

## ALTERNATIVE B

### RANGELAND RESOURCES

#### Soils

Broad based long-term erosion rates would show an average increase of 0.1 tons/acre/year (5%) over current levels. This increase is within the estimated average soil loss tolerance of 2 to 3 tons/acre/year. The erosional processes described for land use actions in the Affected Environment and Alternative A would be the same for this alternative, but the area size and/or magnitude of the impact may vary considerably (Appendix B). Specific uses and actions would be responsible for significant short and/or long-term erosion on isolated areas. These would be ORV use, timber harvest, road building, agricultural development, range projects, and mineral exploration and/or development.

Impacts from ORV use would be similar to those described for Alternative A. The extent of impacts would differ (see Appendix B).

Commercial timber harvest is proposed on 150-700 acres annually with allowable annual cuts of approximately 1.7 million board feet. Selective cutting would generally be used with clearcutting as an option. To accomplish this harvest 3.4 miles/ year of roads, over a 20 year period, would be built. Resulting impacts would be similar to those described in Alternative A and Affected Environment. The extent of impacts would be greater (see Appendix B).

The transfer of public lands include 560 acres for agricultural development. The impacts associated with farming would be the same as those described in Alternative A.

Impacts due to ROWs would be the same as Alternative A.

Mineral exploration and development would be open on 456,281 acres for locatables and 456,289 acres for leasables. Impacts would be the same as described in Alternative A.

Range condition improvement is projected for 23% of the RMP area. See Chapter 2 - Livestock, Vegetation, and Wildlife, Alternative B for details of improvements. Where range condition is improved through enhancement of vegetative density and/or composition, erosion rates would be reduced. Rates would decrease from 0.1 to as much as 1 ton/acre/year. The amount would depend on the degree of vegetative improvement, the success, and the following management of the area. Where annual range is converted to seedings the susceptibility to wildfires would be greatly reduced.

Where burning, spraying, discing or any combination of the three are used, with or without seeding, a short-term (one to two year) increase in soil loss would result. This would be due to loss of vegetative cover and surface disturbance. But as vegetation becomes reestablished and density and/or composition improved, long-term erosional decreases would be expected. Twelve miles of pipelines are proposed.

Livestock AUM increases of 7% are proposed over a 20 year period. By incorporating grazing systems and with the proposed range improvement projects this increase would result in a very slight increase in erosion rates (up to 0.05 tons/acre/year) on grazed lands. Erosion would show the largest increases around livestock concentration areas and on steep hillsides.

Fencing 10 miles and streambank planting of 6 miles of riparian habitat would affect soils as described in Alternative A.

Designation of the Boise Front ACEC and the Sage Creek ACEC would provide special management for these areas (see appropriate ACEC). This management would enhance vegetative condition, increase watershed proficiency, and reduce soil loss.

### Air Quality

There would be no long-term adverse affects to air quality under this alternative. A one to two day localized decrease in air quality would occur due to prescribed burning for rangeland improvements and slash burning after timber harvest.

Where spraying of herbicides is used to control brush and/or annual grasses a one to two hour reduction in air quality would result.

Lands transferred for agricultural production would result in an increase in wind blown particulate matter. Associated with crop production is the use of pesticides and fertilizers which would add pollutants to the air for short periods.

### Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would slightly increase due to a decrease in habitat quality on 2 miles of streams. Water quality would be maintained or very slightly improved on 25 miles of perennial stream and 153 miles of intermittent streams due to management in revised and new AMPs.

A short-term increase in sedimentation would likely occur on a range of 7-29 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 7-29 miles as above from the proposed 68 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

Sediment in streams would likely increase moderately in 70% of the area due to the open ORV use classification in high erosion hazard areas. Accelerated sedimentation would be a long term impact in those streams with inadequate flushing flows. A slight increase in sedimentation would likely occur in streams in areas with limited and closed ORV classification.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the

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quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would slightly decline.

### Vegetation

The long-term vegetative condition would show an overall improvement on 18 to 23% of the RMP area. This increase would not always reflect a total change in condition class. In many areas the general condition would improve but not enough to change classes. On approximately 14% of the poor condition range this change would reflect a seeding. Approximate breakdown where improvements are projected would be: poor changed or improved - 25% (45,000 acres), fair improved - 28% (55,400 acres), good improved - 8% (2,700 acres). See Appendix R for a comparison of vegetation condition changes by alternative. Trend data is not available.

The encroachment of annual grasses (medusahead wildrye and cheatgrass) into fair and poor condition rangeland would continue. This would be most prominent on the sedimentary and lower elevation basalt soils. These areas tend to be very susceptible to invasion once disturbed (wildfires or heavy use by livestock). Full fire suppression and rehabilitation efforts would gradually reduce the total number of acres burned annually.

