# CHAPTER 4

# ENVIRONMENTAL CONSEQUENCES

## INTRODUCTION

This chapter presents the environmental consequences of management actions described in Chapter 2. Both beneficial and adverse effects (impacts) are described.

Assumptions used in analyzing the environmental consequences are described in this chapter and are based on previous events, experience of personnel, and knowledge of the resources in the planning area.

Impacts described in this chapter are estimates based on the alternatives. In some cases, existing data were used; in others, very little data were available. Lack of data has contributed a degree of uncertainty to the impact estimates. The alternatives, however, include professional judgments and projections of anticipated actions and levels that provide an adequate and reasonable range for analysis.

This chapter addresses impacts to all resource elements for each particular alternative. As in Chapter 2, the impacts related to the Proposed Plan are listed first. Actions Common to All Alternatives are taken into account in analyzing the impacts for each alternative. In addition, impact causes and relationships common to all alternatives are included within this analysis.

For the purpose of analysis, short-term impacts described in this document are those that would last less than 10 years; long-term impacts would last 10 years or more. Irreversible or irretrievable commitments of resources and unavoidable adverse effects are discussed in the analysis if they would occur. Similarly, effects on a given environmental component caused by a particular management action are discussed if they would occur. Otherwise, such effects are not discussed.

The following resources are not present in the planning area and are not addressed in this RMP EIS: Prime and Unique Farmlands, Wilderness, Wild Horses, and Forestry (marketable timber). In addition, no areas have been determined to meet the criteria for designation as Areas of Critical Environmental Concern or other special management area designation.

## ASSUMPTIONS AND ASSESSMENT GUIDELINES

Assumptions used for analysis of environmental consequences are listed in Table 4-1.

**TABLE 4-1**
**ASSUMPTIONS FOR ANALYSIS BY ALTERNATIVE**

| LAND USE OR RESOURCE | PROPOSED PLAN | NO ACTION CURRENT MANAGEMENT ALTERNATIVE A | ALTERNATIVE B | ALTERNATIVE C | ALTERNATIVE D | ALTERNATIVE E |
|---|---|---|---|---|---|---|
| **AIR QUALITY MANAGEMENT** | Cooperation with USDA Forest Service, DEQ, and EPA on monitoring for acid rain and its impacts on the Class I airshed of affected wilderness areas would continue at the 8 NADP stations in Wyoming, and at the lake chemistry sampling sites in the Bridger and other wildernesses. | | | | | |
| | The Interagency Monitoring of Protected Visual Environments (IMPROVE) program would be continued at the 4 IMPROVE stations in Wyoming and at WDEQ visibility stations. | | | | | |
| | The Wyoming Department of Environmental Quality, Air Quality Division would monitor and enforce compliance with Wyoming air quality regulations. | | | | | |
| **CULTURAL AND NATURAL HISTORY RESOURCES MANAGEMENT** | Preserved prehistoric cultural resource sites are rare in the Snake River corridor because of the recent age of the floodplain deposits and sediments. Sites may be more common on public lands outside the levees and on higher lands away from the river. | | | | | |
| | All cultural resources may be lost to effective management if transfer out of Federal ownership occurs. However, Class III cultural resource inventory and National Register evaluation would precede any potential transfers. | | | | | |
| **FIRE MANAGEMENT** | Most wildfires on public lands could burn 5 acres or less before being suppressed. | | | | | |
| | Prescribed fire would not be used. | | | | | |
| **LANDS AND REALTY MANAGEMENT** | Interest in protecting open spaces through the use of conservation easements would increase. | | | | | |
| ***Conservation Easements*** | The use of conservation easements would probably not be necessary as public entities would acquire the lands, retain them, and agree to manage them according to BLM management prescriptions. | Same as Proposed Plan. | Any parcels sold to private individuals could be developed in the future, as no conservation easements would be retained. | Parcels sold or transferred from BLM ownership would not be developed, as conservation easements would be retained. | Same as Alternative B. | Same as Alternative C. |
| ***Land Ownership Adjustment*** | Consultation would be conducted with the USFWS prior to finalizing any parcel transfer in accordance with Section 7 of the Endangered Species Act. | | | | | |
| | Private demand to purchase the parcels is high. Government agencies are interested in some parcels, but not all of them. Some entities, including Teton County, are interested in the parcels in order to extract gravel. | | | | | |

| TABLE 4-1<br>ASSUMPTIONS FOR ANALYSIS BY ALTERNATIVE | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **LANDS AND REALTY MANAGEMENT (Continued)**<br><br>***Land Ownership Adjustment* (Continued)** | All the public land parcels would be transferred to other government or public agencies. The parcels would be retained by those agencies or entities and managed for public access, recreation, open space, and wildlife habitat. | Most of the public land parcels would remain in BLM ownership. A few parcels could be transferred to other local, state, or Federal agencies or sold to private individuals. Transfer or sale of the parcels would be conducted only if public benefits would ensue. | Same as Alternative A. | Same as Alternative A. | All the public land parcels would be transferred or sold out of BLM ownership. The likelihood is high that the parcels would end up in private ownership even if initially transferred to other government agencies. | Same as Alternative A. |
| | Other government or public agencies or entities could be found to acquire all the parcels and agree to retain them in public ownership and manage them for public access, recreation, open space, and wildlife habitat. | Most of the public land parcels would be retained by the BLM. | Same as Alternative A. | Same as Alternative A. | Most or all of the parcels would end up in private ownership, and be closed to public access. Some would be developed as home sites. | Same as Alternative A. |
| **LIVESTOCK GRAZING MANAGEMENT** | Actual use by livestock on public lands in the planning area was 300 AUMs during the 1999 base year for analysis. | | | | | |

| TABLE 4-1<br>ASSUMPTIONS FOR ANALYSIS BY ALTERNATIVE | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **LIVESTOCK GRAZING MANAGEMENT (Continued)** | Livestock grazing may or may not be allowed by the entities that acquire the parcels. | The estimated livestock grazing use on public lands in the planning area would be about 300 AUMs annually. | Livestock grazing use on public lands could increase to about 600 AUMs annually if grazing were permitted on all BLM parcels. | No AUMs would be used for livestock grazing. | The public or private parties that acquire the parcels would not allow livestock grazing. | The estimated livestock grazing use on public lands in the planning area would be about 300 AUMs annually, or less if some leases are cancelled. |
| | The elk feedground at South Park, and high populations of elk within the Snake River corridor, could present a brucellosis risk to livestock on public lands. | Same as Proposed Plan. | Same as Proposed Plan. | This would not affect public lands management, as there would be no livestock grazing. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Weed treatments could improve forage for livestock on public land. | Same as Proposed Plan. | Same as Proposed Plan. | No similar effect, as no livestock grazing would be permitted. | Same as Proposed Plan. | Same as Proposed Plan. |
| **MINERALS MANAGEMENT**<br><br>***Geothermal*** | No geothermal development is anticipated. | | | | | |
| ***Locatable Minerals*** | The potential for occurrence of economically viable locatable mineral deposits is low, although there are small amounts of flour gold in the Snake River. | Same as Proposed Plan. | Same as Proposed Plan; there could be some small-scale recreational gold panning in the Snake River. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |

| TABLE 4-1<br>ASSUMPTIONS FOR ANALYSIS BY ALTERNATIVE | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **MINERALS MANAGEMENT (Continued)**<br><br>***Oil and Gas*** | Public lands and mineral estate would not be leased for oil and gas exploration and development. | Same as Proposed Plan. | Public lands outside the Snake River corridor could be leased for oil and gas exploration and development with the result that 1 or 2 exploratory wells may be drilled during the analysis period. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| | All federal mineral estate would be retained in federal ownership. | | | | | |
| ***Salable Minerals*** | The demand for sand and gravel in the planning area (on lands of all ownership) would likely increase during the analysis period because of the county's high growth rate and construction and maintenance needs. | | | | | |
| | During the analysis period, the demand for sand and gravel in the planning area (on lands of all ownership) would exceed 500,000 cubic yards per year. | | | | | |
| | If the demand for sand and gravel exceeds local supply, road construction costs would increase because of the greater haul distances involved. | | | | | |
| | The COE would continue to obtain sand, gravel, and riprap, from public lands for levee maintenance. The Snake River Restoration project, now in the planning stage, would begin in 2003. | Same as Proposed Plan. | Same as Proposed Plan. | No gravel would be extracted from federal mineral estate for any purpose. | Same as Proposed Plan. | Same as Proposed Plan. |
| **MISCELLANEOUS LAND USES** | Protective measures would be applied to public land parcels as conditions of land and resource use to (a) minimize soil movement; (b) minimize disturbance of vegetation in sensitive areas such as riparian areas; (c) protect important cultural and paleontological resources, recreational values, and wildlife resources; and (d) protect visual quality. | | | | | |

**TABLE 4-1**
**ASSUMPTIONS FOR ANALYSIS BY ALTERNATIVE**

| LAND USE OR RESOURCE | PROPOSED PLAN | NO ACTION CURRENT MANAGEMENT ALTERNATIVE A | ALTERNATIVE B | ALTERNATIVE C | ALTERNATIVE D | ALTERNATIVE E |
|---|---|---|---|---|---|---|
| **REASONABLY FORSEEABLE DEVELOPMENT** | No development of leasable minerals on split estate would occur in the foreseeable future. | | | | | |
| | No locatable mineral development would take place. | Development of locatable minerals on federal mineral estate would be minimal in the areas where it is permitted. | Same as Alternative A. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| **RECREATION MANAGEMENT** | During the analysis period, growth in the demand for recreation in the planning area is expected to increase. | | | | | |
| | The allocation of use by other federal agencies would impact or affect the recreational demand for use of BLM-administered lands. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | There would be no recreational access to the parcels after transfer or sale. | Same as Proposed Plan. |
| | BLM regulations would not apply after parcel transfer. | BLM regulation and policy require management of recreation use to protect natural resources and public health. | Same as Alternative A. | Same as Alternative A. | BLM regulations would not apply after parcel sale. | Same as Alternative A. |
| **SOCIOECONOMIC FACTORS AFFECTING LAND USES** | The resident population of Teton County in 2000 was about 18,251 (Census 2000, Jackson Hole News, 3/28/2001). | | | | | |
| | The majority of county residents live within the Snake River RMP EIS planning area boundaries. | | | | | |
| **VEGETATION MANAGEMENT** | During the 1999 base year for analysis, noxious weeds occurred on all the public land parcels. | | | | | |
| | Flooding, sufficient to cause cottonwoods to regenerate by seed, would not occur on most public lands in the Snake River corridor. | | | | | |
| | Weed treatments should improve forage production. | | | | | |
| | Activities associated with levee maintenance and construction could increase the spread of noxious weeds. | | | | | |

