

APPENDICES

Appendix A – Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management

Standards for Rangeland Health

Introduction

The Standards for Rangeland Health, as applied in the State of Idaho, are to be used as the Bureau of Land Management's (BLM's) management goals for the betterment of the environment, protection of cultural resources, and sustained productivity of the range. They are developed with the specific intent of providing for the multiple use of the public lands. Application of the standards should involve collaboration between the authorized officer, interested publics, and resource users.

Rangelands should be meeting the Standards for Rangeland Health or making significant progress toward meeting the standards. Meeting the standards provides for proper nutrient cycling, hydrologic cycling, and energy flow.

Monitoring of all uses is necessary to determine if the standards are being met. It is the primary tool for determining rangeland health, condition, and trend. It will be performed on representative sites.

Appropriate to soil type, climate, and landform, indicators are a list of typical physical and biological factors and processes that can be measured and/or observed (e.g., photographic monitoring). They are used in combination to provide information necessary to determine the health and condition of the rangelands. Usually, no single indicator provides sufficient information to determine rangeland health. Only those indicators appropriate to a particular site are to be used. The indicators listed below each standard are not intended to be all inclusive.

The issue of scale must be kept in mind in evaluating the indicators listed after each standard. It is recognized that individual isolated sites within a landscape may not be meeting the standards; however, broader areas must be in proper functioning condition. Furthermore, fragmentation of habitat that reduces the effective size of large areas must also be evaluated for its consequences.

Standard 1 (Watersheds)

Watersheds provide for the proper infiltration, retention, and release of water appropriate to soil type, vegetation, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Indicators may include, but are not limited to, the following:

1. The amount and distribution of ground cover, including litter, for identified ecological site(s) or soil-plant associations are appropriate for site stability.
2. Evidence of accelerated erosion in the form of rills and/or gullies, erosional pedestals, flow patterns, physical soil crusts/surface sealing, and compaction layers below the soil surface is minimal for soil type and landform.

Standard 2 (Riparian Areas and Wetlands)

Riparian-wetland areas are in properly functioning condition appropriate to soil type, climate, geology, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Indicators may include, but are not limited to, the following:

1. The riparian/wetland vegetation is controlling erosion, stabilizing streambanks, shading water areas to reduce water temperature, stabilizing shorelines, filtering sediment, aiding in floodplain development, dissipating energy, delaying flood water, and increasing recharge of groundwater appropriate to site potential.
2. Riparian/wetland vegetation with deep strong binding roots is sufficient to stabilize streambanks and shorelines. Invader and shallow rooted species are a minor component of the floodplain.
3. Age class and structural diversity of riparian/wetland vegetation is appropriate for the site.
4. Noxious weeds are not increasing.

Standard 3 (Stream Channel/Floodplain)

Stream channels and floodplains are properly functioning relative to the geomorphology (e.g., gradient, size, shape, roughness, confinement, and sinuosity) and climate to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Indicators may include, but are not limited to, the following:

1. Stream channels and floodplains dissipate energy of high water flows and transport sediment. Soils support appropriate riparian-wetland species, allowing water movement, sediment filtration, and water storage. Stream channels are not entrenching.
2. Stream width/depth ratio, gradient, sinuosity, and pool, riffle and run frequency are appropriate for the valley bottom type, geology, hydrology, and soils.
3. Streams have access to their floodplains and sediment deposition is evident.
4. There is little evidence of excessive soil compaction on the floodplain due to human activities.
5. Streambanks are within an appropriate range of stability according to site potential.
6. Noxious weeds are not increasing.

Standard 4 (Native Plant Communities)

Healthy, productive, and diverse native animal habitat and populations of native plants are maintained or promoted as appropriate to soil type, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Indicators may include, but are not limited to, the following:

1. Native plant communities (flora and microbiotic crusts) are maintained or improved to ensure the proper functioning of ecological processes and continued productivity and diversity of native plant species.
2. The diversity of native species is maintained.
3. Plant vigor (total plant production, seed and seedstalk production, cover, etc.) is adequate to enable reproduction and recruitment of plants when favorable climatic events occur.
4. Noxious weeds are not increasing.
5. Adequate litter and standing dead plant material are present for site protection and for decomposition to replenish soil nutrients relative to site potential.

Standard 5 (Seedings)

Rangelands seeded with mixtures, including predominately non-native plants, are functioning to maintain life form diversity, production, native animal habitat, nutrient cycling, energy flow, and the hydrologic cycle.

Indicators may include, but are not limited to, the following:

1. In established seedings, the diversity of perennial species is not diminishing over time.
2. Plant production, seed production, and cover are adequate to enable recruitment when favorable climatic events occur.
3. Noxious weeds are not increasing.
4. Adequate litter and standing dead plant material are present for site protection and for decomposition to replenish soil nutrients relative to site potential.

Standard 6 (Exotic Plant Communities, other than Seedings)

Exotic plant communities, other than seedings, will meet minimum requirements of soil stability and maintenance of existing native and seeded plants. These communities will be rehabilitated to perennial communities when feasible cost effective methods are developed.

Indicators may include, but are not limited to, the following:

1. Noxious weeds are not increasing.
2. The number of perennial species is not diminishing over time.
3. Plant vigor (production, seed and seedstalk production, cover, etc.) of remnant native or seeded (introduced) plants is maintained to enable reproduction and recruitment when favorable climatic or other environmental events occur.
4. Adequate litter and standing dead plant material is present for site protection and for decomposition to replenish soil nutrients relative to site potential.

Standard 7 (Water Quality)

Surface and ground water on public lands comply with the Idaho Water Quality Standards.

Indicators may include, but are not limited to, the following:

1. Physical, chemical, and biologic parameters described in the Idaho Water Quality Standards.

Standard 8 (Threatened and Endangered Plants and Animals)

Habitats are suitable to maintain viable populations of threatened and endangered, sensitive, and other special status species.

Indicators may include, but are not limited to the following:

2. Parameters described in the Idaho Water Quality Standards.
3. Riparian/wetland vegetation with deep, strong, binding roots is sufficient to stabilize streambanks and shorelines. Invader and shallow rooted species are a minor component of the floodplain.
4. Age class and structural diversity of riparian/wetland vegetation are appropriate for the site.
5. Native plant communities (flora and microbiotic crusts) are maintained or improved to ensure the proper functioning of ecological processes and continued productivity and diversity of native plant species.
6. The diversity of native species is maintained.
7. The amount and distribution of ground cover, including litter, for identified ecological site(s) or soil-plant associations are appropriate for site stability.
8. Noxious weeds are not increasing.

Guidelines for Livestock Grazing Management

Introduction

Guidelines direct the selection of grazing management practices, and where appropriate, livestock management facilities to promote significant progress toward, or the attainment and maintenance of, the standards. Grazing management practices are livestock management techniques. They include the manipulation of season, duration (time), and intensity of use, as well as numbers, distribution, and kind of livestock. Livestock management facilities are structures such as fences, corrals, and water developments (ponds, springs, pipelines, troughs, etc.) used to facilitate the application of grazing management practices. Livestock grazing management practices and guidelines will be consistent with the Idaho Agricultural Pollution Abatement plan.

Grazing management practices and facilities are implemented locally, usually on an allotment or watershed basis. Grazing management programs are based on a combination of appropriate grazing management practices and facilities developed through consultation, coordination, and cooperation with the Bureau of Land Management, permittees, other agencies, Indian tribes, and interested publics.

These guidelines were prepared under the assumption that regulations and policies regarding grazing on the public lands will be implemented and will be adhered to by the grazing permittees and agency personnel. Anything not covered in these guidelines will be addressed by existing laws, regulations, Indian treaties, and policies.

The BLM will identify and document within the local watershed all impacts that affect the ability to meet the standards. If a standard is not being met due to livestock grazing, then allotment management will be adjusted unless it can be demonstrated that significant progress toward the standard is being achieved. This applies to all subsequent guidelines.

Guidelines

1. Use grazing management practices and/or facilities to maintain or promote significant progress toward adequate amounts of ground cover (determined on an ecological site basis) to support infiltration, maintain soil moisture storage, and stabilize soils.
2. Locate livestock management facilities away from riparian areas wherever they conflict with achieving or maintaining riparian-wetland functions.
3. Use grazing management practices and/or facilities to maintain or promote soil conditions that support water infiltration, plant vigor, and permeability rates and minimize soil compaction appropriate to site potential.
4. Implement grazing management practices that provide periodic rest or deferment during critical growth stages to allow sufficient regrowth to achieve and maintain healthy, properly functioning conditions, including good plant vigor and adequate vegetative cover appropriate to site potential.
5. Maintain or promote grazing management practices that provide sufficient residual vegetation to improve, restore, or maintain healthy riparian-wetland functions and structure for energy dissipation, sediment capture, ground water recharge, streambank stability, and wildlife habitat appropriate to site potential.
6. The development of springs, seeps, or other projects affecting water and associated resources shall be designed to protect the ecological functions, wildlife habitat, and significant cultural and historical/ archaeological/paleontological values associated with the water source.

7. Apply grazing management practices to maintain, promote, or progress toward appropriate stream channel and streambank morphology and functions. Adverse impacts due to livestock grazing will be addressed.
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.
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.
10. Implement grazing management practices and/or facilities that provide for complying with the Idaho Water Quality Standards.
11. Use grazing management practices developed in recovery plans, conservation agreements, and Endangered Species Act, Section 7 consultations to maintain or improve habitat for federally listed threatened, endangered, and sensitive plants and animals.
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.
13. On areas seeded predominantly with non-native plants, use grazing management practices to maintain or promote the physical and biological conditions to achieve healthy rangelands.
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.
15. Use non-native plant species for rehabilitation only in those situations where:
 - a. native species are not readily available in sufficient quantities;
 - b. native plant species cannot maintain or achieve the standards; or
 - c. non-native plant species provide for management and protection of native rangelands.

Include a diversity of appropriate grasses, forbs, and shrubs in rehabilitation efforts.¹

16. On burned areas, allow natural regeneration when it is determined that populations of native perennial shrubs, grasses, and forbs are sufficient to revegetate the site. Rest burned or rehabilitated areas to allow recovery or establishment of perennial plant species.
17. Carefully consider the effects of new management facilities (e.g., water developments, fences) on healthy and properly functioning rangelands prior to implementation.
18. Use grazing management practices, where feasible, for wildfire control and to reduce the spread of targeted undesirable plants (e.g., cheatgrass, medusa head, wildrye, and noxious weeds) while enhancing vigor and abundance of desirable native or seeded species.
19. Employ grazing management practices that promote natural forest regeneration and protect reforestation projects until the Idaho Forest Practices Act requirements for timber stand replacement are met.
20. Design management fences to minimize adverse impacts, such as habitat fragmentation, to maintain habitat integrity and connectivity for native plants and animals.

¹ An apparent editing mistake with numbering the 1997 Idaho guidelines was carried forward in this appendix to avoid misidentifying specific guidelines.

Appendix B – Recent Actual Use and Utilization Reports

Appendix B-1: Recent Actual Use

Table B-1.1: Bachelor Flat FFR allotment actual use

Year	Pasture 1		Pasture 2		Allotment AUMs
	Date	AUMs	Date	AUMs	
2012	12/1-12/31				127
2010	4/16-5/7 82 AUMs				82
2009	6/15-7/1; 9/1-9/15	105	4/20-5/20	102	207
2008	Rest	Rest	Rest	Rest	Rest
2007	5/1-6/1 107 AUMs				107
2006	No Data	No Data	No Data	No Data	No Data
2005	4/5-4/16	76	6/15-6/19	32	108
2004	4/1-4/16	99	6/11-6/15	31	130
2003	6/12-6/16	31	11/20-12/9	20	51
2002	5/6-6/19	91	6/15-7/10	75	166
2001	No Data	No Data	No Data	No Data	No Data
2000	No Data	No Data	No Data	No Data	No Data
1999	No Data	No Data	No Data	No Data	No Data
1998	No Data	No Data	No Data	No Data	No Data
1997	No Data	No Data	No Data	No Data	No Data
Average		80.4		52	122

Table B-1.2: Berrett FFR allotment actual use

Year	Date	AUMs
2012	5/1-10/31	109
2011	5/1-10/31	109
2010	5/1-10/31	108
2009	5/1-10/15	110
2008	5/15-11/1	112
2007	No Data	No Data
2006	No Data	No Data
2005	6/1-10/15	90
2004	No Data	No Data
2003	4/16-5/16	31
2002	No Data	No Data
2001	No Data	No Data
2000	No Data	No Data
1999	No Data	No Data
1998	1/1-12/31	114
1997	No Data	No Data

Year	Date	AUMs
Average		98

Table B-1.3: Big Field FFR allotment actual use

Year	Date	AUMs
2012	6/15-10/15	142
2011	7/2-10/1	106
2010	No Data	No Data
2009	6/15-10/15	142
2008	7/1-7/31	145
2007	6/15-8/15	150
2006	No Data	No Data
2005	6/10-10/25	181
2004	6/1-8/31	150
2003	8/15-10/15	104
2002	No Data	No Data
2001	No Data	No Data
2000	No Data	No Data
1999	No Data	No Data
1998	No Data	No Data
1997	No Data	No Data
Average		140

Table B-1.4: Bogus Creek FFR allotment actual use

Year	Date	AUMs
2012	7/15-8/15	21
2011	Rest	Rest
2010	7/1-9/30	24
2009	7/1-10/1	24
2008	6/15-9/15	24
2007	6/15-9/15	24
2006	7/15-8/15	25
2005	7/1-9/30	24
2004	No Data	No Data
2003	No Data	No Data
2002	No Data	No Data
2001	No Data	No Data
2000	No Data	No Data
1999	No Data	No Data
1998	No Data	No Data
1997	No Data	No Data
Average		24

Table B-1.5: Boulder allotment actual use

Year	Pasture 1 (Boulder/West)		Pasture 2 (Rail/East)		Pasture 3 (Pole)		Allotment AUMs
	Date	AUMs	Date	AUMs	Date	AUMs	
2012	4/17-5/17	83	Rest	Rest	5/18-6/30	118	201
2011	4/20-5/25	108	5/26-6/30	108	Rest	rest	216
2010	Rest	Rest	4/20-5/20	111	5/21-7/2	103	214
2009	4/17-5/17	120	Rest	Rest	5/24-6/24	124	244
2008	5/20-6/20	114	4/20-5/20	114	Rest	Rest	228
2007	4/15-5/15	114	Rest	Rest	5/15-6/30	111	225
2006	5/19-6/19	121	4/24-5/19	98	Rest	Rest	219
2005	4/15-5/29	151	Rest	Rest	6/3-7/15	51	202
2004	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2003	Rest	Rest	4/17-5/16	108	5/17-6/27	93	201
2002	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2001	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2000	4/15-5/15	113	Rest	Rest	5/16-6/30	98	211
1999	Rest	Rest	4/15-5/15	112	5/16-6/30	113	225
1998	4/18-6/18 208 AUMs						208
1997	4/15-5/15	112	Rest	Rest	5/16-6/30	113	225
Average		94		109		103	217

Table B-1.6: Boulder Flat allotment actual use

Year	Pasture 1		Pasture 2		Allotment AUMs
	Date	AUMs	Date	AUMs	
2012	5/7-10/15 303 AUMs				303
2010	5/7-6/19 214 AUMs				214
2009	4/29-6/12 251 AUMs				251
2008	5/1-8/1	321	Rest	Rest	321
2007	4/16-6/15	344	Rest	Rest	344
2006	Rest	Rest	4/16-6/13	312	312
2005	4/16-6/14	337	Rest	Rest	337
2004	Rest	Rest	4/16-6/11	315	315
2003	4/16-6/12	321	Rest	Rest	321
2002	4/17-6/15 332 AUMs				332
2001	4/22-6/23	286	Rest	Rest	286
2000	4/18-6/18	319	Rest	Rest	319
1999	5/14-5/21	41	5/22-7/14	286	327
1998	4/18-6/25	336	Rest	Rest	286
1997	Rest	Rest	4/20-6/22	309	309

	Pasture 1		Pasture 2		Allotment AUMs
Year	Date	AUMs	Date	AUMs	
Average		288		306	305

Table B-1.7: Combination Creek allotment actual use

Year	Date	AUMs
2012	6/15-10/15	319
2011	7/2-10/1	323
2010	6/17-10/15	314
2009	6/15-10/15	319
2008	6/5-10/31	338
2007	6/15-10/31	285
2006	6/10-10/31	341
2005	6/1-10/31	409
2004	No Data	No Data
2003	8/1-10/31	323
2002	No Data	No Data
2001	No Data	No Data
2000	6/1-10/31	409
1999	6/1-10/31	409
1998	6/1-10/31	410
1997	6/1-10/31	409
Average		354

Table B-1.8: Feltwell allotment actual use

	Pasture 1		Pasture 2 - Private		Pasture 3		Pasture 4		Pasture 5 (Private)		Allotment AUMs
	Date	AUMs	Date	AUMs	Date	AUMs	Date	AUMs	Date	AUMs	
2009	5/1-5/19	Split pasture 5	5/20-6/15	Split pasture 4	6/16-9/1	177	5/20-6/15	Split pasture 2	5/1-5/19	Split pasture 1	281
2005	5/1-5/19	Split pasture 5	5/20-6/15	Split pasture 4	6/16-9/1	177	5/20-6/15	Split pasture 2	5/1-5/19	Split pasture 1	283
2001	5/1-8/15	190	7/15-8/15	Split pasture 4	8/15-9/1	Split pasture 5	7/15-8/15	Split pasture 2	8/15-9/1	Split pasture 3	281
2000	7/20-8/7 43 AUMs				6/17-7/20	42	5/15-6/16	109	No Data	No Data	193
1999	Rest	0	Rest	0	7/15-8/25	36	6/1-7/15	35	No Data	No Data	71
1998	5/15-6/12 60 AUMs				7/16-8/11	57	6/13-7/15	69	No Data	No Data	186
1997	7/16-8/15 56 AUMs				6/19-8/15	67	5/15-7/15	152	No Data	No Data	275
Average		190				93		91			224

Table B-1.9: Glass Creek allotment actual use

	Tom Gluch				Terry Warn				Allotment AUMs
	Pasture 1 (Seeding/Cattle)		Pasture 2 (Native/Glass Cr.)		Pasture 1 (Seeding/Cattle)		Pasture 2 (Native/Glass Cr.)		
	Date	AUMs	Date	AUMs	Date	AUMs	Date	AUMs	
2012	4/16-5/30	57	Rest	0	4/16-5/27	73	Rest	0	130
2011	4/16-5/31	62	Rest	0	No Data	No Data	No Data	No Data	62
2010	4/16-5/30	62	Rest	0	Rest	0	4/16-5/27	73	135
2009	4/13-5/19	64	Rest	0	5/1-6/15	74	Rest	0	138
2008	4/18-5/10	59	Rest	0	Rest	0	4/16-5/3	29	88
2007	4/20-5/17	47	Rest	0	4/20-5/30 59 AUMs				106
2006	4/22-5/24	55	Rest	0	4/21-6/6	47	Rest	0	102
2005	Rest	0	4/17-6/1	67	4/21-6/1 62 AUMs				129
2004	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2003	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2002	4/17-5/30	62	Rest	0	Rest	0	4/11-5/26	76	138
2001	4/18-6/4	65	Rest	0	Rest	0	4/18-6/6	82	147
2000	4/15-5/25	59	Rest	0	Rest	0	4/14-5/20	76	135
1999	4/18-5/12	29	5/13-6/1	36	Rest	0	4/17-6/1	76	141
1998	4/10-5/26	74	Rest	0	Rest	0	4/1-5/15	74	148
1997	4/4-5/20	67	Rest	0	4/4-5/20	76	Rest	0	143
Average									124

Table B-1.10: Gluch allotment actual use

	Date	AUMs
2012	3/24-4/25	46
2011	4/1-5/2	48
2010	3/17-4/12	45
2009	3/23-5/1	55
2008	3/30-4/15	53
2007	3/16-5/6	42
2006	4/9-5/17	22
2005	3/16-4/10	45
2004	3/16-4/15	51
2003	3/16-4/15	43
2002	3/24-4/16	39
2001	3/16-4/15	51
2000	3/16-4/19	42
1999	3/19-4/13	42
1998	3/15-3/31; 4/30-5/15	42
1997	3/17-4/10	46
Average		45

Table B-1.11: Gluch FFR allotment actual use

Year	Date	AUMs
2012	4/15-5/6	92
2011	4/2-4/7	20
2010	4/19-5/6	43
2009	5/2-5/20; 8/6-8/16	58
2007	4/22-5/30	27
2006	4/10-5/11	54
2005	Rest	Rest
2004	6/16-5/31	105
2003	4/27-7/3	48
2002	3/24-5/26	56
2001	3/15-5/31	105
2000	3/16-4/19	42
1999	3/10-4/13	42
1998	3/25-5/15	42
1997	3/17-4/10	46
Average		56

Table B-1.12: Jim's Peak FFR allotment actual use

Year	Date	AUMs
2012	7/15-9/30	51
2011	Rest	Rest
2010	6/20-8/18	55
2009	6/15-9/20	58
2008	7/5-9/5	58
2007	6/10-8/10	57
2006	6/15-9/15	43
2005	7/1-8/31	58
2004	No Data	No Data
2003	No Data	No Data
2002	No Data	No Data
2001	No Data	No Data
2000	No Data	No Data
1999	No Data	No Data
1998	No Data	No Data
1997	No Data	No Data
Average		54

