United States Department of Agriculture	Forest Service	inyo National Forest	873 North Main Bishop, CA 93514-2494 (619) 873-2400 (619) 873-2538 TDD		
			Reply to:	1950	
			Date:	April 12, 1994	۱
	Sco	ping Letter			

**Dear Interested Party:** 

The Inyo National Forest is considering an amendment to its Land and Resource Management Plan (Forest Plan) for the purpose of incorporating refined forest-wide utilization standards for the grazing of domestic livestock.

The need for refinement of utilization standards is identified in the Forest Plan as a range management standard and guideline, with direction to maintain or improve the condition of soils and vegetation. In addition, the need for refined utilization standards has been made more immediate as the Forest is in the process of assessing the current status of riparian-dependent threatened, endangered and sensitive species and their habitats. The assessment of riparian species is being done in accordance with a request by the Pacific Southwest Regional Forester.

The Inyo Forest Plan was approved by Regional Forester Paul Barker on August 12, 1988. It contains overall range management direction in the form of Forest-wide Standards and Guidelines and Management Prescriptions. The proposed Forest Plan amendment would incorporate the utilization standards as "umbrella" direction, applying to all lands in which grazing is permitted. These standards may be modified further for each grazing allotment, to accommodate local conditions. However, this amendment will not address individual allotments, as that is a task to be accomplished later. The other Forest Plan standards and guidelines for range management will remain the same.

Attached to this letter are a set of tables or matrices, describing utilization standards for a variety of vegetation types. Within each table the allowable use, expressed as a percentage, are presented for six different grazing systems. Adoption of these tables in their current form is the proposed action being considered. The proposed action, plus other alternatives will be analyzed through compliance with the National Environmental Policy Act (NEPA).

At this time, we would like to know what concerns, issues or comments you may have regarding the proposed utilization standards. Please send any comments you have regarding this proposed amendment to the following address by no later than **May 31, 1994**: Inyo National Forest, Attn: Range Management, 873 North Main Street, Bishop, CA 93514.

If you have any questions please contact Resource Officer Ron Keil at (619) 873-2400.

Sincereh

DENNIS W. MARTIN Forest Supervisor

enclosure



## INTRODUCTION

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An Interdisciplinary Team developed forage utilization standards for the Inyo National Forest, as directed by the Land and Resource Management Plan (Pages 85-86). These new standards will amend the Forest Land and Resource Management Plan. They will allow the Inyo to sustain and improve rangeland ecosystems. They are summarized in matrices based on vegetation condition, vegetation type, and grazing system.

### I. VEGETATION AND GRAZING SYSTEMS MATRICES

#### A. GENERAL

These matrices are based on procedures and standards from the 1969 Region 5 Range Analysis Handbook (RAH) and the 1993 Draft R5 RAH. The RAH provided a continuum of allowable uses, depending on vegetative condition. The team made adjustments to these figures based on specific grazing system, current literature and professional experience with Inyo conditions. Allowable use refers all users, including wildlife, recreation and domestic livestock. The ID team considered these standards to be the maximum allowable per vegetation type on the Inyo National Forest.

Allowable use is measured by percent weight removed for grasses and sedges; and by percent removed/broken leader growth (measured by length or volume) for shrubs and trees.

Allowable use figures were based on a "normal" precipitation year. Adjustments should be made by managers during "drought" years.

5% allowable use refers to incidental use such as occasional stray and recreational animals. In practice, 5% means no planned use.

The Range Analysis Handbook defines site condition as the lower of the vegetation or soil rating. The team used only the vegetation rating.

Watershed evaluation criteria will modify the use standards where necessary.

Habitats of Threatened, Endangered, Sensitive and Proposed wildlife and plant species will be evaluated and allowable use standards will be modified as necessary to maintain species viability.

Cultural sites will be surveyed, and use will be in accordance with the Section 106 process and other relevant law.

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#### **B. VEGETATION TYPES**

Rangeland vegetation types have been classified according to the Region 5 Range Analysis Handbook system (Draft FSH 2209.21, pp 7-24) and adjusted based on the presence of commonly found plant associations on the Inyo National Forest. The charts below list the desired species for each vegetation type and the desired species selected for monitoring (key species). If a key species is not present at a given site, a different representative desired species may be substituted during actual monitoring.

Within the matrices shown later in this document, there are overlaps in the numbers of desired plants over total herbaceous plants. For clarification, refer to pages 61 to 72 of the Draft FSH 2209.21. When more than one vegetation type exists within a management unit, more than one use standard may exist. Livestock should be removed from a unit when the first (in chronological time) allowable use standard is reached.

desired plants = Plant species which are representative of a specific vegetation type in a healthy state. These plants were identified as Primary and Secondary plants in the 1969 R5 RAH. They are called Decreaser and Increaser plants in the 1993 Draft R5 RAH.

key species = Plant species of sufficient abundance and palatability to justify their use as indicators to the degree of utilization for the associated vegetation species.

total herbaceous = Total number of plants counted out of 100 tallied. This includes invaders as well as desired plants. It does not include tallies on litter, bare soil, gravel or rock.

### 1. Carex - dominated (Wet) Meadows

Desired	Species	Key Species

Carex nebraskensis Carex aquatilis Carex rostratra Carex athrostachya Eleocharis spp.

Carex spp.

