Snake River Allotment (#1001) Evaluation and Grazing Permit Modification
Environmental Assessment OR-035-03-05

Proposed Action: The Bureau of Land Management, Vale District, Baker Resource Area proposes to implement a combination of permanent and temporary management adjustments that would modify the existing 10-year grazing permit authorization for the Snake River Allotment (#1001) including:

1. A permanent reduction of 256 AUMs within the Hibbard Pasture.
2. Permanent adjustments in the grazing season of use in the North, Pole Gulch, and Morgan Creek pastures. Season of use would be April 15 to May 30, adjusted depending on rangeland vegetation, soil, and weather conditions.
3. Temporary (2 year) modification of the present terms and conditions of the permit to facilitate monitoring and evaluation of the effects of adjusted grazing within the North, Pole Gulch, and Morgan Creek pastures. Utilization of herbaceous riparian vegetation in the spring-use pasture would not be limited as long as full re-growth of vegetation is achieved during the growing season and fall/winter rest occurs. Utilization of herbaceous riparian vegetation in the fall-use pasture would be based on a residual 4" stubble height requirement.
4. Additional allotment evaluation to be completed after 2004 grazing season.

Type of Document: Environmental Assessment

Authorizing Document: Baker Resource Management Plan
Record of Decision
Department of the Interior, Bureau of Land Management

Preparing Agency: Baker Resource Area
Vale District
Bureau of Land Management

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CHAPTER 1
PURPOSE AND NEED FOR ACTION

A. Introduction and Background

This environmental assessment (EA) is a site specific analysis of the proposed Snake River Allotment #1001 – Allotment Evaluation and Grazing Permit Modification for the Baker Resource Area of the Vale BLM District. This proposal is in conformance with the Baker Resource Management Plan Record of Decision [(ROD), U.S. Department of Interior, Bureau of Land Management, Vale District Office, Baker Resource Area, July 1989], and the Ironside Grazing Management Environmental Impact Statement – Rangeland Program Summary (1981). Those documents are available for review at the Baker Resource Area Office. This EA is tiered to those Environmental Impact Statement documents, and implements resource management program activities under those decisions.

The Oregon/Washington Standards for Rangeland Health and Guidelines for Livestock Grazing Management (S&Gs) were developed in accordance with 43 CFR 4180.2(b) and approved by the Secretary of the Interior on August 12, 1997.

An interdisciplinary team conducted assessments of rangeland health baseline conditions in the Snake River Allotment (#1001) during 1999. The Standards for Rangeland Health and Guidelines for Livestock Grazing Management -Record of Determination for the Snake River Allotment were completed and signed on August 15, 2000. Standards and Guidelines were formally incorporated into the terms and conditions of the grazing permit and authorization in the 2002 grazing season.

The attached Allotment Evaluation for the Snake River Allotment includes an assessment of the results of livestock grazing management in relation to achieving the objectives established for the Lookout Mountain Geographic Management Unit under the Baker Resource Area RMP, and achieving the Oregon/Washington Standards and Guidelines.

This EA examines the results of ongoing implementation of BLM's Oregon/Washington Rangeland Standards and Guidelines on the Snake River.

B. Need for Action

The BLM is directed to incorporate material in the Oregon/Washington S&Gs into planning documents and modify the terms and conditions of existing permits and leases to reflect standards and guidelines at the earliest possible date. Further, the S&Gs direct that 'the authorized officer shall take appropriate action as soon as practicable, but not later than the start of the next grazing year upon determining through assessment or monitoring by experienced professionals and interdisciplinary teams, that a standard is not being achieved and that livestock are a significant contributing factor to the failure to achieve the standards and conform with the guidelines.'

As described in the allotment evaluation, the BLM has determined that some elements of the standards and guidelines have not been achieved, and determined that management adjustments taken in consultation with the permittee during the last three grazing seasons, including a substantial effort to herd livestock and temporary reductions in seasons and numbers, have not resulted in significant progress toward fulfillment of the standards and significant progress toward conformance with the guidelines.