Table B-1.13: Morgan Allotment Actual Use

Year	Pasture 1		Pasture 2		Pasture 3		Pasture 4		Allotment AUMs
	Date	AUMs	Date	AUMs	Date	AUMs	Date	AUMs	
2012	Total allotment								217
2011	4/16-5/5 113 AUMs								113
2010	4/15-6/1 272 AUMs								272
2009	4/14-6/3 349 AUMs cattle; 4/15-7/15 24 AUMs horse								373
2008	4/15-6/1 162 AUMs cattle; 4/15-7/15 20 AUMs horse								182
2007	4/20-6/1 173 AUMs cattle; 4/15-7/15 20 AUMs horse								193
2006	4/15-6/5 287 AUMs cattle; 4/15-7/15 20 AUMs horse								307
2005	4/1-6/15 340 AUMs cattle; 4/1-7/15 23 AUMs horse								363
2004	No Data								No Data
2003	4/10-6/10	237 cattle	4/25-5/25	53 cattle	No Data	No Data	4/1-6/30	21 horse	311
2002	No Data								No Data
2001	No Data								No Data
2000	Rest	0	Rest	0	3/16-5/24 113 AUMs cattle				113
1999	3/16-6/12 413 AUMs cattle; 4/1-7/15 23 AUMs horse								436
1998	3/16-5/31 413 AUMs cattle; 4/1-7/15 23 AUMs horse								436
1997	No Data								No Data
Average									276

Table B-1.14: Rail Creek FFR allotment actual use

Year	Pasture 1		Pasture 2		Allotment AUMs
	Date	AUMs	Date	AUMs	
2012	7/15-8/15				14
2011	7/1-8/1 14 AUMs				14
2010	7/1-7/31 13 AUMs				13
2009	5/20-6/20 14 AUMs				14
2008	5/1-6/1 14 AUMs				14
2007	7/1-31 13 AUMs				13
2006	8/1-8/31 13 AUMs				13
2005	9/1-9/30 13 AUMs				13
2004	No Data				No Data
2003	No Data				No Data
2002	No Data				No Data
2001	No Data				No Data
2000	No Data				No Data
1999	No Data				No Data
1998	No Data				No Data
1997	No Data				No Data
Average					14

Table B-1.15: South Mountain Individual allotment actual use

Year	Pasture 1		Pasture 2		Allotment AUMs
	Date	AUMs	Date	AUMs	
2012	4/20-5/26	166	6/3-6/30	133	299
2011	4/20-5/4 78 AUMs				78
2010	4/20-5/31; 6/7-6/17 141 AUMs				141
2009	4/16-5/12	147	5/12-6/5	131	278
2008	4/15-5/10	100	5/10-5/25	58	158
2007	4/20-5/10	95	5/10-6/2	104	199
2006	4/15-5/30	287	5/31-6/15	100	387
2005	4/20-6/30	327	10/1-11/1	25	352
2004	No Data	No Data	No Data	No Data	No Data
2003	4/20-5/15	147	5/15-6/3	113	260
2002	No Data	No Data	No Data	No Data	No Data
2001	No Data	No Data	No Data	No Data	No Data
2000	2/20-6/30	502	10/1-11/30	234	736
1999	4/10-7/10; 9/1-11/30 520 AUMs				520
1998	9/1-11/30	207	4/10-7/10	313	520
1997	4/10-7/10; 9/1-11/30 519 AUMs				519

	Pasture 1		Pasture 2		Allotment AUMs
Year	Date	AUMs	Date	AUMs	
Average		227		135	342

Table B-1.16: Walt's Pond FFR allotment actual use

Year	Date	AUMs
2012	4/15-5/15	76
2011	4/1-5/1	77
2010	4/10-6/5	71
2009	4/1-4/30	75
2008	4/1-5/1	77
2007	4/3-5/15	52
2006	4/1-5/30	75
2005	4/1-5/31	76
2004	No Data	No Data
2003	4/1-5/30	73
2002	No Data	No Data
2001	No Data	No Data
2000	No Data	No Data
1999	No Data	No Data
1998	No Data	No Data
1997	No Data	No Data
Average		72

Table B-1.17: Warn allotment actual use

Year	Date	AUMs
2012	5/1-5/11	66
2011	5/1-5/11	72
2010	5/1-5/11	72
2009	5/1-5/11	72
2008	5/1-5/11	72
2007	4/15-4/26	79
2006	4/15-4/24	66
2005	5/14-5/25	79
2004	5/1-5/31	74
2003	5/15-5/26	79
2002	5/24-6/3	72
2001	5/26-6/10	105
2000	5/30-6/15	112
1999	5/4-5/22	118
1998	6/9-6/19	67

Year	Date	AUMs
1997	5/21-6/16	106
Average		82

Table B-1.18: West Maher FFR allotment actual use

Year	Date	AUMs
2011	4/1-6/1	120
2010	4/1-4/30	116
2009	4/1-4/30	116
2008	12/1-12/31	120
2007	12/1-12/1	4
2006	4/1-5/1	122
2005	4/1-4/30	116
2004	No Data	No Data
2003	No Data	No Data
2002	No Data	No Data
2001	No Data	No Data
2000	No Data	No Data
1999	No Data	No Data
1998	No Data	No Data
1997	No Data	No Data
Average		102

Table B-1.19: Wroten allotment actual use

Year	Date	AUMs
2012	4/15-5/15;6/15-10/01	402
2011	4/15-6/1; 6/10-9/20	442
2010	4/15-5/18; 6/28-9/28	416
2009	4/19-5/15; 5/26-9/9	874
2008	7/16-8/15; 9/1-11/29	398
2007	4/17-5/16; 6/10-9/19	416
2006	4/1-11/29	399
2005	No Data	No Data
2004	No Data	No Data
2003	No Data	No Data
2002	No Data	No Data
2001	No Data	No Data
2000	Rest	Rest
1999	No Data	No Data
1998	No Data	No Data
1997	4/20-4/28	315

Year	Date	AUMs
Average		458

Appendix B-2: Utilization

The following tables describe the utilization data collected by allotment and year using methods of measurements as described in Appendix F.

Bachelor Flat FFR Allotment

Pasture 1

Utilization data on bluebunch wheatgrass in June 2011 show 3 percent utilization. In 2012, utilization on Sandberg bluegrass was 19 percent; no other utilization data have been collected on the Bachelor Flat FFR allotment pasture 1.

Pasture 2

Utilization data from May and August 2011 show 3 percent utilization on Sandberg bluegrass, Idaho fescue at 18 percent, and bluebunch wheatgrass at 14 percent; no other utilization data have been collected on the Bachelor Flat FFR allotment pasture 2.

Berrett FFR Allotment

Recorded utilization in the Berrett FFR allotment documented 14 percent in 2011 on Sandberg bluegrass.

Big Field FFR Allotment

Utilization data was collected in 2009; there was slight to light use (0 to 20 percent) on the BLM portion of the area assessed. Use varied greatly on the private land.

Bogus Creek FFR Allotment

Utilization data were collected in 2009; there was slight (0 to 5 percent) use on the BLM portion of the area assessed.

Boulder Allotment

Table B-2.1: Utilization data for pasture 1 in the Boulder allotment 1950-2011

Date	SIHY	FEID
10/22/1950	14	
11/19/1975	47	63
9/17/1981	14	24
6/21/1983	16	12
9/14/1984	35	38
8/26/1986		29
6/23/1987		40
6/22/1988		30
6/6/1989		31

Date	SIHY	FEID
7/19/1990		41
6/28/1993		56
6/23/1994		52
6/23/1995		65
5/20/1997		64
6/16/1998		59
5/13/2000	59	64
6/14/2001	46	47
5/24/2011	37	

Table B-2.2: Utilization data for pasture 2 in the Boulder allotment 1993-2011

Date	SIHY	FEID	POSE	CANE
5/20/1993	30	45		
6/23/1994	59	66		
5/17/1995		70		
5/24/1996		70		
5/24/1996				3-4"
5/20/1998		69		
5/25/1999	55	52		
7/22/1999				3"
5/23/2001	37		53	
6/26/2008		24		
5/24/2011	12			

Table B-2.3: Utilization data for pasture 3 on the Boulder allotment 1995-2012

Date	FEID	AGSP
10/31/1995	44	
7/12/1996	60	
7/21/1997	68	
7/15/1999	61	
7/17/2000	66	
7/17/2012	44	37

Boulder Flat FFR Allotment

Table B-2.4: Utilization data from trend site for pasture 1 of the Boulder Flat allotment (1975-2012)

DATE	FEID	AGSP	SIHY	PUTR
11/18/1975	17	64	56	29
6/30/1982	16	12	14	
6/21/1983	34		32	
9/14/1984	23			

DATE	FEID	AGSP	SIHY	PUTR
6/23/1987	41			
1993				
6/23/1994	38			
7/12/1996	27			
7/31/2008	12			
6/28/2010	26			
5/24/2011	31	22		
7/18/2012	7	3		

Table B-2.5: Utilization data from trend site for pasture 2 of the Boulder Flat allotment (1975-2012)

DATE	FEID	AGSP	POSE	SIHY
11/18/1975	60			63
7/29/1976	83	90		81
9/14/1984	30			
8/26/1986	26			
11/19/1987	24			
6/15/1988	48			
7/19/1990	52			
6/28/1993	46			
6/27/1995	56			
7/21/1997	53			
7/22/1999	59			
6/12/2001	54		46	
7/3/2007	29			
7/31/2008	3			
6/28/2010	36	4		
9/1/2011	35			
7/10/2012	20			
7/10/2012	24			

Combination Creek Allotment

Table B-2.6: Utilization data from trend site for pasture 1 of the Combination Creek allotment (1975-1992)

DATE	SIHY	FEID	AGSP	PUTR
11/19/1975	67	73	64	
9/30/1976		68	90	
10/28/1980				39
11/2/1983		30		

DATE	SIHY	FEID	AGSP	PUTR
10/29/1985		41	20	
9/30/1986		10	10	
10/7/1987		55		
10/5/1988		54		
10/4/1989		59		
10/22/1992		42		

Feltwell Allotment

In 1988, utilization was recorded at one site in pasture 1 on bluebunch wheatgrass at 59 percent utilization. In 2011, utilization was recorded in pasture 2 on bluebunch wheatgrass at 17 percent, pasture 3 on Sandberg bluegrass at 37 percent, on Idaho fescue at 50 percent, and pasture 4 on bluebunch wheatgrass at 18 percent. In 2012, utilization data were collected in pasture 3 on bluebunch wheatgrass at 24 percent utilization.

Glass Creek Allotment

Pasture 1

Utilization data from 1995, 2009, and 2012 show light to moderate use on crested wheatgrass and bluebunch wheatgrass.

Table B-2.7: Pasture 2 utilization on the Glass Creek allotment 1999-2011

Date	FEID	POSE	AGSP	SIHY
5/11/1999	70	70	3	
6/4/2007			42	
6/22/2009			15	
6/7/2011			3	33

Gluch Allotment

Utilization data collected on bluebunch wheatgrass in 2009 show 23 percent utilization, data in 2010 show 29 percent, and data in 2011 show 3 percent; this corresponds with overall light use.

Gluch FFR Allotment

Utilization data for pastures 2 and 3 were collected in 2011 on bluebunch wheatgrass show 3 percent utilization, and data collected in 2012 show 16 percent, which corresponds with overall slight to light use.

Jim's Peak FFR Allotment

No utilization data were reported for this allotment.

Morgan Allotment

Table B-2.8: Utilization data for pasture 1 in the Morgan allotment 1980-2012

Date	PSSP	FEID	SIHY	POA
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Date	PSSP	FEID	SIHY	POA
7/1/1980	17	18	14	
6/16/1981	13	16	12	
6/9/1982	10	15	11	
9/24/1986		30		
10/4/1989	29			
8/31/1993		38		
11/5/1997		33		
6/11/2009	19		21	
6/22/2011	19			15
6/13/2012	23		16	17

Table B-2.9: Utilization data for pasture 2 in the Morgan allotment 1976-2013

Date	PSSP	FEID	SIHY	POA
9/29/1976	44	40	48	
7/1/1980	19	25	18	
6/16/1981	19	18	13	
6/9/1982	12	12	11	
6/28/1983	12	15	13	
9/24/1986		25		
8/31/1993		24		
6/26/1991		39		
11/5/1997		28		
7/16/2009				30
8/4/2011				21
6/13/2013 & 7/10/2013	23		16	17

Table B-2.10: Utilization data pasture 3 for the Morgan allotment 1986-2012

Date	PSSP	FEID	SIHY	POA
9/24/1986	25			
6/26/1991		27		
8/4/2011		6		22
6/13/2012	23		10	17

Pasture 4 Morgan Allotment Utilization Data

Utilization data was recorded in 2011 and no use was apparent. In 2012, slight to light use was recorded on bluebunch wheatgrass, squirreltail, and Sandberg bluegrass.

Rail Creek FFR Allotment

In pasture 1, utilization of bluebunch wheatgrass was 18 percent in 2012, and in 2011, utilization of squirreltail was 13 percent and Sandberg bluegrass was 11 percent. Utilization of Idaho fescue pasture 2 in 2011 was 13 percent.

South Mountain Individual Allotment

Table B-2.11: Utilization data from trend site for pasture 1 of the South Mountain Individual allotment (1990-2012)

Date	PSSP	FEID	POSA
7/19/1990		18	
10/19/1994		13	
5/28/2009		3	
5/24/2011		30	
6/22/2011			11
6/20/2012			22

Table B-2.12: Utilization data from trend site for pasture 2 of the South Mountain Individual allotment (1992-2012)

Date	PSSP	FEID	POSA
10/22/1992		9	
8/4/1993		37	
10/19/1994		25	
7/22/1999		11	
10/21/2008		3	
9/8/2009		28	
8/3/2011	14		22
7/19/2012	26		

Walt’s Pond FFR Allotment

Table B-2.13: Utilization data for pasture 1 in Walt’s Pond FFR allotment 2011 and 2012

Date	PSSP	FEID	SIHY	BRJA	POSA
7/12/2011			13	21	18
5/8/2012	6	7		3	7

Pasture 2

Utilization in May 2009 for bluebunch wheatgrass was 3 percent and Idaho fescue was 3 percent. In 2011, utilization for bluebunch wheatgrass was 12 percent; no other utilization data have been collected on the Walt’s Pond FFR allotment pasture 2.

Warn Allotment

Utilization was collected in 1994-1998, 2007, 2009, 2011, and 2012 on bluebunch wheatgrass and Idaho fescue. More recent utilization levels were slight to light (6 to 35 AUMs) in 1995,

1996, 2007, 2009, 2011, and 2012. Moderate use levels (44 to 65 AUMs) were collected in 1994, 1997, and 1998.

West Maher FFR Allotment

Current utilization data show slight to light use.

Wroten Allotment

Recent utilization data were collected on bluebunch wheatgrass in 2012 and indicate 38 percent utilization, or light use.

Appendix C – Comparison of Alternatives Allotment and Pasture

Bachelor Flat Allotment

Table C-1: Bachelor Flat FFR (#640) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2¹ Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	125	125	125	120	0
Active AUMs	127	127	127	122	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	127	127	127	122	0
% Change compared to recent Average Actual Use: 122 (2002-2012)	4%	4%	4%	No Change	-100%
% Change compared to recent Maximum Actual Use: 207 (2002-2012)	-39%	-39%	-39%	-41%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	No Change	-33%	-100%
Acres/AUMs for Allotment	7.2	7.2	7.2	7.3	0

¹Percent BLM Public Land 29%

Table C-2: Bachelor Flat FFR (#640) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4¹ Season Based Grazing		Alternative 5 No Grazing
					<i>Year 1</i>	<i>4/15- 6/15</i>	<i>Year 1</i>	<i>4/15- 6/15</i>	
Seasons of Use by Pasture	1	4/1-12/31	All Years	4/15- 6/15	<i>Year 1</i>	<i>4/15- 6/15</i>	<i>Year 1</i>	<i>4/15- 6/15</i>	NA
					<i>Year 2</i>	<i>4/15- 6/15</i>	<i>Year 2</i>	<i>7/15- 8/31</i>	
					<i>Year 3</i>	<i>9/1- 11/15</i>	<i>Year 3</i>	<i>Rest</i>	
	2	4/1-12/31	All Years	6/16- 11/15	<i>Year 1</i>	<i>6/16- 11/15</i>	<i>Year 1</i>	<i>6/16- 11/15</i>	NA
					<i>Year 2</i>	<i>6/16- 11/15</i>	<i>Year 2</i>	<i>9/1- 11/15</i>	
					<i>Year3</i>	<i>6/16- 8/31</i>	<i>Year 3</i>	<i>Rest</i>	
Number of Days by Pasture	1	5-30	All Years	62	<i>Year 1</i>	62	<i>Year 1</i>	62	0
					<i>Year 2</i>	153	<i>Year 2</i>	76	
					<i>Year3</i>	76	<i>Year3</i>	0	
	2	5-30	All Years	153	<i>Year 1</i>	153	<i>Year 1</i>	153	0
					<i>Year 2</i>	62	<i>Year 2</i>	48	
					<i>Year3</i>	77	<i>Year3</i>	0	
AUMs by Pasture (10 year average)	1	31-105	All Years	75	75		<i>Year 1</i>	75	0
							<i>Year 2</i>	75	
							<i>Year3</i>	0	

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing	Alternative 4 ¹ Season Based Grazing		Alternative 5 No Grazing
	2	20-102	All Years	52	52	Year 1	52	0
						Year 2	52	
						Year 3	0	
Acres per AUM by Pasture	1	6.6-22.4	All Years	9.3	9.3	Year 1	9.3	0
						Year 2	9.3	
						Year 3	0	
	2	2.2-11.1	All Years	4.3	4.3	Year 1	4.3	0
						Year 2	4.3	
						Year 3	0	

¹Alternative 3 and 4 displays maximum range of dates not to exceed 122 AUMs per year

Berrett FFR Allotment

Table C-3: Berrett FFR (#609) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 ¹ Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 ¹ Season Based Grazing	Alternative 5 No Grazing
Cattle Number	112	200	200	96	0
Active AUMs	114	114	114	98	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	114	114	114	98	0
% Change compared to recent Average Actual Use: 98 (2002-2011)	16%	16%	16%	No Change	-100%
% Change compared to recent Maximum Actual Use: 114 (2002-2011)	No Change	No Change	No Change	-14%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	No Change	-40%	-100%
Acres/AUMs for Allotment	7.8	7.8	7.8	9.0	0

¹Percent BLM Public Land 16%

Table C-4: Berrett FFR (#609) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
Seasons of Use by Pasture	1	4/15-12/31	All Years	4/15- 7/15	Year 1	4/15- 7/15	Year 1	4/15- 6/30	NA
					Year 2	4/15- 6/30	Year 2	9/1- 11/15	
					Year 3	9/1- 11/15	Year 3	Rest	
(All Private)	2		All Years	4/15-7/1	Year 1	3/1- 2/28	Year 1	3/1- 2/28	NA

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing	
		30-184			Year 2	3/1- 2/28	Year 2	3/1- 2/28		
					Year 3	3/1- 2/28	Year 3	3/1- 2/28		
	3		All Years	4/15- 10/15	Year 1	4/15- 10/15	Year 1	4/15- 10/15	NA	
					Year 2	4/15- 10/15	Year 2	9/1- 11/15		
					Year 3	7/1- 8/31	Year 3	Rest		
	4		All Years	7/1- 10/15	Year 1	7/1- 10/15	Year 1	7/1- 10/15	NA	
					Year 2	7/1- 10/15	Year 2	10/1- 11/15		
					Year 3	10/1- 11/15	Year 3	Rest		
Number of Days by Pasture	1			All Years	92	Year 1	92	Year 1	77	0
						Year 2	77	Year 2	76	
						Year 3	76	Year 3	0	
(All Private)	2			All Years	NA	Year 1	365	Year 1	365	NA
					Year 2	365	Year 2	365		
					Year 3	365	Year 3	365		
	3		All Years	184	Year 1	184	Year 1	184	0	
					Year 2	184	Year 2	76		
					Year 3	62	Year 3	0		
	4		All Years	107	Year 1	107	Year 1	107	0	
					Year 2	107	Year 2	46		
					Year 3	46	Year 3	0		
AUMs by Pasture (10 year average)	1		All Years	52	Year 1	52	Year 1	52	0	
					Year 2	52	Year 2	52		
					Year 3	52	Year 3	0		
(All Private)	2		All Years	NA	Year 1	NA	Year 1	NA	NA	
					Year 2	NA	Year 2	NA		
					Year 3	NA	Year 3	NA		
	3		All Years	28	Year 1	28	Year 1	28	0	
					Year 2	28	Year 2	28		