| TABLE 4-1<br>ASSUMPTIONS FOR ANALYSIS BY ALTERNATIVE | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VISUAL RESOURCE MANAGEMENT** | Interest in protecting open spaces through the use of conservation easements should increase during the analysis period. | | | | | |
| **WATERSHED MANAGEMENT** | Levees would continue to be maintained. New levee construction could occur on about 9 miles of privately owned riverbank during the analysis period. | | | | | |
| | The Snake River levee system would continue to cause erosion in the river bed and along the banks by concentrating the flow of water in a small channel and increasing the river's velocity. The BLM-administered public lands in the river corridor would continue to change in size and shape because of erosion and deposition and channel movement. | | | | | |
| **WILDLIFE AND FISH HABITAT MANAGEMENT** | Weed treatments should improve forage production. | | | | | |
| | All wildlife species react to human interaction. The level of reaction, e.g., internal stress, flush/flee, and the physical distance at which a reaction will occur is a function of the species and/or the individual animal. | | | | | |
| | Riparian habitats typically contain a disproportionate number of plant and animal species compared to other vegetative communities. Maintaining riparian areas in a properly functioning condition would stabilize watersheds and maintain wildlife associated with riparian areas. | | | | | |
| | The lands would no longer be subject to the Wyoming Standards for Healthy Rangelands after transfer or sale. | Meeting the Wyoming Standards for Healthy Rangelands is intended to maintain or improve biological and structural diversity in vegetative communities. Meeting these objectives should, in turn, maintain or improve the biological diversity of wildlife. | Same as Alternative A. | Same as Alternative A. | Same as Proposed Plan. | Same as Alternative A. |

| TABLE 4-1<br>ASSUMPTIONS FOR ANALYSIS BY ALTERNATIVE | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT MANAGEMENT (Continued)** | Human presence on accessible parcels would increase. Human presence on isolated would remain low. | Human presence on accessible parcels would increase. | Human presence on accessible parcels would increase. Human presence on isolated parcels that may be transferred or sold would remain low. | Same as Alternative B. | Human presence on the parcels would be reduced as they are sold into private ownership. | Same as Alternative B. |
| | Parcels would be retained for public use and not developed. | Parcels would not be developed unless wildlife impacts could be mitigated. | Development may occur on isolated parcels that may be transferred or sold. | Same as Proposed Plan. | Development activity may occur on the parcels after sale into private ownership. | Same as Alternative B. |

## IMPACT ANALYSIS

The comparative analysis of environmental consequences of the alternatives is found in Table 4-2.

For the Proposed Plan and Alternative D, the impact analysis is focused on those impacts that would occur after the parcels are transferred or sold out of BLM ownership.

