Riparian and Water Quality

Road and drill pad construction for oil and gas exploration and phosphate mining would adversely affect surface water by changing flow patterns and water quality. Increased runoff and erosion on disturbed land would cause some increased rates of suspended and bed load-sediment transport in stream channels.

Timber sale activity would increase erosion and cause a subsequent increase in sedimentation of streams and a decrease in water quality, mainly from road building activity. The limited amounts of increased surface disturbance under this Alternative and the use of best management practices and standard operating procedures in conjunction with mineral development and timber harvesting would result in increases in sedimentation and decreases in water quality so small that they would not be distinguished from the normal observed seasonal fluctuation.

By the use of standard operating procedures and best management practices (see Part I), the BLM will meet or exceed Idaho State water quality standards. Monitoring will be conducted to check compliance and effectiveness of these practices and procedures, and they would be refined and modified to protect beneficial use such as fisheries and drinking water.

Under this Alternative, 17.10 miles of riparian habitat would be proposed for disposal. This is approximately 13 percent of the riparian habitat in the PRA. Of this number, 3.65 miles of stream inventoried was found to be in fair to good condition.

Riparian vegetation, water quality, and streambank condition were factors considered in evaluating riparian habitat.

A total of 6.75 miles of stream would be managed primarily for improvement in riparian condition. This is 36 percent of the miles of riparian habitat with potential to be improved by management prescription. These streams would be managed for improvement because of existing fisheries values and severe erosion problems. These streams are all in "Improve" allotments or are contiguous to streams in "Improve" allotments and currently show a downward or unstable trend. The Blackfoot and Bear River drainages would not be managed for improvement in riparian condition under this Alternative because they drain mineral development areas.

Riparian pastures would be created by fencing 7.25 miles of stream. Utilization on key riparian vegetative species would be limited to 50 percent on these streams. A total of 83.84 miles of riparian habitat would be maintained in its existing condition. These streams are currently stable in trend (see Appendix C).

A total of 3.20 miles of stream would be expected to deteriorate in condition. These streams are in "Maintain" or "Custodial" allotments, which are currently exhibiting a downward trend due to livestock grazing.

The necessary management actions to improve riparian condition on these streams would not be taken. Further degradation could result in elimination of riparian areas by lowering of the water table and by replacement of riparian (mesic) vegetation with more dry-site (xeric) vegetation.

Of the streams inventoried 51.82 miles were inhabited by fish. If season-long grazing is eliminated in riparian areas and utilization of key riparian species is limited to 50 percent, the existing fishery streams would improve in quality and likely increase in mileage. Fish habitat will be improved by leaving overstream cover to provide security and shade for fish as well as reducing sediment flow into waterways.

Under Alternative E, 3.9 miles of fishery streams would be expected to improve; .8 miles would continue to deteriorate; and 47.12 miles would remain unchanged.

In general, impacts to water quality, fisheries habitat, and riparian habitat from surface disturbing activities such as mining, timber harvesting, and road construction would be mitigated on a site-specific basis through the application of standard operating procedures and general best management practices.

Soils and Watershed Management

About 8,200 acres of unallotted grazing lands would be allotted under this Alternative. This would increase overall erosion, but this additional erosion is expected to be kept within tolerable limits by proper stocking rates and grazing management systems.

A total of 163,150 acres of public lands having soils sensitive to erosion are subject to indiscriminate use by ORVs in this Alternative. This includes 8,500 acres in the Pocatello Off-Road-Vehicle Plan for Bannock County.

Oil and gas exploration activity on sensitive soils would be controlled by provisionary options provided for in the seasonal and standard lease stipulations.

About 600 acres of juniper thinning would stimulate understory plant growth reducing annual erosion rates to less that 5 tons per acre per year.

Reduction of grazing on 360 acres of ashy soils subject to high erosion rates in allotments 4062 and 4075 would occur if monitoring shows erosion rates of more than 5 tons per acre per year.

Reclamation of 600 acres of Woodall Mountain mining area would stabilize mine tailings and reduce erosion rates several tons per acre per year. About 867 acres of agriculture trespass lands would be restored to native range, thereby reducing annual erosion by several tons per acre per year.

About 808 acres of commercial forest without restricted management practices would have some short-term of more than 5 tons per acre for less than one year and long-term erosion impacts of less than 5 tons per acre.

Full fire suppression for the PRA would give the area the best option for reduced erosion following wildfires.
Several land treatment improvements are planned for this Alternative. Brush control by fire or range plowing would have high soil erosion impacts, short-term of more than 5 tons per acre per year and long-term of less than 5 tons per acre, on 4,000 acres and moderate-to-high impacts approaching 5 tons per acre per year on 7,240 acres. Brush control by spraying or other mechanical means would have moderate soil erosion impacts on 4,000 acres and slight-to-moderate impacts of less than 5 tons per acre on 7,240 acres of land under this Alternative.

