could be in the form of cell phone, two-way radio, or a person from the campsite traveling to the vehicle location. No vehicle-supported trek groups would utilize this campsite. Only one trek group, regardless of size would be allowed use of the campsite at any one time.

**Alternative 1** – In the event that the proposed Sage Campsite was not authorized by the Wyoming State Lands and Investments Board, or if development is not completed by the beginning of the trekker use season in 2004, the BLM trekker campsite would be made available to all trek groups. Vehicles allowed to park at the campsite would be limited to two per 100 trekkers for vehicle supported trekkers.

### **SANITATION – PORTABLE TOILETS**

**Proposed Action** - All trekkers and support personnel would be encouraged to utilize available facilities at Sixth Crossing, Sweetwater Campground, the Sweetwater Station rest area, or the proposed Sage Campsite prior to beginning their trek.

Portable toilets would be placed along or near the trekking route at the following locations to provide for the needs of the 1/2-day, 1-day and 2-day treks:

**BLM administered public lands:**

\* East of the Ellis Ranch Road in the area used during 2003 (for use by both self-contained and vehicle-supported 2-day treks).

**Private lands:** (not included in the federal action of issuing the SRP. The decision to allow placement of portable toilets would lie with the private landowner)

\*North of Lewiston Lakes on Woolery Ranch lands (permission received) (for use by 1 & 2-day treks). Units would utilize a façade to lessen the visual impacts of the portable toilets.

\* At Strawberry Creek crossing, near the Lewiston Road (permission received) (for use by 1 & 2-day treks).

**Wyoming State lands:** (not included in the federal action of issuing the SRP. The decision to allow placement of portable toilets would lie with the Wyoming State Lands and Investment Board)

\* Proposed Sage Campsite (permission requested) (for use by 1/2-day and 1-day treks, & 2-day vehicle-supported treks)

\* East of the Giles Pie Place (for use by 1 & 2-day treks). Units would utilize a facade to lessen the visual impacts of the portable toilets.

Servicing of the units would be provided by a commercial operator utilizing either a 2-ton service vehicle or a 1-ton service vehicle. The larger sized service vehicle can complete the servicing of all units (includes Sixth Crossing, along the NHTs corridor, and Rock Creek Hollow) in one trip before delivery to the dump station. The smaller unit would require two trips to the dump station. Unit servicing intervals ranged from 2-3 times per week or after any trek groups exceeding 200 people came through.

**Alternative 1** - In addition to the Proposed Action sites portable toilet units would be authorized at the BLM Trekkers Campsite.

**Alternative 2** – Require trek groups to utilize commercially available a portable/disposable sanitation toilet. The number of units per handcart (up to 10 people per handcart) would be determined by the manufacturer's recommendation and through experience of trek groups. These toilets are portable, spill proof, sanitary, and EPA approved for disposable in landfills. There are commercially available screening products that provide a level of privacy. No portable toilets requiring servicing of the

units by a commercial operator, as in the Proposed Action, would be allowed to be placed on BLM administered public lands.

### **NO ACTION ALTERNATIVE**

The No Action alternative is the continuation of the annual authorization for the Church to conduct handcart treks under the terms of a Letter of Agreement for Non-commercial Recreational Use of Public Lands. No fees would be assessed for the authorized use of the BLM administered public lands.

**ROUTE SELECTION** – The route is the same as described under Alternative 2 for the 2-Day Treks described, on Pages 13 and 14, where both self-contained and vehicle-supported treks travel to the BLM undeveloped campsite before accessing the NHTs for the trek to Rock Creek Hollow.

**SEASON OF USE** – The season of use is the same as described under Alternative 1, on Page 14, with use to begin on June 15<sup>th</sup> and end on August 15<sup>th</sup>, based upon weather and ground conditions allowing the activity.

**NUMBER OF PARTICIPANTS PER TREKKING SEASON** – The number of participants is the same as described in the Proposed Action, on Page 15, at 7,500 per trekking season.

**TREK GROUP SIZE** – The maximum number of trekkers per group is the same as described in the Proposed Action, on Page 15, at 400.

**VEHICLE USE ON THE NHTs** – The use of vehicles is the same as identified in the Proposed Action on Page 16. Only two vehicles per 100 trekkers would meet the trekkers at designated spots along the route.

**TREKKER STAGING AREAS** – The parking area described in Alternative 1, on Page 16, would continue to be used as a makeshift staging area.

**TREKKER CAMPSITE** – The BLM undeveloped trekker's campsite would continue to be used as described in Alternative 1 on Page 17.

**SANITATION – PORTABLE TOILETS/PORTABLE DISPOSABLE TOILETS** – The use of portable toilets would continue as described in the Proposed Action and Alternative 1 on Pages 17 & 18. No requirement to use portable/disposal toilets would be made.



- 1) East of Rocky ridge the soils of the broad uplands are formed in alluvium derived dominantly from the White River Formation which is comprised primarily from claystone, sandstones, and conglomerate. These soils are typically well drained (not wet), very deep (> 60 inches) with some being moderately deep (20-40 inches). They are also well developed, having a subsoil layer of translocated clays (argillic horizons) below several inches of lighter textured topsoil. These soils support Loamy and Sandy range sites which contain such species as described for the vegetative type Sagebrush in the above table. There are some lowland areas of seasonably wetter soils that support primarily grasses. These are Sub-irrigated and Saline Sub-irrigated range sites which support basin wildrye, alkali sacaton, alkali bluegrass, tufted hairgrass, redtop, and rhizomatous wheatgrasses.
  
- 2) Rocky Ridge itself is composed of old rocks such as the Cambrian Flathead Sandstone, the Phosphoria (Park City) Formation, and Madison Limestone. Rock outcrops are accompanied by shallow soils (< 20 inches). These soils are typically well drained and poorly developed (i.e., little/no evidence of genetic horizonation). The range sites supported by these soils are Shallow Loamy, Shallow Clay, and Shallow Sandy. Vegetation associated with these range sites includes black sagebrush, Wyoming sagebrush, bluebunch wheatgrass, Indian ricegrass, mutton bluegrass, needleandthread grass, and rhizomatous wheatgrasses.
  
- 3) To the west of Rocky ridge the geology of the higher uplands becomes a mix of Miocene age sedimentary rocks composed of arkosic sandstone, conglomerate, siltstone, claystone, and cherty limestone. There are also large areas of older plutonic igneous granitic and metamorphic rocks farther west from the ridge that contain intrusions of dark mafic rocks. The shorter growing season and cooler temperatures have allowed the soils here to develop darker, more organic matter rich topsoils. Soils here formed in alluvium primarily from these local rocks with soil depths ranging from shallow to very deep along with some occurrences of rock outcrops. There too are some lowland areas of seasonably wetter soils that support primarily grasses. These are Sub-irrigated and Saline Sub-irrigated range sites which support basin wildrye, alkali sacaton, alkali bluegrass, tufted hairgrass, redtop, and rhizomatous wheatgrasses.

Soils within the proposed handcart trekking area are comprised of a variety of types. The soil names, their level of potential to erosion to runoff and wind are provided below. Key locations along the trekking route are also identified within \*( ).

Name – Description	Hazard Potential of Erosion from Water	Hazard Potential of Erosion from Wind	Compaction Potential (Compaction potential highest for moist and wet soils.)
Bosler-Ryan Park –	Slight	Severe	Susceptible

fine sandy loams			
Cragosen-Bosler-Cushool – rolling <b>*(location of portable toilets – east of the Ellis Ranch Road)</b>	Severe	Severe	Low
Diamondville-Forelle – rolling <b>*(BLM trekker’s undeveloped campsite)</b>	Moderate	Moderate	Susceptible
Cushoal-Rock River – 1-15% slopes	Moderate	Severe	Susceptible
Havre-Forelle-Glendive – 0-3% slopes <b>*(proposed staging area at the Hudson-Atlantic City Road)</b>	Slight	Moderate	Susceptible
Crago-Pensore – undulating <b>*(Lower Monument)</b>	Slight	Moderate	Low
Pensore-rock outcrop – hilly <b>*(Rocky Ridge)</b>	Severe	Slight	Low
Rock outcrop-Blackhall – hilly <b>*(Rocky Ridge)</b>	Severe	Severe	Low
Cragosen-Rock outcrop-Carmody – hilly	Severe	Moderate	Low
Luhon-Rock River-Forelle – undulating	Slight	Slight/Severe	Susceptible
Cragosen-Carmody-Blazon – hilly	Severe	Moderate	Low

Forelle-Poposhia – 2-12% slopes	Slight/Moderate	Moderate	Susceptible
Poposhia-Blazon-Carmody – hilly	Moderate/Severe Moderate/	Severe	Susceptible
Rock outcrop-Mosroc – hilly	Moderate	Slight	Low
Mosroc-Lymanson	Slight/Severe	Slight	Low

- hilly			
Lymanson-Abston-Gelkie – hilly	Severe	Slight/Moderate	Susceptible
Iceslew-Countryman – 0-3% slopes <b>*(location of portable toilets on private land at Lewiston Lakes Road)</b>	Slight	Slight/ Moderate	Susceptible
Irigul-Midelight-Rock outcrop – rolling <b>*(location of portable toilets on state land – east of Gilesie Place)</b>	Slight	Slight	Low
Uhl-Gelkie loams – 1-8% slopes <b>*(Gilesie Place/Radium Springs)</b>	Slight	Moderate	Susceptible
Irigul-Rock outcrop – steep	Severe	Slight	Low
Venapass-Uhl-Absher loams – 1-6% slopes	Slight/Moderate	Slight/Moderate	Susceptible
Hoodle-Gelkie – 2-15% slopes	Moderate/Slight	Slight/Moderate	Low
Venapass-Silas loams – 0-6% slopes	Slight	Slight/ Moderate	Susceptible
Pishkun Variant-Hoodle – hilly	Moderate/Slight	Slight	Low

**Invasive, Nonnative Species** - According to the Fremont County Weed and Pest District information there are several noxious weeds and some other invasives of concern found in or adjacent to the area of the proposed handcart routes. Most occur primarily along the Sweetwater River. Canada thistle, dandelion, and foxtail barley are common in the riverine riparian area of the Sweetwater River and its tributaries. Along Highway 287/789 right-of-way, within several miles of Sweetwater Station, are whitetop, hoary cress, Russian knapweed, marsh sowthistle, spotted knapweed, and field bindweed. In the borrow ditches of the local dirt roads black henbane can be found, especially in the Rock Creek area. There is also an occurrence of leafy spurge in the vicinity of the confluence with Rock Creek.

Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that

could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

### **Wildlife/Fisheries** -

The NHTs pass through spring/summer/fall habitats for antelope and mule deer. Rangelands adjacent to the NHTs are used as fawning areas for both species and provide forage and cover. A portion of the use area from the proposed staging area to the Lower Monument lies within yearlong habitat for mule deer. Portions of the trails that cross riparian habitats on Strawberry Creek and Rock Creek are considered crucial winter/yearlong range for moose. Sagebrush habitats near Silver Creek Reservoir are winter range for elk.

Several raptor species may exist in the proposed use area. These include ferruginous hawk, northern harrier, golden eagle, red-tailed hawk, and Swainson's hawk. A review known raptor nests for the proposed use area revealed the presence of four nests, 2 Ferruginous hawks, 1 Swainson's hawk, and 1 Golden eagle. These occur from over ¼ mile to ½ mile from any of the routes contained in the proposed action and alternatives. Additional nests may exist which have not been documented.

Snake, including rattlesnakes, and other reptiles are present in the proposed use area. It would not be uncommon for trekkers to encounter these animals along the trekking route.

Silver Creek Reservoir contains a rainbow trout and brook trout fishery. The Wyoming Game and Fish Department stocks the reservoir annually with catchable (> 8") and advanced fingerlings (4-5"). Silver Creek Reservoir, Antelope Springs Reservoir, and the Sweetwater River are stocked annually with rainbow trout. Fish rarely over-winter at Antelope Springs Reservoir. They commonly do over-winter at Silver Creek Reservoir; hence, fish 2 – 5 pounds are not uncommon. In the Sweetwater River fish size is dictated by the over-wintering habitat available, thus a two pound fish is considered a large river dwelling trout.

### **Sensitive Wildlife Species** –

The following sensitive species may exist in the proposed use area: sage thrasher, loggerhead shrike, Brewer's sparrow, sage sparrow, greater sage-grouse, mountain plover, northern leopard frog, and boreal toad.

The greater sage-grouse inhabit the proposed use area. Two sage-grouse leks have been documented in the use area at Silver Creek and Radium Springs. The Silver Creek lek is within ¼ - ½ mile of the proposed Hudson-Atlantic City Road staging area and the proposed Sage Campsite and approximately one mile from the existing BLM trekker campsite. The lek was documented in 1994 and has been active each year since that time. The Radium Springs lek is located on Wyoming State land ½ mile south of the NHTs. The lek was first documented in 1980 and has been active during recent years. Based on the movements of sage-grouse (radio-collared and observations) much of the NHTs

corridor provides very important nesting, late brood-rearing and summer habitats for sage-grouse. Sage-grouse typically breed from March 1 to May 15 and nest from March 15 to July 15.

Mountain plover may exist in the area of the BLM campsite for handcart trekkers or in other areas of the proposed activity. In June of 2002 a field survey was conducted at the BLM trekker's campsite. This site was chosen due to the impact on the vegetation from use of the campsite in 2001 that created favorable plover nesting habitat. The mountain plover requires limited vegetation cover during nesting. The field survey did not find any evidence that mountain plover were occupying the campsite in June of 2002. A second survey of the BLM trekker's campsite in June of 2003 revealed one mountain plover observation. A follow up survey was conducted in June, but did not reveal any mountain plover and it was determined the initial sighting could have come from a bird passing through the area.

The sage thrasher, Brewer's sparrow, sage sparrow, and loggerhead shrike reside in the proposed use area. Nest sites can be found throughout the adjoining sagebrush stands.

Silver Creek and Silver Creek Reservoir can support limited populations of leopard frogs and boreal toads. These species require permanent water with adjacent marshes and/or meadows.

### **Sensitive Plant Species**

Two known sensitive plant species occur in the general vicinity of the NHT use area. These species include meadow pussytoes and Beaver Rim phlox. The proposed action and alternatives should not affect these populations; therefore, sensitive plants will not be discussed or analyzed further.

### **Livestock Grazing** –

The proposed activity area contains five grazing allotments. The season of use for these allotments occurs as follows:

Flagg AMP, #1701 – 5/1 to 10/31

Flagg Individual, #1702 – 12/1 to 2/28

Fenced Individual, #1717 – 5/1 to 6/14

Atlantic City Common, #1901 – 5/23 to 9/30

Silver Creek Common, #1903 – 5/15 to 10/7

These dates represent the standard turnout and removal of livestock from the allotments. The dates may change (later turnout, earlier removal, variations throughout existing

season based on pasture rotations) due to adjustments during prolonged drought conditions as occurred during the 2002 and 2003 grazing seasons.

### **Recreation Opportunity Spectrum (ROS) –**

The proposed handcart treks would utilize the segment of the NHTs from the Lower Monument to near Rock Creek Hollow on what appears as existing primitive two-track roads. The route for the proposed action and alternatives also includes portions of the improved Hudson-Atlantic City Road (BLM Road 2302) and the Lewiston Road, a Fremont County road. The existing primitive two-track roads, including the NHTs, are described in the ROS classification as Semi-Primitive Motorized (SPM). The experience opportunity for SPM is described as providing an opportunity for isolation from the sights and sounds of man. There is a high degree of interaction with the natural environment, a moderate risk factor and a moderate level of need to use outdoor skills. The setting opportunity is characterized predominantly by an unmodified natural environment. Concentration of users is low, but there is often evidence of other users. On-site controls and restrictions may be present, but are subtle. Facilities are only provided for the protection of resource values and safety of users. Spacing of groups may be formalized to disperse use and limit contacts between groups. Activities could include hiking, enjoying scenery or natural features, handcart trekking, and hunting. The use of motorized vehicles is permitted, but may be restricted.

The improved Hudson-Atlantic City Road falls under the ROS classification of Roaded Natural (RN). The experience opportunity provides about an equal opportunity for contacting other user groups and for experiencing isolation. The opportunity setting provides for a moderate level of self-reliance on outdoor skills with little challenge or risk involved. The activity opportunities can include human powered as well as motorized vehicles.

The Church property at Sixth Crossing and at Rock Creek Hollow would fall into the Rural (R) ROS classification. This classification has a substantially modified natural environment. A considerable number of facilities are designed for use by a large number of people. Interaction between users can be high.

### **Areas of Critical Environmental Concern (ACEC) –**

ACECs are areas given priority for designation and protection to prevent irreparable damage to important historic, cultural, or scenic values. The 1987 Lander Resource Area RMP identified certain BLM administered public lands as significant sites and segments along the NHTs (e.g., ruts, swales, graves, campsites, pristine settings, etc.) as an ACEC. These significant sites within the proposed activity area include the Rocky Ridge Historic Area (850 acres), the Gilesie Place/Radium Springs (40 acres), and Rock Creek Hollow (40 acres).

## **National Historic Trails**

The Oregon and Mormon Pioneer Trails were designated by Congress in 1978 as National Historic Trails. The California and the Pony Express Trails were designated as National Historic Trails by Congress in 1992. All four trails utilized the segment of the handcart trek route from the Lower Monument to near Rock Creek Hollow. This portion is in the 125 mile segment of trail known as the South Pass Segment of the Oregon Trail. It is considered one of the best stretches of Oregon Trail left in any of the six states through which the trail passes. Outstanding scenic values are present all along this segment. The trail winds across the range as a clearly defined two-track trail.

Significant use of this trail corridor by emigrants occurred from 1843 – 1869. Use also occurred prior and later than these years, but it is generally believed these dates saw the heaviest use by the emigrants seeking a better life in the West. Pony express riders rode this segment from April 1860 through October 1861. Heavy use of the trail continued during the “Expansion Period” that occurred after completion of the railroad in 1869.

Cultural landscapes define the nature of the trails, both at the time of the original use and during present times. The major character-defining features of landscapes along the historic trails are the vegetation, topography, and geology of the area. The landscape of the South Pass Segment contains the physical remains of the trails through the proposed use area. These remains include ruts, swales, rust stain deposits from wagon wheels on rocks, and what presently appear to be two-track roads along the original or alternative routes of the trails. Campsites of the emigrants along the segment are other important remnants of the cultural landscape.