2. Carex-Grass -Dominated (Moist) Meadows

Desired Species	Key Species

Carex sppCarex spp.Trifolium spp.Poa spp.Deschampsia caespitosaPoa spp.Hordeum brachyantherumMiscellaneous forbs

3. Carex douglasii-Stipa-Agropyron-dominated (Dry) Meadows \*

Desired Species Key Species

Stipa spp. Carex spp. Agropyron trachycaulum Spartina gracilia Hordeum brachyantherum Carex douglasii Distichlis spp. Stipa spp. Agropyron trachycaulum Spartina gracilia

\* NOTE: This type does not include degraded wet or moist meadows. Dry Meadows do not represent a management problem on the Inyo. <u>Use the same standards for this type as for</u> <u>adjacent dryland vegetation types on a site-specific basis.</u>

4. Desert Shrub

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### Desired Species Key Species

Agropyron spicatum Ambrosia domosa Oryzopsis hymenoides Grayia spinosa Atriplex spp. Menodora spinescens Ceratoides lanata Stipa speciosa Ephedra viridis Ephedra nevadensis Psorothamaus polydenius Oryzopsis hymenoides Stipa speciosa Grayia spinosa Ceratoides lanata

## 5. Sagebrush

Desired Species	Key Species				
Atriplex spp.	Grayia spinosa				
Grayia spinosa	Stipa spp.				
Stipa spp.	Sitanion hystrix				
Sitanion hystrix	Oryzopsis hymenoides				
Oryzopsis hymenoides					
Ephedra viridis					

### 6. Bitterbrush

### Desired Species

Purshia spp. Artemisia tridentata Stipa spp. Sitanion hystrix Oryzopsis hymenoides Ribes cereum Ribes velutinum Agropyron spp. Poa secunda

## Key Species

Purshia spp. Stipa spp. Sitanion hystrix Oryzopsis hymenoides

## 7. Alpine Meadow

Desired	Species		Key	Species	

Carex spp. Agropyron spp. Eleocharis spp Deschampsia caespitosa Danthonia spp. Poa spp. Carex spp. Poa spp. Deschampsia caespitosa Danthonia spp.

## 8. Alpine Dwarf Shrub

Desired	Species	Kev	Species

Artemisia arbuscula Ribes spp. Eriogonum spp. Koeleria cristata Sitanion hystrix Poa spp. Poa spp. Koeleria cristata Sitanion hystrix

9. Willow

Desired Species	Key Species
Salix spp.	Salix spp.

## 10. Aspen

Desired Species Key Species

Populus tremuloides

Populus tremuloides

\* NOTE: This type does not include use standards for the understory vegetation. For understory vegetation, use the appropriate vegetation matrix.

#### C. GRAZING SYSTEMS

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<u>Continuous Season-long</u> (SL) -- This system permits continuous grazing throughout the entire plant growing season. Continuous season long grazing often requires more restrictive standards than other grazing systems due to repeated use of individual plants over an extended period of time. This repeated use can lead to a downward trend in plant vigor.

<u>Once over</u> (00) -- Once over grazing refers to a duration of approximately three days for sheep or five days for cattle, within a given management unit. This grazing scheme is of short duration and low to moderate intensity. Once over grazing may occur early, mid or late season.

<u>Compressed season</u> (CS) -- This system enables permitted animal months to be reached by allowing more livestock over a shorter period of time. For example a historical permitted use of 150 head for 4 months (600 animal months) might be changed to 600 head for 1 month to reach the same 600 AM's of use.

<u>Rest rotation</u> (RR) -- This includes only the two-pasture rest rotation system in which there would be total rest on one pasture and season-long use on the other. Allowable use was largely based on season-long continuous use for the grazed pasture. Rest rotation systems with 3 or more pastures are treated as "deferred rotation", because one pasture is grazed early and another is grazed late as in a deferred rotation system, while the third is rested.

<u>Deferred rotation</u> (DR) -- This is a system in which units are utilized for only a portion of the growing season. The use standards are set individually according to the timing of use; ie., "first half" or "second half" of the plant growing season.

<u>Year-round</u> -- This refers to grazing on a 9 to 12 month basis per year. This form of grazing was considered, but is currently not in use on the Inyo National Forest.

<u>Holistic Resource Management</u> (Commonly associated with Alan Savory and the Center for Holistic Resource Management) Holostic Resource Management typically incorporates High Intensity/Short Duration grazing strategies as well as other resource management techniques. Holistic Resource Management (HRM) is unique with each land use application therefore, it is inconsistent with predetermined utilization standards and could be adopted on an allotment specific basis as decided by an interdisciplinary HRM team. If this grazing system is to be implemented the HRM management team should determine appropriate allowable use standards and participate in the requisite site specific NEPA analysis.

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<u>Setback Pastures</u> -- Setback pastures are resource enclosures or pastures that can be grazed occasionally. They normally will be assigned standards on a site specific basis.

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# PROPOSED UTILIZATION STANDARDS (USING ONLY VEGETATION PARAMETERS)

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## CAREX - DOMINATED (WET) MEADOW

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## ALLOWABLE USE (% BY WEIGHT) Key Species: Carex sp. (sedges)

DESIRED PLANTS <sup>a</sup> GRAZING SYSTEM TALLIED					
TOTAL HERBACEOUS	SL	00 <sup>C</sup>	CS	RR <sup>d</sup>	DR <sup>C</sup>
<u>_68</u> 68+	45 <sup>e</sup>	60 / / / 45	NR		50 / / / 40
<u>51-67</u> 51+	45 <sup>e</sup>	45 / / / 35	NR	· 	50 / / / 40
<u>19-50</u> 19+	25	35 /	NR		40 / / / 30
<u>7-34</u> 16-85	15	25 / / 15	NR		30 / / / 20
<u>0-16</u> 0-45	5 <sup>b</sup>	15 / / / 10	NR		20 / / / 10

<sup>a</sup> Number of vegetation hits tallied out of 100 total using the toe-point method (FSH 2209.21 Range Analysis Handbook).

