



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Tuscarora Field Office

3900 East Idaho Street

Elko, Nevada 89801

[http://www.blm.gov/nv/st/en/fo/elko\\_field\\_office.html](http://www.blm.gov/nv/st/en/fo/elko_field_office.html)

In Reply Refer To:  
4130 (NVE0200)

DEC 22 2015

DEC 22 10 54 AM '15

Dear Interested Parties:

Enclosed is a draft of the Proposed Action for the Blue Basin Term Permit Renewal Environmental Assessment (EA). This EA is not yet completed and the BLM is seeking feedback on the Adaptive Livestock Grazing Management strategy to assist in further development. The following alternatives would be evaluated; the Adaptive Livestock Grazing Management (Proposed Action), No Action, and No Grazing as part of this EA. Please take a moment and review the enclosed document and flow charts to provide comments.

The Tuscarora Field Office (TFO) has been working on a structure for Adaptive Livestock Grazing Management for livestock grazing. Specialists have developed a proposed livestock grazing system for the Blue Basin Allotment Term Permit Renewal that is contingent on seasons of use, utilization levels, and other indicator monitoring. Thresholds would be established along with strategies, guidelines, and resource objectives to work toward maintaining or enhancing rangeland health and habitat condition on a landscape level. This adaptive type of management allows for controlled flexibility in livestock grazing schedules given the uncertain conditions experienced in northeastern Nevada. The ability to change livestock grazing strategies will provide for more controlled use in areas, thus allowing greater opportunity for operator cooperation and increasing health and stability of public rangelands and wildlife habitat, while maintaining multiple use objectives.

Any comments, questions, or concerns can be e-mailed to Joshua C. Robbins, Rangeland Management Specialist, at [jcrobbin@blm.gov](mailto:jcrobbin@blm.gov). Please have your comments submitted by January 12, 2016.

Sincerely,

Richard E. Adams  
Field Manager  
Tuscarora Field Office

Enclosures: As stated

## Alternative 2 — Proposed Action:

The Proposed Action is to renew the grazing permit with the authorization number 2701506 for the term of 10 years for the Blue Basin Allotment. This would permit 15 horses from 4/1 to 9/1, which is 62 AUMs at 81% public land. Also, this permit would lengthen the grazing season for cattle use without increasing the number of allowable AUMs from cattle use; as followed: 574 cattle from 3/1 to 11/30, with a total of 4,204 AUMs at 81% Public Land. Table , “Proposed Livestock Grazing Authorization 1” (p. 1) summarizes the proposed grazing authorization for authorization 2701506.

**Table . Proposed Livestock Grazing Authorization 1**

Allotment	Number	Kind	Dates	PPL	Type	AUMs
Blue Basin	15	Horses	4/1 – 9/1	81%	Active	62
Blue Basin	574	Cattle	3/1 – 11/30	81%	Active	4,204

This alternative would maintain 1,830 Suspended AUMs for Authorization Number 2701506 (with a total grazing preference of 6,100 AUMs).

In addition, this alternative will create a new a grazing authorization number for the Blue Basin grazing preference tied to Authorization Number 2703954, due to Four Mile Canyon Allotment also being a part of this authorization; this new authorization number will be determined after the Final Decision is signed. The parameter of this new Authorization would be as followed: 248 cattle from 3/1 to 11/30, with a total of 2,197 AUMs at 98% public land. Table , “Proposed Livestock Grazing Authorization 2” (p. 1) summarizes the second proposed livestock grazing authorization for the Blue Basin Allotment:

**Table . Proposed Livestock Grazing Authorization 2**

Allotment	Number	Kind	Dates	PPL	Type	AUMs
Blue Basin	248	Cattle	3/1 – 11/30	98%	Active	2,197

This alternative would maintain 944 Suspended AUMs for this authorization (with a total grazing preference of 3,141 AUMs).

