Allotment Assessment
Flat Top

I. Name and Number of Allotment

Flat Top Allotment #01059
Permittees: Frank L. Bachman
Simplot Livestock Co

II. Livestock Use

1. Permitted Grazing Use: 3240 AUMS
   Frank Bachman – 192 AUMs
   Simplot Livestock Co. - 3048 AUMs
2. Historic Use Range: 2248 to 5958 AUMs
3. Suspended Preference: 0 AUMs
4. Season of Use: 3/01-2/28
5. Kind and Class of Livestock: 16 Cattle (Bachman), 254 cattle (Simplot)
6. Percent Public Land: 100%

III. Allotment Profile

1. The Flat Top Allotment is located in the northwest part of the Jarbidge Field Office Area of which 98% is located in MUA 6 and 2% is located in MUA 10. There are four pastures in this allotment: #1, #2, #3, #4. The term of the current permits are March 1, 1997 to February 28, 2007 for Simplot Livestock Co. and March 1, 2000 to February 28, 2010 for Frank L. Bachman. Temporary nonrenewable (TNR) was authorized in 1990 through 1992, 1994 and 1997. The allotment TNR authorizations are included in the totals shown in Table 1. There are 638 acres of the Allotment in MUA 10 which is the Bruneau River-Sheep Creek Wilderness Study Area (WSA). BLM Handbook H-8550-1, Interim Management Policy for Lands under Wilderness Review, describes the policies under which these lands will be managed until Congress either designates these lands as wilderness or releases them for other purposes.
2. Federal Acreage: 34,818
3. MUA Objectives (Jarbidge RMP, 1987):
   - Increase AUMs of forage issued for livestock by 2005 in MUA 6 from 12,136 to 47,772 AUMs (II-28); and from 6,238 to 7,021 AUMs in MUA 10 (II-40). Flat Top has 21% of the acres in MUA 6 and <1% of the acres in MUA 10. This increase use would result from the availability of additional forage from water developments, brush control and seeding projects and improvement in native range condition (II-3).
   - Maintain existing vegetative improvements (75,107 in MUA 6 and 1,866 in MUA 10) (II-28, II-40).

- Improve lands in poor (early seral) ecological condition (75,208 acres in MUA 6 and 56,576 in MUA 10) (II-28, II-40); Flat Top was determined to have 28,174 acres in poor ecological condition.
- In MUA 6, manage big game habitat to support 40 mule deer (63% increase) (II-28).
- In MUA 10, manage big game habitat to support 2,160 winter mule deer and 260 mule deer the rest of the year, 191 antelope, and 208 bighorns and protect existing and potential bighorn habitat through special designation and management. Existing populations are 1320 winter mule deer, 200 mule deer rest of year (II-40).
- In MUA 10, improve sage grouse nesting through seeding and rehabilitation.
- Maintain current upland game nesting and cover habitat in MUAs 6, 7, and 10 (II-28, II-31, II-40).
- In MUA 6, maintain existing riparian conditions (II-28). In MUA 7 maintain current condition of riparian and fish habitat (II-31).
- In MUA 10, improve 4.7 miles of riparian habitat and 11.1 miles of fisheries habitat by 2005.

4. Approximately, 1,558 acres of the allotment is in the Bruneau Jarbidge ACEC. All acreage in the ACEC is to be improved to a good ecological condition (RMP II-67).
5. Key Forage Species:
   - Thurber's needlegrass
   - Crested wheatgrass
   - Sandburg bluegrass.
6. Grazing System: There is no formal grazing system for the Allotment. Frank Bachman grazes the allotment mostly in the summer, fall and winter (June to March). Simplot Livestock Co. grazes cattle in the Allotment mainly in the winter and spring (December to May). Grazing use is informally rotated through the pastures to avoid grazing a pasture in the critical growth periodin the spring between the boot stage and flowering of key species two consecutive years.

IV. Management Evaluation

The purpose of this evaluation is to determine the allotment's status in meeting the Standards for Rangeland Health and Guidelines for Livestock Management and to renew the grazing permit with management guidelines to meet these Standards.

A. Summary of Studies Data

1. Actual Use

Table 1 shows the actual use since from 1990 to 2002.

Table 1 - Actual Use

Grazing Season	AUMs
1990	5213
1991	4021
1992	3655
1993	2734
1994	5958
1995	2248
1996	2880
1997	4053
1998	3062
1999	4306
2000	3195
2001	3400
2002	3240

2. Climate

Average long term water year precipitation (September through June) for **Bruneau** NOAA Weather Station is 6.4 inches or 7.7 inches yearlong, and for the BLM **Big Draw** rain gauge, the 11 year annual average is 11.7 inches. Table 2 shows the moisture totals for the past 11 water years at the Big Draw station which at 4,050 feet elevation is representative of the southern and higher elevations of the allotment. The Bruneau weather station best represents the northern and lower areas of the allotment. Also shown is the crop year index for the Bruneau Weather Station.