<sup>b</sup> The 5% allowable use is for incidental use only. The intent is not to have grazing at this level.

<sup>C</sup> Left column is Early and right column is Late Season.

 $^{\rm d}$  For 2 pasture systems, use season-long (SL) standards; for  $\geq 3$  pasture systems, use deferred rotation (DR) standards for late/early season.

<sup>e</sup> Figure is for concave meadows. If meadow is convex, drop by 10%. NR= Grazing Practice Not Recommended

# CAREX-GRASS - DOMINATED (MOIST MEADOW)

ALLOWABLE USE (% BY WEIGHT) Key Species: POA (bluegrass) Carex sp. (sedges)

DESIRED PLANTS <sup>a</sup> TALLIED	GRAZING SYSTEM					
TOTAL HERBACEOUS	SL	00 <sup>C</sup>	CS	RR <sup>d</sup>	DR <sup>C</sup>	
<u>&gt;51</u> 55	40	55 / / / 40	55 / / / 40		45 / / / 35	
<u>37-57</u> >37	40	40 / / / 30	40 / / / 30		45 / / / 35	
<u>17-57</u> >20	20	30 / / / 25	30 / / / 25		35 / / / 25	
<u>0-20</u> >10	10	20 / / / 10	20 / / / 10		25 / / / 15	
<13 0-25	5 <sup>b</sup>	10 / / 5 <sup>b</sup>	10 / / 5 <sup>b</sup>		15 / /	

<sup>a</sup> Number of vegetation hits tallied out of 100 total using the toe-point method (FSH 2209.21 Range Analysis Handbook).

<sup>b</sup> The 5% allowable use is for incidental use only. The intent is not to have grazing at this level.

<sup>C</sup> Left column is Early and right column is Late Season.

 $^d$  For a 2 pasture system, use Season-long (SL) standards;  $\geq 2$  pasture systems, use Deferred Rotation (DR) standards for late/early season.

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## DESERT SHRUB

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ALLOWABLE USE (%)<sup>d</sup> Key Species: Stipa sp. (needlegrass) Oryzopsis hymenoides (ricegrass), Grayia spinosa (spiny hopsage)

DESIRED PLANTS <sup>a</sup> TALLIED	a GRAZING SYSTEM				
TOTAL HERBACEOUS	SL	00 <sup>C</sup>	cs	RR <sup>e</sup>	DR <sup>C</sup>
<u>29-41</u> >38	30	50 / / / 40	50 / / / 40	NR	40 /
<u>8-40</u> >30	30	50 / / / 40	50 / / / 40	NR	40 /
<u>&lt;32</u> >10	20	30 / / / 20	30 / / / 20	NR	30 / / / 20
<u>&lt;14</u> >5	10	20 / / / 10	20 / / / 10	NR	20 / / / 10
<u>&lt;8</u> <11	5 <sup>b</sup>	10 / / / 5 <sup>b</sup>	10 / / 5 <sup>b</sup>	NR	10 / / / 5 <sup>b</sup>

<sup>a</sup> Number of vegetation hits tallied out of 100 total using the toe-point method (FSH 2209.21 Range Analysis Handbook).

<sup>b</sup> The 5% allowable use is for incidental use only. The intent is not to have grazing at this level.

<sup>C</sup> Left column is Early and right column is Late Season.

<sup>d</sup> Percent use on grasses is by weight. % use on brush is the % of the current year's growth. Whichever is utilized first limits the amount of time grazing is allowed.

<sup>e</sup> Grazing system is not recommended; use season-long standards. NR = Grazing Practice Not Recommended

## SAGEBRUSH/BUNCHGRASS

ALLOWABLE USE (%)<sup>C</sup>

Key Species: Stipa sp. (needlegrass), Sitanion hystrix (squirreltail) Oryzopsis hymenoides (ricegrass), Grayia spinosa (spiny hopsage)

DESIRED PLANTS <sup>a</sup> TALLIED	GRAZING SYSTEM				
TOTAL HERBACEOUS	SL	oo <sup>d</sup>	CS	RR	DR <sup>e</sup>
<u>29-41</u> >38	50	40 /	40 /	50	40 / / / 60
<u>8-40</u> >30	50	40 / / / 60	40 / / 60	50	40 /
<u>&lt;32</u> >10	40	30 / / / 50	30 / / / 50	40	30 / / / 50
<u>&lt;14</u> >5	20	20 / / / 40	20 / / / 40	20	10 / / / 40
<u>&lt;8</u> <11	5 <sup>b</sup>	10 / / / 30	10 / / / 30	5 <sup>b</sup>	5 <sup>0</sup> ////////////////////////////////////

<sup>a</sup> Number of vegetation hits tallied out of 100 total using the toe-point method (FSH 2209.21 Range Analysis Handbook):

<sup>b</sup> The 5% allowable use is for incidental use only. The intent is not to have grazing at this level.

<sup>C</sup> Percent use on grasses is by weight. % use on brush is the % of the current year's growth. Whichever is utilized first limits the amount of time grazing is allowed.

<sup>d</sup> Left column is Early (Prior to range readiness; sometimes used to get rid of less desirable species, such as brome). Right column is late season.

<sup>e</sup> Left column is range-ready period. Right column is late season.