For the Blue Basin Allotment, the proposed action will implement the following:

- Operate between the earliest on-date of March 1 (given soils are dry enough to withstand livestock effects without damage) and the latest off-date of November 30.
- Authorized permitted use of 6,405 cattle AUMs within the Blue Basin Allotment
- Authorized permitted use of 62 horse AUMs within the Blue Basin Allotment.
- Implement Adaptive Management in regard to livestock grazing based on maintaining or achieving resource objectives as well as standards for rangeland and riparian health.

### Adaptive Livestock Grazing Management

Tuscarora BLM Field Office’s purposes to maintain or improve land health and enhance biodiversity in the Blue Basin Allotment by:

- Restoring, enhancing and/or maintaining riparian, wetland and aquatic habitats through revised livestock grazing management and construction and/or maintenance of structural projects.
- Restoring, enhancing and/or maintaining sagebrush steppe habitat (species composition, vigor, and structure) through revised livestock grazing management, structural projects and/or implementation of vegetative treatments.

- Restoring, enhancing and/or maintaining habitat for Special Status wildlife species, including the Greater Sage grouse and other sagebrush obligates.

Grazing management would be based upon annual indicator monitoring which relate to the short and long-term objectives, as appropriate, to allow flexibility and adaptability to uncertain conditions (e.g. long-term drought, fire, insect infestation, etc.) in order to meet or exceed rangeland health standards. Management would key in on areas that have been affected negatively each year, identify these areas, and ensure that the same area is not negatively impacted every year and that management responds to changing conditions and tries to benefit desired species and communities most years. Livestock grazing management strategies as well as other components of the adaptive management approach for the Blue Basin Allotment are listed below.

***Resource Objectives***

Specific short and long-term resource objectives by use area or pasture for upland and riparian resources are included in ??? and ??? Objectives are based on identified resource issues and existing conditions as well as site capability and potential for the Blue Basin Allotment (BLM 2014 S&G).

Long-term monitoring, in relation to the short-term objectives and long-term objectives, would capture the effects and influence of the annual indicators over a lengthier time span. If poor management is taking place, it would be captured in these short-term or long-term objectives (as applicable) and would be considered during the annual grazing strategy development meeting.

***Livestock Grazing Management Strategy***

- Applying adaptive grazing management practices for upland and riparian habitats based upon monitoring and prior season livestock use.
- Additional flexibility could be incorporated into the grazing system provided desired conditions are maintained and/or the system has established resiliency.
- Applying a strategy aimed at providing time for plant reproduction, establishment of new plants, resoration of plant vigor, a return to environmental conditions appropriate for grazing, or the accumulation of forage for later use.

***Livestock Grazing System Guidelines***

- Applying grazing management to provide for stable vegetative states/systems within site potential and capability; with respect to soils, hydrology, and ecology.
- Applying positive grazing strategies which result in positive riparian impacts more than 50% of the time, over a three or more year period for the Stinson Riparian, North Susie, and Adobe Pastures (Table , “Riparian Grazing Strategies” (p. 2)).

**Table . Riparian Grazing Strategies**

Riparian Habitat Impact	
Positive	Negative

<ul style="list-style-type: none"> <li>● Early Season Grazing</li> <li>● Short Duration Grazing</li> <li>● Domestic Horses</li> <li>● Fall Grazing</li> <li>● Trailing</li> <li>● Rest</li> <li>● Combination of Any Above</li> </ul>	<ul style="list-style-type: none"> <li>● Hot Season Grazing</li> </ul>
<p><b>Early season grazing:</b> April, May, mid to late June; <b>Hot season grazing (cow-calf pairs):</b> early/mid July to late September; <b>Hot season grazing (yearling cattle):</b> late July/early August to late September; <b>Fall grazing:</b> early October to late November; <b>Trailing:</b> one to three days; <b>Short duration:</b> less than three weeks; <b>Domestic horses:</b> no seasonal restrictions.</p>	
<p>*Time-frames are approximate and may vary depending on climatic conditions and other factors.</p>	

## ***Monitoring***

A combination of implementation monitoring and effectiveness monitoring will be used to evaluate the effectiveness of the adaptive management strategy both in terms of evaluating short-term management actions and in terms of achieving desired results (resource objectives) over the long-term. Generally, implementation monitoring includes such components as utilization, compliance, actual use, photographs, etc. (Wyman et al. 2006), while effectiveness monitoring evaluates trends towards achievement of objectives (Dickard et al. 2015). Information from both implementation and effectiveness monitoring will be considered during the annual operating meeting and as part of the long-term planning and management of the allotment.

