CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This chapter discusses the environmental consequences of selection and implementation of each of the alternatives described in Chapter 2. The discussion for each alternative identifies impacts on each resource component of the affected environment described in Chapter 3. The identified environmental consequences provide the basis for selection of a preferred alternative in conjunction with public input and coordination with State and local governments, other Federal agencies, and Indian tribes.

EFFECTS OF THE ALTERNATIVES

Alternative A

Fire Management

Average wildfire numbers and size from recent years would be expected to continue in Alternative A; 81 fires per year and 34,000 acres burned per year. No increasing or decreasing trend would be expected over the long term.

Wildlife

Under this alternative, 87 tracts now under the Isolated Tract HMP would remain in Federal ownership and would continue to be managed for wildlife habitat protection.

Where specific numbers of animals are listed below, we anticipate that 50 percent of the change would occur within 5 years, and the remaining 50 percent within 20 years. Refer to Appendix C "Methodology" for an explanation of how the numbers were derived.

Bliss Rapids Snail (Candidate Endangered). Dewatering or creation of slack water would destroy populations of this species if these actions occurred. The future extent of these actions is unpredictable.

Ferruginous Hawk (Candidate Threatened). A population increase could be expected as a result of the placement of artificial nest structures.

Swainson's Hawk (Candidate Threatened). An unknown population increase could be expected, as all 87 wildlife tracts would be maintained in habitat suitable for this species. Artificial or natural nest sites could potentially be provided on any or all of these tracts. By maintaining a large number and variety of these tracts, chances of success in attracting breeding Swainson's hawks are increased.

Burrowing Owl (Sensitive). A net gain of 14 breeding pairs could be expected as a result of providing artificial nest structures on some of the 87 Isolated Tracts.

Shoshone Sculpin (Sensitive). The populations of this species and its habitat in Box Canyon and Blue Heart Springs are currently exposed to three threatening actions--sedimentation from return irrigation flow, soil disturbance within Box Canyon, and most importantly, dewatering. The future extent of these actions is unpredictable.

Ring-Necked Pheasant. A net increase of 5,200 birds could be expected mainly as a result of brush protection and seedings on Isolated Tracts. The population would increase as a result of better winter cover and also improved nesting cover.

Gray Partridge (Hungarian Partridge). A net increase of 870 birds could be expected for the same reasons as those cited for pheasants.

Sage Grouse. No change.

Pronghorn. A net increase of 26 animals could be expected mainly due to seedings, brush protection, and brush enhancement on certain Isolated Tracts. These tracts would be of value as winter range and as fawning cover.

Mule Deer. A net increase of 17 animals could expected due to seedings and brush cover on Isolated Tracts that would be of value to resident deer and some wintering animals.

Hybrid Cutthroat/Rainbow Trout. Currently, sedimentation in the spawning habitat of this unique population is an identified negative effect. However, other unforseen negative effects may arise in the future.

Non-Game Species. A net increase of 1,900 pairs of breeding birds could be expected primarily through increased habitat quality and diversity on Isolated Tracts. A small loss of breeding pairs would occur on transfer lands.

Livestock Forage

Grazing Management. Under this alternative, the stocking rate would be 97,564 AUMs. This is a decrease of 51,571 (35 percent) from the active preference of 149,135 AUMs.

Land transfer would result in a loss of 328 AUMs from the five-year average actual use of 97,892 AUMs. Four allotments would be entirely eliminated by land transfer.

Conversion of sheep AUMs to cattle AUMs would take place on four allotments with existing AMPs which specifically address conversions. This would amount to only 4,982 AUMs converted from sheep use to cattle use. As a result, the amount of nonuse would increase significantly if the sheep industry continues to decline.

See Table D-3 in Appendix D for allotment-specific details.

Vegetation. Vegetation trend in the planning area is expected to be controlled by the influences of cheatgrass. Long-term (27 years) photo points, permanent photo trend plots, and apparent trend observations all provide supportive evidence for the stability of cheatgrass-dominated vegetation types. Downward trends are expected to continue on problem areas and upward trends are expected on areas dominated by perennial vegetation. Stable trends are expected on the remainder of the planning area. Below is a summary of the expected trends for this alternative.

