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Bear Lake Travel Management Plan

U.S. Department of the Interior
Bureau of Land Management
Pocatello Field Office
4350 Cliffs Drive
Pocatello, Idaho 83204-2105
(208) 478-6340
<http://www.id.blm.gov/offices/pocatello>



TABLE OF CONTENTS

CHAPTER 1 - INTRODUCTION.....	1
Background	1
Purpose of and Need for Action	1
Scoping.....	2
Issues	4
Location of Proposed Action.....	4
Conformance with Applicable Land Use Plan.....	4
Relationship to Statutes, Regulations, or Other Plans	4
CHAPTER 2 – THE PROPOSED ACTION AND ALTERNATIVES.....	7
Alternative Development.....	7
Alternative A – No Action	7
Alternative B – The Proposed Action.....	8
Alternative C – The Resource Protection Alternative	8
Actions Common to Alternatives B and C.....	9
CHAPTER 3 - AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES.....	11
General Setting.....	11
Resources Considered in the Impact Analysis	12
Direct and Indirect Impacts	14
Access	14
Existing and Potential Land Uses	16
Fisheries	17
Invasive, Non-Native Species	19
Migratory Birds.....	21
Range Resources	23
Recreation	24
Soils.....	25
Threatened, Endangered and Sensitive Animals.....	27
Threatened, Endangered and Sensitive Fish	29
Threatened, Endangered and Sensitive Plants	30
Tribal Treaty Rights and Interests.....	32
Vegetation	33
Water Quality.....	34
Wetlands and Riparian Areas.....	37
Wildlife Resources	38
CHAPTER 4 – CUMULATIVE IMPACTS	40
Past and Present Actions	40
Reasonably Foreseeable Future Actions	42

Cumulative Impacts Associated with Past, Present and Reasonably Foreseeably Future Actions	44
The Contribution of the Alternatives to Cumulative Impacts	44
CHAPTER 5 - CONSULTATION AND COORDINATION	52
List of Preparers	52
REFERENCES CITED	53
APPENDIX A - MAPS	55

CHAPTER 1 - INTRODUCTION

Background

Since the 1980's, Bear Lake County, Idaho has become an increasingly popular tourist destination with developed campgrounds, time shares, hotels, and amenities which offer many and varied recreational opportunities. Over time, the area has received both an "over-flow" of recreation use from the Wasatch Front and other residents of the Intermountain West. Recreationists use the Bear Lake County area for dispersed camping, hunting, and OHV travel. In the winter months, the area has become very popular for snowmobiling. Numerous parking lots and groomed trails attract snowmobilers region-wide.

In recognition of the increasing environmental impacts and user conflicts associated with rising recreational use, the BLM limited OHV access on public lands in Bear Lake County to existing roads and trails or designated routes as part of a larger land use planning process (USDOI-BLM 1988: Map 16). While this planning process evaluated the environmental impacts associated with limiting OHV access in a general sense, it did not result in the delineation or definition of routes that existed at that time nor did the process result in the designation of routes that could be used for motorized travel.

A travel management planning effort that moves the PFO toward a rational network of designated motorized travel routes is required to provide reasonable and varied transportation routes for motorized travel on public lands, while reducing user conflicts and limiting impacts to important natural and cultural resources. In the long-term, a travel management plan will provide the foundation to prevent unnecessary closures or restrictions stemming from preventable resource damage or user conflicts and will, therefore, protect rather than inhibit motorized travel on public lands.

The development and approval of a travel management plan constitutes a federal action subject to the provisions of the National Environmental Policy Act (NEPA). In the preparation of this Environmental Assessment (EA), the potential direct, indirect, and cumulative impacts associated with the Proposed Action and alternatives have been analyzed. Preparation of the document has been in accordance with the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] § 1500 et. seq.), BLM guidelines for land use planning in BLM Handbook H-1601-1, BLM guidelines for implementing NEPA in BLM Handbook H-1790-1, and the Idaho Falls District Guide for Implementing NEPA (IM-ID-300-09-004).

Purpose of and Need for Action

The purpose of this travel management plan (hereafter the BLTMP) is to identify an appropriate system of designated routes for motorized travel associated with public lands within Bear Lake County. A travel management plan is needed that complies with the agency's national direction in light of increasing motorized use and demand while (a) protecting wildlife resources such as sage-grouse habitat and wintering big game, (b)

reducing impacts to soils, water, vegetation, or other resource values, (c) satisfying the public need for recreation, access, and safety, and (d) facilitating the management of BLM resources and programs.

Scoping

The PFO initiated the travel management planning process by issuing a press release on November 5, 2009 to local and regional newspapers inviting the public to participate in the development of the EA by providing written comments. In conjunction with the press release, a mailing list was developed that included grazing permittees, cooperating agencies, and organizations that might have a vested interest in the BLTMP. A scoping letter was sent to these interested publics on November 9, 2009.

The press release and scoping letter offered the public two ways to participate. They could attend one of three public scoping meetings or provide input online at http://www.blm.gov/id/st/en/fo/pocatello/travel_management.html. The 30-day scoping period started on November 11, 2009.

The three meetings were held at the Logan Library, Northeast Conference Room, Logan, Utah on November 17, 2009; the Lodge at the Reserve, Fish Haven, Idaho on November 18, 2009; and the National Oregon/California Trail Center, Forest Service Conference Room, Montpelier, Idaho on November 19, 2009.

At the meetings, the PFO presented motorized travel route maps derived from 2004 National Agricultural Imagery Program (NAIP) aerial imagery. Line features on the aerial image that appeared as motorized travel routes were digitized using Geographic Information System (GIS) software. The PFO also provided forms for written comments.

At the meetings, the PFO asked participants to consider the following criteria when making written comments: 1) preliminary resource concerns such as impacts to visual resources, vegetation, soils, range, wildlife, etc., 2) access issues across private land, 3) redundant roads and trails, 4) areas that require additional protection to help preserve natural resources, 5) areas that could be further developed to increase recreational opportunities, 6) routes that are missing from the data, and 7) existing roads where public safety is a concern. The public were given the option of either presenting written comments at the meetings or mailing comments prior to the conclusion of the comment period.

The website provided an opportunity for the public to comment if they could not attend the meetings. The same commenting opportunities available at the meetings were available through the website.

In January 2010, the PFO compiled and reviewed the public scoping comments. The PFO received numerous comments from individuals, permittees, cooperating agencies, and organizations. The public expressed confusion over where the existing routes were

since many of the assumed routes were actually game trails, cow trails, or river beds and washes. Based on this input, the PFO determined that the NAIP aerial images were an inadequate means of defining existing routes and a complete on-the-ground route inventory was needed.

During the course of the inventory, all of the presumed routes appearing on the NAIP imagery were field checked. Legitimate routes that could be traveled with motorized vehicles were then recorded with GPS units. These routes were also categorized as to type (i.e., 2-track, single lane and 4X4) and condition.

Determinations were also made as to whether access across private lands was permissible and if the implementation of the current land use plan had closed routes to motorized travel. Routes were not included in the plan if access to public lands was either blocked by private lands or were closed to motorized travel under the current land use plan.

In December 2010, a BLM Interdisciplinary Team (IDT) was assembled to examine the completed inventory. This completed inventory represented the No Action Alternative for the purposes of the BLTMP because all of these routes are currently open for motorized travel under the current land use plan. If the BLM took no steps to change current management as described in this plan, this situation would not change. The definition of a No Action alternative is important because it provides a comparative baseline from which to evaluate the consequences of taking alternative courses of action.

In January and February 2011, the IDT began developing alternatives to No Action for the BLTMP. As discussed, management alternatives that alter the current open status of existing routes are needed to reduce or minimize natural and cultural resource impacts that are known to be occurring within the planning area. By altering the degree of management emphasis between resource protection and the need for public access, two alternative travel management scenarios in addition to the No Action alternative were developed (more detail on the development of the alternatives is provided under the section titled, **Alternative Development**).

After the development of the alternatives, the PFO sent a press release to local and regional newspapers on February 14, 2011, notifying the public that a scoping meeting was being held at the National Oregon/California Trail Center, Forest Service Conference Room, Montpelier, Idaho on February 24, 2011 to solicit public comments on the alternatives.

A scoping letter was also sent on February 17, 2011 to those on the 2009 mailing list, which also consisted of others that requested to be added on the mailing list. Both the newspaper article and scoping letter indicated that the public could either attend the meeting or visit the website to view maps of the various alternatives at http://www.blm.gov/id/st/en/fo/pocatello/travel_management.html . The official start of the 30-day public comment period began on February 24, 2011.

Issues

Once the comment period had concluded, the IDT examined the comments to derive common threads that could be used to delineate issues to further refine the range of alternatives. A wide range of comments and concerns were expressed. Several respondents expressed support for an alternative that would not reduce the present level of access. Other respondents were concerned about keeping open or closing individual routes or route segments for which they had a personal interest.

One group expressed a strong interest in the conservation of sage grouse and their habitat, while other respondents did not feel that there was insufficient information presented to provide an informed commentary.

An internal scoping process was also conducted by the IDT. The primary issue derived from this process was the observation that a large number of redundant routes, short cuts, and dead ends were located in areas of resource concern, such as big game winter range, key sage grouse habitat, on erodible soils, and crossing fish-bearing streams.

Location of Proposed Action

The 55,415 acres of public lands comprising the travel management planning area is located south of Highway 30, generally in the area of T 10, 11, 12, 13, 14, 15, and 16 S, R 42, 43, 44, 45 and 46 E, Bear Lake County, Idaho. The project area runs along the Idaho/Wyoming border east of Highway 30 and along the Idaho-Utah border south of Fish Haven, Idaho. The northern boundary is formed by the Bear Lake-Caribou County Line with the southern boundary formed by Bear Lake Reservoir.

Conformance with Applicable Land Use Plan

The action alternatives have been reviewed for conformance with the Pocatello Resource Management Plan and Environmental Impact Statement. The action alternatives are consistent with the RMP decision that:

“Public lands will be designated as open, limited, or closed to motorized vehicles. In making these determinations, BLM will consider the following:

1. Public safety.
2. Resolving conflicts between uses of public lands.
3. Resource Protection requirements.
4. Public access requirements for recreational use (USDOI-BLM 1988:13).”

Relationship to Statutes, Regulations, or Other Plans

Section 202(9) of the Federal Land Management and Policy Act (P.L. 94-579), as amended, states that “...to the extent consistent with the laws governing the

administration of the public lands, ...assure that consideration is given to those State, local, and tribal plans that are germane in the development of land use plans for public lands....” Section 102(8) of the FLPMA, as amended, further states: *“It is the policy... that... the public lands be managed in a manner that will protect the quality of scientific, scenic...ecological, environmental...values; that, where appropriate, will preserve and protect certain public lands in their natural condition; ...and that will provide for outdoor recreation...”*

The selected travel management plan would be in compliance with Executive Order 11989 (1977), which directs Federal land managers to immediately close areas or trails to off-road vehicles whenever the land manager determines that “the use of the off-road vehicle will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitats or cultural or historic resources of particular areas or trails until such adverse effects have been eliminated and that measures have been implemented to prevent further recurrence.”

The authority for the Travel Management Plan designations is provided in the Code of Federal Regulations (CFR). Designations of areas and trails open, closed, or limited to motorized use is required and authorized under 43 CFR §8342 - Designation of Areas and Trails. These designations would be effective upon issuance of the Record of Decision. The designation of areas open, closed, or limited for non-motorized and other uses (mechanical, mountain bike, equestrian, foot), or conditions of use, is authorized under 43 CFR§ 8364.1. Closure and restriction orders are described under 43 CFR§ 8365.1-6 Supplementary Rules. Designations under 43 CFR §8364.1 and 43 CFR §8365.1-6 require publication in the Federal Register and local media and are not effective until such publication.

The Fort Bridger Treaty of 1868 (15 Stat. 673) specifically reserves the right of the Shoshone-Bannock Tribes to hunt, fish, and gather natural resources located on unoccupied lands of the United States, including lands managed by the BLM-Pocatello Field Office. The BLM has a Federal trust responsibility to honor treaty rights and to make land management decisions that take treaty rights, treaty resources and other tribal interests into consideration. Part of the Federal trust responsibility entails conducting government-to-government consultation with Indian groups when a project has the potential to impact the exercise of treaty reserved rights. The BLM-Pocatello Field Office met with the Shoshone-Bannock Tribe on February 11, 2010 at the Pocatello Field Office and discussions were held about the BLMs travel management planning efforts regarding this EA.

The BLM Interim Management Policy and Guidelines for Lands under Wilderness Review (IMP), H-8550-1 (USDOI-BLM 1995): The Wormcreek Wilderness Study Area (WSA) is located within the planning area, and as such all actions in this EA must comply with the IMP, which directs that the preservation of wilderness values within the WSA is paramount and should be the primary consideration when evaluating any proposed action or use that may impair (conflict with or be adverse to) those wilderness values. Generally, a use or activity is considered to be non-impairing if it is temporary –

that is, a use that does not create surface disturbance (requiring reclamation such as re-contouring, replacing topsoil, and/or restoration of native plant cover), or involve permanent placement of facilities (a facility that cannot be removed at time of designation). Actions that clearly benefit a WSA's wilderness values (roadlessness, naturalness, solitude, primitive and unconfined recreation, size, and supplemental values) through restoration, protection, or maintenance of these values may be allowed, if carried out in a manner which is least disturbing to the site.

CHAPTER 2 – THE PROPOSED ACTION AND ALTERNATIVES

Alternative development

In order to develop the alternatives, the IDT compared the distribution of existing routes with various natural resource data layers in GIS. These resource data layers included: sage-grouse key habitat, fisheries habitat, pigmy rabbit habitat, steep slopes, big game winter range, erodible soils, streams, riparian areas, and the distribution of sensitive plant species. Areas of overlap between existing routes and natural resource distributions provided the IDT with an idea of which routes were most likely to create adverse environmental impacts.

Environmental impacts associated with the use of individual routes were weighed against the perceived value of the route for transportation and access. By varying the perceived value of routes for transportation against the likelihood of environmental impacts, alternatives were created that designated different combinations of routes as either open or closed to motorized use across the planning area. For example, redundant and user – created routes, dead ends, and short cuts (those having low transportation and access value) in areas of high natural or cultural resource values would likely be proposed for closure under one of the alternative travel management scenarios.

Similarly, user-defined routes (those resulting from ad-hoc cross country travel) on steep side slopes might be considered for closure due to public safety and soil erosion concerns. On the other hand, routes that provided access to recreational facilities (those having high transportation and access value) would not likely be considered for closure unless the route was redundant or represented a short cut regardless of the type of habitat in which it was located.

Other considerations influenced the alternative development process as well. For example, routes connected to a designated motorized route located on public lands managed by the U.S. Forest Service were designated for the sake of consistency. Similarly, routes identified as Rights-Of-Way (ROWs) for Bear Lake County were designated since the county holds legal access.

