

flexibility for livestock grazing but necessitates absolute livestock control within and between paddocks through modifying livestock behavior and intensive herding practices.

The Permit information describing seasons of use, numbers of AUMs, terms and conditions indicated as grazing use standards and guidelines, would duplicate that shown in Alternative 2. In addition, actual use reports submitted by each permittee in a timely manner would be a requirement of the permit. These reports must state, at a minimum, the number and type of livestock and the on/off dates for each paddock comprising BLM land.

This Alternative complies with recommendations made in the Herd Creek Watershed Analysis, Step 6 Recommendations, p. 176, which states the following:

Increase grazing system flexibility within the Herd Creek Allotment by developing more pastures or use areas, fencing, herding, or riding to expand opportunities with adjoining allotments and private land areas to increase grazing system efficiency.

Keep riparian areas in an upward trend by continuing to use 6" median stubble height standards, 50% woody use, and no cattle use along Herd Creek or Lake Creeks after August 10.

Stocking levels and watershed carrying capacity will be determined through utilization pattern mapping indicating success in meeting grazing standards and livestock distribution.

Continue the 50% upland utilization standard on current year production of key forage species.

Alternative 4 - Emphasis on Conservative Grazing Use

This alternative focuses on non-commodity uses. While still recognizing livestock grazing as a valid use of public land, grazing would be reduced to emphasize wilderness values, recreation, visual characteristics, wildlife habitat, water quality and to accelerate recovery of riparian condition.

All livestock scheduled use would remain in accordance to the 1975 Allotment Management Plan which specifies a three pasture rest rotation grazing system. The AMP would be further modified under this alternative to include the following:

Emphasis on non-commodity resources would be provided by reducing livestock herd size, restricting flexibility in the grazing operation, and providing extensive rest periods in the grazing system. Strict livestock use standards would be used to ensure low risk of adverse effects to resources.

The grazing sequence, initial herd size and dates of grazing use would initially be authorized at the lowest levels of stocking used in recent years, averaged with the

numbers used during the drought year of 1994. In 1994, 556 cattle were run on the allotment. In 1996, 110 cattle were run on the allotment (Ingrams took non-use). A subsequent average of 333 head of cattle also coincides with exactly one-half of the original permitted numbers for the allotment. The permittees would still be able to run more than this number on Forest Service-administered portions of the Herd Creek Allotment, up to that agency's permitted numbers.

Grazing prescriptions for use areas or paddocks with perennial streams would be designed to use BLM lands early (6/15 to 7/15) and then rest completely from grazing use the following year. Late grazing use would only be scheduled if cattle could be kept off of perennial streams used by spawning native, and anadromous fish. No cattle use would be authorized on occupied anadromous streams after August 10, and on bulltrout spawning streams after September 15. Only dry cows without calves would be authorized for fall use on BLM pastures after September 15.

Other pastures or paddocks would be under a rest-rotation system that would provide a periodic growing season rest and a yearlong rest one out of four years. The herd would enter the allotment from different directions in alternate years.

Operational and Resource Use Criteria as follows, would be applied:

Livestock herd sizes would be adjusted to fit the estimated AUMs and period of use. This equates to a total herd size of approximately 333 to 556 cow/calf pairs. The herd would be split into smaller units or run as one unit providing the pastures are cleaned of all livestock on schedule. Fall grazing would be made by "dry" cows.

Livestock movement dates would be fixed to provide established dates to recreationists desiring a "livestock free" outdoor experience. Early use pastures would be used from mid-June to mid-July; Mid-summer season pastures would be used from mid-July to mid-August; Late summer season pastures would be scheduled from mid-August to mid-September; and fall use would be scheduled on the remaining pasture from mid-September to the scheduled end of season, on or before October 31. Scheduled use would be closely coordinated with the Forest Service. Areas that may be considered "under utilized" by the off date would be left unallocated for resource protection and enhancement.

Upland Utilization Standards would be the same as described for the proposed action, except that no areas of use would be allowed to exceed the 50% upland utilization level.

Riparian stubble-height standards - Minimum stubble height standard would be 6 inches on all perennial streams. A three inch (3") stubble height would be applied to designated seeps and springs where identified resource values were determined to need additional protection from livestock grazing impacts.

Bank stability standards and woody use standards - Bank stability evaluations would

be performed before, during and after livestock grazing. Livestock would be removed if more than 10% of shearing can be attributed to livestock impacts, regardless of the stubble height or period of use.

Frequency of woody nipping would be measured during any late seasons of use, and would be limited to no more than 30% frequency of browsing on all new leader growth. If nipping by livestock is noticed to be affecting the growth structure of hydric woody species, more stringent frequency of nipping standards would be applied prior to the next grazing period.

Range administration would be the same as for the proposed action, except:

The grazing permits would authorize a total variable herd size on the BLM portion of the Herd Creek allotment from 333 to 556 cattle, for a period from 6/15 to 10/31, for a forage use of up to 990 AUMs on BLM.

Annual adjustments of herd size would lean towards the conservative side of "no risk" to the resources. Flexibility in livestock moving dates would not be considered to provide established dates to recreationists desiring a "livestock free" outdoor experience. Areas that may be considered "under utilized" by the off date would be left unallocated for resource protection and enhancement.