Table 2 - Water Year Precipitation and Crop Year Index

Year	Big Draw (in inches)	Yield Index At Bruneau
1993	14.9*	1.06
1994	7.5	0.60
1995	16.9*	1.47
1996	12.1	1.73
1997	16.7*	1.33
1998	15.2*	1.16
1999	8.6	0.86
2000	7.6	0.68
2001	11.9	0.63
2002	9.3	0.81
2003	7.9	N/A

*Above average precipitation.

3. Utilization

Table 3 shows the actual data from sampling transects in the Allotment during the various grazing seasons.

Table 3 - Utilization Data

Year	Vegetation Type	Utilization Range	Utilization Average
1997*	Crested Wheatgrass	2.5-8%	NA
1999*	Crested Wheatgrass	2.5-2.9%	NA
2001*	Crested Wheatgrass	2.5-4.5%	NA
2003	Native	45.6%	45.6%
2003	Crested wheatgrass	19-43%	29%

*Data collected prior to TNR authorization.

4. Production

Appendix 1 displays the production data that has been collected in the Flat Top Allotment. It shows that approximately 16,731,804 pounds of forage vegetation is produced on a near normal production year. Forage vegetation refers to grasses, and in seeded areas may include alfalfa and sainfoin. The production of forbs and shrubs is not included in this poundage. Considering precipitation data and its relationship to drought, as well as the needs of the watershed and wildlife, it is estimated that 5,761 AUMs of forage vegetation is available for livestock.

5. Condition and Trend

There has been no long-term trend studies established in the Flat Top allotment, however, six short-term trend sites have been setup in the allotment as recently as 2000-01, to monitor fire rehabilitation treatments following several recent fires in 1999 and 2000 which burned about one third of this allotment.

The sites were either located in existing crested wheatgrass seeding or native sites now seeded with crested wheatgrass. Follow up monitoring of the sites from 2001-03 has only been useful for determining that the sites and existing vegetation and soil conditions are recovering from the effects of the burns and does not really establish any long-term vegetative trends in the allotment. Since there have been no long-term trend studies established in the allotment, vegetative and soil cover trends are unknown, except for the fact and knowledge that most of the allotment has been burned and seeded several times in the past (late 1970's and early '80's) and again more recently from 1999 (Big Draw, Fritz Spur and Impact SE fires) and 2000 (SE Impact fire). Currently, about one half of the allotment now consists of crested wheatgrass seedings of various ages. Table 4a and 4b show the condition ratings from 1981-82 inventories and from the recent 2002-03 production studies.

Table 4a – Condition and Trend Evaluation of Native Vegetation Study Sites

1981-83 Inventory Site	Inventory Site Location	Vegetation Types 1981-83 (2002-03)**	1981-83 Ecological Rating*	2002-03 Production Studies Name/Rating
RA-14	08S07E22	Artrw/Brte (Artrw/Posa3)	Early	FTP-6/Late FTP-7/Late
IN-29	08S08E11	Artrw/Brte/Posa3	Early	FTP-4/Late
RA-24	08S09E32	Brte/Artrw(burn)	Early	
IN-28	10S09E08	Artrw/Brte	Early	
IN-25	10S09E24	Brte/Sial2(burn)	Early	

Table 4b – Condition and Trend Evaluation of Seeding Study Sites

1981-83 Inventory Site	Inventory Site Location	Vegetation Types	1981-83 Condition Rating*
IN-22	09S07E03	Agcr/Artrw	Good
RA-22	09S07E14	Agcr/Artrw	Good
RA-19	10S08E06	Agcr/Artrw	Good

*****Jarbidge RMP referred to Range Condition as: Excellent, Good, Fair, and Poor. Since that time these terms have been related to; Potential Natural Community, Late Seral, Mid Seral and Early Seral, respectively. Value terms of excellent, good, fair, poor are only used as a value rating for areas rehabilitated with *Agropyron cristatum* and *Agropyron intermedium*.

** "()" indicate the current vegetation if different from 1981-83 Inventory.

As for the vegetative conditions in the allotment, the most recent "intensive and comprehensive" vegetation surveys were conducted in 1982. According to this survey, approximately 1/3 of the allotment was delineated as seeded to crested wheatgrass and the remaining 2/3 was determined to be in poor ecological condition (early-seral stage). It is now estimated that about 50% of the allotment consist of crested wheatgrass seedings, as a result of the more recent wild land fire rehabilitation efforts. These latest seedings do include Snake River wheatgrass which is very similar to the native bluebunch wheatgrass.