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **AIR QUALITY MANAGEMENT** | Noise and airborne dust would result from the use of motorized vehicles along levees and at the Wilson Bridge boat and river access site, and from the mining of sand and gravel. | Same as Proposed Plan. | Same as Proposed Plan. | Compared to the Proposed Plan, noise and dust would be reduced. Some noise and dust could be generated by vehicles transporting sand and gravel into the planning area from other areas. | Compared to the Proposed Plan, noise and dust could be reduced since public vehicle access to the river could be lost. However, uses by future landowners may cause similar impacts. | Same as Proposed Plan. |
| | Noise, dust, and vehicle emissions would be increased by truck traffic on highways if it is necessary to haul gravel in from outside the valley. | Same as Proposed Plan. | This impact would be less, as more gravel would be available from the public lands. | This impact could be greater, as no gravel would be available from the public lands in the planning area. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Noise and dust would increase if additional river access or recreation sites were developed. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. | No similar impact. | Same as Proposed Plan. |
| | The effects of noise and dust would be local and temporary, lasting a few minutes as vehicles travel along levees, and during periods of active sand and gravel mining. | Same as Proposed Plan. | Same as Proposed Plan. | The relatively minor effects of noise and dust would be local and temporary. There would be no dust or noise generated from sand and gravel mining. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Smoke from campfires at primitive campgrounds would affect air quality on a local basis during the summer. | No similar impact, as there would be no camping on BLM parcels under this alternative. | Same as Proposed Plan. | Same as Alternative A. | Same as Alternative A. | Same as Proposed Plan. |
| **CULTURAL AND NATURAL HISTORY RESOURCES** | Permits issued for the scientific study of cultural resources on public lands would ensure that important sites are protected and new scientific information is made available to the public. | | | | | |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **CULTURAL AND NATURAL HISTORY RESOURCES** | There would be no adverse effects on **identified** significant cultural or natural history resources from the sale, exchange, or transfer of public lands. Any **unidentified** significant cultural or natural history resources could suffer adverse effects from the sale, exchange or transfer of public lands. | | | | | |
| | The inventory and protection of cultural resources would prevent unintentional damage to these resources from surface-disturbing activities. New information about these resources would be acquired through detailed inventories. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | The required inventory and study of cultural resources before parcel sale would add time and expense to the disposal of the parcels. New information about these resources would be acquired through detailed inventories. | Same as Proposed Plan. |
| | The use of minimum-impact suppression techniques for fighting wildfires would protect some cultural resources from surface-disturbing activities. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. | Same as Proposed Plan. |
| | Inventories conducted for proposed surface-disturbing activities or proposed land transfers out of Federal ownership would identify any potentially threatened sites. Significant sites would be either avoided or mitigated as appropriate. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. The potential for discovery of significant sites would be lost when the parcels are sold. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **CULTURAL AND NATURAL HISTORY RESOURCES (Continued)** | Interpretive signs could increase public appreciation for, and the protection of, cultural resources, if used by the acquiring agencies and/or entities. | No similar impact. | The use of interpretive signs could increase public appreciation for, and the protection of, rare and sensitive resources. | Compared to Alternative B, the beneficial effects could be greater because of the added emphasis on interpretive signs. | No similar impact. | Same as Proposed Plan. |
| | Sporadic unauthorized collection of cultural resources would take place. Inventories conducted for proposed surface-disturbing activities would mitigate the loss of data to some extent. Unauthorized collection will always result in some loss of data. | Same as Proposed Plan. | Compared to the Proposed Plan, greater visitor use associated with river floating and visits to recreational sites would increase the potential for unauthorized collecting. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| **FIRE MANAGEMENT** | There would be some potential for wildfires due to human activities on the public land parcels. | There would be more potential for wildfires because the area is open to OHV use. | Same as Alternative A. | Potential for wildfires from unauthorized camping would be reduced. | The risk of wildfires from human activities would be lessened, as public access is lost; however, the activities of future landowners could also lead to a risk of fire. | Same as Proposed Plan. |
| | The use of campfires at campgrounds would increase the risk of wildfire. | No risk of wildfire from campgrounds. | Same as Proposed Plan. | Same as Alternative A. | Same as Alternative A. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **HAZARDOUS MATERIALS** | As the demand for use of the public lands increases, so does the potential for hazardous material spills and unauthorized dumping. Although industrial operations are regulated to minimize any potential spills, accidents can never be completely eliminated. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | BLM would not regulate operations that might cause hazardous material spills after the lands are transferred from BLM ownership. | Same as Proposed Plan. |
| | Increased recreational activities on BLM lands will put visitors at a greater risk of encountering a variety of hazards: chemical and physical hazards left over from past industrial operations; illegal waste dumping; and illegal drug manufacturing wastes. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | As the lands are transferred into private ownership and closed to public access, risks to the public from encountering hazardous materials on the parcels would decrease. | Same as Proposed Plan. |
| **LANDS AND REALTY MANAGEMENT** | Opportunities for the management of public areas by Teton County, or jointly by the county, state, and (or) federal agencies, would increase; this increase would be greater than under other alternatives. | Opportunities for the management of public areas by Teton County, or jointly by the county, state, and (or) federal agencies, would increase to a lesser extent. | Opportunities for the management of public areas by Teton County, or jointly by the county, state, and (or) federal agencies, would increase. | Same as Alternative A. | Opportunities for the management of public areas by Teton County, or jointly by the county, state, and (or) federal agencies, could increase. | Same as Alternative B. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **LANDS AND REALTY MANAGEMENT (Continued)** | Landownership adjustments would not affect the level of public use of lands within the Snake River corridor. | Same as Proposed Plan. | Landownership adjustments could increase the level of public use and access to some lands within the Snake River corridor, through the acquisition of lands for public access and improved recreation opportunities. Access to some remote parcels could be lost. | Same as Alternative B. | Landownership adjustments could eliminate public use of lands within the Snake River corridor. | Landownership adjustments could reduce the level of public use of some lands within the Snake River corridor, although this effect may be mitigated where recreation easements are retained or offset by the consolidation of public lands in areas of high recreational use. |
| | By retaining public lands for public use, this alternative would help to ensure affordable recreational opportunities for low-income residents of Teton County. This alternative is appropriate to meet the requirements of Environmental Justice (E.O. 12898). | Same as Proposed Plan. | This alternative is less appropriate to meet the requirements of Environmental Justice. | Same as Proposed Plan. | Private sales could eliminate these opportunities. Potential for all access onto current public parcels to be lost.<br><br>This alternative is less appropriate to meet the requirements of Environmental Justice. | Same as Proposed Plan. |
| | The posting of informational and directional signs could enhance recreational experiences and reduce trespass, if acquiring agencies or entities choose to erect the signs. | Lack of signing would result in continued confusion about the location of public lands, inappropriate resources uses, and trespass. | The posting of informational and directional signs to identify public lands with public access would enhance recreational experiences, protect resources, and reduce trespass. | Same as Alternative B. | Impacts to natural resources may occur. Private lands trespass would be more likely. | Same as Alternative B. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **LANDS AND REALTY MANAGEMENT (Continued)** | The level of public use would decline seasonally on public lands that are developed for sand and gravel mining. | Same as Proposed Plan. | Compared to the Proposed Plan, the decline of public use would be greater and more use would be concentrated on adjacent public lands. | Public use would not be impacted by sand and gravel mining on public lands or mineral estate. | Same as Proposed Plan | Same as Proposed Plan. |
| | Attempts to resolve occupancy trespass through removal would be difficult and may result in litigation. | Trespass resolution would be less difficult than under the Proposed Plan, as the authorized officer would have more options for resolution. | The option of resolving agricultural or occupancy trespass on public land through land sales or exchanges could encourage these unauthorized land uses. | Same as Alternative A. | Same as Alternative B. | Same as Alternative A. |
| **LIVESTOCK GRAZING MANAGEMENT** | The prohibition of some forms of predator control on public lands to protect the safety of recreational users and their pets could result in livestock losses to predators. However, these effects would be minimal. | | | | | |
| | There could be some temporary reductions in forage from certain allowed surface-disturbing activities such as development of rights-of-way. Following reclamation of these areas, forage production could return to pre-disturbance levels. | Temporary reductions in forage would be greater than under the Proposed Plan as more surface-disturbing activities would be allowed. Following reclamation of disturbed areas, forage production could return to pre-disturbance levels. | Temporary reductions in available forage from surface-disturbing activities would be the greatest of all alternatives. Following reclamation of these areas, forage production could return to pre-disturbance levels. | Temporary forage reductions would not impact livestock, as no grazing would be permitted. | Same as Alternative A. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **LIVESTOCK GRAZING MANAGEMENT (Continued)** | The transfer of parcels could cause a reduction in livestock grazing, if grazing is determined to be incompatible with the uses to be established by the acquiring agencies or entities. | The potential transfer of parcels could cause a reduction in livestock grazing, if grazing is determined to be incompatible with the uses to be established by the acquiring agencies or entities. | Same as Alternative A. | Livestock grazing would be reduced by 300 AUMs on 620 acres of land that is currently grazed by livestock. | Transfer and sale of all the parcels would reduce the acreage available for livestock grazing. Potentially, all the parcels could be removed from livestock grazing use. | Same as Alternative A. |
| | Recreational use could cause conflicts with livestock grazing, if grazing continues to be allowed after transfer of the parcels. No similar impact if livestock grazing is not allowed. | Recreational use could cause minor conflicts with livestock grazing. | Recreational use could cause conflicts with livestock grazing, although the potential for this would be reduced by the posting of signs at boat and river access sites with information on safety, river etiquette, and minimum impact recreation. | Recreational use would not impact livestock grazing on public land parcels, because no livestock grazing would be permitted. | Same as Alternative A, although this impact could disappear if the lands are sold and no longer available for recreation or livestock grazing use. | Same as Alternative B. |
| | Continued suppression of all fires would affect the vegetation and possibly the grazing capacity of the parcels. | Same as Proposed Plan. | Same as Proposed Plan. | Changes in the vegetation and grazing capacity of the parcels would not impact livestock, as no grazing would be permitted. | Same as Proposed Plan. | Same as Proposed Plan. |
| | A long-term withdrawal to prohibit the staking and development of mining claims would keep land undisturbed for livestock grazing and other purposes. | Possible mining development could make lands unavailable for livestock grazing, to a lesser extent than under Alternative B. | Possible mining development could make lands unavailable for livestock grazing. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **LIVESTOCK GRAZING MANAGEMENT (Continued)** | Minor conflicts between campground development and livestock use could occur, if these uses are allowed by the agencies or entities that acquire the parcels. | There would be no impacts to campgrounds on public lands from livestock grazing (no campgrounds under this alternative). | Campground development would conflict with livestock grazing due to loss of acreage as cattle are fenced out. | Same as Alternative A. | Uses specified by the new parcel owners would control the potential impacts. There would be no conflicts with public livestock grazing. | Same as Alternative B. |
| | Requirements to blend livestock management structures on public lands with the landscape could increase operator costs, if livestock grazing is allowed by the agencies or entities that acquire the parcels. | Modifying livestock management structures or range improvements to blend with the landscape could increase costs and reduce options for livestock management. | Same as Alternative A. | No impact on livestock on public lands as no grazing would be permitted. However, requirements to modify livestock management structures, particularly fences on the public land parcels, could affect management of livestock on adjacent private lands. | Same as Proposed Plan. | Same as Alternative A. |
| **MINERAL RESOURCES** | There would be no effects related to the management prescriptions for geothermal energy, phosphate, sodium, and coal because these resources are not anticipated to exist in commercial amounts on public lands in the planning area. | | | | | |
| | There would be no development of oil and gas in the planning area from public lands. | Same as Proposed Plan. | There would be potential for oil and gas development from one or two wells. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **MINERAL RESOURCES (Continued)** | 2,890 acres of public land and mineral estate included in PLO 7143 (Map 10) would be closed to locatable mineral entry. | Same as Proposed Plan. | Public lands and mineral estate inside the area included in PLO 7143 (Map 10) (2,890 acres) would be opened to locatable mineral development after June 1, 2005. Small-scale recreational gold panning and dredging could take place on public lands within the Snake River channel. The discovery of commercial amounts of gold is not anticipated. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| | 12,233 acres of public lands and federal mineral estate outside the PLO area would be closed to locatable mineral entry. | Public lands and federal mineral estate outside the area included in PLO 7143 (12,233 acres) would be available for locatable mineral development. (Map 10) | Same as Alternative A. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Longer haul distances for gravel would result in more truck traffic and potential for accidents, both to other motorists and to wildlife crossing highways. | Same as Proposed Plan. | This impact would be less, as more gravel extraction from the public lands would be allowed. | This impact would be greater, as no gravel would be available from public lands in the planning area. | Same as Proposed Plan. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **OFF-HIGHWAY VEHICLES** | Motorized access to certain parcels and levees would be prohibited. The opportunity to recreate on public lands by a small portion of the public would be foregone. Recreational use could decrease on some parcels. | Motorized access to the parcels would be the greatest under this alternative; however, some parcels would still be inaccessible to motorized vehicles. | Compared to alternative A, motorized and non-motorized recreational opportunities would be less. The loss of this opportunity would be minimal since the public lands parcels are small and access is limited. | Motorized access to certain parcels and levees would be prohibited. The opportunity to recreate on public lands by a small portion of the public would be foregone. Recreational use would decrease on some parcels. | The opportunity for public use of motorized OHVs on public lands would be foregone. | Same as Proposed Plan. |
| **PALEONTO-LOGICAL RESOURCES** | There would be no adverse effects on **identified** significant paleontological resources from the sale, exchange, or transfer of public lands. Any **unidentified** significant paleontological resources would suffer adverse effects from the sale, exchange, or transfer of public lands. | | | | | |
| | Sand and gravel operations in the river channel would not impact vertebrate fossils. | Same as Proposed Plan. | There is a small potential that sand and gravel operations outside the active river channel could impact vertebrate fossils. | There would be no impact from sand and gravel extraction on fossils. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Permits issued for the scientific study of paleontological resources on public lands would ensure that important sites are protected and new scientific information is made available to the public. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. There is a very small chance that significant paleontological resources could be lost to the public with parcel sales. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **PALEONTO-LOGICAL RESOURCES (Continued)** | The use of minimum-impact suppression techniques for fighting wildfires could protect some paleontological resources from surface-disturbing activities. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | There is a small chance that paleontological resources could be affected, as BLM restrictions would not apply. | Same as Proposed Plan. |
| | Sporadic unauthorized collection of paleontological resources could take place. Inventories conducted for proposed surface-disturbing activities would mitigate the loss of data to some extent. Unauthorized collection will always result in some loss of data. | Same as Proposed Plan. | Compared to the Proposed Plan, greater visitor use associated with river floating and visits to recreational sites would increase the potential for unauthorized collecting, although the potential for finding significant vertebrate fossils is very low. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| **RECREATION** | Landownership adjustments would not affect the level of public use of lands within the Snake River corridor. | Same as Proposed Plan. | Landownership adjustments could increase the level of public use and access to some lands within the Snake River corridor, through the acquisition of lands for public access and improved recreation opportunities. Access to some remote parcels could be lost. | Same as Alternative B. | Landownership adjustments could eliminate public use of lands within the Snake River corridor. | Landownership adjustments could reduce the level of public use of some lands within the Snake River corridor, although this effect may be mitigated where recreation easements are retained or offset by the consolidation of public lands in areas of high recreational use. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **RECREATION (Continued)** | Information and directional signs posted on public lands where appropriate could enhance recreational experiences and reduce trespassing on private lands, if the signs are used by the acquiring agencies and/or entities. | Confusion about parcel location and appropriate uses would continue. | Information and directional signs posted on all public lands may enhance the recreational experience and reduce trespass. | Same as Alternative B. | Public access to the parcels would be lost; signs would not be necessary. | Information and directional signs posted on public lands where appropriate could enhance recreational experiences and reduce trespassing on private lands. |
| | The benefits listed for Alternative A would be realized if the managing agency or entity develops boat access at South Park (parcel 26). | The development of boating access at South Park (parcel 26) would improve vehicle access, reducing traffic hazards. Visitor experience would be enhanced with improved facilities and river access. | Same as Alternative A. | The traffic hazards associated with the existing public access (located on private land) would remain the same. | No recreation access after parcel disposal, thus no related traffic hazards. | Same as d Alternative A. |
| | If recreation easements were acquired by the managing agency or entity, they would enhance recreation opportunities and public access. | No similar impact. | The acquisition of recreation easements through the sale or exchange of public lands would enhance recreation opportunities and public access. | No similar impact. | No similar impact. | Same as Alternative B. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **RECREATION (Continued)** | Withdrawal of the federal mineral estate from locatable minerals development after June 1, 2005 provides for long-term protection of recreation opportunities. | Same as Proposed Plan. | Lands not withdrawn from the federal mineral estate for locatable minerals after June 1, 2005 are at risk for staking and development. Some long-term recreation opportunities may be forgone if lands are not withdrawn. | Same as Proposed Plan. | No recreation access after parcel disposal. | Same as Proposed Plan. |
| | The closure of federal lands and mineral estate in the planning area to oil and gas leasing would ensure long-term recreation benefits would not be impacted by oil and gas development. | Same as Proposed Plan. | The development of oil and gas extraction on federal lands and mineral estate outside the Snake River corridor could create some long-term impacts to recreation facilities and opportunities, although closure of the river corridor to leasing for oil and gas would preserve most recreation benefits. | Same as Proposed Plan. | No recreation access after parcel disposal. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **RECREATION (Continued)** | The closure of leasing on federal lands and mineral estate in the planning area to phosphate, sodium and other leasable minerals would ensure long-term recreation benefits would not be impacted by development of these minerals. | Same as Proposed Plan. | The development of phosphate, sodium, and other leasable minerals on federal lands and mineral estate in the planning area could create long-term impacts to recreation facilities and opportunities. | Same as Proposed Plan. | No recreation access after parcel disposal. | Same as Proposed Plan. |
| | The closure of federal lands and mineral estate in the planning area to geothermal leasing would ensure long-term recreation benefits would not be impacted by geothermal development. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | No recreation access after parcel disposal. | Same as Proposed Plan. |
| | Recreational use could decline on public lands that are developed for sand and gravel mining. With mitigation, impacts to recreation would be low. | Recreational use could decline on public lands that are developed for sand and gravel mining. | Compared to Alternative A, the decline in public use would be greater. More recreational use could be concentrated on adjacent public lands. | There would be no impact on recreational use from salable mineral development on public land or mineral estate. | No recreation access after parcel disposal. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **RECREATION (Continued)** | Industrial vehicle access across public lands for mining sand and gravel would reduce the quality of recreational experiences and increase hazards to public health and safety.<br>With mitigation and seasonal restrictions these impacts would be minimal. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. | No recreation access after parcel disposal. | Same as Proposed Plan. |
| | Plans of operations submitted for saleable mineral exploration and development must address the protection of natural resource values.<br>Mitigation of recreation impacts could be stipulated. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact, as no minerals could be developed. | No recreation access after parcel disposal. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **RECREATION (Continued)** | No similar impact. | No similar impact. | No similar impact. | The prohibition on the use of motorized vehicles, except at the Wilson Bridge boat and river access site, would make some levee pathways and fishing areas inaccessible to people unable to travel without mechanized transportation. Recreational experiences for boaters and hikers, by comparison, would improve. | No similar impact. No recreation access after parcel disposal. | No similar impact. |