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing		
				Year 3	28	Year 3	0	
Allotment only data	4		All Years	34	Year 1	34	Year 1	34
					Year 2	34	Year 2	34
					Year 3	34		0
Acres per AUM by Pasture	1		All Years	7.8	Year 1	7.8	Year 1	7.8
					Year 2	7.8	Year 2	7.8
					Year 3	7.8	Year 3	0
(All Private)	2	7.8-28.6	All Years	NA	Year 1	NA	Year 1	NA
					Year 2	NA	Year 2	NA
					Year 3	NA	Year 3	NA
	3		All Years	7.6	Year 1	7.6	Year 1	7.6
					Year 2	7.6	Year 2	7.6
					Year 3	7.6	Year 3	0
	4		All Years	7.8	Year 1	7.8	Year 1	7.8
					Year 2	7.8	Year 2	7.8
					Year 3	7.8	Year 3	0

Alternative 4 displays maximum range of dates not to exceed 98 AUMs per year
Alternative 2-3 Cattle may vary up to 200 head not to exceed AUMs per pasture

Big Field FFR Allotment

Table C-5: Big Field FFR (#594) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 ¹ Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	142	91-168	168	135	0
Active AUMs	147	147	147	140	0
Suspension AUMs	21	21	21	21	0
Permitted AUMs	168	168	168	161	0
% Change compared to recent Average Actual Use: 140 (2002-2011)	20%	20%	20%	15%	-100%
% Change compared to recent Maximum Actual Use: 181 (2002-2011)	-7%	-7%	-7%	-11%	-100%
% Change Compared to	No Change	No Change	No Change	-33%	-100%

	Alternative 1 Current Situation	Alternative 2¹ Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Current Authorized Active AUMs (10-year permit)					
Acres/AUMs for Allotment	6.2	7.1	7.1	7.5	0

Based on 40% BLM public land

Table C-6: Big Field FFR (#594) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 2 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
		Year	Season	Year	Season	Year	Season	Year	Season	
Seasons of Use by Pasture	1	All Years	6/1-10/25	All Years	6/15- 10/15 ¹	Year 1	6/15-10/15	Year 1	6/15/10/15	NA
						Year 2	6/15/10/15	Year 2	10/1-11/15	
						Year 3	10/1-11/15	Year 3	Rest	
Number of Days by Pasture	1	All Years	31	All Years	123	Year 1	123	Year 1	123	0
						Year 2	123	Year 2	46	
						Year 3	46	Year 3	0	
AUMs by Pasture (10 year average)	1	All Years	140	All Years	147	Year 1	147	Year 1	140	0
						Year 2	147	Year 2	140	
						Year 3	147	Year 3	0	
Acres per AUM by Pasture	1	All Years	7.5	All Years	7.1	Year 1	7.1	Year 1	7.5	0
						Year 2	7.1	Year 2	7.5	
						Year 3	7.1	Year 3	0	

¹Alternative 2 and 3 not to exceed AUMs maximum dates; cattle number may vary up to 168 cattle Use

Bogus Creek FFR Allotment

Table C-7: Bogus Creek FFR (#577) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	24	350	24	0
Active AUMs	24	24	24	0
Suspension AUMs	0	0	0	0
Permitted AUMs	24	24	24	0
% Change compared to recent Average Actual Use: 24 (2002-2011)	No Change	No Change	No Change	-100%
% Change compared to recent Maximum Actual Use: 25	-4%	-4%	-4%	-100%

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
(2002-2011)				
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	-30%	-100%
Acres/AUMs for Allotment	17.5	17.5	17.5	0

Based on 6% BLM land

Table C-8: Bogus Creek FFR (#577) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
		All Years	6/5-9/30	Year 1	6/15-10/15	Year 1	6/15/10/15	
Seasons of Use by Pasture	1	All Years	6/5-9/30	Year 1	6/15-10/15	Year 1	6/15/10/15	NA
				Year 2	6/15/10/15	Year 2	10/1-11/15	
				Year 3	10/1-11/15	Year 3	Rest	
Number of Days by Pasture	1	All Years	31	Year 1	123	Year 1	123	0
				Year 2	123	Year 2	46	
				Year 3	46	Year 3	0	
AUMs by Pasture (10 year average)	1	All Years	24	Year 1	24	Year 1	24	0
				Year 2	24	Year 2	24	
				Year 3	24	Year 3	0	
Acres per AUM by Pasture	1	All Years	17.5	Year 1	17.5	Year 1	17.5	0
				Year 2	17.5	Year 2	17.5	
				Year 3	17.5	Year 3	0	

Alternative 2 not to exceed AUMs and maximum dates; cattle number may vary up to 350 cattle when on for 35 days

Boulder Allotment

Table C-9: Boulder Allotment (#509) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2¹ Applicant's Proposed Action	Alternative 3² Deferred Grazing	Alternative 4² Season Based Grazing	Alternative 5 No Grazing
Cattle Number	97	125	125	97	0
Active AUMs	225	225	160	160	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	225	225	160	160	0
% Change compared to recent Average Actual Use: 217 (2002-2011)	4%	4%	-26%	-26%	-100%
% Change compared to recent Maximum Actual Use: 244 (2002-2011)	-8%	-8%	-34%	-34%	-100%
% Change	No Change	No Change	-26	-26%	-100%

	Alternative 1 Current Situation	Alternative 2¹ Applicant's Proposed Action	Alternative 3² Deferred Grazing	Alternative 4² Season Based Grazing	Alternative 5 No Grazing
Compared to Current Authorized Active AUMs (10- year permit)					
Acres/AUMs for Allotment	8.1	8.1	11.4	11.4	0

¹Percent Public Land 89%, Alternative 2 Cattle numbers may vary up to 125 not to exceed AUMs by allotment

²Alternatives 3 and 4 were developed using Stocking Rates adjustments as appropriate in ESDs

Table C-10: Boulder Allotment (#509) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
Seasons of Use by Pasture	1	4/15-6/20 Rested 3 years since 1997	Year 1	4/15- 5/15	Year 1	5/18- 6/15	Year 1	4/17- 5/15	NA
			Year 2	Rest	Year 2	Rest	Year 2	Rest	
			Year 3	5/16- 6/30	Year 3	6/15- 7/13	Year 3	9/1- 9/29	
	2	4/15-6/30 Rested 6 years since 1997	Year 1	5/16- 6/30	Year 1	6/16- 7/12	Year 1	5/16- 6/11	NA
			Year 2	4/15- 5/15	Year 2	5/20- 6/15	Year 2	9/1- 9/27	
			Year 3	Rest	Year 3	Rest	Year 3	Rest	
	3	5/15-7/15 Rested 3 years since 1997	Year 1	Rest	Year 1	Rest	Year 1	Rest	NA
			Year 2	5/16- 6/30	Year 2	6/16- 7/16	Year 2	8/1- 8/31	
			Year 3	4/15- 5/15	Year 3	5/15- 6/14	Year 3	9/30- 10/30	
Number of Days by Pasture	1	30-65	Year 1	31	Year 1	29	Year 1	29	0
			Year 2	0	Year 2	0	Year 2	0	
			Year 3	46	Year 3	29	Year 3	29	
	2	26-75	Year 1	46	Year 1	27	Year 1	27	0
			Year 2	31	Year 2	27	Year 2	27	
			Year 3	0	Year 3	0	Year 3	0	
	3	30-62	Year 1	0	Year 1	0	Year 1	0	0
			Year 2	46	Year 2	31	Year 2	31	
			Year 3	31	Year 3	31	Year 3	31	
AUMs by Pasture (10 year average)	1	83-151	Year 1	91	Year 1	82	Year 1	82	0
			Year 2	0	Year 2	0	Year 2	0	
			Year 3	135	Year 3	82	Year 3	82	
	2	98-112	Year 1	135	Year 1	78	Year 1	78	0
			Year 2	91	Year 2	78	Year 2	78	
			Year 3	0	Year 3	0	Year 3	0	
	3	51-124	Year 1	0	Year 1	0	Year 1	0	0
			Year 2	135	Year 2	52	Year 2	52	

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
			Year 3	91	Year 3	52	Year 3	52	
Acres per AUM by Pasture	1	4.8-8.7	Year 1	7.9	Year 1	8.8 ¹	Year 1	8.8 ¹	0
			Year 2	0	Year 2	0	Year 2	0	
			Year 3	5.3	Year 3	8.8	Year 3	8.8	
			Year 1	5.1	Year 1	8.8	Year 1	8.8 ¹	
2	6.1-7.0		Year 2	7.5	Year 2	8.8	Year 2	8.8	0
			Year 3	0	Year 3	0	Year 3	0	
			Year 1	0	Year 1	0	Year 1	0	
3	3.4-8.2		Year 2	3.1	Year 2	8.1 ¹	Year 2	8.1	0
			Year 3	4.5	Year 3	8.1	Year 3	8.1	
			Year 3	4.5	Year 3	8.1	Year 3	8.1	

¹Stocking rate adjustment based on 35% use and ESD production data

Boulder Flat Allotment

Table C-11: Boulder Flat Allotment (#526) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	64	152	152	136	0
Active AUMs	344	344	344	305	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	344	344	344	305	0
% Change compared to recent Average Actual Use: 305 (2002-2011)	13%	13%	13%	No Change	-100%
% Change compared to recent Maximum Actual Use: 344 (2002-2011)	No Change	No Change	No Change	-11%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	No Change	-38%	-100%
Acres/AUMs for Allotment	11.5	11.5	11.5	13.0	0

Table C-12: Boulder Flat Allotment (#526) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action ¹		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
			Year 1	4/15- 5/15	Year1	4/15- 5/15	Year1	4/15- 5/15	
Seasons of Use by Pasture	1	4/16-10/15	Year 2	6/1-6/30	Year 2	6/1- 6/30	Year 2	Rest	NA
					Year 3	7/1- 7/31	Year 3	10/1- 10/31	
			Year 1	5/16- 6/30	Year1	5/16- 6/30	Year1	5/16- 6/30	
2	4/16-10/15	Year 1	5/16- 6/30	Year1	5/16- 6/30	Year1	5/16- 6/30	NA	

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action ¹		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
			Year 2	4/15- 5/30	Year 2	4/15- 5/30	Year 2	Rest	
					Year 3	8/1- 9/15	Year 3	11/1- 12/16	
Number of Days by Pasture	1	183	All Years	31	Year1	31	Year1	31	0
					Year 2	31	Year 2	0	
					Year 3	31	Year 3	31	
	2	183	All Years	46	Year1	46	Year1	46	0
					Year 2	46	Year 2	0	
					Year 3	46	Year 3	46	
AUMs by Pasture (10 year average)	1	41-337	All Years	138	Year1	138	Year1	123	0
					Year 2	138	Year 2	0	
					Year 3	138	Year 3	123	
	2	286-315	All Years	205	Year1	205	Year1	183	0
					Year 2	205	Year 2	0	
					Year 3	205	Year 3	183	
Acres per AUM by Pasture	1	5.3-43	All Years	12.8	Year1	12.8	Year1	14.4	0
					Year 2	12.8	Year 2	0	
					Year 3	12.8	Year 3	14.4	
	2	6.9-7.6	All Years	10.6	Year1	10.6	Year1	11.9	0
					Year 2	10.6	Year 2	0	
					Year 3	10.6	Year 3	11.9	

¹Use in the fall 7/1-10/15 when water is available if AUMs are not exceeded

Combination Creek Allotment

Table C-13: Combination Creek Allotment (#595) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	103	350	103	0
Active AUMs	410	410	354	0
Suspension AUMs	0	0	0	0
Permitted AUMs	410	410	354	0
% Change compared to recent Average Actual Use: 354 (2002-2011)	16%	16%	No Change	-100%
% Change compared to recent Maximum Actual Use: 410 (2002-2011)	No Change	No Change	-14%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	-40%	-100%
Acres/AUMs for Allotment	7.7	7.7	8.9	0

Table C-14: Combination Creek Allotment (#595) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
		All Years	6/1-10/31	Year 1	6/1-10/31	Year 1	6/1-10/31	
Seasons of Use by Pasture	1	All Years	6/1-10/31	Year 1	6/1-10/31	Year 1	6/1-10/31	NA
				Year 2	6/1-10/31	Year 2	10/1-11/15	
				Year 3	10/1-11/15	Year 3	Rest	
Number of Days by Pasture	1	All Years	152	Year 1	152	Year 1	152	0
				Year 2	152	Year 2	46	
				Year 3	46	Year 3	0	
AUMs by Pasture (10 year average)	1	All Years	354	Year 1	410	Year 1	354	0
				Year 2	410	Year 2	354	
				Year 3	410	Year 3	0	
Acres per AUM by Pasture	1	All Years	8.9	Year 1	7.7	Year 1	8.9	0
				Year 2	7.7	Year 2	8.9	
				Year 3	7.7	Year 3	0	

Alternative 2 Cattle numbers may vary up to 350 cattle not to exceed permitted AUMs

Feltwell Allotment

Table C-15: Feltwell Allotment (#544) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 ¹ Applicant's Proposed Action	Alternative 3 ¹ Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	69	80	80	69	0
Active AUMs	279	279	224	188	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	279	279	224	188	0
% Change compared to recent Average Actual Use: 224 (2002-2011)	-25%	-25%	No Change	No Change	-100%
% Change compared to recent Maximum Actual Use: 283 (2002-2011)	-1%	-1%	-21%	-21%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	-27%	-53%	-100%
Acres/AUMs for Allotment	3.2	3.2	4.6	5.5	0

¹Based on 63 percent public land

Table C-16: Feltwell Allotment (#544) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
		All Years	5/1-8/15	Year 1	4/1-7/15	Year 1	5/15- 6/12	Year 1	Rest	
Seasons of Use by Pasture	1	All Years	5/1-8/15	Year 1	4/1-7/15	Year 1	5/15- 6/12	Year 1	Rest	NA
				Year 2	8/16-9/15	Year 2	8/9-9/6	Year 2	8/21- 9/30	

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
				Year 3 4/1-7/15	Year 3 10/1-10/29	Year 3 10/1-10/29
	2	All Years	5/20-8/15	Year 1 4/1-7/15	Year 1 5/15-6/12	Year 1 Rest
				Year 2 8/16-9/15	Year 2 8/9-9/6	Year 2 8/21-9/30
				Year 3 4/1-7/15	Year 3 10/1-10/29	Year 3 10/1-10/29
	3	All Years	6/16-9/1	Year 1 7/16-8/15	Year 1 6/13-9/28	Year 1 6/13-9/28
				Year 2 7/16-8/15	Year 2 10/1-11/15	Year 2 10/1-11/15
				Year 3 8/16-9/15	Year 3 6/15-9/30	Year 3 Rest
	4	All Years	5/15-8/15	Year 1 8/16-9/15	Year 1 9/29-10/22	Year 1 9/29-10/22
				Year 2 4/1-7/15	Year 2 9/7-9/30	Year 2 Rest
				Year 3 7/16-8/15	Year 3 5/22-6/14	Year 3 9/7-9/30
Number of Days by Pasture	1	All Years	107	Year 1 106	Year 1 29	Year 1 0
				Year 2 31	Year 2 29	Year 2 29
				Year 3 106	Year 3 29	Year 3 29
	2	All Years	88	Year 1 106	Year 1 29	Year 1 0
				Year 2 31	Year 2 29	Year 2 29
				Year 3 106	Year 3 29	Year 3 29
	3	All Years	78	Year 1 31	Year 1 108	Year 1 108
				Year 2 31	Year 2 46	Year 2 46
				Year 3 31	Year 3 108	Year 3 0
	4	All Years	93	Year 1 31	Year 1 24	Year 1 24
				Year 2 106	Year 2 24	Year 2 0
				Year 3 31	Year 3 24	Year 3 24
AUMs by Pasture (10 year average)	1	All Years	190	Year 1 88	Year 1 34	Year 1 0
				Year 2 26	Year 2 34	Year 2 34
				Year 3 88	Year 3 34	Year 3 34
	2	All Years	91	Year 1 88	Year 1 7	Year 1 0
				Year 2 26	Year 2 7	Year 2 7
				Year 3 88	Year 3 7	Year 3 7
	3	All Years	93	Year 1 51	Year 1 154	Year 1 154
				Year 2 51	Year 2 66	Year 2 66
				Year 3 51	Year 3 154	Year 3 0
	4	All Years	91	Year 1 51	Year 1 34	Year 1 34
				Year 2 176	Year 2 34	Year 2 0
				Year 3 51	Year 3 34	Year 3 34
Acres per AUM by Pasture	1	All Years	0.81	Year 1 1.7	Year 1 4.5	Year 1 0
				Year 2 5.9	Year 2 4.5	Year 2 4.5
				Year 3 1.7	Year 3 4.5	Year 3 4.5
	2	All	0.24	Year 1 0.25	Year 1 3.1	Year 1 0

0

0

0

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
		Years		Year 2	0.85	Year 2	3.1	Year 2	3.1	
				Year 3	0.25	Year 3	3.1	Year 3	3.1	
	3	All Years	7.6	Year 1	13.9	Year 1	4.6	Year 1	4.6	
				Year 2	13.9	Year 2	10.7	Year 2	10.7	
				Year 3	13.9	Year 3	4.6	Year 3	0	
	4	All Years	1.6	Year 1	2.9	Year 1	4.4	Year 1	4.4	
				Year 2	0.85	Year 2	4.4	Year 2	0	
				Year 3	2.9	Year 3	4.4	Year 3	4.4	

Pastures 1 and 2 are used in conjunction for Alternatives 2-4
AUMs based on average actual use.

Glass Creek Allotment

Table C-17: Glass Creek Allotment (#552) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	98	100	NA	73	0
Active AUMs	139	139		73	0
Suspension AUMs	0	0		0	0
Permitted AUMs	139	139		73	0
% Change compared to recent Average Actual Use: 124 (1997-2012)	12%	12%		No Change	-100%
% Change compared to recent Maximum Actual Use: 148 (1997-2012)	-6%	-6%		-16%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change		-48%	-100%
Acres/AUMs for Allotment	11.7	11.7		13.1	0

Table C-18: Glass Creek Allotment (#552) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing	
Seasons of Use by Pasture	1	Range of maximum seasons: 4/4-6/15	Year 1	4/16-6/15	NA	Year 1	4/16-6/15
			Year 2	4/16-6/15		Year 2	6/21-8/21
			Year 3	Rest		Year 3	Rest
	2	Range of maximum seasons: 4/1-6/6	Year 1	Rest		Year 1	Rest
			Year 2	Rest		Year 2	Rest
			Year 3	4/16-6/15		Year 3	4/16-6/15

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing		
Number of Days by Pasture	1	Range of days: 25-47	Year 1	46		Year 1	46	0
			Year 2	46		Year 2	46	
			Year 3	0		Year 3	0	
	2	Range of days: 0-46	Year 1	0		Year 1	0	0
			Year 2	0		Year 2	0	
			Year 3	46		Year 3	35	
AUMs by Pasture (10 year average)	1	Range of AUMs: 29-143 Average: 73	Year 1	139		Year 1	73	0
			Year 2	139		Year 2	73	
			Year 3	0		Year 3	0	
	2	Range of AUMs: 0-112 Average: 72	Year 1	0		Year 1	0	0
			Year 2	0		Year 2	0	
			Year 3	139		Year 3	72	
Acres per AUM by Pasture	1	5.0-25.0	Year 1	5.2		Year 1	9.9	0
			Year 2	5.2		Year 2	9.9	
			Year 3	0		Year 3	0	
	2	No use-8.0	Year 1	0		Year 1	0	0
			Year 2	0		Year 2	0	
			Year 3	6.5		Year 3	12.5	

Gluch Allotment

Table C-19: Gluch Allotment (#553) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	50	50	50	44	0
Active AUMs	50	50	50	44	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	50	50	50	44	0
% Change compared to recent Average Actual Use:44 (1997-2012)	14%	14%	14%	No Change	-100%
% Change compared to recent Maximum Actual Use:55 (1997-2012)	-9%	-9%	-9%	-20%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	No Change	-12%	-100%
Acres/AUMs for Allotment	4.9	4.9	4.9	5.5	0

Table C-20: Gluch Allotment (#553) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
Seasons of Use by Pasture	1	3/15-5/17	All Years	3/16- 4/15	Year 1	3/16-4/15	Year 1	3/16- 4/15	
					Year 2	3/16-4/15	Year 2	rest	
					Year 3	6/1-6/30	Year 3	6/1- 6/30	
Number of Days by Pasture	1	17-52	All Years	31	30		30		0
AUMs by Pasture (10 year average)	1	22-55	All Years	50	50		44		0
Acres per AUM by Pasture	1	4.4-11.0	All Years	4.9	4.9		5.5		0

Gluch FFR Allotment

Table C-21: Gluch FFR (#466) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 ¹ Applicant's Proposed Action	Alternative 3 ¹ Deferred Grazing	Alternative 4 ¹ Season Based Grazing	Alternative 5 No Grazing
Cattle Number	103	300	300	74	0
Active AUMs	105	105	75	75	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	105	105	75	75	0
% Change compared to recent Average Actual Use:54 (1997-2012)	94%	94%	39%	39%	-100%
% Change compared to recent Maximum Actual Use105 (1997-2012)	No Change	No Change	-29%	-29%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	-29%	-29%	-100%
Acres/AUMs for Allotment	7.2	7.2	10.0	10.0	0

¹Percent Public Land 19%

Table C-22: Gluch FFR (#466) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
Seasons of Use by Pasture	1	3/10-8/16 As reported	All Years	1/1-4/1	Year 1	1/1-4/1	Year 1	1/1-4/1	NA
					Year 2	1/1-4/1	Year 2	7/1-12/31	
					Year 3	Rest	Year 3	Rest	
	2			4/2-4/30	Year 1	Rest	Year 1	7/1-12/31	