Upward	21 percent
Stable	74 percent
Downward	5 percent

Range condition would continue to decline on downward trend areas due to seasonal grazing and livestock distribution problems resulting from lack of water and rough, rocky terrain. Continued improvement should occur in upward trend areas, but no change in condition is expected on areas with stable trend. The dampening effects of cheatgrass on successional change would make plant community changes subtle and changes of condition slow to occur (Robertson and Pearse 1945; Hironaka 1963; Young, Evans, and Major 1972). Virtually all of the poor condition range lacks sufficient native species to provide an adequate seed source for an improvement in condition. Continued high fire frequencies and competition from cheatgrass are expected to prevent condition class changes in this alternative. Present condition classes are:

Good	2 percent
Fair	8 percent
Poor	70 percent
Seeded	20 percent

Refer to Appendix D, "Projecting Ecological Condition and Trend" for an explanation of how the projections above were derived.

No ACEC designations would be made under this alternative. Proposed ACECs would not be lost to land transfer, but special management for protection of these tracts from disturbance would not be implemented either. Both the Substation Tract and the Silver Sage Playa would be susceptible to disturbances, especially burning.

No effects on Threatened or Endangered plants are expected to occur under this alternative.

Lands

Transfer of 3,458 acres could occur under this alternative through public sales, exchanges, or R&PPs (refer to Table 2-2). No transfer of lands currently under Desert Land Act and Carey Act application would occur. This would result in adverse actions being taken on 5,570 acres of land under Desert Land Entry application and 38,420 acres of land under Carey Act application.

The transfer of public lands has the potential for significant adverse impacts on other resource and public values. The loss of public land base would eliminate the availability of these lands for future use by the public and the Federal government. It is assumed that the lands would be put to a single use (housing, agriculture, etc.) and the multiple use values would be lost or diminished. Legal, existing uses would be protected and mineral rights would be reserved to the government in most cases.

Transfers could reduce problem mangement areas for BLM, protect private land investments and values, and add to the local tax base. Disposals would be selected which better consolidate land ownership patterns, thereby improving management.

The transfer of public lands would affect each resource to varying degrees. The overall impacts are somewhat proportional to the acreages involved and are discussed in the environmental consequences narrative for each resource.

Actions for leases, easements, permits, and rights-of-way would continue to be allowed. Mitigation of any adverse effects to the environment would be included in the use authorization.

Lands activities would be limited to those not involving motor vehicle use on 450 acres. For example, a right-of-way application might be denied or modified because motor vehicles could not be used to install or maintain developments.

Withdrawal review activities would occur in accordance with a specified schedule through 1991 (see Appendix E). As a result of this review, all lands now withdrawn by formal withdrawal or 'de facto' withdrawals (lands classifications) which prohibit some lands and minerals actions, could be opened to entry, settlement, or location under various land and mineral laws. Nearly all lands within the planning area are now encumbered, to some degree, by withdrawals and/or classifications. The removal of the withdrawal status and segregations provided for by the classifications would not, in itself, cause any impacts other than the administrative actions necessary to respond to filings for various lands uses. The retention of withdrawals and/or classifications would continue the restriction of certain entries and uses of the affected lands.

Existing, recognized (legal) uses of public lands transferred to private ownership would be protected. These protected uses include rights-of-way and public access and, in the case of sales, the privilege of continued grazing for the period specified in the permit or lease in existence at the time of the sale. Areas containing resource values such as wetland/riparian habitat and flood plains would be protected through patent reservations or encumbrances. Minerals would normally be reserved to the United States. In an exchange, mineral rights would be exchanged when the mineral rights on public lands and non-public are comparable. Local government needs, primarily for rights-of-way and sanitary landfills, would continue to be addressed on a case-by-case basis. Over 1,100 acres have use authorizations or are under consideration for allowance of sanitary landfill development. Lands needed for recreation and public purpose uses would be leased subject to an approved development and management plan that takes the needs of the populace and environmental protection into consideration. Lands used for sanitary landfills would not be available to the public for other uses until the site's usefulness for landfill purposes is exhausted. At that time, the lands would be rehabilitated for return to multiple use management or developed for some other purpose consistent with the Recreation and Public Purposes Act and the site capability.