### **Rocky Ridge**

After following the Sweetwater River the emigrants were forced up and away from the river. They then had to cross a high, barren and rocky ridgeline to the north of the river which necessitated much hard and jarring travel over a rock-strewn landscape. The name given to this natural obstacle was Rocky Ridge. The name refers to a geographic area spread over two square miles where wind and erosion have laid bare a washboard of rock. The passing of steel rimmed wagon wheels is evidenced by the rust stains left on the rocks.

In 1992, the BLM authorized the Church to construct monuments at the eastern base and near the top of Rocky Ridge. The Lower Monument (at the eastern base) provides information on the historical significance of the rescue site of the 1856 Willie’s Handcart Company along the Sweetwater River. It is now held by most, including Church historians and other trail enthusiasts that the rescue site was located at the 6<sup>th</sup> crossing, 12 miles downstream, at the Church’s property known as Sixth Crossing. The monument on Rocky Ridge contains information on the emigrant’s struggle over the rough terrain.

## **Radium Springs (The Gillespie Place)**

The Gillespie Place is part of the colorful history of the South Pass and Lewiston Mining Districts. It is located on the Oregon Trail at Radium Springs and was established around the turn of the 20<sup>th</sup> century. The Gillespie Place was on the Trail, not because of emigrants, but because the trail was still used as a road in the late 1800s, connecting the Sweetwater Valley with South Pass City via the Lewiston Mining District. It is thought the spring was used earlier as a campsite by emigrants on the trail.

It was operated as an early road house, ranch headquarters, and residence of a woman named Gillespie. The notoriety of the place is a result of the activities of Ms. Gillespie. She came to the Lewiston/South Pass/Atlantic City area and promoted herself as the “Copper Queen of Wyoming.” Apparently she was involved in filing and selling numerous copper claims throughout the South Pass area. Oral history says she established a road house/bordello/spa to serve the needs of the Lewiston area.

Radium Springs was billed as a spa with numerous “health benefits” because of the alleged occurrence of radium in the spring water. In those days radium, a radioactive mineral, was thought to provide numerous health benefits. Bathing in radioactive springs was a fad in Europe and was advertised as such in the wilds of Wyoming. It made a good story though and its alleged existence at Radium Springs was exploited by Ms. Gillespie. Ms. Gillespie eventually left the South Pass area and returned to Kansas City. The buildings are thought to have stood abandoned at least since the 1950s.

The buildings were fairly intact until the late 1970s, after which age, vandalism, livestock, and the elements began to take their toll. The buildings themselves were built in a haphazard manner with materials that were second-hand or borrowed from other abandoned building projects in the area. BLM placed a fence surrounding the buildings in the 1980s, and has made efforts to stabilize the remaining buildings in the last couple of years (2001- 2003).

### **Concurrent Recreational Uses**

Concurrent recreational uses on the public lands in the area of the proposed handcart trekking include enthusiasts exploring the NHTs, mountain biking, hunting, driving for pleasure (on the Hudson-Atlantic City Road and adjacent two-track roads), OHV use on existing roads, hiking, rock hounding, fishing, and bird watching.

Following are the big game species hunt areas and their seasons within the proposed activity area as managed by the Wyoming Department of Game and Fish.

<u>Species</u>	<u>Archery Season</u>	<u>Rifle Season</u>
Antelope HA 65	8/15 to 3 <sup>rd</sup> Friday in Sept.	3 <sup>rd</sup> Sat. in Sept. to 10/22
Mule Deer HA 94, 95	9/1 to 9/30	10/1-15 to 10/15-31

Elk HA 25

Upland game bird and small game hunting seasons occurring in the area of the proposed activity:

Sage-grouse – 9/23 to 10/3

Chukar/Gray Partridge – 9/15 -12/31

Cottontail rabbit – 9/1 -3/1

Hunting of non-game species and predators can occur year round.

Fishing use at Silver Creek Reservoir is open year round. There are typically a low number of fishermen at any given time using Silver Creek Reservoir, which is along the proposed route of the trek route.

## **ENVIRONMENTAL IMPACTS**

Environmental impacts for the specific proposed actions and alternatives for 2-day self-contained and vehicle-supported treks, 1-day treks, and 1/2-day treks, are discussed below.

## **ROUTE SELECTION**

### **2-Day Self-contained trek group, Proposed Action –**

**Vegetation/Soils** – On approximately twenty miles of primitive two-track roads that comprise the trek route, vegetation on and immediately adjacent to the roads would be impacted by foot traffic and rolling handcart wheels. The impacts would range from minor damage to plants by trampling to the actual loss of the plants by repeated trampling. This would occur particularly along the center vegetation strip of the two-track road, resulting in the loss of plant cover. This reduction in plant cover could lead to an increase in soil erosion that may lead to damage to the trail resource. The increase in soil erosion could also add sediment to drainages and streams. Additionally, the removal (loss) of the center strip of vegetation in the two-track road would result in the appearance of a wider primitive road. This appearance to some viewers may closer replicate the appearance of the trail during its historic use period of 1843-1869 rather than the modern day primitive two-track roads.

When a vehicle(s) containing other recreationists, ranchers, BLM employees, etc. and a trek group (traveling either in the same or in the opposite direction) meet up one of them has to “step aside” to let the other one pass on by. Depending on the location, this could

result in additional impacts to vegetation adjacent to the trek route. If the vehicle pulls off the road or drives around the trek group a set of tire tracks could be visible through the vegetation and soil. Repeated use of this set of tracks by other vehicles could result in the establishment of a new pull-off or two-track road adjacent to the existing two-track road on or adjacent to the NHTs. This impact could distract from the more primitive nature of the two-track road.

The rocky soils will handle the handcart and support vehicle traffic better than soils that do not possess such coarse fragments as found in the rocky soils. The soils at greatest risk from compaction are the medium, loamy textures especially when they are moist to wet. Generally, the wetter the soil is the more compaction it will experience. Compacted soils lose much of their ability for water infiltration. As a result water runs off rather than into them and erosion results from overland flow. This in turn increases the sediment pollution to local streams and ultimately the Sweetwater River.

Soils along the route have a range from slight to severe for both water and wind caused erosion. The ranges for water and wind cause erosion for the key areas are as follows:

<b>Key Area</b>	<b>Wind Erosion Potential</b>	<b>Water Erosion Potential</b>	<b>Compaction Potential</b> (Compaction potential highest for moist and wet soils)
Portable toilets east of Ellis Ranch Road	Severe	Severe	Low
BLM trekker's campsite	Moderate	Moderate	Susceptible
Proposed staging area	Slight	Moderate	Susceptible
Lower Monument	Slight	Moderate	Low
Rocky Ridge	Severe	Severe	Low
Portable toilets at Lewiston Lakes Road (private land)	Slight	Moderate	Susceptible
East of Gillespie Place/Radium Springs (state land)	Slight	Moderate	Low

Routing of trekkers and limited numbers of support vehicles over the dike of Silver Creek Reservoir could increase maintenance needs for the dike. Loss of soil from wind and water erosion is expected to increase due to the loss of vegetative cover on the top of the dike.

**Invasive, Nonnative Species** - With visitors traveling through the Highway 287/789 corridor from other states and regions, and local travel through weed infested areas visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The presence of the trek groups and associated vehicle use (limited to emergency use of vehicles at the BLM campsite) could cause a temporary displacement of big game animals (antelope, deer, elk) during use of the trek route and campsite. The repeated use of the area by the trek groups throughout the season and year after year could cause a permanent displacement of some animals off of their historic range along the NHT corridor. Antelope and deer typically fawn in June; therefore animals could be disturbed/displaced when trekker use occurs.

Reptile populations could be impacted by the handcart groups. Rattlesnakes may be killed, particularly when they are encountered by people traveling on foot. Short-horned lizards may be caught and carried off-site to be released. When released, they often are let go in unsuitable habitat, resulting in their death.

The self-contained route utilizes the dam (containing a two-track road) that forms Silver Creek Reservoir. This is a popular fishing area that could be impacted if the large number of trek participants were to use the reservoir for swimming or fishing. The impacts to the fisheries could include over-fishing and increased sediment to the water from heavy use on the dike.

**Sensitive Wildlife Species** - The proposed route for the self-contained trek groups would take them to the existing BLM campsite south of the Hudson-Atlantic City Road. This site is approximately one mile from a Greater sage-grouse lek. Another lek is located ½ mile south of the route on state land (southeast of the GilesPie Place). Sage-grouse recruitment could be negatively affected by the presence of large groups of trekkers traveling this route. Although sage-grouse strutting activity on the lek is normally completed by the time of the earliest proposed use of the trek route (June 1st), repeated disruptions to the sage-grouse activities could cause the lek to be abandoned. The NHTs corridor provides very important nesting, late brood-rearing and summer habitats for sage-grouse. Trek activities through these sensitive areas could disrupt and/or displace sage-grouse from their historic range. Disturbance during the nesting period could cause nest abandonment, resulting in the loss of eggs and/or chicks from over-exposure, predation or other physical harm. These impacts would be similar for the sage thrasher, Brewer's sparrow, sage sparrow and loggerhead shrike.

Trekking and camping activity could cause mountain plover mortality if activity occurs in suitable habitat. Mountain plover are dependent on relatively flat, sparsely vegetated to denuded areas. Plover nests are often found on two-track roads and trails. The nesting period is typically during May and June. Birds nesting on the trail, campsite or adjacent

suitable sites could abandon nests or have their eggs/chicks crushed during trekking or camping activity.

There should be little impact to leopard frogs or boreal toads unless animals are captured by curious trekkers. Unless released at the capture site, death would occur.

**Livestock Grazing** – Unintentional harassment of livestock by trek participants could occur along the NHTs. Trekking activity through the five grazing allotments could cause temporary displacement of grazing livestock. Livestock tend to hang around water sources and meadows, including those along or near the trekking route. These areas include the Sweetwater River, Silver Creek Reservoir, Lewiston Lakes, and numerous small drainages and springs. This could cause livestock stress and activity that have not normally been associated with these allotments and the free ranging grazing operations. Gates that would be used by trekkers could add to the instances of gates being inadvertently left open, thus potentially providing livestock the opportunity to occupy pastures or allotments that they are not scheduled to be in. This could lead to disruption to grazing rotations, increased forage use in some pastures, and the need for operators to return the livestock to the proper pasture/allotment.

**Recreation Opportunity Spectrum (ROS)** – While ROS is a classification of recreation opportunities, the activities occurring within the spectrum can have a negative impact on the public land recreationists. Therefore, impacts to the ROS classifications will be discussed. The self-contained trekkers could match well with the experience, setting, and activity opportunities defined for the Semi-Primitive Motorized (SPM) classification of the primitive two-track roads. The definition of SPM and how the self-contained treks fit into the definition are as follows: (1) providing an opportunity for isolation from the sights and sounds of man. This is provided by the very nature of the wide-open spaces and lack of constant sights and sounds of man; (2) there is a high degree of interaction with the natural environment, a moderate risk factor and a moderate level of need to use outdoor skills. This too is provided by the isolated setting of the NHTs corridor; (3) the setting opportunity is characterized predominantly by an unmodified natural environment. This segment of the NHTs is basically unmodified, with a few exceptions (e.g., Sixth Crossing facilities, LDS monuments, Gilespie Place, Lewiston Townsite, Lewiston County Road, Rock Creek Hollow facilities); (4) concentration of users is low, but there is often evidence of other users. This part of the SPM definition is not met when groups of trekkers greater than 10 are on the NHTs; (5) on-site controls and restrictions may be present, but are subtle (e.g., SRP, limiting vehicle support, portable toilets with a facade); (6) facilities are only provided for the protection of resource values and safety of users (e.g., portable toilets); (7) spacing of groups may be formalized to disperse use and limit contacts between groups. This could be provided for in the stipulations attached to the SRP. The SPM definition states that use of motorized vehicles equipment is permitted, but may be restricted. This falls into the use of handcarts in a self-contained manner with no or limited vehicle support.

The one mile section of the Hudson-Atlantic City Road (BLM 2302) and the 3.5 mile section of the Lewiston Road utilized as a portion of the trek route are classified as Roaded Natural (RN). The experience, setting, and activity opportunities for RN are

defined as: (1) the experience opportunity provides about an equal opportunity for contacting other user groups and for experiencing isolation. (2) the opportunity setting provides for a moderate level of self-reliance on outdoor skills with little challenge or risk involved. (3) the activity opportunities can include human powered (e.g., hiking, handcarts) as well as motorized vehicles assisted activities. The handcart trekking activities are compatible with the three opportunities for the RN classification.

The route for self-contained treks would utilize an existing two-track road less than ½-mile from the Ellis Ranch. Trekkers traveling this route could be viewed from the ranch house and from other areas of the ranch property. This could impact the isolated setting of the ranch and negatively alter the recreational experience of visitors at the ranch.

**National Historic Trails & Areas of Critical Environmental Concern (ACEC)** – The 26 mile route of the handcart treks utilizes approximately 12 miles of the NHTs (also designated an ACEC) from the Lower Monument to near Rock Creek Hollow. Decisions of the 1987 RMP for the Lander Field Office and the 1986 Oregon/Mormon Pioneer National Historic Trails Management Plan provide for the use, interpretation, and protection of the trails. The self-contained handcart trekker's route along the NHTs could be harmonious or compatible with the decisions on use, interpretation, and protection of the trails. As identified in the RMP and the Trails Plan, use of the NHTs is to be compatible with historic preservation of the trail's resources.

Handcart use will change the two-track road appearance of the trail to a broad one-track which would be similar to the way it looked in historic times. During wet soils conditions historic ruts could be widened and deepened by the passage of trekkers and handcarts. On Rocky Ridge there are remains of rust stains on rocks from the passage of wagons during the emigration period. The movement of trekkers and their handcarts over the historic rust stains could lead to the reduction and eventual loss of some historic rust stains. It is possible new rust stains could be deposited by the modern handcarts that have metal enforced wheels.

**Concurrent Recreational Uses** – Recreationists may encounter self-contained trekker groups along the proposed route. This inter-action with other user groups could negatively affect both non-trekker's and trekker's recreational experiences. Instances of "stand-offs" between trekkers and motor vehicles on two-track roads during previous year's trekking use did not enhance the experience of either user group. Some non-trekkers may enjoy observing a handcart trek in progress, while others may find larger trek groups infringing upon their desired recreational experience. The potential use of Silver Creek Reservoir as a swimming hole, or for fishing by some trekkers, could displace fishermen that are seeking a more solitude type experience. Fishermen at the reservoir would be subject to groups of trekkers crossing the dike which could impact the desired recreational experience of quiet solitude previously enjoyed while fishing.

There are safety concerns with mixing foot/handcart traffic with motor vehicle traffic on the improved Hudson-Atlantic City Road (BLM 2302) and the Fremont County Lewiston Road. While some of the vehicle traffic is connected to the trek groups (support vehicles)

and aware of their use of the road other traffic may not be aware of the trekker's presence and accidents between trekkers and vehicles could occur. Trekkers could interfere with the passage of vehicles by blocking traffic.

Archery antelope hunters could be negatively impacted by disturbance to antelope in the vicinity of their hunting blinds (often used in the vicinity of watering holes).

### **2-Day Vehicle-supported trek group, Proposed Action –**

**Vegetation/Soils** – The impacts by the trekkers and their handcarts to the vegetation would be the same as the self-contained trek groups. The use of motor vehicles to provide support could cause additional impacts to vegetation by the crushing of plants. The impacts would range from damage to plants by crushing to the actual loss of the plants by repeated crushing. This would occur adjacent to the two-track roads and the NHTs where vehicles may park or drive off to allow passage of other vehicles or recreationists. This reduction in plant cover could lead to an increase in soil erosion that may lead to damage to the trail resource. The increase in soil erosion could add sediment to drainages and streams. Vehicle use could also increase compaction of the soils, which could lead to additional soil loss, by accelerating the movement of water along the roads until it diverts from the roads and taking loose soils with it. This could lead to increases in sedimentation in drainages and streams in the area.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The impacts by the trekkers and their handcarts to wildlife species would be the same as the self-contained trek groups. The use of motor vehicles for support could cause additional impacts to wildlife by the addition of noise and movement of the vehicles. The repeated presence of the trek groups and the associated vehicles in the area could cause a permanent displacement of some animals off of their historic range along the two-track roads and the NHT corridor. This route would take the trekkers to within a few hundred feet of Silver Creek Reservoir. The vehicle supported groups would not cross the dike of Silver Creek' Reservoir, but would continue on to the Hudson-Atlantic City Road. The potential impacts to wildlife and the fishery would be the same as those for the self-contained groups.

**Sensitive Wildlife Species** – The impacts associated with the vehicle-supported trekkers traveling past the proposed BLM staging area and the proposed Sage Campsite would be similar to those discussed for the self-contained trek groups. The addition of motor vehicle support would add to the potential for impacting sensitive wildlife species. The passage of vehicles within ¼ mile of an active lek could lead to increased stress and potential abandonment of the lek. Although sage-grouse strutting activity on the lek is normally completed by the time of the earliest proposed uses of this trek route (June 1st),

repeated disruptions to the sage-grouse activities could cause temporary displacement or lower reproductive success.

**Livestock Grazing** – The impacts by the trekkers and their handcarts to wildlife species would be the same as the self-contained trek groups. The addition of motor vehicles supporting these trek groups could add to the potential for disruption of the grazing livestock. Gates that would be used by vehicles could add to the instances of gates being inadvertently left open, thus potentially causing grazing livestock to occupy pastures or allotments that they should not be in.

**Recreation Opportunity Spectrum (ROS)** – The addition of motor vehicles to support trek groups may cause added impacts to the recreational experience of both trekker and non-trekker recreationists. While the SPM classification allows for the use of motorized vehicles, their presence can negatively alter the experience, setting, and activity opportunities for all recreationists.

The trek routes for vehicle-supported treks would utilize an existing two-track road less than ½ mile from the Ellis Ranch. Trekkers traveling this route or vehicles meeting them along the Ellis Ranch access road could be viewed from the ranch house and from other areas of the ranch property. This could impact the isolated setting of the ranch and alter the experience of visitors at the ranch. The vehicles providing support to the trekkers would add additional impacts to the setting and experience expectations of ranch visitors.

There are safety concerns with mixing foot/handcart traffic with motor vehicle traffic on the improved Hudson-Atlantic City Road (BLM 2302) and the Fremont County Lewiston Road. While some of the vehicle traffic is connected to the trek groups (support vehicles) other traffic may not be aware of the trekker's presence and accidents between trekkers and vehicles could occur.

**National Historic Trails & Areas of Critical Environmental Concern (ACEC)** – The use of this section of trail for motor vehicle-supported handcart trekking could be compatible with the intent of the RMP and Trails Plan. Whether or not this is feasible may be contingent on the stipulations to be developed for the SRP. They would need to meet the intent of the decisions as outlined in the Trails Plan on Pages 9 – 11 of this document.