Three sites within the remaining native vegetation communities were measured for condition based on the Similarity Index presented in the Inventory and Monitoring Technical Reference 1734-7. All three sites were rated in late seral ecological condition which would be the same a good condition as referenced in the Jarbidge RMP EIS. These ratings show an increase in condition since the 1987 RMP.

Despite all the burns and seedings that have taken place throughout the allotment over the years and much native vegetation being replaced predominantly with the introduced species of crested wheatgrass, the major ecological range site of most of the allotment is a Artrw/Stth2, Loamy 8-10 inch ppt. type. As a result of the burns and seeding of this introduced grass species, much of this range site has limited potential eco-site vegetation species like Thurber's needlegrass. Although the big sagebrush may return to the site in time, the recovery of needlegrass will likely be substantially slower because of the loss of the seed source and the competitive nature of the crested wheatgrass.

B. Rangeland Health Assessment

In 1999, rangeland health data was gathered on the Allotment at ecological sites within native range and range sites with seedings. Rangeland health data was collected per Technical Reference 1734-6, *Interpreting Indicators of Rangeland Health*. The rangeland health data was collected by an interdisciplinary team for the purposes of making a quantitative assessment of the soil/site stability, hydrologic function, and the integrity of the biotic community for the various ecological sites.

1. Standard 1 – Watershed

Nearly all of the sites assessed were noted to be within the plus category. This means that flow patterns were few with slight deposition, and surface litter was in place. There was little evidence of plant pedestaling due to water or wind erosion. There was minimal soil crusting and no evidence of a compaction layer. There was some evidence of hoof prints but frost heaving minimizes the chance of soil compaction from trampling. Deep hoof prints were uncommon. Rills were rare and widely spaced while gullies were few, and where present, were vegetated on the sides and bottom. The only exception noted was at site #2 (seeding) where there was evidence of past erosion on some of the native grass pedestals, possibly from a past fire event.

2. Standard 2 - Riparian Zones and Wetlands and Standard 3 - Stream Channel/Floodplain

The following principal stream reach (Table 6) is present in Flat Top Allotment.

Table 6. Stream Reach Functionality Rating

Stream (year inventoried/ monitored)	Inventory Reach #	Miles	Dominant Vegetation	Functionality Rating	Comments
Clover Creek 1999	3.4 – 7.8	4.4	Rush/Reed Canarygrass/ Willow	PFC Proper Functioning Condition	vegetation in this area is effectively stabilizing the system

Clover Creek abuts the southwest border of the Flat Top allotment. There are roughly 4.5 riparian miles next to the allotment boundary. Although the allotment boundary is on the canyon rim, cattle have been known to get into this portion of Clover Creek at a few access points. Should there ever be problems with this segment all permittees adjoining the creek would need to be contacted to work out a viable solution.

Clover Creek segment 3.4 to 7.8 was assessed from digital images in the office and spot checked in the field in 1999. Clover Creek adjacent to the Flat Top allotment is rated in functional-at-risk condition with an upward trend. The segment has been excluded from livestock since 1988 or 1989, when breaks along the north rim were fenced. West of the fencing, Clover Creek is essentially inaccessible to cattle because of the presence of rimrock and steep cliff faces. Furthermore, there is a cross panel established across Clover Creek below private land near Winter Camp to prevent cattle from accessing the Echo, Flat Top and Bruneau Hill Allotment reaches along Clover Creek. However, cattle have been found in this reach since the exclosure and cross panel were built because of problems with the gates being left open adjacent to the river cross panels.

The riparian vegetation along this stretch is controlling erosion, stabilizing streambanks, filtering sediment, aiding in floodplain development and dissipating energy. Herbaceous grasses are well established along the reach. Although a variety of species were present, spike rush, reed canarygrass and baltic rush seemed to be the dominant riparian species. Reed canarygrass and spike rush are highly effective species for erosion control. Mannagrass, bulrush, wooly sedge and goldenrod were some other riparian species present. Several of the species present are considered wetland obligate plants indicating maintenance of riparian soil moisture. Willows are limited and patchy in places, however many seedlings are present. The age class distribution and structural diversity in the willow population is not diverse. Most of the willows present are young or seedlings. The stream banks are 90%-95% vegetated and stable. Most of the species present along the stream bank have root masses capable of withstanding high stream flows. The riparian area is widening indicating an upward trend. Noxious weeds were not recorded but are likely present in scarce amounts.

The stream is evolving into a Rosgen C stream channel. The channel is narrowing while the floodplain is widening indicating an upward, improving trend. The channel is also developing better sinuosity. The gradient is less than 2%. Debris deposits were evident in the active floodplain and visible at the base of the willows. The point bars are revegetating with riparian species. The system is stable laterally and vertically. Cutting was evident on the outside meander bends but this is associated with natural sinuosity. The system appears vertically stable. There seems to be more cobble with lesser amounts of gravel and boulder. The substrate size increases downstream. The stream banks are within an appropriate range of stability according to the site potential. There is no evidence of excessive soil compaction on the floodplain. Noxious weeds are not recorded but are likely present in scarce amounts.