The settlement of unauthorized use on public lands would result in payment of fair market value for past use and provide for rehabilitation of degraded areas. When the lands are retained in Federal ownership, continued use may be allowed under FLPMA authorization or a Sikes Act agreement for wildlife habitat improvement and maintenance.

Wilderness

Shale Butte WSA (57-2). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining, and fire suppression could have adverse impacts on wilderness resources.

Although the entire WSA is accessible to trailbike use and, except for a number of very rough areas, four-wheel drive vehicles, recreational ORV use is presently low (less than 1,000 visits/year) in this unit. Long term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in the WSA.

Livestock management would require the occasional use of vehicles on ways inside the WSA for various management activities. This use would have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity inside the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value of naturalness. Since fires occur frequently (one every five years), there is a fair chance that over the long term some damage to the wilderness resource due to fire suppression activities would occur. Fires would continue to create conditions that are unfavorable to vegetation that is representative of the potential natural vegetation for this area (Sagebrush-Steppe).

Sand Butte WSA (57-8). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining, and fire suppression could have adverse impacts on wilderness resources.

Although the entire WSA is accessible to trailbike use, and in a few areas close to existing roads and ways accessible to four-wheel drive vehicles, recreational ORV use is presently low (less than 1,000 visits/year) in this unit. Long term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in the WSA.

Livestock management will require the occasional use of vehicles on ways and cherrystem roads inside the WSA for various management activities. This use will have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity inside the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value of naturalness. Some portions of the WSA have fires fairly frequently (three times in the last 25 years), although most of the WSA has burned at a much lower frequency. Given the fire history of this area, it is reasonable to assume that, over the long run, heavy equipment would be used in the unit for fire suppression. The use of this equipment would have an adverse impact on the wilderness value of naturalness.

Raven's Eye WSA (57-10). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining and fire suppression could have adverse impacts on wilderness resources.

Approximately 47 percent of the WSA is accessible to trailbike use. A much smaller area, close to existing roads and ways, is accessible to four-wheel drive vehicles. Although recreational ORV use is presently low (less than 1,000 visits/year) in this unit, long term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in those portions of the WSA that are accessible.

Livestock management would require the occasional use of vehicles on ways and cherrystem roads inside the WSA for various management activities. This use would have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity on 47 percent of the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value of naturalness. The remainder of the WSA is so barren of vegetation that fires of more than an acre or two rarely occur. In addition, that part of the WSA is so rugged that fire suppression using heavy equipment would not be attempted. Given the fire history of this area, it is reasonable to assume that, over the long run, heavy equipment would be used in the unit for fire suppression. The use of this equipment would have an adverse impact on the wilderness value of naturalness in those portions of the WSA accessible to heavy equipment.

Little Deer WSA (57-11). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining, and fire suppression could have adverse impacts on wilderness resources.

Approximately 38 percent of the WSA is accessible to trailbike use. A much smaller area close to existing roads and ways is accessible to four-wheel drive vehicles. Although recreational ORV use is presently low (less than 1,000 visits/year) in this unit, long-term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in those portions of the WSA that are accessible.

Livestock management would require the occasional use of vehicles on ways and cherrystem roads inside the WSA for various management activities. This use would have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity on 38 percent of the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value of naturalness. The remainder of the WSA is so barren of vegetation that fires of more than an acre or two rarely occur. In addition, that part of the WSA is so rugged that fire suppression using heavy equipment would not be attempted. Given the fire history of this area, it is reasonable to assume that, over the long run, heavy equipment would be used in the unit for fire suppression. The use of this equipment would have an adverse impact on the wilderness value of naturalness in those portions of the WSA accessible to heavy equipment.

Bear Den Butte WSA (57-14). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. Activities such as off-road vehicle (ORV) use, livestock management, mining, and fire suppression could have adverse impacts on wilderness resources.