**Concurrent Recreational Uses** – Recreationists may encounter trekker groups along the proposed route. This inter-action with other user groups could negatively affect the non-trekker's recreational experiences, particularly if the non-trekkers are non-motorized. Hunters could be reluctant to continue their activity or feel their chances of harvesting their desired animal would be greatly reduced with the trekkers also utilizing the same area. The potential use of Silver Creek Reservoir as a swimming hole or for fishing by some trekkers could displace fishermen that are seeking a more solitude type experience.

There are safety concerns with mixing foot/handcart traffic with motor vehicle traffic on the improved Hudson-Atlantic City Road (BLM 2302) and the Fremont County Lewiston Road. While some of the vehicle traffic is connected to the trek groups (support vehicles) and aware of their use of the road other traffic may not be aware of the trekker's presence and accidents between trekkers and vehicles could occur. Trekkers could interfere with the passage of vehicles by blocking traffic.

### **2-Day Treks (Self-contained & Vehicle-supported), Alternative 1**

This alternative route applies to the vehicle-supported trek groups. It utilizes more of the Hudson-Atlantic City Road and less of the Silver Creek Reservoir eastern access road.

**Vegetation/Soils** - The route would utilize approximately 2/3 of a mile more of the Hudson-Atlantic City Road (BLM 2302). The impacts on vegetation and soils on the route would be similar to the Proposed Action. The impacts on vegetation and soils would be eliminated on approximately 1.5 miles of the semi-improved Silver Creek Reservoir eastern access road used in the Proposed Action.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The impacts to wildlife would be similar to the Proposed Action.

**Sensitive Wildlife Species** – The impacts to sensitive wildlife species would be similar to the Proposed Action.

**Livestock Grazing** – The impacts to grazing livestock would be similar to the Proposed Action.

**Recreation Opportunity Spectrum (ROS)** – On the two-track roads the impacts to ROS would be similar to the Proposed Action with some exceptions. The additional use of 2/3 of a mile of the Hudson-Atlantic City Road (BLM 2302) would increase the amount of time trekkers would be subject to an improved road and the incidence of inter-action with motorized vehicles traveling the improved road. This would reduce the opportunity for trekkers to be away from the sights and sounds of man, reduce the opportunity for achieving isolation, and a reduced level of need to use outdoor skills.

**National Historic Trails & ACEC** – The impacts to the NHTs and ACEC would be similar to the Proposed Action.

**Concurrent Recreational Uses** – The impacts to concurrent recreational uses would be similar to the Proposed Action with some exceptions. There could be a reduction in the inter-action of trekkers with other users on the two-track roads, while there could be an

increase in the inter-action with other users along the Hudson-Atlantic City Road (BLM 2302). There are safety concerns with mixing foot/handcart traffic with motor vehicle traffic on the improved Hudson-Atlantic City Road (BLM 2302) and the Fremont County Lewiston Road. While some of the vehicle traffic is connected to the trek groups (support vehicles) and aware of the use of the roads by trekkers other traffic may not be aware of the trekker's presence and accidents between trekkers and vehicles could occur. Trekkers could interfere with the passage of vehicles by blocking traffic. Hunters could be reluctant to continue their activity or feel their chances of harvesting their desired animal would be greatly reduced with the trekkers also utilizing the same area.

While on the Hudson-Atlantic City Road trekkers could create a safety hazard for motor vehicles and themselves while using the road as a portion of their route. Trekkers could interfere with the passage of vehicles by blocking traffic.

### **2-Day Treks (Self-contained & Vehicle-supported), Alternative 2**

This alternative route applies to both self-contained and vehicle support trek groups.

**Vegetation/Soils** - The impacts on vegetation and soils would be similar to the Proposed Action. The impacts related to motorized vehicle supported treks would be similar to those discussed for the vehicle-supported treks in the Proposed Action with the impacts occurring on the route from Silver Creek Reservoir to the Lower Monument.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife** – The impacts to wildlife would be similar to the Proposed Action.

**Sensitive Wildlife Species** – The impacts to sensitive wildlife species would be similar to the Proposed Action.

**Livestock Grazing** – The impacts to grazing livestock would be similar to the Proposed Action.

**Recreation Opportunity Spectrum (ROS)** – On the two-track roads the impacts to ROS would be similar to the Proposed Action with some exceptions. Diverting the vehicle-supported trekkers at Silver Creek Reservoir to a two-track road would increase the opportunity for trekkers to be away from the sights and sounds of man, increase the opportunity for achieving isolation, and increase the level of need to use outdoor skills. The increased use of the dam at Silver Creek Reservoir could impact the recreational experience of the public fishing by subjecting them to additional sights and sounds of other users.

**National Historic Trails & ACEC** – The impacts to the NHTs and ACEC would be similar to the Proposed Action.

**Concurrent Recreational Uses** – The impacts to concurrent recreational uses would be similar to the Proposed Action with one exception. For the vehicle-supported trekkers there could be a decrease in the inter-action with motor vehicles and other users along the Hudson-Atlantic City Road (BLM 2302). With the trekkers crossing the dam at Silver Creek Reservoir there could be an increase to potential conflicts between non-trekker groups and/or individuals that come into contact with the trekkers. Hunters could be reluctant to continue their activity or feel their chances of harvesting their desired animal would be greatly reduced with the trekkers also utilizing the same area.

While on the Hudson-Atlantic City Road trekkers could create a safety hazard for motor vehicles and themselves while using the road as a portion of their route. Trekkers could interfere with the passage of vehicles by blocking traffic.

#### **1-Day Treks (Self-contained & Vehicle-supported), Proposed Action**

Beginning at the proposed Hudson-Atlantic City Road staging area the route would utilize the same two-track road and the NHTs as the 2-day vehicle-supported route, Proposed Action. Impacts to the **Vegetation/Soils, Invasive/Nonnative Species, Wildlife, Sensitive Wildlife Species, Livestock Grazing, ROS, National Historic Trails & ACEC**, and **Concurrent Recreational Uses** would be the same as described in the Route Selection, Proposed Action, 2-Day Treks, Vehicle-Supported, on Pages 34-36.

#### **1-Day Treks (Self-contained & Vehicle-supported), Alternative 1**

Beginning at the alternative staging area above Silver Creek Reservoir, the route would utilize the same two-track road and the NHTs as the 2-day self-contained route, Proposed Action. Impacts to the **Vegetation/Soils, Invasive/Nonnative Species Wildlife, Sensitive Wildlife Species, Livestock Grazing, ROS, National Historic Trails & ACEC**, and **Concurrent Recreational Uses** would be the same as described in the Route Selection, 2-Day Treks, Alternative 2, Vehicle-Supported, on Pages 37-38.

#### **1/2-Day Treks (Self-contained & Vehicle-supported), Proposed Action**

Trekkers would depart from the proposed Hudson-Atlantic City Road staging area. Impacts to the **Vegetation/Soils, Invasive/Nonnative Species, Wildlife, Sensitive Wildlife Species, Livestock Grazing, ROS, National Historic Trails & ACEC**, and **Concurrent Recreational Uses** would be the same as described in the Route Selection, Proposed Action, 2-Day Treks, Vehicle-Supported, on Pages 38-39. Since the trekkers would return to the staging area by reversing their route there would be a doubling of use by these 1/2-day trek groups. This would lead to occasions when they would meet up with other trek groups or other NHT recreation user individuals and groups. This could result in additional impacts to vegetation and soils when groups would need to leave the

trail to allow passage of those traveling in the opposite direction. Also, during the return trip to the staging area a potential increase in meeting other recreationists could negatively impact each group's recreational experience.

### **1/2-Day Treks (Self-contained & Vehicle-supported), Alternative 1**

Trekkers would depart from the proposed Hudson-Atlantic City Road staging area. An additional two miles of two-track road and two miles of the Hudson-Atlantic City Road would be utilized under this alternative to return the trekkers to the proposed staging area. Impacts to the **Vegetation/Soils, Invasive/Nonnative Species, Wildlife, Sensitive Wildlife Species, Livestock Grazing, ROS, National Historic Trails & ACEC, and Concurrent Recreational Uses** would be the same as described in the Route Selection, Proposed Action, 2-Day Treks, Vehicle-Supported, on Page 39.

### **SEASON OF USE**

#### **2-Day, 1-Day, & 1/2-Day Treks, Proposed Action**

The season of use for self-contained and vehicle-supported treks would be from June 1<sup>st</sup> through September 30<sup>th</sup>, Monday through Friday. Not conducting the treks on the weekend would allow other trail enthusiasts the opportunity to experience their desired use without meeting up with large groups of trekkers.

**Vegetation/Soils** – Impacts to vegetation and soils would occur during wet soil conditions. If the winter snow pack and spring storms (snow and/or rain) keep the trek area wet, then rutting of the Hudson-Atlantic City Road (BLM 2302) access road to the area, two-track roads used for trekking and access, and the NHTs would occur. The same results could occur in the early fall if precipitation of sufficient quantity occurs. Though summer time thunderstorms can produce sufficient quantity of precipitation to cause wet roads they are more often short-lived, and dry conditions can return in as little as a few hours. If a summer storm system stays for several days the area can become soaked and muddy conditions can result from the precipitation though dry conditions can return in a matter of several hours to several days. Though the area has experienced an severe drought during 2000 to the present if and when a “normal” winter/spring precipitation occurs the trekking route and access routes could be impassable until late June or even early July.

Soils along the route have a range from slight to severe for both water and wind caused erosion. The ranges for water and wind cause erosion for the key areas are as follows:

Location of portable toilets east of the Ellis Ranch Road – severe & severe

BLM trekker's campsite – moderate & moderate

Proposed staging area – slight & moderate

Lower Monument – slight & moderate

Rocky Ridge- severe & severe

Location of portable toilets at Lewiston Lakes Road (private land) – slight & moderate

Location of portable toilets east of Gilesie Place (state land) – slight & slight

Gilesie Place/Radium Springs – slight & moderate

The earlier the trek use starts the more likely the soils would be subject to wet conditions. During wetter soils conditions impacts from compaction, rutting, and accelerated runoff could increase.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The presence of the trek groups during use of the trek route and campsites along with any associated vehicle use during the period of June 1<sup>st</sup> to September 30<sup>th</sup> could cause a temporary displacement of wildlife. The repeated use of the area by the trek groups could cause a permanent displacement of some animals off of their historic range along the NHT corridor. Antelope and mule deer have their fawns in June, so trekker activities would be occurring during this critical period. If activities are restricted to the trail, impacts should be minimal. If trekkers wander off the trail, then impacts (disturbance/displacement) could be greater.

Raptor nesting in the area could be impacted by the presence of trekkers. The standard BLM mitigation is to avoid surface disturbance activities within at least ¼ mile of active nests until after July 31st. Current inventory of nests indicates that trekking activities on BLM administered public lands would be at least ¼ mile from known raptor nests. Should additional nests be found in the area of the trek activity (trekking, campsites and support vehicle use) they would need to be evaluated on a case-by-case-basis.

**Sensitive Wildlife Species** – The proposed time frame of June 1 to September 30 could conflict with sage-grouse, mountain plover, sage thrasher, Brewer's sparrow, sage sparrow and loggerhead shrike nesting periods. The proposed route for the self-contained trek groups would take them within approximately one mile of a greater sage-grouse lek. The vehicle-supported trek route would be within ¼ mile of this same lek. Another lek is located ½ mile south of the route (both trek groups) on state land, southeast of the Gilesie Place. Recruitment of sage-grouse could be negatively affected by the presence of large groups of trekkers traveling this route. Although sage-grouse strutting activity

on the lek is normally completed by June 1st, repeated disruptions to the sage-grouse activities could cause the lek to be abandoned. The NHTs corridor provides very important nesting, late brood-rearing and summer habitats for sage-grouse. Disturbance during the nesting period could cause nest abandonment, resulting in the loss of eggs and/or chicks from over-exposure, predation or other physical harm. These impacts would be similar for the sage thrasher, Brewer's sparrow, sage sparrow and loggerhead shrike. The standard stipulation for avoiding disturbing activities in sage-grouse nesting habitat is July 31<sup>st</sup>.

Trekking activity through other sensitive areas could disrupt and/or displace species from their historic range or crucial habitat (e.g., potential mountain plover nesting sites at the BLM trekker campsite). A follow up to the initial June 2002 survey of the campsite for mountain plover was conducted in June of 2003. While a mountain plover was sighted in the campsite area, a 2<sup>nd</sup> follow-up survey was conducted two weeks later with a determination of no confirmed nesting occurring in the area. The standard stipulation for avoiding disturbing activities for mountain plover is to avoid known nesting sites until after July 10<sup>th</sup>.

**Livestock Grazing** –The four grazing allotments within the trekking area and their season of use dates are as follows: Flagg AMP (5/1-10/31), Fenced Individual (5/1-6/14), Atlantic City Common (5/23-9/30), and the Silver Creek Common (5/15-10/7). Trekking use within the allotments during these time periods could cause disruptions with respect to livestock grazing management. Gates that would be used by trekkers could add to the instances of gates being inadvertently left open, thus potentially providing livestock the opportunity to utilize pastures or allotments that they should not be in. This could lead to disruption to grazing rotations, increased forage utilization in some pastures, and the need for operators to return the livestock to the proper pasture/allotment. When trekkers and/or vehicles approach grazing livestock the livestock may temporarily leave the immediate area. It is expected that soon after the trekkers pass through an area the livestock would return to their normal grazing activities. However, repeated disturbance to livestock could result in a disruption to their use patterns.

**Recreation Opportunity Spectrum (ROS)** – The season of use would not impact the recreational experiences of the trekkers unless the wet conditions of the roads and NHTs would prevent entry into the area. If this were to occur the affect would be postponement or complete cancellation of the trek experience for some groups unable to reschedule a trek. This could cause major disappointment to trek leaders and trek participants as well as place a financial burden on the trekkers for expenses already incurred in the planning of their trek, including transportation to Sixth Crossing, only to be notified of the cancellation of their particular trek.

The route for self-contained treks would utilize an existing two-track road less than ½-mile from the Ellis Ranch. Trekkers traveling this route could be viewed from the ranch house and from other areas of the ranch property. This could impact the isolated setting of the ranch and negatively alter the recreational experience of visitors at the ranch by subjecting them to large groups of trekkers. Though the frequency of trek groups passing

within sight of the ranch facilities is one per day, it is the period of June 1<sup>st</sup> to September 30<sup>th</sup> (5-6 days per week) that could alter the isolated experience of the ranch guests.

**National Historic Trails & Areas of Critical Environmental Concern (ACEC)** – The 26 mile route of the handcart treks utilizes approximately 12 miles of the NHTs (also designated an ACEC) from the Lower Monument to near Rock Creek Hollow. The season of use of the NHTs could be contrary to the intent of the 1987 RMP for the Lander Field Office and the 1986 Oregon/Mormon Pioneer National Historic Trails Management Plan that provide direction for the use, interpretation, and protection of the trails. If the NHTs receive use during wet conditions the impacts to the resources of the NHTs would be contrary to the intent of the Plans.

**Concurrent Recreational Uses** – During the proposed season of use for trekking other recreational user individuals/groups may encounter trekker groups along the proposed route. These other groups could be NHT enthusiasts or simply passing through the NHT corridor to access other public lands to participate in their form of recreation. This interaction with other user groups could negatively affect both non-trekker's and trekker's recreational experiences. Hunting for antelope (archery – 8/15 to 3<sup>rd</sup> Friday in Sept.; rifle – 3<sup>rd</sup> Sat. in Sept. to 10/22), deer (9/1 to 9/30), sage-grouse (4<sup>th</sup> Sat. in Sept to 1<sup>st</sup> Sunday in Oct.), Chukar/Gray partridge (9/15-12/31), and cottontail rabbit (9/1-3/1) could occur within the trekking use area during mid-August to the end of September. Hunting of non-game, including predators could occur throughout the entire trekking season of use. Inter-action between hunters and trekkers could negatively impact both user groups as hunters may want to avoid the trekker route and trekkers may be apprehensive with hunting occurring nearby. Instances of “stand-offs” between trekkers and motor vehicles on two-track roads in the recent past did not enhance the experience of either user group. Some non-trekkers may enjoy observing a handcart trek in progress, while others may find larger trek groups infringing upon their desired recreational experience.

**2-Day, 1-Day, & 1/2-Day Treks, Alternative 1** – The season of use would begin June 15<sup>th</sup> and continue through August 15<sup>th</sup>.

**Vegetation/Soils** – With two additional weeks of time to allow drying of the roads and the NHTs the area could be drier than June 1st – 14<sup>th</sup>, thus a reduction in potential damage to the resources could result. Ending the trekking season on August 15<sup>th</sup> could prevent damage to trail resources during late summer and/or early fall storms. A delay of the use season by two weeks could result in fewer impacts from compaction, rutting, and accelerated runoff.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – Delaying the trekking season until the 15<sup>th</sup> of June could result in less disturbance to antelope/deer fawns during their critical survival period. However, the use season would still fall within the antelope/deer birthing period and in raptor nesting period. BLM protects the fawning period until June 30 and the nesting period until July 31.

**Sensitive Wildlife Species** – Delaying the trekking season until June 15<sup>th</sup> could result in a reduction of disturbance to nesting sage-grouse and mountain plover, however, use would still occur before the standard end dates for avoiding disturbance to sage-grouse and mountain plover of July 31<sup>st</sup> and July 10<sup>th</sup> respectively.

**Livestock Grazing** – Use of three of the four grazing allotments would still occur during the June 15<sup>th</sup> – August 15<sup>th</sup> trekking use season. The Fenced Individual (5/1-6/14) Allotment would no longer be affected by the trekker activities. The remaining three allotments would be impacted in the same manner as the Proposed Action, as described on Pages 41.

**Recreation Opportunity Spectrum (ROS)** – If the road and NHT conditions were too wet to allow access into the area the impacts would be similar to the Proposed Action, as described on Page 32. Potential impacts to the Ellis Ranch visitors would continue similar to the Proposed Action, as described on Page 41-42.

**National Historic Trails & ACEC** – Impacts would continue similar to the Proposed Action, as described on Page 42.

**Concurrent Recreational Uses** – The impacts would be similar to the Proposed Action, as described on Page 42, except the season of use would end as the archery season for antelope is starting. There would be a reduction in potential conflicts between hunting activities and trekking activities.