This process resulted in the development of three alternative travel management scenarios that were brought forward for analysis.

Alternative A – No Action

Under this alternative, there would be no change in the current travel management direction. Approximately 210 miles of inventoried routes would be available for motorized travel, while 0.03 miles would be closed to protect Resource Natural Areas (RNAs) and Wilderness Study Areas (WSAs). Current OHV Designations, including the newly constructed trail designated for vehicles 50 inches or less near Fish Haven Creek, would remain unchanged (Table 1; Map 1).

Areas that do not have designations under current management are open to all vehicle use. Any proposed closures or restrictions of existing motorized travel routes to prevent resource damage or user conflicts would be reviewed and implemented subject to special rule authorities provided under 43 CFR §8340 - Off-Road Vehicles.

Table 1. Current OHV Designations in the Planning Area.		
Designation	Description	Miles
1	Closed to all Vehicles (RNA/WSA)	0.03
3	Wheeled vehicles limited to existing roads and trails, open to oversnow vehicles	121.92
4	All vehicles limited to designated routes	27.66
6	Wheeled vehicles limited to existing roads and trails, closed to oversnow vehicles	
8	Wheeled vehicles limited to existing roads and trails, oversnow vehicles restricted to designated routes	40.20
Unnumbered	Open to all vehicles	20.19
Total		210.00

Alternative B – The Proposed Action

The emphasis of Alternative B is on providing quality motorized recreational access, while striving to improve the health and condition of vegetation, soils, wildlife habitats, and water quality across the Bear Lake Plateau through the closure of redundant routes, short cuts, and dead ends that traverse sensitive resource areas. It includes recommendations made by the IDT and the public to protect resources, such as sage-grouse key habitat, pigmy rabbit habitat, sensitive plant species, watersheds, riparian areas, and the Oregon/California National Historic Trail.

Under this alternative, 142 miles of routes would be designated as open for motorized or over snow travel, a decrease of 68 miles or approximately 32 percent relative to Alternative A (Map 2). Under this alternative, no cross-country travel would be authorized for wheeled motorized vehicles and no cross-country travel would be authorized for snowmobiles within Big Game Winter Range. The 68 miles of formerly open motorized routes would be closed to all motorized traffic (see **Actions Common to Alternatives B and C**).

Alternative C – The Resource Protection Alternative

Alternative C focuses primarily on resource protection while allowing minimal motorized travel within the planning area (Map 3). The primary management emphasis would be on the protection and enhancement of natural resource values through a substantial reduction in the travel routes available for motorized use. Under this alternative, routes without a specific purpose or that were not a system route or a connector route to a Forest Service system route or Bear Lake County ROWs would be closed. Approximately 89 miles of

routes would be designated and available for motorized use, a reduction of 121 miles or approximately 58 percent compared to Alternative A.

Reclamation of closed routes would be prioritized based on wildlife habitat productivity, soil loss potential, vegetation resource impacts, or other resource protection needs.

Actions Common to Alternatives B and C

The following actions would be common to both action alternatives:

- ***Change in Designations:*** The OHV Designations: “(3), (4), (6), and (8)”, including the “*Un-numbered Areas that are open to all Vehicle Use*” under the current management situation identified in the 1988 Pocatello RMP would be changed to “*Wheeled Vehicles limited to designated routes, snowmobiles limited to designated routes within Big Game Winter Range.*” The “*Closed to all Vehicles*” under the current management situation would not be changed and would remain in effect for the Pine Gap and Dairy Hollow Research Natural Areas and the Worm Creek Wilderness Study Area.
- ***Road-Side Use Limitation:*** Pulling a motorized vehicle off a designated route (e.g., for parking, camping, and other dispersed recreational activities would be limited to a single perpendicular distance of 300 feet from the edge of the route (no travel parallel to a route).
- ***Proposed Parking Areas:*** Under Alternative B and C, the Loveland Lane parking area, which is associated with the section of trail just to the south of Fish Haven Creek, would be improved to accommodate multiple vehicles with trailers. The existing parking area was created by users over time to access two existing designated trails for motorized use 50 inches or less in width. The trail leading west out of the small parking area connects to other trails located on U.S. Forest Service public lands.

As proposed, the parking area would be approximately 2 acres in size and would be constructed by leveling the site and hardening it with gravel or other hardening materials. Kiosks would be installed for informational purposes, such as the posting of rules and regulations and the displaying of maps and interpretive materials. Signs, barricades, and other parking area devices would be installed to direct and control the flow of traffic.

In addition, a parking area similar in size and construction would be developed at Maple Canyon (see Map 2). The proposed Maple Canyon parking area would be developed to serve as a staging area for cyclists accessing the designated bicycle trail in Maple Canyon managed by the U.S. Forest Service.

- ***Game Retrieval:*** Motorized use off of designated motorized routes (cross-country travel), including game retrieval, would not be permitted.

- ***Emergency Use:*** Motorized emergency use would be available (i.e., in accordance with appropriate federal regulations) throughout the planning area regardless of the area or route designation. When possible, emergency vehicles will attempt to utilize existing routes, however there may be instances where traveling off-route would be necessary.
- ***Methods of Route Closure:*** A variety of closure methods would be considered depending on site-specific circumstances. In general, minimum closure techniques supporting resource needs would be used. Methods of closure may include one or more of the following activities: signing, natural rehabilitation, obscuring the road entrance, blocking the road entrance, and/or scarifying, seeding and/or planting the road surface. A BLM-approved seed mix would be used when disturbances from route closures or rehabilitation are planted and seeded. Regardless of the method employed, closed roads would be monitored for the presence weeds on a periodic basis and treated as needed to prevent their spread.
- ***Route Maintenance:*** Motorized route segments could receive periodic maintenance including smoothing of tread, removal of rocks or other obstacles, installation of rolling dips or water bars, cleanout of water bars, and repair of gullies and rills on the route surfaces. Maintenance of motorized routes may require mechanized equipment, whereas maintenance of single track trails could be carried out with the use of hand tools.
- ***Permanent Closure:*** In order to prevent adverse impacts to Bonneville Cutthroat trout habitat associated with user-defined crossings of Fish Haven Creek, a temporary closure to motorized, not to exceed 24 months, was instituted at these crossing areas in August 2010 under the emergency closure authorities provided under 43 CFR§8364 (Closures and Restrictions). Under Alternatives B and C, the closure of these areas would become permanent.
- ***Mapping Errors:*** Despite the efforts of personnel to “ground truth” existing routes within the planning area in the 2010 inventory, some errors may still be identified on the maps and they would be corrected as they are found. Correction of mapping errors would not change the effects of any of the alternatives and routes would not be added to the alternatives. Maps would be corrected as necessary to accurately reflect the routes on the landscape.
- ***Future closures or restrictions:*** Future closures or restriction to existing motorized routes to prevent resource damage or user conflicts would be evaluated and implemented as needed through separate individual environmental assessments or per emergency closure authorities provided under 43 CFR §8340 - Off-Road Vehicles. Future development of new routes would also be evaluated and implemented through separate environmental analysis.

CHAPTER 3 - AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section provides a description of the resources that could be affected by the Proposed Action and alternatives. In addition, the section presents an analysis of the direct and indirect environmental impacts stemming from the implementation of the various alternatives.

General Setting

The planning area is located in southeast Idaho and encompasses 55,415 acres of public lands. Lands managed by the PFO and neighboring BLM Kemmerer Field Office adjoin at the upper elevation boundary on the east side of the Bear Lake Plateau, and private lands at the lower elevation boundaries. The PFO-administered lands also adjoin with the Caribou-Targhee National Forest Service lands within the travel management planning area.

The landscape vegetation within the travel management planning area is composed predominately of grasses/forbs, woody plants, aspen, aspen/conifer, spruce/fir, mixed conifer, and Douglas-Fir. Vegetation types on the eastern Bear Range are a consequence of the combined effects of the soils, geologic substrates, precipitation, topography, and elevation. Elevation ranges from 5,500 to 8,200 feet. Slopes change from 0-10 percent in the lowlands and thrust upwards to 11 to 70 percent in the uplands.

General climatic characteristics are abundant sunshine, low humidity, and high evaporation. Annual precipitation in the area varies from about 7 inches in the lowlands to about 20 inches at the highest elevations. Precipitation in the area occurs primarily in the spring and fall as rain with April, May, and June being the wettest months. Summer thunderstorm activity is moderate; however, some storms exhibit high intensity rainfall combined with moderate duration. Summer thunderstorms typically occur over small, subwatershed-sized areas, and subsequent erosion is generally limited spatially; however, occasionally downstream impacts such as debris flow deposition and flooding does occur.

The existing transportation system within the planning area includes county roads, federal highways, state highway, and about 210 miles of BLM-administered roads, which would include primitive roads and trails. The major roads in the planning area include Highway 30, Georgetown Canyon, Highway 36, and Paris Canyon to the north, the centrally located Highway 89, Dingle Road east of Bear Lake, Bloomington Canyon, and Saint Charles Canyon west of Bear Lake and the Fish Haven Canyon to the south.

The majority of roads and trails on public lands within the planning area are primitive and user-created. The amount of motorized vehicle use on this network of routes is moderate with the exception of: 1) the fall hunting season -September, October, and November; and 2) routes located within a 15-20 mile radius of Bear Lake. Vehicle use drops off during the winter and spring as a result of snow cover, inclement weather and poor road conditions (December through mid-April).

Resources Considered in the Impact Analysis

This section describes the resources that were considered during the assessment. The result of the assessment indicates that not all of the resources considered are present or would be impacted by the Proposed Action and alternatives (Table 2). Only those resources that are present and affected are discussed in the following narratives.

Table 2. Resources Considered in the Analysis*.		
Resource	Resource Status	Rationale
Access	Present, affected	Impacts are disclosed under Access
Air Quality	Present, not affected	The implementation of the Proposed Action or the two alternatives would not result in the production of vehicle or equipment emission or particulate matter above those described under the Clean Air Act, as amended.
Areas of Critical Environmental Concern (ACEC's)	Present, not affected	The Dairy Hollow and Pine Gap Research Natural Areas (RNA's) exist within the travel management planning area. Vehicle use is prohibited in all RNA's identified in the Pocatello RMP, which would eliminate possible adverse impacts from motorized travel. No new routes are proposed in the alternatives. The resources within the RNA's for which the area was established would not be affected by any of the alternatives.
Cultural Resources	Present, not affected	A Class I Cultural Resource Inventory was completed for this project BLM Report # 2011-PFO-9. Other than some segments of the Oregon/California National Historic Trail, there are no National Register of Historic Places (NRHP) eligible sites within the Area of Potential Effect (APE). A few of the historic trail segments have been used over the years as motorized routes. The BLTMP would not impact the eligibility of any of the historic trail segments since it would not change the use on these segments and in a few cases would remove motorized use from some trail segments. A Class III Cultural Resource Inventory would be conducted before the proposed parking areas are allowed to be constructed or any ground-disturbing activities, such as road rehabilitation are conducted. Pending these requirements, the BLTMP would have no effect on NRHP-eligible properties.
Economic and Social Values	Present, not affected	The Proposed Action and alternatives would have little effect on economic and social values within Bear Lake County. The county would remain predominately rural and agricultural with an increasing trend toward tourism.
Environmental Justice	Not affected	Neither the implementation of the Proposed Action or alternatives would impart disproportionate environmental impacts on minority or low income populations.
Existing and Potential Land Uses	Present, affected	Impacts are disclosed under Existing and Potential Land Use
Farmlands (prime and unique)	Not present	There are no prime or unique farms lands in Bear Lake County.
Fisheries	Present, affected	Impacts are disclosed under Fisheries
Floodplains	Present, not affected	Floodplains occur within Bear Lake County however none of the alternatives authorize construction of structures in, modification of, or federal occupancy of floodplains. In accordance with Executive Order 11988, there will be no alteration of the floodplain's function, risk of loss of federal facilities due to flooding, or impact human safety from flooding. None of the

Table 2. Resources Considered in the Analysis*.		
Resource	Resource Status	Rationale
		actions proposed under the alternatives would impact flood plains
Forest Resources	Present, not affected	There are no forested areas that would be affected by travel management planning.
Invasive, Non-Native Species	Present, affected	Impacts are disclosed under Invasive, Non Native Species
Mineral Resources	Present, not affected	Mineral Resources occur within Bear Lake County. However, none of the actions proposed under the any of the alternatives would affect minerals resources. Any proposals for mineral development would be subject to mining laws which would ensure access to the resource.
Migratory Birds	Present, affected	Impacts are disclosed under Migratory Birds
Native American Religious Concerns	Not Present	There are no known ceremonial sites or resources associated with ceremonial practices within the project area.
Paleontological Resources	Present, not affected	Paleontological Resources occur within Bear Lake County however none of the actions proposed under the alternatives would impact the resource as there will be no new ground disturbance.
Prime and Unique Farmlands	Not present	There are no prime or unique farmlands in Bear Lake County.
Range Resources	Present, affected	Impacts are disclosed under Range Resources.
Recreational Use	Present, affected	Impacts are disclosed under Recreational Use
Soils	Present affected	Impacts are disclosed under Soils.
Threatened, Endangered, and Sensitive Animals	Present, affected	Impacts are disclosed under Threatened, Endangered, and Sensitive Animals
Threatened, Endangered, and Sensitive Fish	Present, affected	Impacts are disclosed under Threatened, Endangered, and Sensitive Fish
Threatened, Endangered, and Sensitive Plants	Present, affected	Impacts are disclosed under Threatened, Endangered, and Sensitive Plants.
Tribal Treaty Rights and Interests	Present, affected	Impacts are disclosed under Tribal Treaty Rights and Interests.
Vegetation	Present, affected	Impacts are disclosed under Vegetation
Visual Resources	Present, not affected	Design features of the proposed alternatives produce negligible adverse and beneficial impacts.
Wastes, Hazardous and Solid	Not present	There will be no hazardous or solid wastes associated with the actions proposed under the alternatives
Water Quality (Surface and Ground)	Present, affected	Impacts are disclosed under Water Quality.
Wetland and Riparian Zones	Present, affected	Impacts are disclosed under Wetlands and Riparian Zones
Wild and Scenic Rivers	Not present	There are no wild and scenic rivers in Bear Lake County.
Wild Horse and Burro HMA's	Not present	There are no HMA's in Bear Lake County.
Wilderness	Not present	There are no wilderness areas or WSAs on public lands in the Pleasantview allotment.
Wildlands	Not present	Wildlands are not present within the travel planning area due to the lack of wilderness characteristics.

Table 2. Resources Considered in the Analysis*.		
Resource	Resource Status	Rationale
Wildlife	Present, affected	Impacts are disclosed under Wildlife

*- Rationale for Interdisciplinary Team recommendations is required for all “not present” and “present not impacted” situations. For resources that are “present and impacted” a detailed analysis is provided

Direct and Indirect Impacts

Access

Affected Environment:

Decisions presented within the 1988 Pocatello RMP resulted in limiting motorized travel across most of the area administered by the PFO to “existing roads, ways and trails”; with subsets of the public land “limited to designated roads and trails.” For purposes of this discussion, legal access is provided by roads or trails that are maintained by federal, state, county or city governments for use by the general public. Physical access means that roads or trails exist but cannot legally be used by the general public without the private landowners consent.