3. Standard 4 - Native Plant Communities

There were three areas assessed as native plant communities. The percent cover for the three native sites rated out as; grass cover 39 percent (with 15 percent being cheatgrass), shrub 18 percent, forb five percent, cryptogamic crust 13 percent, litter 13 percent, and bare ground rated at 11 percent. Community diversity was deemed to be in the intermediate category for site #6 due to the lack of forbs present. The other two sites were rated in the plus category for diversity. Community structure was rated in the plus category for all three-sites. Invasive plants were present along the roads and scattered in the plant community with a threat of further expansion. Noxious weeds are not present at the locations in the native communities evaluated, however, a fair amount of rush skeleton weed was observed on the way to one site in an older burn. Productivity as it relates to biomass production was in the plus category all sites with a fair amount of the biomass production generated from shrub species. Plant status or health was rated within the plus category except for patchy areas that were dominated by cheatgrass. Seed production was also effected by the patchy cheatgrass. Some of the native species had reduced seed production due to grazing, however, overall the seed production was rated between plus and intermediate. There was adequate evidence of recruitment of species. Mechanisms were marginal for nutrient cycling in two of the three sites. This was due to a lack of nitrogen fixing species such as legumes and microbiotic crusts. Several locations of Russian knapweed are present in the large Brush Pasture in and near the southern water haul location and are spreading into the adjacent uplands.

There is no data on number of deer or antelope utilizing the habitat in the Flat Top Allotment. Antelope numbers are generally down in hunt unit 46. Uplands and canyons along Clover Creek Canyon are classified as mule deer winter range. The native habitat is used as fawning habitat and winter cover by mule deer and antelope. Antelope are present in the allotment year round. Winter range for mule deer is identified in the uplands and East Fork of the Bruneau River Canyon (Clover Creek). Antelope winter in the remaining shrub lands.

4. Standard 5 - Seedings

Three assessments were completed in seedings within the Flat Top Allotment. The percent cover as averaged for the three sites is: Grass cover 48 percent (15 percent from cheatgrass); shrub cover six percent; forb cover five percent; cryptogrammic crust three

percent; litter 19 percent and bare ground 20 percent. The community diversity for all three sites monitored fell within the intermediate category due to the relative lack of native forbs and microbiotic crusts. Community structure fell within the plus category for two sites, however, on site #2 the community structure was intermediate category. The reduced structure in site #2 is due to a 1994 fire that burned through this location. Noxious weeds are known to be present in the allotment and at one site rush skeleton weed was observed. Invasive plants, cheatgrass, and some annual forbs were wide spread throughout the seeded portion of allotment. Plant health was productive and seed production was adequate for stand maintenance of crested wheatgrass at all three sites. Vigor and numbers of seed stalks of the native grasses was somewhat suppressed. Plant recruitment was adequate at two sites monitored and spotty at one site. Sagebrush was re-establishing at two of the three sites. The nutrient cycle was found to be limiting due to the lack of nitrogen fixing native forbs and crusts.

5. Standard 6 – Exotic Plant Communities, Other Than Seedings

There were no areas in the Flat Top Allotment that would be considered strictly an exotic plant community, and no data was collected for this standard.

6. Standard 7 – Water Quality

Although the East Fork of the Bruneau River (Clover Creek) forms three miles of the southern boundary of the Flat Top allotment, there is no livestock access to the river from the allotment because of rimrock topography of the river canyon and gap fencing. Direct livestock impacts to Clover Creek are not present in this allotment. There are no other "open" perennial waterbodies such as live springs, streams or reservoirs within the allotment, and no major drainages (except on a rare occasion when Big Draw runs water that contribute to runoff or sediment flows that may affect the Bruneau River), that are of water quality concern.

All water present and used for purposes of watering livestock and wildlife within the allotment is provided by means of pipeline and troughs. The water in the Echo Water system is diverted from Clover Creek, a long distance away. There are no other known water sources (ground or surface) or water quality issues in the allotment therefore, this standard is not applicable.