**2-Day, 1-Day, & 1/2-Day Treks, Alternative 2** – The season of use would be flexible to match conditions on the ground, such as, weather related trail conditions. June 15<sup>th</sup> would be the earliest authorized use with the ending date the Monday of the Labor Day weekend. Based upon the knowledge of the BLM Lander Field Office staff, during a “normal” precipitation year the trek area can be inaccessible due to weather related trail conditions as late as early July. Delaying the trekking season of use, based on weather related trail conditions, would reduce impacts to **Vegetation/Soils, Invasive/Nonnative Species, Wildlife, Sensitive Wildlife Species, Livestock Grazing, Recreation Opportunity Spectrum (ROS), National Historic Trails & ACEC, and Concurrent**

**Recreational Uses** proportionately as the beginning date of use is extended later into the summer to coincide with the drying out of the soils.

**Vegetation/Soils** – With two additional weeks of time to allow drying of the roads and NHT the area could be drier than June 1<sup>st</sup> – 14<sup>th</sup>, thus a reduction in potential damage to the resources could result. Ending the trekking season on the Monday of the Labor Day weekend could prevent damage to trail resources during late summer and/or early fall storms.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – Delaying the trekking season until the 15<sup>th</sup> of June could result in less disturbance to antelope/deer fawns during their critical survival period. However, the use season would still fall within the antelope/deer birthing period and in raptor nesting period. BLM protects the fawning period until June 30 and the nesting period until July 31.

**Sensitive Wildlife Species** – Delaying the trekking season until June 15<sup>th</sup> could result in a reduction of disturbance to nesting sage-grouse and mountain plover, however, use would still occur before the standard end dates for avoiding disturbance to sage-grouse and mountain plover of July 31<sup>st</sup> and July 10<sup>th</sup> respectively.

**Livestock Grazing** – Use of three of the four grazing allotments would still occur during the June 15<sup>th</sup> to the Monday of the Labor Day weekend trekking use season. The Fenced Individual (5/1-6/14) Allotment would no longer be affected by the trekker activities. The remaining three would be impacted in the same manner as the Proposed Action, as described on Page 41.

**Recreation Opportunity Spectrum (ROS)** – If the road and NHT conditions were too wet to allow access into the area the impacts would be similar to the Proposed Action, as described on Pages 41-42. Potential impacts to the Ellis Ranch visitors would continue similar to the Proposed Action. The potential for needing to cancel or postpone treks would be less than in the Proposed Action, but could still occur.

**National Historic Trails & ACEC** – Impacts would continue similar to the Proposed Action, as described on Page 42.

**Concurrent Recreational Uses** – The impacts would be similar to the Proposed Action, as described on Page 42, except the season of use would end as the archery season for antelope is starting. There would be a reduction in potential conflicts between hunting activities and trekking activities. Since the hunting season for cottontail rabbit starts September 1, the two activities would overlap. There would be an overall reduction in

potential conflicts between hunting activities and trekking activities to the Proposed Action, as described on Pages 43.

## **NUMBER OF PARTICIPANTS PER TREKKING SEASON**

### **Proposed Action (7,500 participants)**

The total maximum number of trek participants per use season would be capped at 7,500. Monitoring of the trekking activities would provide data that could be used to evaluate the amount of resource impacts associated with this level of season-long participation. The evaluation could determine that the number of participants should remain at 7,500 or should be reduced to a lower level that would lessen resource impacts.

The total number of participants per trekking season includes the total of all 2-day self-contained, 2-day vehicle-supported, 1-day, and 1/2-day trekkers and any related support personnel. Use would be spread over one of the various season of use timeframes as previously outlined in the Season of Use, Proposed Action and Alternatives described on Page 14. A discussion on impacts for the size of individual trek groups begins on Page 51 under Trek Group Size. Depending on the size of groups and the length of the trekking season the 7,500 participants could be spread out over a four month period, with the majority of use from mid-June to mid-August. This two month period coincides with the break from school for a majority of the trek participants made up of teenage children and their adult leaders.

**Vegetation/Soils** – The 7,500 level of participation would result in impacts to the vegetation ranging from minor damage to plants by trampling to the actual loss of plants by repeated trampling. Impacts to soils would occur by the repeated compaction from foot, handcart wheels, and any associated motor vehicle support. The impacts would be most apparent on the center vegetation strip of the two-track roads and NHTs, the BLM trekker’s campsite, and areas of group concentration, such as port-a-potty locations, and rest/lunch areas. The loss of plant cover and added soil compaction could result in accelerated soil loss during water runoff and high wind events. This could impact the drainages and streams by adding additional sediment that could adversely affect fisheries and water quality.

Soils along the route have a range from slight to severe for both water and wind caused erosion. The ranges for water and wind cause erosion for the key areas are as follows:

Location of portable toilets east of the Ellis Ranch Road – severe & severe

BLM trekker’s campsite – moderate & moderate

Proposed staging area – slight & moderate

Lower Monument – slight & moderate

Rocky Ridge- severe & severe

Location of portable toilets at Lewiston Lakes Road (private land) – slight & moderate

Location of portable toilets east of Gilespe Place (state land) – slight & slight

Gilespe Place/Radium Springs – slight & moderate

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – Impacts to wildlife would be as previously described in the Route Selection and Season of Use proposed actions and alternatives, as described on Pages 29-45. These impacts would cause a temporary displacement of wildlife from their historic ranges. Repeated disturbance could cause a permanent displacement of some wildlife from their historic ranges.

Impacts to raptors may not be significant if there are no existing active nests within ½ mile of the trekking activities. Should active nests be located within ½ mile of the trekking activities disturbance of the nesting raptors could result in abandonment and resultant failure of the nest, including the loss of non-fledged birds.

**Sensitive Wildlife Species** - Impacts to sensitive wildlife species would be as previously described in the Route Selection and Season of Use proposed actions and alternatives as described on pages 29-45. These impacts could cause a reduction in sage-grouse recruitment and a possible abandonment of the lek by the repeated passage of trekkers and their support personnel.

**Livestock Grazing** – The larger groups and/or more frequent groups could impact livestock grazing management operations through inadvertently leaving gates open or temporarily displacing livestock from feed and water.

**Recreation Opportunity Spectrum (ROS)** – The total number of participants could impact the opportunities of trekkers and other recreationists from experiencing isolation from the sights and sounds of man, reduce the degree of interaction with the natural environment, and reduce the need to use outdoor skills by concentrating users along the trekking route. For example, if the use were to be evenly spread out over the June 15<sup>th</sup> – August 15<sup>th</sup>, Monday- Friday season of use (5 days a week for 8 weeks = 40 days), there would be 188 people in each trek group five days a week (7,500 divided by 40 = 188). Some trek participants could view this as an unacceptable number per group (e.g., too small a number to accommodate the number of desired participants), while others may

actually view it as an opportunity to have a better experience. Other recreational users utilizing the route could view it as excessive and detrimental to their recreational experience. Still, others may find observing the trekkers a positive addition to their experience.

**National Historic Trails & ACEC** – The protection of the NHTs could be compromised by the large number of users (7,500 trekkers and an estimated additional 2,000 non-trekker visitors) to Rocky Ridge. Impacts during 2002 use (trekking use was reported as over 12,000) on the NHTs included changes to vegetation, widening of two-track roads, compaction of soils, and impacts to other NHT user groups and/or individual's experiences. Monitoring of NHTs conditions during and after the use season (both trekkers and non-trekker groups/individuals) could determine if the reduction in total number of trekkers (from 12,000 in 2002 to 7,500 as proposed) would result in reduced impacts to the trails resources.

**Concurrent Recreational Uses** – Even with 4,500 fewer trek participants per season compared to trekker use in 2002 (12,000 – 7,500 = 4,500) other NHTs corridor recreational users groups may have a reduced level of desired experience on the public lands (less isolation from the sights and sounds of man, reduced degree of interaction with the natural environment, and reduced need to use outdoor skills).

#### **Alternative 1 (5,000 participants)**

The maximum number of trek participants per use season would be capped at 5,000. This number would include the total of all 2-day self-contained, 2-day vehicle-supported, 1-day, and 1/2-day trekkers and any support personnel. Use would be spread over one of the various season of use timeframes as previously outlined in the Season of Use alternatives described on Page 14. A discussion on impacts for the size of individual trek groups begins on Page 51 under Trek Group Size. Depending on the size of groups and the length of the trekking season the 5,000 participants could be spread out over from a two to four month period with the majority of use from mid-June to mid-August. This two month period would coincide with the break from school for a majority of the trek participants made up of teenage children and their adult leaders.

**Vegetation/Soils** – The 5,000 level of participation would result in similar impacts as compared to the Proposed Action. This level of participation would result in impacts to the vegetation ranging from minor damage to plants by trampling to the actual loss of plants by repeated trampling. Impacts to soils would occur by the repeated compaction from foot, handcart wheels, and any associated motor vehicle support. The impacts would be most apparent on the center vegetation strip of the two-track roads and NHTs, the BLM trekker's campsite, and areas of group concentration, such as portable toilet locations and rest/lunch areas. The loss of plant cover and added soil compaction could result in accelerated soil loss during water runoff and high wind events. This could impact the drainages and streams by adding additional sediment that could adversely affect fisheries and water quality.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – Impacts to wildlife would be as previously described in the Route Selection and Season of Use proposed actions and alternatives, as described on Pages 29-43. These impacts would cause a temporary displacement of wildlife from their historic ranges. Repeated disturbance could cause a permanent displacement of some wildlife from their historic ranges.

Impacts to raptors may not be significant if there are no existing active nests within ½ mile of the trekking activities. Should additional active nests be located within ½ mile of trekking activities the impacts could include abandonment of nests.

**Sensitive Wildlife Species** - Impacts to sensitive wildlife species would be as previously described in the Route Selection and Season of Use proposed actions and alternatives, as described on Pages 29-43. These impacts could cause a reduction in sage-grouse recruitment and a possible abandonment of leks by the repeated passage of trekkers and their support personnel.

**Livestock Grazing** – The 5,000 level of participation would result in similar impacts as compared to the Proposed Action. The groups could impact livestock grazing management operations through inadvertently leaving gates open or temporarily displacing livestock from feed and water.

**Recreation Opportunity Spectrum (ROS)** – The total number of participants could impact the opportunities of trekkers and other recreationists from experiencing isolation from the sights and sounds of man, reduce the degree of interaction with the natural environment, and reduce the need to use outdoor skills by concentrating users along the trekking route. For example, if the use were to be evenly spread out over the June 15<sup>th</sup> – August 15<sup>th</sup>, Monday- Friday, season of use alternative, (5 days a week for 8 weeks = 40 days) there would be 125 people in each trek group five days a week (5,000 divided by 40 = 125). Some trek participants could view this as an unnecessary restriction. Still, others may find observing the trekkers a positive addition to their experience, while others may actually view it as an opportunity to have a better experience. Other recreational users utilizing the route could view it as excessive and detrimental to their recreational experience. Still, others may find observing the trekkers a positive addition to their experience. The reduction in the total number of participants would negatively impact the opportunity of interested trekkers to schedule and complete a trek. The reduction could result in the creation of a larger waiting list and schedule than currently exists to accommodate future treks.

**National Historic Trails & ACEC** – The protection of the NHTs could be compromised by the large number of users (5,000 trekkers and an estimated additional 2,000 non-trekker visitors) to Rocky Ridge. Impacts during 2002 use (trekking use was reported as over 12,000) on the NHTs included changes to vegetation, widening of two-track roads, compaction of soils, and impacts to other NHT user groups and/or individual's experiences. Monitoring of NHTs conditions during and after the use season (both trekkers and non-trekker groups/individuals) could determine if the reduction in total number of trekkers to 5,000 would result in reduced impacts to the trails resources.

**Concurrent Recreational Uses** – Even with 2,500 fewer trek participants per season than in the Proposed Action (7,500 – 2,500 = 5,000) other NHTs corridor recreational users groups may have a reduced level of desired experience on the public lands (less isolation from the sights and sounds of man, reduced degree of interaction with the natural environment, and reduced need to use outdoor skills). However, the impacts would be lessened than those of the Proposed Action of 7,500.

### **Alternative 2 (2,500 participants)**

The maximum number of trek participants per use season would be capped at 2,500. This number would include the total of all 2-day self-contained, 2-day vehicle-supported, 1-day, and 1/2-day trekkers and any support personnel. Use would be spread over one of the various season of use timeframes as previously outlined in the Season of Use alternatives described on Page 14.

**Vegetation/Soils** – The 2,500 level of participation would result in reduced impacts compared to the Proposed Action and Alternative 1. Still, impacts to the vegetation would range from minor damage to plants by trampling to the actual loss of plants by repeated trampling. Impacts to soils would occur by the repeated compaction from foot, handcart wheels, and any associated motor vehicle support. The impacts would be most apparent on the center vegetation strip of the two-track roads and NHTs, the BLM trekker's campsite, and areas of group concentration, such as port-a-potty locations and rest/lunch areas. The loss of plant cover and added soil compaction could result in accelerated soil loss during water runoff and high wind events. This could impact the drainages and streams by adding additional sediment that could adversely affect fisheries and water quality.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – Impacts to wildlife would be reduced compared to the Proposed Action, but would be as previously described in the Route Selection and Season of Use proposed actions and alternatives, as described on Pages 29-43. These impacts would

cause a temporary displacement of wildlife from their historic ranges. Repeated disturbance could cause a permanent displacement of some wildlife from their historic ranges.

Impacts to raptors may not be significant if there are no existing active nests within ½ mile of the trekking activities. Should additional active nests be located within ½ mile of trekking activities the impacts could include abandonment of nests.

**Sensitive Wildlife Species** - Impacts to sensitive wildlife species would be as previously described in the Route Selection and Season of Use proposed actions and alternatives, as described on Pages 29-43. These impacts could cause a reduction in sage-grouse production and a possible abandonment of the lek by the repeated passage of trekkers and their support personnel.

**Livestock Grazing** – The larger groups and/or more frequent groups could impact livestock grazing management operations through inadvertently leaving gates open or temporarily displacing livestock from feed and water.

**Recreation Opportunity Spectrum (ROS)** – The total number of participants could impact the opportunities of trekkers and other recreationists from experiencing isolation from the sights and sounds of man, reduce the degree of interaction with the natural environment, and reduce the need to use outdoor skills by concentrating users along the trekking route. For example, if the use were to be evenly spread out over the June 15<sup>th</sup> – August 15<sup>th</sup>, Monday- Friday, season of use alternative, (5 days a week for 8 weeks = 40 days) there would be 63 people in each trek group five days a week (2,500 divided by 40 = 63). Some trek participants could view this as acceptable and could actually have a better experience with reduced numbers, while other trekkers may feel restricted by the reduced numbers which would limit the number of participants from their Church organization. Other recreationists on the route could view it as excessive and compromising to their desired recreational experience, while others may find observing the trekkers a positive addition to their experience. The reduction in the total number of participants would negatively impact the opportunity of interested trekkers to schedule and complete a trek. The reduction could result in the creation of a larger waiting list and schedule than currently exists to accommodate future treks.

**National Historic Trails & ACEC** – The protection of the NHTs could be compromised by the large number of users (2,500 trekkers and an estimated additional 2,000 non-trekker visitors) to Rocky Ridge, though to a lesser degree than the Proposed Action and Alternative 1. Impacts during previous trekking use on the NHTs included changes to vegetation, widening of two-track roads, compaction of soils, and impacts to other NHT user groups and/or individuals. Monitoring of the NHTs conditions during and after the use season (both trekkers and non-trekker groups/individuals) could determine if the reduction in total number of trekkers (from 7,500 in the Proposed Action or 5,000 in Alternative 1 to 2,500 as proposed in this alternative) has reduced the impacts to the trails resources.

**Concurrent Recreational Uses** – Even with 5,000 fewer trek participants per season than in the Proposed Action (7,500 – 5,000 = 2,500) other NHTs corridor recreational users groups may have a reduced level of desired experience on the public lands (less isolation from the sights and sounds of man, reduced degree of interaction with the natural environment, and reduced need to use outdoor skills). However, the impacts could be less than those of the Proposed Action and Alternative 1.

## **TREK GROUP SIZE**

### **Proposed Action (400)**

The maximum number for a trek group size for either 2-day self-contained, 2-day vehicle-supported, 1-day, or 1/2-day trekkers, including any support personnel, would be capped at 400 participants. Trek groups of up to 400 participants would not be the norm, but would be able to accommodate the desires of some Church organizational units (6 out of 59 trek groups reserving space in 2003 were at or exceeded 400 participants).

**Vegetation/Soils** – The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45. Large groups of trekker could be more apt to “spill” off of the two-track roads and NHTs and inadvertently create more damage to the vegetation and soils than smaller more easily managed sized groups. Loss of the center strip of vegetation on the two-track roads would occur during the pulling/pushing of the handcarts.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Sensitive Wildlife Species** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Livestock Grazing** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Recreation Opportunity Spectrum (ROS)** – The impacts to the recreational experiences of trekkers and non-trekkers would be similar to those discussed in the Proposed Action for Number of Participants on Page 45. The reduced opportunity of experiencing isolation from the sights and sounds of man, a reduction in the degree of interaction with the natural environment, and a reduced need to use outdoor skills by concentrating 400 users along the trekking route would occur under this proposal.

**National Historic Trails & ACEC** – The impacts from groups as large as 400 would compromise the protection of the trails. These impacts are similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Concurrent Recreational Uses** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

### **Alternative 1 (200)**

The maximum number for a trek group size for either 2-day self-contained, 2-day vehicle-supported, 1-day, or 1/2-day trekkers, including any support personnel, would be capped at 200 participants. Trek groups of up to 200 participants could be the norm as 42 out of 59 trek groups reserving space in 2003 were at or below 200 participants.

**Vegetation/Soils** – The impacts would be similar, but to a lesser degree, to those discussed in the Proposed Action, 400 sized group. The reduction of the size of groups by 50% could result in fewer instances of participants “spilling” off of the two-track roads and NHTs and inadvertently creating more damage to the vegetation and soils. Loss of the center strip of vegetation on the two-track roads would probably still occur during the pulling/pushing of the handcarts.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Sensitive Wildlife Species** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Livestock Grazing** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Recreation Opportunity Spectrum (ROS)** – The impacts to the recreational experiences of trekkers and non-trekkers would be similar to those discussed in the Proposed Action for Number of Participants on Page 45. The reduced opportunity of experiencing isolation from the sights and sounds of man, a reduction in the degree of interaction with the natural environment, and a reduced need to use outdoor skills by concentrating 200 users along the trekking route would occur under this alternative. The reduction in the total number of group participants would negatively impact the opportunity of interested trekkers to schedule and complete a trek. The reduction could

result in the creation of a larger waiting list and schedule than currently exists to accommodate future treks. Church sponsored treks are often based on the size of the stake and the number of youth in the stake. The size of a trek group often reflects the size of the stake and youth which typically involves 200 – 400 trek participants.