Approximately 56 percent of the WSA is accessible to trailbike use. A much smaller area close to existing roads and ways accessible to four-wheel drive vehicles. Although recreational ORV use is presently low (less-than 1,000 visits/year) in this unit, long term use trends for the region (Idaho Department of Parks & Recreation 1977) indicate that ORV use will increase to levels that would have adverse impacts on wilderness values of naturalness and solitude in those portions of the WSA that are accessible.

Livestock management would require the occasional use of vehicles on ways inside the WSA for various management activities. This use would have a minor adverse impact on solitude values in the WSA.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (see Fredericksen and Fernette), and the probability of damage to wilderness resources from mineral development is also low.

Fire suppression activity on 56 percent of the WSA could include the use of heavy equipment that would have an adverse impact on the wilderness value of naturalness. The remainder of the WSA is so barren of vegetation that fires of more than an acre or two rarely occur. In addition, that part of the WSA is so rugged that fire suppression using heavy equipment would not be attempted. Given the fire history of this area, it is reasonable to assume that, over the long run, heavy equipment would be used in the unit for fire suppression. The use of this equipment would have an adverse impact on the wilderness value of naturalness in those portions of the WSA accessible to heavy equipment.

Shoshone WSA (59-7). None of the WSA would be recommended as suitable for wilderness. This alternative would have no beneficial impacts on the wilderness resource. The only activity that would have an adverse impact on wilderness values is mining. The WSA is so rugged that it is not used by other activities such as livestock management, recreational ORV use, and fire suppression.

Although no mining claims exist within the WSA at present, development of new claims or leases would have an adverse impact on wilderness values of naturalness and solitude. The potential for locatable or leasable minerals occurring in the WSA is low (Fredericksen and Fernette 1983), and the probability of damage to wilderness resources from mineral development is also low.

Natural History

None of the areas of geologic interest (AGI) would have any special management. Improved access to AGI would accelerate vandalism and other man-caused agents of deterioration in four AGI covering 8,579 acres. Improved access to six AGI would increase the number of people exposed to natural hazards.

The proposed Dry Cataracts National Natural Landmark would be open to mineral material removal. Excavation of alluvial gravel deposits would adversely affect geological features that illustrate natural history related to the Bonneville Flood.

Diversion of water from springs in the proposed Box Canyon National Natural Landmark could adversely affect natural history values related to the unique alcove ecosystem in the area. No special emphasis would be given to the protection of natural history values when considering resource use proposals.

Cultural Resources

Since any Bureau authorized or initiated action recognizes and accommodates cultural resources by virtue of our standard operating procedures (see Appendix H), the only activity which may damage these resources is unplanned public use. Such activities include unauthorized recreational vehicle use, artifact collection, and illegal excavation for materials and antiquities. The location of these activities is impossible to predict and may occur in spite of measures designed to exclude or limit them.

The following restrictions would protect cultural resources from inadvertant disturbance associated with vehicle or machine use and/or the hazards associated with increased public use such as illegal collection of artifacts. The restricted areas are divided into high density and low density cultural resource occurrence areas as described in Chapter 3. Although the exact location and significance of cultural resources is not known, it is expected that the more acres of high density occurrence areas where the following limitations apply, the greater the benefit to cultural occurrence. Limitations in low density occurrence areas are less likely to effect cultural resources. ORV closures would protect sites on 450 acres in high density cultural resource areas. ORV limitations would protect 345 acres in high density cultural resource areas.

Recreation

Recreation use would continue its present upward trend. Use would increase because of local population increases, increased leisure time, and a greater influx of people into the area for recreation purposes. The largest use increase would be experienced in big game hunting and float boating. Refer to Table 2-3 for the projected growth rates in various recreation activities. Scenic quality in the Cedar Fields area will continue to deteriorate because of increased ORV activity.

Although recreation use would increase, opportunities would generally decrease in quality. Recreationists would experience greater competition for recreation resources and recreation-related conflicts would increase.

Soils

Erosion would continue at an average 4.8 tons/acre/year. Of the 1,178,989 acres in the planning area, 36,509 acres (3 percent) would have a severe erosion problem by the end of 20 years. This slight decrease from present conditions would be due to the continuing beneficial effects of ORV closures and limitations in fragile areas, and 150 acres of seeding to stabilize sand dunes. Appendix I contains a discussion about changes in erosion rates and the equations used to estimate erosion rates.