Increasing livestock AUMs by 7% over 20 years is proposed. By incorporating grazing systems along with range improvement projects this increase would not adversely affect the projected condition increase. The projected increases do however depend on the success of range improvement projects and how effectively grazing systems are utilized. These increases in condition would be most notable on the fair condition rangeland. A majority of the RMP area would show good response to management due to productive soils and having an average annual precipitation of greater than 13 inches.

Rangeland and wildlife improvements would affect 10% of the RMP area. These and the acres affected are listed in Chapter 2 - Livestock, Vegetation, and Wildlife. The success of rangeland seedings where poor condition annual range is converted is questionable at this point in time.

Impacts associated with ORV use would be the same as described in Alternative A.

The curlew habitat area and Columbian sharp-tailed grouse habitat area would be affected as discussed in Alternative A.

### Candidate and Sensitive Plant Species

The designation and management of 5 research natural areas totaling 1,355 acres would provide protection and increased vigor for several candidate, sensitive, or uncommon plant populations. These areas may act as centers of dispersal for the plant species. Public awareness would also be increased in these areas.

Limiting ORV use and excluding surface and subsurface rights-of-way on 2,545 acres should provide for the continued existence of candidate,

sensitive, or uncommon plant species. Some species may increase in number due to the protection provided while other plant species would be stabilized but would not have an opportunity to increase. Some species may decrease in numbers outside of these areas because small scattered populations and undiscovered populations would not be protected from grazing, ORV use, annual grass invasion or other hazards.

The increased grazing pressure would destroy some plant populations. This increased grazing would further the invasion of exotic weedy annuals by the selective grazing of the more palatable perennial species. Exotic weedy annuals compete with native flora, negatively impacting native plant populations. Annuals increase the probability of wild fires which cause a perpetuation of annual grass ranges and poor ecological conditions. Some plant species could be eliminated or reduced in areas recurrently burned.

Due to the lack of restrictions on mineral development on 2,545 acres, some individual plants or small populations could be destroyed. Procedural compliance with the Endangered Species Act of 1973 would keep these impacts below the level of significant to the species as whole.

#### Riparian Habitat

Resource management guidelines for various programs should maintain overall existing riparian habitat quality and minimize impacts of actions in riparian areas.

Land transfer proposal would not impact the base of 122 miles of surveyed drainages. Two miles of unsurveyed perennial habitat would be transferred from public ownership. Habitat quality would be maintained on 101 miles of the 122 miles surveyed while 9 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Loss of habitat value due to increased stocking levels would occur on 12 miles of stream riparian habitat.

Revision of 7 existing AMPs and the proposed 18 new AMPs would result in some improvement of riparian habitat on approximately 25 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 151 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of approximately 1.7 MMBF and the associated 68 miles of road construction would have a minimum impact on riparian habitat along 5-22 miles of the potentially impacted 39 miles of perennial streams and 2-7 miles of the 13 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossings where absolutely necessary).

ORV use in the limited areas would occur on 30% of the area and would have a slight impact on riparian vegetation within those areas. Drainages are often used as travel corridors by wildlife and humans. With no use restrictions on 70% of the area, riparian areas within these open use areas

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would likely be moderately impacted resulting in long term disturbance to vegetation and soils and short term disturbance to riparian associated wildlife.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wildfires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

### Aquatic/Fisheries Habitat

Due to land transfer proposals in this alternative, 2 perennial stream miles would be eliminated from the 81 miles of the surveyed aquatic/fisheries habitat base. Habitat quality would be maintained on 58 miles of the remaining 56 miles.

Improvement of habitat condition to good would occur on 10 miles of surveyed miles due to proposed aquatic habitat improvement projects. The remaining 12 miles would show a loss of habitat condition to the next lower condition class due to increased stocking rates.

Revision of 7 existing AMPs and the proposed 18 new AMPs would result in the improvement of approximately 25 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 153 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest level of approximately 1.7 MMBF and the associated 68 miles of road construction would impact 5-22 miles of the 39 miles of perennial streams within the total harvest acreage. Also impacted would be 2-7 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and the rehabilitation of major disturbed areas. A moderate increase in stream sedimentation over the long term would result from road construction, particularly in high erosion hazard areas and adjacent to perennial drainages. All roads would be stabilized and closure considered on a case-by-case basis to further minimize impacts.

ORV use on high erosional hazard areas would be in the limited use class on 28% of the area to minimize soil loss to drainages. The remaining 72% of the area would be in the open use class. A moderate amount of sediment could be expected to reach perennial streams with these levels of use.

Redband trout populations would increase over the long term on segments of 3 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 9 miles of riparian habitat is eliminated. Decreased habitat condition on 12 stream miles due to increased stocking levels would cause a slight decrease in redband trout populations in those stream reaches over the long term. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing

good riparian habitat and would be expected to slightly improve existing poor and fair condition riparian habitat. A corresponding increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities and ORV use would likely be moderate. Resource Management Guidelines would minimize soil disturbance and sedimentation in streams. Flushing streamflows would likely be adequate to prevent fine sediment accumulation in spawning gravels.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

### Wildlife

#### Elk

Both fall/winter ranges and crucial winter ranges would show a slight improvement in this alternative. This improvement would be located mostly in the northern portions of the ranges in the higher precipitation zones.