| | The quality of recreational experience would likely deteriorate without recreation management (e.g., education, signing, regulating use levels). If a cooperative agreement(s) for management were reached, this effect could be mitigated. | Same as Proposed Plan. | Same as Alternative E.<br><br>Public benefits for river floating and upland activities may increase as management prescriptions emphasize expanding facilities and services to meet public demand. | Same as Alternative E except that public benefits for river floating and upland activities may decrease as management prescriptions emphasize reducing public use to protect wildlife habitat. | No recreation access after parcel disposal. | The quality of recreational experience would improve as management provides services, resolves conflicts, regulates use for desired future conditions developed through the Limits of Acceptable Change process (LAC), and provides for the protection of natural resources. |
| | Commercial floating opportunities would be improved. | The commercial floating experience would decline. | The benefits enjoyed from commercial recreation use would continue. | Same as Alternative B. | Commercial floating use may continue, but would not be regulated by the BLM. | Same as Alternative B. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **RECREATION (Continued)** | The maintenance of the Wilson Bridge river access would provide continued recreation opportunities. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Public benefits of the Wilson boat ramp could be lost. | Same as Proposed Plan. |
| | The development of facilities at the South Park location would enhance recreational opportunities. | Same as Proposed Plan. | The improvement of visitor facilities at the Wilson Bridge boat and river access site and the development of facilities at the South Park location would enhance recreational opportunities. | No similar impact. | No recreation access after parcel disposal. | Same as Alternative B. |
| | Adverse effects on public safety could be mitigated by development of a boat and river access site in the South Park area, which could include improvements made to the exit off U.S. Highway 191. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. | No similar impact. | Same as Proposed Plan. |
| | Recreation facilities and services would be maintained by the managing agency or entity. Impacts are likely to be similar to Alternative B. | Facilities and services would continue to be minimally maintained through agreements with Teton County.<br><br>The quality of recreational experience could decrease. | The implementation of an access fee program would allow for the enhancement of visitor services and facilities. A fee system could deter or eliminate recreational use by some of the public. | Same as Alternative B except that the choice of contributing to user services would be voluntary.<br><br>Revenue income for recreation management and natural resource protection would be uncertain. | No recreation access after parcel disposal. | Same as Alternative B. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **RECREATION** | Benefits could be realized if the managing agencies and/or entities develop additional boating access. | The Wilson Bridge and South Park river access facilities would remain congested, as no other access facilities would be developed. | Added river boating access facilities could ease congestion and provide an enhanced recreational experience. | The Wilson Bridge boat ramp would remain very congested, as no other access facilities would be developed. | Public river access may be lost after parcel disposal. | Same as Alternative B. |
| | The benefits of authorized camping could be realized if the managing agencies and/or entities develop camping facilities. | Some unauthorized camping would occur along the Snake River corridor. Authorized camping opportunities would be forgone. | Unauthorized camping would be reduced because camping would be allowed in designated campgrounds on public lands. | Same as Alternative A. | Same as Alternative A. | Same as Alternative B. |
| | Other agencies could, after acquiring parcels, close them to hunting. This would reduce the opportunity for hunting in the Jackson Hole valley. The potential extent of this impact is not known | Access to the parcels for hunting would be preserved, as BLM would retain the parcels. | Same as Alternative A. | Same as Alternative A. | All public hunting access to the parcels would be lost as the parcels become privately owned. | Same as Alternative A. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **SOCIO-ECONOMICS** | Given the importance of land disposal issues, protection of wildlife habitat, livestock grazing, minerals management, and the management of recreation to the Willingness to Pay (WTP) considerations, the Proposed Plan is superior to Alternatives A, B, and D, inferior to Alternative C, and equal to Alternative E. | Given the importance of land disposal issues, protection of wildlife habitat, livestock grazing, minerals management, and the management of recreation to the Willingness to Pay (WTP) considerations, Alternative A is inferior to the Proposed Plan and Alternatives C and E, and superior to Alternatives B and D. | Given the importance of land disposal issues, protection of wildlife habitat, livestock grazing, minerals management, and the management of recreation to the Willingness to Pay (WTP) considerations, Alternative B is inferior to the Proposed Plan and Alternatives A, C, and E; and superior to Alternative D. | Given the importance of land disposal issues, protection of wildlife habitat, livestock grazing, minerals management, and the management of recreation to the Willingness to Pay (WTP) considerations, Alternative C is superior to the Proposed Plan and all other alternatives. | Given the importance of land disposal issues, protection of wildlife habitat, livestock grazing, minerals management, and the management of recreation to the Willingness to Pay (WTP) considerations, Alternative D is inferior to the Proposed Plan and all other alternatives. | Given the importance of land disposal issues, protection of wildlife habitat, livestock grazing, minerals management, and the management of recreation to the Willingness to Pay (WTP) considerations, Alternative E is equal to the Proposed Plan, superior to Alternatives A, B, and D, and inferior to Alternative C. |
| **VEGETATION** | Surface-disturbing and disruptive activities could cause a loss of vegetation and an increase in weeds. | | | | | |
| | Fire suppression efforts may lead to spread of noxious weeds and other invasive species through soil disturbance or introduction of seed from outside sources. | | | | | |
| | Access and rights-of-way could lead to surface disturbance or the introduction of noxious weed seed dispersal agents. | | | | | |
| | Stipulations and management actions implemented to protect other resources could prevent surface disturbances and protect vegetation and Special Status Plant Species. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)** | The absence of flooding outside the levees and the exclusion of fire would inhibit cottonwood regeneration. The cottonwood-dominated community would change to a shrub-grass or conifer community with time. | Same as Proposed Plan. | Same as Proposed Plan. | The absence of flooding outside the levees and the exclusion of fire would inhibit cottonwood regeneration. The cottonwood-dominated community would change to a shrub-grass or conifer community with time. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Increases in public access or facilities (e.g., South Park access site) could cause the removal of vegetation and the increase of weeds. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. | No similar impact. | Same as Proposed Plan. |
| | The resolution of agriculture or occupancy trespass and subsequent reclamation could benefit native vegetation in the long term. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. | Same as Proposed Plan. |
| | Elimination of fall livestock grazing would allow for an increase in shrub production and diversity of understory habitats in cottonwood stands. | Same as Proposed Plan. | No similar impact. | Elimination of all livestock grazing would allow for greater shrub production and diversity of understory habitats in cottonwood stands. | No similar impact. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)** | Salt and mineral supplements used for livestock can leach into the soil, affecting plant survival and growth. These supplements can also attract wildlife. | Same as Proposed Plan. | Same as Proposed Plan. | Plant survival and growth would be benefited, as salt and mineral supplements would not be used, as there would be no livestock grazing allowed. | Same as Proposed Plan, pending disposal of the parcels. | Same as Proposed Plan. |
| | No similar impact. | No similar impact. | Oil and gas development on federal mineral estate outside the Snake River corridor could cause a short-term loss of vegetation followed by an increase in vegetation with the reestablishment of desirable grass and forb species after reclamation measures. The long-term loss in vegetation would not be significant. There could be an increase in weeds in the short-term until reclamation success. | No similar impact. | No similar impact. | No similar impact. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)** | No similar impact. | No similar impact. | Other leasable minerals development on federal mineral estate outside the Snake River corridor could cause a short-term loss of vegetation followed by an increase in vegetation with the reestablishment of desirable grass and forb species after reclamation measures. The long-term loss in vegetation would not be significant. There could be an increase in weeds in the short-term until reclamation success. | No similar impact. | No similar impact. | No similar impact. |
| | A long-term protective withdrawal to prohibit the staking and development of mining claims could benefit vegetation in the long term. | Same as Proposed Plan. | Opening public lands and federal mineral estate to the staking and development of mining claims in 2005 could cause removal of vegetation and an increase in weeds. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)** | The extraction of sand and gravel on public lands and federal mineral estate only within the active unvegetated channel could cause a temporary increase in weeds in the area during each season of use. | Same as Proposed Plan. | The extraction of sand and gravel on public lands and federal mineral estate could cause the loss of vegetation and an increase in weeds in the area for the duration of the operations. Reclamation activities would cause an increase in desirable species in the long term. | No similar impact. | Same as Proposed Plan, pending disposal of the parcels. | Same as Proposed Plan. |
| | An increase in the number of visitors and improvement or development of new facilities or camping areas could cause an increase of disturbance, loss of vegetation, and an increase in weeds. | No similar impact. | Same as Proposed Plan. | A decrease in the number of visitors and fewer improvements or developments of new facilities could cause an increase of vegetation and a decrease in weeds, causing an overall beneficial effect to the native plant species. | No similar impact. | Same as Proposed Plan. |
| | Visual resource management could benefit vegetation through Class II VRM management actions on selected parcels to maintain or improve scenic values. | Same as Proposed Plan. | Visual resource management could benefit vegetation less than the Proposed Plan through conformance with Class III VRM management actions. | Same as Proposed Plan. | No similar impact. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)** | Repeated OHV use would damage vegetation because vehicle tires crush and tear plant tissues and eventually destroy plant cover. OHV activity often occurs in areas that are erosive. The combination of vegetation loss and activity on erosive soils produces excessive soil erosion and causes further impacts associated with sedimentation on adjacent areas. The impacts could be the most beneficial to vegetation as public lands in the planning area would be closed to motorized vehicle use except at the Wilson Bridge and certain designated roads and non-motorized vehicles would be limited to designated roads and trails. | The impacts could be greater than under the Proposed Plan as more areas would be open for motorized and non-motorized use. | The impacts could be greater than under the Proposed Plan as public lands in the planning area would be either closed or limited to existing roads and trails. | Same as Proposed Plan. | Repeated off-road vehicle (OHV) use would damage vegetation because vehicle tires crush and tear plant tissues and eventually destroy plant cover. OHV activity often occurs in areas that are erosive. The combination of vegetation loss and activity on erosive soils produces excessive soil erosion and causes further impacts associated with sedimentation on adjacent areas. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)** | Livestock grazing, recreational use, interpretive sites, additional access, and surface-disturbing activities would result in seed dispersal and the increased establishment of noxious weeds and other invasive species. Seed dispersal would occur both within and outside of the planning area. These effects would be mitigated by implementation of the Jackson Hole Weed Management Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Impacts would be less than those described for the Proposed Plan because there would be no livestock grazing. | Livestock grazing, recreational use, interpretive sites, and surface-disturbing activities would not cause seed dispersal or the increased establishment of noxious weeds and other invasive species. However, uses of the new parcel landowners could contribute to establishment of weeds. Seed dispersal would occur both within and outside of the planning area. | Same as Proposed Plan. |
| ***Noxious weeds and other invasive species*** | Strict water quality protection measures for public lands could reduce ability to treat noxious weeds and other invasive species with chemicals. | | | | | |
| | Delaying weed treatments on public lands to avoid special wildlife needs could impede efforts to control noxious weeds and other invasive species. | | | | | |
| | Interpretive sites, improved visitor services, and recreation easements could increase the potential for noxious weed dispersal (i.e., vehicles, pets, humans). | These impacts would not occur, as these developments would not be implemented. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Alternative A. | Same as Proposed Plan. |
| | More options would be available for the control of noxious weeds on public lands. | Same as Proposed Plan. | Same as Proposed Plan. | Removal of chemical control will impede efforts to control noxious weeds and other invasive species. | Same as Proposed Plan. | Same as Proposed Plan. |
| ***Riparian*** | There would be no adverse impact to riparian/wetland areas in the Snake River Corridor due to geothermal or oil and gas development activities. | | | | | |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)**<br><br>***Riparian* (Continued)** | All vegetation management activities on public lands would be designed to enhance riparian/wetland health and would have positive impacts. | | | | | |
| | All wildlife and watershed management activities on public lands would be designed with riparian/wetland health as a priority and would thus positively benefit this resource. | | | | | |
| | Fire management activities (i.e., suppression) would be mitigated through emergency fire rehabilitation, if needed, resulting in no adverse impact to riparian/wetland areas. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. | Same as Proposed Plan. |
| | Actions to protect public lands from hazardous waste would positively benefit riparian/wetland areas. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. | Same as Proposed Plan. |
| | Closing the parcels along the Snake River to Desert Land Entry would benefit riparian/wetland areas. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Private sale would have similar impacts to Desert Land Entry. | Same as Proposed Plan. |
| | Sale or transfer of public lands could remove riparian/wetlands from BLM management. | Sale of public lands could remove riparian/wetlands from BLM management. Exchange of riparian/wetlands for other lands may not be for those of equal or better functional value or habitat value. | Same as Alternative A. | Sale of public lands could remove riparian/wetlands from BLM management but would allow public access to other riparian/wetland areas. | Sale of public lands will remove riparian/wetlands in Teton County from BLM management. | Same as Alternative C. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)**<br><br>***Riparian* (Continued)** | BLM would not be managing the riparian/wetland areas. | This impact would not occur, as BLM would not be acquiring parcels. | BLM management of riparian/wetland areas may be improved through acquisition or exchange of parcels. | Same as Alternative B. | Same as Proposed Plan. | Same as Alternative B. |
| | The imposition of conservation easements on disposals could assist the management and protection of riparian/wetland areas. | This impact would not occur, as BLM would not be retaining conservation easements. | Same as Alternative A. | The imposition of conservation easements on disposals would assist the management and protection of riparian/wetland areas. | Same as Alternative A. | Same as Alternative C. |
| | Resolving occupancy trespass by removing the trespass would have no impact or would be a positive impact to riparian/wetland areas. | Resolving occupancy trespass by removing the trespass would have no impact or would have a positive impact to riparian/wetland areas. | Land sales in the case of occupancy trespass could result in removal of riparian/wetland areas from BLM management. | Same as Alternative A. | No similar impact. | Resolving agricultural or occupancy trespass by removing the trespass would have no impact or would be a positive impact to riparian/wetland areas. However, resolving the issue through rental agreement would continue any impacts that may be occurring. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)**<br><br>***Riparian* (Continued)** | Riparian/wetland areas would generally be avoided by ROW development. Mitigation measures to rehabilitate areas would be developed case by case. However, some trees could be lost. | Same as Proposed Plan. | Some riparian/wetland areas could be permanently lost (e.g., from road development). Other situations (e.g., buried utility lines) could be mitigated through rehabilitation of the affected area. Trees could be permanently lost. | Aquatic and wetland sites are exclusion areas for ROW development. Other riparian areas would be restored if ROWs were allowed. However, some trees could be lost. | No similar impact. | Same as Proposed Plan. |
| | Elimination of fall grazing unless the Standards for Healthy Rangelands are met and a grazing plan is in place would increase the recovery and productivity of riparian/wetland shrub species. Should grazing permits be relinquished in the future, the removal of livestock grazing would allow for quicker recovery of any degraded vegetative conditions. | Fall grazing would likely be detrimental to riparian/wetland shrub condition. Should grazing permits be relinquished in the future, the removal of livestock grazing would allow for quicker recovery of any degraded vegetative conditions. | Same as Alternative A. | Elimination of livestock grazing would lead to a greater increase in the recovery and productivity of riparian/wetland shrub species than under the Proposed Plan. | Same as Alternative A. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)**<br><br>***Riparian* (Continued)** | There would be no adverse impact to riparian/wetland areas in the Snake River Corridor due to any leasable minerals. | Same as Proposed Plan. | Leasing lands for phosphate, sodium, or other leasable minerals development could have an adverse impact to riparian/wetland areas during development (surface disturbance and vegetation loss). | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| | A long-term mineral withdrawal in the planning area would protect riparian/wetland areas from mineral development. | Public mineral estate outside the area included in PLO 7143 (2896 acres) would be available for locatable mineral development. This could affect riparian or wetland habitats in some areas. | Public mineral estate in the planning area (15,123 acres) would be available for locatable mineral development. This could affect riparian or wetland habitats in some areas. | Same as Proposed Plan. | Same as Proposed Plan | Same as Proposed Plan. |
| | Confining sand and gravel operations to the active, unvegetated channel within the levees would have minimal adverse effect on the riparian/wetland plant community. | Same as Proposed Plan. | Sand and Gravel operations could result in widespread loss of riparian/wetland habitat outside the levees. | There would be no impact to riparian/wetland habitat due to Salable mineral development. | Same as Proposed Plan. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)**<br><br>***Riparian* (Continued)** | Increased access to public lands may have an adverse effect on riparian/wetland areas, depending on the level and type of use by the public. Restrictions on motorized access would benefit riparian/wetland resources. | Increased access to public lands may have an adverse effect on riparian/wetland areas depending on the level and type of use by the public. Access, by itself, has no impact to riparian/wetland areas. | Same as Alternative A. | Same as Proposed Plan. | No similar impact. Access to the parcels would decrease or be lost entirely. | Same as Proposed Plan. |
| | Limiting motorized vehicle use to specific existing roads, non-motorized traffic to designated roads and trails and possibly limiting all but authorized traffic seasonally where needed would benefit riparian/wetland resources. | Riparian/wetland habitat could be adversely affected by allowing all public lands to be open to OHVs. This could create new roads and trails over time, and increase erosion and the destruction of riparian/wetland plants. | Limiting OHVs to existing roads and trails, and closing trails causing resource damage, would be beneficial to riparian/wetland habitats. | Same as Alternative B. | No similar impact. | Same as Proposed Plan. |
| | There could be some limited adverse impact to riparian/wetland shrubs due to over-the-snow vehicles, primarily in low snow years. | Same as Proposed Plan. | Same as Proposed Plan. | There would be no adverse impact to riparian/wetland resource due to over-the-snow vehicles. | Same as Proposed Plan. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)**<br><br>***Riparian* (Continued)** | Riparian/wetland resources could be impacted negatively with increased "land-based" recreation activity; however, monitoring, mitigation, and informational signing could help to alleviate these impacts. | Most recreational activity in this area has not impacted the riparian/wetland resource. However, some negative impact to riparian/wetland resources has occurred due to "land-based" recreation. This impact has been limited to specific areas and has been a result of unauthorized activity. | Riparian/wetland resources could be impacted negatively with increased "land-based" recreation activity; however, monitoring, mitigation, and informational signing could help to alleviate these impacts. | The decrease in "land-based" recreation and the implementation of signing and a fee system could protect riparian/wetland resources. | No similar impact. | Same as Alternative B. |
| | These benefits could be realized if the managing agencies and/or entities maintain the existing boat access facilities, and develop additional boating accesses. | Maintaining existing and developing additional float boating access and visitor facilities at specific locations may be beneficial to riparian/wetland resources by concentrating use in designated areas, providing educational opportunities, and eliminating unintended encroachment into other areas. | Same as Alternative A. | Maintaining existing float boating access and visitor facilities at specific locations may be more beneficial to riparian/wetland resources by concentrating use in fewer designated areas, providing educational opportunities, and eliminating unintended encroachment into other areas. | No similar impact. | Same as Alternative A. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VEGETATION (Continued)**<br><br>***Riparian* (Continued)** | If additional boat ramp facilities (such as parking areas) cannot be located outside of riparian areas, a limited amount of riparian vegetation could be permanently lost. | Same as Proposed Plan. | Same as Proposed Plan. | This impact would not occur, as no additional facilities would be constructed. | Same as Alternative C. | Same as Proposed Plan. |
| | Regulated overnight camping at specific boat-in campground areas could have some localized adverse effect to riparian/wetland resources. | No camping would be allowed, so there would be no impact to riparian/wetland resources. | Same as Proposed Plan. | Same as Alternative A. | No similar impact. | Same as Proposed Plan. |