Easements granted by private landowners on their private lands generally provide for a specific use to a specific entity. Many private landowners allow the public the use of their roads to cross their lands and thereby may provide physical access. These private roads are owned and maintained by the private landowners.

Many other private landowners have denied the public the use of their roads. Most of the private lands are located in the bottom lands and the public land is located in the uplands. This presents unique challenges in seeking public access across private lands. Within the study area, BLM holds two public access easements across state lands east of Bear Lake. The public would need to continue to seek permission to cross private lands where no easement exists. The PFO would continue to pursue opportunities to acquire public access easements from willing landowners. Acquisition of an easement would include a site-specific environmental analysis.

Environmental consequences:

Alternative A:

Under this alternative, access to public lands would not change. There would continue to be approximately 210 miles of routes available for travel within the planning area. Over time, this number may increase should some landowners become willing to allow legal public access across private lands to access public lands. These lands would then be available for motorized travel. Under this alternative, the BLM would continue to pursue potential access easements across private lands thus increasing opportunities to access public lands.

If there is legal public access across the private lands to an authorized BLM route, the route would become available for travel. If there is no legal or physical public access across the private lands, the route on BLM lands would not become available for motorized travel.

Alternative B:

Under Alternative B, motorized travel over approximately 142 miles of existing routes would be provided. Although the miles of designated routes would be reduced by approximately 68 miles or about 32 percent relative to Alternative A, access to public lands would not be reduced by this amount because many of the routes that would be closed under this alternative are redundant routes and short cuts. So while it might take longer for a motorist or recreationist to reach a destination, the reduction in access would actually only be slight.

Legal public access through private lands where BLM holds public easements would not change. Routes would continue to be used where an individual holds an authorized ROW for an access road across public lands to their private lands. These routes would continue to be used by the BLM and would be designated, if there is legal public access to get to the ROW.

If there is no legal or physical public access across the private land, the route would not be designated. In situations where private land owners have private lands adjoining BLM lands, and the public cannot cross, the routes on the BLM lands are closed to all motorized travel.

As with Alternative A, access to public lands may increase as a result of some land owners allowing public access across private lands. If this occurs, existing roads on public lands currently restricted by private lands may also become designated which would be beneficial to the public in accessing public lands.

Alternative C:

Under this alternative, there would be a reduced number of roads designated as “open” for use. Motorized travel would be allowed on approximately 89 miles of designated routes. This alternative would designate a minimal network of vehicle access along the most commonly used routes within the planning area. Over time, the routes which are no longer used would eventually be rehabilitated, either naturally or by man, and/or blocked off by barriers. By reducing these routes, public access would be restricted which may result in the pioneered of new routes which may create an increased need for monitoring and enforcement.

By reducing the number of routes, the opportunity for the public to enjoy their public lands would be reduced. This would limit the use of the public lands and increase the potential for unauthorized uses such as off-road vehicle use in non-designated areas. As

needed, the BLM would continue to pursue additional access easements across private lands under this alternative.

Existing and Potential Land Uses

Affected Environment:

Currently, the primary land uses within Bear Lake County consists of agriculture and grazing, residential development and recreation. Agriculture and grazing are clearly the most dominant land uses. Approximately 71,000 acres or about 11 percent of lands in the Bear Lake region are currently in agricultural development, about 8,300 acres are residentially developed in some form, while approximately 187,451 AUMs on 81 allotments are current grazed under Federal permits or leases. Recreational activity within Bear Lake County is focused on either the Caribou-Targhee National Forest or Bear Lake. The Caribou-Targhee National Forest offers campgrounds in a forested setting, numerous trail opportunities, and climatic relief from Bear Lake itself, which gets hot and windy most mid-summer afternoons. Minnetonka Cave and Bloomington Lake are important attractions to both tourists and valley residents.

OHV use occurs on established roads and motorized trails and snowmobiling is popular during the winter months. While agriculture and grazing has been historically the dominant uses in Bear Lake County, tourist-oriented uses are expanding at a relatively rapid pace. Seasonally oriented residential development is increasing, particularly to the west of Bear Lake (Idaho Department of Commerce 2003). This trend is likely to continue into the foreseeable future.

Environmental Consequences:

Alternative A:

Under this alternative, the maximum number of routes would be available for transportation. Current existing authorized uses of the public lands within the planning area would continue to occur under this alternative.

Alternative B:

The current existing authorized uses of the public lands within the planning area would also continue to occur under this alternative. However, there would be fewer miles of routes available for motorized travel on public lands within the travel management planning area. The reduction in mileage would have little impact on agriculture and grazing, since routes associated with these land uses are either on private lands or legal access across public lands has been granted through a ROW.

The reduction in routes available for motorized travel would have a slight impact on recreational uses of public lands, because it would take longer for recreationists to reach their destination due to the elimination of redundant roads and short cuts from the

transportation network. This would likely result in a slight inconvenience to the recreationist and could result in increasing use of more easily accessible areas.

Alternative C:

Under this alternative, there would be 89 miles of routes available for motorized travel; a reduction of approximately 121 miles or about 58 percent less than Alternative A. This level of reduction, which would leave primarily BLM system routes or connector routes to Forest Service lands open for motorized travel, would have an adverse impact on recreational land uses because access would be limited to relatively few locations on public lands which would be desirable from a recreational standpoint. Under this level of restriction, indirect effects such as pioneering of new routes and the environmental impacts associated with it are likely to occur which would require increased resource expenditures on the part of the BLM to control and mitigate.

Like the other alternatives, Alternative C would have little effect on agricultural and grazing since access associated with these land uses is typically on private lands or legal access has been granted through a ROW.

Fisheries

Affected Environment:

There are several streams that bisect BLM land in Bear Lake County. Streams on the west side of Bear Lake generally run west to east and drain into Bear Lake, Mud Lake or the Bear River. The streams originate on the Cache National Forest then flow down through private and BLM managed land. Most streams on the Bear Lake Plateau and the Sheep Creek Hills drain into the Bear River. The Bear River originates in Utah, flows into Wyoming and then flows through Bear Lake County generally from the southeast to the northwest. Fish known to inhabit the Bear River include: brown trout (*Salmo trutta*), rainbow trout (*Oncorhynchus mykiss*), carp (*Cyprinus carpio*), Utah (*Catostomus ardens*), mottled sculpin (*Cottus bairdi*), redbelt shiner (*Richardsonius balteatus*), and long-nosed dace (*Rhinichthys cataractae*). Bear Lake straddles the Utah/Idaho border and covers approximately 70,000 surface acres when full.

All native species occurring in the study area are cold water species. The native trout in the streams and Bear Lake is the Bonneville Cutthroat trout. Introduced trout include brook, rainbow, and lake trout. Bear Lake contains several species that are endemic. The BLM generally manages a small portion of each stream and only a small portion of each watershed.

Fish populations are limited primarily by water management and livestock grazing in Bear Lake County. Most streams in the county are managed for irrigation purposes. Irrigation practices that impact fish populations include diversions and reduced flows in streams. Unscreened diversions allow fish to enter canals and ultimately be delivered

into agricultural fields. Diversions also remove water from the stream, reducing the amount of habitat for fish.

Livestock grazing has the potential to widen streams, reduce pool habitat, and increase water temperatures. All of these factors reduce habitat, or habitat suitability for cold water fish species.

Environmental Consequences

Alternative A:

Under this alternative, approximately 8 miles or about 4 percent of designated routes would be within 300 feet¹ of 12 different perennial streams. Given this proximity and number, these routes have the potential to contribute sediment to these streams, particularly during events of high precipitation and heavy visitor use.

An increase in sediment delivery to a stream can impact aquatic species in a number of ways. Suspended sediment in the stream can inhibit respiration by irritating gills, the tissues that allow the transfer of oxygen to the blood of aquatic species. Suspended sediment can also affect feeding and movement behavior by increasing instream turbidity; juveniles are most affected. Increased sediment can also modify channel configuration by accumulating and filling pools. It can hamper spawning and incubation by covering spawning substrates and then not allowing the interstitial flow of water through the spawning substrate. Flow through the gravels provides oxygen to developing embryos and removes carbon dioxide and waste materials and without it egg development can be slowed or halted.

Although all routes within 300 feet have the potential to deliver sediment to streams, impacts have the potential to be the most serious where routes cross perennial streams which under this alternative would be at Indian and Pegram Creeks.

Alternative B:

Under Alternative B, about 6 miles or about 5 percent of designated routes would be within 300 feet of 12 different perennial streams. While the nature of potential impacts would be similar to those discussed under Alternative A, the potential intensity of the impact would be somewhat less due to the slightly lower mileage and the fact that designated routes cross only one perennial stream, Indian Creek.

The permanent closure of user-defined crossings along Fish Haven Creek road would reduce the potential for erosion and sedimentation in this perennial stream which would benefit fish, including Bonneville Cutthroat trout.

¹ According to the Inland Native Fish Strategy (INFISH), 300 feet is considered the Riparian Habitat Conservation Area or the area where sedimentation and other impacts are likely to occur.

Alternative C:

The nature of the impact associated with the implementation of Alternative C would be similar to Alternatives A and B. However, the potential intensity or severity would be the same as Alternative B because the same number of miles of perennial stream would be within 300 feet of designated routes (6 miles) and there would be one perennial stream crossing at Indian Creek.

The effect of the permanent closure of user-defined crossings along Fish Haven Creek Road would be similar to those discussed under Alternative B.

Invasive, Non-Native Species

Affected Environment:

The BLM has made weed management a priority on the public lands it manages in Bear Lake County. The PFO weed control program is coordinated with partners from other federal and state agencies, county and tribal governments, industry, conservation organizations, and private citizens, including the Highlands Cooperative Weed Management Association (CWMA).

Idaho currently has 57 different species of weeds that are designated noxious by state law (Table 3). These weeds are designated at three levels of concern: Early Detection/Rapid Response (EDRR), Statewide Control, and Statewide Containment. Although not all of these species occur in Bear Lake County, the PFO would treat these species under any of the action alternatives.

Table 3. Idaho's Designated Noxious Weed List.	
Statewide EDRR List¹	Statewide Containment List³
Brazilian Elodea (<i>Egeria densa</i>)	Canada Thistle (<i>Cirsium arvense</i>)
Giant Hogweed (<i>Heracleum mantegazzianum</i>)	Dalmatian Toadflax (<i>Linaria genistifolia</i> ssp. <i>dalmatica</i>)
Hydrilla (<i>Hydrilla verticillata</i>)	Diffuse Knapweed (<i>Centaurea diffusa</i>)
Policeman's Helmet (<i>Impatiens glandulifera</i>)	Field Bindweed (<i>Convolvulus arvensis</i>)
Squarrose Knapweed (<i>Centaurea squarrosa</i>)	Hoary Alyssum (<i>Berteroa incana</i>)
Syrian Beancaper (<i>Zygophyllum fabago</i>)	Houndstongue (<i>Cynoglossum officinale</i>)
Tall Hawkweed (<i>Hieracium piloselloides</i>)	Jointed Goatgrass (<i>Aegilops cylindrica</i>)
Water Hyacinth (<i>Eichhornia crassipes</i>)	Leafy Spurge (<i>Euphorbia esula</i>)
Yellow Devil Hawkweed (<i>Hieracium</i> spp.)	Milium (<i>Milium vernale</i>)
Statewide Control List²	Oxeye Daisy (<i>Chrysanthemum leucanthemum</i>)
Black Henbane (<i>Hyoscyamus niger</i>)	Perennial Pepperweed (<i>Lepidium latifolium</i>)
Bohemian Knotweed (<i>Polygonum bohemicum</i>)	Plumeless Thistle (<i>Carduus acanthoides</i>)
Buffalobur (<i>Solanum rostratum</i>)	Poison Hemlock (<i>Conium maculatum</i>)
Common Crupina (<i>Crupina vulgaris</i>)	Puncturevine (<i>Tribulus terrestris</i>)
Dyer's Woad (<i>Isatis tinctoria</i>)	Purple Loosestrife (<i>Lythrum salicaria</i>)

<p>Eurasian Watermilfoil (<i>Myriophyllum spicatum</i>) Giant Knotweed (<i>Polygonum sachalinesnse</i>) Japanese Knotweed (<i>Polygonum cuspidatum</i>) Johnsongrass (<i>Sorghum halpense</i>) Matgrass (<i>Nardus stricta</i>) Meadow Hawkweed (<i>Hieracium caespitosum</i>) Meadow Knapweed (<i>Centaurea pratensis</i>) Mediterranean Sage (<i>Salvia aethiopis</i>) Musk Thistle (<i>Carduus nutans</i>) Orange Hawkweed (<i>Hieracium aurantiacum</i>) Parrotfeather Milfoil (<i>Myriophyllum aquaticum</i>) Perennial Sowthistle (<i>Sonchus arvensis</i>) Russian Knapweed (<i>Acroptilon repens</i>) Scotch Broom (<i>Cytisus scoparius</i>) Silverleaf Nightshade (<i>Solanum elaeagnifolium</i>) Skeletonleaf Bursage (<i>Ambrosia tomentosa</i>) Small Bugloss (<i>Anchusa arvensis</i>) Toothed Spurge (<i>Euphorbia dentata</i>) Vipers Bugloss (<i>Echium vulgare</i>)</p>	<p>Rush Skeletonweed (<i>Chondrilla juncea</i>) Saltcedar or Tamarisk (<i>Tamarix</i> spp.) Scotch Thistle (<i>Onopordum acanthium</i>) Spotted Knapweed (<i>Centaurea maculosa</i>) Tansy Ragwort (<i>Senecio jacobaea</i>) White Bryony (<i>Bryonia alba</i>) Whitetop (<i>Cardaria draba</i>) Yellow Starthistle (<i>Centaurea solstitialis</i>) Yellow Toadflax (<i>Linaria vulgaris</i>)</p>
<p>¹ Statewide Early Detection and Rapid Response (EDRR) noxious weeds are to reported to the Department of Agriculture within 10 days of positive identification and eradicated during the same growing season as identified.</p> <p>² Statewide Control noxious weeds are known to exist in Idaho and the concentration of these weeds is at a level where control and/or eradication may be possible.</p> <p>³ Statewide Containment noxious weeds are known to exist in Idaho and weed control efforts may be directed at reducing or eliminating new or expanding weed populations while know and established weed populations may be managed by approved weed control methods.</p>	

In addition to the invasive species identified on Idaho’s designated noxious weed list, other non-native invasive species of concern are exotic annual grasses, primarily cheatgrass, Japanese brome (*Bromus japonicus*), and medusahead wildrye (*Taeniatherm caput-medusae*); dames rocket (*Hesperis matronalis*), bull thistle (*Cirsium vulgare*); Russian olive (*Elaeagnus angustifolia*), St. Johnswort (*Hypericum perforatum*), Siberian elm (*Ulmus pumila*) and halogeton (*Halogeton glomeratus*). These species have not been designated as “noxious” in Idaho, but can also pose a serious threat to native vegetation.