7. Standard 8 - Threatened and Endangered Plants and Animals

No species listed as threatened or endangered are known to occupy the Flat Top Allotment. It is possible that some migrating peregrine falcon or bald eagles may pass through the allotment during migration to other wintering areas, but BLM has no information to document such movements. A number of species presently designated as Sensitive are present in the allotment. For the most part, the Flat Top Allotment has not been inventoried for sensitive species. Sensitive species occurrences were frequently noted from incidental observations. BLM has no information regarding whether or not pygmy rabbits are present or were historically present in this allotment. No bat inventory has been conducted in this allotment. Also, a number of wildlife species presently designated as “watch” are present. Watch species are **not** presently designated as Sensitive species, but may be added to the sensitive list in future years. No BLM

sensitive plant species are known to occur in the Flat Top Allotment. Only limited surveys for sensitive plants have been conducted in this allotment and sensitive species may occur. It was unknown whether the standard is being met for special status plant species. There is no information available to determine whether livestock grazing management is having a significant impact on sensitive plant species or not. All sensitive or watch species are shown in Table 6.

Table 6 - Idaho BLM Sensitive and Watch species in the Flat Top Butte Allotment

Common Name	Scientific Name	Status	Presence
Greater sage grouse	*Centrocercus urophasianus*	S	C
Loggerhead shrike	*Lanius ludovicianus*	S	C
Brewer's sparrow	*Spizella breweri*	S	C
Sage sparrow	*Amphispiza belli*	S	C
Ferruginous hawk	*Buteo regalis*	S	C
Prairie falcon	*Falco mexicanus*	S	C
Spotted bat	*Euderma maculatum*	S	C
California bighorn sheep	*Ovis Canadensis californiana*	S	L
Redband trout	*Oncorhynchus mykiss gairdneri*	S	C
Grasshopper sparrow	*Ammodramus savannarun*	W	C
Long-billed curlew	*Numenius americanus*	W	C
Western burrowing owl	*Speotyto cunicularia*	W	C
Sage thrasher	*Oreoscoptes montanus*	W	C
Brewer's blackbird	*Euphagus cyanocephalus*	W	C
Slickspot peppergrass	*Lepidium papilliferum*	C	L
Status codes: C = FWS Candidate species; S = designated Sensitive species; W = Watch category Presence codes: C = presence confirmed in allotment; L = presence likely in the allotment			

Greater sage grouse. There are two known sage grouse leks present in the Flat Top Allotment. A number of sage grouse leks are documented in the surrounding allotments (Bruneau Hill, Echo-Jewett and Winter Camp, Table 7). Sharp declines in sage grouse numbers coincided with a switch to winter grazing and the issuance of several hundred AUM's of TNR in the late 1980's and 1990's. The Brush Pasture has the largest remaining concentration of sagebrush cover in this part of the Jarbidge Resource Area. It likely serves as winter and nesting habitat for many of the sage grouse left in the general area. Sage grouse nesting occurs in areas with adequate brush cover (10-25%). Plant communities where Sandberg bluegrass, bottlebrush squirreltail, and Thurber needlegrass are grazed to 40% use level will not provide adequate residual vegetation for nesting sage grouse when 0.5 miles or more from water. Grazing to 50% use on crested wheatgrass will reduce residual herbaceous nesting cover for sage grouse at more than 0.5 miles from water.

Lek #	# Males	Year of Recent Count	Highest # Males	Year of Count
2O-001	0	2002	13	1982
2O-007	0	2001	27	1986
2O-008	4	2002	15	1986
2O-128	0	2002	15	1994
2O-129	5	2002	12	1991
2O-130	0	2002	12	1991
2O-135	0	2002	8	1992
2O-166	0	2002	14	1992
Lek # in bold is in the allotment				

Loggerhead shrike. During breeding bird surveys loggerhead shrikes have been documented in two pastures of the Flat Top Allotment. The time of year indicates loggerhead shrikes nest in these pastures and likely nest in suitable habitat in the remaining pastures. Presently, habitat within the seeded portion of the allotment is not adequate for this species, however, as sagebrush invades the seeding nesting habitat should improve. Loggerhead shrikes usually nest in taller shrubs (>36") and junipers.

Brewer's sparrow and sage sparrow. Sage sparrows were detected on public lands in the Flat Top Allotment during the Breeding Bird Survey (BBS) route conducted each spring. A portion of the BBS route runs along the western edge of the Brush Pasture. The time of year when data are collected indicates sage sparrows nest in this allotment. Presently, habitat within the seeded portion of the allotment is not adequate for this species, however, as sagebrush invades the seeding nesting habitat should improve. Sage sparrows use big sagebrush for nesting and foraging. Brewer's sparrows were heard singing in areas of Wyoming big sagebrush during the spring while conducting annual BBS routes and during sage grouse lek counts. Brewer's sparrows usually nest in shrubs, including sagebrush. Like sage sparrows, Brewer's sparrows are more common in the large stands of sagebrush habitat. Presently, habitat within the seeded portion of the allotment is not adequate for this species, however, as sagebrush invades the seeding nesting habitat should improve. However, Brewer's sparrows have been detected in islands of sagebrush in three pastures in the Flat Top Allotment.

