

### Recreation

Recreational values would be maintained or improved under this alternative. Conflicts between recreationists and livestock would be minimal due to the applied grazing standards and defined deferment/rest grazing schedule that provides opportunities to avoid livestock interactions.

### Cultural Resources

Cultural sites are expected to be maintained or improved under this alternative due to regulated livestock grazing use on upland and riparian habitats. Cultural sites associated with upland wetland spring areas are expected to be maintained under this alternative. Only slight improvement can be expected on these areas as a result of applied upland grazing use standards. Grazing impacts associated with riparian areas along perennial streams may have a direct effect to cultural sites, but these would be lessened under the grazing use standards proposed in this alternative.

### Economic/Social Values

Individual ranch economies would likely be adversely impacted by this alternative due to the additional livestock handling requirements needed to successfully meet the grazing standards during the scheduled periods of use. Hiring additional riders or re-distributing the ranch personnel would likely be needed. These additional operating costs are not likely to be significant. The added expenses could be dealt with by both operators collectively, which would possibly alleviate or re-distribute some of the cost burden.

### Floodplains/Wetlands/Riparian Zones

Floodplains and riparian zone conditions are expected to be enhanced due to the application of the grazing use and bank shearing standards that would apply during the scheduled grazing period, coupled with the deferment/rest grazing schedule. These standards would ensure riparian vegetation is not excessively grazed or browsed and is provided the opportunity to improve vigor, growth form and age distribution. Undesirable plant communities (i.e. bluegrass) would gradually succumb to desirable hydric plant communities. Stream systems currently in functional-at-risk would become properly functioning with improved plant compositions and balanced sediment/energy dissipating stream systems. Wetlands associated with upland springs and seeps would be maintained under this alternative with grazing standards only applied to upland utilization levels and not specifically to wetland sites.

### Wildlife

Same as Alternative 1, except: utilization limits on bluebunch wheatgrass during the critical growth period is expected to provide more herbaceous cover and forage for wildlife. In addition, the stubble-height, woody use, and streambank shearing standards may help to maintain and improve habitat for riparian-dependent wildlife species more than the standards under Alternative 1. Reduced levels of livestock use in riparian areas would also result in less disturbance and displacement of wildlife from riparian habitats.

### Wild and Scenic Rivers (W&SR)

The outstandingly remarkable values associated with the eligible river segments and suitable Herd Creek segment would be maintained or improved under this alternative. This alternative

would ensure that outstandingly remarkable values such as the anadromous and native fisheries and cultural resources, are maintained and enhanced by the additional protection afforded within the W&SR corridor, through the application of stubble, browse, and bank shearing grazing use standards, coupled with the deferment and rest grazing schedule presented in this alternative. These type of prescriptive livestock grazing actions have also been analyzed in the Challis Proposed Resource Management Plan (PRMP), and have been found compatible with Wild and Scenic Rivers, Goal 1: number 1 (a). Livestock grazing management under this alternative would maintain the level of development that resulted in the segments' tentative classifications, ensure non-degradation of outstandingly remarkable (OR) values, and would protect free-flowing characteristics.

#### Indirect Impacts

No additional indirect impacts are expected under this alternative.

#### Cumulative Impacts

Cumulative impacts under this alternative are likely to be similar to those described in Alternative 1. However, the application of additional grazing use standards would reduce livestock induced stream sedimentation and provide opportunities for habitat protection and improvement. Adverse impacts from cumulative sediment loads from other actions would be minimal.

#### Summary of Alternative 2 Impacts to Affected Resources

Positive individual and cumulative impacts are anticipated as a result of this alternative. No significant individual or cumulative adverse impacts are anticipated as a result of this alternative.

### **Alternative 3: Livestock Controlled Timed Grazing**

#### Threatened and Endangered Species (TES) Fish; Native Fisheries

Impacts of permit issuance under the terms and conditions of use described for this alternative are expected to be very similar as those described for the proposed action, alternative 2. TES fish, other fish species and their habitats would be expected to improve under this alternative. Livestock grazing on accessible streams is permissible but, the very short time frames followed by extensive rest periods would provide for vegetative regrowth and streambank stabilization. The applied terms and conditions would prevent excessive livestock grazing impacts from occurring on the grazed paddocks. Specific sub-watersheds or drainages with critical fish habitat or unacceptable conditions could be avoided under this alternative grazing strategy for extended periods through improved livestock control practices providing additional opportunities for rapid, site specific improvement.

#### Vegetation Types and Rangeland Resources

Upland vegetation types would be maintained or improved under this alternative. Utilization is expected to be light to moderate with this type of grazing system since the livestock are encouraged to move rapidly through the scheduled paddock avoiding opportunities to re-graze

individual plants or to concentrate for extended periods of time. The relatively light grazing use and extended rest periods would ensure regrowth opportunities for improved plant vigor and seed production. Added flexibility allows means to avoid areas of low production, fragile soils, or other sensitive areas of concern. Livestock concentration areas where soils are left bare and susceptible to weed invasion are minimized under this alternative. Weed distribution and establishment is similar for this alternative as indicated in Alternative 2. However, localized disturbed areas and weed infestations can be avoided through controlled livestock herding. Individual paddocks or drainages can be totally avoided for extended periods to allow weed treatment activities to succeed.

#### Threatened/Endangered/Sensitive Plants

Same as Alternative 2.

#### Soils

Soil plant and litter cover and soil stability are likely to be improved under this alternative due to the limited grazing utilization, improved regrowth potential, and the extended rest periods being provided. Soil compaction is possible on the early grazed areas with large numbers of livestock, where soils are still moist. This situation is likely to be localized (north slopes) and minimal in extent. Areas with exposed soils (low production areas) and fragile soil sites can be avoided with improved livestock control practices reducing the threat of accelerated soil erosion from these locations. Livestock concentration areas where soils are left bare and highly susceptible to accelerated erosion would also be minimized under this alternative.