| | Chemical control of noxious weeds and other invasive species could damage some riparian plants in the short term, but long-term vegetation health should be improved. | Same as Proposed Plan. | Same as Proposed Plan. | This impact would not occur, as chemical control of noxious weeds and other invasive species would be prohibited. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Riparian/wetland areas may not be managed specifically for proper functioning condition, but for more broadly defined wildlife habitat goals. | Managing riparian/wetland areas to maintain proper functioning condition or later seral stages (outside of the levees) would be beneficial to this resource. | Same as Alternative A. | Same as Alternative A. | Riparian/wetland areas would probably not be managed for proper functioning condition. | Same as Alternative A. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **VISUAL RESOURCES** | Visibility would be affected on a local and temporary basis by airborne dust from the use of motorized vehicles along levees and by mining of sand and gravel. | Same as Proposed Plan. | Compared to the Proposed Plan, dust and associated visual impacts could increase as additional areas are mined for sand and gravel. | Compared to the Proposed Plan, dust and associated visual impacts would be reduced since mining would be prohibited and motorized vehicle use would be confined to the Wilson Bridge boat and river access site. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Management of the parcels by the acquiring agencies or entities for wildlife habitat and open space would probably allow for a low degree of alteration to the existing scenic values.<br><br>Some impacts to visual quality could occur; the extent of visual changes is difficult to predict, as BLM would not be managing the parcels. | Management of visual resources to assigned VRM objectives would allow for a low degree of alteration to the existing scenic values.<br><br>Changes in visual quality would be minimal due to restrictions on development. | Compared to the Proposed Plan, the management of visual resources to assigned VRM objectives would allow a greater degree of alteration to the existing scenic values.<br><br>Changes in visual quality would be increased under this alternative. | Management of visual resources to assigned VRM objectives would allow for a low degree of alteration to the existing scenic values.<br><br>Changes in visual quality would be the least under this alternative. | No VRM objectives would be assigned. Private landowners could make alterations to scenic values.<br><br>Changes in visual quality could be greatest under this alternative. | Management of visual resources to assigned VRM objectives would allow for a low degree of alteration to the existing scenic values.<br><br>Changes in visual quality would be minimal. |
| | Smoke from campfires at primitive campgrounds, if allowed by the managing agencies or entities, would affect visibility locally during the summer. | This impact would not occur, as no camping would be allowed. | Smoke from campfires at primitive campgrounds would affect visibility locally during the summer. | This impact would not occur, as no camping would be allowed. | This impact would not occur, as no camping would be allowed. However, management by private landowners may result in similar impacts. | Same as Alternative B. |
| **WATERSHED** | The existence of the levee system will be the primary long-term factor affecting channel condition and sediment related water quality. | | | | | |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WATERSHED (Continued)** | The use of surfactants and foaming agents for fire suppressing activities has the potential to produce local changes in water quality. However, the level of dilution that could be provided by the Snake River, the rapid biological breakdown of the agents, and the practice of avoiding direct application of surfactant or foam solutions to open waters would likely reduce concentrations to acceptable levels. | | | | | |
| | Given the existence and the extent of the levee system and the comparatively small amount of public land involved, the actions taken on public land will most likely have only minor impacts on the channel condition and non-point source related water quality. | | | | | |
| | Isolated oxbows, within the levee system, would continue to be affected by both the movements of the active channel and channel reclamation efforts. | | | | | |
| | Aerial fire retardants would most likely not cause adverse changes in watershed function or water quality. The use of aerial fire suppressants has the potential to produce short-term local changes in the level of nutrients in adjacent waters. Avoiding application of aerial fire retardants to open waters, and the relatively large amount of dilution that can be provided by the discharge of the Snake River, would most likely reduce this effect further in terms of concentration and duration. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. After parcel sale, Teton County would make the decisions regarding fire retardant use. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WATERSHED (Continued)** | The lower levels of mining or soil disturbance under this alternative would create a lower potential for water quality degradation. | Same as Proposed Plan. | The higher levels of disturbance within and outside the levees would create a greater potential for water quality degradation, due not only to greater levels of direct disturbance but increased channel modification as well. | As this alternative has the lowest levels of soil disturbance and no mining activity, water quality degradation from these activities would the lowest of all alternatives. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Disturbance within the channel due to gravel mining could create short-term decreases in water quality. Continued mining over time will have both short-term local and long-term remote effects on river morphology. | Same as Proposed Plan. | The areas outside the levees that might be disturbed under this alternative would have a less direct and smaller initial effect on water quality and watershed function but would most likely exist longer as visual disturbances. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Continued grazing at past levels would result in the maintenance of existing grazing related conditions. If grazing pressures were altered, the impacts to the system would change. | Same as Proposed Plan. | The extended grazing season would create additional disturbance to vegetation and soil, increasing the potential for water quality degradation over the Proposed Plan. | The removal of grazing by domestic animals would result in a lower potential for water quality degradation. Because grazing would still take place on private lands, the effect would not be entirely eliminated from the system. | No similar impact; there would be no livestock grazing. However, management by private landowners may result in similar impacts. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WATERSHED (Continued)** | Impacts from OHV activity would be dependent on the OHV management practiced by the acquiring or managing agencies or entities. | Increased runoff from OHV related disturbances would create a potential for water quality degradation. | Compared to the Proposed Plan, the higher levels of OHV use and potential loss of management ability due to potential land sales would create a potential for increased water quality degradation. | Compared to the Proposed Plan, the potential for water quality degradation would be less due to lower levels of OHV-related disturbance. | There would be no similar impact as there would be no public access to the parcels. However, management by private landowners may result in similar impacts. | OHV activity will most likely increase with time. Improved management of this activity could reduce the potential for accelerated runoff from public lands and the associated water quality degradation. Given the relatively small size of the public lands in comparison to the planning area, this would not eliminate the potential for OHV related damage. |
| | The potential for water quality degradation would increase with increased recreation activities. Actions taken to inform and direct the recreating public could reduce the potential per capita influence, but the overall level of recreation related disturbance would increase. | Runoff from recreation related disturbances would create a potential for water quality degradation. With increased recreation pressures, the potential for recreation related disturbance would increase. | The higher levels of recreational use and loss of management ability due to potential land sales would create a potential for water quality degradation greater than the Proposed Plan. | Same as Proposed Plan. | There would be a lower potential for general public related water quality impacts and an increased potential for impacts due to the management practices of private landowners with the increased privatization of the land. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WATERSHED (Continued)** | The addition of a boat ramp at the South Park bridge and the signing of public land, if carried out by the acquiring or managing agencies or entities, would create areas of concentrated disturbance but could also assist in reducing overall disturbance. | This impact would be lessened, as the South Park boat ramp would be built but no signs would be placed on the public land parcels. | The addition of a boat ramp at the South Park bridge and the signing of public land would create areas of concentrated disturbance but could also assist in reducing overall disturbance. | The signing of public land would create areas of concentrated disturbance but could also assist in reducing overall disturbance. | There would be no public access to the parcels after sale; no similar impacts. | Same as Alternative B. |
| | Sanitation facilities provided at key recreation sites would reduce water quality impacts from human waste. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | No public recreation sites on the parcels; this impact would not occur. | Same as Proposed Plan. |
| **WILDLIFE AND FISH HABITAT** | Fire suppression would generally benefit wildlife habitats. The potential exists for adverse impacts due to human-wildlife interactions or habitat alterations from construction of fire breaks/roads. | | | | | |
| | Actions to clean up hazardous materials and wastes on public lands, and prevent their release onto public lands and water, would benefit wildlife, fish, and amphibians. | | | | | |
| | Changes in landownership that increase the incidence of human-wildlife interactions may cause adverse impacts to wildlife. Construction of parks and pathways could expand human presence into new areas not previously accessible. | | | | | |
| | The removal of trespasses on public land could benefit wildlife if human-wildlife interactions are reduced. | | | | | |
| | Allowing future rights-of-way on public lands could adversely impact wildlife if this permits increased human-wildlife interactions or destruction of forage. | | | | | |
| | Closing public lands and federal mineral estate to geothermal leasing would benefit wildlife by preventing potential adverse development in sensitive habitats. | | | | | |
| | Closing public lands and federal mineral estate in the Snake River corridor to oil and gas leasing would benefit wildlife by preventing potential adverse development in sensitive habitats. | | | | | |
| | Prohibiting mineral or surface entry through June 1, 2005 under PLO 7143 would prevent adverse impacts to foraging, nesting and wintering habitats. | | | | | |
| | Under the Snake River Restoration Project, fisheries habitat may be improved. “Spring creeks” or channels which cross some BLM parcels could provide fish habitat if, in the future, connection to the Snake River were made suitable to fish passage and barriers were removed. | | | | | |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | There would be no "jeopardy" effects on threatened or endangered species including Canada lynx, gray wolves, grizzly bears, bald eagles, and whooping cranes. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Actions of private landowners that might impact threatened or endangered species cannot be predicted. | Same as Proposed Plan. |
| | Prohibiting firewood harvest on public lands would benefit wildlife that require deadwood for nesting or reproductive habitat. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | This prohibition would not be in effect on the lands; impacts to wildlife habitat could occur. | Same as Proposed Plan. |
| | Closing public lands to Desert Land Entry and agricultural lease could benefit wildlife by prohibiting development or impacts to forage. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Sale of the parcels into private ownership may have the same impacts as Desert Land Entry. | Same as Proposed Plan. |
| | Maintaining public access to the parcels could adversely impact wildlife due to human-wildlife interactions. However, seasonal closures/restrictions would minimize adverse impacts. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Reducing or eliminating public access to the parcels may benefit wildlife by reducing human presence and human-wildlife interactions. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Requiring the acquiring or managing agencies or entities to manage the lands for open space and wildlife habitat would protect wildlife migration routes and corridors. | Wildlife migration routes and corridors would not receive special protection. | Same as Alternative A. | Wildlife migration corridors would be protected to the extent possible by landownership adjustments to consolidate public lands, the use of conservation easements, management prescriptions for fence modification, and prohibitions on mining. | No protection of wildlife migration corridors. | Same as Alternative C. |
| | No additional recreation easements would be acquired by BLM; there would be no impact to wildlife from additional human presence due to acquired recreation easements. | Same as Proposed Plan. | The acquisition of recreational easements using Land and Water Conservation Fund could adversely impact wildlife by increasing the potential human-wildlife interactions. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Alternative B. |
| | The retention of conservation easements would benefit wildlife by protecting select areas from development-related wildlife disturbances. | Parcels sold or transferred out of BLM ownership would not be protected by conservation easements; development of these parcels would cause wildlife disturbances and impacts to habitat quantity and quality. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Alternative A. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Linear rights-of-way that cross the Snake River could create some adverse impact to fish habitat due to short-term sedimentation. | Same as Proposed Plan. | Same as Proposed Plan. | These impacts would not occur as no rights-of-way would be allowed to cross the Snake River. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Prohibiting communication sites on public lands would eliminate the potential for avian-tower collisions. The potential for human-wildlife interactions associated with maintenance activities at these sites would be eliminated. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Impacts to raptors and other birds may occur, as these restrictions would not apply after parcel sale. | Same as Proposed Plan. |
| | Implementation of management actions consistent with the Guidelines for Livestock Grazing Management could benefit certain wildlife species dependent on post-grazing forage for fall/winter survival. | Same as Proposed Plan. | Same as Proposed Plan. | Wildlife species dependent on post-grazing forage would benefit, as there would be no livestock grazing. | Same as Alternative C; however, other impacts may occur due to the management practices of private landowners. | Same as Proposed Plan. |
| | Impacts to wildlife forage could occur if livestock grazing were allowed by the acquiring or managing agencies or entities. | Approval of additional grazing permits on public lands could adversely impact available forage for migrating and/or wintering wildlife. | Same as Alternative A; this impact could be increased as fall livestock grazing would be allowed. | There would be no impact to wildlife forage from livestock grazing on public land parcels. | There would be no impact to wildlife forage from livestock grazing on public land parcels; impacts may occur due to the management practices of private landowners. | There would be no additional impact to wildlife forage, as no additional livestock grazing would be allowed. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Conformance to applicable fencing standards would ensure minimal disruption to wildlife movements. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Fences not compatible with wildlife movements may be constructed, impacting wildlife migration and other movements. | Same as Proposed Plan. |
| | Closing federal mineral estate outside the Snake River corridor to oil and gas leasing would benefit wildlife by preventing potential adverse development in sensitive habitats and preventing potential increases in human disturbances. | Same as Proposed Plan. | Leasing for oil and gas on federal mineral estate outside the Snake River corridor could have detrimental impacts on wildlife due to direct loss of habitat or increases in human disturbance. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Closing public lands and federal mineral estate to phosphate, sodium, and other leasable minerals to leasing would benefit wildlife by preventing potential adverse development in suitable habitats. | Same as Proposed Plan. | Leasing on public lands and federal mineral estate for phosphate, sodium, and other leasable minerals could have detrimental impacts on wildlife due to direct loss of habitat or increases in human disturbance. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Pursuing a long-term protective withdrawal to prohibit the staking and development of mining claims (inside the PLO 7143 area) would benefit wildlife by preventing potential adverse impacts to foraging, nesting or wintering habitats. | Same as Proposed Plan. | Allowing mineral and/or surface entry in the area included in PLO 7143 after the withdrawal expires in 2005 could adversely impact wildlife forage/habitat and increase the potential for human-wildlife interactions. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| | The use of appropriate mitigation measures for surface-disturbing and disruptive activities on public lands could reduce adverse impacts to wildlife. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan; benefits from the use of mitigation measures would be lost as the parcels are sold into private ownership. | Same as Proposed Plan. |
| | Pursuing a long-term protective withdrawal to prohibit the staking and development of mining claims (including the area outside PLO 7143) would benefit wildlife by preventing potential adverse impacts to foraging, nesting or wintering habitats. | Allowing mineral and/or surface entry outside the PLO 7143 area could adversely impact wildlife forage/habitat and increase the potential for human-wildlife interactions. | Same as Alternative A. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Sand and gravel mining would be most likely during mid-fall to late winter when river flows are lowest, and operations would remain outside critical wintering habitats and nest site buffer zones. These factors and the use of site-specific seasonal requirements would prevent most impacts to nesting, foraging, and wintering habitat on the Snake River and tributaries. Fish habitat could be affected through channel manipulation and sedimentation. | Same as Proposed Plan. | Impacts to migrating and wintering avian species from sand and gravel mining would be greatest under this alternative. | The prohibition on mining and the use of site-specific seasonal requirements for other surface-disturbing and disruptive activities would prevent most impacts to nesting, foraging, and wintering habitat on the Snake River and tributaries. There would be no adverse fisheries impacts. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Permitting access across public lands near the Wilson and South Park bridges for mining of salable minerals on adjacent privately-owned lands could have an adverse impact on nesting or foraging birds, or other wildlife that encounter an increased human disturbance. | Same as Proposed Plan. | Same as Proposed Plan. | These impacts would not occur as mining for salable minerals would not occur on public lands or mineral estate. | No similar impact. BLM would not have authority to grant access across private lands. Impacts may occur if private landowners grant access. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Collecting of fossils could adversely impact wildlife due to increased human-wildlife interactions or destruction of vegetation from excavation. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. |
| | Maintaining visitor facilities at the Wilson Bridge boat and river access would have an undetermined impact on wildlife due to the potential for future increased use. | Same as Proposed Plan. | Improving the visitor facilities at the Wilson Bridge boat and river access could have a detrimental impact on wildlife if this promotes an increased use of river-related activities that cause higher levels of human-wildlife conflicts or impact corridor vegetation. | Same as Proposed Plan. | Impacts cannot be determined, as it is not known whether public access to the Wilson Bridge boat ramp site would be available after parcel sale. | Same as Proposed Plan. |
| | Development of a boat and river access near the South Park Bridge could have an adverse impact to avian species which nest or forage near the facilities. If this development increases on-river use, adverse impacts could increase proportionally due to adverse human-wildlife interactions. | Same as Proposed Plan. | Same as Proposed Plan. | These impacts would not occur, as no boat ramp would be constructed on public lands near the South Park Bridge. | Same as Alternative C. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Development of additional boat ramps/river access points could have detrimental effects to wildlife due to direct loss of habitats or increases in human-wildlife conflicts. | These impacts would not occur, as no additional boat access facilities would be constructed. | Same as Proposed Plan. | Same as Alternative A. | Same as Alternative A; however, management by private landowners may result in similar impacts. | Same as Proposed Plan. |
| | Development of campgrounds could have detrimental effects to wildlife due to direct loss of habitats, human excursions into previously undisturbed habitats, or increases in human-wildlife conflicts. | These impacts would not occur, as no campgrounds would be constructed. | Same as Proposed Plan. | Same as Alternative A. | Same as Alternative A; however, management by private landowners may result in similar impacts. | Same as Proposed Plan. |
| | Overnight camping could have detrimental effects to wildlife due to direct impacts on vegetation, human incursions into previously undisturbed habitats or increases in human-wildlife conflicts, if camping is allowed by the acquiring or managing agencies or entities. | Continued prohibition of overnight camping would prevent detrimental impacts to vegetation and wildlife habitat due to firewood harvest and nighttime disturbance of wildlife. | Overnight camping could have detrimental effects to wildlife due to direct impacts on vegetation, human incursions into previously undisturbed habitats or increases in human-wildlife conflicts. | Same as Alternative A. | No similar impact; however, management by private landowners may result in similar impacts. | Same as Alternative B. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Posting signs at boat and river access sites on public land to educate river users about potential wildlife impacts, could help to minimize conflicts and to heighten awareness of viewable wildlife, if the signs were posted by the acquiring or managing agencies or entities. | No similar impact. | Posting signs at boat and river access sites on public land to educate river users about potential wildlife impacts could help to minimize conflicts and to heighten awareness of viewable wildlife. | Same as Proposed Plan. | No similar impact. | Same as Alternative B. |
| | Maintaining riparian habitats (outside the Snake River channel) in proper functioning condition would benefit wildlife habitat by providing a sustained level of available forage and water quality. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Habitats may be of lesser quality, as proper functioning condition of riparian areas may not be maintained. | Same as Proposed Plan. |
| | With expansion of recreational activities into big game habitat, human-wildlife interactions would increase. Human injuries could occur and some wildlife might be displaced. Depending on the extent of the activities, wildlife reproductive success and species diversity could be affected. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | No similar impact. There would be no public recreational access to the parcels. However, private landowners' uses of the parcels may cause other impacts to wildlife or wildlife habitat. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Any level of human activity in areas of breeding, nesting or foraging raptors can be expected to influence raptor behaviors. Some degree of adverse impacts may be possible. | River activities such as fishing and floating may adversely affect spring nesting and young rearing by birds that depend on the Snake River. The effects would be greatest on bald eagle nesting areas that are viewable from some portion of the river or its banks. | Compared to the Proposed Plan, these effects would be increased by the higher levels of river recreation and emphasis on mining. | Compared to the Proposed Plan, impacts on raptors due to recreation activity would be less. | Same as Proposed Plan. | Same as Proposed Plan. |
| | An increase in land-based recreational use would likely increase the potential for adverse impacts to wildlife due to detrimental, direct effects to vegetation/forage, and/or increased human-wildlife conflicts. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | A decrease in land-based recreational use would likely benefit wildlife by reducing impacts to vegetation/forage or decreasing human-wildlife conflicts. | Same as Proposed Plan. |
| | Control of noxious weeds and other undesirable vegetation would benefit wildlife by providing appropriate vegetation/forage types, so long as the control method minimizes toxicity. | Same as Proposed Plan. | Same as Proposed Plan. | Lesser ability to control noxious weeds and other undesirable vegetation could impact wildlife habitat through the presence of more weeds. Prohibition on the use of chemical control would reduce the potential for a toxic affect to wildlife. | Impacts are unknown as the extent of weed control that private landowners would employ is unknown. | Same as Proposed Plan. |