In crucial winter ranges, there are 10,000 acres of range and wildlife seeding proposed. Approximately 1,100 acres of range program seedings are proposed in elk fall/winter ranges. There are also about 2,800 acres of aerial seedings that are proposed for the Snake River Breaks. These seedings would improve the carrying capacity of the range for both wildlife and livestock.

There are 2,293 acres of timber sales proposed in the fall/winter ranges. Impacts from these sales should be minimized by following the Resource Management Guidelines.

In crucial winter ranges, 8,190 acres of timber sales are proposed. There are also 68 miles of roads proposed in deer and elk habitat to facilitate these sales. Negative impacts could occur from decreasing crucial habitat. Roads would make more areas accessible to the public during hunting season and put more pressure on the population.

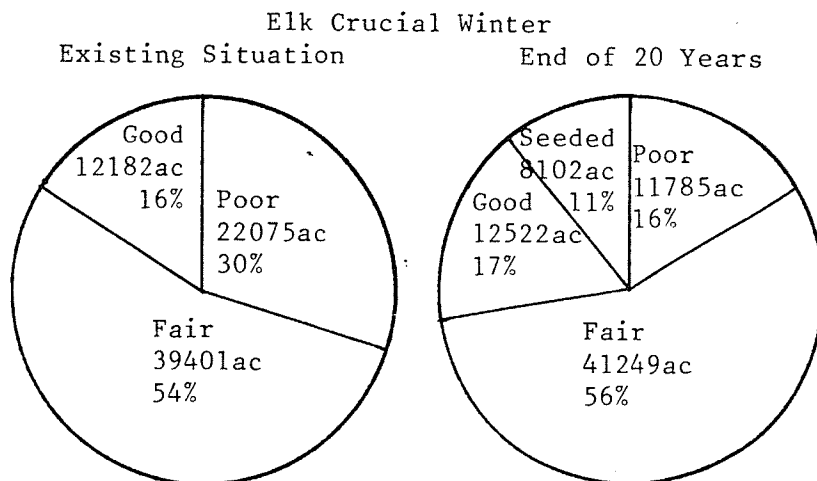
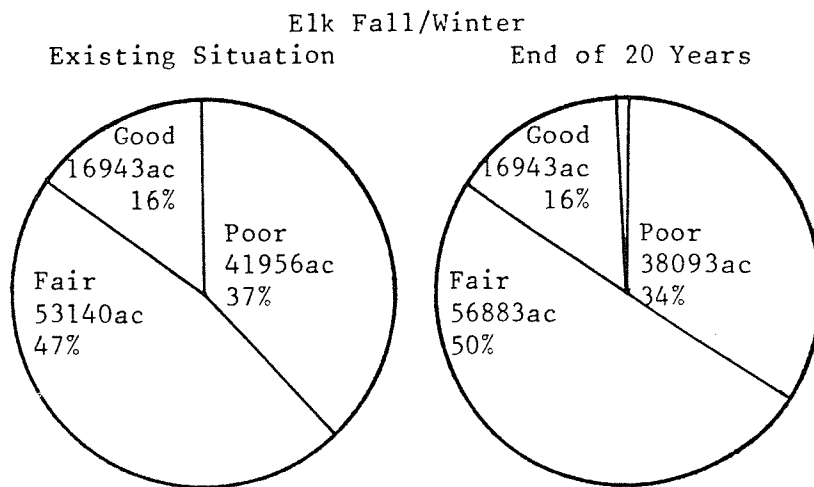
There are 4,660 acres of crucial habitat proposed to be offered for sale or exchange. This would have slightly negative impacts by decreasing habitat availability by 6%.

The 7% increase in livestock AUMs over the 20 year period would have minimal impact on elk populations and its habitat.

Overall there would be fences, water developments and pipelines identified in the livestock program, increased range and wildlife seedings beneficial to elk, improved livestock management, and 18 new AMPs. These factors combined with the current situation of over 65% of the area in fair to good condition, would provide habitat which should be able to support a 25% increase over current populations. This would exceed population goals set for the habitat by the Idaho Department of Fish and Game.

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The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Mule Deer

Fall/winter and crucial winter deer ranges should show a slight improvement over current situation. This improvement would occur in the higher rainfall, northern ranges. This improvement would be due mainly to increased livestock management and use of grazing systems.

There are 2,400 acres of range projects proposed in the fall/winter ranges and approximately 20,000 acres of both range and wildlife seedings proposed in the crucial winter range. These seedings are designed to improve the forage base and increase the carrying capacity of the range. The 2,800 acres of aerial seedings proposed for the Snake River Breaks would improve the forage base on these crucial ranges.

There are approximately 665 acres of timber sales proposed in the fall/winter ranges and 1,092 acres on the crucial winter ranges. Impacts