Vehicles, wind, water, humans, wildlife and livestock can spread weeds from infested areas to public lands and vice versa. Weed infestations compete with native vegetation for soil nutrients, water and sunlight and can seriously diminish forage production and habitat for livestock and wildlife. Rangeland degradation, caused by displacement of native species by invasive non-natives, reduces the available forage for livestock and wildlife.

Roads act as corridors for the dispersal and invasion of weedy species. Weed infestations are commonly associated with proximity to waterways, roads/highways, farmlands and railroad tracks. Vehicles, including OHVs, can act as dispersal agents in transporting weedy seeds over long distances and into new areas.

Alternative A:

Under this alternative, the designation of the all routes as open to motorized traffic would permit the continued dispersal of weed species throughout the planning area. In order to control the spread of weeds throughout the planning area, the PFO, in conjunction with its partners, would have to continue to participate in cooperative weeds control actions at least at current levels to prevent the widespread proliferation of weed species in the planning area.

Alternative B:

Since Alternative B proposes the closing of approximately 32 percent of currently existing roads and trails, the potential for the spread of weeds would be reduced. The effects of physically closing these routes to motorized travel would vary depending on the chosen method, however. If, for example, the routes were scarified and seeded, the spread of weeds on the former routes should tend to be quite low. If, on the other hand, signing or blockage of the former route entrance was the method used, weeds may or may not proliferate on the former road bed depending on local conditions. In order to prevent the spread of weeds in these cases, all closed routes would be monitored and treated as necessary.

Alternative C:

Under Alternative C, impacts on the spread of weeds would be similar to Alternative B. However, Alternative C would have a greater overall effect in the planning area because more miles of existing roads and trails would be closed to motorized traffic. Fewer miles of roads and trails would limit the areas where weeds could be introduced. As with Alternative B, the effects of physically closing the routes would depend on the method used. In some cases, revegetation may occur naturally or through seeding, in others, weeds may proliferate in the former road beds. Monitoring and possible treatment would be required to ensure that weeds do not spread as a consequence of road closures.

Migratory Birds

Affected Environment:

There are approximately 240 species of migratory birds in the PFO. Waterfowl, raptors, shorebirds, gulls, and neo-tropical migrant are included in the migratory bird category. The Idaho Bird Conservation Plan included both riparian areas and sagebrush as priority bird habitats in Idaho. Sagebrush obligates that inhabit Bear Lake County include the sage-sparrow, Brewer's Sparrow and the sage thrasher.

Through the years, migratory bird habitat in the study area has been substantially altered by agricultural and residential developments which have removed the structural component of the habitat provided by sagebrush. Large amounts of nesting and brood rearing habitat have also been eliminated. The type of insects and seed, providing food

for migratory birds, has either been altered or reduced as a consequence of these developments.

Environmental Consequences:

Alternative A:

Under this alternative, 210 miles of routes would traverse migratory bird habitat. Impacts to migratory birds associated with the use of these routes depend on traffic volume and season of use. Studies indicate that during times of relatively high levels of traffic volume, typically on holidays, weekends, and hunting season, migratory birds tend to be repeatedly displaced from habitat near routes (Ingelfinger and Anderson 2004; Froman et al. 2002). However, the volume of traffic in the planning is probably insufficient for birds to abandon near-route habitat altogether. Since the nesting season (March 15-May 15) typically coincides with times of relatively low traffic volume (excepting weekends), there would be little impact on nesting birds.

Direct mortality could occur as a consequence of collisions with OHVs of all types, though this impact should be fairly uncommon given the generally low travel speeds and variable traffic volume. Traffic could potentially increase the incidence of wildland fires which would remove shrubs that provide nesting habitat for migratory birds. Vehicle use also has the potential to spread noxious weeds which would decrease the quality of migratory bird habitat.

Alternative B:

Under Alternative B, the number of designated routes would be reduced to 142 miles; a reduction of about 32 percent relative to Alternative A. Assuming that traffic volumes remain more or less constant, this reduction would result in a more frequent displacement and direct mortality of birds across a smaller area since the same amount of traffic would be using fewer miles of designated routes. On the other hand, there would be no displacement or mortality along the 68 miles of routes that would be closed.

Alternative C:

Under this alternative, the number of designated routes would be reduced to 89 miles; a reduction of approximately 58 percent relative to Alternative A. The implementation of this alternative would result in displacement and direct mortality effects that would be restricted to relatively few miles of designated routes. There, however, would be no impacts associated with the 121 miles of routes closed relative to Alternative A.

This level of restriction could motivate visitors to pioneer new roads and trails across the study area, which would result in direct and indirect habitat loss to migratory bird species.

Range Resources

Affected Environment:

The livestock industry in the planning area centers around cow-calf operations that winter and calve on private grounds and graze Forest Service lands and BLM public lands, administered by the Caribou National Forest District Office, Montpelier, ID and the PFO, respectively. Grazing allotment boundaries were originally set-out following the implementation of provisions of the Taylor Grazing Act and have since been subject to land sales and changing allotment boundaries.

The rangeland resources in Bear Lake County are comprised of about 6,350 acres of BLM-administered public lands, 2,545 acres of lands owned by the State of Idaho, 6,117 acres administered by the Forest Service and 7,383 acres of privately owned lands. Grazing on the Federal lands is authorized as leases through Section 15 of the Taylor Grazing Act (1934) which allocated grazing leases on public lands outside the original grazing district boundaries. Grazing on these allotments is allocated as follows: 45,182 AUMs on BLM; 4,157 AUMs on State lands; 60,138 AUMs on Forest Service lands and 77,974 on private lands.

Of the 81 allotments that are located in the planning area, 71 are actively grazed; the remaining 10 allotments are not grazed. At present, all grazing lease holders, “lessees”, have access to public lands within allotment boundaries for the efficient management of their livestock and access to range improvements (e.g., troughs or fences) for maintenance.

Environmental Consequences:

Alternative A:

Under Alternative A, no roads or trails would be removed from public access. The development and the use of the current network of roads would lead to increased erosion over the long-term, the introduction of noxious weed species, the transformation of natural vegetative communities to a variety of exotic species. All of the effects, which have resulted in the general decline in rangeland conditions, would continue under this alternative.

Alternative B:

Alternative B would restrict public access to approximately 142 miles of roads and trails. Restricting public access on some roads and trails would have long-term positive effect on the rangeland resources on public lands. Reductions in public access and vehicular

use on roads and trails would allow vegetation to re-establish which would protect previously bare and unstable areas from erosion and further degradation and promote watershed integrity.

Under Alternative B, grazing lessees would retain rights of access, as specified in the terms and conditions of their leases, for the management of livestock and maintenance of range improvements on public lands within their allotments.

Alternative C:

Alternative C would restrict public access to approximately 89 miles of motorized routes. This alternative would have a greater beneficial effect on the recovery of rangeland resources in the planning area than either Alternative A or B since there would be more restrictions on public access on roads and trails which would allow more vegetation to recovery over a larger area. Under both Alternatives B and C, grazing lessees would retain rights of access, as specified in the terms and conditions of their leases, for the management of livestock and maintenance of range improvements on public lands within their allotments.

Recreation

Affected Environment:

The majority of recreation in Bear Lake County is concentrated on either the Caribou-Targhee National Forest or Bear Lake. The Caribou-Targhee National Forest offers campgrounds in a forested setting, numerous trail opportunities, and climatic relief from Bear Lake itself, which gets hot and windy most mid-summer afternoons. Minnetonka Cave and Bloomington Lake are important tourist attractions to the Bear Lake Valley and valley residents.

OHV use on the public lands administered by the PFO has historically been relatively low due to the high concentration of use occurring around Bear Lake and on U.S Forest Service lands. OHV use occurring on PFO-administered public lands has been either associated with permissess gaining access for cattle grazing and range developments or hunters scouting, camping, and hunting game in the fall season.

The current transportation network within the planning area is, for the most part, an inherited system of unplanned roads and trails totaling about 210 miles. Many of these routes were created by the passage of vehicles in support of activities such as grazing, mineral exploration, driving for pleasure, and hunting. Routes were often pioneered or constructed in the most direct manner possible to a specific location and for a specific need. Over time, the use of many of these routes has become recreational in nature as OHVs have become an increasingly popular form of recreation and transportation.

Environmental Consequences:

Alternative A:

Alternative A provides the maximum opportunity for motorized access and recreation, allowing continued use of the all existing routes. Under Alternative A, there would be no change in the recreational activities such as hunting, camping, OHV use, wildlife viewing, though these activities are likely to increase over time. The majority of recreation in the Bear Lake County is concentrated on either the Caribou-Targhee National Forest or Bear Lake and the current network of roads and trails should be sufficient to accommodate the increased use of these areas into the foreseeable future.

Alternative B:

Under this alternative, recreational opportunities would diminish slightly and access to public lands would be reduced somewhat. The reduction of 68 miles of routes would impact hunters scouting for game or taking of animals. Also, the lesser number of miles would negatively impact individuals looking for dispersed camping sites or driving the existing routes for pleasure when compared to Alternative A. By reducing the number of routes available for motorized travel, the potential exists for conflicts between user groups due to increased traffic.

Alternative C:

Under this alternative, the nature of impacts to recreation would generally similar to those associated with Alternative B. However, the intensity of the impact would be greater due to the fewer miles of designated routes. The impact to hunters could be substantial, competition for dispersed camping areas may begin to emerge, and there would be a greater potential for conflicts between users groups given the relatively small number of miles of routes open for travel.

Soils

Affected Environment:

Geology and soils have a major influence on topography, vegetation, watershed and land use in the BLTMP project area. Bear Lake County consists of high mountain valleys comprised of loess-mantled fan terraces and alluvial bottoms between north-south oriented sedimentary mountains of limestone, sandstone, siltstone quartzite, conglomerate, and minor amounts of volcanic ash. Bear Lake Valley is dominantly fine, lacustrine sediments.

The soils of Bear Lake County have been mapped by the Natural Resources Conservation Service (USDA, NRCS 2010). Major soils of Bear Lake County include:

(http://soils.usda.gov/survey/printed_surveys)

1. Level to nearly level, moderately well to very poorly drained, very deep soils formed in mixed alluvium. These soils occur mainly in the Bear Lake basin. Representative soils include the Bear Lake, Lago and Merkley series.
2. Rolling to very steep, well drained, shallow to very deep soils formed in alluvium/residuum from limestone, sandstone, conglomerate and quartzite. These soils occur on mountainsides and hillsides throughout the eastern and western parts of the county. Representative soils include the Ant Flat, Cedarhill, Dutch-Canyon and Ireland series.
3. Undulating to steep, well drained, moderately deep to very deep soils formed in alluvium/residuum from limestone, sandstone, siltstone and conglomerate. These soils occur mainly on mountainsides and hillsides of the uplifted/dissected Bear Lake Plateau in the southeastern corner of the county. Representative series are currently being developed (USDA, NRCS 2010).
4. Nearly level to gently rolling, well drained, very deep soils formed in loess and mixed alluvium. These soils occur mainly on fan terraces and hill-slopes throughout the center of the county and account for the majority of the cropland in Bear Lake County. Representative soils include the Bancroft, Buist, George-Canyon, Iphil, Lanark (Lanoak) and Pegram series.

Other minor areas include lake and river terraces, loess covered basalt, and a variety of cryic soils throughout the upper mountainous elevations. Representative soils include the Brifox, Niter, Rexburg and Ririe series.

The primary ecological impacts affecting soil quality are conifers expanding into aspen, sagebrush-grassland and riparian communities, the loss of tall forb communities and replacement with annual tarweed, spread of noxious weeds and increased susceptibility to fires. Management activities affecting soil quality are roads, livestock grazing, logging, fire and recreation.

The principle concern with regard to the analysis of the alternatives is the number of miles of road that occur, entirely or in part, on erodible soils. In order to evaluate the alternatives in this regard, an erodible soils dataset, previously created for the Proposed Fire, Fuels, and Related Vegetation Management Direction Plan Amendment and Final Environmental Impact Statement (USDOJ 2008) was overlaid with the number of motorized routes to arrive at mileage values for each alternative.

Environmental consequences:

Alternative A:

Under this alternative, 134 miles of designated motorized routes would be situated on soils that are susceptible to wind and/or water erosion. The continued use of these roads,

most of which are barren of vegetation, is likely to result in high levels of erosion and off-site sedimentation, especially during high wind and high precipitation events.

Alternative B:

Under Alternative B, 89 miles of designated motorized routes would be located in erodible soils; approximately 34 percent compared less than Alternative A. While these roads would still be susceptible to erosion, the potential severity of the impacts overall would be substantially less than Alternative A. Roads that would be closed under this alternative would be either scarified and seeded or allowed to naturally revegetate, holding soils in place.

Alternative C:

Under Alternative C, 55 miles of designated routes would be situated on soils that are prone to erosion; a reduction of 60 percent over Alternative A and 38 percent less than Alternative B. Under this alternative, the potential for erosion and off-site sedimentation would be substantially reduced when considered at the planning area scale. Like Alternative B, the routes that would be closed would be seeded or allowed to naturally revegetate which would retain soils and lead to enhanced watershed health.

Threatened, Endangered and Sensitive Animals

Affected Environment:

There are no threatened or endangered (T&E) animal species known to inhabit BLM land in Bear Lake County. The greater sage-grouse (*Centrocercus urophasianus*) inhabit BLM land in Bear Lake County and is a BLM sensitive species. Key sage-grouse habitat is located within the Bear Lake County totaling approximately 41,058 acres or about 7 percent of the planning area. Pygmy rabbits (*Brachylagus idahoensis*), also a BLM sensitive species, have been documented in the portion of Bear Lake County that is east of Bear Lake and south of U.S. Highway 30, an area totaling 33,849 acres or approximately 5 percent of the planning area.

On March 5, 2010 the U. S. Fish & Wildlife Service announced that the greater sage-grouse was warranted for listing but was precluded by higher listing priorities. The greater sage-grouse was placed on the list of candidate species. Candidate species do not have statutory protection under the Endangered Species Act, but their status will be reviewed annually by the Service.

Other BLM sensitive bird species that inhabit BLM land in Bear Lake County include: Brewer's sparrow (*Spizella breweri*), loggerhead shrike (*Lanius ludovicianus*) and the sage sparrow (*Amphispiza belli*). Impacts to these species are covered in the migratory bird section. Northern leopard frogs (*Rana pipiens*) have also been documented on BLM land in Bear Lake County.