| TABLE 4-2<br>COMPARISON OF ENVIRONMENTAL CONSEQUENCES | | | | | | |
|---|---|---|---|---|---|---|
| **LAND USE OR RESOURCE** | **PROPOSED PLAN** | **NO ACTION CURRENT MANAGEMENT ALTERNATIVE A** | **ALTERNATIVE B** | **ALTERNATIVE C** | **ALTERNATIVE D** | **ALTERNATIVE E** |
| **WILDLIFE AND FISH HABITAT (Continued)** | Cooperation with the WGFD and USFWS to identify active or historic raptor nest locations and to impose seasonal restrictions to reduce human intrusions would ensure minimal impacts on nesting pairs and nestlings. | Same as Proposed Plan. | Same as Proposed Plan. | Same as Proposed Plan. | Private landowners' management of habitats near raptor nest locations may cause impacts on nesting pairs and nestlings. Landowners would still be subject to certain provisions of the ESA. | Same as Proposed Plan. |
| | River recreation and sand and gravel mining could cause impacts to bald eagle nesting success due to disturbance of the birds from human presence. | Impacts could be greater, as recreation would be unregulated and could increase substantially. | The higher levels of river recreation and emphasis on mining under this alternative could cause greater impacts to bald eagle nesting success. | These impacts would be less than under the Proposed Plan, as no sand and gravel mining would be allowed. | Impacts would be similar to Alternative A until parcel sale. Other impacts to bald eagle nesting and habitat could occur after parcel sale due to the management practices of private landowners. | Same as Proposed Plan. |
| | Anticipated actions and activities would not adversely affect smaller mammals, such as furbearers and predators, or amphibians and reptiles. Anticipated beneficial management practices in riparian areas would enhance habitat for these animals. | Same as Proposed Plan. | Compared to the Proposed Plan, increased recreational activity in riparian areas, such as pulling rafts through vegetation and foot travel creating new trails, would negatively affect these animals. | Same as Proposed Plan. | The impacts of private landowners' actions cannot be predicted. Benefits from BLM management practices would not be realized. | Same as Proposed Plan. |