C. Description of the Proposal

The Bureau of Land Management, Vale District, Baker Resource Area proposes to implement a

combination of permanent and temporary management adjustments that would modify the existing 10-year grazing permit authorization for the Snake River Allotment (#1001) including:

1. A permanent reduction of 256 AUMs (from 387 to 131) within the Hibbard Pasture (see table in attached Allotment Evaluation, Recommendations, page 8).

2. Permanent adjustments in the grazing season of use in the North, Pole Gulch, and Morgan Creek pastures. Season of use would be April 15 to May 30, adjusted depending on rangeland vegetation, soil, and weather conditions.

3. Temporary (2 year) modification of the present terms and conditions of the permit to facilitate monitoring and evaluation of the effects of adjusted grazing within the North, Pole Gulch, and Morgan Creek pastures. Utilization of herbaceous riparian vegetation in the spring-use pasture would not be limited as long as full re-growth of vegetation is achieved during the growing season and fall/winter rest occurs. Utilization of herbaceous riparian vegetation in the fall-use pasture would be based on a residual 4" stubble height requirement.

4. Additional allotment evaluation to be completed after 2004 grazing season.

D. Objectives

The objectives for the annual operating plan of livestock grazing management in the Snake River Allotment are derived from the Baker Resource Management Plan ROD, Oregon/Washington Standards and Guidelines, and ID team assessment and evaluations. The specific objectives for the proposed permit modifications are:

1. To adjust grazing use in the Hibbard Pasture to meet proper utilization standards on upland (50%) and riparian vegetation (45%) to protect the resource from substantial and long term damage. Utilization standards are designed to provide for the physiological requirements of the plants and achieve an upward trend in riparian condition and upland forage production areas.

2. To enable sufficient flexibility in seasons of use to achieve full re-growth of riparian vegetation after spring grazing in the North, Pole Gulch, and Morgan Creek pastures.

3. To gather additional data and conduct an interdisciplinary team evaluation on the effects of ongoing adjustments in seasons and numbers on riparian re-growth and recovery in the North, Pole Gulch, and Morgan Creek pastures.

4. To gather additional data and conduct an interdisciplinary team evaluation in the North pasture after other cooperating landowners have completed their proposed fencing on lower Fox Creek.

E. Issues to be Analyzed

The primary issues important to this proposal were identified by an interdisciplinary team conducting the field examinations and assessment of Rangeland Standards and Guides in 1999.

1. How would the alternatives bring allotment management into compliance with upland and riparian utilization standards? Upland vegetation, herbaceous riparian vegetation, and woody riparian vegetation are addressed.

2. How would riparian areas be impacted by the alternatives? The structure and species composition of the riparian areas are analyzed. 'Critical Element' -Floodplains addressed.

3. How would water quality be impacted by the alternatives? Water temperature and sedimentation are analyzed.

4. How would aspen stands and aspen-meadow habitats be impacted by alternatives? Aspen regeneration, ecological processes, de-watering of meadows, and headcut erosion are addressed.

5. How would the alternatives impact grazing and livestock operations? Kind and numbers, and associated ranch operations are addressed.

6. What is the impact of the alternatives on BLM designated 'Sensitive' species and habitats? Effects to the following 'Sensitive' species and habitats are discussed: The Snake River goldenweed (*Pyrrocoma radiata*) occurs on upland habitats in the Morgan Creek, Pole Gulch, and North pastures. Rocky Mountain bighorn sheep habitat in North Pasture. Sage grouse in Morgan Creek and Pole Gulch pastures. Also redband trout below.

7. What is the impact of the alternatives on fisheries habitat? - Perennial streams in the project areas provide or contribute habitat for resident redband trout.

F. Issues Considered and Eliminated from Detailed Analysis

Issues previously analyzed in existing planning documents are not further discussed or re-analyzed in this document. Other issues were eliminated from further analysis because they would not be impacted by any of the alternatives.

1. Noxious weeds – Noxious weed management has been addressed in the Vale District Noxious Weed Management Plan and environmental assessment (2001).