## ***Implementation Monitoring***

Implementation monitoring would include the use of indicators based on vegetative utilization by livestock. This can be recorded in two ways: key species utilization and/or stubble height monitoring (Swanson et al. 2006). The annual indicators (expressed as thresholds) are listed below):

### **Riparian Resources**

- A 4 inch or greater stubble height on riparian herbaceous species, as appropriate based on capability/site potential.
- Livestock utilization would be no more than 35% utilization of current year's growth of aspen suckers and single-stemmed saplings, or willow that are less than seven feet in height.

### **Upland Resources**

- Livestock utilization would be no more than a 50% use of current year's growth on perennial grass species.
- Bitterbrush use by livestock would not exceed 50% of current year's growth in mule deer summer range and/or 25% of current year's growth in mule deer winter range.
- Consideration and recommendation of deferred livestock turnout if prior year early season (May 1 — June 30) was greater than moderate utilization within the use area.

Photographs, use of the Grazing Response Index (GRI) (USDA USFS, 1996), use pattern mapping and/or actual use records, and/or other applicable information could also be used to inform annual management planning.

Implementation monitoring would be conducted and analyzed no less than three out of five years to help evaluate the effects of livestock grazing on the allotment. Information on indicators would be collected by pasture when cattle leave the area or at the end of the growing/grazing season as appropriate.

### ***Effectiveness Monitoring***

Effectiveness monitoring would be used to inform management decisions based on meeting short and long-term objectives for upland and riparian habitats. Trend studies (new and existing) would be implemented/continued as appropriate to collect and record resource conditions using the best available science.

### ***Administration***

The BLM and the livestock operator would meet no less than once a year, prior to turn out, to review the last grazing season's effectiveness monitoring and/or available data (including the status of achieving resource objectives) to develop a grazing strategy for the current year. Indicators would be considered on an annual basis to determine if any implementation of the following adaptive practices should be implemented. The current year's grazing strategy would be approved with a grazing application by the BLM Authorized Officer in consultation with staff specialists.

If short-term resource objectives are not met following implementation of an adaptive management approach, then a formal rotation grazing system with defined dates and components analyzed in this EA shall be employed to work toward short-term resource objectives, as deemed appropriate by the BLM prior to the next grazing season. Flexibility in deviating from the developed grazing strategy would not be permitted until short-term resource objectives are met. Once these short-term objectives are met, adaptive livestock grazing management may again be implemented.

### ***Adaptive Practices***

Adaptive Practices which may be employed as the need is determined through monitoring:

- Changing class of livestock (within species; ex: yearlings, cow-calf, heifers).
- Temporary reduction of utilization levels (< moderate use).
- Temporary reduction or increase of livestock numbers.
- Changing season of use within permitted dates.
- Supplementing livestock to increase distribution (> ¼ mile from live waters, troughs, wet/dry meadows, and aspen stands).
- Employ riding and/or herding practices to improve livestock distribution.
- Deferred use of areas within the permitted dates.
- Rest use areas to allow ungrazed, vegetative growth and plant propagation.
- Move livestock from pasture or use area when annual or in-season (as appropriate) utilization thresholds, in relation to utilization indicators, have been reached.
- Prescriptive livestock grazing schedule. (ex: rest rotation, deferred, etc.)
- Plan and implement additional range improvement infrastructure to increase management capabilities and/or increase livestock distribution, after sufficient NEPA analysis has been conducted.

Adaptive management design is summarized in ??? and ???