**National Historic Trails & ACEC** – The impacts from groups as large as 200 could compromise the protection of the trails. These impacts are similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Concurrent Recreational Uses** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

### **Alternative 2 (100)**

The maximum number for a trek group size for either 2-day self-contained, 2-day vehicle-supported, 1-day, or 1/2-day trekkers, including any support personnel, would be capped at 100 participants. Trek groups of up to 100 participants made up 28 out of 59 trek groups reserving space in 2003.

**Vegetation/Soils** – The impacts would be significantly reduced from those discussed in the Proposed Action, 400 sized groups, and less than the 200 sized groups in Alternative 1. The reduction of the size of groups by 75% and 50% would result in fewer instances of participants “spilling” off of the two-track roads and NHTs and inadvertently creating more damage to the vegetation and soils. Loss of some of the center strip of vegetation on the two-track roads would probably still occur during the pulling/pushing of the handcarts.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Sensitive Wildlife Species** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Livestock Grazing** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Recreation Opportunity Spectrum (ROS)** – The impacts to the recreational experiences of trekkers and non-trekkers would be less than those discussed in the Proposed Action for Number of Participants on Page 45. The reduced opportunity of

experiencing isolation from the sights and sounds of man, a reduction in the degree of interaction with the natural environment, and a reduced need to use outdoor skills by concentrating 100 users along the trekking route would occur under this alternative. However, a reduction in impacts on the recreational experience from the Proposed Action and Alternative 1 would be achieved under this alternative. The reduction in the total number of group participants would negatively impact the opportunity of interested trekkers to schedule and complete a trek. The reduction could result in the creation of a larger waiting list and schedule than currently exists to accommodate future treks. Church sponsored treks are based on the size of the stake and the number of youth in the stake. The size of a trek group often reflects the size of the stake and youth which typically involves 200 – 400 trek participants.

**National Historic Trails & ACEC** – The impacts from groups as large as 100 may compromise the protection of the trails. These impacts are similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

**Concurrent Recreational Uses** - The impacts would be similar to those discussed in the Proposed Action for Number of Participants, on Page 45.

### **VEHICLE USE ON THE NHTs**

#### **Proposed Action (Exclude trekker support vehicles from NHTs)**

The exclusion of vehicles from the NHTs discussed below applies only to their operation in support of the handcart treks. Vehicle use by other current special recreation permittees (e.g., outfitters for mountain bike rides, horseback riding, wagon trains, and hunting) is also excluded from the NHTs. For other recreationists the NHTs are considered two-track roads with the off-highway vehicle designation that allows vehicle use on existing two-track roads. It is BLM policy that SRPs contain stipulations that may restrict the permittee's operation more than that of the general public in use of the public lands in order to protect the cultural, historic, and natural resource values.

**Vegetation/Soils** - The exclusion of support vehicles from the NHTs would reduce the impacts to vegetation and soils discussed in Route Selection, 2-Day Treks, Vehicle-Supported, Proposed Action, on Page 34. The primary reduction in impacts along the NHTs would be in the form of less damage/destruction to plants from crushing by passage of vehicles and a reduction in the compaction of soils. The use of vehicles responding to a trekker emergency situation along the NHTs could result in some limited damage to plants or soil compaction, but it is not anticipated that the need for an emergency vehicle would occur often. Limited vehicle use on designated access roads to the NHTs by support vehicles may cause some damage to vegetation and soils, but with a restriction of two support vehicles per 100 trekkers it is anticipated that any impacts directly related to vehicle use could range from moderate to significant. Repeated parking of vehicles on vegetation would result in soil compaction and damage to vegetation.

Soils along the route have a range from slight to severe for both water and wind caused erosion. The ranges for water and wind cause erosion for the key areas are as follows:

<b>Key Area</b>	<b>Wind Erosion Potential</b>	<b>Water Erosion Potential</b>	<b>Compaction Potential</b>
Portable toilets east of Ellis Ranch Road	Severe	Severe	Low
BLM trekker's campsite	Moderate w/vegetation cover Severe w/o vegetation cover	Moderate	Susceptible
Proposed staging area	Slight	Moderate	Susceptible
Lower Monument	Slight	Moderate	Low
Rocky Ridge	Severe	Severe	Low
Portable toilets at Lewiston Lakes Road (private land)	Slight	Moderate	Susceptible
East of Gillespie Place/Radium Springs (state land)	Slight	Moderate	Low

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** - The exclusion of support vehicles from the NHTs would reduce the impacts to wildlife discussed in Route Selection, 2-Day Treks, Vehicle-Supported, Proposed Action, on Page 34. While the absence of vehicles along the NHTs would not totally prevent disturbance of wildlife during the treks, since the primary cause of wildlife movement would be the group of trekkers, it could reduce additional disturbance. Limited vehicle use on designated access roads to the NHTs for support of the trekkers may cause some temporary disturbance to wildlife.

**Sensitive Wildlife Species** - The exclusion of support vehicles from the NHTs would reduce the impacts to the sensitive wildlife species discussed in Route Selection, 2-Day Treks, Vehicle-Supported, Proposed Action, on Page 34-35. While the absence of vehicles along the NHTs would not totally prevent disturbance of sage-grouse (the number of trekkers would be the primary cause of disturbance), it could reduce additional disturbance. The U.S. Fish and Wildlife Service has reported that disturbance to nesting mountain plover is less likely to occur from vehicles driving within or near nesting areas than people walking in these areas. Therefore, excluding vehicles from potential mountain plover nesting habitat would not reduce the potential for abandonment of nests.

It is more likely that people on foot would lead to nest abandonment. Limited vehicle use on designated access roads to the NHTs for support of the trekkers may cause some movement of species and could lead to abandonment of raptor nests by repeated disturbance.

**Livestock Grazing** -The exclusion of support vehicles from the NHTs would result in some reduction of impacts to livestock grazing on the affected allotments. However, vehicle disturbance is secondary to that caused by groups of trekkers along the trekking route. Vehicle use on designated access roads to the NHTs for support of the trekkers may cause some movement of livestock from stock reservoirs, salting sites, or during their grazing activities.

**Recreation Opportunity Spectrum (ROS)** - The exclusion of support vehicles from the NHTs could enhance the trekking experience by reducing the sights and sounds of man (in the form of vehicles). Despite the fact that non-trekking related vehicle use is presently allowed on the NHTs, trekker interaction with other these other vehicles can be sporadic or non-existent during their activities. Fewer vehicles on the roads within the NHTs corridor could add to the enhancement of recreational experiences by other recreationists.

**National Historic Trails & ACEC** - The exclusion of support vehicles from the NHTs could reduce the impacts to the trail resources and aid in the protection of the trail's cultural and historic values. Vehicle use on designated access roads to the NHTs, particularly as the vehicles park to provide support for the trekkers, would cause damage to vegetation causing a modification to the pristine viewshed of the NHTs. The parking of vehicles in proximity of the NHTs would temporary distract from the historic nature of the setting.

**Concurrent Recreational Use** - The exclusion of support vehicles from the NHTs could reduce the instances of inter-action with other recreation users. This could lead to enhancing the experiences of these non-trekker recreationists by reducing the sights and sounds of man (in the form of vehicles). The parking of vehicles in proximity of the NHTs would temporary distract from the historic nature of the setting.

### **Alternative 1 (limited to two support vehicles on the NHTs)**

This alternative would allow two vehicles to accompany trekkers on the NHTs with the purpose of providing support for carrying heavy supplies and for emergency medical purposes.

**Vegetation/Soils** – Allowing vehicles on the NHTs would lead to increased impacts to vegetation by the passage of vehicles crushing or repeatedly crushing plants. This could result in a reduction in plant cover and an increase in loss of soil by water and wind erosion.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The addition of noise and movement of vehicles would add to the disturbance of wildlife, though the primary cause of disturbance would be from the group of trekkers.

**Sensitive Wildlife Species** - The addition of noise of vehicles would add to the disturbance of wildlife, though the primary cause of disturbance would be from the group of trekkers.

**Livestock Grazing** -Disturbance from vehicles would be secondary to that caused by groups of trekkers along the trekking route. Vehicle use on the NHTs may cause some movement of livestock from stock reservoirs, salting sites, or during their grazing activities.

**Recreation Opportunity Spectrum (ROS)** – Allowing support vehicles on the NHTs would reduce the trekking experience by increasing the sights and sounds of man (in the form of vehicles). More vehicles on the NHTs corridor would add to the reduction in the recreational experiences of other recreationists.

**National Historic Trails & ACEC** - The addition of support vehicles to the NHTs would increase the impacts to the trail resources and lead to reduced protection of the trail's cultural and historic values. The driving of vehicles in on the NHTs would temporary distract from the historic nature of the setting.

**Concurrent Recreational Use** - The addition of support vehicles to the NHTs would increase the instances of inter-action with other recreation users. This could lead to reducing the experiences of these non-trekker recreationists by increasing the sights and sounds of man (in the form of vehicles).

#### **Alternative 2 (vehicle access for the disabled)**

This alternative would only allow vehicles to be used to transport the disabled to accompany along on treks. The number of persons with disabilities or the number of vehicles to be used for this purpose is unknown.

**Vegetation/Soils** – Allowing vehicles on the NHTs would lead to impacts to vegetation by the passage of vehicles crushing or repeatedly crushing plants. This would result in a reduction in plant cover and an increase in loss of soil by water and wind erosion.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The addition of noise and movement of vehicles would add to the disturbance of wildlife, though the primary cause of disturbance would be from the group of trekkers.

**Sensitive Wildlife Species** - The addition of noise of vehicles would add to the disturbance of wildlife, though the primary cause of disturbance would be from the group of trekkers.

**Livestock Grazing** -Disturbance from vehicles would be secondary to that caused by groups of trekkers along the trekking route. Vehicle use on the NHTs may cause some movement of livestock from stock reservoirs, salting sites, or during their grazing activities.

**Recreation Opportunity Spectrum (ROS)** – Allowing vehicles to transport the disabled on the NHTs would impact the trekking experience by increasing the sights and sounds of man (in the form of vehicles). More vehicles on the NHTs corridor would add to the reduction in the recreational experiences of other recreationists. For those disabled individuals they would be able to visit specific sites along the NHTs (e.g., Rocky Ridge, Gilesie Place) with the group of trekkers. They would also be able to observe the handcart trekking in action.

**National Historic Trails & ACEC** - The addition of support vehicles to the NHTs would increase the impacts to the trail resources and lead to reduced protection of the trail’s cultural and historic values. This alternative could lead to additional vehicle use on and over Rocky Ridge resulting in increased damage to the trail resource.

**Concurrent Recreational Use** - The addition of support vehicles to the NHTs would increase the instances of inter-action with other recreation users. This would lead to reducing the experiences of these non-trekker recreationists by increasing the sights and sounds of man (in the form of vehicles).

## **TREKKER STAGING AREAS**

### **Proposed Action (Develop Hudson-Atlantic City Road Staging Area)**

This staging area would be located at the large BLM informational sign along the Hudson Atlantic City Road (BLM 2302), nine miles southwest of US Highway 287. This site has been used by NHTs enthusiasts for numerous years as the entry point to the Lower Monument (authorized by BLM and erected by the Church in 1992), and access to Rocky Ridge. Parking barriers will be used to define the parking area limits.

**Vegetation/Soils** – The site has been used as a make-shift parking area for years. Impacts to the vegetation have occurred in the past from vehicles driving across the plants. The area used for parking has been well defined by the plant damage. Soils in the area of previous parking use have been compacted, and thus are already impacted. These soils have a hazard rating of slight for water and moderate for wind caused erosion. Long term use would completely remove vegetation from the entire staging area of approximately two acres. The area without a vegetation cover would be much more subject to wind and water erosion and rutting when wet. Long term use could cause the need to surface the staging area with a crushed gravel aggregate material.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The noise of vehicles and people using the staging area could disturb wildlife in the vicinity of the staging area. This could be temporary, but with repeated utilization it could cause some wildlife to change their historic uses of the area around the staging area.

**Sensitive Wildlife Species** - The noise of vehicles and people using the staging area could disturb a sage-grouse lek located ¼ - ½ mile east of the staging area. While the handcart trekking activity would not occur before June 1<sup>st</sup> (Season of Use – Proposed Action), or June 15<sup>th</sup> (Season of Use – Alternative 1 & 2) the standard BLM stipulation that avoids disturbance to sage-grouse strutting and nesting areas is July 31<sup>st</sup>. Use of the staging area by non-trekker recreationists could occur as early as access into the area is possible by the drying out of the access roads. This can occur as early as mid-April and as late as mid-June, depending on the occurrence of spring storms.

**Livestock Grazing** – No impacts to the grazing of livestock is anticipated by the development of a staging area.

**Recreation Opportunity Spectrum (ROS)** – The development of a staging area along the improved Hudson-Atlantic City Road could have the effect of fewer vehicles on the NHTs and therefore a reduction in the impacts to user recreational experiences from the sights and sounds of man. As proposed, the staging area could provide short-term parking for vehicles related to the BLM trekker campsite and the proposed Sage campsite. Having fewer vehicles on the access roads and the NHTs could reduce the conflicts between the users and vehicles or between multiple vehicles.

The area surrounding the staging area is characterized by predominantly natural appearing environments. The improved Hudson-Atlantic City Road is identified as a Roaded Natural ROS classification with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction

between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities. The proposed staging area would maintain the Roaded Natural ROS classification.

**National Historic Trails & ACEC** - The addition of a staging area could reduce the number of vehicles on the trails and result in increased protection to the cultural and historic values associated with the NHTs. The staging area would provide a parking area away from the Lower Monument, which is along the NHTs. The staging area would relieve parking pressure at the monument which has received substantial impacts from vehicles through the compaction of soils and the damage to vegetation. The make shift parking occurring at the monument would be reduced which would allow some recovery of vegetation.

**Concurrent Recreational Use** - The addition of a staging area could reduce the conflicts between the users and vehicles or between multiple vehicles. This could also lead to reducing the sights and sounds of man (in the form of vehicles) which could result in fewer impacts to the recreational experiences of other user groups.

**Alternative 1 (Do not develop the staging area, but allow for its use as a parking area)**

This parking area at the same location of the proposed staging area would continue to be utilized as a short term parking and drop-off spot as it has for trek groups since 1999.

**Vegetation/Soils** – The site has been used as a parking area and turn around location for trek transportation vehicles (tour buses and standard vehicles) in the past, but has not been developed for this use. Impacts to the vegetation have occurred in the past from vehicles driving across the plants. The area used for parking has been well defined by the plant damage. Soils in the area of previous parking use have been compacted, and thus are already impacted. Continued use of the undeveloped area could cause additional damage to vegetation and soils by the expansion of the area since there would be no parking area delineation. Long term use would completely remove vegetation from the entire staging area of approximately two acres. The area without a vegetation cover would be much more subject to wind and water erosion and rutting when wet. Long term use could cause the need to surface the staging area with a crushed gravel aggregate material.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The noise of vehicles and people using the staging area could disturb wildlife, in the vicinity of the parking area. This could be temporary, but with repeated utilization it could cause some wildlife to change their historic uses of the area around the parking area.

**Sensitive Wildlife Species** - The noise of vehicles and people using the parking area could disturb a sage-grouse lek located ¼ - ½ mile west of the staging area. While the handcart trekking activity would not occur before June 1<sup>st</sup> (Season of Use – Proposed Action), or June 15<sup>th</sup> (Season of Use – Alternative 1 & 2) the standard BLM stipulation that avoids sage-grouse strutting and nesting areas is July 31<sup>st</sup>. Use of the parking area by non-trekker recreationists could occur as early as access into the area is possible by the drying out of the access roads. This can occur as early as mid-April and as late as mid-June depending on the occurrence of spring storms.

**Livestock Grazing** – No impacts to the grazing of livestock is anticipated by the continued use of the site as a parking area.

**Recreation Opportunity Spectrum (ROS)** – The continued use of the parking area along the improved Hudson-Atlantic City Road could have the effect of fewer vehicles on the NHTs and therefore a reduction in the impacts to recreational user experiences from the sights and sounds of man. As proposed, the parking area could provide short-term parking for vehicles using the proposed Sage campsite (on adjacent state land). Having fewer vehicles on the access roads and the NHTs could reduce the conflicts between the users and vehicles or between multiple vehicles.

**National Historic Trails & ACEC** - The continued use of the parking area could reduce the number of vehicles on the trails and result in increased protection to the cultural and historic values associated with the NHTs.

**Concurrent Recreational Use** - The continued use of the parking area could reduce the conflicts between the users and vehicles or between multiple vehicles. This could also lead to reducing the sights and sounds of man (in the form of vehicles) which could cause fewer impacts to the recreational experiences of other user groups.

### **TREKKER CAMPSITE**

The use of the existing BLM trekker's campsite is analyzed in this document. The proposed Sage campsite is located on Wyoming State land and is not in the federal action of issuing the SRP. Therefore, the Sage campsite is not analyzed in this document. The decision on the Sage campsite lies with the Wyoming State Lands and Investments Board. The designated undeveloped (no permanent facilities) BLM campsite was first used in 1999 by 2-day handcart trekkers traveling between Sweetwater Station and Rock Creek Hollow as a mid-way camping site.

### **Proposed Action (self-contained handcart groups only)**

Use of the BLM undeveloped trekker's campsite would be limited to self-contained handcart groups only. These groups are to be fully self-contained, including personal gear, tents, sleeping bags, food, water, and commercially available portable/disposable sanitation facilities. No support vehicles would be allowed under this action. No vehicle-supported trek groups would utilize the campsite. No portable toilets would be placed at the campsite.

**Vegetation/Soils** – Impacts to the vegetation at the campsite have occurred in the past from vehicles driving across the plants and the repeated trampling from foot traffic. The area used for camping and vehicle parking has been well defined by the plant damage. Soils within the camping site have been compacted by vehicles and foot traffic. The impacted area following the 2002 use season was approximately three acres. During 2001 and 2002 at the end of the trekker use season (mid-August) the site was mostly devoid of grasses (Western wheatgrass). Observations in May of the following year (2002 and 2003) revealed re-growth of Western wheatgrass throughout the impacted site. However, plant coverage was less than that of adjacent areas outside of the campsite. Sage brush plants previously damaged by vehicle and foot traffic were dead. Restricting vehicles from entering the campsite would reduce the occurrence of vehicle caused impacts to vegetation and soils. The occurrence of impacts to vegetation being trampling by foot would continue. Long-term impacts to the vegetation could result in reduction or elimination of most vegetation from the campsite. By limiting use of the campsite to self-contained trekkers there could be a reduced number of trekkers utilizing the campsite since some groups may not opt for trekking without vehicle support.