## BITTERBRUSH

ALLOWABLE USE (%)d

Key Species: Purshia sp. (bitterbrush), Stipa sp.(needlegrass) Oryzopsis hymenoides (ricegrass), Sitanion hystrix (squirreltail)

DESIRED PLANTS <sup>a</sup> TALLIED	GI	RAZING	SYSTE	4	
TOTAL HERBACEOUS					6
	SL	00~	CS	RR	DR
		60 /	60 /		50 /
<u>29-41</u>	40		1	NR	
>38		/ 50	/ 50		<b>€</b> 40
<15% Purshia	in Form	n Class	ses 3 a	and/or	6 <sup>1</sup>
	[	60 /	60 /		50 /
<u>8-40</u>	40	ĺ	/	NR	1
>30		/ 50	/50		<b>4</b> 40
<15% Purshia	in Form	n Class	ses 3 a	and/or	6 <sup>1</sup>
		40 /	40 /		40 /
<32	30	i	į	NR	i
>10		/ 30	/ 30		<b>£</b> 30
>15% Purshia	In Form	n Class	ses 3 a	and/or	່6 <sup>⊥</sup>
		30 /	30 /		30 /
<14	20	j	j	NR	i
>5		/ 20	/ 20		i 20
>15% Purshia	in Form	n Class	ses 3 a	and/or	6 <sup>I</sup>
		20 /	20 /		20 /
<8	5 <sup>be</sup>	ĺ /.	<i>i</i> .	NR	<i>i</i> .
<11		/ 5 <sup>b</sup>	/ 5 <sup>b</sup>		ζ <sup>5<sup>b</sup></sup>
>15% Purshia i	in Form	n Class	ses 3 a	and/or	6 <sup>Í</sup>

<sup>(</sup>FOOTNOTES ON FOLLOWING PAGE)

<sup>a</sup> Number of vegetation hits tallied out of 100 total using the toe-point method (FSH 2209.21 Range Analysis Handbook).

<sup>b</sup> The 5% allowable use is for incidental use only. The intent is not to have grazing at this level.

<sup>C</sup> Left column is Early and right column is Late Season.

<sup>d</sup> Percent use on grasses is by weight. Percent use on brush is the Percent of the current year's growth. Whichever is utilized first limits the amount of time grazing is allowed. Bunchgrass standards from Sagebrush/Bunchgrass site matrix were used in this matrix also.

<sup>e</sup> Also use if all hits are decadent and there is no regeneration. NR = Grazing Practice Not Recommended. Use Season-long Standards.

f FSH 2209.21 (Range Handbook) Form Classes for brush:

Class 1 = All bitterbrush available, little or no hedging. Class 2 = All bitterbrush available, moderately hedged. Class 3 = All bitterbrush available, heavily hedged. Class 4 = Bitterbrush largely available, little or no hedging. Class 5 = Bitterbrush largely available, moderately hedged. Class 6 = Bitterbrush largely available, heavily hedged.

### ALPINE MEADOW

ALLOWABLE USE (% BY WEIGHT) Key Species: Carex sp. (sedges), Poa (bluegrass) Deschampsia caespitosa (hairgrass), Danthonia sp. (oatgrass)

DESIRED PLANTS <sup>a</sup> TALLIED	GRAZING SYSTEM				
TOTAL HERBACEOUS	SL	00 <sup>c</sup>	cs <sup>d</sup>	RR <sup>e</sup>	DR
<u>&gt;38</u> 40	30	35 / / / 30	NR	30	NR
<u>31-40</u> >30	20	30 /	NR	20	NR
<u>19-30</u> >21	15	20 / / / 15	NR	15	NR
<u>9-20</u> >9	5 <sup>b</sup>	10 / / 5 <sup>b</sup>	NR	5 <sup>b</sup>	NR
<u>&lt;11</u> <28	5 <sup>b</sup>	5 <sup>b</sup>	NR	5 <sup>b</sup>	NR

<sup>a</sup> Number of vegetation hits tallied out of 100 total using the toe-point method (FSH 2209.21 Range Analysis Handbook).

<sup>b</sup> The 5% allowable use is for incidental use only. The intent is not to have grazing at this level.

<sup>C</sup> Left column is Early and right column is Late Season.

<sup>d</sup> Not recommended because of low recovery of regrowth.

<sup>e</sup> Only the 2-pasture system is used, because of the short growing season. NR = Grazing Practice Not Recommended

## ALPINE DWARF SHRUB

	ALLOWABLE USE (% BY WEIGHT)	
Key Species:	Poa sp. (bluegrass), Koeleria cristata (junegrass	)
	Sitanion hystrix (squirreltail)	

DESIRED PLANTS <sup>a</sup> TALLIED TOTAL HERBACEOUS	GRAZING SYSTEM				
	SL	00 <sup>C</sup>	CS	RR <sup>d</sup>	DR
<u>&gt;38</u> 40	25	30	NR	25	NR
<u>31-40</u> >30	20	20	NR	20	NR
<u>19-30</u> >21	15	15	NR	15	NR
<u>9-20</u> >9	5 <sup>b</sup>	5 <sup>b</sup>	NR	5 <sup>b</sup>	NR
<u>&lt;11</u> <28	5 <sup>b</sup>	5 <sup>b</sup>	NR	5 <sup>b</sup>	NR

<sup>a</sup> Number of vegetation hits tallied out of 100 total using the toe-point method (FSH 2209.21 Range Analysis Handbook).

<sup>b</sup> The 5% allowable use is for incidental use only. The intent is not to have grazing at this level.

<sup>C</sup> Only late season standards used, because this sit has less moisture than the Alpine Meadow Site and is more difficult to manage.