# CUMULATIVE IMPACTS OF THE ALTERNATIVES

## INTRODUCTION

Cumulative effects are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The Bureau of Land Management (BLM) is a minority landowner in Jackson Hole. The public land parcels cover about 29% of the length of the Snake River between Grand Teton National Park and the South Park Bridge (about 20 miles; see Map 1). The parcels occur randomly spaced along a very narrow corridor, and this number overestimates the total amount of the river's riparian area or former floodplain that is managed by BLM. For this reason, the cumulative impacts of BLM actions that would be taken under these alternatives are minor in proportion to potential impacts from actions on private lands in the Valley.

However, BLM does control the majority of public access to the river corridor. Public land parcels are located at both highway bridges over the Snake River, and at other points that allow a substantial amount of public access and recreation use. The wildlife habitat value of the public land parcels is also important, as undeveloped areas usable by certain wildlife species, particularly bald eagles, are located mostly on the BLM parcels.

This section analyzes differences between the alternatives and the overall impacts associated with implementing each alternative. It is assumed that there would be impacts from many other activities (i.e., residential and commercial development, new roads, increased traffic) in the valley outside of the control of BLM, but these activities are not specifically addressed.

### Proposed Plan

The Proposed Plan assumes that the BLM would transfer the public land parcels to another public land managing agency, or to other public or government entities. While no specific restrictions for management would be placed on the parcels as they are transferred, acquiring agencies or entities would be required to manage the parcels to preserve public access, recreation use, open space, and wildlife habitat values.