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing			
	3			5/1-5/30	Year 2	4/2-4/30	Year 2	Rest	
					Year 3	4/2-4/30	Year 3	4/2-4/30	
					Year 1	5/1-5/31	Year 1	Rest	
					Year 2	Rest	Year 2	5/1-5/31	
					Year 3	5/1-5/30	Year 3	7/1-12/31	
					Year 1	3/1-2/28	Year 1	3/1-2/28	
	4			Year 2	3/1-2/28	Year 2	3/1-2/28		
				Year 3	3/1-2/28	Year 3	3/1-2/28		
				Year 1	3/1-2/28	Year 1	3/1-2/28		
	5			Year 2	3/1-2/28	Year 2	3/1-2/28		
				Year 3	3/1-2/28	Year 3	3/1-2/28		
				Year 1	3/1-2/28	Year 1	3/1-2/28		
Number of Days or cows by Pasture	1	5-64	All Years	91	Year 1	47	Year 1	47	0
					Year 2	47	Year 2	47	
					Year 3	0	Year 3	0	
	2			29	Year 1	0	Year 1	47	
					Year 2	47	Year 2	0	
					Year 3	47	Year 3	47	
	3			30	Year 1	47	Year 1	0	
					Year 2	0	Year 2	47	
					Year 3	47	Year 3	47	
	4			365	Year 1	5 cows	Year 1	5 cows	
					Year 2	5cows	Year 2	5cows	
					Year 3	5cows	Year 3	5cows	
	5			365	Year 1	2cows	Year 1	2cows	
					Year 2	2cows	Year 2	2cows	
					Year 3	2cows	Year 3	2cows	
AUMs by Pasture (10 year average)	1	No AUMs were reported for the pastures only the whole allotment 20-105	All Years	30	Year 1	30	Year 1	30	0
					Year 2	30	Year 2	30	
					Year 3	0	Year 3	0	
	2			30	Year 1	0	Year 1	30	
					Year 2	30	Year 2	0	
					Year 3	30	Year 3	30	
	3			30	Year 1	30	Year 1	0	
					Year 2	0	Year 2	30	
					Year 3	30	Year 3	30	
	4			10	Year 1	10	Year 1	10	
					Year 2	10	Year 2	10	
					Year 3	10	Year 3	10	
5	5	Year 1	5	Year 1	5				
		Year 2	5	Year 2	5				

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
						Year 3	5	Year 3	5	
Acres per AUM by Pasture	1	7.1-37.5	All Years	3.2	Year 1	3.2	Year 1	3.2	0	
					Year 2	3.2	Year 2	3.2		
					Year 3	0	Year 3	0		
	2			6.5	Year 1	0	Year 1	6.5		
					Year 2	6.5	Year 2	0		
					Year 3	6.5	Year 3	6.5		
	3			8.9	Year 1	8.9	Year 1	0		
					Year 2	0	Year 2	8.9		
					Year 3	8.9	Year 3	8.9		
	4			7.7	Year 1	7.7	Year 1	7.7		
					Year 2	7.7	Year 2	7.7		
					Year 3	7.7	Year 3	7.7		
	5			22.2	Year 1	22.2	Year 1	22.2		
					Year 2	22.2	Year 2	22.2		
					Year 3	22.2	Year 3	22.2		

Jim's Peak FFR Allotment

Table C-23: Jim's Peak FFR (#576) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	55	55	53	0
Active AUMs	56	56	54	0
Suspension AUMs	0	0	0	0
Permitted AUMs	56	56	54	0
% Change compared to recent Average Actual Use: 54 (2002-2011)	4%	4%	No Change	-100%
% Change compared to recent Maximum Actual Use: 58 (2002-2011)	-3%	-3%	-7%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	-33%	-100%
Acres/AUMs for Allotment	18.6	18.6	19.3	0

Based on 40% BLM public Land

Alternative 2 may vary up to 100 cattle not to exceed 56 AUMs

Table C-24: Jim's Peak FFR (#576) alternative comparison of pasture data

Seasons of Use by Pasture	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
		All Years	12/1-12/31	Year 1	6/15-10/31	Year 1	6/15-10/31	
	1	All Years	12/1-12/31	Year 1	6/15-10/31	Year 1	6/15-10/31	NA
				Year 2	6/15/10/31	Year 2	Rest	

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
				Year 3	10/1-11/15	Year 3	10/1-11/15	
Number of Days by Pasture	1	All Years	31	Year 1	139	Year 1	139	0
				Year 2	139	Year 2	0	
				Year 3	46	Year 3	46	
AUMs by Pasture (10 year average)	1	All Years	54	Year 1	56	Year 1	54	0
				Year 2	56	Year 2	0	
				Year 3	56	Year 3	54	
Acres per AUM by Pasture	1	All Years	19.3	Year 1	18.6	Year 1	19.3	0
				Year 2	18.6	Year 2	0	
				Year 3	18.6	Year 3	19.3	

Alternatives 2-4 cattle numbers may vary as long as AUMs and season are not exceeded

Morgan Allotment

Table C-25: Morgan Allotment (#505) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	60	60	60	60	0
Horse Number	8	8	8	8	0
Active AUMs	436	446	436	364 ¹	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	446	446	436	364	0
% Change compared to recent Average Actual Use: 276 (2002-2011)	58%	62%	58%	32%	-100%
% Change compared to recent Maximum Actual Use: 436 (2002-2011)	No Change	2%	No Change	-17%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	-2%	No Change	-7%	-30%	-100%
Acres/AUMs for Allotment	10.9	10.6	10.9	13.0	0

Based on stocking rate adjustments from ESDs

Table C-26: Morgan Allotment (#505) alternative comparison of pasture data (No pasture data available for Alternatives 1 and 2)

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
						Year 1	3/16-6/15	Year 1	3/16-6/15	
Seasons of Use by Pasture	1	4/1-7/15 h 3/16-11/30 c	4/1-7/15-h c	All Years	4/1-7/15 h 3/16-11/30 c	Year 1	3/16-6/15	Year 1	3/16-6/15	NA
						Year 2	10/1-12/30	Year 2	10/1-12/30	
						Year 3	3/16-6/15	Year 3	Rest	

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
	2			All Years		Year 1	10/1- 11/15	Year 1	10/1- 11/15	
						Year 2	6/1- 7/16	Year 2	Rest	
						Year 3	6/1- 7/16	Year 3	6/1- 7/16	
Pastures 3 and 4 same field	3			All Years		Year 1	4/20- 6/15	Year 1	Rest	
						Year 2	4/20- 6/15	Year 2	4/20- 6/15	
						Year 3	10/1- 11/26	Year 3	10/1- 11/26	
	4			All Years		Year 1	4/20- 5/22	Year 1	Rest	
						Year 2	4/20- 5/22	Year 2	4/20- 5/22	
						Year 3	10/1- 11/2	Year 3	10/1- 11/2	
Number of Days by Pasture	1			All Years		Year 1	135	Year 1	135	
						Year 2	91	Year 2	135	
						Year 3	135	Year 3	0	
	2			All Years		Year 1	46	Year 1	46	
						Year 2	46	Year 2	0	
						Year 3	46	Year 3	46	
	3	260	260	All Years	260	Year 1	57	Year 1	0	0
						Year 2	57	Year 2	57	
						Year 3	57	Year 3	57	
	4			All Years		Year 1	33	Year 1	0	
						Year 2	33	Year 2	33	
						Year 3	33	Year 3	33	
AUMs by Pasture (10 year average)	1			All Years		Year 1	218	Year 1	218	
						Year 2	147	Year 2	218	
						Year 3	218	Year 3	0	
	2			All Years		Year 1	74	Year 1	74	
						Year 2	74	Year 2	0	
						Year 3	74	Year 3	74	
	3	276	276	All Years	446	Year 1	92	Year 1	0	0
						Year 2	92	Year 2	92	
						Year 3	92	Year 3	92	
	4			All Years		Year 1	54	Year 1	0	
						Year 2	54	Year 2	54	
						Year 3	54	Year 3	54	
Acres per AUM by Pasture	1			All Years		Year 1	11.0	Year 1	11.0	
						Year 2	16.3	Year 2	11.0	
						Year 3	11.0	Year 3	0	
	2	17.1	17.1	All Years	10.6	Year 1	11.1	Year 1	11.1	0
						Year 2	11.1	Year 2	0	
						Year 3	11.1	Year 3	11.1	

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
	3			All Years	Year 1	10.6	Year 1	0	
					Year 2	10.6	Year 2	10.6	
					Year 3	10.6	Year 3	10.6	
	4			All Years	Year 1	10.1	Year 1	0	
					Year 2	10.1	Year 2	10.1	
					Year 3	10.1	Year 3	10.1	

Rail Creek FFR Allotment

Table C-27: Rail Creek FFR (#627) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	13	300	300	70 ¹	0
Active AUMs	13	13	13	13	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	13	13	13	13	0
% Change compared to recent Average Actual Use: 14 (2002-2011)	-7%	-7%	-7%	-7%	-100%
% Change compared to recent Maximum Actual Use: 14 (2002-2011)	-7%	-7%	-7%	-7%	-100%
% Change Compared to Current Authorized Active AUMs (10- year permit)	No Change	No Change	-16%	-62%	-100%
Acres/AUMs for Allotment	9.5	9.5	9.5	9.5	0

¹Based on 3 percent public land; not to exceed 300 cattle or 13 AUMs alternative 2-3

Table C-28: Rail Creek FFR (#627) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
Seasons of Use by Pasture	1	All Years	6/1-8/31	5/15-10/15	Year 1	6/1- 8/31	Year 1	6/1- 8/31	NA
					Year 2	6/1- 8/31	Year 2	Rest	
					Year 3	10/1- 10/31	Year 3	10/1- 10/31	
2	All Years	9/1- 11/30	5/15-10/15	Year 1	9/1- 11/30	Year 1	9/1- 11/30		
				Year 2	9/1- 11/30	Year 2	Rest		
				Year 3	11/1- 12/15	Year 3	11/1- 12/15		
Number	1	All	92	154	Year 1	92	Year 1	92	0

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
of Days by Pasture		Years			Year 2	92	Year 2	Rest	
					Year 3	30	Year 3	30	
	2	All Years	91	154	Year 1	91	Year 1	91	
					Year 2	91	Year 2	Rest	
					Year 3	45	Year 3	45	
AUMs by Pasture (10 year average)	1	All Years	6	6	Year 1	6	Year 1	6	0
					Year 2	6	Year 2	0	
					Year 3	3	Year 3	3	
	2	All Years	7	7	Year 1	7	Year 1	7	
					Year 2	7	Year 2	0	
					Year 3	3	Year 3	3	
Acres per AUM by Pasture	1	All Years	8.7	8.7	Year 1	8.7	Year 1	8.7	0
					Year 2	8.7	Year 2	0	
					Year 3	17.3	Year 3	17.3	
	2	All Years	10.4	10.4	Year 1	10.4	Year 1	10.4	
					Year 2	10.4	Year 2	0	
					Year 3	24.3	Year 3	24.3	

Alternative 2-4 Cattle numbers may vary not to exceed AUMs by pasture per year

South Mountain Individual Allotment

Table C-29: South Mountain Individual (#600) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	100	250	250	67	0
Active AUMs	511	511	511	342	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	511	511	511	342	0
% Change compared to recent Average Actual Use: 342 (2002-2011)	49%	49%	49%	No Change	-100%
% Change compared to recent Maximum Actual Use: 736 (2002-2011)	-31%	-31%	-31%	-54%	-100%
% Change Compared to Current Authorized Active AUMs (10- year permit)	No Change	No Change	-9%	-68%	-100%
Acres/AUMs for Allotment	6.9	6.9	6.9	10.3	0

Alternative 2 Cattle numbers may vary up to 250 head not to exceed 250 cattle

Table C-30: South Mountain Individual (#600) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing	
		Year 1	Year 2	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2		
Seasons of Use by Pasture	1	All Years	2/20-11/30	Year 1	4/20-7/1	Year 1	4/20-7/1	Year 1	4/20-7/1	NA	
				Year 2	9/19-11/30	Year 3	10/1-11/30	Year 3	10/1-11/30		
	2	All Years	4/10-11/30	Year 1	7/2-11/30	Year 1	7/2-11/30	Year 1	7/2-11/30		
				Year 2	4/20-9/18	Year 3	4/27-6/15	Year 3	4/27-6/15		
Number of Days by Pasture	1	All Years	284	Year 1	73	Year 1	73	Year 1	73		0
				Year 2	73	Year 3	61	Year 3	61		
	2	All Years	235	Year 1	152	Year 1	152	Year 1	152		
				Year 2	152	Year 3	57	Year 3	57		
AUMs by Pasture (10 year average)	1	All Years	227	Year 1	166	Year 1	166	Year 1	111	0	
				Year 2	166	Year 3	164	Year 3	111		
	2	All Years	135	Year 1	345	Year 1	345	Year 1	231		
				Year 2	345	Year 3	201	Year 3	201		
Acres per AUM by Pasture	1	All Years	4.9	Year 1	6.7	Year 1	6.7	Year 1	10.1		0
				Year 2	6.7	Year 3	6.7	Year 3	10.1		
	2	All Years	17.8	Year 1	7.0	Year 1	7.0	Year 1	10.4		
				Year 2	7.0	Year 3	11.9	Year 3	11.9		

West Maher FFR Allotment

Table C-31: West Maher FFR (#567) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 ¹ Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	118	118	118	100	0
Active AUMs	120	120	120	102	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	120	120	120	102	0
% Change compared to recent Average Actual Use:102 (2005-2011)	18%	18%	18%	No Change	-100%
% Change compared to	-2%	-2%	-2%	-16%	-100%

recent Maximum Actual Use:122 (2005-2011)					
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	No Change	-36%	-100%
Acres/AUMs for Allotment	6.7	6.7	6.7	7.9	0

¹Percent BLM Public Land 61%

Table C-32: West Maher FFR (#567) alternative comparison of pasture data (No data by Pasture)

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 ¹ Season Based Grazing		Alternative 5 No Grazing
			All Years	3/1-2/28	Year 1	4/1- 6/30	Year 1	4/1- 6/30	
Seasons of Use by Pasture	1(Private)	4/1-12/31	All Years	3/1-2/28					
	2	4/1-12/31	Year 1	4/1-6/30	Year 1	4/1- 6/30	Year 1	4/1- 6/30	NA
			Year 2	4/1-6/30	Year 2	4/1- 6/30	Year 2	10/1- 10/30	
			Year 3	4/1-6/30	Year 3	10/1- 10/30	Year 3	Rest	
	3	4/1-12/31	Year 1	4/1-6/30	Year 1	4/1- 6/30	Year 1	10/1- 10/30	
			Year 2	4/1-6/30	Year 2	10/1- 10/30	Year 2	Rest	
			Year 3	9/1- 10/15	Year 3	4/1- 6/30	Year 3	4/1- 6/30	
Number of Days by Pasture	1	275	All Years	365					
	2	275	Year 1	91	Year 1	30	Year 1	30	0
			Year 2	91	Year 2	30	Year 2	30	
			Year 3	91	Year 3	30	Year 3	0	
	3	275	Year 1	91	Year 1	20	Year 1	20	
			Year 2	91	Year 2	20	Year 2	0	
			Year 3	45	Year 3	20	Year 3	20	
AUMs by Pasture (10 year average)	1	4-122	Private	NA					0
	2		All Years	70	Year 1	70	Year 1	60	
					Year 2	70	Year 2	70	
					Year 3	70	Year 3	0	
	3		All Years	50	Year 1	50	Year 1	40	
					Year 2	50	Year 2	0	
				Year 3	50	Year 3	50		
Acres per AUM by Pasture	1	6.6-202	All Years	NA					0
	2		All Years	7.0	Year 1	7.0	Year 1	8.2	
					Year 2	7.0	Year 2	7.0	
					Year 3	7.0	Year 3	0	
	3		All	6.3	Year 1	6.3	Year 1	7.9	

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 ¹ Season Based Grazing		Alternative 5 No Grazing	
		Years		Year 2	6.3	Year 2	0	Year 3	6.3	Year 3	6.3

¹Alternative 4 not to exceed: year 1- 102AUMs year 2- 70 AUMs year 3- 50 AUMs

Walt's Pond FFR Allotment

Table C-33: Walt's Pond FFR (#659) alternative comparison of allotment data

	Alternative 1 Permit	Alternative 1 Current Situation	Alternative 2 ¹ Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	75	75	75	75	75	0
Active AUMs	76	76	76	76	76	0
Suspension AUMs	0	0	6	0	0	0
Permitted AUMs	76	76	76	76	76	0
% Change compared to recent Average Actual Use 72 (2002-2011)	6%	6%	6%	6%	6%	-100%
% Change compared to recent Maximum Actual Use 77 (2002-2011)	-1%	-1%	-1%	-1%	-1%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	No Change	No Change	-53%	-100%
Acres/AUMs for Allotment	19.0	19.0	19.0	19.0	19.0	0

¹Percent BLM Public Land 20%

Table C-34: Walt's Pond FFR (#659) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing	
		Year 1	10/1- 12/25	Year 1	10/1- 12/25	Year 1	10/1- 12/25	Year 1	10/1- 12/25	Year 1	10/1- 12/25
Seasons of Use by Pasture	1	All Years	4/1-6/5	All Years	3/1-2/28	Year 1	10/1- 12/25	Year 1	10/1- 12/25	NA	
						Year 2	10/1- 12/25	Year 2	rest		
						Year 3	4/1-6/5	Year 3	4/1-6/5		
	2	All Years	4/1-6/5	All Years	3/1-2/28	Year 1	4/1-6/5	Year 1	rest		
						Year 2	4/1-6/5	Year 2	4/1-6/5		
						Year 3	10/1- 12/25	Year 3	10/1- 12/25		
Number of Days by Pasture	1	All Years	33	All Years	31	Year 1	86	Year 1	86	0	
						Year 2	86	Year 2	0		
						Year 3	66	Year 3	66		
	2	All	33	All	31	Year 1	66	Year 1	0		

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
		Years		Years		Year 2		Year 2		
						Year 2	66	Year 2	66	
						Year 3	86	Year 3	86	
AUMs by Pasture (10 year average)	1	All Years	38	All Years	38	Year 1	42	Year 1	42	0
						Year 2	42	Year 2	0	
						Year 3	33	Year 3	33	
2	All Years	38	All Years	38	Year 1	33	Year 1	0		
					Year 2	33	Year 2	33		
					Year 3	42	Year 3	42		
Acres per AUM by Pasture	1	All Years	23.1	All Years	23.1	Year 1	20.9	Year 1	20.9	0
						Year 2	20.9	Year 2	0	
						Year 3	26.6	Year 3	26.6	
2	All Years	11.6	All Years	11.6	Year 1	13.4	Year 1	0		
					Year 2	13.4	Year 2	13.4		
					Year 3	10.5	Year 3	10.5		

Warn Allotment

Table C-35: Warn Allotment (#596) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	74	200	200	74	0
Active AUMs	74	74	74	74	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	74	74	74	74	0
% Change compared to recent Average Actual Use:82 (1997-2012)	-10%	-10%	-10%	-10%	-100%
% Change compared to recent Maximum Actual Use:118 (1997-2012)	-37%	-37%	-37%	-37%	-100%
% Change Compared to Current Authorized Active AUMs (10-year permit)	No Change	No Change	No Change	-30%	-100%
Acres/AUMs for Allotment	9.1	9.1	9.1	9.1	0

Table C-36: Warn Allotment (#596) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
			Year 1		Year 1		Year 1		
Seasons of Use by Pasture	1	4/15-6/19	Year 1	4/15- 6/30	Year 1	5/1- 5/31	Year 1	4/15- 6/30	NA
			Year 2	4/15- 6/30	Year 2	5/1- 5/31	Year 2	10/1- 10/30	

	Pasture	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
			Year 3	10/1- 10/30	Year 3	10/1- 10/30	Year 3	Rest	
Number of Days by Pasture	1	10-25	Year 1	11 to 77	Year 1	11-31	Year 1	31	0
			Year 2	11 to 77	Year 2	11-31	Year 2	31	
			Year 3	11 to 45	Year 3	11-30	Year 3	0	
AUMs by Pasture (10 year average)	1	66-118	Year 1	74	Year 1	74	Year 1	74	0
			Year 2	74	Year 2	74	Year 2	74	
			Year 3	74	Year 3	74	Year 3		
Acres per AUM by Pasture	1	5.7-10.2	All Years	9.1	Year 1	9.1	Year 1	9.1	0
					Year 2	9.1	Year 2	9.1	
					Year 3	9.1	Year 3	0	

Written Allotment

Table C-37: Written Allotment (#597) alternative comparison of allotment data

	Alternative 1 Current Situation	Alternative 2 Applicant's Proposed Action	Alternative 3 Deferred Grazing	Alternative 4 Season Based Grazing	Alternative 5 No Grazing
Cattle Number	135	200	200	131	0
Active AUMs	400	400	400	398	0
Suspension AUMs	0	0	0	0	0
Permitted AUMs	400	400	400	398	0
% Change compared to recent Average Actual Use: 398 (2002-2011)	-1%	-1%	-1%	No Change	-100%
% Change compared to recent Maximum Actual Use: 416 (2002-2011)	-4%	-4%	-4%	-4%	-100%
% Change Compared to Current Authorized Active AUMs (10- year permit)	No Change	No Change	No Change	-30%	-100%
Acres/AUMs for Allotment	4.3	4.3	4.3	4.3	0