 $^{\rm d}$  2-pasture system only, because of the short growing season. NR  $\,$  Grazing System is not applicable in this site.

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# ASPEN

# ALLOWABLE USE (%)<sup>C</sup> Key Species: Populus tremuloides (aspen)

AGE CLASS <sup>ab</sup> AND	GRAZING SYSTEM				
REGENERATION	SL	00	CS	RR	DR
≥2 Age Classes AND					
"Adequate" Regeneration	20	20	20	20	20
<2 Age Classes AND	NO	NO	NO	NO	NO
"Adequate" Regeneration	USE	USE	USE	USE	USE
≥2 Age Classes AND NO Regeneration	NO USE	NO USE	NO USE	NO USE	NO USE
<2 Age Classes AND NO Regeneration	NO USE	NO USE	NO USE	NO USE	NO USE

<sup>a</sup> Sites with <2 years and/or no regeneration were combined and put into a NO USE category, since the objectives in aspen stand management are to manage for a minimum of two age classes, for regeneration if only one class exists, and for protection of the stands if there are more than 2 age classes.

<sup>b</sup> FSH 2209.21 (Range Handbook) Age Classes:

- S = Seedling
- Y = Young Plant
- M = Mature Plant
- D = Decandent Plant
- Sp = Sprouts or suckers

<sup>C</sup> Percent (by number) aspen regeneration utilized (either consumed or trampled) annually.

## WILLOW

FORM CLASS <sup>2</sup> AND	GRAZING SYSTEM				
REGENERATION	SL	00	CS	RR	DR
Form Classes 1 & 4 AND "Good" Regen.	40	40	40	40	40
Form Classes 2 & 5; AND "Fair" Regen.	20	20	20	20	20
Form Classes 3,6,7 & 8 AND "Little" Regen.	10	10	10	10	10

ALLOWABLE USE (%)<sup>b</sup> Key Species: Salix sp. (willow)

a FSH 2209.21 (Range Handbook) Form Classes:

Class 1 = All willows are available; little or no hedging. Class 2 = All willows are available; moderately hedged. Class 3 = All willows are available; heavily hedged. Class 4 = Willows largely available; little or no hedging. Class 5 = Willows largely available; moderately hedged. Class 6 = Willows largely available; heavily hedged. Class 7 = Willows mostly unavailable. Class 8 = Willows unavailable.

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Percent (by volume) available willow twigs and leaves utilized and broken (trampled).

1. <u>Early Season</u> -- refers to use before range readiness (pre-boot stage: before seedhead is formed) of key species. This is especially hard on perennial grasses physiologically.

2. Late Season -- After seed maturity.

3. <u>First half</u> (of the season)--grazing during the first half of the growing season (normally refers to a rotation-type system). First-half grazing allows time for regrowth of grasses, sedges, and shrubs when sufficient soil moisture is present, so use standards generally can be a little higher (in percentage of the plant taken) than late season. Use during the first half coupled with a shorter season of use such as "deferred rotation" or "once over" will generally yield higher allowable use standards.

4. <u>Second half</u> (of the season)

(a) <u>Wet/moist meadows and shrubby species</u>--Grazing during the second half of the growing season allows less time for regrowth before onset of dormancy, so generally requires a more restrictive standard than first-half grazing. It tends to be particularly hard on browse and shrub species such as bitterbrush and willow because by this time of year they are becoming more attractive to livestock as the herbaceous forage begins to dry out.

(b) <u>Perennial bunchgrass species</u>--Second half grazing of perennial bunchgrass on dry sites is often preferred because regrowth is not always possible anyway due to lack of moisture. In this case it is generally better to wait until the second half to commence grazing, thus allowing adequate time for plants to reach seed maturity and restore root reserves before having their herbage removed.

5. <u>Range-ready</u> -- For grasses, this is normally boot or post-boot stage (emergence of the seed from the plant sheath). For shrubs and forbs, it is normally full flower or when the leaders reach a given length.

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#### SUMMARY OF MANAGEMENT DIRECTION APPLICABLE TO GRAZING

The natural resources on land administered by the Forest Service are managed in compliance with regulations and policies established by Congress and by the Secretary of the Department of Agriculture. The following is not intended to be a complete listing of all potentially applicable management direction, it is a list of selected management direction determined to potentially be relevant to many grazing management situations.

#### Land and Resource Management Plan

The Forest Land and Resource Management Plan contains goals, objectives, area prescriptions and standards and guidelines incorporating management direction from the Forest Service Manual and legal direction from Congressional Acts. Implementing the LRMP is a primary focus of this allotment planning process and this direction will be used to formulate the Term Permit conditions, allotment management objectives, action items and monitoring.

#### Management Area Prescription

Each grazing allotment is within one or more identified management areas and there may be management area specific direction applicable to grazing management incorporated from the LRMP area prescriptions (pp. 151-238).

#### Standards and Guidelines

The following Standards and Guidelines were selected as providing direction applicable to grazing on the Inyo National Forest. The interdisciplinary team working on each allotment Environmental Analysis will determine which of these apply to that specific allotment and will develop these standards and guidelines into terms and conditions of the Term Grazing Permit.

### Diversity (LRMP p. 76):

Maintain or improve the diversity of plant and animal communities by providing a variety of vegetation types and seral stages within the Forest.

Maintain at least five percent of each timber type and ten percent of each shrub type in each of the named seral stages. if any given seral stage-vegetation combination currently represents less than the minimum required level, manage to achieve the required level as soon as possible.

Use the following...shrub types, and seral stages to determine the Minimum Management Requirement level of diversity....