Minerals and Energy

In Alternative A 340 acres of existing material sites would be lost to public use by transfer from Federal ownership. Loss of these material sites could cause considerable hardship and higher costs to highway departments and the public who depend upon these sites for mineral materials. Two thousand five hundred sixty acres of possible mineral material deposits could be lost by transfer.

Transfer could create problems of split estate ownership, a situation where the surface is privately owned, but the subsurface mineral rights are Federally owned. This could make mineral exploration more complicated, time consuming, and expensive.

Economic Conditions

Appendix J contains a detailed comparison of the economic effects of each alternative.

Grazing-Related Economic Effects. There would be a slight decline in income with this alternative as a result of a loss of 328 AUMs through land disposals. This would represent an income loss of $6,100 annually, which is less than 1 percent of current income generated by BLM grazing use. Table 4-1 shows the effects of this income loss by size group. Grazing-related employment would not be affected by this alternative. There would be no secondary income or employment effects from this alternative. There are no range improvements planned in this alternative.

TABLE 4-1

LIVESTOCK INCOME AND EMPLOYMENT CHANGES
ALTERNATIVE A

Size Group	Proposed Grazing Use	Change in Use	Income Change	Employment Change
1	11,583	- 39	- $ 725	-0-
2	22,288	- 75	- $1,395	-0-
3	34,116	-115	- $2,139	-0-
4	29,577	- 99	- $1,841	-0-
Total	97,564	-328	- $6,100	-0-

Grazing fees are distributed in the following manner: 50 percent to range improvement fund, 37 1/2 percent to Federal treasury, 12 1/2 percent to State of Idaho (who redistributes it to the county of collection for range imrpovements). Based on a $2 grazing fee (the average fee over the grazing years 1979 to 1983 was $1.96), the following grazing fee collection reductions would take place with this alternative:

Range Improvement Fund	- $328
Federal Treasury	- $246
State of Idaho	- $ 82
Total	- $656

The total capital value of the AUMs lost would amount to between $18,000 and $81,000. This is based on the values reported in Boly (1980) and Fowler and Gray (1980). This alternative would not place the viability of any ranches in jeopardy.

Recreation-Related Economic Effects. By the end of 20 years, the income generated by recreation-related activities would increase by $2 million a year over present levels. This would generally benefit the retail trade industry and would represent a 15 percent increase in earnings over the present levels. This includes both primary and secondary income effects.

There would be approximately 202 jobs added in recreation-related employment by year 20. This would be an increase of 15 percent over current employment in the retail trade sector.

Crop Agriculture-Related Economic Effects. There would be no agricultural development of DLEs or Carey Acts in Alternative A.

Economic Effects of Land Transfers. Except as stated previously (Grazing Related Economic Effects), the primary economic effect of land transfers would be in the form of revenues or decreased operating costs to the Federal government. Assuming a benefit (either in revenues or decreased costs) of $100 per acre of lands transferred, then this alternative would have a land transfer benefit of $345,800.

Economic Effects of Fire Suppression. The basic economic effect of fire suppression is the cost to the government. It is estimated, based on the last three years average cost per fire, that annual fire suppression costs with this alternative would total $306,200.

Summary. This alternative would raise income over present levels by $2 million and employment by 202 jobs. The costs would be $306,200 annually. Although some minor grazing reductions would occur, no significant impacts to the economy would result from implementing this alternative.

Alternative B

Fire Management

A decrease of 5 percent in acres burned (1,700 acres) and 1 percent reduction in number of fires (1 fire) would occur in this alternative. The reductions would be primarily due to heavier grazing, which would account for about 3 percent of the decrease, and improved road maintenance, which would account for the other 2 percent reduction. The two proposed wilderness areas would pose no significant fire problems in this alternative.

Reductions would be averages measured on a long term basis. The number of fires and acres burned varies greatly from year to year.

Wildlife

Under this alternative, 57 of the 87 tracts under the existing Isolated Tract HMP would be available for transfer from Federal owernship. For analysis purposes, it is assumed that the 57 tracts would be transferred and converted to agricultural use. Nine other tracts would be dropped from the Isolated Tracts HMP, but would not be available for transfer from Federal ownership.