Environmental Consequences:

Alternative A:

Under this alternative, 210 miles of inventoried routes would be available for motorized recreation. Approximately 159 miles of these routes would traverse key greater sage-grouse habitat and 142 miles of designated routes would be within 2 miles of a known lek.² In addition to vehicle collisions with greater sage-grouse, the use of these routes could potentially disturb sage-grouse during reproductive (April to early May) and wintering periods, fragment habitat, may lead to the spread of noxious weeds and other invasive plants, and increase the possibility of wildland fires. These effects have reduced the quality and quantity of greater sage-grouse habitat in the planning area.

Pygmy rabbits have been documented on the Bear Lake Plateau. Approximately 128 miles of motorized vehicle routes pass through pygmy rabbit habitat. The impacts to pygmy rabbit habitat would be similar to those for sage-grouse.

Sediment from routes and vehicle damage to riparian vegetation would reduce the quality and quantity of Northern Leopard frog habitat. Under this alternative, 8 miles of routes are within 300 feet of perennial waterways and 6 miles are within 300 feet of intermittent waterways.

Alternative B:

Under this alternative, approximately 107 miles of motorized routes would be situated in key greater sage-grouse habitat, compared to approximately 159 miles in Alternative A; a reduction of approximately 33 percent. Ninety-five (95) miles of designated routes would be within 2 miles of a known lek. The same suite of impacts as Alternative A would occur to greater sage-grouse and pygmy rabbit habitat under this alternative, but the potential intensity of the impact would be reduced given the lower number of miles in key habitat and in proximity to known leks. In addition, closure and reclamation activities should provide for an increase in potential sage grouse habitat on the 52 miles of routes that are closed, reducing fragmentation.

Routes in pygmy rabbit habitat would be reduced to approximately 89 miles in Alternative B (30% reduction in route miles). This reduction would result in a decrease in habitat fragmentation and potential direct population loss through vehicle collisions. Under this alternative, 6 miles of routes are within 300 feet of perennial waterways and 4 miles are within 300 feet of intermittent waterways. Sediment from routes and vehicle damage to riparian vegetation would reduce the quality and quantity of Northern Leopard frog habitat, although to a slightly lesser extent than Alternative A.

² The Conservation Plan for the Greater Sage-grouse in Idaho (2006) recommends a restriction of activities within 2 miles of an active lek during morning hours from the April through early May period.

Alternative C:

Under Alternative C, approximately 66 miles of routes would be located in key greater sage-grouse habitat, compared to approximately 159 miles in Alternative A and 107 miles in Alternative B. Fifty-eight (58) miles of designated routes would be within 2 miles of a known lek. The same suite impacts to greater sage-grouse would occur in this alternative, but the potential intensity of the impacts would be comparatively less (58% reduction in route miles compared to Alternative A and a 38% reduction from Alternative B). In addition, the lower number of miles of designated routes in proximity to leks would lower the likelihood of disturbances during the reproductive period relative to the other alternatives. Potential sage grouse habitat should increase and fragmentation decrease on the 66 miles of routes proposed for closure and reclamation.

Routes in pygmy rabbit habitat would be reduced to approximately 47 miles under Alternative C (63% reduction in route miles compared to Alternative A and a 47% reduction from Alternative B). Under this alternative, 6 miles of routes are within 300 feet of perennial waterways and 2 miles are within 300 feet of intermittent waterways. Sediment from routes and vehicle damage to riparian vegetation would reduce the quality and quantity of Northern Leopard frog habitat, although to a slightly lesser extent than both Alternatives A and B.

Threatened, Endangered and Sensitive Fish

Affected Environment:

Bear Lake has several species that are endemic to the lake. They include the Bear Lake Cutthroat trout (*Oncorhynchus clarki ssp.*), the Bear Lake Whitefish (*Prosopium abyscicola*), the Bear Lake Sculpin (*Cottus extensus*), the Bonneville Whitefish (*Prosopium spilonotus*) and the Bonneville Cisco (*Prosopium gemmiferum*) all reside in Bear Lake. The leatherside chub (*Cila copei*) and the Bonneville cutthroat (*Oncorhynchus clarki Utah*) reside in selected streams in Bear Lake County.

Environmental Consequences:

Alternative A:

There would be no impacts to fish endemic to Bear Lake (Bear lake Whitefish, Bear Lake Sculpin, Bonneville whitefish and Bonneville Cisco). These species spend their entire life cycle in Bear Lake and sediment from BLM routes would seldom reach the lake. The cutthroat trout and the leatherside chub spend all or at least a portion of their life cycle in streams. Under this alternative, sediment from routes and vehicle damage to riparian vegetation could reduce the quality and quantity of fish habitat. However, only 4 of the 210 miles of designated motorized routes would be located within 300 feet of perennial waterways containing Bonneville cutthroat trout and only 0.25 mile of designated route is located within 300 feet of a northern leatherside chub stream. Based on the small number of miles of designated routes located near streams bearing these fish

species, it is unlikely that sedimentation associated with the presence and use of these routes would have a substantial impact on these fish species.

Alternative B:

Under this alternative, 2 of the 210 miles of designated motorized routes would be located within 300 feet of streams bearing Bonneville cutthroat trout. Although sedimentation would still be the principle impacting medium, the small number of miles of designated motorized routes that could contribute sediment is so small that any potential impact would be insubstantial.

The potential for erosion and sedimentation would be reduced as a consequence of the permanent closure of the user-defined crossings along Fish Haven Road further reducing potential impacts to Bonneville Cutthroat trout.

Alternative C:

Under this alternative, the nature and intensity of potential impacts to Threatened, Endangered, and Sensitive fish would be the same as Alternative B, because the miles of designated motorized within 300 feet of fish-bearing streams would be identical and the permanent closure of user-defined crossing along Fish Haven Creek Road would be implemented.

Threatened, Endangered and Sensitive Plants

A GIS-based assessment of threatened, endangered and sensitive plants was completed using the most current Idaho Special Status Plant Species layer (May 2011). The results of the assessment indicate that there are six known Idaho BLM species within Bear Lake County. Of the six species, there are two that occur on BLM lands (Table 4): Silky cryptantha (*Cryptantha sericea*) and Staveling milkvetch (*Astragalus jejunus*). These species, which typically grow in association, are located exclusively on the Bear Lake Plateau on the eastern periphery of the study area. These species cover a collective area of approximately 168 acres. They ordinarily grow on barren hills in loose soils and are often associated with low-growing sage brush, cushion forb, and bunchgrass species.

Table 4. 2011 BLM Special Status Plant Species Occurring in Bear Lake County.				
Common Name	Scientific Name	BLM Status¹	Vegetation Community Type	Potential for Occurrence in Affected Area
Purple Meadow-rue	<i>Thalictrum dasycarpum</i>	Type 3	Riparian/Wetlands	No- Potential habitat includes moist wetlands. This habitat type is not present in the affected are. No known populations on BLM lands.
Red glasswort	<i>Saliornia rubra</i>	Type 4	Riparian/saline wetlands	No – Potential habitat includes moist, saline or alkaline soil of flats, shores, seepage areas and

Table 4. 2011 BLM Special Status Plant Species Occurring in Bear Lake County.				
Common Name	Scientific Name	BLM Status ¹	Vegetation Community Type	Potential for Occurrence in Affected Area
				ditches. No known populations on BLM.
Silky cryptantha	<i>Cryptantha sericea</i>	Type 4	Mid-Elevation Shrub	Yes – habitat includes dry barren ridges/bluffs of shale. There are known populations located within the affected area on BLM.
Starveling milkvetch	<i>Astragalus jejunus</i> var. <i>jejunus</i>	Type 2	Mid-Elevation Shrub	Yes –habitat includes dry barren ridges/bluffs of shale. There are known populations located within the affected area on BLM.
Tufted cryptantha	<i>Cryptantha caespitosa</i>	Type 4	Mid-Elevation Shrub	No – Potential habitat includes sparsely vegetated, shale, clay, gravelly knolls. No known populations on BLM.
Uinta Basin cryptantha	<i>Cryptantha breviflora</i>	Type 3	Mid-Elevation Shrub	Yes – Potential habitat includes dry barren ridges/bluffs of shale and on exposed Limestone. This habitat type is present, however, no know populations are located on BLM.

¹ Type 1 = federally listed, proposed and candidate species; Type 2 = range wide/globally imperiled species - high endangerment; Type 3 = range wide/globally imperiled species - moderate endangerment; Type 4 = species of concern; Type 5 = watch list.

Environmental Consequences:

Alternative A:

Under Alternative A, there are approximately 3 miles of routes that directly intersect with or are within 300 feet of *Cryptantha sericea* and *Astragalus jejunus* populations. These populations have the potential to be crushed by traffic or be subjected to dust impacts which could adversely affect their viability. Disturbance associated with traffic along these motorized routes also have the potential to encourage the spread of noxious weeds which could further affect the populations health through competition. These impacts are most likely to affect individual plants that occur within the footprint or along the edges of the most heavily used routes with impacts becoming far less substantial at greater distances.

Alternative B:

The impacts associated with Alternative B would be similar to those of Alternative A. The overall reduction of routes in this alternative does not change the miles affecting the sensitive plant populations. The same number of miles would intersect with or be located within 300 feet of the same plant populations. However, designation of these routes will likely reduce the number of user-generated, cross-country routes and prevent further disturbance to sensitive plant habitat.

Alternative C:

Under Alternative C, approximately 3.5 miles of designated motorized trail would be removed from the affected areas. This would eliminate 0.7 miles of routes that currently intersect with or are located within 300 feet of *Cryptantha sericea* and *Astragalus jejunus* populations. The nature of the impacts to these populations would be similar to those described under Alternative A, however the potential intensity of the impact to the collective population would be less given the lower number of miles of designated motorized routes and the lesser number of individual plants involved.

Tribal Treaty Rights and Interests

Affected Environment:

The 1868 Fort Bridger Treaty, between the United States and the Shoshone and Bannock Tribes, reserves the Tribes' right to hunt, fish, gather, and exercise other traditional uses and practices on unoccupied federal lands, including those in the eastern semi-arid foothills.

The federal government has a unique trust relationship with federally-recognized Native American Tribes including the Shoshone-Bannock Tribes. BLM has a responsibility and obligation to consider and consult on potential effects to natural resources related to the Tribes' treaty rights or cultural use. Amongst the resources or issues of interest to the Tribes that could have a bearing on their traditional use and/or treaty rights include access to and availability of traditionally used plant and animal species.

Environmental Consequences:

Alternative A:

Under Alternative A, the Tribes would have the maximum amount of access to traditionally used plant and animal species given the current number and distribution of motorized routes.

Alternative B:

Alternative B would result in a reduction of approximately 32 percent in the total mileage of motorized routes in the study area. This reduction would have a slight adverse effect on tribal treaty rights and interests because access to traditionally used plant and animal species would become somewhat more difficult. In some cases, access to these resources may involve parking a vehicle and walking.

Alternative C:

Under Alternative C, a reduction of approximately 58 percent in the total mileage of motorized routes would be adopted. This reduction could have substantial adverse effects on treaty rights and interests because access to traditionally used plants and animals would be restricted, perhaps forcing members of the Tribes to access these resources on foot.

Vegetation

Affected Environment:

The natural vegetation of Bear Lake County, west to east, is comprised of the forests of the Bear River Range, sagebrush steppe of the mountain foothills, sagebrush steppe, marshlands and floodplains of the lowest portions of the Bear Lake basin, the partially forested mountains in Caribou National Forest in the northeast portion of the county and the sagebrush steppe of the Bear Lake plateau on the east. Predominant land uses consist of timber, summer grazing and wildlife habitat at the higher elevations, grazing and wildlife habitat at mid elevations and marshland, irrigated hayland, pasture, rangeland and wildlife habitat at the lowest elevations.

Prominent plant species include, Englemann spruce (*Picea engelmannii*), Douglas-fir (*Pseudotsuga menziesii*), aspen (*Populus tremuloides*) and lodgepole pine (*Pinus contorta*) with mountain shrubs like snowberry (*Symphoricarpos albus*) and serviceberry (*Amelanchier sericea*) at the higher elevations, mountain shrub, sagebrush (*Artemisia tridentata subsp. tridentata, vaseyana*), bluebunch wheatgrass (*Agropyron spicatum*), and Idaho fescue (*Festuca idahoensis*) at mid-elevations and marshland and riparian vegetation, on sites that are sub-irrigated or are situated near stream channels.

The present vegetation of Bear Lake County is a consequence of the development of agricultural fields, roads and housing, as well as the effects of the spread of noxious weeds, wildland fire suppression, off-road vehicle trails and other impacts associated with human activities.

Environmental Consequences:

Alternative A:

Under Alternative A, 210 miles of roads or trails would be designated for motorized use, primarily in the mid-elevations of the study area. The use of these motorized routes would continue and potentially exacerbate the current trend towards increasing erosion and off-site sedimentation, the proliferation of noxious and invasive species and a general decline in the health and vigor of mid-elevation species such as mountain shrub, sagebrush, bluebunch wheatgrass and Idaho fescue.

Alternative B:

Under Alternative B, 142 miles of motorized trails would be designated, a reduction of approximately 32 percent compared to Alternative A. Reducing the amount of roads and trails used for motorized travel would have long-term positive effects on the vegetation resources by allowing vegetation to encroach and re-establish on the bare soil surfaces and develop a new plant cover. A rehabilitated vegetation cover would promote watershed integrity and reduce water and wind erosion on these previously exposed roads and trails.

Alternative C:

Under this alternative, 89 miles of motorized trails would be designated. The closure of 121 miles of roads and trails that are currently open for motorized travel under Alternative A and 68 miles that would be open under Alternative B would benefit vegetation to a greater degree because many more miles of bare ground surfaces would be closed and allowed to develop a healthy plant cover which would reduce erosion potential and greatly promote watershed health.

Water Quality

Affected Environment:

Surface Water

Bear Lake County contains numerous perennial streams which are derived from snowmelt or springs emanating from the highlands surrounding Bear Lake valley. Surface Water Quality concerns within Bear Lake County involve the Bear River and several tributaries.

As the agency responsible for protecting Idaho's surface water, the Idaho Department of Environmental Quality (IDEQ) continually monitors and assesses the quality of the state's rivers, streams, and lakes. This information is used to report to the U.S. Environmental Protection Agency (EPA) and to make decisions regarding water quality management.

The IDEQ's 2008 Integrated Report indicates that many streams in Bear Lake County have water quality that supports the streams beneficial uses (for example, see **Fisheries**). The 2008 report also indicates that there are several stream segments in the county that have impaired water quality as defined by section 303(d) of the Clean Water Act (IDEQ, 2008). Table 4 identifies those streams.