Shrub Types: Big Sagebrush, bitterbrush.

Seral Stages:

- (1) early stage
- (2) middle stage

### (3) late stage

#### Facilities (LRMP pp. 77-78)

Maintain trails to assigned maintenance levels.

Separate incompatible trail uses where feasible.

## <u>Fish</u>

#### Threatened and Endangered Fish

Rehabilitate and maintain essential habitat for these species according to species' recovery plans and Memoranda of Understanding with the California Department of Fish and Game and the U.S. Fish and Wildlife Service.

Provide high quality habitat for threatened and endangered fish species based on the results of habitat capability model analysis.

Manage all stream reaches of essential habitat as depicted in the Recovery. Plan to the following guidelines in consultation with the U.S. Fish and Wildlife Service.

- 1. Do not allow any activity that results in more than 10 percent degradation of the habitat within any given stream reach; this conclusion must be supported by data the results from the use of a quantitative methodology survey such as GAWS, COWFISH, etc.
- 2. Restore unstable or eroding streambanks to attain a streambank system that is no more than 10 percent unstable at any given time.
- 3. Retain vegetation adjacent to perennial streams that affords stream shading and streambank stability.

## **Fisheries**

Provide medium to high quality habitat for resident fish species based on the results of the appropriate habitat capability model.

Manage all stream reaches of all state designated wild trout waters according to the following:

- Any activity that results in trampling and chiseling should not exceed 10 percent of any given stream reach...
- (2) Restore unstable or eroding streambanks to attain a streambank system that is no more than 10 percent unstable at any given time.
- (3) Streamside vegetation should provide a minimum of 90 percent of the habitat's capability to provide stream shading and fish cover.

Manage all stream reaches containing resident fish according to the following:

- 1. Any activity that results in trampling and chiseling should not exceed 20 percent of any given stream reach...
- 2. Restore unstable or eroding streambanks to attain a streambank system that is no more than 20 percent unstable at any given time.

Design stream crossings to accommodate fish passage...

Maintain instream flows needed to support existing fisheries.

### Hardwoods (p. 80)

Protect the integrity of the hardwood ecosystem in all existing oak stands.

## Range (LRMP pp.84-85):

Develop range resources to their reasonable potential and manage them for sustained yields.

Provide grazing tenure to lend stability to the local livestock-raising community and established ranching operations.

Manage grazing allotments according to a planned management system.

Develop range Allotment Management Plans before term permits are issued where possible. incorporate in those plans provisions for implementing Best Management Practices for range management.

Use individual grazing allotment plans as the instrument to guide the avoidance of unacceptable damage to soil, water quality...and the resolution of incompatibilities between livestock and known key mule deer fawning areas. Institute positive measures such as delaying the grazing season and/or directing livestock away from riparian areas by herding, salting, water developments, or fencing. Amend allotment plans to include adopted means of resolution and needed mitigation measures. If mitigation is unsuccessful in preventing unacceptable resource damage, as a last resort livestock grazing will be reduced or eliminated.

Consider the benefit to...wildlife recreation and watershed as well as range when designing range improvements.

Assess impacts on riparian areas within permit boundaries during grazing permit re-evaluations. Require structural and/or nonstructural measures to correct unacceptable deterioration of riparian-dependent resources.

Achieve or maintain rangeland, over time, in "satisfactory" condition as defined by the Region 4 or Region 5 (as appropriate) Range Analysis handbook and Resource Value Rating System.

Use criteria will be established and documented for each unit of each grazing allotment. These criteria will be developed through the interdisciplinary team approach using long-term trend studies and identified limiting factors. These criteria will define permissible grazing levels. This standard should be observed in the process--soil and vegetation are the basic resources. The condition of these two resources must be maintained or improved. If they are in a satisfactory condition, then they must be maintained in this condition. If they are in a less than satisfactory condition, then allowance must be made for improvement in condition.

Locate salt...outside riparian areas and at least one-quarter mile away if possible and reasonable.

#### Riparian Areas (LRMP pp.89-91).

Give emphasis to riparian-dependent resources in the management of riparian areas.

Prevent significant adverse riparian area changes in water temperature, chemistry, sedimentation and channel blockages.

Use allotment management plans as the vehicle for ensuring protection of riparian areas from unacceptable impacts from grazing. Institute positive measures such as salting, herding, water developments, fencing, rest rotation, deferred rotation,, and other grazing systems as mitigation measures. If mitigation is unsuccessful in preventing unacceptable resource damage to the riparian habitat, as a last resort, livestock grazing will be reduced or eliminated in the effected areas.

Rehabilitate and/or fence riparian areas that consistently show resource damage from any cause if conflicts cannot be resolved.

Relocate existing roads, trails, and campsites outside riparian areas where necessary to eliminate or reduce unacceptable deterioration of riparian-dependent resources.

Maintain the integrity of desert springs in the...Inyo Mountains... to conserve plant and wildlife habitat.

Recognize the important and distinctive values of riparian areas when implementing management activities. Give preferential consideration to riparian-dependent resources when conflicts among land use activities occur.

Delineate and evaluate riparian areas before implementing any planned management activity.

Design range...and wildlife habitat improvement projects...to maintain or enhance riparian area dependent resources.

Give priority to the rehabilitation of riparian areas when planning range, wildlife habitat,...improvement projects.

Move existing livestock watering locations out of riparian areas when and where feasible.

## Sensitive and Watchlist Plants (LRMP pp.91-92).

Develop and implement a consistent, systematic, biologically sound program for sensitive plant species and their habitat so that federal listing does not occur.