Where specific numbers of animals are listed below, we anticipate that 50 percent of the change would occur within 5 years, and the remaining 50 percent within 20 years. Refer to Appendix C "Methodology" for an explanation of how the numbers were derived.

Bliss Rapids Snail (Candidate Endangered). Under this alternative, the habitat of the snail would be afforded greater protection through designation of Box Canyon/Blueheart Springs and Vineyard Creek as ACECs. Even though other uses would be allowed, the type and degree of development would be limited so as not to deplete the habitat value for this species.

Ferruginous Hawk (Candidate Threatened). A population increase could be expected as a result of the placement of artificial nest structures. Good potential sites for nest structures would receive additional protection from disturbing influences of future developments if the Little Deer WSA is designated wilderness.

Swainson's Hawk (Candidate Threatened). An unknown population increase could be expected, because the 21 wildlife tracts remaining would be maintained in habitat suitable for this species. Artificial nest sites could potentially be provided on any or all of these tracts. However, by maintaining only a few of these tracts, chances of success in attracting breeding Swainson's hawks would be reduced.

Burrowing Owl (Sensitive). A net loss of five breeding pairs could be expected. The positive effect of artificial nest site placement and burrow protection on the 21 Isolated Tracts would be offset by the transfer of habitat and conversion to agriculture. Some transfers would probably result in improved habitat for this species by providing a greater prey base associated with certain agricultural crops. Transfers may result in the increased availability of suitable nest sites from creation of rock piles when new fields are opened.

Shoshone Sculpin (Sensitive). Under this alternative, the habitat of the Shoshone sculpin would be afforded a greater degree of protection through designation of Box Canyon and Blueheart Springs as an ACEC. Even though other uses may be allowed, the type and degree of development would be limited so as not to deplete the habitat value for this sensitive species. ACEC designation would give priority to managing for the needs of the species.

Ring-Necked Pheasant. No significant change in the population would be expected. Some existing habitat would be lost on transfer lands, but large areas of public land that currently are not suitable for pheasants could become suitable where adjacent agricultural development occurs.

Gray Partridge (Hungarian Partridge). No significant change in the populations would be expected for the same reason as those cited for pheasants.

Sage Grouse. A net population increase of 1.5 percent could be expected. There would be an improved forb component in prescribed burn areas and in some seedings for livestock forage. These forbs would be made available to grouse by the creation of a mosaic of treated and untreated areas where forage and cover would be in proximity. Development and implementation of a HMP for sage grouse habitat would maintain high rates of winter survival and increase brood rearing success.

Pronghorn. A net loss of 55 animals could be expected as a result of transfer of land for agricultural development; much of which is historic winter range. Conversion to agriculture would further reduce fawning cover in some areas. The net loss of pronghorn would be greater, but development and implementation of a HMP for pronghorn winter habitat would help increase winter survival. Development and implementation of a summer range HMP would also benefit pronghorn.

Mule Deer. A net loss of 42 animals could be expected due to transfer of public land for agricultural development and loss of habitat for resident deer. The loss would be slightly offset by the implementation of the HMP for pronghorn winter range which would also benefit some wintering deer.

Hybrid Cutthroat/Rainbow Trout. Under ACEC designation, the spawning habitat of this unique population would receive greater attention than without such designation.

Non-Game Species. A net loss of 7,100 pairs of breeding birds is expected as a result of the transfer and conversion of rangeland to agriculture. The modest increase expected on Isolated Tracts and in brush protection areas is inadequate to offset this loss.

Livestock Forage

Grazing Management. This alternative would allow a total of 150,100 AUMs of forage for livestock. It is an increase of 52,208 AUMs (53 percent) from the five-year average actual use, or 965 AUMs (1 percent), from active preference (149,135 AUMs).

There would be 13,076 AUMs lost as a result of land transfer and public land devoted to other uses. Transfer of land from Federal ownership would significantly affect (more than 10 percent of active preference) 42 allotments and 72 permittees. Twenty-seven allotments would be lost completely because of land transfer.