Soils at the BLM trekker's campsite have a hazard rating of moderate for water and moderate for wind caused erosion. With use restricted to self-contained trekkers the removal of vegetation cover would be reduced from past use. Therefore, the incidence of loss of soil and vegetation production would be reduced.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The noise of people using the camping site could disturb wildlife in the vicinity and along the access road into the site (access from Silver Creek Reservoir) and the access road out of the site (access from the Lower Monument). This disturbance would be temporary, but with repeated use it could cause some wildlife to change their historic uses of the area around the campsite.

**Sensitive Wildlife Species** - The noise of people using the campsite and the two access roads could disturb a sage-grouse lek located 1 mile north of the campsite. The area of the campsite is within the associated sage-grouse nesting area, though the sparse vegetation within and adjacent to the campsite does not provide adequate nesting habitat.

While the handcart trekking activity would not occur before June 1<sup>st</sup> (Season of Use – Proposed Action), or June 15<sup>th</sup> (Season of Use – Alternative 1 & 2) the standard BLM stipulation that avoids sage-grouse strutting and nesting areas is July 31<sup>st</sup>. Use of the two access roads through the campsite by non-trekker recreationists could occur as early as roads into the area dry out. Depending upon the snow pack and spring snow/rain this could occur as early as mid-April and as late, or later, than mid-June. This campsite location would provide a greater distance from the Silver Creek lek than the proposed Sage campsite on state land. It could reduce the disturbance of sage-grouse from that lek by being ½ to ¾ of a mile farther away than that of the Sage campsite.

**Livestock Grazing** – Impacts to the grazing of livestock could be in the form of temporary displacement of livestock and/or leaving the gate at the campsite open causing unauthorized livestock movement into the wrong pasture. This gate, on the west side of a pasture fence, is in the Silver Creek Common Allotment.

**Recreation Opportunity Spectrum (ROS)** – The use of the designated campsite for trekkers would have the effect of concentrating people at the campsite. The concentration of people would be the primary cause of an increase in the impacts to recreational user experiences from the sights and sounds of man. The lack of vehicles in the campsite would provide a more primitive setting for the trekkers. The trekker’s need for reliance on outdoor skills and an increase in challenge and risk would result in a more primitive recreational experience than obtained from a vehicle supported trek.

**National Historic Trails & ACEC** – The campsite is approximately ½ mile east of the NHTs. This should result in increased protection to the cultural and historic values associated with the NHTs. Removing vehicle support to the campsite would reduce vehicle travel on the NHTs, thus aiding in the protection of the trail resources.

**Concurrent Recreational Use** – Removing vehicle support would reduce the conflicts between the other users and vehicles or between multiple vehicles. This action would reduce the number of vehicles driving past the Lower Monument to access the campsite. This could also lead to reducing the sights and sounds of man (in the form of vehicles) which could cause fewer impacts to the recreational experiences of other user groups. The campsite is 1 ¼ miles from Silver Creek Reservoir, but with the route used to access the campsite instances of negative interaction with fisherman and trekkers could be reduced by not having vehicles driving across the dam of the reservoir.

#### **Alternative 1 (both self-contained and vehicle-supported trek groups)**

If the Sage Creek campsite is not permitted by the Wyoming State lands and Investments Board, or if the development is not completed before the trekker use season begins, the BLM trekker campsite would be available to both self-contained and vehicle-supported trek groups. Vehicle-support would be limited to two vehicles per 100 trekkers.

**Vegetation/Soils** – Heavy impacts to the vegetation at the campsite occurred in the past from an excessive number of vehicles entering and staying at the campsite. Individual

trek participants and groups ignored the instructions on limiting vehicle use into the campsite from both the BLM and the FMO by parking pickups, RVs, camp trailers and refrigerated trucks within and adjacent to the campsite. Vehicles driving over plants and the repeated trampling from foot traffic resulted in the campsite area being devoid of vegetation during the latter part of the summer use season. The area used for camping and vehicle parking has been well defined by the plant damage. Observations in May of the following year revealed re-growth of Western wheatgrass throughout the impacted site. However, plant coverage was less than that of adjacent areas outside of the campsite. Soils within the camping site have been compacted by vehicles and foot traffic. The heavily impacted area following the 2002 use season was approximately three acres. The access roads into the campsite show heavy compaction by vehicle use. Some portions of the wheel tracks on the access road from the Lower Monument are in excess of 6-8 inches deep.

With the soils having a hazard rating of moderate for water and moderate for wind caused erosion the removal of vegetation cover would increase the incidence of loss of soil and vegetation production.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The noise of vehicles and people using the camping site could disturb wildlife in the vicinity and along the two access roads into the site. This disturbance could be temporary, but with repeated use it could cause some wildlife to change their historic uses of the area around the campsite.

**Sensitive Wildlife Species** - The noise of vehicles and people using the campsite and the two access roads could disturb a sage-grouse lek located 1 mile north of the campsite. The associated sage-grouse nesting area encompasses the area of the campsite. While the handcart trekking activity would not occur before June 1<sup>st</sup> (Season of Use – Proposed Action), or June 15<sup>th</sup> (Season of Use – Alternative 1 & 2) the standard BLM stipulation that avoids sage-grouse strutting and nesting areas is July 31<sup>st</sup>. Use of the area of the campsite and two access roads by non-trekker recreationists could occur as early as roads into the area dry out. Depending upon the snow pack and spring snow/rain this could occur as early as mid-April and as late, or later, than mid-June. This campsite location would provide a greater distance from the Silver Creek lek than the proposed Sage campsite. It could reduce the disturbance of sage-grouse from that lek by being 1/2 -3/4 miles farther away than that of the Sage campsite.

**Livestock Grazing** – Impacts to the grazing of livestock could be in the form of temporary displacement of livestock and/or leaving the gate at the campsite open causing unauthorized livestock movement into the wrong pasture. This gate, on the west side of a pasture fence, is in the Silver Creek Common Allotment.

**Recreation Opportunity Spectrum (ROS)** – The use of the designated campsite for trekkers would have the effect of concentrating people. Restricting travel into and occupation of the campsite to two vehicles per 100 trekkers at the campsite could also concentrate up to eight vehicles at the site (Trek group size of 400 = 2 vehicles per 100 = 8 vehicles). The concentration of people and vehicles could increase the impacts to recreational user experiences from the sights and sounds of man. If the level of two vehicles per 100 trekkers is exceeded then the impacts caused by vehicle use would increase. An increase in the number of vehicles at the campsite, on the access roads and the NHTs could increase the conflicts between other user groups and vehicles or between multiple vehicles.

**National Historic Trails & ACEC** – With the campsite being utilized by both self-contained and vehicle-supported trekker groups, the access roads and NHTs would see an increase in impacts from vehicle use. This would result in reduced protection to the cultural and historic values associated with the NHTs.

**Concurrent Recreational Use** - The use of the campsite ½ mile from the NHTs could increase the conflicts between other users and vehicles or between multiple vehicles. This could also lead to increasing the sights and sounds of man (in the form of vehicles) which could cause impacts to the recreational experiences of other user groups. The campsite is 1 ¼ miles from Silver Creek Reservoir, but with some vehicle use utilizing the road over the dam to access the campsite instances of negative interaction with fisherman and other recreationists could occur.

## **SANATATION**

**Proposed Action** – Allow for the placement of portable toilets at the sites identified on Page 17, Sanitation – Proposed Action. The route and pumping location of the portable toilet service unit in 2003 was to leave Sixth Crossing, drive along the Hudson-Atlantic City Road to access the toilets east of the Ellis Ranch Road and then return to the Hudson-Atlantic City Road. It would proceed to the access road toward the Lower Monument and take the access road into the BLM trekker’s campsite before returning to the Hudson-Atlantic City Road via a reverse of this same route. Continuing to the Lewiston Lakes Road it would service toilets at the NHTs before proceeding along the trail to service the units on the state land, east of the Gilespeie Place, before continuing along the trail to the next units on private land at Strawberry Creek and then at the facilities at Rock Creek Hollow.

**Vegetation/Soils** – The site used for the portable toilets receives concentrated use by trekkers and in most cases authorized vehicles. Vehicles driving over plants and the repeated trampling from foot traffic at the site area would reduce the amount of vegetation cover. This could add to an increase in soil erosion from runoff or wind effects. The units are serviced two – three times per week depending upon the use level. The service truck used in 2003 is a two-ton dual rear-wheeled vehicle (Ford F-650) with

a width greater than that of the existing pickup truck/SUV type of vehicle used by recreationists. The wider vehicle running on the primitive two-track roads can damage vegetation at the edges. The gross vehicle weight is approximately 14,000 pounds when the tank is half full, which is most often the case when it is servicing the portable toilets. The weight of the service unit has compacted soils to create ruts of 6-8 inches deep on some access roads. The smaller service unit is a one-ton dual rear-wheeled vehicle (Ford F-350) with a width similar to that of a standard pickup/SUV. Its gross vehicle weight is half of that of the larger service unit. Therefore, it is anticipated that compaction of soils and damage to roadside vegetation could be less with this smaller service unit.

Soils at the portable toilet locations route have a range from slight to severe for both water and wind caused erosion. The ranges for water and wind cause erosion for these locations are as follows:

Location of portable toilets east of the Ellis Ranch Road – severe & severe

Location of portable toilets at Lewiston Lakes Road (private land) – slight & moderate

Location of portable toilets east of Gilespie Place (state land) – slight & slight

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – Concentrating use at these sites could disturb wildlife in the vicinity and along the access road into the site. This disturbance could be temporary, but with repeated use it could cause some wildlife to change their historic uses of the area around the campsite.

**Sensitive Wildlife Species** - The noise of vehicles and people using the portable toilet sites and the access roads could disturb sage-grouse that may be nesting in the area. The potential sage-grouse nesting area encompasses the areas of the portable toilet sites. While the handcart trekking activity would not occur before June 1<sup>st</sup> (Season of Use – Proposed Action), or June 15<sup>th</sup> (Season of Use – Alternative 1 & 2) the standard BLM stipulation that avoids sage-grouse strutting and nesting areas is July 31<sup>st</sup>.

**Livestock Grazing** - Impacts to the grazing of livestock would be in the form of temporary displacement of livestock from the area of the portable toilets or use of access roads to service them.

**Recreation Opportunity Spectrum (ROS)** - The use of the designated portable toilet sites for trekkers would have the effect of concentrating people. The concentration of people and vehicles and the toilets themselves would increase the impacts to recreational

user experiences from the sights and sounds of man. The frequent use of service vehicles along the trekker route, on the access roads, and the NHTs could increase the conflicts between other user groups and vehicles or between multiple vehicles.

**National Historic Trails & ACEC** – With the placement of portable toilets along or near the NHTs and/or along the access roads there would be an increase in impacts from vehicle use. Use of the smaller (1-ton) service unit would result in reduced impacts to the cultural and historic values associated with the NHTs by having a reduction in vegetation damage and soils compaction.

**Concurrent Recreational Use** - The use of the portable toilets along the NHTs corridor could increase the conflicts with other users and the service vehicle. This could also lead to increasing the sights and sounds of man in the form of visually obtrusive toilets and the service vehicle. This could cause impacts to the recreational experiences of other user groups.

**Alternative 1** – In addition to the Proposed Action portable toilets locations allow for the placement of portable toilets at the BLM trekker’s campsite.

**Vegetation/Soils** – Same as the Proposed Action as described above with the BLM trekker’s campsite having a moderate and moderate erosion hazard for water and wind, respectively.

**Invasive, Nonnative Species** – Same as the Proposed Action as described above.

**Wildlife/Fisheries** – Same as the Proposed Action as described above.

**Sensitive Wildlife Species** - Same as the Proposed Action as described above.

**Livestock Grazing** - Same as the Proposed Action as described above.

**Recreation Opportunity Spectrum (ROS)** - Same as the Proposed Action as described above.

**National Historic Trails & ACEC** – Same as the Proposed Action as described above.

**Concurrent Recreational Use** - Same as the Proposed Action as described above. The toilets at the BLM trekker’s campsite are visible from the Hudson-Atlantic City Road and from the NHTs above the Lower Monument. The other toilet placement sites are visible from the NHTs as one approaches from along the trail. This visual obtrusion distracts from the wide-open spaces experienced and desired by many recreationists to this area.

**Alternative 2** - Require trek groups to utilize commercially available portable/disposable toilets. Available screens would provide some level of privacy. No portable toilets would be allowed to be placed on BLM administered public lands.

**Vegetation/Soils** – There could be a reduction in the amount of damage to vegetation and soils as the occurrence of the concentration of people could be less than the Proposed Action and Alternative 1. The use of the portable/disposable toilets could be more easily available for use by the trekkers on a use as needed basis than those in the Proposed Action and Alternative 1. Rather than concentrate use on just a few sites the use could be spread to areas more resistant to impacts, or could avoid areas where impact is just beginning. The use of these facilities could reduce the amount of impacts associated with the Proposed Action and Alternative 1.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoarycress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

**Wildlife/Fisheries** – The disturbance to wildlife from using the disposable toilets would be secondary to those caused by the trek activities. Any disturbance would be temporary, but with repeated use it could cause some wildlife to change their historic uses of the area around the locations used for sanitation purposes, but less so than the Proposed Action and Alternative 1 as described above.

**Sensitive Wildlife Species** - The noise people using the disposable toilet locations could disturb sage-grouse that may be nesting in the area. The potential sage-grouse nesting area encompasses the areas of the portable toilet sites, which is potentially anywhere along the trekker's route. The impacts from using the disposable toilets would be secondary to those caused by the trek activities. While the handcart trekking activity would not occur before June 1<sup>st</sup> (Season of Use – Proposed Action), or June 15<sup>th</sup> (Season of Use – Alternative 1 & 2) the standard BLM stipulation that avoids sage-grouse strutting and nesting areas is July 31<sup>st</sup>.

**Livestock Grazing** – Without the need to place and service the portable toilets there could be fewer disturbances to grazing livestock. Any disturbance from using the disposable toilets would be secondary to those caused by the trek activities.

**Recreation Opportunity Spectrum (ROS)** – By not having the portable toilets on the BLM administered public lands (east of the Ellis Ranch Road and at the BLM trekker's campsite) the effect of concentrating people would be reduced. There would be fewer impacts to recreational user experiences from the sights and sounds of man. The frequent use of service vehicles along the trekker route, on the access roads, and the NHTs would be reduced as would the conflicts between other user groups and vehicles or between multiple vehicles. These impacts could still occur on the private lands and the access

roads leading to the portable toilets on the private and state lands (Sage Campsite, Lewiston Lakes Road, state land east of the Gilespe Place, and Strawberry Creek).

**National Historic Trails & ACEC** – Same as the Proposed Action as described above due to the use of portable toilets on the private and state lands and the access roads leading to the portable toilets for servicing (Lewiston Lakes Road, state land east of the Gilespe Place, and Strawberry Creek)..

**Concurrent Recreational Use** - The visual obtrusion of toilets would be reduced on the BLM administered public lands. There would be fewer distractions from the wide-open spaces experienced and desired by many recreationists to this area.

### **NO ACTION ALTERNATIVE**

The No Action alternative is the continuation of the annual authorization for the Church to conduct handcart treks under the terms of a Letter of Agreement for Non-commercial Recreational Use of Public Lands. No fees would be assessed for use of the BLM administered public land for the uses authorized.

The impacts for the following issues are referred to the Environmental Impacts section beginning on Page 29.

**ROUTE SELECTION** – The impacts are the same as described under Alternative 2 for the 2-Day Vehicle-supported Treks described on Pages 34-36, where both self-contained and vehicle-supported treks travel to the BLM undeveloped campsite before accessing the NHTs for the trek to Rock Creek Hollow.

**SEASON OF USE** – The impacts are the same as described under Alternative 1, on Page 42-43, with use to begin on June 15<sup>th</sup> and end on August 15<sup>th</sup>.

**NUMBERS OF PARTICIPANTS PER TREKKING SEASON** – The impacts are the same described in the Proposed Action, on Page 45-47, for 7,500 per trekking season.

**TREK GROUP SIZE** – The impacts are the same as described in the Proposed Action, on Page 51, for 400.per group.

**VEHICLE USE ON THE NHTs** – The impacts are the same as identified in the Proposed Action on Pages 54-56. Only two vehicles per 100 trekkers would meet the trekkers at designated spots along the route.

**TREKKER STAGING AREAS** – The impacts are the same as described in Alternative 1, on Pages 60-61. The parking area would continue to be used as a makeshift staging area.

**TREKKER CAMPSITE** – The BLM undeveloped trekker’s campsite would continue to be used as described in Alternative 1 on Pages 64-65. Both self-contained and vehicle supported treks would utilize the campsite.

**SANITATION – PORTABLE TOILETS** – The use of portable toilets would continue as described in the Proposed Action and Alternative 1 on Pages 66-67. Portable toilets would continue to be placed along the route and at the BLM trekker’s campsite. No requirement to use portable/disposal toilets would be made.

### **MITIGATION MEASURES**

Compulsory mitigation measures intended to reduce the impacts described for the various proposed actions and alternative would be contained in the Standard Stipulations and the Terms and Conditions for SRPs. They are listed below.

**SRP Standard Stipulations** – (located on the back of BLM Form 8370-1, Special Recreation Application and Permit)

Application Requirements:

The following **shall** be submitted before an application is approved and a permit issued. This information **shall** be submitted within 10 days of the application.

- a. A topographic map, showing area of proposed use with routes, parking, staging areas, proposed improvements, and other points of intensive use specifically identified. (**Note: the Church and the BLM have met and maps of the proposed activity were developed**)
- b. Applicant shall inform other pertinent private landowners and/or public agencies (*law enforcement, highway, fish and game, etc*). Bureau of Land management will contact other authorized users of public lands, etc.
- c. A certificate from an insurer that comprehensive insurance has been obtained for this use or event in the minimum amount of (1) \$300,000 bodily injury for any one person; \$600,000 for any one occurrence; and (2) \$ 30,000 property damage for any one occurrence. This certificate **shall** also state that such insurance is in force and that the insurer will give BLM reasonable notice (*usually 7 days*) prior to cancellation or modification of such insurance.