Table 4. 303 (d) listed streams in Bear Lake County.	
Stream Name (Subbasin in bold)	303 (d) Listed Pollutant
Central Bear	
Bear River	Sedimentation/siltation
Pegram Creek	Sedimentation/siltation
Thomas Fork	Sedimentation/siltation

Dry Creek	Sedimentation/siltation, Unknown
Preuss Creek	Sedimentation/siltation
Beaver Creek	Combined biota/Habitat Bioassessments
Sheep Creek	Sedimentation/siltation
Bear Lake	
Bennington Canyon and unnamed Tributaries	Combined biota/Habitat Bioassessments Sedimentation/siltation Cause Unknown
Wood Canyon	Combined biota/Habitat Bioassessments
Dunn's Creek	Cause Unknown
Stauffer Creek	Escherichia coli
Spring Creek	Combined biota/Habitat Bioassessments
Co-op Creek	Sedimentation/siltation Phosphorous
North Creek	Combined biota/Habitat Bioassessments
Emigration Creek	Cause Unknown
Middle Mill Creek	Fecal Coliform
Sleight Canyon	Combined biota/Habitat Bioassessments
Upper Paris Creek	Combined biota/Habitat Bioassessments Fishes Bioassessments Habitat Assessment (Streams) Cause Unknown
Spring Creek	Sedimentation/siltation Cause Unknown
Indian Creek	Sedimentation/siltation
Montpelier Creek	Escherichia coli Sedimentation/siltation
Little Beaver Creek	Escherichia coli
Whiskey Creek	Combined biota/Habitat Bioassessments Escherichia coli Habitat Assessment (Streams) Cause Unknown
Home Canyon	Escherichia coli
Snowslide Creek	Escherichia coli Sedimentation/siltation
Lower Montpelier Creek	Combined biota/Habitat Bioassessments Sedimentation/siltation
Middle Montpelier Creek	Escherichia Coli
Georgetown Creek	Selenium

All pollutants listed above are from non-point sources, that is, no one single location or activity can be identified as the source. Sources of these pollutants found within the watersheds may include surface mining, waste rock piles, streambank modification/

destabilization, irrigated crop production, rangeland (livestock grazing), flow regulation/modification, highway/road/bridge construction, and pastureland treatment. Sedimentation generated from non-point sources such as irrigated crop production, rangeland, pastureland, streambank modification and roads is the primary pollutant of concern, although nutrients from pastureland and cropland can also be of concern.

Under the current management situation approximately 210 miles of routes are available for motorized travel. The current route system has the potential to contribute limited sediment into the waterways within the BLTMP area, mostly from spring runoff and isolated summer thunderstorm events.

Environmental Consequences:

Alternative A:

Surface Water: Impacts to water quality from travel routes are very similar to impacts for the Fisheries section above including potential erosion and subsequent sedimentation into stream channels. In general, most streams within the BLTMP area are listed as having water quality impairments related to sediment/siltation which are likely sourced from private land erosion and habitat conditions (IDEQ 2008)

Travel routes in the BLTMP area have the potential to increase stream sediment inputs from erosion above background levels, and input chemicals produced by vehicle travel to live water and stream habitat. This could increase stream water turbidity and increase potentially toxic chemicals in the water. Thus reducing stream habitat and negatively affecting agricultural and recreational water users downstream on public and private lands.

Alternative B:

Surface Water: Impacts to water quality under Alternative B would be slightly reduced from impacts associated with existing management (Alternative A). Under Alternative B, there would be 68 fewer miles less than existing management. The reduction in road length would decrease the amount erosion and surface water runoff produced on road surfaces. Thus, lessen the potential for sedimentation as well as contamination produced by vehicle travel from entering streams and water ways.

Alternative C:

Surface Water: Impacts to water quality from Alternative C would be significantly less from existing management (Alternative A) and Alternative B. Under Alternative C, there would be 121 fewer miles of motorized routes relative to Alternative A. The alternative would substantially decrease the number of routes and thus potentially reduce the amount of erosion and associated sedimentation running into stream channels and waterways. Closed routes would be revegetated through seeding or through natural processes which

would prevent the erosion of soils and slowing surface water runoff. Thus decreasing sedimentation in streams and waterways located within the BLTMP area.

Wetlands and Riparian Areas

Affected Environment:

The major water bodies within Bear Lake County are the Bear River, its tributaries and Bear Lake. Major tributaries of the Bear River include: Peagram Creek, Sheep Creek, Georgetown Creek, Skinner Creek, Stauffer Creek, Ovid Creek, Paris Creek, and the Thomas Fork River. Major streams that empty into Bear Lake include: Indian Creek, Fish haven Creek, and St. Charles Creek. Major streams that empty into Mud Lake include Bloomington Creek and Paris Creek.

Major impacts to riparian areas in Bear Lake County stem from water diversions for irrigation, road establishment and use, and livestock grazing. Diversions remove water from the systems thereby reducing the size of riparian areas.

Portions of Highway 30 are located in the Bear River floodplain. The river was straightened to allow construction of the highway. This action reduced the amount of riparian habitat associated with the river. On BLM lands, roads across streams, both improved crossing with culverts, and unimproved crossings, remove riparian vegetation and decrease the quantity and quality of riparian habitat.

Livestock grazing on BLM-administered lands generally takes place during the hot season. This intensifies use of the riparian areas because the vegetation remains green and nutritious in the riparian areas. Grazing removes vegetation, can cause bank shearing, and increase sediment loads in streams.

Environmental Consequences:

Alternative A:

There are approximately 8.5 miles of roads, on BLM land, that are within 300 feet of perennial streams. Under this alternative, sediment from routes and vehicle damage to vegetation would reduce the quality and quantity of riparian habitat associated with the streams. Vehicles could also introduce and spread weeds along the streams.

Alternative B:

Although the impacts associated with the implementation of this alternative would be similar to Alternative A, the effect would not be as substantial because 5.8 miles as opposed to 8.5 miles of roads are within 300 feet of perennial streams.

Alternative C:

The nature and intensity of impacts associated with the implementation of this alternative are essentially the same as Alternative B given the similarity of road distances within 300 feet of perennial streams (5.7 miles vs. 5.8 miles).

Wildlife Resources

Affected Environment:

Wildlife in Bear Lake County include: big game species such as mule deer (*Odocoileus hemionus*), elk (*Cervus elaphus*), pronghorn (*Antilocapra Americana*), moose (*Alces alces*), and mountain lions (*Felis concolor*). Upland game birds include: blue grouse (*Dendragapus obscurus*), ruffed grouse (*Bonasa umbellus*), gray partridge (*Perdix perdix*), and mourning doves (*Zenaida macroura*). Small game includes: cottontail rabbits. Other wildlife that inhabit Bear Lake County include fur-bearers, bats, reptiles, and amphibians.

Wildlife habitat in Bear Lake County has been reduced, in both quantity and quality since European settlers have inhabited the county. Habitat has been converted for agricultural purposes, establishment of communities, development of transportation infrastructure, and introduction of invasive species.

Agricultural crop production involves periodic tillage and removes both shrub and herbaceous vegetation used by wildlife. Livestock grazing can remove herbaceous vegetation at critical periods of the year, when it is required by ground nesting birds. Roads and railroads fragment wildlife habitat, introduce invasive plants decreasing the quality of habitat, and cause direct mortality. Infrastructure associated with communities eliminates most wildlife habitat.

BLM managed land in the county has native vegetation that has been impacted by livestock grazing, roads, and introduction of invasive vegetation.

Environmental Consequences:

Alternative A:

Most BLM land in Bear Lake County is classified as big game (deer and elk) winter range. One hundred and seventy-eight miles (175) of the 210 miles of motorized routes proposed for designation in Bear Lake County traverse big game winter range. During the winter, vehicle use, including snowmobiles, can disturb wintering big game. They use energy to move away from the disturbance. Depending on the severity of winter and the fitness of the animal entering winter, they are less likely to survive.

Routes also can potentially increase the incidence of wildland fires which remove shrubs the deer rely on for winter forage. Vehicle use also can spread noxious weeds which decrease the quality of big game winter range.

Alternative B:

Under this alternative, the nature of impacts to big game winter range would be similar to Alternative A. However, they are likely to be somewhat less intensive given that 120 miles rather than 175 miles of designated motorized routes would be located in big game winter range.

Alternative C:

Compared to Alternatives A and B, this alternative would disturb wintering big game the least since only 72 miles of motorized routes proposed for designation would be located in big game winter range.

CHAPTER 4 – CUMULATIVE IMPACTS

This section of the document discloses the incremental impact that the alternatives are likely to have when considered in the context of impacts associated with past, present and reasonably foreseeable future actions that have occurred, or are likely to occur, in the area.

The Cumulative Impact Assessment Area for this analysis includes all lands within Bear Lake County. For all of the resources affected by the alternatives described in this document, Bear Lake County is the landscape unit that defines the bounds of the cumulative analysis.

Past and Present Actions

On the basis of aerial photographic data, BLM and Forest Service records and GIS analysis, the following past and present actions, which have impacted the assessment area to varying degrees, have been identified: agriculture, residential development, road construction and use, livestock grazing, and recreation.

Agriculture

Agricultural development has an extensive history in the area extending back to the earliest settlement days of settlement. Today, irrigated alfalfa and hay production, in addition to some wheat production are the dominant agricultural activities. According to the U.S. Department of Agriculture's National Agricultural Statistics Service, approximately 71, 050 acres or about 11 percent of the county, primarily valley bottoms, is currently under cultivation (USDA 2010).

Residential Development

According to the U. S. Census Bureau, the population of Bear Lake County as of the 2010 census was 5, 986, a decrease of 6.6 percent from 2000 (U.S. Bureau of Commerce 2010). The majority of the population resides in the incorporated towns of Montpelier (pop. 2,350), Paris (the county seat, pop. 483), Georgetown (pop. 464), Bloomington (pop. 229) and St. Charles (pop. 130) with smaller segments of the population residing in the numerous unincorporated hamlets such as Fish Haven, Lanark, Nounan, Ovid, Pegram (amongst others) or making their homes in rural residential lots often tied to ranching or agricultural pursuits. The National Landscape Cover Data Set indicate that residential development of various intensities occurs on approximately 8, 324 acres of the assessment area (USDA 2010).

Road Construction and Use

According to the 2000 U.S. Census data set, there is 1, 372 miles of roads in Bear Lake County or approximately 1.31 miles of road per sq. mi of land area (U.S. Department of Commerce 2001). The types and quality of roads within the county vary widely from State highways, to town streets, to 4WD trails in more rural areas (Table 5).

Table 5. Approximate mileage of roads by road type in the Bear Lake County Assessment Area.	
Road type	Miles
US Hwy, unseparated	86.3
State Hwy, unseparated	14.3
Local, neighborhood, and rural road, city street, unseparated	1027.3
4WD trail, unseparated	205.2
Other thoroughfare	0.49
Driveway	38.4
Total	1,371.99

The great majority of roads in the county are the result of a formal planning, engineering, and construction process, though virtually all of the 4WD trails and some of the rural roads reflect the repeated use of what once pioneered cross-country routes.

The variability apparent in these roads types is reflected in their varied uses. U.S. and highways are typically heavily used for high-speed travel over relatively long distances while more local, neighborhood, and rural roads accommodate less volume at slower speeds. 4WD routes are the least commonly used type of road whose use is typified by very slow travel speeds and traffic volumes that are often associated with recreation uses such as OHV use and hunting.

Livestock grazing

Livestock grazing has a long history in the Bear Lake County area dating back to the late 1800's. Throughout its history, livestock grazing has remained a dispersed activity characterized by localized areas of more intensive use. Today, it remains an important use of the assessment area.

All or parts of the 81 federally administrated allotments are located within the Bear Lake County assessment area. The allotments are used principally for grazing cattle, although a small number of operators graze sheep. May to September or October is the typical season of use. The U.S. Forest Service, Montpelier Ranger District, also manages all or parts of allotments within the Bear Lake County assessment area, primarily in forested, upland settings.

Recreation

The majority of recreation in Bear Lake County assessment area takes places either on Bear Lake or the Caribou-Targhee National Forest. Bear Lake is a major tourist destination with developed campgrounds, time shares, hotels, amenities, which offer many and varied recreational opportunities. Visitor use, which can be characterized as concentrated, includes camping, boating, snowmobiling, and OHVing.

Recreational activity associated with the Caribou-Targhee National Forest can be characterized as relatively dispersed and includes hiking, fishing, boating, camping, backpacking, wildlife viewing, mountain biking, OHV riding, scenic driving, hunting, and photography. These activities occur on both the U.S. Forest Service and BLM lands. The Caribou-Targhee National Forest offers campgrounds in forested settings, numerous trail opportunities, and climatic relief from Bear Lake itself, which gets hot and windy most mid-summer afternoons. Minnetonka Cave and Bloomington Lake are also important tourist attractions.

The number of visitors to the Bear Lake County assessment area has, and will likely continue, to increase. Although data specific to the Bear Lake area were not available, an analysis of statewide trends in outdoor recreation published by the Idaho Department of Parks and Recreation indicates that recreational activities of all types has risen sharply since 2001 (Idaho Department of Parks and Recreation 2010), and it is reasonable to conclude that these trends apply to the Bear Lake assessment area as well.

Reasonably Foreseeable Future Actions

In considering a time frame in which to evaluate reasonably foreseeable future actions, a 10-year timeframe was selected. This timeframe was chosen because it is considered the limit at which we can be reasonably certain of what will occur in the area in the future. All of the past and present actions discussed above are expected to persist through this time frame, though the relative intensity of these actions could vary depending on a variety of economic factors or changes in management direction. Two additional actions, infrastructure development and public land sales, are reasonably foreseeable and are considered below.

Agriculture

Future levels of agricultural activity in the assessment area are tied to the availability of new tracts of land for cultivation, the availability of water, and the commodity price of alfalfa, hay and wheat. At present, there are no known plans to expand agricultural production on privately held lands. If current trends remain consistent, agricultural activity could slowly decline and former agricultural lands will be used for residential and commercial purposes in the foreseeable future.

Residential Development

Despite this fact that the population of Bear Lake County is decreasing, a large increase in new housing units is predicted over the next 10 years. According to projections presented in the U.S. Highway 89 Corridor Plan (2007), over 1,000 new housing units will be constructed within the assessment period during this time frame. The disparity between the decreasing population trend and the increase in housing units is explained by an upward trend in the number seasonal occupants.

Road Construction and Use

While it is reasonably foreseeable that the most of the currently used road system in the assessment area will be maintained, there are no known plans to construct new roads by any federal, state, or municipal entity. It is reasonably foreseeable, however, that there will be an increase in traffic volume based on projected increases on recreational activity.

Livestock Grazing

The intensity and character of livestock grazing is anticipated to remain consistent into the foreseeable future. It is reasonably foreseeable that small-scale range improvements, such as enclosures, troughs, water pipelines, or fences, or adjustments to grazing management, such as alterations in stocking rate or seasons of use could be proposed in support of allotment-specific objectives, on either public or private lands. However, no improvements or alterations to grazing management on federally administered public lands are planned in the immediate future.