#### Water Quality

Same as Alternative 2. Although livestock use would occur on most stream segments under this alternative, the short duration, extended rest periods, and applied terms and conditions would improve water quality through improved streambank stability and improved woody and herbaceous plant communities.

#### Wilderness Study Area

Same as Alternative 2.

#### Recreation

Recreational values would be maintained or slightly decreased under this alternative. Although upland, riparian, and aquatic habitat conditions are likely to be improved under this alternative, recreational values may be hindered due to the lack of a structured livestock grazing schedule. Recreationists desiring a "livestock free" recreational experience would be forced to coordinate their activities around the annual operating plan. Although potential impacts may exist, they are not considered significant.

#### Cultural Resources

Same as Alternative 2, except cultural sites associated with upland wetland spring areas are expected to be maintained or possibly improved under this alternative due to the short duration of livestock presence and reduced potential for livestock concentration resulting in reduced soil compaction and site disturbance. In addition, sites of special concern can be

avoided altogether through controlled livestock herding.

#### Economic/Social Values

Same as Alternative 2. In addition, livestock control measures may need to be enhanced when paddocks or other areas are closed to grazing either seasonally or yearlong for other resource concerns. This requirement may necessitate hiring additional handlers or further redistribution of ranch personnel at additional expense.

#### Floodplains/Wetlands/Riparian Zones

Same as Alternative 2. In addition, application of use standards coupled with extended grazing rest periods in the short duration grazing system would be expected to accelerate improvement. Applying standards would ensure riparian vegetation is not excessively grazed or browsed and is provided the opportunity to improve vigor, growth form and age distribution. Undesirable plant communities (i.e. bluegrass) would be replaced by hydric plant communities. Stream functionality would be restored with improved plant compositions and balanced sediment/energy dissipating stream systems. With the added livestock control and flexibility, areas of concern can be removed from grazing for extended periods until conditions indicate grazing can resume. Wetlands associated with upland springs & seeps would be maintained or improved under this alternative through reduced livestock concentration and soil compaction reducing site disturbance.

#### Wildlife

Same as Alternative 2, except: It is expected that livestock numbers would be greater per unit area of land (higher density of livestock) in smaller paddocks or pastures. Higher livestock numbers in smaller areas would increase the potential for disturbance and displacement of wildlife within the paddock.

#### Wild and Scenic Rivers

Same as Alternative 2.

#### Indirect Impacts

No additional indirect impacts are expected under this alternative.

#### Cumulative Impacts

Same as Alternative 1. In addition, the application of grazing use standards during the scheduled grazing periods, the increased ability to control livestock to avoid areas of concern, and the limited durations of grazing in any paddock would be expected to provide more protection to sensitive riparian habitats and also may provide good opportunities for site specific upland watershed and riparian/stream reach habitat improvement.

Private, state and county interests are interspersed within the allotment, and are not managed by BLM. Private lands actions include upland grazing, diversions of parts of most streams onto private land for agricultural irrigation, riparian zone use for grazing purposes (water, feed, shade), and private residences. Uses for recreational purposes include fishing, hunting, hiking, sightseeing, and camping. County actions within the allotment include road

maintenance, telephone and power line maintenance along county and private road rights-of-ways and occasional use of materials sites in upland areas. All of the aforementioned activities hold the potential to increase natural geologic erosion rates, and deposit sediment into stream systems. The additive effects of authorized livestock grazing in accordance with the terms and conditions proposed in this alternative are not expected to be significant.

#### Summary of Alternative 3 Impacts to Affected Resources

Same as Alternative 2.

#### **Alternative 4: Emphasis on Conservative Grazing Use**

##### Threatened and Endangered Species (TES) Fish; Native Fisheries

Same as Alternative 2, except that more rapid improvement of riparian vegetation and fish habitat would be expected as a result of lower livestock numbers and more stringent grazing use standards. Population numbers, viability, and productivity of fish populations would be expected to show a gradual long term trend of improvement, possibly more easily detectible under this alternative than under any of those previously described. There would be a high probability that riparian vegetation and fish habitats would improve to a healthy, functional state within a shorter time-frame. Trampling, wood gathering and associated disturbance of riparian vegetation due to an expected increase in recreational activities could possibly result in erosion & sedimentation of aquatic habitats at localized sites during periods of high use (hunting season, etc) if the expected increase in recreation use was unregulated.

##### Vegetation Types and Rangeland Resources

Same as Alternative 2, except upland plant communities are expected to improve more rapidly as a result of more restrictive grazing management (i.e. 30-50% utilization criteria, shorter grazing periods, rest treatments applied to all pastures, etc.). Upland plant communities in less than satisfactory condition near livestock water sources, adjacent to riparian areas, and on gentle slopes would receive less grazing pressure and would be likely to show improvement in vigor, vegetative cover and general health. Increased recreation activities may impact upland plant communities in terms of disturbance from off- highway vehicle use and potential for wildfire.

More residual forage would be left on the uplands, increasing the fine fuel load and thus the risk for higher intensity wildfires, and more acres burned.

##### Threatened/Endangered/Sensitive Plants

Effects on Special status plants from trampling, grazing and trailing would be the lowest under this alternative due to fewer livestock numbers, shorter periods of grazing use and more frequent rest treatments. Damage to special status plants could result from greater occurrence of motorized vehicle use in riparian areas, although the incidence of occurrence is expected to be infrequent.

##### Soils

Potential for soil erosion and compaction would be limited to livestock concentration areas, such as springs and stream crossings. Susceptibility of soils to erosion and compaction