Reductions amounting to 3,310 AUMs would be made on two allotments to bring them within their estimated carrying capacity. This would affect nine permittees.

Increased forage would be available in six allotments, for a total of 7,304 AUMs, as a result of past management and land treatment. On a long term, an additional 6,737 AUMs would be realized from land treatment.

Wildfire would result in an average annual temporary suspension of 5,768 AUMs. This is to allow adequate time for the vegetation to recover from the effects of fire.

An estimated 22,860 sheep AUMs would be converted to cattle AUMs. As a result, the amount of nonuse attributable to the continued decline of the sheep industry would be reduced.

There would be no significant impact on permittees in allotments proposed for new AMP or CRMP development. Six of these plans would be prepared to implement conversions of sheep to cattle. In these allotments, permittees would have to spend more time on maintenance of range improvements, but would spend much less time tending livestock. One of the plans would alter existing management and another would implement a new management system. In these allotments, permittees would have to spend some additional time on maintenance of range improvements and tending livestock. The remaining proposed AMPs or CRMPs would formalize existing management in an allotment.

See Table D-3 in Appendix D for allotment specific data.

Vegetation. A proposed 53 percent increase in grazing use in this alternative would result in increased utilization of available forage. This grazing pressure would be offset by seeding 55,500 acres and conducting brush control on 19,000 acres to increase the amount and availability of forage. Fencing, water developments, and grazing systems would also aid in supporting this level of use. Also, the number of acres burned each year is expected to drop 5 percent in this alternative. Priority for seedings and improvements to aid livestock distribution will be given to problem areas, causing a shift of acreage from downward to stable trend. Improved livestock distribution and higher levels of use would increase grazing on upward trend areas, causing a shift of acreage from upward to stable trend. The dampening effects of cheatgrass on successional change would make plant community changes subtle and slow to occur (Robertson and Pearse 1945; Hironaka and Tisdale 1963; Young, Evans, and Major 1972). The projected trends for this alternative are:

Upward	19 percent
Stable	77 percent
Downward	4 percent

All seedings would be done in poor condition areas dominated by cheatgrass, causing a change from poor ecological condition to seeded on 7 percent of the planning area. Additional changes in condition classes should be precluded by higher livestock use. Competition from cheatgrass should also prevent significant change in plant composition (Robertson and Pearse 1945; Hironaka and Tisdale 1963; Young, Evans, and Major 1972). Condition classes would be as shown below:

Good	2 percent
Fair	8 percent
Poor	63 percent
Seeded	27 percent

Refer to Appendix D, "Projecting Ecological Condition and Trend" for an explanation of how the projections above were derived.

Land disposals would prevent designation of the Substation Tract and the Silver Sage Playa as ACECs. These tracts would be lost as relict study areas and a significant loss of scientific values would result.

Proposed land treatments may have an effect on the Picabo milkvetch (Astragalus oniciformis), which is proposed for Federal listing as Endangered. Consultation procedures with U.S. Fish and Wildlife Service (FWS) regarding impacts to this species will be followed prior to any treatments. No detriment is expected from proposed stocking levels.

Lands

The acreages considered for disposal under this alternative are shown in Table 2-2. The total area considered for disposal includes 43,510 acres now under agricultural application. Allowances could occur on 5,330 acres of land under DLE application and 38,180 acres under Carey Act application. Denials would occur on 240 acres under DLE application and 240 acres under Carey Act application. Other disposals could occur through sales, exchanges, and R&PPs.

Impacts associated with lands disposals are the same as identified in Alternative A. Because of the greater amount of acreage involved, the impacts would, correspondingly, also be greater.

Land uses would be restricted to those compatible with wilderness management on 67,889 acres. For example, ORV use would be prohibited and no utility developments could be installed.

In addition to the wilderness acres discussed above, lands activities would be limited to those not involving motor vehicle use on 450 acres. For example, a right-of-way application might be denied or modified because motor vehicles could not be used to install or maintain developments.

Other non-transfer lands actions would continue under constraints set out in the resource management guidelines (see Chapter 2) and Standard Operating Procedures (see Appendix E) with the same general impacts identified in Alternative A.