Plowing and seeding of 120 acres in the Aspen Road allotment would have high short-term erosion impacts of more than 5 tons per acre per year. Planned plowing and seeding in all other allotments would have moderate-to-high short-termed erosion effects approaching 5 tons per acre per year and slight-to-moderate long-term effects of less than 5 tons per acre.

Small wildlife and range development improvements would generally have only limited short-term erosion impacts approaching 5 tons per acre per year. The impacts on sensitive soil areas and mitigation measures to reduce these impacts would be addressed in individual activity plans and environmental assessments as the RMP is implemented.

Economic Conditions

Native Americans

There would be no economic impact on Native Americans under this Alternative.

Minerals

This Alternative would have no economic impact on the minerals industry in the economic region.

Livestock

Initially there would be 29,969 AUMs available for livestock under this Alternative. This would generate direct earnings of $649,300. The total economic impact would be $1.7 million (including the multiplier effect). These levels of earnings would represent 0.6 and 0.1 percent, respectively, of the farm and total earnings (1983) in the PRA.

This level of AUMs would generate direct employment of 28 jobs. Including the multiplier effect, the total number of jobs generated would be 82.

In the short-term, there would be a gain of capital value of between $46,000 and $205,000.

In the long-term (15 years), there would be 34,276 AUMs available for livestock under this Alternative. This would generate direct earnings of $742,600. The total economic impact would be $1.9 million (including the multiplier effect). These would represent 0.7 and 0.1 percent, respectively, of the 1983 farm and total PRA earnings.

This level of AUMs would generate direct employment of 32 jobs. Including the multiplier effect, the total number of jobs generated would be 94.

In the long-term, there would be a gain of capital value of between $285,000 and $1.3 million.

Appendix E shows how these earnings, employment, and capital value estimates were made.

Recreation

Recreation activities would generate expenditures of $1.8 million under this Alternative. Utilizing the earnings to gross output ratio for the retail trade industry, this would convert to direct earnings of $721,200. This would represent 0.5 percent of the PRA retail trade earnings. The multiplier effect would increase total earnings to $1.6 million. This would be 0.1 percent of the total PRA earnings.

The direct earnings would generate 66 jobs in the retail trade industry, while the total earnings would account for 113 jobs spread throughout the local economy.

Appendix E shows how these earnings and employment estimates were made.

Lumber and Wood Products

The impacts from this Alternative would be the same as for Alternative C.

Project Costs

Range improvements necessary to implement this Alternative would cost $237,200. Wildlife improvements would cost $75,200. The cost of constructing recreation facilities (recreation sites, multiple use trails) would be $121,600 under this Alternative. The total cost of these improvements would be $434,000.

Revenues and Receipts to Local Governments

This Alternative would have no significant impact on revenues generated or receipts to local governments.

Summary

This Alternative would increase direct livestock earnings from the existing situation by $17,300 in the short-term and by $110,600 in the long-term. This, however, represents only a gain of 0.02 to 0.1 percent in the PRA farm earnings. Direct recreation earnings would increase from the existing situation by $27,055, or a gain of less than one-tenth of one percent in the PRA retail trade earnings. Direct lumber and wood earnings would be decreased from the existing situation by $21,700. In the long-term, the capital value of AUMs could be increased by as much as $1.3 million. Improvements needed to implement this Alternative would cost $434,000.

Access

Under Alternatives B through E, obtaining legal public access to approximately 37,300 acres of public land (17 percent of the PRA) and marking boundaries of the public lands would ensure the continuation of present public recreational activities. Problems with trespass would diminish and visitor management would improve. Upgrading of some of the access roads would have both positive and negative effects depending on the degree of upgrading needed, extent, and location (see Map 8).

Additional access would have a slight adverse impact because of chance of littering and some ORV use outside of designated roads and trails.

SHORT-TERM VS LONG-TERM PRODUCTIVITY

The short-term uses of man's environment are described for each Alternative in Part II, Chapter 2. The relationship of these short-term users to long-term productivity is discussed for various resources in Part II, Chapter 4. The appendix data in Part III also includes long-term productivity as opposed to

short-term uses. A comparison between Alternatives and a summary of environmental consequences is presented in Table S.1 and Table 2.5.

The following environmental topics (Mineral Management, Lands, Wildlife Management, Recreation and Visual Resources, and ACECs/RNAs) have additional short-term use versus long-term productivity concerns which were not discussed fully in other portions of the documents. These additional concerns are described below:

Minerals Management

Solid Leasable Minerals

Projected demand for solid leasable minerals would be met under all Alternatives. There is little probability of any short-term use of the mineral resources causing problems in meeting long-term demands. At present, there is one active mining operation on lands administered by the BLM, although potentially ten other existing leases could be developed during the life of this RMP.