Alternative 2 Cattle numbers may vary up to 200 cattle not to exceed 400 AUMs

Table C-38: Written Allotment (#597) alternative comparison of pasture data

	Pasture	Alternative 1 Current Situation		Alternative 2 Applicant's Proposed Action		Alternative 3 Deferred Grazing		Alternative 4 Season Based Grazing		Alternative 5 No Grazing
Seasons of Use by Pasture	1	All Years	4/1-11/29	Year 1	4/1-2/28	Year 1	4/15- 9/4	Year 1	4/15- 9/4	
				Year 2	4/1-2/28	Year 2	4/15- 9/4	Year 2	Rest	
				Year 3	4/1-2/28	Year 3	10/1- 1/29	Year 3	10/1- 1/29	
				Year 4	7/1-2/28					

	Pasture	Alternative 1 <i>Current Situation</i>		Alternative 2 <i>Applicant's Proposed Action</i>		Alternative 3 <i>Deferred Grazing</i>		Alternative 4 <i>Season Based Grazing</i>		Alternative 5 <i>No Grazing</i>
Number of Days by Pasture	1	All Years	243	<i>Year 1</i>	334	<i>Year 1</i>	143	<i>Year 1</i>	143	0
				<i>Year 2</i>	334	<i>Year 2</i>	143	<i>Year 2</i>	143	
				<i>Year 3</i>	334	<i>Year 3</i>	121	<i>Year 3</i>	121	
				<i>Year 4</i>	243					
AUMs by Pasture (10 year average)	1	All Years	398	<i>Year 1</i>	400	<i>Year 1</i>	400	<i>Year 1</i>	400	0
				<i>Year 2</i>	400	<i>Year 2</i>	400	<i>Year 2</i>	Rest	
				<i>Year 3</i>	400	<i>Year 3</i>	400	<i>Year 3</i>	400	
				<i>Year 4</i>	400					
Acres per AUM by Pasture	1	All Years	4.3	<i>Year 1</i>	4.3	<i>Year 1</i>	4.3	<i>Year 1</i>	4.3	0
				<i>Year 2</i>	4.3	<i>Year 2</i>	4.3	<i>Year 2</i>	Rest	
				<i>Year 3</i>	4.3	<i>Year 3</i>	4.3	<i>Year 3</i>	4.3	
				<i>Year 4</i>	4.3					

Alternative 2-3 Cattle numbers may vary not to exceed 400 AUMs by pasture per year or 200 Cattle

Appendix D - Permittee Applications

CASE FILE COPY

APPLICATION FOR GRAZING PERMIT RENEWAL

AUTH NUMBER: 1101388
DATE PRINTED: 5/25/2011

RECEIVED
OWYHEE FIELD OFFICE

2011 AUG 16 AM 10:41

Form 4130-2a
(February 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE ID
OFFICE LLIDB03000
AUTH NUMBER 1101388
PREFERENCE CODE 03
DATE PRINTED 05/25/2011

APPLICATION FOR GRAZING PERMIT RENEWAL

RETURN BY: June 24, 2011

BUREAU OF LAND MANAGEMENT
OWYHEE FIELD OFFICE
20 FIRST AVE WEST
MARSING ID 83639

DALE L BERRETT
3540 HWY 95
JORDAN VALLEY OR 97910

This application for grazing permit renewal describes your current permit schedule(s) and summarizes your permitted use. If you wish to apply for renewal of this permit, sign and return this form by the date shown above. Contact your local BLM office at 208-896-5912 if you have questions.

MANDATORY TERMS AND CONDITONS

ALLOTMENT	PASTURE	LIVESTOCK		GRAZING BEGIN	PERIOD END	%PL	TYPE USE	AUMS
		NUMBER	KIND					
00509	BOULDER	97	CATTLE	04/15	06/30	91	ACTIVE	223
00609	BERRETT FFR	112	CATTLE	12/01	12/31	100	ACTIVE	114

OTHER TERMS AND CONDITIONS:

* "THIS PERMIT OF LEASE IS ISSUED UNDER THE AUTHORITY OF SECTION 416, PUBLIC LAW 111-88 AND CONTAINS THE SAME MANDATORY TERMS AND CONDITIONS AS THE EXPIRED OR TRANSFERRED PERMIT OR LEASE. THIS PERMIT OR LEASE MAY BE CANCELED, SUSPENDED, OR MODIFIED, IN WHOLE OR IN PART TO MEET THE REQUIREMENTS OF APPLICABLE LAWS AND REGULATIONS."

* A MINIMUM 4 INCH STUBBLE HEIGHT WILL BE LEFT ON HERBACEOUS VEGETATION WITHIN THE RIPARIAN AREA ALONG .5 MILES OF WILLIAMS CREEK IN ALLOTMENT #609 AT THE END OF THE GROWING SEASON AS IDENTIFIED IN THE FISHERIES OBJECTIVE OF THE OWYHEE EIS.

* THE NUMBER OF LIVESTOCK AND SEASON OF USE ON THE FENCED IN FEDERAL RANGE (FFR) ALLOTMENT #609 IS AT YOUR DISCRETION WITH THE EXCEPTION OF THE NORTHERN MOST PASTURE OF THIS ALLOTMENT. THIS PASTURE IS LOCATED IN T.7S., R.5W. SECTIONS 4 & 9 AND CONTAINS WILLIAMS CREEK. SEASON OF USE IN THIS PASTURE WILL BE FROM APRIL 1 TO JULY 15 EACH YEAR WITH GRAZING USE (ACTIVE PREFERENCE) NOT TO EXCEED 32 AUM'S.

* TURNOUT IS SUBJECT TO BOISE DISTRICT RANGE READINESS CRITERIA.

* YOUR CERTIFIED ACTUAL USE REPORT IS DUE WITHIN 15 DAYS OF COMPLETING YOUR AUTHORIZED ANNUAL GRAZING USE.

APPLICATION FOR GRAZING PERMIT RENEWAL

- * SALT AND/OR SUPPLEMENT SHALL NOT BE PLACED WITHIN ONE QUARTER (1/4) MILE OF SPRINGS, STREAMS, MEADOWS, ASPEN STANDS, PLAYAS, OR WATER DEVELOPMENTS.
- * CHANGES TO THE SCHEDULED USE REQUIRES PRIOR APPROVAL.
- * TRAILING ACTIVITIES MUST BE COORDINATED WITH THE BLM PRIOR TO INITIATION. A TRAILING PERMIT OR SIMILAR AUTHORIZATION MAY BE REQUIRED PRIOR TO CROSSING PUBLIC LANDS.
- * LIVESTOCK ENCLOSURES LOCATED WITHIN YOUR GRAZING ALLOTMENTS ARE CLOSED TO ALL DOMESTIC GRAZING USE.
- * RANGE IMPROVEMENTS MUST BE MAINTAINED IN ACCORDANCE WITH THE COOPERATIVE AGREEMENTS AND RANGE IMPROVEMENT PERMITS IN WHICH YOU ARE A SIGNATOR OR ASSIGNEE. ALL MAINTENANCE OF RANGE IMPROVEMENTS WITHIN WILDERNESS STUDY AREA REQUIRES PRIOR CONSULTATION WITH THE AUTHORIZED OFFICER.
- * ALL APPROPRIATE DOCUMENTATION REGARDING BASE PROPERTY LEASES, LANDS OFFERED FOR EXCHANGE-OF-USE, AND LIVESTOCK CONTROL AGREEMENTS MUST BE APPROVED PRIOR TO TURN OUT. LEASES OF LAND AND/OR LIVESTOCK MUST BE NOTARIZED PRIOR TO SUBMISSION AND BE IN COMPLIANCE WITH BOISE DISTRICT POLICY.
- * FAILURE TO PAY THE GRAZING BILL WITHIN 15 DAYS OF THE DUE DATE SPECIFIED SHALL RESULT IN A LATE FEE ASSESSMENT OF \$25.00 OR 10% PERCENT OF THE GRAZING BILL, WHICHEVER IS GREATER, NOT TO EXCEED \$250.00. PAYMENT MADE LATER THAN 15 DAYS AFTER THE DUE DATE SHALL INCLUDE THE APPROPRIATE LATE FEE ASSESSMENT. FAILURE TO MAKE PAYMENT WITHIN 30 DAYS MAY BE A VIOLATION OF 43 CFR 4140.1(B)(1) AND SHALL RESULT IN ACTION BY THE AUTHORIZED OFFICER UNDER 43 CFR 4150.1 AND 4160.1
- * LIVESTOCK GRAZING WILL BE IN ACCORDANCE WITH YOUR ALLOTMENT GRAZING SCHEMATIC(S). CHANGES IN SCHEDULED PASTURE USE DATES WILL REQUIRE PRIOR AUTHORIZATION.
- * UTILIZATION MAY NOT EXCEED 50% OF THE CURRENT YEAR'S GROWTH.

ALLOT NO CONDITIONS

NO ALLOTMENT TERMS OR CONDITIONS

NO OFFICE TERMS OR CONDITIONS

ALLOTMENT SUMMARY (AUM'S)

<u>ALLOTMENT</u>	<u>ACTIVE AUMS</u>	<u>SUSPENDED AUMS</u>	<u>TEMP SUSPENDED AUMS</u>	<u>PERMITTED USE</u>
00509 BOULDER	225	0	0	225
00609 BERRETT FFR	114	0	0	114

Standard
Terms and Conditions

1. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with all the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
2. They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations.
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
 - c. A transfer of grazing preference by the permittee/lessee to another party.
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described.
 - e. Repeated willful unauthorized grazing use.
3. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits or leases when completed.
4. Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.
5. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
6. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
7. Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
8. Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.
9. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.
10. Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
11. No Member of, or Delegate to, Congress or Resident Commissioner, after his election of appointment, or either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department of the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App.1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statutes (41 U.S.C. 22; 18 U.S.C. Sections 431-433, and 43 CFR Part 7), enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

SIGNATURE OF PERMITTEE:



DATE :

8-11-11

Title 18, U.S.C., Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED AT
OWYHEE FIELD OFFICE

Form 4130-2a
(February 1999)

2011 MAY 31 AM 10:43

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE ID
OFFICE LLIDB03000
AUTH NUMBER 1101412
PREFERENCE CODE 03
DATE PRINTED 05/25/2011

APPLICATION FOR GRAZING PERMIT RENEWAL

RETURN BY: June 24, 2011

BUREAU OF LAND MANAGEMENT
OWYHEE FIELD OFFICE
20 FIRST AVE WEST
MARSING ID 83639

TOM GLUCH
BOX 257
JORDAN VALLEY OR 97910

This application for grazing permit renewal describes your current permit schedule(s) and summarizes your permitted use. If you wish to apply for renewal of this permit, sign and return this form by the date shown above. Contact your local BLM office at 208-896-5912 if you have questions.

MANDATORY TERMS AND CONDITONS

ALLOTMENT	PASTURE	LIVESTOCK		GRAZING BEGIN	PERIOD END	%PL	TYPE USE	AUMS
		NUMBER	KIND					
00466	GLUCH FFR	103	CATTLE	12/01	12/31	100	ACTIVE	105
00553	GLUCH	50	CATTLE	03/16	04/15	100	ACTIVE	51
00552	GLASS CREEK	49	CATTLE	04/16	05/31	87	ACTIVE	64

OTHER TERMS AND CONDITIONS:

AS A RESULT OF JUDGE WINMILL'S FEBRUARY 29, 2000, MEMORANDUM DECISION AND ORDER THE FOLLOWING INTERIM TERMS AND CONDITIONS NOW APPLY TO THIS GRAZING AUTHORIZATION:

- (1) KEY HERBACEOUS RIPARIAN VEGETATION, WHERE STREAMBANK STABILITY IS DEPENDANT UPON IT, WILL HAVE A MINIMUM STUBBLE HEIGHT OF 4 INCHES ON THE STREAMBANK, ALONG THE GREENLINE, AFTER THE GROWING SEASON;
- (2) KEY RIPARIAN BROWSE VEGETATION WILL NOT BE USED MORE THAN 50% OF THE CURRENT ANNUAL TWIG GROWTH THAT IS WITHIN REACH OF THE ANIMALS;
- (3) KEY HERBACEOUS RIPARIAN VEGETATION ON RIPARIAN AREAS, OTHER THAN THE STREAMBANKS, WILL NOT BE GRAZED MORE THAN 50% DURING THE GROWING SEASON, OR 60% DURING THE DORMANT SEASON; AND
- (4) STREAMBANK DAMAGE ATTRIBUTABLE TO GRAZING LIVESTOCK WILL BE LESS THAN 10% ON A STREAM SEGMENT.

THE NUMBER OF LIVESTOCK AND SEASON OF USE ON THE FENCED IN FEDERAL RANGE (FFR) ALLOTMENT #0466 IS AT YOUR DISCRETION.

ALLOT NO CONDITIONS

NO ALLOTMENT TERMS OR CONDITIONS

CASE FILE COPY

APPLICATION FOR GRAZING PERMIT RENEWAL

AUTH NUMBER: 1101412
DATE PRINTED: 5/25/2011

NO OFFICE TERMS OR CONDITIONS

ALLOTMENT SUMMARY (AUM'S)

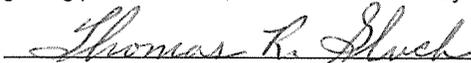
<u>ALLOTMENT</u>	<u>ACTIVE AUMS</u>	<u>SUSPENDED AUMS</u>	<u>TEMP SUSPENDED AUMS</u>	<u>PERMITTED USE</u>
00466 GLUCH FFR	105	0	0	105
00552 GLASS CREEK	65	0	0	65
00553 GLUCH	50	0	0	50

APPLICATION FOR GRAZING PERMIT RENEWAL

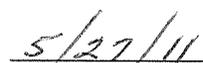
**Standard
Terms and Conditions**

1. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with all the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
2. They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations.
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
 - c. A transfer of grazing preference by the permittee/lessee to another party.
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described.
 - e. Repeated willful unauthorized grazing use.
3. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits or leases when completed.
4. Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.
5. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
6. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
7. Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
8. Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.
9. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.
10. Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
11. No Member of, or Delegate to, Congress or Resident Commissioner, after his election of appointment, or either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department of the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App.1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statutes (41 U.S.C. 22; 18 U.S.C. Sections 431-433, and 43 CFR Part 7), enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

SIGNATURE OF PERMITTEE:



DATE :



Title 18, U.S.C., Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED
OWYHEE FIELD OFFICE

AUTH NUMBER: 1101510
DATE PRINTED: 5/25/2011

Form 4130-2a
(February 1999)

2011 JUN 21 AM 11:35

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE ID
OFFICE LLIDB03000
AUTH NUMBER 1101510
PREFERENCE CODE 03
DATE PRINTED 05/25/2011

APPLICATION FOR GRAZING PERMIT RENEWAL

RETURN BY: June 24, 2011

BUREAU OF LAND MANAGEMENT
OWYHEE FIELD OFFICE
20 FIRST AVE WEST
MARSING ID 83639

MORGAN PROPERTIES LP DBA MORGAN RANCHES
C/O DAVID RUTAN
BOX 277
JORDAN VALLEY OR 97910

This application for grazing permit renewal describes your current permit schedule(s) and summarizes your permitted use. If you wish to apply for renewal of this permit, sign and return this form by the date shown above. Contact your local BLM office at 208-896-5912 if you have questions.

MANDATORY TERMS AND CONDITONS

ALLOTMENT	PASTURE	LIVESTOCK		GRAZING BEGIN	PERIOD END	%PL	TYPE USE	AUMS
		NUMBER	KIND					
00505	MORGAN	8	HORSE	04/01	07/15	82	ACTIVE	23
00576	JIM'S PEAK FFR	55	CATTLE	12/01	12/31	100	ACTIVE	56
00577	BOGUS CREEK FFR	24	CATTLE	12/01	12/31	100	ACTIVE	24
00594	BIG FIELD FFR	142	CATTLE	12/01	12/31	100	ACTIVE	145
00595	COMBINATION CREE	103	CATTLE	06/01	10/31	79	ACTIVE	409
00600	SOUTH MOUNTAIN I	100	CATTLE	04/20	11/30	69	ACTIVE	510
00627	RAIL CREEK FFR	13	CATTLE	12/01	12/31	100	ACTIVE	13
00659	WALT'S POND FFR	75	CATTLE	12/01	12/31	100	ACTIVE	76
00505	MORGAN	60	CATTLE	03/16	11/30	82	ACTIVE	421

OTHER TERMS AND CONDITIONS:

" IN ACCORDANCE WITH SECTION 1101(A)(4), SECTION 1104 AND SECTION 1106 OF DIVISION B, TITLE 1 OF THE DEPARTMENT OF DEFENSE AND FULL-YEAR CONTINUING APPROPRIATIONS ACT, 2011 ENACTED BY THE UNITED STATES

CONGRESS ON APRIL 14, 2011, THIS PERMIT OR LEASE IS ISSUED UNDER THE AUTHORITY OF SECTION 416, PUBLIC LAW 111-88 AND CONTAINS THE SAME MANDATORY TERMS AND CONDITIONS AS THE EXPIRED OR TRANSFERRED PERMIT OR LEASE. THIS PERMIT OR LEASE MAY BE CANCELED, SUSPENDED, OR MODIFIED, IN WHOLE OR IN PART TO MEET THE REQUIREMENTS OF APPLICABLE LAWS AND REGULATIONS."

* THE NUMBER OF LIVESTOCK AND SEASON OF USE ON THE FENCED IN FEDERAL RANGE (FFR) ALLOTMENTS #0576 AND #0577 AND #0594 AND #0627 AND #0659 IS AT YOUR DISCRETION.

* A MINIMUM 4 INCH STUBBLE HEIGHT WILL BE LEFT ON HERBACEOUS VEGETATION WITHIN THE RIPARIAN AREA ALONG 2.2 MILES OF JORDAN CREEK AND 1.5 MILES OF WILLIAMS CREEK IN ALLOTMENT #0505, 1.0 MILES OF

NORTH FORK OF BOULDER CREEK OF ALLOTMENT #0595 AND .75 MILES OF SOUTH MOUNTAIN CREEK IN ALLOTMENT #0600 AT THE END OF THE GROWING SEASON AS IDENTIFIED IN THE FISHERIES OBJECTIVE OF THE OWYHEE EIS.

would like to see this removed. This stream is not perennial and dries up every year.

- * UTILIZATION IN ALLOTMENT #0505 IS LIMITED TO 30% (BIOLOGICAL LIMITS) AS PER GRAZING DECISION DATED MAY 15, 1985.
- * TURNOUT IS SUBJECT TO BOISE DISTRICT RANGE READINESS CRITERIA.
- * YOUR CERTIFIED ACTUAL USE REPORT IS DUE WITHIN 15 DAYS OF COMPLETING YOUR AUTHORIZED ANNUAL GRAZING USE.
- * SALT AND/OR SUPPLEMENT SHALL NOT BE PLACED WITHIN ONE QUARTER (1/4) MILE OF SPRINGS, STREAMS, MEADOWS, ASPEN STANDS, PLAYAS, OR WATER DEVELOPMENTS.
- * CHANGES TO THE SCHEDULED USE REQUIRES PRIOR APPROVAL .
- * TRAILING ACTIVITIES MUST BE COORDINATED WITH THE BLM PRIOR TO INITIATION. A TRAILING PERMIT OR SIMILAR AUTHORIZATION MAY BE REQUIRED PRIOR TO CROSSING PUBLIC LANDS.
- * LIVESTOCK ENCLOSURES LOCATED WITHIN YOUR GRAZING ALLOTMENTS ARE CLOSED TO ALL DOMESTIC GRAZING USE.
- * RANGE IMPROVEMENTS MUST BE MAINTAINED IN ACCORDANCE WITH THE COOPERATIVE AGREEMENTS AND RANGE IMPROVEMENT PERMITS IN WHICH YOU ARE A SIGNATOR OR ASSIGNEE. ALL MAINTENANCE OF RANGE IMPROVEMENTS WITHIN A WILDERNESS STUDY AREA REQUIRES PRIOR CONSULTATION WITH THE AUTHORIZED OFFICER.
- * ALL APPROPRIATE DOCUMENTATION REGARDING BASE PROPERTY LEASES, LANDS OFFERED FOR EXCHANGE-OF-USE, AND LIVESTOCK CONTROL AGREEMENTS MUST BE APPROVED PRIOR TO TURN OUT. LEASES OF LAND AND/OR LIVESTOCK MUST BE NOTARIZED PRIOR TO SUBMISSION AND BE IN COMPLIANCE WITH BOISE DISTRICT POLICY.
- * FAILURE TO PAY THE GRAZING BILL WITHIN 15 DAYS OF THE DUE DATE SPECIFIED SHALL RESULT IN A LATE FEE ASSESSMENT OF \$25.00 OR 10 PERCENT OF THE GRAZING BILL, WHICHEVER IS GREATER, NOT TO EXCEED \$250.00. PAYMENT MADE LATER THAN 15 DAYS AFTER THE DUE DATE SHALL INCLUDE THE APPROPRIATE LATE FEE ASSESSMENT. FAILURE TO MAKE PAYMENT WITHIN 30 DAYS MAY BE A VIOLATION OF 43 CFR 4140.1(B)(1) AND SHALL RESULT IN ACTION BY THE AUTHORIZED OFFICER UNDER 43 CFR 4150.1 AND 4160.1
- * LIVESTOCK GRAZING WILL BE IN ACCORDANCE WITH YOUR ALLOTMENT GRAZING SCHEMATIC(S). CHANGES IN SCHEDULED PASTURE USE DATES WILL REQUIRE PRIOR AUTHORIZATION.
- * UTILIZATION MAY NOT EXCEED 50% OF THE CURRENT YEAR'S GROWTH.
- * PURSUANT TO 43 CFR 10.4(B) YOU MUST NOTIFY THE BLM FIELD MANAGER, BY TELEPHONE WITH WRITTEN CONFIRMATION, IMMEDIATELY UPON THE DISCOVERY OF HUMAN REMAINS, FUNERARY OBJECTS, SACRED OBJECTS, OR OBJECTS OF

CULTURAL PATRIMONY (AS DEFINED IN 43 CFR 10.2) ON FEDERAL LANDS.
PURSUANT TO 43 CFR 10.4(C), YOU MUST IMMEDIATELY STOP ANY ONGOING
ACTIVITIES CONNECTED WITH SUCH DISCOVERY AND MAKE A REASONABLE
EFFORT TO PROTECT THE DISCOVERED REMAINS OR OBJECTS.