# Resource Objectives

**Table . Upland Resource Objectives**

Short-Term (annually)	Long-Term (7-8 years)
<ul style="list-style-type: none"> <li>• Livestock utilization would be no more than 50% use of current year's growth on perennial grass species.</li> <li>• Bitterbrush use by livestock would not exceed 50% of current year's growth in mule deer summer range or 25% of current year's growth in mule deer winter range.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain or increase composition and cover of native perennial cool season bunchgrasses.</li> <li>• Increase or maintain grassland and shrubland habitat types.</li> <li>• Maintain or enhance vegetative composition and availability of Sage Grouse habitat.</li> </ul>

**Table . Riparian Resource Objectives**

Pasture (See ???) <sup>1</sup>	Riparian Resources <sup>2</sup>	Habitat Objectives <sup>3</sup>	
		Short-Term (3 year)	Long-Term (5 years)
South Susie	Spring # 2	Maintain PFC <sup>4</sup>	Maintain PFC
North Susie	Spring # 5, 6, 7, 8, 9, 10, 37, & 38	> 50% FAR, Upward Trend	> 50% PFC
Adobe	Adobe Creek	Maintain PFC, RCC <sup>5</sup> > 75% optimum	Maintain PFC, RCC > 75% optimum
Stinson Riparian Pasture	Upper Susie Creek	FAR, Upward Trend	RRC > 65% optimum; PFC
North Lone Mountain	Blue Basin Creek	Maintain PFC	Maintain PFC
Stinson	Cold Creek Meadow	Maintain PFC	Maintain PFC
	Spring # 31, 32, 33, 34, 35, & 36	> 50% FAR, Upward Trend	> 50% PFC
Louse	Spring # 15, 17 & 20, 30	> 50% FAR, Upward Trend	> 50% PFC
	Blue Basin Creek	Maintain PFC; RCC > 59% optimum	Maintain PFC; RCC > 59% optimum
All (except South Lone Mountain, Avenals, and Airport Pastures)	Riparian/Meadow Habitats <sup>6</sup>	Provide for food forbs and plant species richness; sagebrush interspersions	Provide for food forbs and plant species richness; sagebrush interspersions

<sup>1</sup> Objectives are not established for limited riparian resources on public lands in the West and East Avenals and Airport pastures.

<sup>2</sup> Based on information presented in BLM (2015)

<sup>3</sup> Based on current conditions (BLM 2014)