2. Forest Health/Forest Management issues have been considered and actions proposed under the Draft Lookout Mountain EIS (2002). Certain impacts of livestock grazing on aspen habitats and aspen regeneration are discussed.

3. What is the impact of the alternatives on Threatened or Endangered species? -No federally listed threatened or endangered species is known or likely to occur in the area.

CHAPTER 2
ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. Alternative 1 - No Action

Under the no action alternative, ongoing management actions would be implemented under the present terms and conditions of the 10-year grazing permit. It is assumed that BLM would continue to address resource issues through temporary adjustments based on monitoring results, within the scope of flexibility of the current grazing system and permit authorization. The scale and effect of temporary (year to year) adjustments in livestock numbers could be similar to Alternative 2. The permitee would be required to remove livestock from any pasture at the time utilization standards are reached or exceeded. Monitoring in all seasons and pastures would be based on maximum utilization of 50% on key upland forage species, and 45% on herbaceous riparian species.

Within the framework of current regulations, BLM is required to adjust the 10-year grazing permit to reflect actual use and utilization data and to meet Oregon/Washington Rangeland Standards and Guidelines. The No Action Alternative would in effect delay or defer a decision to adjust the 10-year grazing permit to reflect the results of monitoring data.

B. Alternative 2 – Modify existing grazing permit authorization

This alternative proposes to implement a combination of permanent and temporary management adjustments that would modify the existing 10-year grazing permit authorization for the Snake River Allotment (#1001) including:

1. A permanent reduction of 256 AUMs (from 387 to 131) within the Hibbard Pasture.
2. Permanent adjustments in the grazing season of use in the North, Pole Gulch, and Morgan Creek pastures. Season of use would be April 15 to May 15, adjusted depending on rangeland vegetation, soil, and weather conditions.
3. Temporary (2 year) modification of the present terms and conditions of the permit to facilitate monitoring and evaluation of the effects of adjusted grazing within the North, Pole Gulch, and Morgan Creek pastures. Utilization of herbaceous riparian vegetation in the spring-use pasture would not be limited as long as full re-growth of vegetation is achieved during the growing season and fall/winter rest occurs. Utilization of herbaceous riparian vegetation in the fall-use pasture would be based on a residual 4" stubble height requirement. Upland utilization standards (50%) would be enforced.
4. Additional allotment evaluation to be completed after 2004 grazing season.

C. Actions Common to All Alternatives

This section describes actions which would be implemented in conjunction with all alternatives to minimize adverse impacts on the environment.

Grazing Controls – The permittee is required to herd livestock away from riparian areas and distribute them to achieve proper utilization in uplands. Salt supplements are placed on ridges and slopes at least ¼ mile from water to facilitate livestock distribution. Fencing may be used to control or exclude livestock from small sensitive areas. Forage utilization limits are monitored to achieve management objectives and protect resources from substantial and long term damage. Temporary non-use of burn and/or treatment areas may be required. Broadcast burned areas that are reforested would be fenced following treatment to exclude livestock. Other prescribed fire areas would be fenced if monitoring indicates livestock need to be excluded from the area.

Monitoring – Forage utilization, livestock actual use, vegetation trend, and riparian 'Proper Functioning Condition' monitoring on an annual or periodic basis are part of the BLM's monitoring protocol.

D. Alternatives Considered and Eliminated from Further Analysis

1. No-grazing Alternative - A no-grazing alternative was considered, but not selected in the Ironside Grazing Management Environmental Impact Statement – Rangeland Program Summary (1981).

2. Extensive Riparian Exclosures or Pastures – Alternatives involving extensive fence construction to re-configure pastures within the allotment or to exclude livestock from riparian areas were considered but eliminated in part because of the enormous cost of construction and maintenance of extensive fences, and in part because it is physically impractical to isolate the numerous stream channels from the steep uplands.