ALLOT NO CONDITIONS

NO ALLOTMENT TERMS OR CONDITIONS

NO OFFICE TERMS OR CONDITIONS

ALLOTMENT SUMMARY (AUM'S)

<u>ALLOTMENT</u>	<u>ACTIVE AUMS</u>	<u>SUSPENDED AUMS</u>	<u>TEMP SUSPENDED AUMS</u>	<u>PERMITTED USE</u>
00505 MORGAN	446	0	0	446
00576 JIM'S PEAK FFR	56	0	0	56
00577 BOGUS CREEK FFR	24	0	0	24
00594 BIG FIELD FFR	147	21	0	168
00595 COMBINATION CREEK	410	0	0	410
00600 SOUTH MOUNTAIN IND.	511	0	0	511
00627 RAIL CREEK FFR	13	0	0	13
00659 WALT'S POND FFR	76	0	0	76

Standard
Terms and Conditions

1. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with all the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
2. They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations.
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
 - c. A transfer of grazing preference by the permittee/lessee to another party.
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described.
 - e. Repeated willful unauthorized grazing use.
3. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits or leases when completed.
4. Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.
5. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
6. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
7. Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
8. Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.
9. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.
10. Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
11. No Member of, or Delegate to, Congress or Resident Commissioner, after his election of appointment, or either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department of the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App.1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statutes (41 U.S.C. 22; 18 U.S.C. Sections 431-433, and 43 CFR Part 7), enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

SIGNATURE OF PERMITTEE:

David R. Kuter

DATE :

6-21-11

Title 18, U.S.C., Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

CASE FILE COPY

APPLICATION FOR GRAZING PERMIT RENEWAL

AUTH NUMBER: 1104126
DATE PRINTED: 5/25/2011

Form 4130-2a
(February 1999)

RECEIVED AT
OWYHEE FIELD OFFICE
June 28
2011 MAY 23 PM 12:35

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE ID
OFFICE LLIDB03000
AUTH NUMBER 1104126
PREFERENCE CODE 03
DATE PRINTED 05/25/2011

APPLICATION FOR GRAZING PERMIT RENEWAL

RETURN BY: June 24, 2011

BUREAU OF LAND MANAGEMENT
OWYHEE FIELD OFFICE
20 FIRST AVE WEST
MARSING ID 83639

WF & CAROLYN D. PETON
PO BOX 998
VENETA OR 97487

This application for grazing permit renewal describes your current permit schedule(s) and summarizes your permitted use. If you wish to apply for renewal of this permit, sign and return this form by the date shown above. Contact your local BLM office at 208-896-5912 if you have questions.

MANDATORY TERMS AND CONDITONS

ALLOTMENT	PASTURE	LIVESTOCK		GRAZING BEGIN	PERIOD END	%PL	TYPE USE	AUMS
		NUMBER	KIND					
00544	FELTWELL	69	CATTLE	05/01	08/31	100	ACTIVE	279

OTHER TERMS AND CONDITIONS:

- " IN ACCORDANCE WITH SECTION 1101(A)(4), SECTION 1104 AND SECTION 1106 OF DIVISION B, TITLE 1 OF THE DEPARTMENT OF DEFENSE AND FULL-YEAR CONTINUING APPROPRIATIONS ACT, 2011 ENACTED BY THE UNITED STATES CONGRESS ON APRIL 14, 2011, THIS PERMIT OR LEASE IS ISSUED UNDER THE AUTHORITY OF SECTION 416, PUBLIC LAW 111-88 AND CONTAINS THE SAME MANDATORY TERMS AND CONDITIONS AS THE EXPIRED OR TRANSFERRED PERMIT OR LEASE. THIS PERMIT OR LEASE MAY BE CANCELED, SUSPENDED, OR MODIFIED, IN WHOLE OR IN PART TO MEET THE REQUIREMENTS OF APPLICABLE LAWS AND REGULATIONS."
- * ALL GRAZING USE WITHIN THE 0544 ALLOTMENT WILL BE IN ACCORDANCE WITH YOUR EXISTING GRAZING DECISION.
 - * TURN OUT IS SUBJECT TO BOISE DISTRICT RANGE READINESS CRTIERIA.
 - * YOUR CERTIFIED ACTUAL USE REPORT IS DUE 15 DAYS AFTER AUTHORIZED USE.
 - * SALT AND/OR SUPPLEMENT SHALL NOT BE PLACED WITHIN ONE QUARTER (1/4) MILE OF SPRINGS, STREAMS MEADOWS, ASPEN STANDS, PLAYAS OR WATER DEVELOPMENTS.
 - * CHANGES TO THE SCHEDULED USE REQUIRES PRIOR APPROVAL.

- * TRAILING ACTIVITIES MUST BE COORDINATED WITH THE BLM PRIOR TO INITIATION. A TRAILING PERMIT OR SIMILAR AUTHORIZATION MAY BE REQUIRED PRIOR TO CROSSING PUBLIC LANDS.
- * LIVESTOCK EXCLOSURES LOCATED WITHIN YOUR GRAZING ALLOTMENT(S) ARE CLOSED TO ALL DOMESTIC GRAZING USE.
- * RANGE IMPROVEMENTS MUST BE MAINTAINED IN ACCORDANCE WITH THE COOPERATIVE AGREEMENTS AND RANGE IMPROVEMENT PERMITS IN WHICH YOU ARE A SIGNATOR OR ASSIGNEE. ALL MAINTENANCE OF RANGE IMPROVEMENTS WITHIN A WILDERNESS STUDY AREA REQUIRES PRIOR CONSULTATION WITH THE AUTHORIZED OFFICER.
- * ALL APPROPRIATE DOCUMENTATION REGARDING BASE PROPERTY LEASES, LANDS OFFERED FOR EXCHANGE-OF-USE, AND LIVESTOCK CONTROL AGREEMENTS MUST BE APPROVED PRIOR TO TURN-OUT. LEASES OF LAND AND/OR LIVESTOCK MUST BE NOTARIZED PRIOR TO SUBMISSION AND BE IN COMPLIANCE WITH BOISE DISTRICT POLICY.
- * FAILURE TO PAY THE GRAZING BILL WITHIN 15 DAYS OF THE DUE DATE SPECIFIED SHALL RESULT IN A LATE FEE ASSESSMENT OF \$25.00 OR 10 PERCENT OF THE GRAZING BILL, WHICHEVER IS GREATER, NOT TO EXCEED \$250.00 PAYMENT MADE LATER THAN 15 DAYS AFTER THE DUE DATE SHALL INCLUDE THE APPROPRIATE LATE FEE ASSESSMENT. FAILURE TO MAKE PAYMENT WITHIN 30 DAYS MAY BE A VIOLATION OF 43 CFR 4140.1(B)(1) AND SHALL RESULT IN ACTION BY THE AUTHORIZED OFFICER UNDER 43 CFR 4150.1 AND 4160.1
- * LIVESTOCK GRAZING WILL BE IN ACCORDANCE WITH YOUR ALLOTMENT GRAZING SCHEMATIC(S). CHANGES IN SCHEDULED PASTURE USE DATES WILL REQUIRE PRIOR AUTHORIZATION.
- * UTILIZATION MAY NOT EXCEED 50% OF THE CURRENT YEAR'S GROWTH.

ALLOT NO CONDITIONS

NO ALLOTMENT TERMS OR CONDITIONS

NO OFFICE TERMS OR CONDITIONS

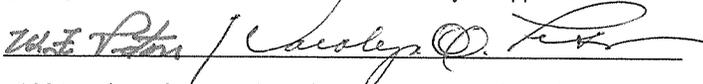
ALLOTMENT SUMMARY (AUM'S)

<u>ALLOTMENT</u>	<u>ACTIVE AUMS</u>	<u>SUSPENDED AUMS</u>	<u>TEMP SUSPENDED AUMS</u>	<u>PERMITTED USE</u>
00544 FELTWELL	279	0	0	279

**Standard
Terms and Conditions**

1. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with all the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
2. They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations.
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
 - c. A transfer of grazing preference by the permittee/lessee to another party.
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described.
 - e. Repeated willful unauthorized grazing use.
3. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans **MUST** be incorporated in permits or leases when completed.
4. Those holding permits or leases **MUST** own or control and be responsible for the management of livestock authorized to graze.
5. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
6. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
7. Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
8. Livestock grazing use that is different from that authorized by a permit or lease **MUST** be applied for prior to the grazing period and **MUST** be filed with and approved by the authorized officer before grazing use can be made.
9. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.
10. Grazing fee payments are due on the date specified on the billing notice and **MUST** be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
11. No Member of, or Delegate to, Congress or Resident Commissioner, after his election of appointment, or either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department of the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App.1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statutes (41 U.S.C. 22; 18 U.S.C. Sections 431-433, and 43 CFR Part 7), enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

SIGNATURE OF PERMITTEE:



DATE : 5-30-11

Title 18, U.S.C., Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED AT
OWYHEE FIELD OFFICE

Form 4130-2a
(February 1999)

2011 JUN -7 AM 8:46

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE ID
OFFICE LLIDB03000
AUTH NUMBER 1101462
PREFERENCE CODE 03
DATE PRINTED 05/25/2011

APPLICATION FOR GRAZING PERMIT RENEWAL

RETURN BY: June 24, 2011

BUREAU OF LAND MANAGEMENT
OWYHEE FIELD OFFICE
20 FIRST AVE WEST
MARSING ID 83639

TERRY WARN
BOX 235
JORDAN VALLEY OR 97910

This application for grazing permit renewal describes your current permit schedule(s) and summarizes your permitted use. If you wish to apply for renewal of this permit, sign and return this form by the date shown above. Contact your local BLM office at 208-896-5912 if you have questions.

MANDATORY TERMS AND CONDITONS

ALLOTMENT	PASTURE	LIVESTOCK		GRAZING BEGIN	PERIOD END	%PL	TYPE USE	AUMS
		NUMBER	KIND					
00552	GLASS CREEK	49	CATTLE	04/16	05/31	100	ACTIVE	74
00596	WARN	74	CATTLE	05/01	05/31	100	ACTIVE	75
00567	W. MAHER FFR	118	CATTLE	12/01	12/31	100	ACTIVE	120

OTHER TERMS AND CONDITIONS:

THE NUMBER OF LIVESTOCK AND SEASON OF USE ON THE FENCED IN FEDERAL RANGE (FFR) ALLOTMENT 0567 IS AT YOUR DISCRETION.

TURN OUT IS SUBJECT TO BOISE DISTRICT RANGE READINESS CRTIERIA.

YOU ARE REQUIRED TO PROPERLY COMPLETE, SIGN, AND DATE AN ACTUAL GRAZING USE REPORT FORM (4130-5) FOR EACH ALLOTMENT. THE COMPLETED FORM(S) MUST BE SUBMITTED TO THIS OFFICE WITHIN 15 DAYS FROM THE LAST DAY OF YOUR AUTHORIZED ANNUAL GRAZING USE.

SUPPLEMENTAL FEEDING IS LIMITED TO SALT, MINERAL, AND/OR PROTEIN IN BLOCK, GRANULAR, OR LIQUID FORM. IF USED, THESE SUPPLEMENTS MUST BE PLACED AT LEAST ONE-QUARTER 1/4 MILE AWAY FROM ANY RIPARIAN AREA, SPRING, STREAM, MEADOW, ASPEN STAND, PLAYA, SPECIAL STATUS PLANT POPULATION, OR WATER DEVELOPMENT.

PURSUANT TO 43 CFR 10.4(B) YOU MUST NOTIFY THE BLM FIELD MANAGER, BY TELEPHONE WITH WRITTEN CONFIRMATION, IMMEDIATELY UPON THE DISCOVERY OF HUMAN REMAINS, FUNERARY OBJECTS, SACRED OBJECTS, OR OBJECTS OF CULTURAL PATRIMONY (AS DEFINED IN 43 CFR 10.2) ON FEDERAL LANDS. PURSUANT TO 43 CFR 10.4(C), YOU MUST IMMEDIATELY STOP ANY ONGOING ACTIVITIES CONNECTED WITH SUCH DISCOVERY AND MAKE A REASONABLE EFFORT TO PROTECT THE DISCOVERED REMAINS OR OBJECTS.

AS A RESULT OF JUDGE WINMILL'S FEBRUARY 29, 2000, MEMORANDUM DECISION

AND ORDER THE FOLLOWING INTERIM TERMS AND CONDITIONS NOW APPLY TO THIS GRAZING AUTHORIZATION:

- 1) KEY HERBACEOUS RIPARIAN VEGETATION, WHERE STREAMBANK STABILITY IS DEPENDENT UPON IT, WILL HAVE A MINIMUM STUBBLE HEIGHT OF 4 INCHES ON THE STREAMBANK, ALONG THE GREENLINE, AFTER THE GROWING SEASON;
- 2) KEY RIPARIAN BROWSE VEGETATION WILL NOT BE USED MORE THAN 50% OF THE CURRENT ANNUAL TWIG GROWTH THAT IS WITHIN REACH OF THE ANIMALS;
- 3) KEY HERBACEOUS RIPARIAN VEGETATION ON RIPARIAN AREAS, OTHER THAN THE STREAMBANKS, WILL NOT BE GRAZED MORE THAN 50% DURING THE GROWING SEASON, OR 60% DURING THE DORMANT SEASON; AND
- 4) STREAMBANK DAMAGE ATTRIBUTABLE TO GRAZING LIVESTOCK WILL BE LESS THAN 10% ON A STREAM SEGMENT.

ALLOT NO CONDITIONS

NO ALLOTMENT TERMS OR CONDITIONS

NO OFFICE TERMS OR CONDITIONS

ALLOTMENT SUMMARY (AUM'S)

<u>ALLOTMENT</u>	<u>ACTIVE AUMS</u>	<u>SUSPENDED AUMS</u>	<u>TEMP SUSPENDED AUMS</u>	<u>PERMITTED USE</u>
00552 GLASS CREEK	74	0	0	74
00567 W. MAHER FFR	120	0	0	120
00596 WARN	74	0	0	74

**Standard
Terms and Conditions**

1. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with all the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
2. They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations.
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
 - c. A transfer of grazing preference by the permittee/lessee to another party.
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described.
 - e. Repeated willful unauthorized grazing use.
3. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits or leases when completed.
4. Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.
5. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
6. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
7. Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
8. Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.
9. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.
10. Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
11. No Member of, or Delegate to, Congress or Resident Commissioner, after his election of appointment, or either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department of the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App.1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statutes (41 U.S.C. 22; 18 U.S.C. Sections 431-433, and 43 CFR Part 7), enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

SIGNATURE OF PERMITTEE:

Jerry WarnDATE : 5/27/11

Title 18, U.S.C., Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

CASE FILE COPY

APPLICATION FOR GRAZING PERMIT RENEWAL

RECEIVED AT
OWYHEE FIELD OFFICE

AUTH NUMBER: 1102867
DATE PRINTED: 5/25/2011

Form 4130-2a
(February 1999)

2011 JUN 14 AM 9:56

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE ID
OFFICE LLIDB03000
AUTH NUMBER 1102867
PREFERENCE CODE 03
DATE PRINTED 05/25/2011

APPLICATION FOR GRAZING PERMIT RENEWAL

RETURN BY: June 24, 2011

BUREAU OF LAND MANAGEMENT
OWYHEE FIELD OFFICE
20 FIRST AVE WEST
MARSING ID 83639

WILLIAMS, PHILLIP & WILLIAMS, BENJAMIN
A.
1807 DANNER LOOP ROAD
JORDAN VALLEY OR 97910

This application for grazing permit renewal describes your current permit schedule(s) and summarizes your permitted use. If you wish to apply for renewal of this permit, sign and return this form by the date shown above. Contact your local BLM office at 208-896-5912 if you have questions.

MANDATORY TERMS AND CONDITONS

ALLOTMENT	PASTURE	LIVESTOCK		GRAZING BEGIN	PERIOD END	%PL	TYPE USE	AUMS
		NUMBER	KIND					
00503	FLINT CREEK	10	CATTLE	06/01	10/31	100	ACTIVE	50
00640	BACHELOR FLAT FF	125	CATTLE	12/01	12/31	100	ACTIVE	127
00526	BOULDER FLAT	64	CATTLE	04/16	10/15	89	ACTIVE	343

OTHER TERMS AND CONDITIONS:

THE NUMBER OF LIVESTOCK AND SEASON OF USE ON THE FENCED FEDERAL RANGE (FFR) ALLOTMENT #0640 IS AT YOUR DISCRETION.

A MINIMUM 4 INCH STUBBLE HEIGHT WILL BE LEFT ON HERBACEOUS VEGETATION WITHIN THE RIPARIAN AREA ALONG .75 MILES OF BOULDER CREEK AND 1.24 MILES OF SOUTH MOUNTAIN CREEK IN ALLOTMENT #0526 AT THE END OF THE GROWING SEASON AS IDENTIFIED IN THE FISHERIES OBJECTIVE IN THE OWYHEE EIS.

LIVESTOCK TURNOUT DATES ARE SUBJECT TO BOISE DISTRICT RANGE READINESS CRITERIA.

YOU ARE REQUIRED TO PROPERLY COMPLETE, SIGN AND DATE AN ACTUAL USE REPORT FORM (BLM FORM 4130-5) FOR EACH ALLOTMENT, THE COMPLETED FORM MUST BE SUBMITTED TO THIS OFFICE WITHIN 15 DAYS FROM THE LAST DAY OF YOUR AUTHORIZED ANNUAL GRAZING USE.

SUPPLEMENTAL FEEDING IS LIMITED TO SALT, MINERAL, AND/OR PROTEIN IN BLOCK, GRANULAR, OR LIQUID FORM. IS USED, THESE SUPPLEMENTS MUST BE PLACED AT LEAST ONE-QUARTER (1/4) MILE AWAY FROM ANY RIPARIAN AREA, SPRING, STREAM, MEADOW, ASPEN STAND, SENSITIVE PLANT SPECIES, PLAYA, OR WATER DEVELOPMENT.

PURSUANT TO 43 CFR 10.4(B), YOU MUST NOTIFY THE BLM FIELD MANAGER, BY TELEPHONE WITH WRITTEN CONFIRMATION, IMMEDIATELY UPON DISCOVERY OF HUMAN REMAINS, FUNERARY OBJECTS, SACRED OBJECTS, OR OBJECTS OF

OF CULTURAL PATRIMONY (AS DEFINED IN 43 CFR 10.2) ON FEDERAL LAND. PURSUANT TO 43 CFR 10.4(C), YOU MUST IMMEDIATELY STOP ANY ONGOING ACTIVITIES CONNECTED WITH SUCH DISCOVERY AND MAKE A REASONABLE EFFORT TO PROTECT THE DISCOVERED REMAINS OR OBJECTS.

CHANGES TO THE SCHEDULED USE REQUIRES PRIOR APPROVAL.

TRAILING ACTIVITIES MUST BE COORDINATED WITH THE BLM PRIOR TO INITIATION. A TRAILING PERMIT OR SIMILAR AUTHORIZATION MAY BE REQUIRED PRIOR TO CROSSING PUBLIC LANDS.

LIVESTOCK ENCLOSURES LOCATED WITHIN YOUR GRAZING ALLOTMENTS ARE CLOSED TO ALL DOMESTIC GRAZING USE.

RANGE IMPROVEMENTS MUST BE MAINTAINED IN ACCORDANCE WITH THE COOPERATIVE AGREEMENTS AND RANGE IMPROVEMENT PERMITS IN WHICH YOU ARE A SIGNATOR OR ASSIGNEE. ALL MAINTENANCE OF RANGE IMPROVEMENTS WITHIN A WILDERNESS STUDY AREA REQUIRES PRIOR CONSULTATION WITH THE AUTHORIZED OFFICER.