### **Permits Subject to the Following Conditions:**

1. This permit is issued for the period specified herein. It is revocable for any breach of conditions hereof or at the discretion of the authorized officer of the Bureau of Land Management, at any time upon notice. This permit is subject to valid adverse claims heretofore or hereafter acquired.

2. This permit is subject to all applicable provisions of the regulations (43 CFR Group 2932) which are made a part hereof.
3. This permit is subject to the provisions of Executive Order No. 11246 of September 24, 1965, as amended, which sets forth the Equal opportunity clauses. A copy of this order may be obtained from the signing officer.
4. This permit may not be reassigned or transferred by permittee.
5. Permittee **shall** pay sum of estimated user fees in advance of permit issuance. Adjustments to use fee charges will be based on actual use reported on the Post Use Report. (**NOTE: the \$80 minimum fee is due at the time of permit issuance; any adjustment would occur before or at time of Post Use Report completion**)
6. Permittee **shall** observe all Federal, State, and local laws and regulations applicable to the premises; to erection or maintenance of signs or advertising displays including the regulations for the protection of game birds and animals, and shall keep the premises in a neat, orderly manner, and sanitary conditions.
7. Permittee **shall** take all reasonable precautions to prevent and suppress timber, brush, and grass fires, and to prevent polluting of waters on or in vicinity of the public lands.
8. Permittee **shall not** enclose roads or trails commonly in public use.
9. Permittee **shall** pay the United States for any damage to its property resulting from this use.
10. Permittee **shall** notify the authorized officer of address change immediately.
11. Permittee **shall not** cut any timber on the public lands without prior written permission from the authorized officer.
12. Permittee **shall** indemnify, defend, and hold harmless the United States and/or its agencies and representatives against and from any and all demands, claims, or liabilities of every nature whatsoever, including, but not limited to, damages to property, injuries to or death of persons, arising directly or indirectly from, or in any way connected with the permittee's use and occupancy of the public lands described in this permit or with the event authorized under this permit.
13. Authorized representatives of the Department of the Interior, other Federal agencies, and game wardens **must** at all times, have the right to enter the premises on official business.
14. Permittee **shall** abide by all special stipulation attached hereto.

15. Permittee **shall not** disturb archeological and historic values, including, but not limited to, petroglyphs, ruins, historic buildings, and artifacts.

16. Permittee **shall** leave in place any hidden cultural values uncovered through authorized operations.

**SRP Terms and Conditions** (these are attached to the permit)

***NOTE: These terms and conditions will be revised to reflect the specific proposed actions or alternatives selected in the Decision Record following the completion of this environmental assessment.***

### **Terms and Conditions for Organized Groups on BLM - Administered Public Lands in Wyoming**

In addition to the stipulations on the Special Recreation Permit, the Wyoming BLM has established the following additional stipulations designed to protect the land or resources involved, reduce user conflicts, 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. This Special Recreation Permit is for 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 Bureau of Land Management 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. Evidence that permission has been obtained to use private property must be available upon request.

2. This Special Recreation Permit is for the use of certain BLM-administered public lands (see attached map) between the dates of \_\_\_\_\_. (***NOTE: to be determined in Decision Record***) These dates are intended to prevent damage to the historic trail resource during periods of wet ground conditions. Earlier use of the trail may be granted if it is determined by the BLM that ground moisture conditions would not result in damage to the trail resource. (See #10 for additional conditions on use of trail time frames)

3. A post use report must be returned to the authorized officer by December 31 for every year the permit is in effect. If use exceeds the minimum yearly fee, an additional payment will be required. This permit will only remain valid if annual fees have been paid.

4. To assist in the tracking of visitor use of the BLM-administered public lands a count of the number of treks and the total number of days/visitors of each trek should be provided to the BLM contact person by September 25<sup>th</sup> of each year.

5. This agreement does not grant the group exclusive use of any area of BLM-administered public land. Trek participants and support personnel shall allow other public land users un-warranted access and use of the public lands, including use of the historic trail and its corridor.
6. BLM reserves the right to close various sites and/or areas of the BLM-administered public land to prevent resource damage, use conflicts, and to promote visitor safety.
7. No alterations to the intended use area will occur without first contacting the authorized officer for permission to revise the permit.
8. Issuance of a permit by BLM does not guarantee the permittee's use of specific public land areas, nor does it grant the exclusive use of any area by the permittee.
9. Unless use allocations are in place, the public lands will generally remain available on a first-come, first-served basis to as many other commercial, organized group, and private users as desire to use them, except as otherwise provided in the terms and conditions of the permit (e.g., \$155 campsite reservation fee paid). Nothing herein implies that the first permittee into any area has been authorized an exclusive use privilege, except as noted above.
10. Permittee is responsible for all actions of employees and guests on the public lands.
11. Permittee shall provide a copy of the authorization or similar verification of authorization to trek leaders. Trek leaders shall have this copy available on all excursions and will show evidence of the authorization to any BLM employee upon request.
12. Issuance of an SRP does not authorize the permittee or the trek groups to have free use of public campgrounds. Use of fee areas requires the payment of all fees as is required for the general public.
13. If the permittee's performance, including actions of employees and trek groups, is found to be unsatisfactory, the authorized officer can modify or revoke this permit at any time.
14. Only signs authorized by the BLM in writing will be permitted on public lands. During use of the Hudson-Atlantic City Road by trekkers there shall be signs placed advising motor vehicle users the potential of meeting trekkers and handcars along the roadway. These signs shall be removed immediately following the scheduled use of the Hudson-Atlantic City Road on a daily basis.
15. The applicant will 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. It is not intended to include non-Church sponsored family outings. The purpose of this scheduling is to avoid over-use and damage of the trail resource and limit potential user conflicts among handcart trek groups

and among handcart trek groups and other recreationists. Therefore, scheduling of multiple groups on the same portion of the route and at the designated campsite is not authorized.

16. There are certain natural hazards that could be encountered that present risks to participants. Prior to the start of the activity, an orientation briefing shall be given to trip leaders and passed on to participants to inform them of the designated route, hiking conditions, use of the campsite, support vehicle access routes, portable toilet requirements and the possible presence of other public land users along the route, including hunters. Trek leaders shall consider the use of blaze orange clothing or material to make the trek participants easily visible. All participants must be advised of the conditions which might be encountered along the designated route.

17. Support vehicles shall not be permitted to follow along with the trek groups as they travel along two-track roads or the Hudson-Atlantic City Road, as shown on the attached maps (Ellis Ranch Road, Eastern Silver Creek Road at the Hudson-Atlantic City Road, Lower Monument Road/ Hudson-Atlantic City Road staging area, Lewiston Lakes Road at the trek route, Gelespie Place Road at the trek route, and the Lewiston Road county road. Support vehicles may access the trekkers via the approved access roads shown on the attached maps. These and other vehicles may continue along the Hudson-Atlantic City Road to Atlantic City and follow county roads to the Rock Creek site. See #11 for use of support vehicles at the campsite.

18. Where portable toilets are authorized, groups larger than 20 shall have toilets at a ratio of one toilet per 70 people. The servicing of these units shall avoid use of the trek's route along two-track roads when and where possible. Access routes for servicing toilets along the trek route are shown on the attached maps. For groups less than 20 the use of portable/disposable toilets, capable of being hauled in a handcart, may be required. It is inappropriate to deposit human waste and/or toilet paper under rocks or in bushes.

19. No motor vehicles are permitted to cross Rocky Ridge, either from the east or west, except if necessary, vehicles responding to medical emergency purposes will be permitted.

20. Help us clean up public lands by packing out ALL trash. Picking up trash left by less thoughtful people helps maintain the scenic beauty of your public lands.

21. Any directional signs, flagging, or other signs placed as part of this activity shall be removed at the completion of the activity.

22. Any gates opened by trekkers and/or support personnel shall be closed behind them.

23. Guidelines for Camping/Use of Fires on Public Lands

- a. The use of the designated campsite (southwest of Silver Creek Reservoir, west of the pasture fence) is permitted starting from June 15<sup>th</sup>. If use of the trail is

permitted prior to June 15<sup>th</sup>, as allowed for in #1, use of the campsite may be granted if it is determined by the BLM that the livestock have been moved between the two pastures. Use of the campsite prior to June 10th will only be granted if disruption to the movement of livestock through the pasture division gate would not occur.

b. Motor vehicle access to the campsite is not permitted, except if necessary, vehicles responding to medical emergency purposes will be permitted. Motor homes, camp trailers, pickup campers, or other non-emergency vehicles will not be permitted to access the campsite unless they meet the above description of an emergency vehicle.

d. The BLM Trekker's campsite shall only be used by self-contained trek groups. No use of support vehicles shall be permitted, except for the use of vehicles for emergency medical uses. ***(NOTE: this stipulation could change to allow vehicle-supported groups into the campsite based upon the outcome of the Decision Record)*** The permittee will not establish any other campsite for overnight use on public lands without first receiving approval from the authorized officer.

e. No temporary, permanent, or semi-permanent structures or improvements shall be permitted to be erected at the campsite. This includes such things as corrals, picket lines for horses or other stock, picnic tables, hanging poles, etc. The campsite is to remain an undeveloped area for the pitching of tents and preparation of meals. The campsite shall be maintained in a neat and clean condition with no litter. When the campsite is dismantled, the area should be left in a natural state.

f. Camping at this undeveloped site is limited to one night per trek.

h. All garbage will be removed, except that paper waste may be burned in the required fire pans. No garbage of any type will be buried.

i. Human waste will be disposed of in portable/disposable toilets. Any used portable/disposable toilets shall be properly disposed of in approved locations. The use of catholes or trenches for the disposal of human waste is prohibited.

j. Cutting or removing any live plant material within the campsite or within the NHTs corridor is prohibited.

#### 24. Guidelines for Use of Fires on Public Lands

a. No campfires are to be built outside of the designated BLM trekker's campsite.

- b. Within the campsite fires shall be contained in portable metal fire pans with sides high enough to contain wood and ashes (a minimum of three inches high). The metal fire pan will be removed when the site is vacated.
  - c. Firewood shall be brought into the campsite from a source away from the historic trail corridor. No gathering of fire wood shall be allowed along the trekker's route or within the corridor of the NHTs.
  - d. Unburned material (wood, plastic, paper, metal, food scraps) and ash shall be packed out of the area and properly disposed of.
  - e. Restrictions on the use of fire may be imposed during periods of high fire danger. It is the responsibility of the permittee and trek leaders to beware of any restrictions on the use of fire on the public lands and to adhere to the restrictions.
25. Use of water sources (reservoirs and water developments) must be done in a manner that does not prevent livestock and wildlife from having unrestricted access to those facilities.
26. This agreement shall not be construed to imply permission to build any structure or conduct any activity not specifically named.
27. Disorderly or otherwise objectionable conduct such as harassment of wildlife or livestock, operation of motorized vehicles off of their authorized routes, or littering will not be tolerated and could be the basis for revoking this or similar permits in the future.
28. Precautions must be made to protect natural resource values, cultural or historic objects, aesthetic values, and any improvement on BLM-administered public lands.
29. Use of Silver Creek Reservoir by trek participants for fishing and swimming shall not be permitted to ease the potential impacts to other recreationists utilizing this recreation area.
30. Trekkers shall pull off of travel routes for rest breaks so other trail users are not forced to leave the trail to go around. Also, when meeting vehicles along the travel route it may be necessary for trekkers to pull off the route rather than requiring motor vehicles to leave the trail or road.
31. Leave No Trace and Tread Lightly! Programs

The BLM recognizes and endorses the principles of Leave No Trace and Tread Lightly! as appropriate wildland ethical behavior for the recreating public. The Leave No Trace program is primarily for non-motorized recreational uses and the Tread Lightly! program is primarily for motorized recreation uses. However, both programs can be used appropriately to reduce our impacts occurring on the public land private lands. The permittee and its trek groups are highly encouraged

to adopt these principles and stress their use while conducting handcart operations. Both programs are designed to minimize 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 are available at the Lander Field Office. Summaries of both programs are listed below.

## **LEAVE NO TRACE**

### **Plan Ahead and Prepare**

Know the area and what to expect, travel in small groups, and select appropriate equipment.

### **Travel and Camp on Durable Surfaces**

Concentrate use in popular areas, spread use in remote areas, and avoid places where impact is just beginning.

### **Dispose of Waste Properly**

Reduce litter at the source by repackaging food, pack it in - and pack it out, dispose of trash and garbage properly. Practice good sanitation - dispose of human waste responsibly, minimize soap and food scraps in waste water, avoid contaminating water sources when washing, dispose of fishing and hunting waste appropriately.

### **Leave What You Find**

Minimize site alterations, avoid damaging trees and plants, leave natural objects and cultural artifacts for others to discover and enjoy.

### **Minimize Campfire Impacts**

Be aware of regulations and weather conditions. Stoves are often the best option. If you must build a fire, use an approved metal fire pan. Collect only dead and downed wood or bring your own.

### **Respect Wildlife**

Avoid disturbing wildlife; enjoy wildlife at a distance, store food properly.

### **Be Considerate of Other Visitors**

Reduce your impact on other visitors, respect the privacy of others, and keep noise to a minimum.

## **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.

## 32. Guidelines for Livestock Use (including but not limited to horses, llamas, and pack goats)

a. Livestock use will be permitted in support of the treks. The BLM Lander Field Office (307/332-8400 or 8420) should be contacted by trek leaders prior to planning on utilizing stock to further discuss their use and possible restrictions of their use.

b. Livestock use will be permitted on roads, trails, and for cross country travel.

c. Livestock will remain under control of the operator or handler at all times.

d. Livestock shall be loose grazed, hobbled, placed in temporary corrals, highlined, or picketed at least 200 feet from the perimeter of the BLM trekker's campsite, any lake, stream, spring, main trail, or developed campground. Livestock shall not be tied in-place for extended periods. In the area of trees use of the highline method is encouraged to prevent the trampling of root systems around trees.

e. Forage for livestock is to be provided by the permittee or trekkers. This feed must be certified weed free by any Wyoming County Weed and Pest Control District Office in advance to bringing it on the public lands. Evidence of proper certification must be available upon request on all treks.

Use of livestock shall follow the principles of the Leave No Trace outdoor skills and ethics program for horse use summarized below.

**Leave No Trace Backcountry Horse Use** (can also pertain to other livestock)

**Stay on trails** to minimize damage to soils and vegetation.

**Pull off for rest breaks** so other trail users are not forced to leave the trail to go around you.

When **confining horses in camp or for grazing restraint** utilize one of the following techniques presented from generally lesser to greater degrees of impact:

**Loose grazing** confines horses by their own herd-bound instincts. Restraining the group lead horse(s) by one of the techniques listed below can restrain the others in the bunch.

**Saddle hobbles** provide a short-term restraint to allow the animal to graze a short distance away from the supervision of the handler.

**Temporary corrals** with either two-rope or portable electric fencing should be large enough to prevent over-trampling of the area.

**Highlines** prevent the trampling of root systems around trees.

**Picket pins** should be moved frequently to prevent overgrazing and trampling – as much as every few hours

**Tying to trees** for a short time should be a last resort as damage to the tree and its root system will occur by trampling.

**Watering of stock** should avoid damaging the sensitive vegetation and fragile soils by utilizing established fords or low rocky spots in the bank. Consider water stock away from the source to lessen the impacts.

**Supplemental feed** can reduce grazing time and amount of live feed utilized. It can also lessen the problem of introducing weeds and non-native species to the public and private lands when it is certified weed free.

33. Permittee and trek leaders shall take precautions to avoid the introduction or transporting of invasive and nonnative plant species to the public lands. Vehicles and handcarts should routinely be checked for plants that may include one or more of the following: Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

## **RESIDUAL IMPACTS**

Residual impacts are those impacts that will remain for the various proposed actions and alternatives after the implementation of various mitigation measures employed to reduce or eliminate impacts identified in the environmental impact section of the assessment.

The critical elements of the human environment (e.g., air quality; environmental justice; farmland, prime/unique; flood plains; Native American religious concerns; wastes, hazardous/solid; water quality drinking /ground; zones; wild and scenic rivers; and wilderness) would continue to be unaffected by the proposed actions or alternatives.

### **2-Day, 1-Day, & 1/2-Day Treks**

#### **Vegetation/Soils**

Vegetation and soils would continue to be impacted by foot traffic and handcart wheels by the trampling of vegetation and the compaction of soils. Loss of the vegetation center strip on two-track roads would persist by continuous trampling. Damage to vegetation and soils would continue where vehicle traffic is permitted. Loss of vegetation could lead to increased loss of soils on those sites identified with a hazard of moderate to severe for water and wind erosion. Compaction of soils would also persist from foot traffic, handcart wheels, and motor vehicle use.

**Invasive, Nonnative Species** - Visitors to the public lands can without their knowledge transport or introduce invasive and/or nonnative species of plants to the public lands. A common list of these plants that could be introduced include Canada thistle, white top, hoary cress, Russian knapweed, leafy spurge, spotted knapweed, field bindweed, and black henbane.

#### **Wildlife/Fisheries**

A temporary displacement of wildlife during use of the trek route and campsite could still occur. The repeated use of the route and campsite could cause a permanent displacement of some animals from their historic range along the NHT corridor.

#### **Sensitive Wildlife Species**

Impacts to sage-grouse leks and nesting sites would continue. While there may be reduced impacts if trekking were to occur later than on the 1<sup>st</sup> of June the impacts could still occur resulting in disrupting or displacing sage-grouse from their historic range. Impacts to other sensitive species (e.g., nesting raptors, mountain plover) could still occur.

Traditional nest sites or nesting areas may be abandoned with repeated use during the early part of the trekking season.

## **Livestock Grazing**

Unintentional harassment of livestock from trek participant activities could still occur. Gates could still be left open with livestock moving into areas not scheduled for use.

## **Recreation Opportunity Spectrum (ROS)**

The number one impact to ROS is the number of concentrated trek participants. This impact would continue even at the lowest level of participants per season (2,500) and trek group size (100). Trek groups larger than 20 could negatively impact the recreational experience of trekkers and non-trek recreationists.

## **Areas of Critical Environmental Concern (ACEC)**

The concentration of trek participants, the damage to vegetation and soils, and the impacts from vehicle use on and over Rocky Ridge could still exceed the level that would protect the historic trail resources of the NHTs.

## **National Historic Trails**

Use of the NHTs during wet soil conditions would result in compaction and rutting of the soils. This could lead to accelerated loss of soils from the trail which could lead to rutting and even more damage to this historic resource.