CHAPTER 3
AFFECTED ENVIRONMENT

Critical elements to the human environment. This environmental assessment does not discuss impacts to the following resource values either because no site specific impacts were identified or the resource value did not occur within the analysis area: Air Quality, Areas of Critical Environmental Concern, Drinking or Ground Water Quality, Energy or Mineral Resources, Hazardous or Solid Wastes, Native American Religious Concerns and Treaty Rights, Prime or Unique Farmlands, Threatened or Endangered Species, Wild and Scenic Rivers, Wilderness Study Areas.

A. Issue specific existing environment

1. How would the alternatives bring allotment management into compliance with upland and riparian utilization standards?

Upland vegetation utilization has generally been within acceptable levels (under 50% of current annual growth) in Pole Gulch, Morgan Creek, and North pastures. These pastures are dominated by sagebrush-grassland habitats in which bluebunch wheatgrass, Idaho fescue, squirreltail, and Great Basin wildrye are the key forage species.

The 1999 S&G evaluation identified problems with excessive use levels in aspen/snowberry/sedge open meadow and aspen/snowberry forest habitats in the Hibbard Pasture. Subsequent detailed monitoring determined that the major forage production zones within the Hibbard Pasture are in those habitat types, followed by aspen/mountain shrub and aspen-Douglas fir/mountain shrub habitats. Key upland forage species were identified as Hood's sedge and smallwing sedge, and to a lesser extent, bluebunch wheatgrass, Idaho Fescue, mountain brome, and blue wildrye. Utilization of Hood's sedge and smallwing sedge has been consistently above acceptable levels in three successive years of monitoring.

Excessive utilization on herbaceous riparian vegetation was identified in 1999 as a contributing factor to various stream segments to be evaluated as "at risk". In particular, utilization levels contributed to poor vegetation vigor, lack of vegetation diversity, and lack of adequate vegetation cover to protect stream banks or stabilize sediments. Utilization of herbaceous riparian vegetation has been above acceptable levels in three successive years of monitoring. This occurred in all pastures regardless of season of use and regardless of intensive livestock management practices including herding livestock away from streams.

2. How would riparian areas be impacted by the alternatives?

The 1999 S&G evaluation and Proper Functioning Condition (PFC) assessments determined that grazing management contributed to various stream segments evaluated as "at risk". Species diversity was less than expected on most streams. Some palatable herbaceous and woody species had been reduced to very low densities or eliminated from some stream reaches. In particular, utilization levels contributed to poor vegetation vigor, lack of vegetation diversity, and lack of adequate vegetation cover to protect stream banks or stabilize sediments. Monitoring indicates that riparian areas with limited numbers of palatable woody species (particularly willow, cottonwood and alder) continue to show heavy to severe hedging that limits recovery and regeneration. Broad scale removal of herbaceous vegetation has continued to be excessive. A shift to early season spring use in the Pole Gulch pasture (in the 2002 grazing season) did result in complete re-growth of herbaceous riparian cover by the end of July.

Floodplain sites are typically narrow, with 1 to3 year floodplains ranging from 3 to 30 feet wide, and 50 to 100 year floodplains ranging from 15 to 150 feet wide. Historic floodplains may no longer be accessible in a particular stream reach during high flow events because of past down-cutting and channelization. Small floodplains in incised channels are generally poorly vegetated and unstable due to livestock utilization and trampling.

3. How would water quality be impacted by the alternatives?

A description and discussion of watershed and water quality data is presented in the Draft Lookout Mountain EIS. Specific factors affected by this proposed action include non-point pollution (animal waste) and degradation of aquatic resources by removal and elimination of riparian vegetation which stabilizes soil and sediment. These factors contribute to non-point source problems with stream temperature, turbidity, low dissolved oxygen, nutrient loading, sediment, and low flow volumes that affect aquatic biota at certain times of the year at different locations.

The 1999 PFC assessments found that stream segments rated at risk were lacking in vegetation density, diversity, and structure, and that poorly vegetated stream banks were directly impacted by livestock trampling. Some degree of channel instability and active channel down-cutting occur in all stream systems except Connor Creek and portions of Morgan Creek. Monitoring indicates that the degree of temporary adjustments and livestock management practices being implemented have not resulted in any visible improvements in vegetation cover on or near headcuts, and that bank instability and trampling continue to be substantial problems. Riparian areas with limited numbers of palatable woody species (particularly willow, cottonwood and alder) continue to show heavy to severe hedging that limits recovery and regeneration. Broad scale removal of herbaceous vegetation has continued to be excessive.