ALL APPROPRIATE DOCUMENTATION REGARDING BASE PROPERTY LEASES, LANDS OFFERED FOR EXCHANGE OF USE, AND LIVESTOCK CONTROL AGREEMENTS MUST BE APPROVED PRIOR TO TURN OUT. LEASES OF LAND AND/OR LIVESTOCK MUST BE NOTARIZED PRIOR TO SUBMISSION AND BE IN COMPLIANCE WITH BOISE DISTRICT POLICY.

LIVESTOCK GRAZING WILL BE IN ACCORDANCE WITH YOUR ALLOTMENT GRAZING SCHEMATIC(S). CHANGES IN SCHEDULED PASTURE USE DATES WILL REQUIRE PRIOR AUTHORIZATION.

UTILIZATION MAY NOT EXCEED 50% OF THE CURRENT YEAR'S GROWTH.

OTHER TERMS AND CONDITIONS SPECIFIC TO THE FLINT CREEK ALLOTMENT (#503): LIVESTOCK GRAZING IS NOT AUTHORIZED IN ENCLOSURES WITHIN THE FLINT CREEK (#503) ALLOTMENT INCLUDING SPRING ENCLOSURES AND RIPARIAN ENCLOSURES.

GRAZING IN THE FLINT CREEK ALLOTMENT (503) WILL BE IN ACCORDANCE WITH FINAL DECISION DATED NOVEMBER 4, 2003.

LIVESTOCK GRAZING IN THE BACHELOR FLAT FFR (640) & BOULDER FLAT (526) ALLOTMENTS ARE AUTHORIZED IN ACCORDANCE WITH JUDGE WINMILL'S FEBRUARY 29, 2000, MEMORANDUM DECISION AND ORDER, WHICH INCLUDES THE FOLLOWING INTERIM TERMS AND CONDITIONS:

- 1) KEY HERBACEOUS RIPARIAN VEGETATION, WHERE STREAMBANK STABILITY IS DEPENDENT UPON IT, WILL HAVE A MINIMUM STUBBLE HEIGHT OF 4 INCHES ON THE STREAMBANK, ALONG THE GREENLINE, AFTER THE GROWING SEASON;
- 2) KEY RIPARIAN BROWSE VEGETATION WILL NOT BE USED MORE THAN 50% OF THE CURRENT ANNUAL TWIG GROWTH THAT IS WITHIN REACH OF THE ANIMALS;
- 3) KEY HERBACEOUS RIPARIAN VEGETATION ON RIPARIAN AREAS, OTHER THAN THE STREAMBANKS, WILL NOT BE GRAZED MORE THAN 50% DURING THE GROWING SEASON, OR 60% DURING THE DORMANT SEASON; AND
- 4) STREAMBANK DAMAGE ATTRIBUTABLE TO GRAZING LIVESTOCK WILL BE LESS THAN 10% ON A STREAM SEGMENT.

ALLOT NO CONDITIONS

NO ALLOTMENT TERMS OR CONDITIONS

NO OFFICE TERMS OR CONDITIONS

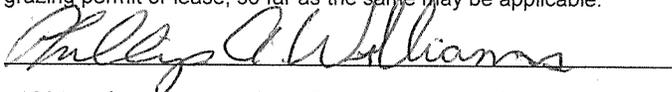
ALLOTMENT SUMMARY (AUM'S)

<u>ALLOTMENT</u>	<u>ACTIVE AUMS</u>	<u>SUSPENDED AUMS</u>	<u>TEMP SUSPENDED AUMS</u>	<u>PERMITTED USE</u>
00503 FLINT CREEK	50	0	0	50
00526 BOULDER FLAT	344	0	0	344
00640 BACHELOR FLAT FFR	127	0	0	127

**Standard
Terms and Conditions**

1. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with all the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
2. They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations.
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
 - c. A transfer of grazing preference by the permittee/lessee to another party.
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described.
 - e. Repeated willful unauthorized grazing use.
3. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans **MUST** be incorporated in permits or leases when completed.
4. Those holding permits or leases **MUST** own or control and be responsible for the management of livestock authorized to graze.
5. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
6. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
7. Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
8. Livestock grazing use that is different from that authorized by a permit or lease **MUST** be applied for prior to the grazing period and **MUST** be filed with and approved by the authorized officer before grazing use can be made.
9. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.
10. Grazing fee payments are due on the date specified on the billing notice and **MUST** be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
11. No Member of, or Delegate to, Congress or Resident Commissioner, after his election of appointment, or either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department of the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App.1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statutes (41 U.S.C. 22; 18 U.S.C. Sections 431-433, and 43 CFR Part 7), enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

SIGNATURE OF PERMITTEE:



DATE : 6-1-11

Title 18, U.S.C., Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

OWYHEE FIELD OFFICE

Form 4130-2a
(February 1999)

2011 OCT 17 AM 9:27

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE ID
OFFICE LLIDB03000
AUTH NUMBER 1101463
PREFERENCE CODE 03
DATE PRINTED 09/27/2011

APPLICATION FOR GRAZING PERMIT RENEWAL

RETURN BY: October 27, 2011

BUREAU OF LAND MANAGEMENT
OWYHEE FIELD OFFICE
20 FIRST AVE WEST
MARSING ID 83639

WROTEN LAND & CATTLE COMPANY
30314 JUNIPER MTN RD
JORDAN VALLEY OR 97910

This application for grazing permit renewal describes your current permit schedule(s) and summarizes your permitted use. If you wish to apply for renewal of this permit, sign and return this form by the date shown above. Contact your local BLM office at 208-896-5912 if you have questions.

MANDATORY TERMS AND CONDITONS

ALLOTMENT	PASTURE	LIVESTOCK		GRAZING BEGIN	PERIOD END	%PL	TYPE USE	AUMS
		NUMBER	KIND					
00597	WROTEN	135	CATTLE	04/01	11/29	100	ACTIVE	1079

OTHER TERMS AND CONDITIONS:

TURN OUT IS SUBJECT TO BOISE DISTRICT RANGE READINESS CRTIERIA.

YOU ARE REQUIRED TO PROPERLY COMPLETE, SIGN, AND DATE AN ACTUAL GRAZING USE REPORT FORM (4130-5) FOR EACH ALLOTMENT. THE COMPLETED FORM(S) MUST BE SUBMITTED TO THIS OFFICE WITHIN 15 DAYS FROM THE LAST DAY OF YOUR AUTHORIZED ANNUAL GRAZING USE.

SUPPLEMENTAL FEEDING IS LIMITED TO SALT, MINERAL, AND/OR PROTEIN IN BLOCK, GRANULAR, OR LIQUID FORM. IF USED, THESE SUPPLEMENTS MUST BE PLACED AT LEAST ONE-QUARTER 1/4 MILE AWAY FROM ANY RIPARIAN AREA, SPRING, STREAM, MEADOW, ASPEN STAND, PLAYA, SPECIAL STATUS PLANT POPULATION, OR WATER DEVELOPMENT.

PURSUANT TO 43 CFR 10.4(B) YOU MUST NOTIFY THE BLM FIELD MANAGER, BY TELEPHONE WITH WRITTEN CONFIRMATION, IMMEDIATELY UPON THE DISCOVERY OF HUMAN REMAINS, FUNERARY OBJECTS, SACRED OBJECTS, OR OBJECTS OF CULTURAL PATRIMONY (AS DEFINED IN 43 CFR 10.2) ON FEDERAL LANDS. PURSUANT TO 43 CFR 10.4(C), YOU MUST IMMEDIATELY STOP ANY ONGOING ACTIVITIES CONNECTED WITH SUCH DISCOVERY AND MAKE A REASONABLE EFFORT TO PROTECT THE DISCOVERED REMAINS OR OBJECTS.

AS A RESULT OF JUDGE WINMILL'S FEBRUARY 29, 2000, MEMORANDUM DECISION AND ORDER THE FOLLOWING INTERIM TERMS AND CONDITIONS NOW APPLY TO THIS GRAZING AUTHORIZATION:

- 1) KEY HERBACEOUS RIPARIAN VEGETATION, WHERE STREAMBANK STABILITY IS

OWYHEE FIELD OFFICE

Standard
2011 OCT 17 AM 9:27
Terms and Conditions

1. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with all the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
2. They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations.
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
 - c. A transfer of grazing preference by the permittee/lessee to another party.
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described.
 - e. Repeated willful unauthorized grazing use.
3. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits or leases when completed.
4. Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.
5. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
6. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
7. Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
8. Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.
9. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.
10. Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
11. No Member of, or Delegate to, Congress or Resident Commissioner, after his election of appointment, or either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department of the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App.1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statutes (41 U.S.C. 22; 18 U.S.C. Sections 431-433, and 43 CFR Part 7), enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

SIGNATURE OF PERMITTEE: Bob LeSoto DATE : 10-14-11

Title 18, U.S.C., Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

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- DEPENDENT UPON IT, WILL HAVE A MINIMUM STUBBLE HEIGHT OF 4 INCHES ON THE STREAMBANK, ALONG THE GREENLINE, AFTER THE GROWING SEASON;
- 2) KEY RIPARIAN BROWSE VEGETATION WILL NOT BE USED MORE THAN 50% OF THE CURRENT ANNUAL TWIG GROWTH THAT IS WITHIN REACH OF THE ANIMALS;
- 3) KEY HERBACEOUS RIPARIAN VEGETATION ON RIPARIAN AREAS, OTHER THAN THE STREAMBANKS, WILL NOT BE GRAZED MORE THAN 50% DURING THE GROWING SEASON, OR 60% DURING THE DORMANT SEASON; AND
- 4) STREAMBANK DAMAGE ATTRIBUTABLE TO GRAZING LIVESTOCK WILL BE LESS THAN 10% ON A STREAM SEGMENT.

ALLOT NO CONDITIONS

NO ALLOTMENT TERMS OR CONDITIONS

NO OFFICE TERMS OR CONDITIONS

ALLOTMENT SUMMARY (AUM'S)

<u>ALLOTMENT</u>	<u>ACTIVE AUMS</u>	<u>SUSPENDED AUMS</u>	<u>TEMP SUSPENDED AUMS</u>	<u>PERMITTED USE</u>
00597 WROTEN	400	0	0	400

Appendix E – Rangeland Ecology and Vegetation

Rangeland Ecology / Seasons and Intensities of Grazing Use

Rangeland Vegetation Ecology

Succession is the process of soil and plant community development on an ecological site. Primary succession is the formation process that begins on substrates which have never previously supported any vegetation. Ecological site development associated with soil parent materials, climatic conditions, and the natural range of disturbances with time produces a plant community in dynamic equilibrium. The resulting plant community is referred to as the historic climax plant community or potential natural plant community. The dominant plant species expected are those present within the potential natural plant community for each ecological site (Clements, 1916) (Dyksterhuis, 1949) (National Research Council, 1994).

Retrogression can occur in response to management practices or severe natural climatic events, with species composition of vegetation communities altered from the historic climax or potential plant community. Secondary succession occurs on previously formed soil from which some or all vegetation has been partially or completely removed by a disturbance factor.

Alternate evolution theory has led to ecological concepts that multiple stable state plant communities can potentially occupy individual ecological sites. These concepts and perspectives are the foundation of state-and-transition models and thresholds. Vegetation evaluation procedures must be able to assess continuous and reversible (the traditional range model posed by Clements) as well as discontinuous and nonreversible vegetation dynamics (the state-and-transition model), because both patterns occur and neither pattern alone provides a complete assessment of vegetation dynamics on all rangelands (Briske, Fuhlendorf, & Smeins, 2005).

A state-and-transition model is used to describe vegetation dynamics and management interactions associated with disturbance within an ecological site. States are relatively stable and resistant to disturbances up to a threshold point. The reference state is defined as the vegetation communities that result through time under natural disturbance regimes. A threshold is the boundary between two states, such that secondary succession does not result in restoration through natural events, such as a simple change in management or removal of a disturbance factor. Active restoration must be accomplished once a threshold is passed in order to return to the reference state. Inputs of management actions necessary to cross the threshold from a new state and return to the state that includes the potential natural community are greater than simple removal of a disturbance factor or restoration of a natural disturbance factor. Examples of management inputs necessary to cross that threshold include mechanical vegetation treatments, herbicide treatments, prescription fire, or a combination of active management inputs. Transition is the trajectory of system change between states.

State-and-transition models have been defined within ecological site descriptions for a number of low sagebrush/bunchgrass and big sagebrush/bunchgrass vegetation communities (USDA NRCS, 2010). These models for ecological sites with a sagebrush shrub component identify the reference plant community with co-dominance by deep-rooted perennial grasses (e.g., bluebunch wheatgrass, Idaho fescue, and Thurber's needlegrass) and sagebrush. These models also identify possible vegetation change from reference site potential to a greater dominance by sagebrush and shallow-rooted bunchgrasses (e.g., Sandberg bluegrass and squirreltail) or annual herbaceous species. Factors that can lead to this shift include altered fire return intervals, improper grazing management, or a combination of both. In addition, the state-and-transition models note that dominance by deep-rooted perennial bunchgrasses is enhanced and maintained with proper grazing management. The presence of sagebrush in the shrub layer of the

reference state is dependent on the time that has passed since the most recent fire and the individual sagebrush species present. As a result, a number of phases of the reference state for low sagebrush or big sagebrush vegetation communities can be expressed through the vegetation composition. The expressed vegetation composition is an indicator of past disturbances, including fire and grazing management practices, and is in a dynamic equilibrium. Additionally, the current phase of the potential reference community has potential to change as a result of future disturbances or removal of disturbances. The state-and-transition models further identify that following frequent or combined disturbances, a transition to a different vegetation community can be crossed, resulting in a new state. State-and-transition models are not precise enough to identify a clear line when some thresholds have been crossed. States which differ from the variability resulting from natural disturbance factors in the reference state are more broadly defined, especially when vegetation change results in a shift between the dominance of species present in the reference state. Other thresholds resulting in states dominated by non-native annual species are more clearly defined. As stated above, both the traditional range model and the state-and-transition model occur and neither pattern alone provides a complete assessment of vegetation dynamics on all rangelands (Briske, Fuhlendorf, & Smeins, 2005).

Miller and Eddleman (2001) identify a number of temporal changes in vegetation composition within the sagebrush biome attributed to livestock grazing, introduction of exotic plants, change in fire regimes, and herbicides. One scenario of change is an increase in the dominance of woody species (shrubs and trees), a decline in fire frequency and a decrease in perennial forbs and grasses. A second scenario is an increase in annual weeds (e.g., cheatgrass), an increase in fire frequency, and a loss of native perennial shrubs, forbs, and grasses. Change that usually occurs with excessive grazing and in the absence of fire within many sagebrush steppe types includes an increase in density and cover of shrubs, annual forbs, and annual grasses, with a corresponding decrease in native perennial grasses and forbs. If Sandberg bluegrass is present in the ecological site, it generally increases with excessive grazing.

Cagney and others (2010) identified grazing influences in a sandy soil ecological site in the 10-to-14-inch precipitation zone in south-central Wyoming. Four plant communities in three states (state-and-transition model) were identified, with the discussion of factors leading to transitions between states and resources values associated with these states. Two described plant communities (bunchgrass; sagebrush/bunchgrass) make up the reference state, with varying amounts of sagebrush resulting from natural disturbance factors, primarily fire. With time alone, Wyoming big sagebrush will advance into the bunchgrass community following fire. With improper grazing management, the rate of sagebrush advancement into the bunchgrass community and the density of sagebrush can be increased. In addition, improper grazing management can result in deep-rooted bunchgrasses (species that dominate the understory in the reference state) being replaced by grazing-resistant grasses (rhizomatous grasses and bluegrass). The replacement of deep-rooted perennial bunchgrass species by rhizomatous grasses and bluegrass result in a second state – a new grazing-resistant and stable plant community. A third possible state is a plant community made up almost entirely of sagebrush with bare ground in the understory and is the result of continued improper grazing management.

Mueggler and Stewart (1980) identify similar vegetation community responses to improper livestock grazing within low sagebrush/bluebunch wheatgrass, low sagebrush/Idaho fescue, and big sagebrush (Wyoming and mountain)/bluebunch wheatgrass habitat types in southwest Montana. There, an increased dominance by sagebrush and Sandberg bluegrass, among other species, corresponded with the grazing-influenced decrease in the dominant bunchgrass species within each of these habitat types. The authors noted other described sagebrush/bunchgrass habitat types throughout the sagebrush biome, including descriptions for Idaho, Oregon, and Nevada, with species compositions similar to those described in Montana. Although a Wyoming big sagebrush/Sandberg bluegrass habitat type is identified for southern Idaho in a bulletin published by the University of Idaho (1983), this habitat type was restricted to a small area in western Idaho where precipitation is less than seven inches annually. The authors cautioned that

this habitat type is difficult to separate from other disturbed Wyoming big sagebrush habitat types on the basis of vegetation alone.

Anderson and Holt (1981) identified a number of studies of vegetal dynamics on exclosures or other protected areas which did not provide clear conclusions regarding the validity of the classical Clements based successional theory. Data from their study of change within heavily grazed Wyoming big sagebrush/bunchgrass sites excluded from grazing for 25 years suggest that many different assemblages of the same species could form relatively stable communities on a given site. The relative abundance of the component species would depend largely on the disturbance history, the nature of past disturbances, and the vegetal composition at the time of disturbance. Any of the relatively stable community assemblages might be considered climax communities. Allington and Valone (2011) identified that with 40 years of livestock exclusion in southeastern Arizona, restoration of soil properties was initiated, grass cover was increased, and native grasses returned, leading to a conclusion that desertification toward a shrubland state had not occurred. Both these studies indicate that the response in vegetation composition to disturbance or removal of disturbance may be a process which occurs over a number of years. In the short term, what may appear to be a different state in the state-and-transition models may be a slow progression between phases, which is dependent on recovery of factors for plant establishment or growth, such as soil properties.

State-and-transition models identified in ecological descriptions for a number of the sagebrush/bunchgrass ecological sites descriptions represented in the Owyhee River Group allotments are similar to the state-and-transition model for the south-central Wyoming site described in Cagney et al. (Cagney, et al., 2010) (USDA NRCS, 2010). Many of the ecological site descriptions for low and big sagebrush sites identify retrogression and secondary succession through phases of the reference state, with varying degrees of dominance by Sandberg bluegrass, squirreltail, and annual grasses resulting from grazing management practices. Fire tolerance of these bunchgrass species has less influence on the species composition of these sites following fire. Dominance by deep-rooted perennial bunchgrasses (e.g., bluebunch wheatgrass, Idaho fescue, Thurber's needlegrass) is enhanced and maintained with proper grazing management.

A less productive state dominated by sagebrush in the shrub layer and Sandberg bluegrass, annual grasses, and annual forbs in the herbaceous layer is described in the state-and-transition models for a number of ecological site descriptions for the Owyhee River Group allotments (USDA NRCS, 2010). This plant community develops due to continued improper grazing management and lack of fire. Frequent fire leads to a similar plant community in this state, though lacking sagebrush and often with rabbitbrush, a more fire-tolerant shrub.

Seasons and Intensities of grazing use

The consequences of livestock impacts to vegetation resources and individual plants are related to the season in which livestock graze a vegetation community, as well as the intensity, duration, and frequency of use in a given year (Reed, Roath, & Bradford, 1999). Long-term consequences from grazing management practices result from the response from the successive years of use a vegetation resource receives. Inappropriate grazing management practices are a process of repeated, selective use of the more desired plant species in a grazing environment. This grazing and regrazing within one growing season or in successive years has profound effects on the individual plants and their ability to compete with other plants for water, minerals, solar energy, and space. Similarly, the consequences of physical impacts associated with livestock grazing can result from a single impacting event or a sequence of impacting events without opportunity for recovery to occur. The result is a loss of productivity and potential death of a select group of plants that are excessively pressured by grazing animals.

A number of authors have identified physiological differences of rangeland plants, primarily grasses, as they relate to their response to grazing defoliation between those that grow in the Great Plains and the Intermountain West (Mack & Thompson, 1982); (Vavra, Laycock, & Pieper, 1994). Caespitose grasses in the Intermountain West, including the majority of perennial bunchgrasses within upland vegetation communities of group 1 allotments, evolved at least in partial response to low selective pressure by large congregating grazing mammals. The dominant caespitose grass within potential vegetation communities of the Owyhee River Group allotments is bluebunch wheatgrass, a species susceptible to repeated grazing. A number of sources suggest limiting the intensity of grazing use of bluebunch wheatgrass during the active growing season and providing at least two years of deferment of grazing use outside the active growing season for every year of active growing season use (Stoddart, 1946); (Blaisdell & Pechanec, 1949); (Mueggler, 1972); (Mueggler, 1975); (Miller, Seufert, & Haferkamp, 1994); (USDA NRCS, 2012). Burkhardt and Sanders (2010) provided the Owyhee Initiative Board of Directors with a science review of management tools appropriate for spring growing season grazing and recommended similar deferment or rest from growing season use. These retired university professors recommended a system of “early-on-early-off or a two to three early-season pasture rotation allowing grazed bunchgrasses to complete their reproductive cycle without grazing interruption at least on alternating years if not every year, based on their review of research and practical experience.