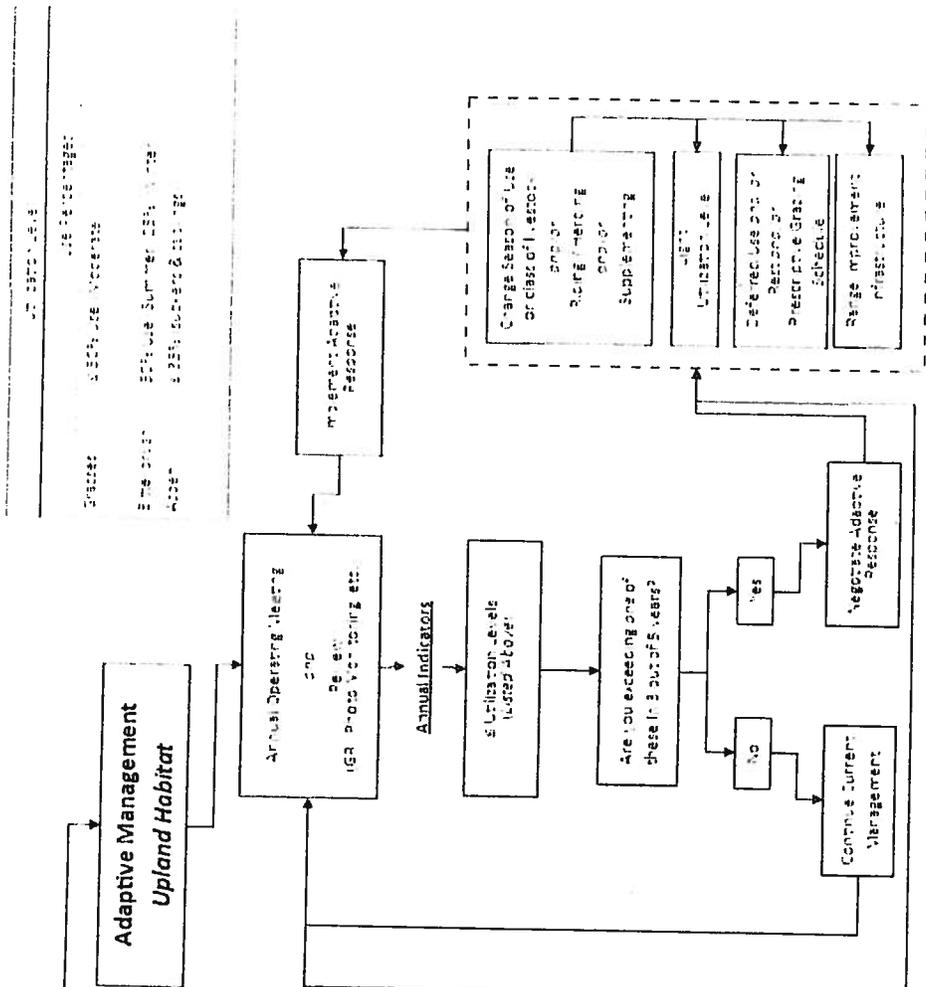
<sup>4</sup> PFC — Proper Functioning Condition; FAR — Functioning at Risk (Prichard et al. 1998; Prichard et al. 1999, Revised 2003). Dickard et al. (2015) replaces Prichard et al. (1998) when released.

<sup>5</sup> RCC — Riparian Condition Class. Percent of optimum is defined as totally stable streambanks vegetated by tall shrubs or trees (BLM 2002). Generally, >65% of optimum represents good to excellent riparian habitat conditions.

<sup>6</sup> Habitat Objectives for Greater Sage-Grouse for riparian and meadow habitats (BLM and USFS 2015).

**Note** that other quantitative methods are described in Dickard et al. (2015) and Burton et al. (2011) for lotic systems or which are under development for lentic systems (Dickard 2015) may also be used to inform attainment of stream and riparian habitat conditions.

Management: Applying adaptive grazing management to provide for stable vegetative states/systems within site potential and capability; with respect to soils, hydrology, and ecology.



**Long Term Objectives (7-8 yrs)**

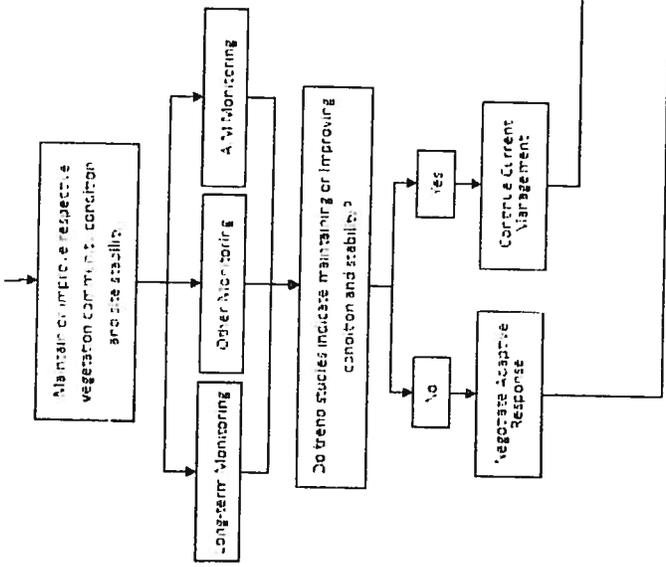


Figure . Adaptive Livestock Grazing Flowchart — Upland Resources

Management: Applying positive riparian impacts more than 50% of the time, over a three or more year period for the Stinson Riparian, North Susie, and Adobe Pastures.