Ferruginous hawk. This species has been observed flying over the allotment. Suitable nesting habitat (isolated junipers) is present in the Big Draw. Some of the junipers contain large stick nests that are likely used by this species.

Prairie falcon. Prairie falcons are known to nest in the cliff habitat associated with the East Fork Bruneau Canyon. This species likely forages in the Flat Top Allotment.

Spotted bat. Spotted bats have been confirmed to be present in both the East Fork of the Bruneau and Bruneau River Canyons. They are believed to forage over the Reservoir Pasture and likely use it as a source of water. No hibernacula or maternity roost areas have been documented for this species in the Jarbidge Resource Area. Spotted bats are generally solitary.

California bighorn sheep. About 1,560 acres of the Bruneau/Jarbidge ACEC is in the Flat Top Allotment. One water trough is located within the 1 mile buffer zone where water was not to be developed to minimize impacts to bighorn habitat. California bighorn sheep have not been documented in this allotment. A single bighorn sheep was observed near the confluence of Clover Creek with the Bruneau River. Suitable bighorn sheep habitat is present along the Clover Creek canyon. Bighorn sheep numbers are less than 40% of that projected for the RMP, and this area remains unpopulated. In the past Idaho Fish & Game has contemplated re-introducing bighorns into this historic habitat. Cattle grazing during the winter (December into March) in this area is not compatible with wintering bighorn sheep. Livestock graze during the winter in or adjacent to bighorn winter habitat in the Blackrock Pocket, Diamond A, Bruneau Canyon, Poison Butte, 71 Desert, Winter Camp, Flat Top and Bruneau Hill Allotments, or essentially all the bighorn sheep winter habitat along the Bruneau/Jarbidge Canyons.

Redband trout. Redband trout are known to be present in Clover Creek. However, livestock from this allotment do not have physical access to Clover Creek. A fence prevents access in one area and the cliff topography precludes access in the remaining portion of the allotment.

Slickspot peppergrass. Slickspot peppergrass is not known to occur in this allotment, however, 5628 acres of suitable habitat does occur. Threats to this species include degradation of slickspots and surrounding area habitat, trampling from livestock, and weed invasion.

A wide variety of wildlife is present in the Flat Top Allotment. Mule deer are present in areas with shrub cover in the uplands and in or near the East Fork Canyon. Antelope are present in uplands vegetated by both seedings and areas with sagebrush. A number of mammalian predators are known to occur including badgers, coyotes, spotted skunk, and racoon. Mountain lion and bobcat are probably present in the canyon at the south boundary. Yellow bellied marmots and bushy-tailed woodrats are found in talus and cliff areas, whereas, black-tailed jackrabbits and cottontail are relegated to upland areas with some shrub cover. Small mammals present include deer mice, least chipmunk, kangaroo rats, and probably a few voles and shrews. A variety of bats are present in the canyon area adjoining the Flat Top Allotment and likely forage over the allotment. Species probably present include California myotis, little brown bat, and pallid bat.

Game birds, including chukar and mourning doves, are known to be present in that portion of the Reservoir Pasture abutting Clover Creek. Mourning doves have been found to nest on the ground or in shrubs. Raptors in the allotment include golden eagle, red-tailed hawk, American kestrel, and Swainson hawk. Most of these species likely forage in the allotment from their nest sites in either Clover Creek or the Bruneau River. Short-eared owls have been observed in the middle pasture. Rock wren, canyon wren, cliff swallow, black-billed magpie, and rock dove have been seen in the vicinity of the East Fork of the Bruneau Canyon. Horned lark, brown-headed cowbird, Brewer's

blackbird, western meadowlark, vesper sparrow, sage thrasher, common nighthawk, and ravens are species commonly found in the uplands.

Waterfowl, including mallard, blue-wing teal, and a few other species, have been observed.

Reptiles in the allotment include gopher snakes, rattle snakes, striped whipsnake, desert horned lizards, western fence lizards, northern leopard lizard, sagebrush lizard, and side-blotched lizards. The reservoir may function as breeding habitat for some of the more drought tolerant amphibians like spadefoot toads. Rock outcrops have the potential for providing den habitats for some of the reptiles.