4. How would aspen stands and aspen-meadow habitats be impacted by alternatives?

The 1999 S&G evaluation determined that aspen habitats in the Hibbard Pasture were being impacted by livestock use to the degree that aspen regeneration in some stands was prevented by browsing, and that many aspen-meadow habitats showed other signs of disruption of normal ecological processes. Headcuts progressing through the habitats are causing lowering of water tables and associated changes in vegetation species composition and productivity. Mid and late-seral herbaceous species like sedges have been partly replaced by grazing-tolerant species or non-palatable species like blue wildrye, senecio, and false hellebore.

Monitoring indicates these habitats have continued to receive excessive use over the past three years. Early removal of livestock (15-17 days early in 2002) from the Hibbard Pasture was partly successful in reducing browsing on young aspen, however, all palatable herbaceous species had been severely utilized by that time.

5. How would the alternatives impact grazing and livestock operations?

The present grazing use authorization is described in the attached allotment evaluation. The BLM grazing permit is used in association with approximately 800 acres of private land owned by the permittee and fenced within the pastures as well as approximately 1600 acres of other private land. In addition, the grazing permittee has nearby separately fenced private land including irrigated hay fields, and two smaller allotments which provide forage for the livestock when they are not on the Snake River Allotment. The numbers of livestock the permittee can maintain, and timing of operations on the associated private land and other allotments are partly dependent on the use of this allotment.

6. What is the impact of the alternatives on BLM designated 'Sensitive' species and habitats?
The following species are designated by the Oregon State Office, Bureau of Land Management as 'Sensitive' species:
The Snake River goldenweed (*Pyrrocoma radiata*) occurs on upland habitats in the Morgan Creek, Pole Gulch, and North pastures. The species has relatively low palatability to livestock or wildlife, but it remains green during mid-summer, and may be grazed when other vegetation has dried. In general, the habitats in which this species occurs have shown an improving trend in density of native perennial grasses.

Approximately 40 to 50 Rocky Mountain bighorn sheep occupy habitat in North Pasture. Normally, they utilize the habitat along Connor Creek, and the ridge between Connor Creek and Fox Creek, although a small number occasionally range southward into the Morgan Creek drainage. There is some potential for forage competition with livestock, but the ridge has been lightly used by livestock in recent years. When the Seven Generations Trust completes fencing out their private land along Fox Creek, the North Pasture will effectively be subdivided into two parts, and some change to livestock operations will occur as a result.

A small number of sage grouse may nest and forage in Morgan Creek and Pole Gulch pastures. Overall, the upland habitats which this species utilizes have shown an improving trend in density of native perennial grasses.

Redband trout and their habitat conditions are discussed below.

7. What is the impact of the alternatives on fisheries habitat?
Morgan Creek, Hibbard Creek, Fox Creek, and Connor Creek are perennial streams that provide habitat for resident populations of redband trout. Tributary streams provide spawning and rearing habitat and contribute to water conditions downstream. The extent of occupied habitat may depend on stream gradient and natural obstructions. Water quality, including oxygen content, sediment loads, and temperatures may affect habitat suitability and the physiology of the fish. Water quality has been influenced by livestock grazing as noted above. Physical features of habitat structure directly and indirectly influenced by livestock grazing include channel depth and width, bank form and stability, and cover.

CHAPTER 4
ENVIRONMENTAL CONSEQUENCES

This chapter will describe the anticipated consequences of implementing the alternatives. Anticipated impacts are displayed in relation to the issues identified in Chapter 1, Section E. Included in this analysis are direct, indirect, and cumulative effects on resources. These effects are not necessarily labeled.