Complete inventories of project sites and areas of disturbance if there is potential habitat or known population locations are identified.

Complete interim management recommendations for all listed sensitive plant species (the Watch List I, Watch II, and Sensitive Species lists).

Allow no new disturbance of identified sensitive plant habitat without direction from Interim Management Guides, Species Management Guides, or an environmental analysis.

#### Special Interest Areas and National Landmarks (LRMP p. 92)

Manage the existing Ancient Bristlecone Pine Forest Botanical Area under the approved management plan.

#### Cultural Resources (LRMP pp. 75-76).

Consult with local American Indian groups to ensure the protection of, and access to, traditional secular, religious, and ceremonial sites.

Document inventories, site evaluations, assessments of impacts and mitigation plans in all EAs/EISs for Forest initiated, authorized, or licensed activities.

Treat Class II properties as if they were class I until they are evaluated.

Maintain the confidentiality of cultural resource site locations to aid in their protection.

Develop and implement strategies including road closures for the protection of cultural sites.

### <u>Soils</u>

Reduce accelerated soil erosion resulting from management activities to natural background levels within three years after soil-disturbing activity.

Avoid the use of soil-disturbing equipment,...trampling by livestock on wet or poorly drained soils whenever possible.

Conserve the surface mineral and/or surface organic layer of the soils by minimizing soil disturbance to maintain long term productivity.

Stabilize all areas disturbed by management activities to minimize soil erosion.

Apply the Best Management Practices from the handbook, ...when implementing ground disturbing activities...

Require an interdisciplinary review to avoid of mitigate adverse impacts for any projects or activities proposed in areas identified in the soil resource inventories as having an erosion hazard rating of nine or greater.

Limit disturbance to no more than five percent per decade on that portion of a management area characterized by steep slopes, very high erosion potential, or high instability.

### <u>Water</u>

Maintain or improve water quality to meet state and federal standards.

Implement Best Management Practices (BMPs) to meet water quality objectives and maintain and improve the quality of surface water on the Forest. Identify methods for applying BMPs during project level environmental analysis and incorporate into the associated project plan and implementation documents.

Manage watersheds with the priority of maintaining and protecting existing healthy watersheds before rehabilitating degraded systems.

Maintain instream flows needed to maintain stream channel competence.

Manage sensitive stream reaches (those with bank protection ratings of 16-20) according to the following guidelines for all domestic water supply watersheds:

- 1. Do not allow the sum of trampling and chiseling scores to exceed 20 percent.
- 2. Do not permit roads, trails, or livestock paths to cross streams in these reaches unless they are satisfactorily mitigated.

3. Maintain adequate instream flows to retain soil protecting riparian vegetation.

Locate roads and trails...well away from stream courses and other water bodies where possible. Avoid constructing roads and trails that parallel or cross tributaries to a main stream.

Use the steepest permissible pitches and grades to avoid parallelling the stream at stream crossings. Design to maintain the existing width:depth ratio of the stream.

Heavily armor the streambed both upstream and downstream from each road, trail, and livestock path crossing...Give highest priority to streams that contain threatened or endangered species and watersheds that provide domestic water supplies.

Return all lands in declining watershed condition to equilibrium.

Wilderness (LRMP p. 97)

- Manage wilderness under the following guidelines: maintain a predominantly natural and natural-appearing environment, facilitate low frequencies of interaction between users, and exercise necessary controls primarily from outside the wilderness boundary. Any on-site controls should be subtle.

Wildlife (LRMP pp. 98 - 105)

### Threatened, Endangered, and Sensitive Animal Species

- Consider threatened and endangered species as below viability until recovery is achieved. Emphasize the protection and improvement of habitat for threatened or endangered wildlife. Manage for the protection and enhancement of all historically and potentially threatened or endangered species habitat as necessary to meet recovery levels.
- Cooperate with the Fish and Wildlife Service and California Department of Fish and Game in the management of threatened and endangered species and the restoration of habitat. Submit proposals for actions that might affect the continued existence of a threatened or endangered species to the U.S. Fish and Wildlife Service for formal consultation.
- Develop and implement a consistent, systematic, biologically sound strategy to manage sensitive species and their habitats so that federal listing does not occur.

#### Management Indicator Species

- Management Indicator Species are those that the Forest identified for one or more of the following reasons: federally designated threatened or endangered species; sensitive species; harvest species; ecological indicator species; or special interest species. - Populations of species in these categories will be maintained at viable levels. These Standards and Guidelines apply to existing and potential habitats for these species.

<u>Carnivores (State-listed or Sensitive): Sierra Nevada red fox, pine</u> marten, fisher, wolverine

1. Inventory project areas where development or habitat alteration projects could alter habitats required by these species.

2. Maintain the integrity of habitats required by these species. Manage known habitats to ensure that breeding and adjacent foraging habitats are maintained.

### Mule deer (Harvest)

 Maintain or enhance the integrity of key winter rangers, holding areas, migration routes, and fawning areas for mule deer. Although management activities may allow for some alteration of their habitat, the goal is to maintain deer habitat to support deer population levels consistent with deer herd management objectives.

Design vegetative treatment units on summer, winter, and transition ranges so that the distance from forage to cover does not exceed six hundred feet.

Recognize the sensitivity of infringement on known key mule deer fawning areas during the critical fawning period from June 15 to July 15. Resolve conflicts in favor of fawning areas.

Manage summer and transition ranges for each herd to provide a thermal cover to forage ratio between 20:80 and 80:20 on each area.

Develop water sources where water is needed and opportunities are available.