Recreation

Given trends of the recent past, recreation activity in the Bear Lake County assessment is likely to increase substantially. A study conducted by the Idaho Department of Parks and Recreation (2010) indicates that recreational activities of various types increased in the 20-30 percent range across the state during the 2006-2010 period. Given this increase, it is reasonably foreseeable that recreational activities in the assessment area could increase in the 40-60 percent range over the next 10 years.

Infrastructural Development

Idaho Power Company and PacifiCorp (Rocky Mountain Power) applied to the BLM for a Right-of-Way (ROW) Grant to use public lands for portions of the Gateway West Transmission Line Project in 2007. The Companies are proposing to construct and operate a new electric transmission system consisting of 11 segments totaling about 1,148 miles of new construction of 230 kilovolt (kV), and 500kV transmission line to supplement existing transmission lines. As proposed, a portion of these lines will traverse the Bear Lake County assessment at a width of between 50 and 100 feet.

Public Land Sales

The BLM plans to disposal of 24 small, isolated parcels of public lands within the assessment area under the *Federal Land Transaction Facilitation Act.* The parcels, which total approximately 650 acres, will be sold in three separate phases. It is reasonably foreseeable that an initial 7 parcels will sold during 2012, with the balance of the parcels disposed of within the next 5 years. It is likely that the majority of the parcels will be used for livestock grazing though a small number of parcels may be developed.

Cumulative Impacts associated with Past, Present, and Reasonably Foreseeable Future Actions

The results of the cumulative analysis indicate that residential and agricultural development on private lands is responsible for the majority of the accumulated effects identified within the assessment area (Table 6). These effects include the direct loss or alteration of native plant communities, increasing levels of erosion and sedimentation, direct and indirect losses and fragmentation of sage grouse, big game and other wildlife species habitat. The projected rapid increase in residential development and recreational activity will add substantially to the collective impact over the next 10 years.

The Contribution of the Alternatives to Cumulative Impacts

Alternative A:

Alternative A or the No Action alternative would continue to contribute incrementally to the collective impact in the assessment area. Taking no action to designate routes that are open or closed to motorized travel would continue to contribute to increasing erosion and sedimentation, displacement and fragmentation in sage grouse habitat and big game winter range, and decreases in the quality of fish habitat. Relative to the assessment area as a whole, these impacts would occur over a relatively small area, nevertheless taking no action would contribute incrementally to the collective impact.

Alternative B:

The implementation of Alternative B would have a minor countervailing effect on the collective impact, because the effects associated with the unplanned, user-defined motorized routes would be reduced by about a third. Impacts associated with the use of motorized routes would still occur, but the rate at which these impacts would accumulate across the Bear Lake County landscape would be slowed. The effect would be minor, however, given the small number of miles of motorized routes closed relative to the impacts that have already occurred within the assessment area.

Alternative C:

Alternative C would also have a countervailing effect on the collective impact because the number of miles of routes that would be closed is the greatest amongst the alternatives. A closure of approximately 60 percent of motorized routes would slow the accumulation of environmental impacts on public lands to a substantial degree; correspondingly slowing the accumulation of impacts across the assessment landscape. Restricting the number of open routes to this degree could, however, result in an acceleration of new pioneered routes that could result in new cumulative environmental impacts that the implementation of this alternative is designed to reduce.

Table 6. Cumulative Impacts Associated with Past, Present and Reasonably Foreseeable Future Actions by Affected Resource.

<i>Resource</i>	<i>Impacts of Past and Present Actions</i>	<i>Impacts of Reasonably Foreseeable Future Actions (RFFAs)</i>	<i>Cumulative Impact</i>
Access	Past and present actions have led to the development of 1,372 miles of access roads of varying types across the assessment area.	Reasonably foreseeable future actions should contribute little to access across the study area.	There are 1,372 miles of access roads across the study area.
Existing and Potential Land Uses	Past and present actions have resulted in the existing lands uses of agriculture, residential development, road construction and use, livestock grazing, and recreation	Over the next ten years, there is likely to be a shift in land uses from grazing and agriculture to uses which more increasingly emphasize residential developments associated with increasing tourism. In addition, a new infrastructural development in the form of the Gateway West transmission line is reasonably foreseeable.	Past and present actions have resulted in the existing lands uses of agriculture, residential development, road construction and use, livestock grazing, and recreation. Over the next ten years, there is likely to be a shift in land uses from grazing and agriculture to uses which more increasingly emphasize residential developments associated with increasing tourism and infrastructural development.
Fisheries	Impacts of past and present action on fish are the same as those described under Threatened, Endangered, and Special Status Fish.	Impacts of Reasonably Foreseeable Future Actions on fish are the same as those described under Threatened, Endangered, and Special Status Fish.	The cumulative impacts to fish are the same as those described under Threatened, Endangered, and Special Status Fish.
Invasive, Non-native Species	Agricultural and residential development has removed vegetation across 79,500 acres and 1,372 linear miles of roads and trails in the assessment area. These disruptions have created gaps in the native vegetation increasing the susceptibility of weed invasion and establishment in the assessment area. In addition, the network of roads	The projected increase in housing units in the assessment area is likely to increase the areal extent of the assessment area that is susceptible to weedy invasion by another 5,000 acres. However, since these are residential developments, it can be expected that homeowners would likely control the spread on weeds on their property. The construction of the Gateway West transmission line could increase the susceptibility of weed invasion across its proposed right of way, though it	An increase in the susceptibility of weed invasion has occurred on approximately 79,500 acres and 1,372 linear of the assessment area. It is possible that the construction of the Gateway West transmission line and future public land sales could contribute further to the spread of weeds.

Table 6. Cumulative Impacts Associated with Past, Present and Reasonably Foreseeable Future Actions by Affected Resource.

<i>Resource</i>	<i>Impacts of Past and Present Actions</i>	<i>Impacts of Reasonably Foreseeable Future Actions (RFFAs)</i>	<i>Cumulative Impact</i>
	<p>and trails has further exacerbated the spread of weeds in the assessment area.</p> <p>Past and present grazing activities has also led to an increase in weed populations on public and private lands.</p>	<p>would be the responsibility of the proponent to monitor and treat weeds as a ROW term and condition.</p> <p>Future public lands sales could contribute to the future spread of weeds if the buyers do not monitor and treat weeds on their new holdings.</p>	
Migratory Birds	<p>Agricultural and residential development has removed shrubs used by migratory birds for nesting and foraging across 79,500 acres and 1,372 linear miles of roads in the assessment area.</p> <p>The herbaceous vegetation in farmed areas also is highly altered. When only one species (wheat or alfalfa) is grown, the species diversity of insects is reduced, decreasing the forage base for some species of migratory birds. These decreases have reduced the nesting habitat and the forage base for some species of migratory birds. These effects have likely reduced local populations.</p>	<p>The reasonably foreseeable increase in housing units is likely to reduce nesting and foraging habitats by 5,000 acres.</p>	<p>Past, present, and reasonably foreseeable future actions are likely to result in the loss of nesting and foraging habitat across approximately 84, 500 acres of the assessment area. These losses are likely to reduce migratory bird populations across this area.</p>
Range Resources	<p>Agricultural and residential development of 79,500 acres of the original grassland – shrub land – forest environment</p>	<p>The projected increase in housing units may impact some of the assessment area’s rangelands, but probably not the full extent of 5,000 acres.</p>	<p>The cumulative impacts to the range resources and grazing capacity of the assessment area, potentially up to about 84,500 acres, would be a small,</p>

Table 6. Cumulative Impacts Associated with Past, Present and Reasonably Foreseeable Future Actions by Affected Resource.

<i>Resource</i>	<i>Impacts of Past and Present Actions</i>	<i>Impacts of Reasonably Foreseeable Future Actions (RFFAs)</i>	<i>Cumulative Impact</i>
	<p>presently supports about 26,500 cattle, including 7,378 cattle permitted on BLM allotments and about 6,066 county-resident sheep of the 21,160 sheep permitted on BLM allotments (2007 Ag Census).</p> <p>About 210 miles of assessment area's 1,372 miles, access BLM public lands.</p>	<p>Under the proposed FLTFA land disposal in Bear Lake County, seven BLM parcel (355 acres) may be taken out of BLM jurisdiction. However, the parcels are inaccessible to the public, completely surrounded by private lands with no feeder roads or trails and are isolated from the current 210 miles of access.</p>	<p>incremental decrease in the number of livestock grazing on public lands within the assessment area or no change at all.</p>
Recreational Use	<p>Past and present action has had relatively little impact on recreation because the great majority of these actions have occurred on private land to which the general public would not normally have access.</p> <p>Past and present grazing activity has created some conflicts between recreationist and cattle. Road construction have both facilitated and been the product of past and present recreational activity.</p>	<p>Reasonably foreseeable future actions not have a substantial effect on recreation either because most action will occur on private lands where access is limited. However, future residential development will facilitate recreation in the area because, for the most part, these developments will occur to improve access to recreational opportunities.</p>	<p>Past, present and reasonably foreseeable future actions will have relatively little impact on recreation. Future residential development will facilitate recreational activity by providing improved access to recreational opportunity.</p> <p>Livestock grazing could create minor conflicts with recreationists.</p>
Soils	<p>Agricultural and residential development has removed the protective vegetative cover on about 79,500 acres of the assessment area. An additional portion of the assessment area has developed into roads and trails comprised of about 1,372 linear miles. Impacted areas are</p>	<p>The projected increase in housing units is likely to increase the areal extent of disturbed soils on about 5,000 acres of the assessment area.</p> <p>Any additional roads or trails will increase the length of area's transportation corridor with corresponding decreases in infiltration and increases in erosion, runoff and sedimentation.</p>	<p>Approximately 84,500 acres of surface soils in the assessment area have been disturbed resulting in increased erosion, runoff and sedimentation.</p>

Table 6. Cumulative Impacts Associated with Past, Present and Reasonably Foreseeable Future Actions by Affected Resource.

<i>Resource</i>	<i>Impacts of Past and Present Actions</i>	<i>Impacts of Reasonably Foreseeable Future Actions (RFFAs)</i>	<i>Cumulative Impact</i>
	susceptible to decreased infiltration of precipitation and increases in erosion, runoff and sedimentation.		
Threatened, Endangered and Sensitive Animals	Agricultural and residential development has removed shrubs used by sage-grouse and pygmy rabbits across 79,500 acres and 1,372 linear miles of roads in the assessment area. Alfalfa fields provide foraging areas for sage-grouse broods, but pygmy rabbits require sagebrush grasslands year long. Roads remove habitat and fragment remaining habitat. These effects have likely reduced local populations.	The reasonably foreseeable increase in housing units is likely to reduce nesting habitat for a sage-grouse and foraging habitats for grouse and pygmy rabbits by 5,000 acres. Construction of the Gateway Transmission line would bisect sage-grouse habitat. Sage-grouse use of habitats by tall structures is reduced.	Past, present, and reasonably foreseeable future actions has resulted or is likely to result in the loss of habitat across approximately 84, 500 acres of the assessment area. These losses are likely to reduce sage-grouse and pygmy rabbits population across this area.
Threatened, Endangered and Sensitive Fish	Agricultural and residential development has taken place across 79,500 acres and 1,372 linear miles of roads in the assessment area. Road derived sediments in stream gravel have been linked to decreased fry emergence, decreased juvenile densities, loss of winter carrying capacities, increased predation of fishes, and reduced benthic organism populations and algal production. Irrigated agriculture also de-waters streams which reduces the amount of habitat and increases water temperature in streams. Rainbow trout have	The reasonably foreseeable increase in housing units (5000 acres) will increase sediment delivered to streams in the assessment area. The Idaho Department of Fish & Game plans to stock sterile rainbow trout where populations of cutthroat trout exist. This will reduce the interbreeding between rainbow and cutthroat trout.	Past, present, and reasonably foreseeable future action are likely to result in the loss of habitat across approximately 84, 500 acres of the assessment area. Most of the additional housing is expected to take place on the west side of Bear Lake near sensitive fish habitat impacts to sensitive fish would increase in the future.

Table 6. Cumulative Impacts Associated with Past, Present and Reasonably Foreseeable Future Actions by Affected Resource.

<i>Resource</i>	<i>Impacts of Past and Present Actions</i>	<i>Impacts of Reasonably Foreseeable Future Actions (RFFAs)</i>	<i>Cumulative Impact</i>
	been introduced to provide recreational angling and have interbred with cutthroat trout. The impacts have reduced sensitive fish populations in the assessment area.		
Threatened, Endangered and Sensitive Plants	It is likely that past and present actions have led to a decrease in sensitive plant habitat due to an increase in recreational, agricultural and residential development. Many of these sensitive plants have only recently been inventoried; however, loss of overall natural vegetation communities has occurred. Much of the sensitive plant habitat occurs on the Bear Lake Plateau where an increase in roads and trails has led to fragmentation of populations and loss of individual plants.	For the most part, reasonably foreseeable future actions should have relatively little effect on sensitive plants because there will be little increase in the intensity of the various activities. However, future residential development and increases in the level of recreation in the area has the potential impact sensitive plants where they occur.	Future residential development and increases in the level of recreation in the area has the potential impact sensitive plants where they occur.
Tribal Treaty Rights and Interests	Past and present actions have resulted in decreasing access to and decreasing numbers of plants and animals that the Tribes use to exercise their reserved rights under the Ft. Bridger Treaty.	Reasonably foreseeable land sales will further limit the Tribes ability to access resources to which they have a right under the Ft. Bridger Treaty.	Past, present, and reasonably foreseeable future actions have resulted in a decrease in access to and quantity of resources that the tribes use to exercise their reserved treaty rights.
Vegetation	Past and present agricultural and residential development have resulted in either the transformation of natural vegetative communities with cultigens or displaced these	Assuming 5-acre lots, the future development of approximately 1,000 housing units will result in an alteration from natural vegetative communities to domestic grasses and shrubs on as many as 5, 000 acres.	Past, present, and reasonably foreseeable future actions have resulted or will result in the transformation or alternation of natural vegetative communities across approximately 84,500 acres of the assessment area.

Table 6. Cumulative Impacts Associated with Past, Present and Reasonably Foreseeable Future Actions by Affected Resource.

<i>Resource</i>	<i>Impacts of Past and Present Actions</i>	<i>Impacts of Reasonably Foreseeable Future Actions (RFFAs)</i>	<i>Cumulative Impact</i>
	communities across approximately 79,500 acres or about 12 percent of the assessment area. These losses or alterations have been compounded by road construction which have altered or destroyed vegetation across approximately 1,372 linear miles.		
Water Quality	Past and present agricultural residential, and road development has resulted in impacts to water quality. Development of 71,050 of agricultural lands has contributed to soil erosion and sedimentation in areas where natural vegetation communities have been removed. Use of fertilizers near streams in the region has also contributed to overabundance of biota in water ways. The development of approximately 8,324 acres of residential areas and 1,372 miles of roadway has contributed to surface water runoff and soil erosion. Surface water runoff on road ways has carried chemicals produced by vehicle travel into waterways of the region.	Assuming 5-acre lots, the future development of approximately 1,000 housing units will result in an increase in surface water runoff, soil erosion, and sedimentation in areas where surface disturbance has occurred and natural vegetative communities have been removed.	Past, Present, and reasonably foreseeable future actions will create a total of approximately 84, 500 acres of surface disturbance. This will result in an increase in soil erosion and surface water runoff which contribute to sedimentation and turbidity of streams.
Wetlands and Riparian Zones	Agricultural and residential development has taken place across 79,500 acres and 1,372	The reasonably foreseeable increase in housing units (5000 acres) will cause additional impacts to riparian areas	Past, present, and reasonably foreseeable future action (development of 84,500 acres) are likely to result in

Table 6. Cumulative Impacts Associated with Past, Present and Reasonably Foreseeable Future Actions by Affected Resource.