A. No Action Alternative

1. How would the alternatives bring allotment management into compliance with upland and riparian utilization standards?

Upland vegetation utilization has generally been within acceptable levels (under 50% of current annual growth) in Pole Gulch, Morgan Creek, and North pastures under the current grazing system. Actual use by livestock is subject to monitoring and adjustment within the flexibility and terms and conditions of the existing permit. This would not change under the no-action alternative.

BLM would continue to work with the permittee to achieve proper livestock distribution and compliance with monitoring and use adjustment requirements. In the short-term, BLM would continue to negotiate with the permittee or issue decisions on annual use authorization agreements that would reduce the actual use of livestock in the Hibbard Pasture without changing the 10-year grazing permit. Based on monitoring results, it is anticipated that the actual use of livestock would ultimately have to be reduced to the same degree as under the proposed alternative in order to comply with utilization standards.

Utilization on herbaceous riparian vegetation throughout the allotment would be addressed in a similar manner. Based on monitoring data, livestock use patterns, and the effectiveness of herding and other livestock management measures, riparian utilization standards would likely limit the extent to which upland carrying capacity could effectively be utilized. Livestock would be removed from any particular pasture when utilization levels approached 45% on riparian areas.

Given the workload required to monitor utilization and to move livestock, the risk of exceeding utilization limits in any particular year would be greater under this alternative than in alternative 2.

2. How would riparian areas be impacted by the alternatives?

Monitoring and actual use data would be used to adjust livestock numbers and the length of time livestock remained in a particular pasture. Riparian vegetation would be expected to improve in vigor and density as average utilization levels were brought down to meet standards. Correcting excessive use on herbaceous riparian vegetation would also serve to alleviate heavy browsing of riparian brush species. Under the present spring use schedule in the lower elevation pastures, annual re-growth of herbaceous riparian species after livestock are removed may be less than in Alternative 2. We have insufficient data at this time to determine if rates of recovery of riparian habitats would differ because of seed production or root mass differences between the alternative treatments.

As riparian habitat standards are achieved, floodplain sites would generally be improved by increase in vegetation, stabilization of sediment, and re-establishment of normal dynamic hydrologic conditions. Some improvement and re-filling of downcut channels would occur, although in general, new floodplains must be built up from within incised channels, and historic floodplain levels would probably never be re-established. As hydrologic function improves and normal balances are achieved between floodplain

stability and dynamic change, water interception and storage capacity would increase and downstream flood intensities would be decreased.

3. How would water quality be impacted by the alternatives?

As riparian habitat standards are achieved, vegetation density, diversity, and structure, would improve. Stream banks would be less susceptible to trampling damage. Vegetation should reduce the degree of headcutting, and eventually stabilize all channels. Regeneration and recruitment of woody species (particularly willow, cottonwood and alder) should increase, stabilizing banks. Sediment, turbidity, and nutrient loading would decrease. Non-point source pollution (animal waste) would likely decrease due to fewer livestock present in riparian areas. Soil water-storage capacity would increase, providing more stable flow volumes, with greater quantities of water released during late spring, summer, and fall.

4. How would aspen stands and aspen-meadow habitats be impacted by alternatives?

Aspen regeneration would likely increase as utilization standards on key upland forage species are achieved. Mid and late-seral herbaceous species, particularly Hood's sedge and smallwing sedge will increase in density and vigor. Stabilization of headcuts will enable recovery of water tables and tend to reverse associated changes in vegetation species composition and productivity.

5. How would the alternatives impact grazing and livestock operations?

The present grazing use authorization is described in the attached allotment evaluation. The permittee would be required to make adjustments to actual use on an annual basis in all pastures to achieve utilization standards for upland and riparian forage species. The permittee would be responsible to monitor ongoing utilization levels and remove livestock from any particular pasture at the appropriate time to avoid exceeding utilization standards. In the short-term, actual use adjustments would be similar to Alternative 2 in the Hibbard Pasture, amounting to a 256 AUM reduction.

Spring and fall use within the lower elevation pastures would probably be limited by utilization levels on riparian vegetation due to the topography and livestock forage preferences. The period of actual use would be influenced by the effectiveness of herding livestock onto the uplands, but a substantial reduction would probably be necessary to meet the riparian utilization standard, particularly in the Pole Gulch and Morgan Creek Pastures. In the short-term, the effective reduction of livestock use would probably be substantially greater than under Alternative 2.