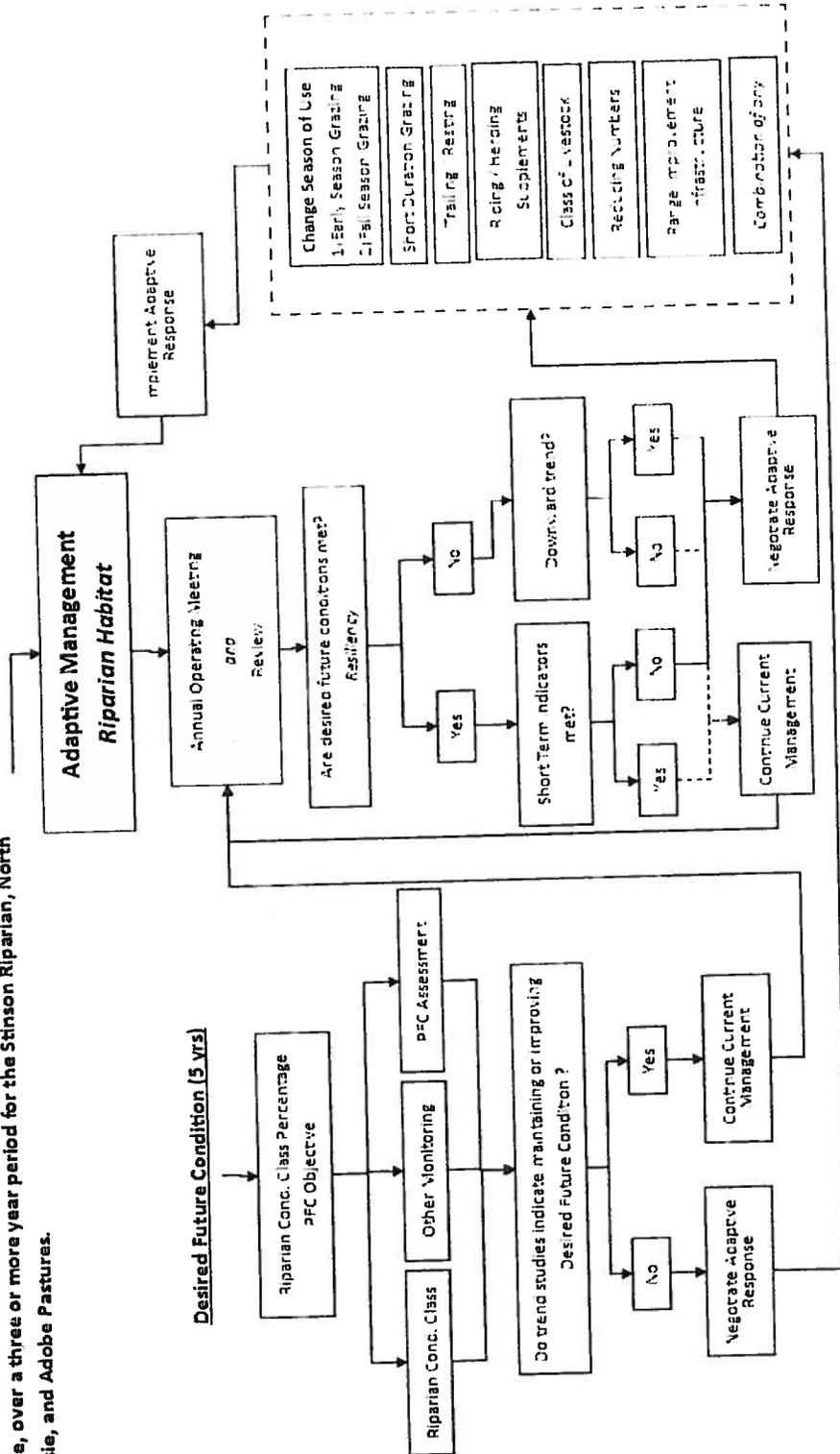


Figure . Adaptive Livestock Grazing Flowchart — Riparian Resources