C. Guidelines for Grazing Management

Per the *Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Managemen,t* the following Guidelines need to be implemented to promote significant progress toward meeting the Standards:

> Guideline 4 – Implement grazing management practices that provide periodic rest or deferment during critical growth stages to allow sufficient regrowth to achieve good plant vigor and adequate vegetative cover.
>
> Guideline 8 – Apply grazing management practices that maintain or promote the interaction of the hydrologic cycle, nutrient cycle, and energy flow that will support the appropriate types and amounts of soil organisms, plants, and animals appropriate to soil type, climate, and landform.
>
> Guideline 9 – Apply grazing management practices to maintain adequate plant vigor for seed production, seed dispersal, and seedling survival of desired species relative to soil type, climate, and landform.
>
> Guideline 11 – Use grazing practices developed in recovery plans, conservation agreements, and Endangered Species Act, Section7 consultations to maintain or improve habitat for federally listed threatened and endangered and sensitive species.
>
> Guideline 12 – Apply grazing management practices and/or facilities that maintain or promote the physical and biological conditions necessary to sustain native plant populations and wildlife habitats in native plant communities.
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> Guideline 14 – Where native communities exist, the conversion to exotic communities after disturbance will be minimized. Native species are emphasized for rehabilitating disturbed rangelands. Evaluate whether native plants are adapted, available, and able to compete with weeds or seeded exotics.

VI. Conclusions

A determination was made on November 26, 1999 that not all applicable Standards for Rangeland Health were met. Standard 1 for Watershed is met. Standard 2 and 3 do not apply because cattle do not have access to Clover Creek. Standard 4 (Native Plant Communities) is not met and livestock grazing is a significant factor. Standard 5 for Seeded Rangelands was not being met, but livestock were found not to be a significant factor. Standards 6 and 7 do not apply to the Allotment. Standard 8 for Special Status Plant and Animal species is not met and livestock were found to be a significant factor. Monitoring information acquired in 2002 shows that some of the previously poor condition (early seral ecological condition) rangeland is now in fair condition (mid-seral ecological condition).

Based on current monitoring information and production data, additional vegetation forage is available for allocation to watershed, wildlife and livestock.

Changes in grazing on WSA lands may be allowed in number, kind, or season of use if following preparation of an EA, the effects are found to be negligible. Changes cannot cause declining conditions or trend of the vegetation or soil, and cannot cause unnecessary or undue degradation of the lands.

VII. Consultation

Jim Klott, Wildlife Biologist
Arnold Pike, Range Conservationist
Sheri Hagwood, Botanist
Max Yingst, Recreation/Wilderness
Jeff Ross, Archeologist
Clare Josaitis, Natural Resource Specialist
John Ash, NRS – Climate/Monitoring/WQ
Frank L Bachman
Simplot Livestock Co

VIII. Recommendations

Increase permitted grazing use from 3,240 AUMs to 5,761 AUMs. Production studies show that there may be additional vegetation production for allocation to livestock. Any increases in allocation levels need to be consistent with the Wilderness EIS and the Interim Management Plan (IMP) as they are not grandfathered in the WSA. In order to comply with the IMP for the WSA, additional utilization and trend monitoring is necessary. Prior to implementing additional use in the allotment the trend studies must be read at least two different years far enough apart to establish static or upward trend and utilization measurements must be taken with in the WSA to provide a base data to determine changes in use after the increase.

Maintain the current 10,993 acres of existing vegetation improvements (10,813 acres and 180 in MUAs 6 and 10, respectively). Restore or improve any remaining acres of non-native seedings to a more natural vegetation community.

Conduct Ecological Site Inventory of those acres previously determined to be in poor condition to quantify current status. Seed or plant native shrubs, grasses and forbs into poor condition range sites and rest as necessary to ensure establishment. This would result in improvement of poor condition range.

Manage big game habitat to support increased mule deer, antelope, and bighorn sheep populations. There is no data on number of deer or antelope utilizing the habitat in the Flat Top Allotment. Bighorn sheep numbers are less than 40% of that projected in the RMP. Land along the Jarbidge and Bruneau River Canyons is classified as mule deer winter range. It is also habitat for California bighorn sheep. The native habitat is used as fawning habitat and winter cover for antelope.

Maintain existing upland game bird nesting and cover habitats. Sage grouse are known to utilize the native areas during the winter. Crested wheatgrass provides limited habitat for some species, but can provide suitable habitat to grassland species. Some grassland species prefer large blocks of grassland habitat (7 to 10 inches tall). Removal of 40% of the grasses in native range will not leave adequate residual cover for nesting sage grouse, particularly in areas dominated by Sandberg bluegrass.

Manage for light utilization levels (up to 40%) in native pastures and pastures with greater than 50 percent seedings with greater than 15 percent sagebrush cover in order to maintain the existing native communities. Also manage for light utilization levels (up to 40%) in pastures with greater than 50 percent seedings with greater than 15 percent sagebrush cover. Under the forage allocation proposed, a portion of the forage production would be allocated to watershed and wildlife, and would maintain the native plant communities and provide habitat for wildlife.