Permittee operations on adjacent private lands will be affected to some degree. The permittee must find additional pasture or otherwise provide feed for livestock when they are not on the BLM allotment. Efficiencies of scale of operations and cost benefit ratios of livestock operations may also be affected. At some point, the effort and unit cost of maintaining miles of fence, water facilities, and other rangeland improvements on public land can outweigh the benefits of low forage costs when only a small number of livestock can be grazed or the season and timing of use is too restricted. At that point, the use of a livestock grazing allotment may become uneconomical. While there are many cost factors not directly under either BLM's or the permittee's control, adjustments on BLM permits do have direct and indirect effects on associated ranching operations. The permittee has stated that he believes the degree of reductions that would be necessary to fully meet riparian utilization standards would effectively make this grazing allotment uneconomical to operate..

6. What is the impact of the alternatives on BLM designated 'Sensitive' species and habitats?

The Snake River goldenweed (*Pyrrocoma radiata*) occurs on upland habitats in the Morgan Creek, Pole Gulch, and North pastures. In general, the habitats on which this species occurs have shown an improving trend in density of native perennial grasses. Continuation of present management under the no-action alternative is unlikely to have any measurable impact on this species.

There is some potential for forage competition between bighorn sheep and livestock. BLM would continue to monitor vegetation and forage availability in the habitat use area to ensure that the population of bighorn sheep would be maintained. Continuation of present management under the no-action alternative is expected to be fully compatible with maintenance of this species.

A small number of sage grouse may nest and forage in Morgan Creek and Pole Gulch pastures. In general, the upland habitats which this species utilizes have shown an improving trend in density of native perennial grasses. Continuation of present management under the no-action alternative is unlikely to have any measurable impact on this species.

7. What is the impact of the alternatives on fisheries habitat?

As riparian habitat standards are achieved, vegetation density, diversity, and structure, would improve. Stream banks would be less susceptible to trampling damage. Vegetation should reduce the degree of headcutting, and eventually stabilize all channels. Stream channel depth should increase and average stream width should decrease over time. Regeneration and recruitment of woody species (particularly willow, cottonwood and alder) should increase, stabilizing banks and trapping sediment. Sediment, turbidity, and nutrient loading would decrease. Soil water-storage capacity would increase, providing more stable flow volumes, with greater quantities of water released during late spring, summer, and fall. All of these changes would improve redband trout habitat.

B. Alternative 2 - The Proposed Action

1. How would the alternatives bring allotment management into compliance with upland and riparian utilization standards?

Upland vegetation utilization has generally been within acceptable levels (under 50% of current annual growth) in Pole Gulch, Morgan Creek, and North pastures under the current grazing system. Actual use by livestock is subject to monitoring and adjustment within the flexibility and terms and conditions of the existing permit. This would not change under this alternative.

In 2003, BLM would permanently reduce the existing 10-year grazing permit by 256 AUMs in the Hibbard Pasture to reflect the observed carrying capacity based on monitoring data. BLM would continue to work with the permittee to achieve proper livestock distribution and compliance with use adjustment requirements. Upland and riparian utilization standards would continue to be implemented in this pasture.

BLM would temporarily (2 years) authorize the permittee to exceed the utilization standard on herbaceous riparian vegetation in the spring pasture if full re-growth of riparian vegetation is achieved and the pasture received fall/winter rest. Livestock use in the fall pasture would be adjusted requiring a 4" residual stubble height on herbaceous riparian vegetation. Spring grazing use would be adjusted (depending on weather and range readiness criteria) to allow the use period to begin by April 15, with a corresponding early removal of livestock. Upland forage utilization standards would continue to apply. After two years of additional monitoring, BLM would re-assess the effects of this adjusted use on riparian habitat recovery and achievement of progress toward implementing Rangeland Standards and Guidelines, and propose a new decision whether or not to continue that modification.