No permanent structural projects would be developed within the wilderness study areas. Temporary electric fences may be utilized while livestock are within the affected area but must be removed within one week of livestock removal. Temporary water hauling troughs must also be removed within one week. Fencing to create riparian pastures would be analyzed in a separate environmental assessment, and if built, would be incorporated into a grazing schedule only after vegetative conditions have improved sufficiently to allow for livestock grazing. Upland seeps and springs in all pastures would not be fenced or otherwise developed.

Alternatives considered but not analyzed in detail:

A No Grazing alternative was considered but not analyzed in this environmental assessment. Resolution of any present issues or resource conflicts would continue to be obtained through properly managed livestock grazing in accordance with direction given in the Challis RMP, without total livestock exclusion.

AFFECTED ENVIRONMENT

General Description

The allotment generally faces northerly, sloping towards the East Fork Salmon River with the Lake Creek drainage flowing from east to west into Herd Creek, creating dissected upland foothills with north and south aspects. Herd Creek and McDonald Creek watersheds flow northerly into the East Fork, thus creating east and west facing aspects. The public land portion of the allotment occupies sagebrush steppe foothills from approximately 6000

feet to 10010 feet at the summit of Jerry Peak. Slopes range from nearly flat on creek bottoms and low benches to very steep (over 60%) on mountain hillsides and canyons.

Mean annual precipitation for Herd Creek ranges from near 10 inches at the lowest elevations, to over 30 inches on the highest mountain ridges.

CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT

Some of the following elements of the human environment are subject to requirements specified in statute, regulation, executive order, or policy and must be considered in all environmental assessments. Others have been added to the following list because of their importance in assessing impacts. All the following elements have been analyzed. However, elements denoted by an "X" are not affected by the proposed action and will receive no further consideration.

<u> X </u> Air Quality	<u> </u> Areas of Critical Environmental Concern
<u> </u> Cultural Resources	<u> X </u> Farm Lands (prime or unique)
<u> </u> Floodplains	<u> X </u> Native American Religious Concerns
<u> X </u> Threatened/Endangered Animals	<u> </u> T/E and Sensitive Plants
<u> </u> Threatened/Endangered Fish	<u> X </u> Wastes, Hazardous or Solid
<u> </u> Water Quality	<u> </u> Wetlands
<u> </u> Wild & Scenic Rivers	<u> </u> Wilderness
<u> X </u> Availability of Access/ Need to Reserve Access	<u> </u> Soils
<u> X </u> Wild Horse and Burro Designated Herd Management Areas	<u> X </u> Mineral Resources
<u> </u> Vegetation types, communities; vegetative permits and sales; Rangeland resources	<u> </u> Riparian Zones
<u> </u> Wildlife	<u> X </u> Forest Resources
<u> X </u> Economic Feasibility of Agricultural Entry	<u> X </u> Paleontological Resources
<u> X </u> Indian Trust Resources	<u> X </u> Tribal Treaty Rights
<u> </u> Recreation Use, Existing and Potential	<u> X </u> Visual Resources
<u> X </u> Existing and Potential Land Uses	<u> </u> Economic & Social Values
<u> X </u> Environmental Justice (EO 12989) (minority and low-income populations)	<u> </u> Fisheries
<u> X </u> No chemical or chemicals from the EPA's <u>Consolidated List of Chemicals Subject to Reporting Under Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986</u> , (10,000 pounds or more), will be used, produced, stored, transported, or disposed of in implementing the proposed action.	

No extremely hazardous substances, as defined in 40 CFR 355, will be used, produced, stored, transported, or disposed of in implementing the proposed action.

Affected Resources: Elements which are present and are likely to be affected are discussed below.

Threatened/Endangered Fish: Native Fisheries: The following table describes the miles, acres, and percent of stream ownership within the Herd Creek watershed:

Table 1. Ownership within the Herd Creek Watershed

Stream	Miles/Percent of Stream Ownership				Drainage Area * (acres)			
	BLM	Private	State	F.S.	BLM	Private	State	F.S.
Herd Creek ownership in miles	3.6	2.5	0	13.8	20,105	641	2,348	55,813
Herd Creek ownership percent	18.1%	12.7%	0	69.2%	26	1	3	71
Lake Creek ownership miles	3.4	0	1.0	0	9,993	8	1,265	0
Lake Creek ownership percent	77.3	0	22.7	0	89	<1	11	0

* The drainage area characterized in the Table above includes acreage outside the BLM Herd Creek Allotment.

Salmonid species currently inhabiting the Herd Creek watershed include chinook salmon, steelhead and resident rainbow trout, bull trout, westslope cutthroat trout, and mountain whitefish. Sculpin are also found in most reaches of the watershed. Table 2 describes fish abundance by reach groups that are within, or immediately adjacent to BLM lands within the Herd Creek Allotment.

Table 2. Fish abundance in the Herd Creek watershed, August-September, 1994 and 1996 (derived from Herd Creek Watershed Analysis, Table 19, October 1997).

Reach Group	Fish Species (numbers/100 m ²)					
	Chinook	Steelhead/ Rainbow	Bull Trout	Westslope Cutthroat	Whitefish	Sculpin
HC-1	no data	no data	no data	no data	no data	no data
HC-2	0	0.53	0	0	0	10.70
HC-3 (pvt)	0	5.90	0.20	0	0.82	4.90
HC-4 (BLM exclos.)	0	0.34	0	0	0	8.70
HC-5 (F.S.)	0	0.38	0.19	0	0	16.10
LC-7	8.69	1.10	0	0.07	0	0