Coordinate with Caltrans and the counties to provide the safest possible road crossings for mule deer.

- Recognize the importance of key deer habitats. Emphasize the protection of critical deer habitat when analyzing development proposals.
- 3. Determine forage allocation for deer on the basis of five pounds of forage per deer per day (6.5 deer per AUM).

### Bald eagle (Endangered)

1. Manage for recovery. Recovery may require the management of potential sites as well as occupied sites.

- 2. Use the presence of bald eagles and results of the habitat capability model for the species to establish the existing and potential wintering areas including winter roosts, foraging areas, and daytime perches.
- 3. Maintain the integrity of existing wintering areas. Do not establish new winter uses or recreation developments within one-quarter mile of such areas.
- 4. Maintain and enhance fish, waterfowl, and other prey-base populations within winter foraging areas where opportunities exist.
- 5. Implement the Pacific States Bald Eagle Recovery Plan. Prepare a local winter bald eagle management plan that tiers to the Pacific States Plan.

# Golden eagle and prairie falcon (Special Interest)

1. Maintain or enhance the integrity of nesting habitats for golden eagles and prairie falcons.

Limit human disturbance within one-quarter mile of nest sites from February 1 through June 30.

Provide for several successional stages and vegetation types within five miles of nest sites.

#### Tule elk (Special Interest)

1. Follow the direction of the Tule Elk Management Plan for the Owens Valley.

#### Peregrine falcon (Endangered)

1. Implement the Pacific Coast American Peregrine Falcon Recovery Plan prepared by the U.S. Fish and Wildlife Service.

#### Goshawk (Sensitive)

- Maintain a density of at least one goshawk territory per eighteen square miles within goshawk habitat range. Distances between territories or clumps of territories will not exceed twelve miles. Goshawk habitat range is defined as an area containing active or potential nesting habitat as defined below.
- 2. Include the following elements in potential goshawk habitat or territories retained to assure species viability: (a) five or more vegetation types and three or more seral stages within two miles of the nest stand; (b) at least 40 percent canopy cover; (c) a water source within one-quarter mile of the nest stand; and (d) a nest stand location on a slope of less than 20 percent.

### <u>Blue grouse (Harvest)</u>

1. Maintain or enhance blue grouse habitat by protecting vegetative diversity, riparian habitat, and down logs.

### <u>Sage grouse (Harvest)</u>

- Maintain a shrub canopy cover of at least 20 percent on at least 30 percent of vegetation treatment areas within six miles of known strutting grounds (leks).
- 2. Allow no vegetative treatment in sage grouse habitat that would have a significant negative impact on this species.
- Recognize the sensitivity of sage grouse leks during the period from March 1 and April 30. Resolve conflicts in favor of sage-grouse.

- ... w

4. Cooperate with the California Department of Fish and Game in reintroduction efforts.

### Spotted owl/Great gray owl (Sensitive)

- 1. Conduct periodic inventories. If spotted owl pairs are located, manage their habitat as needed to maintain natural distribution on the Forest.
- 2. If great gray owls are documented, maintain foraging and nesting habitat where management activities could alter their habitat.

## <u>Sierra Nevada mountain sheep (Sensitive) and Nelson mountain sheep</u> (Special Interest)

- 1. Maintain existing mountain sheep habitat. Where feasible, expand their ranges by transplanting animals to suitable unoccupied habitats as per the criteria stated in the Sierra Nevada Mountain Sheep Recovery Plan.
- 2. Permit no increase in existing livestock use if the increase is shown to be deleterious to mountain sheep populations as defined in the Recovery Plan.
- 3. Maintain the health of established mountain sheep populations. If disease transmission from domestic livestock is shown to be deleterious to mountain sheep populations, find ways to alleviate this problem.
- 4. Prohibit the conversion of livestock type from cattle to sheep on or adjacent to existing or approved reintroduction sites for mountain sheep.
- 5. If reintroduced mountain sheep establish themselves in drainages outside the reintroduction sites, take advantage of opportunities

to extend mountain sheep range, consistent with other resource activities.

6. Develop and implement a recovery and conservation plan for Nelson sheep similar to the one devised for Sierra Nevada sheep. Update the Sierra Nevada Mountain Sheep Plan.

### Riparian area-dependent Species

 Maintain the viability of the yellow warbler by implementing management direction for snags, down logs, riparian habitats, and habitat diversity

### Habitat Types

#### Shrub Habitats

<u>Shrub Habitat Types</u>: High elevation (alpine shrub, montane shrub, wedgeleaf ceanothus); low elevation (curlleaf mahogany, bitterbrush, big sagebrush, low sagebrush); and high desert (saltbush-greasewood, shadscale).

<u>Successional Stages</u> (not applied to high elevations: <20% canopy cover (grass-forb); 20-40% canopy cover; >40% canopy cover.

- 1. Maintain a minimum of 15 percents of total shrubshabitats in each successional stage in low elevation and high desert shrub types.
- 2. Limit vegetation treatment area size to a range of 80 to 140 acres in most cases. Design treatment areas so they have wavy or feathered edges and a diversity index greater than 1.4.
- 3. Bring all grazed habitats to at least fair condition with an upward or static trend on lands grazed under rest-rotation and deferred rotation systems.
- 4. Defer livestock grazing on vegetation treatment areas 1.5 to 2.5 years to allow establishment of herbaceous vegetation.
- 5. Address the management of all forage classes, including forbs, in terms of grazing systems and season of use in Allotment Management Plans.
- Locate areas proposed for treatment in shrub habitats where existing herbaceous understory represents at least 10 percent of total vegetative cover.