<i>Resource</i>	<i>Impacts of Past and Present Actions</i>	<i>Impacts of Reasonably Foreseeable Future Actions (RFFAs)</i>	<i>Cumulative Impact</i>
	linear miles of roads in the assessment area. Livestock grazing reduces vegetative cover in riparian areas, adding sediment and increasing water temperature. Irrigation removes water from the stream which exacerbates sediment problems. Roads reduce the amount of riparian vegetation, increase sediment in streams, and increase stream alterations to allow road placement. The health of riparian areas is decreased by these actions.		the loss or degradation of riparian areas across the assessment area.
Wildlife	Agricultural and residential development has taken place across 79,500 acres and 1,372 linear miles of roads in the assessment area. Most of these areas were once big game winter range. These developments reduce the amount of winter habitat available to big game by removing shrubs and by increasing the disturbances in the areas. The number of animals that these winter ranges can support has been reduced.	The reasonably foreseeable increase in housing units (5,000 acres) will cause additional impacts to big game winter range.	Past, present and reasonably foreseeable future action (development of 84,500 acres) is likely to result in the loss or degradation of big game winter ranges across the assessment area.

CHAPTER 5 - CONSULTATION AND COORDINATION

A summary description of the proposed project was made available to the public on the Idaho BLM's internet site in November 2009 and March 2011, at public meetings in Logan, Utah, Fish Haven, Idaho, and Montpelier, Idaho, which gives the public the opportunity to provide comments or consult on the action. Staff to Staff meetings took place between the Shoshone-Bannock Tribes and the Pocatello Field. The Idaho Department of Fish and Game was actively involved in providing recommendations in the development of the proposed project.

LIST OF PREPARERS

Name	Title	Resource
William Limbach	Range Specialist	Range, Farmlands, Soils, Vegetation, Wild Horse/Burro, Invasive/Non-Native Species
Heather Worley	Forestry Technican	T&E Plants
James Kumm	Wildlife Biologist	T&E Animals, T&E Fish, Wetlands, Riparian Areas, Migratory Birds, Wildlife
Amy Lapp	Archeologist	Cultural Resource, Native American Religious Concerns, Tribal Treaty Rights and Interests.
Charles Patterson	Outdoor Recreation Planner	Access, ACEC, Economic Social Values, Environmental Justice, Existing Land Uses, Recreation, Visual Resources, Wild & Scenic Rivers, Wilderness, Wildlands.
Bryce Anderson	Geologist	Flood Plains, Minerals, Paleontology, Wastes/Hazards/Solids, Water Quality
Brain Holmes	GIS	Map productions and GIS technical support.

/s/Charles Patterson 7/15/11
 (Preparer) Date

/s/ Mark J. Ennes 7/15/11
 (NEPA Reviewer) Date

REFERENCES CITED

- Cook, Jeff. 2007. *Idaho Motorbike/ATV Registration Statistics 2002-2006*. IDPR Recreation Registration Information System.
- Cravens, Dan 2011. Bear Lake County Work Force Trends, Idaho Department of Labor. Labor.idaho.gov
- Forman, Richard T.T., Bjorn Reineking and Anna M. Hersperger, 2002. Road traffic and nearby Grassland Bird Patterns in a Suburbanized Landscape. *Environmental Management* 29 (6), pp. 782-800.
- Francis T. Achana, 2004. The 2004 Outdoor Recreational Needs Assessment - Idaho Recreational Activities by Place of Residence. IDPR Regional Participation Rates publication.
- Idaho Department of Parks and Recreation, 2010. Research Analysis. Statewide trends in Outdoor Recreation.
<http://parksandrecreation.idaho.gov/assets/content/docs/Comp%20Planning/Trends%20In%20Recreation%202006-2010%20SCORTP.pdf>.
- Idaho Department of Environmental Quality (IDEQ) 2008. Idaho Department of Environmental Quality, Final 2008 Integrated Report.
- Idaho Department of Environmental Quality (IDEQ), 2010 website:
http://www.deq.state.id.us/water/data_reports/surface_water/monitoring/parameters.cfm#bact
- Idaho Sage-grouse Advisory Committee. 2006. Conservation Plan for the Greater Sage-grouse in Idaho.
- Ingelfinger, Franz and Stanley Anderson, 2004. Passerine Response to Roads associated with Natural Gas Extraction in a Sagebrush Steppe Habitat. *Western North American Naturalist* 64(3), pp. 385-395.
- Lee, W.H., 2000. A History of Phosphate Mining in Southeastern Idaho: U.S. Department of the Interior and U.S. Geological Survey open file report 00-425.
- Mansfield, G.R., 1927. Geography, Geology, and Mineral Resources of Part of Southeastern Idaho: United State Geologic Survey, Professional Paper 152.
- Mitchell, V.E., et al, 1981. Mines and Prospects of the Preston Quadrangle, Idaho: Idaho Department of Lands Bureau of Mines and Geology, Moscow, Idaho.
- U.S. Department of Commerce, Census Bureau 2010. State and County Quickfacts – Bear Lake County, Idaho.
<http://quickfacts.census.gov/qfd/states/16/16007.html>).

U.S. Department of Commerce, Census Bureau, Geography Department 2001. Roads 100k, Redistricting Census 2000. Vector digital data, TIGER/Line files.

United States Department of Agriculture, Caribou-Targhee National Forest, Montpelier Ranger District. 2009. Fish Haven Landscape Assessment.

United States Department of Agriculture, Natural Resources Conservation Service. 2010. Soil Survey of Bear Lake County Area, Idaho.

U.S. Department of Agriculture, National Agriculture Statistics Service 2010. Cropscape – Cropland Data Layer. <http://nassgeodata.gmu.edu/CropScape/>).

U.S. Department of Interior, Bureau of Land Management 2008. Proposed Fire, Fuels, and Related Vegetation Management Direction Plan Amendment and Final Environmental Impact Statement. Idaho Falls and Twin Falls Districts, Bureau of Land Management.

U.S. Department of the Interior, Bureau of Land Management, 1995. The BLM Interim Management Policy and Guidelines for Lands under Wilderness Review (IMP), H-8550-1.

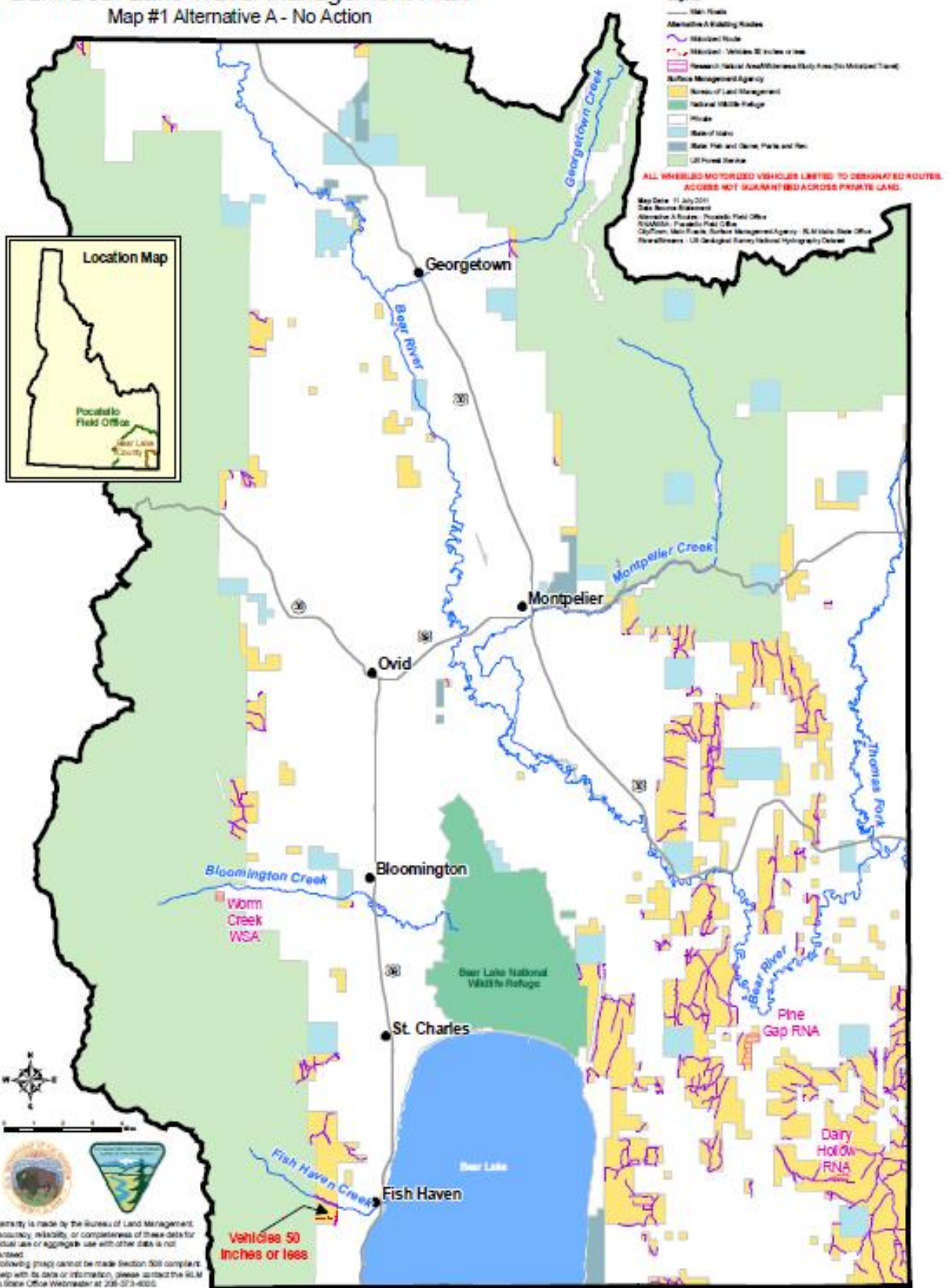
U.S. Department of Interior, Bureau of Land Management 1988. Pocatello Resource Management Plan and Environmental Impact Statement: Bureau of Land Management, Idaho Falls District.

APPENDIX A

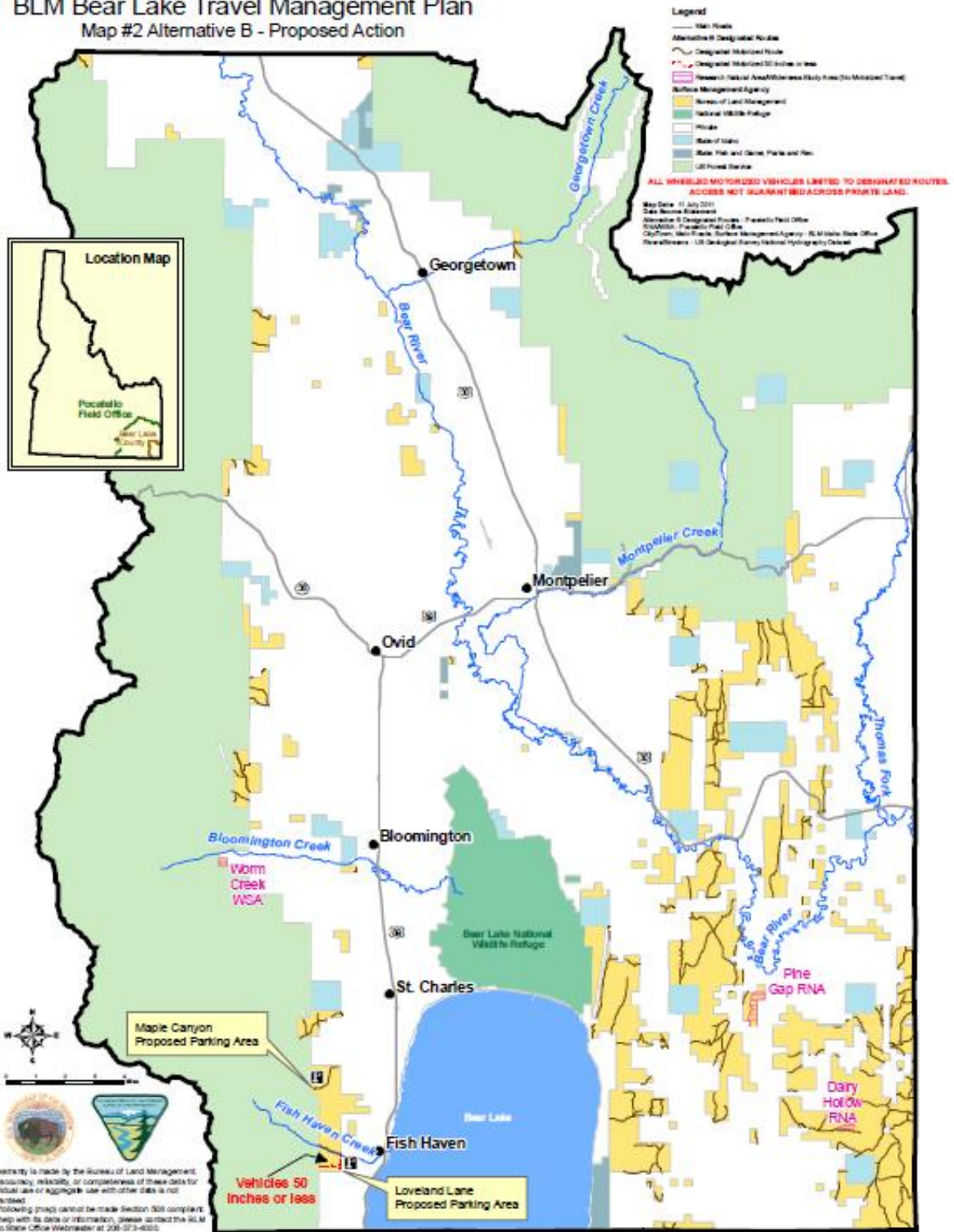
MAPS

BLM Bear Lake Travel Management Plan

Map #1 Alternative A - No Action



BLM Bear Lake Travel Management Plan Map #2 Alternative B - Proposed Action



BLM Bear Lake Travel Management Plan

Map #3 Alternative C - Resource Protection