Fluid Leasable Minerals

No discoveries have been made. Exploration activities have slowed considerably in the last two years.

Locatable Minerals

No estimates can be made due to the lack of production; however, silica and limestone will continue to be used.

Salable Minerals

Sand and gravel permits and sales are handled on an ongoing public demand basis.

Lands

Large-scale and rapid land tenure adjustments through sale and exchange are unlikely; therefore, there would be no short-term impacts. Positive long-term impacts would be increased efficiency and lower cost of BLM surface management of consolidated land ownership patterns.

Negative impacts would be associated with the creation of split ownership of the surface and subsurface estates. These impacts would primarily affect oil and gas development. Also, disposal of Federal lands would create loss of public grazing privileges, loss of wildlife habitat and, depending on future use, loss of soil and vegetation.

Wildlife Management

Proposed short-term uses under Alternatives A, B, D, and E would generally improve long-term wildlife habitat productivity. Adjusted grazing season and lower grazing use levels along with some brush control, agricultural trespass rehabilitation, and bitterbrush plantings would increase carrying capacity of lands retained in public ownership. Restrictions on mineral and other development would protect crucial wildlife values. Alternative C is expected to have the reverse effect.

Recreation and Visual Resources

Short-term commodity uses of timber, minerals, and other resources would shift resource-dependent recreation uses and opportunities to facility-dependent types. However, rehabilitation would resolve the adverse impacts to recreation and visual quality over the long-term.

In the short-term, recreational activities on public land such as camping, hunting, fishing, boating, and others would remain constant in all Alternatives. In the long-term, productivity would be increased in Alternatives B through E by developing additional recreation facilities and giving management emphasis to the two Special Recreation Management Areas.

Visual intrusions would be created over the short-term through commodity production. In the long-term, revegetation of disturbed areas would lessen the visual impacts, resulting in little loss of the visual quality.

Areas of Critical Environmental Concern and Research Natural Areas

The proposed ACECs and RNAs that would be subjected to surface-disturbing actions such as mining and mineral leasing activities and ORV uses would have long-term impacts. Remnant plant associations could be lost. Very little is known about re-establishing native and sensitive plant communities. Natural geologic structures could not be reclaimed and could be lost.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The implementation of any of the Alternatives would limit some potential future uses of the land and resources. Irreversible or irretrievable commitments of resources are those that would occur when future options were foreclosed.

Disposal of Federal lands would result in a loss of administrative control for all resource values except minerals and valid existing rights-of-way.

Implementation of the Preferred Alternative (Alternative B) would result in the following irreversible or irretrievable commitments of resources.

Minerals Management

The extraction of any mineral product would generally be an irretrievable commitment of the recovered mineral product. Energy resources consumed during exploration, development, and production would also be irretrievable.

Lands

Disposal of Federal lands would result in a loss of administrative control for all resource values except mineral values, existing rights-of-way, and any reservations in the patent for access.

Range Management

Grazing preference would be lost on disposed lands. Completion of nonstructural range improvements would represent an irretrievable and irreversible commitment of land and resources for the lives of the projects.

Wildlife Management

Wildlife habitat under BLM's jurisdiction would be irreversibly and irretrievably lost on lands disposed of through sale, exchange, or issuance of mineral patents. Mining and mineral activity would involve an irretrievable commitment of wildlife habitat, particularly where reclamation was inadequate or failed. Displacement of disturbance-intolerant species could result in an irreversible, irretrievable impact. Vegetation projects such as prescribed burning would involve an irretrievable or irreversible commitment of resources during the life of the projects.

Recreation and Visual Resources

Lands shifted from resource-dependent recreation uses and opportunities to facility-dependent types would likely never return to the original setting. Recreation developments and improvements such as campgrounds, access sites, and other structural improvements would represent irreversible and irretrievable commitments of land and resources. Public lands converted to private ownership would no longer be available for public recreation uses.

Mining scars, utility lines, and roads would always be evident or, at least, partially evident in the landscape. Present technology limits the ability to economically re-establish natural landforms and completely screen all structures from view.

Cultural Resource Management

By their very nature, cultural resources are irretrievable once lost or damaged. The Standard Operating Procedures protect most cultural resources. However, it is likely that some sites would be damaged, which would be an irreversible and irretrievable commitment of resources.

Forest Management

Disposal of Federal lands would result in a loss of commercial forest land and woodland acres, which would be an irreversible and irretrievable commitment of resources.

Soils and Watershed

Soil losses associated with the required management actions would be irreversible and irretrievable. Development of new soil would occur at a very slow rate.

Riparian and Water Quality

The disposal of Federal lands would result in the loss of riparian habitat which is an irreversible and irretrievable commitment of resources.