Existence of the public land parcels is instrumental in maintaining public access to this section of the river. Ensuring that the parcels remain open for public use would positively benefit recreation users. Limited overnight camping could be provided on public lands, and the number and type of river floaters could be regulated through a permit process. This would result in improved facilities for river users, but also may cause conflicts if users cannot get a river permit or if campgrounds do not have the capacity to answer the demand. Signs and interpretive facilities on public land parcels could enable users to locate and use the parcels with less likelihood of trespassing on adjacent private lands. However, increasing the numbers of users on the parcels also could cause an increase in incidental trespass. Increases in public access or use in areas of sensitive wildlife habitats could cause adverse human-wildlife interactions.

While signing or efforts to make the public aware of wildlife issues could help to reduce conflicts, the potential for impacts would remain.

This alternative would limit access to minerals. Public lands and mineral estate would be closed to leasing for oil and gas and other leasable minerals. These areas also would be closed to locatable mineral (gold, silver, diamonds) entry. Salable minerals, in particular sand and gravel, would be available only in the active river channel; access to sand and gravel would be subject to provisions to protect sensitive resources. These actions would benefit the river system, wildlife habitats, and the recreation experience. The extractive mineral industry in general, and local prices for and availability of construction materials, would be negatively impacted to the extent that materials from BLM-administered mineral estate contribute to the overall availability of mineral materials in Teton County.

The Proposed Plan would maintain or increase the amount of land in Jackson Hole that is managed by two or more entities. The BLM would retain all federal mineral estate; thus all minerals management activities, particularly gravel sales, would be carried out in the Pinedale BLM office. In addition, if conservation easements or other management agreements were retained on any parcels that are sold or transferred, another layer of ownership would also be added to the management of those parcels.

**Alternative A**

Alternative A, Continuation of Existing Management, would continue current management practices based on compliance with federal laws, regulations, and BLM policy, as well as adherence to court decisions granting recreational access and allocating livestock grazing within the Snake River corridor. Alternative A would provide for the retention of public lands for public purposes and would allow the current levels of recreational activity to continue and expand to the possible detriment of wildlife and the recreational experience. Generally, mineral development would be prohibited, although mining for mineral materials, such as sand and gravel, would be allowed case-by-case. There would be little active management, although some restrictions would exist where necessary to protect sensitive resources.

Overnight camping would continue to be prohibited on the parcels, and no access fee or recreation permit system would be established. Retaining the parcels for public use would benefit recreation users. This alternative would result in fewer facilities and options for river users, but also would not limit use of the river. A continued lack of signs and interpretive facilities on public land parcels would result in continued confusion about the location of and access to the parcels. Conflicts and trespass would increase. The cumulative effects of no management would negatively impact important resources.

Impacts of this alternative on mineral development would be similar to those listed for the Proposed Plan.

This alternative would not include the option of sale or transfer of public lands out of public ownership (with the exception of parcel 27, the trash transfer station). The lands may be transferred to another public agency, with the requirement that the lands remain open for public use. This may allow for some opportunity to provide improved access or better protection to some parcels; however, much of the opportunity to achieve consolidation or better access to the parcels through private exchange would be lost. It is likely that the current configuration of parcel locations, sizes, and access would continue under this alternative.

**Alternative B**

Alternative B would reduce the level of land use restrictions while providing for higher levels of mineral development and recreational use. The development of two primitive, boat-in campsites, the construction of a new boat and river access site, and the posting of interpretive and directional signs would emphasize recreation. Under Alternative B, some lands could be removed from public ownership and use.

Alternative B would emphasize the development and consumptive use of non-renewable resources and increased recreation. Negative impacts to visual, wildlife, vegetation, and watershed resources would be greatest under this alternative. Access to mineral resources would be greatest, providing for local sources of minerals and limited economic development.

Because Alternative B would allow for the sale of parcels into private ownership, there could be a loss of areas available for recreation use. Overnight camping would be provided on public lands, and the number and type of both private and commercial river floaters would be regulated through a permit process. This would result in improved facilities for river users, but may also cause conflicts if users cannot get a river permit or if campgrounds do not have the capacity to answer the demand. Signs and interpretive facilities on public land parcels would enable users to locate and use the parcels with less likelihood of trespassing on adjacent private lands. However, increasing the numbers of users on the parcels also could cause an increase in incidental trespass and may also lead to additional adverse human-wildlife interactions.

This alternative would emphasize access to minerals. Public lands and mineral estate outside the river corridor would be opened to leasing for oil and gas, and all public mineral estate would be opened to leasing for other leasable minerals. The areas also would be opened to locatable mineral (gold, silver, diamonds) entry after expiration of the withdrawal in 2005. Salable minerals, in particular sand and gravel, would be available on federal mineral estate throughout the planning area. These actions would impact the river system, wildlife habitats, and the recreation experience. The extractive mineral industry in general, and local prices for and availability of construction materials, could be positively impacted to the extent that materials from federal mineral estate contribute to the overall availability of mineral resources in Teton County.

The opportunity would remain to provide improved access or better protection to some parcels, through exchange or transfer of public land parcels. Transfer of any parcels out of public ownership likely would result in loss of public access in an area where access to the river is already limited; however, some exchanges could result in improved river access at another point, better management of other parcels, or other public benefits.

Wildlife, vegetation and watershed resources would experience the most negative impacts under this alternative.

**Alternative C**

Alternative C is a resource protection alternative. The protection of wildlife habitat and a more isolated recreational experience would be pursued through a reduced level of river floating. Public education would be highlighted through the use of interpretive signs. Generally, Alternative C would provide for the retention and possible consolidation of public lands. In cases where lands might be removed from

public ownership and use, these parcels would be protected from development through the use of conservation easements.

Recreation uses on or originating from public lands would be limited: camping would be prohibited, as well as commercial, competitive, and organized recreational events. This would adversely affect access to the river, especially for residents of Jackson Hole, who might be less likely to use organized guide services operating out of Grand Teton National Park or the Bridger-Teton National Forest.

In addition to the limitations on access to minerals of the Proposed Plan, Alternative C disallows access to salable minerals. No minerals could be developed on federal mineral estate in the planning area under this alternative. Impacts would be similar to those listed for the Proposed Plan, with slightly more negative impact on the availability and price of construction material.

The opportunity would remain to provide improved access or better protection to some parcels, through exchange or transfer of public land parcels. Transfer of any parcels out of public ownership likely would result in loss of public access in an area where access to the river is already limited; however, some exchanges could result in improved river access at another point, better management of other parcels, or other public benefits.

Alternative C includes the greatest provisions for the protection of wildlife habitats, fisheries, vegetation and watershed health, while keeping the parcels available for recreation to the extent possible. Wildlife, vegetation and watershed resources would benefit under this alternative because of the mitigating measures and restrictions on surface-disturbing and consumptive uses.

**Alternative D**

Alternative D is a disposal alternative. Under Alternative D, BLM would seek to end its management responsibility for surface lands and resources in the planning area. Other agencies or private individuals would manage the parcels (except for the mineral estate, which would be retained by the BLM). Protective restrictions put in place by BLM under other alternatives in this EIS would no longer apply to management of the parcels. Protections required by law, such as cultural resource inventories and ESA Section 7 consultation on Threatened and Endangered Species prior to land disposal, would apply.

Transfer or sale of the parcels into private ownership would greatly impact recreation use of the river, especially for local residents. There would be no public camping, boat launching, or other recreational facilities. Private individuals would control access to the river between GTNP and the South Park bridge, with the potential for all access to be lost, or for high access fees to be charged. This would change the recreation dynamic for many residents of the valley, for whom the river levees are a primary source of recreation. Congestion at other recreation sites in the valley, including walking paths and parks, would increase.

Transfer of the parcels into private ownership could also result in development of the parcels as home sites or for other uses. These activities would impact vegetation, soil, and water quality and riparian characteristics of the parcels, ultimately making them less desirable or unusable as wildlife habitat. The open space and scenic character of the parcels would also be lost. Density of homes and other developments along the river corridor would increase.

This alternative is similar to the Proposed Plan in management of federal mineral resources. Impacts would be similar to those listed for the Proposed Plan. In addition, with loss of public access across the BLM land parcels, gaining access to lands containing federal sand and gravel resources could become more difficult.

All opportunities for the BLM to provide access to or protection of the parcels would be lost. Access to the Snake River through Jackson Hole would become extremely limited. There may be some opportunity for private conservation groups or other agencies to acquire and protect some parcels; however, this cannot be predicted.

It is difficult to predict impacts on wildlife, vegetation, and watershed resources. While reduction of public access may be a benefit to wildlife, this effect would be countered by the potential for development of some of the last remaining undeveloped parcels of wildlife habitat along the river. Vegetation and watersheds would also be impacted if the parcels were developed after sale. Sale of the parcels into private ownership could fundamentally change the character of the river corridor, in regard to public access, wildlife habitat, and recreation opportunities.

**Alternative E**

Alternative E is similar to the Proposed Plan, with the exception that management would be carried out by the BLM. For that reason, impacts would, for the most part, be similar to those listed for the Proposed Plan.

Alternative E is a resource protection alternative that includes greater provisions for the protection of wildlife habitats, fisheries, cultural resources, recreation use and public access to the parcels. Impacts from surface-disturbing activities, such as mineral extraction, would be reduced. In general, there would be more active management of the parcels, with recreation fee programs, informational signs and interpretive facilities, limitations on livestock grazing, and restrictions on activities that would impact sensitive resources.

Alternative E is similar to Alternative C in its approach to sale, exchange, or transfer of public land parcels. Impacts would be similar to those listed for Alternative C.

This alternative would limit access to minerals. Public lands and mineral estate would be closed to leasing for oil and gas and other leasable minerals. These areas also would be closed to locatable mineral (gold, silver, diamonds) entry. Salable minerals, in particular sand and gravel, would be available only in the active river channel; access to sand and gravel would be subject to provisions to protect sensitive resources. These actions would benefit the river system, wildlife habitats, and the recreation experience. The extractive mineral industry in general, and local prices for and availability of construction materials, would be negatively impacted to the extent that materials from BLM-administered mineral estate contribute to the overall availability of mineral materials in Teton County.

Existence of the public land parcels is instrumental in maintaining public access to this section of the river. Ensuring that the parcels remain open for public use would positively benefit recreation users. Limited overnight camping could be provided on public lands, and the number and type of river floaters could be regulated through a permit process. This would result in improved facilities for river users, but also may cause conflicts if users cannot get a river permit or if campgrounds do not have the capacity to

answer the demand. Signs and interpretive facilities on public land parcels could enable users to locate and use the parcels with less likelihood of trespassing on adjacent private lands. However, increasing the numbers of users on the parcels also could cause an increase in incidental trespass.

Wildlife, vegetation and watershed resources would benefit under this alternative because of the mitigating measures and restrictions on surface-disturbing and consumptive uses. However, development of additional recreation facilities could have negative impacts on some wildlife species and habitats. Increases in public access or use in areas of sensitive wildlife habitats could cause adverse human-wildlife interactions. While signing or efforts to make the public aware of wildlife issues could help to reduce conflicts, the potential for impacts would remain.