## **Concurrent Recreational Uses**

Group size, frequency of treks, vehicles on and near the NHTs, and length of the trek season could impact other recreationists using the area. Inter-action between trekkers and non-trekker individuals and groups could negatively affect both user groups by the perception of each infringing upon their desired recreational experience. Fishermen at the reservoir would be subject to groups of trekkers crossing the dike which could impact the desired recreational experience of quite solitude previously enjoyed while fishing.

Archery antelope hunters could be negatively impacted by disturbance to antelope in the vicinity of their hunting blinds (often used in the vicinity of watering holes).

Increasing use of the Hudson-Atlantic City road by the causal use recreationists and handcart trekking activity may require more frequent maintenance (grading, drainage, partial surfacing) to provide a safe road surface for the public.

## Persons and Agencies Consulted

<u>Name/Title</u>	<u>Area of Expertise</u>
<u>USDI BLM Lander Field Office</u>	
Ray Hanson, Outdoor Rec Planner	EA Lead, Recreation
Jared Oakleaf, Outdoor Rec Planner (SCEP)	Recreation
Greg Bautz, Soil Scientist	Soils
Kevin Edinger, Range Land Mgmt Specialist	Range/Grazing Mgmt
Sue Oberlie, Wildlife Biologist	Wildlife Management
Connie Breckenridge, Wildlife Biologist	T&E Species Mgmt
Michelle Hymas, Wildlife Technician	Wildlife Management
Craig Bromley, Archaeologist	Archaeology/Historic Tr.
Carol-Anne Murray, Archaeologist	Archaeology/Historic Tr.
<u>USDI, BLM Wyoming State Office, Cheyenne</u>	
Andy Tenney, Outdoor Rec Planner	Recreation, Historic Tr.
Gary Long, Outdoor Rec Planner	Recreation, Historic Tr.
Tom Rinkes, Wildlife Biologist	Sage-grouse Mgmt
<u>USDI National Park Service</u>	
Lee Kreutzer, Archaeologist	Archaeology/Historic Tr.

USDI Fish and Wildlife Service

Michael Long, Field Supervisor

T&E Species Mgmt

Wyoming State Office of Federal Land Policy

Wyoming Game and Fish Department

Bill Wichers, Deputy Director

Wildlife Management

Tom Ryder, Wildlife Biologist

Wildlife Management

Bob Trebelcock, Game Warden

Wildlife Management

Office of State Lands and Investments

Harold Kemp, Acting Director

State Land Mgmt

Chuck Oakley

State Land Mgmt

The Church of Jesus Christ of Latter Day Saints, Farm Management Co.

Max Brough, Vice President Human Resources

Handcart Trekking Mgmt

Bryce Christensen, Mormon Handcart Historic  
Sites Manager

Handcart Trekking Mgmt

Public Scoping Comments (1/28 – 3/1/03)

112 Letters

138 E-Mails

**RECREATIONAL OPPORTUNITY SPECTRUM (ROS) CLASSES  
(From USDA Forest Service ROS Guide, 1992)**

**Setting Characterization**

**Primitive** – Area is characterized by essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use is not permitted.

**Semi-Primitive Non-Motorized** – Area is characterized by a predominantly natural or natural appearing environment of moderate-to-large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but they are subtle. Motorized use is not permitted.

**Semi-Primitive Motorized** – Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such as way that minimum on-site-controls and restrictions may be present, but are subtle. Motorized use is permitted.

**Roaded Natural** – Area is characterized by predominantly natural appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.

**Rural** – Area is characterized by a substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soils. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided far away from developed sites. Facilities for intensified motorized use and parking are available.

**Urban** – Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modification and utilization practices are to enhance specific recreation activities. Vegetation cover is often exotic and manicured. Sights and sounds of humans on-site are predominant. Large numbers of users can be expected both on-site and in nearby areas. Facilities for

highly intensified motorized use and parking are available with forms of mass transit often available to carry people throughout the site.

**PERMIT FEES**

**Standard fee** for non-commercial organized groups is \$4.00 per person per day.

**Examples:** 100 people spend ½-day on BLM administered public lands.

$$\$4.00 \times 100 \text{ people} = \$400$$

100 people spend one day on BLM administered public lands.

$$\$4.00 \times 100 \text{ people} = \$400$$

100 people spend two days on BLM administered public lands

$$\$4.00 \times 100 \text{ people} = \$400 \times 2 \text{ days} = \$800$$

With 7,500 trek participants the following fees could be generated by the collection of the standard fee charged to any organized group (handcart trekkers and other organized groups). The percentages are based on the number of 1/2 –day, 1-day, and 2-day treks in 2003.

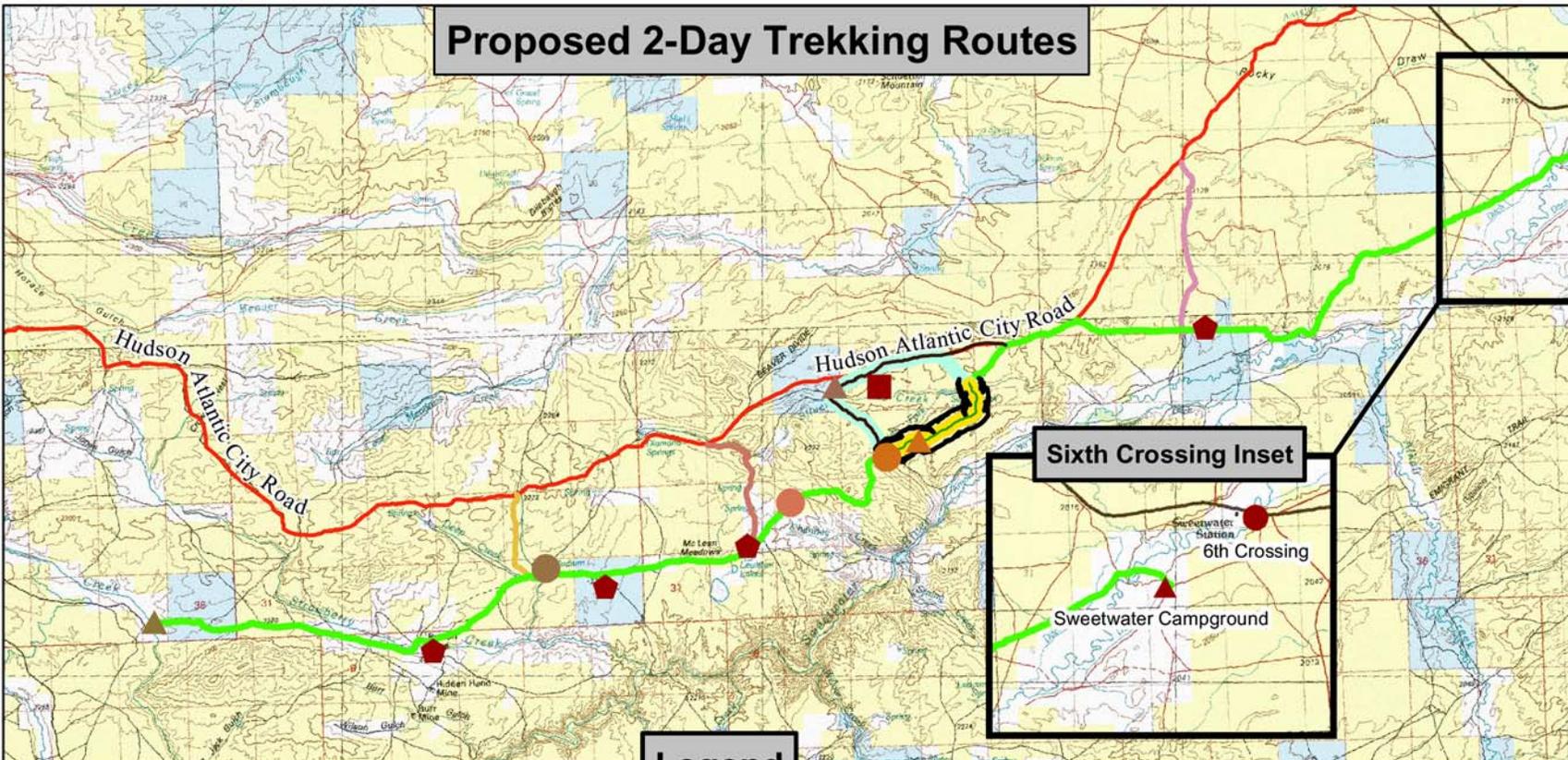
$$\frac{1}{2}\text{-day trekkers} - 18\% \times 7,500 = 1,350 \times \$4/\text{day} = \$5,400$$

$$1\text{-day trekkers} - 55\% \times 7,500 = 4,125 \times \$4/\text{day} = \$16,500$$

$$2\text{-day trekkers} - 27\% \times 7,500 = 2,025 \times \$4/\text{day} \times 2 \text{ days} = \underline{\$16,200}$$

**Total \$38,100**

# Proposed 2-Day Trekking Routes



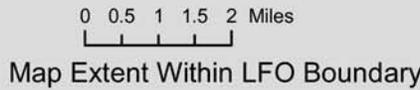
## Map Items

- 2 Day Trek Route
- ◆ Port-a-potties
- Staging Areas
- Land Management**
- Private
- BLM
- Wyoming State
- Proposed Action**
- Self Contained
- Vehicle Supported

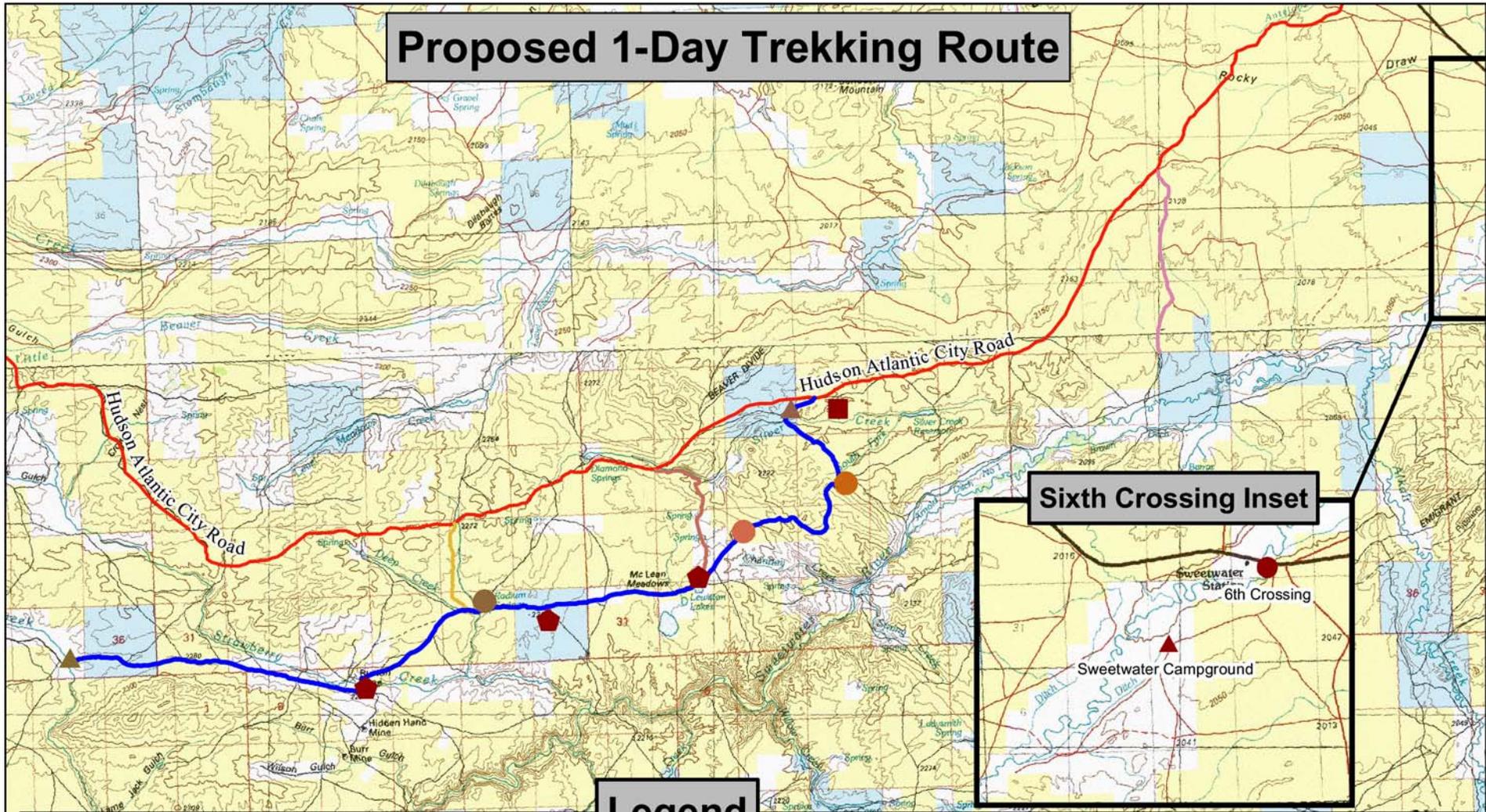
- Alternative 1**
- Self Contained
- Vehicle Supported
- Alternative 2**
- Vehicle Supported and Self Contained
- Campgrounds**
- ▲ Sage Campground
- ▲ BLM Campsite
- ▲ Rock Creek Hollow

## Legend

- Areas of Interest**
- Gillespie Place
- Lower Monument
- Rocky Ridge
- Access Roads**
- Ellis Ranch Road
- Gillespie Place Road
- Lewiston Lakes Road



# Proposed 1-Day Trekking Route



## Sixth Crossing Inset



## Legend



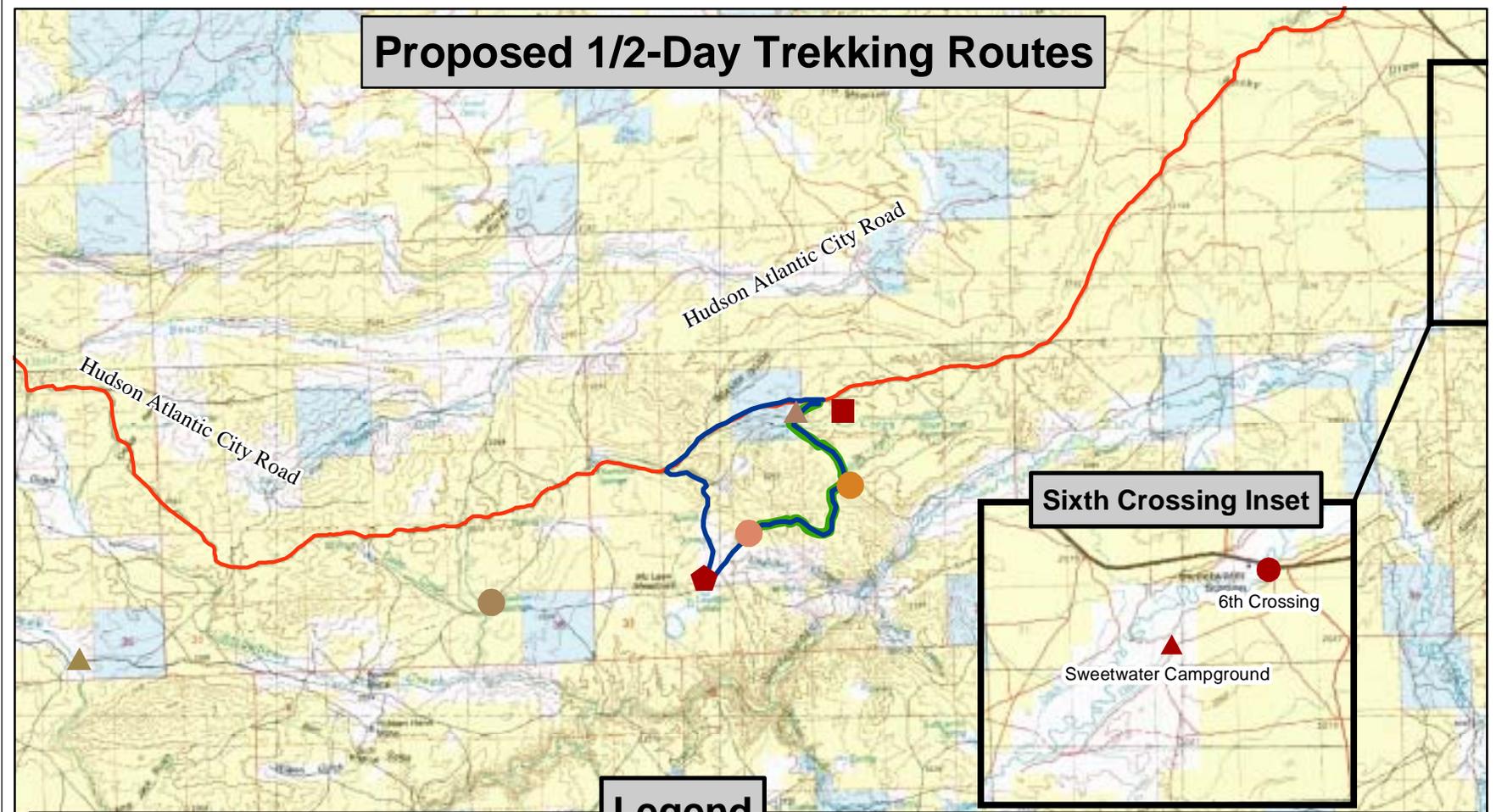
Map Extent Within LFO Boundary



### Map Items

- |  |                    |                      |
|--|--------------------|----------------------|
| Proposed Action                          | <b>Campgrounds</b> | <b>Access Roads</b>  |
| Staging Areas                            | Sage Campground    | Ellis Ranch Road     |
| Port-a-potties                           | Rock Creek Hollow  | Gillespie Place Road |
| <b>Land Management Areas of Interest</b> | Gillespie Place    | Lewiston Lakes Road  |
| Private                                  | Lower Monument     |                      |
| BLM                                      | Rocky Ridge        |                      |
| Wyoming State                            |                    |                      |

# Proposed 1/2-Day Trekking Routes



## Legend

- |                          |                   |
|--------------------------|-------------------|
| <b>Map Items</b>         |                   |
|                          | Proposed Action   |
|                          | Alternative 1     |
|                          | Staging Areas     |
|                          | Port-a-potties    |
| <b>Land Management</b>   |                   |
|                          | Private           |
|                          | BLM               |
|                          | Wyoming State     |
| <b>Campgrounds</b>       |                   |
|                          | Sage Campground   |
|                          | Rock Creek Hollow |
| <b>Areas of Interest</b> |                   |
|                          | Gillespie Place   |
|                          | Lower Monument    |
|                          | Rocky Ridge       |

0 0.2 Miles

Map Extent Within LFO Boundary