Manage for moderate utilization levels (up to 50 percent) in pastures predominately seeded to crested wheatgrass. In areas of seeded pastures where crested wheatgrass plants are becoming decadent or “wolfy” allow higher utilization (up to 70 percent) on an occasional basis (once in 5 years) to condition plants and remove standing dead material. This treatment will promote plant vigor, increase ground litter, overall palatability and maintain healthy stands of crested wheatgrass in accordance with the Jarbidge RMP. Increased palatability of seeded species will decrease grazing pressure on native species thus resulting in better plant vigor in the native herbaceous component. This level will be cumulative between livestock and wildlife. When 70 percent grazing use is authorized at key areas within a seeded pasture, use in the remaining seeded pastures would be at 50 percent or less; in the native pastures at 40 percent or less; and total grazing use would be limited to the permitted use in the allotment.

Monitor and manage as native seeded areas reverting to sagebrush to ensure re-establishment of big game habitat and upland game bird nesting and cover habitat. Allow no more than 50% frequency of nipping on current year leaders on key woody species*.

Ensure that all water troughs have correctly installed and properly functioning wildlife escape ramps and that water is in all troughs from May through October, even when livestock are not present in the allotment. This was mitigation for the Echo Water system when it was originally installed.

Ensure all fences conform to BLM standards for wire spacing to minimize impacts to wildlife. Allotment boundary fence should have no more than 4 strands. The top wire should not exceed 40 inches for 4 strand fence and a bottom height of 18 inches. Pasture fences should only be 3 strand with a top height of 38 inches and a bottom height of 18 inches. The bottom wire of all fences should be barbless in antelope habitat.

Ensure that BLM's management policy for lands under wilderness review be conformed to and to continue resource uses on these lands in a manner that maintains the area's suitability for preservation as wilderness.

No salting should occur within the ACEC to protect Bighorn sheep habitat and cultural resources.

*Note: 50% use on key woody species is not allocated to livestock. Use is expected to be low except for during the winter if snow covers herbaceous vegetation. Winter range is identified in this allotment.

Appendix 1 **Stocking Rate Based Climate and Production**

Allotment: **Flat Top #1059** **Date:** **1/15/2004**

Station	Avg. PPT (Inches)	75% of Avg. (Inches)	# of Years ≥75% of Avg.	# of Years of Data	% of Years ≥75% of Avg.
Bruneau	6.86	5.15	27	40	68%
Hollister	9.62	7.22	38	52	73%

Produtn Total lb	Average Hollister, Bruneau, Pothole & Big Draw YI Adjustment 0.73	Decision Weighted Use Factor	% of Years ≥75% of Avg. PPT	% of Veg. Prodt'n Available	AUMs Available for Livestock
12,214,217	16,731,804	43%	70%	30%	6,321
		WSA Adjustment*			5,761

Pasture	Vegetation	Acres	lbs/ Acre	lb.of Forage	Utilization Factor	Weighted Forage
#1	Crested-ML	2,875	776	2,231,000	50%	1,115,500
	Annual-ML	143	0	0	0%	0
Subtotal		3,018				
#2	Crested	748	482	360,536	50%	180,268
	Crested-ML	1,916	482	923,512	50%	461,756
	Wy sage/bluegrass	269	64	17,216	50%	8,608
	Wy sage/bluegrass-ML	2,079	64	133,056	50%	66,528
Subtotal		5,012				
#3	Wy sage/bluegrass	682	64	43,648	40%	17,459
	Wy sage/bluegrass-ML	584	64	37,376	40%	14,950
	WY sage/bluegrass-WSA	594	64	38,016	40%	15,206
	Bluebunch	29	112	3,248	40%	1,299
	Wy sage/crested	1,236	589	728,004	40%	291,202
	Wy sage/crested-ML	223	589	131,347	40%	52,539
	Crested-WSA	8	691	5,528	40%	2,211
	Crested	607	691	419,437	40%	167,775
	Crested-ML	763	691	527,233	40%	210,893
Subtotal		4,726			AUMs	967
#4	Wy sage/bluegrass	3,441	64	220,224	40%	88,090
	Wy sage/bluegrass-ML	8,789	64	562,496	40%	224,998
	Crested	4,854	620	3,009,480	40%	1,203,792
	Crested-ML	4,553	620	2,822,860	40%	1,129,144
	Annual	425	0	0	0%	0
Subtotal		22,062				
	Total Acres	34,818		12,214,217		5,252,219

Adjustment Pending IMP Required Monitoring*	
WSA Pasture Acres	4,726
Current Permit	3,248
Current Stocking Level (Ac/AUM)	10.72
AUMs Allowed in WSA Pasture	441
Proposed AUMs in Non-WSA Pastures	5,321
Adjusted Proposed AUMs	5,761

Weighted Use Factor	0.43

* The AUMs in the WSA cannot be adjusted in pastures containing WSA acreage until requirements in the Interim Management Plan for WSA's are met.