2. How would riparian areas be impacted by the alternatives?

Riparian vegetation would improve in vigor and density as average utilization levels are brought down to meet standards similar to Alternative 1. Floodplain sites would generally be improved by increase in vegetation and stabilization of sediment. Some improvement and re-filling of downcut channels would occur. As hydrologic function improves, water interception and storage capacity would increase and downstream flood intensities would be lessened.

In the lower elevation pastures, there would be a longer period after spring grazing for re-growth to improve plant vigor and seed production. Monitoring would assess if re-growth of vegetation would be adequate to allow riparian habitat recovery. If not, the 45% riparian utilization standard would be resumed. Basing fall use on residual herbaceous stubble height would make it simpler for the permittee to monitor actual use and remove livestock at the proper time. Sufficient riparian vegetation would remain to trap and filter sediments from fall and late winter stream flows.

There is insufficient data to determine if rates of recovery of riparian habitats would differ between the alternative treatments.

3. How would water quality be impacted by the alternatives?

Impacts would be similar to Alternative 1. There is insufficient data to determine if rates of improvement of water quality would differ between the alternative treatments.

4. How would aspen stands and aspen-meadow habitats be impacted by alternatives?

Impacts would be similar to Alternative 1. The proposed treatment within the Hibbard Pasture is identical in terms of actual use by livestock. Only the formal adjustment of terms of the 10-year grazing permit is different.

5. How would the alternatives impact grazing and livestock operations?

The present grazing use authorization is described in the attached allotment evaluation.

In 2003, BLM would permanently reduce the existing 10-year grazing permit by 256 AUMs (from 387 to 131) in the Hibbard Pasture based on the results of the previous three years of monitoring data. The adjustment would be achieved by reducing the period of time the livestock are present. BLM would continue to work with the permittee to achieve proper livestock distribution and compliance. Upland and riparian utilization standards would continue to be implemented in this pasture. The permittee would be responsible to monitor utilization levels and remove livestock from any particular pasture at the appropriate time. This would have the same effect on livestock numbers and operation as Alternative 1 when the proper annual use adjustments are made to comply with the same standards.

Fall use within the lower elevation pastures would probably be limited by utilization levels on riparian vegetation due to the topography and livestock forage preferences. Spring use would continue at currently authorized levels for at least two years while BLM monitors and evaluates the effects of season of use adjustment on riparian recovery. Because riparian utilization would be allowed to exceed the 45% use standard in spring, and because upland forage utilization standards have generally not been exceeded, it is expected that livestock would be able to remain in the spring pasture longer than under Alternative 1. Therefore there would be less impact to the permittee's existing operation.

Permittee operations on adjacent private lands will be affected similarly, but in the short-term to a lesser degree than under Alternative 1.

6. What is the impact of the alternatives on BLM designated 'Sensitive' species and habitats?

There would be no difference between Alternative 2 and Alternative 1 in respect to special status species habitats.

7. What is the impact of the alternatives on fisheries habitat?

Impacts would be similar to Alternative 1. There is insufficient data at this time to determine if rates of recovery of riparian habitats in the lower elevation pastures would differ between the alternative treatments.

CHAPTER 5
CONTACTS, CONSULTATIONS AND PREPARERS

A. Agencies, Organizations, and Persons Consulted

Alex Finke
Hans Finke
Bill Mathews (2002 grazing season)

B. Future Public Notification

1. A 30 day public comment period will be established for review of this EA and the associated Finding of No Significant Impact (FONSI). A notice of availability of these documents will be published in the Baker City Herald in Baker City.

2. All parties on the mailing list for this project will be notified of the availability of the EA and FONSI and the comment period.

3. A notice of decision would be published in the Baker City Herald if the decision is made to implement the project.

C. List of Preparers

Clair Button	Range/Botany
Mary Oman	Cultural
Jackie Dougan	Fisheries
Greg Miller	Wildlife
Polly Gribskov	Recreation/VRM
Todd Kuck	Hydrology/Soils/Riparian
Walt Wood	Forestry
Mike Woods	Weed Management