Intensity of grazing use includes a number of potential impacts to a variety of resource values. One aspect of intensity of grazing use is utilization of forage species. Utilization is defined as the proportion or degree of current year’s forage production that is consumed or destroyed by animals (USDI BLM, 1999b). For purposes of analysis, slight utilization is generally defined as up to 20 percent, light utilization is from 21 to 40 percent, moderate utilization is defined as 41 to 60 percent, and heavy utilization is defined as 61 to 80 percent. Severe utilization is greater than 81 percent. Generally, the vigor of forage grass species can be sustained with light or moderate utilization, while heavy utilization reduces photosynthetic tissue below levels needed to maintain root reserves, diminishing the vigor of utilized species. However, the timing of grazing use relative to plant phenology and the occurrence of repeat grazing of individual plants combine with utilization levels to affect the health and vigor of key species, as well as changes to vegetation community composition. Moderate utilization during periods when reserves and photosynthesis are limited for initial growth, during regrowth, or during seed formation will impact herbaceous species greater than the same level of utilization during periods when the plant is not actively growing. A review of the literature by Anderson (1991), pertaining to the effects of defoliation and vigor recovery of bluebunch wheatgrass, and research by Ganskopp (1988), pertaining to similar effects to Thurber’s needlegrass, revealed a high sensitivity to utilization during the active growing season. Grazing use that occurred when the plant was entering the boot stage, a period early in its seed producing stage of growth, was the period of highest sensitivity. Utilization levels of thirty to forty percent under deferred grazing systems or one time utilization levels greater than 50 percent during the growing season have been shown to cause significant reductions in vigor and productivity. Time frames necessary for recovery may extend beyond the average 2- to 4-year cycle frequently used in grazing rotations. Researchers have recommended that desert ranges be stocked for around 30 to 35 percent use of forage production in an average year to meet both vegetation management and livestock production objectives (Holechek, Thomas, Molinar, & Galt, 1999).

Forb species tend to not have the ability to regrow following grazing. While grasses tend to have growing points close to the soil surface¹, growing point of forbs are elevated with growth. As a result, grasses are less likely to have growing points removed with light to moderate levels of grazing while growing points

¹ Mack and Thompson (Mack & Thompson, 1982) cited other sources who identified morphologic features of caespitose grasses in the Intermountain West that make them more susceptible to grazing impacts as compared to rhizomatous grasses in the Great Basin.

of forbs are easily removed, even with light grazing. Additionally, some forbs are highly palatable and sought out by grazing animals.

Long-term impacts of moderate to heavy utilization are dependent on the individual plant species' ability to maintain health and vigor, recover from impacts, and remain competitive while being utilized by grazing animals. The composition of a vegetation community, as it relates to the relative palatability of different plant species available for grazing, will affect measured utilization and subsequent levels of competition between individual plants. Although stocking rates are usually established to limit utilization to light or moderate levels, factors affecting livestock distribution will cause some areas where animals tend to concentrate to be utilized to a heavy degree, while other areas may remain unused or only slightly used.

The intensity of livestock use will also affect other resource values, including the ability to meet management objectives which relate to standing vegetation material and ground cover remaining after use. As utilization levels are increased, canopy cover of grazed and browsed plants declines. Additionally, deposition of protective plant litter to the soil surface, incorporation of litter into the soil, and the density and distribution of plant roots in the soil profile are decreased. As a result, increased utilization can reduce cover of bare ground by vegetation material and litter, increase puddling of clay soils with raindrop impact, reduce rates of infiltration of precipitation, and reduce permeability and moisture storage of soils. High utilization levels can contribute to increased overland flow of precipitation and snowmelt, soil erosion, siltation of streams, and a decline in surface water quality affecting beneficial uses. All these adverse impacts to soil properties and availability of soil moisture from high levels of utilization result in long-term reduced plant vigor and productivity.

Reed et al (1999) provided a grazing response index based on the frequency of grazing forage plants, intensity of removal of photosynthetically active material, and opportunity to grow prior to grazing or to regrow. Generally, a positive index resulting from grazing less than 7-10 days, removal of less than 40 percent of photosynthetically active material, and most or all of the growing season to grow or regrow is beneficial to the health, structure, and vigor of plants. Conversely, a negative index results from grazing longer than 14 to 20 days, removal of more than 55 percent of photosynthetically active material, and little or no chance to grow or regrow indicating that management practices are harmful.

Winter grazing use (November 1 to March 1) of upland vegetation communities generally is a period of minimum impacts. Upland herbaceous plants are mostly dormant during the winter season of use with the exception of some photosynthesis by new plant growth after fall and winter precipitation and during warming weather trends, primarily on south exposed slopes. Forage quality of cured standing herbaceous vegetation is moderate to low, improving when mixed with new growth or browse from palatable shrubs. Light to moderate utilization of standing cured herbaceous vegetation is not detrimental to health and vigor of plants. Light to moderate defoliation of new growth usually is not detrimental to maintenance of health and vigor of herbaceous species since soil moisture will be available for spring and early summer growth, regrowth, and completion of the annual growth cycle prior to soil moisture depletion. Grazing of fall sprouting annual species may reduce competition with desirable perennial herbaceous species during the following growing season. Light to moderate utilization levels will retain adequate standing material and litter for soil protection from wind erosion, rainfall impact, and late winter and spring runoff. Heavy utilization levels will expose the soil surface to these negative impacts, especially on sites with marginal potential to produce a reasonable vegetation cover and in years with limited growth of protective vegetation cover. The potential for repeated grazing of localized areas, resulting in heavy utilization, is present with severe weather conditions and snow accumulation reducing livestock distribution. Negative impacts intensify on palatable shrub species when snow accumulation makes herbaceous species unavailable. Livestock management actions to maintain animal distribution are oftentimes limited by weather and accessibility.

Early spring grazing use (February 1 to May 1) results in additional impacts to vegetation and soil resources as compared to winter use. Table F-1 was developed with data for phenological growth of native perennial grasses within Boise District, as supported by data presented in the Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement. Table F-1 identifies average dates for initiation of growth, flowering, and seed-ripe for a number of bunchgrass species by elevation. Early growth of herbaceous species, primarily cool season species, occurs with rising soil temperatures. Minimal impacts to plant vigor and health occur with light to moderate utilization of early growth when adequate soil moisture is available for regrowth and completion of the annual growth cycle. Moderate utilization, in years with minimal soil moisture available for regrowth after use, could deplete plant vigor and health, especially during periods of critical growth. Heavy to severe defoliation can expose the soil surface to future erosive forces of wind and water. Use of palatable annual species early in this period may reduce competition with desirable native perennial species when grazing is removed and adequate soil moisture remains to complete growth cycles. Early growth of herbaceous vegetation contains high water content and thus, when combined with leached old growth, has only moderate forage quality, improving after mid-March in most years. The hazard of compaction of wet soils with hoof action of livestock may be present, resulting in a reduction of infiltration and soil moisture holding capacity in fine-textured soils. Opportunities for good livestock distribution are present with more locations of available water and cool air temperature.

Table F-1: Approximate growth stage dates for bunchgrass species¹

Elevation (feet)	Sandberg bluegrass			Squirreltail			Bluebunch wheatgrass			Idaho fescue		
	Initiate growth	Flowering	Seed-ripe	Initiate growth	Flowering	Seed-ripe	Initiate growth	Flowering	Seed-ripe	Initiate growth	Flowering	Seed-ripe
4,000	March 10	April 15	May 15	March 25	June 1	July 1	March 15	June 15	July 1	April 1	July 1	Aug 1
4,700	April 1	May 5	June 15	March 25	June 1	July 1	March 25	June 25	Aug 15	April 5	July 1	Aug 15
6,000	April 15	June 25	Aug 1	May 1	June 25	Aug 1	April 25	July 15	Aug 15	May 10	July 20	Sept 1

¹ Adapted from Appendix R of the Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement (USDI BLM, 2001)

Upland growing season grazing use (May 1 to July 1) is the season of greatest impact to native perennial grass species. Upland plants are actively growing, allocating carbohydrates from roots and crowns and from limited photosynthetic surface area to early growth, regrowth, and seed formation. Herbaceous plants are susceptible to defoliation impacts as a result of the depletion of carbohydrates, especially with moderate to heavy utilization, repeated grazing, and/or frequent growing season use. Grass species are especially susceptible to impacts from defoliation during seed formation and seed stalk elongation, due to the high requirement for carbohydrate from remaining plant material and photosynthesis. Opportunities for regrowth and completion of the annual growth cycle after defoliation are limited, especially in years of below average precipitation and soil moisture. Soil compaction from the physical presence of livestock remains a concern with moist soils, especially in areas with shallow and fine-textured soils. Upland shrub species reach maximum growth withdrawing shallow soil moisture early and deeper water reserves as the season progresses. Opportunities for good livestock distribution during the early portion of this season are present with more locations of available water, high palatability of quality forage, and cool air temperature. Repeated use during the growing season can be expected to reduce vigor and health of desirable perennial herbaceous species and lead to trends away from desired future conditions.

Summer grazing use (July 1 to October 31) defers grazing until after the active growing season for most bunchgrass species. A deferred season of use provides for livestock grazing after most of the upland species have reached the growth stage of late seed development and replenished carbohydrate reserves. Most upland plants, including native bunchgrass species, have completed their annual growth cycles and have entered senescence. As a result, upland communities have declining forage quality and lower palatability to wildlife and domestic herbivores after the growing season and during the summer. Livestock will tend to turn to palatable browse species, especially when herbaceous utilization levels become heavy late during this period, to maintain a given level of nutrition when mixed with lower quality herbaceous feeds. With the onset of senescence, native upland vegetation communities are less susceptible to negative impacts of light to moderate defoliation. Heavy to severe defoliation can expose the soil surface to future erosive forces of wind and water. Livestock distribution away from water sources is limited by high ambient temperatures, increasing the need for frequent watering and causing cattle to graze primarily during the evenings and throughout the night, while becoming less active during daylight hours. Localized impacts from defoliation and the physical presence of livestock intensify, especially near water sources and other areas of concentrated activity. Additionally, nutrient concentration will occur in areas of concentrated livestock activity.

Fall grazing use (October 15 to November 30) remains a period of limited impact to upland plant species. Herbaceous upland plants remain senescent with some new growth of annual species and regrowth of perennial bunchgrass species during warming conditions when soil moisture has been replenished by fall precipitation. Upland herbaceous health and vigor is not impaired with light to moderate utilization of cured standing materials. Heavy to severe use may expose soils to erosion from wind and water for an extended period through the initiation of spring growth. Cooler ambient temperatures, with some fall regrowth of upland herbaceous species, may provide for better livestock distribution than during summer. Forage quality of upland herbaceous species remains low, though improving with the initiation of new fall growth. Livestock will retain a percentage of palatable browse species in their diets, when available, to maintain a given level of nutrition by combining it with lower quality herbaceous feeds.

Season-long grazing of a pasture generally begins during the growing season and extends to the end of the period of authorized use, typically into the fall period. Many of the impacts associated with use during the growing season occur with season-long use. Additional impacts occur from localized livestock concentration late in the season as sources of water diminish, as forage quality declines in upland communities, and as ambient temperatures rise. The effects of season-long grazing on species composition are largely dependent on the degree of utilization on the key species. Although the stocking

rates that are generally implemented with season-long grazing are designed to achieve moderate levels of utilization on most areas, factors such as terrain, location of fences and water, and vegetation types available, prevent uniform patterns of grazing. Heavy grazing will inevitably occur in some areas while light utilization will occur in others. A trend away from desired future conditions is expected in areas receiving moderate to heavy utilization on an annual basis, especially when that use occurs during active growing periods.

No pastures in the Owyhee River Group allotments are scheduled for yearlong (March 1 through February 28) grazing by domestic livestock nor is yearlong use included in any alternative. Although terms and conditions of to permit to graze cattle in Swisher FFR may not exclude opportunity for yearlong grazing, winter weather conditions make the allotment unavailable during a portion of the year.

Exclusion of livestock grazing removes impacts to vegetation resources resulting from authorized use. Defoliation of herbaceous and shrub species is limited to that which occurs from insect and native herbivore use. Except in instances when native herbivore numbers are high, upland utilization levels during the growing season and dormant seasons are light. In any year, small areas of concentrated native herbivore use may have moderate to high utilization levels. Residual standing herbaceous material and litter accumulation is greater than with scheduled use by livestock in any season. Soil protection from rain impact is high, limiting erosion and improving soil structure and infiltration. The initiation of herbaceous growth with warming spring soil temperatures may be slightly delayed due to greater interception of solar radiation by standing and down litter.

Livestock grazing schedules are generally implemented to provide opportunity for unacceptable resource conditions to improve, to maintain resource values which are consistent with management objectives, or to avoid unacceptable impacts to resource values or conflicts between uses of public land resources. Anticipated short and long-term impacts from annual use of a pasture during any one season are presented above. Though some established grazing schedules provide for annual use of a pasture during one specified season, more often the mix of management objectives associated with a given pasture can better be met by varying the season of use over a repeating cycle of two or more years. Multiyear grazing schedules are primarily developed with varied seasons of use through an established rotation to allow desirable vegetation species the opportunity to regain vigor and health for future growth, productivity, and sustainability of resource values. Similarly, opportunities for recovery from grazing impacts to other resources, specific to a season of use, may be provided by varying the season in which livestock graze a pasture. Long-term and cumulative impacts of implementing a grazing scheme will define trend toward future vegetation communities and resource conditions.

Most multiyear grazing schedules can be defined as either a deferred-rotation or rest/rotation schedule. Both types of grazing schedules were designed primarily to promote plant vigor, seed production, seedling establishment, root production, and litter accumulation for herbaceous plants in upland ecosystems. Deferred rotation grazing schedules provide for one or more years of grazing use after seed-set, following one or more years of growing season use. In its simplest form, a deferred rotation grazing schedule within a pasture provides for a 2-year rotation cycle with one year of use during the critical period of plant growth followed by one year of deferment of use until after the growing season. More conservative schedules provide for a higher proportion of deferment than years of use during the period of active growth.

Rest/rotation schedules allow for similar opportunities for recovery with one or more years of the grazing rotation in which no use is scheduled. Caution should be implemented to ensure that higher levels of utilization during periods of use of one pasture while providing rest for another pasture do not preclude meeting management objectives. At moderate utilization levels, either rest/rotation or deferred-rotation grazing systems can allow for adequate recovery of upland herbaceous root growth and associated

carbohydrate storage following the impacts of critical season defoliation. The number of years of rest or deferment necessary to meet vegetation management objectives is dependent on a number of factors including resource conditions, soil and climatic factors, and the intensity of grazing use. With an increase in the proportion of years of rest or deferred use to the number of years of use during the critical season, the opportunity for recovery and maintenance of plant health and vigor is improved. Recovery following heavy use during the active growing season may require a substantial number of rest or deferment years to provide adequate opportunities for recovery of health and vigor, especially when growth conditions are poor or if the vegetation resource is in poor ecological condition.

Ecological sites and vegetation condition class (Reference Community descriptions)

SHALLOW CLAYPAN 12-16 ARAR8/FEID; Major Land Resource Area (MLRA) 25

The dominant visual aspect of this site is low sagebrush, Idaho fescue (*Festuca idahoensis*) and bluebunch wheatgrass (*Pseudoroegneria spicata*). Subdominant species include Sandberg bluegrass (*Poa secunda*), squirreltail (*Elymus elymoides*), thickspike wheatgrass (*Elymus lanceolatus*), Thurber's needlegrass (*Achnatherum thurberianum*), arrowleaf balsamroot (*Balsamorhiza sagittata*), Hooker's balsamroot (*B. hookeri*), and longleaf phlox (*Phlox longifolia*). Composition by weight is approximately 40 to 60 percent grasses, 15 to 25 percent forbs and 25 to 35 percent shrubs. Plant growth usually begins in April and plants mature by early July, with some fall green-up usually occurring in early September. Natural herbivory has historically occurred on the site at low levels of utilization by pronghorn antelope, mule deer, sage-grouse, lagomorphs and small rodents. Fire has historically occurred on this site every 80 to 100 years. In a year with normal temperatures and precipitation, total annual vegetative growth averages 650 lbs per acre, 950 lbs per acre in a favorable year, and 350 lbs per acre in an unfavorable year. Structurally, cool season deep-rooted perennial bunchgrasses are dominant, followed by shrubs with perennial forbs and shallow rooted bunchgrasses being sub-dominant. This site is suited for grazing by livestock in spring, early summer, and fall and provides habitat for mule deer, pronghorn antelope, small game, sage-grouse, small birds, and rodents.

LOAMY 13-16 ARTRV/PSSPS-FEID

The dominant visual aspect of this site is mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) with Idaho fescue and bluebunch wheatgrass. Bitterbrush (*Purshia tridentata*) is a subdominant overstory species. Subdominant understory species include Sandberg bluegrass, squirreltail, arrowleaf balsamroot and lupine. Composition by weight is approximately 55 to 65 percent grass, 10 to 20 percent forbs and 20 to 30 percent shrubs. Natural herbivory has historically occurred on this site at low levels of utilization by pronghorn antelope, mule deer, Rocky Mountain elk and rabbits and hares. Total annual production is 1,110 lbs per acre in a normal year, 1,400 lbs per acre in a favorable year, and 800 lbs per acre in an unfavorable year. This site is well suited for big game summer and fall range and livestock and recreation use in the late spring, summer and fall.

LOAMY 16+ ARTRV/FEID

The dominant visual aspect of this site is mountain big sagebrush in the overstory and Idaho fescue in the understory. Subdominant species include Columbia needlegrass (*Achnatherum nelsonii*), bluebunch wheatgrass, mountain brome (*Bromus marginatus*), squirreltail, prairie junegrass (*Koeleria macrantha*), arrowleaf balsamroot, tapertip hawksbeard (*Crepis acuminata*), horsemint (*Agastache* spp.) and lupine. The composition by weight is approximately 60 to 70 percent grass, 10 to 20 percent forbs and 15 to 25 percent shrubs. Natural herbivory has historically occurred on this site at low levels of utilization. Herbivores include mule deer, Rocky Mountain elk, lagomorphs and small rodents. Fire has historically occurred on the site at intervals of 20 to 50 years. Total annual production is 1,300 lbs per acre in a normal year, 1,800 lbs per acre in a favorable year, and 800 lbs per acre in an unfavorable year. This site is suited for livestock grazing in the spring, summer and fall. There are few limitations to grazing. Water is generally more abundant on this site than adjacent sites. This site is usually a key area in a management

program and provides good habitat for mule deer, Rocky Mountain elk, sage-grouse, hares, raptors, songbirds and due to the variety of grasses, forbs and shrubs.

VERY SHALLOW STONY LOAM 10-14” ARAR8/POSE-PSSPS

The dominant visual aspect of this site is low sagebrush and Sandberg bluegrass and mixed grass. Subdominant species include bluebunch wheatgrass, Nevada bluegrass, bottlebrush squirreltail and Hooker’s balsamroot. Where bluebunch wheatgrass and Idaho fescue occur on this site, they are typically growing in an area with slightly deeper soils or in areas of more favorable moisture conditions. Composition by weight is approximately 65 to 75 percent grasses, 10 to 15 percent forbs and 15 to 20 percent shrubs. Natural herbivory has historically occurred on the site at low levels of utilization. Herbivores include pronghorn antelope, mule deer, sage grouse, lagomorphs and small rodents. In a Total annual production is 200 pounds per acre in a normal year, in a favorable year 300 pounds per acre is expected, and in an unfavorable year 125 pounds per acre. This site is best suited for livestock grazing in late spring and early fall. This site provides fair to good habitat for various upland wildlife species. Mule deer, pronghorn, feral horses and sage grouse make use of the site throughout the year.

SHALLOW CLAYPAN 11-13 ARAR8/PSSPS

The dominant visual aspect of the site is low sagebrush and bluebunch wheatgrass. Subdominant species include Sandberg bluegrass, squirreltail, arrowleaf balsamroot and Hooker’s balsamroot. Composition by weight is approximately 45 to 65 percent grasses, 10 to 20 percent forbs and 20 to 40 percent shrubs. Natural herbivory has historically occurred on the site at low levels of utilization. Herbivores include pronghorn antelope, mule deer, sage-grouse, lagomorphs and small rodents. Total annual production is 550 lbs per acre in a normal year, 800 lbs per acre in a favorable year, and 300 lbs per acre in an unfavorable year. This site is suited for grazing by livestock in spring, early summer, and fall. It also provides habitat for mule deer, pronghorn antelope, small game, sage-grouse, small birds and rodents.

Ecological sites: Seral Condition and Pacific Northwest National Laboratory (PNNL) data (Existing Conditions)

Table F-2 below is a summary of seral stage within the analysis area. Seral stages were identified during inventories conducted between 1977 and 1979 (SVIM citation) and provides a useful baseline.

Table F-2: Seral stage¹ by allotment (Percent of BLM-administered acres) (USDI BLM, 1999a)

Allotment	Early Seral	Mid-Seral	Late Seral	Climax	Treated Lands ²
Bachelor Flat FFR	0	100	0	0	0
Berrett FFR	45	55	0	0	0
Big Field FFR	0	75	25	0	0
Bogus Creek FFR	0	100	0	0	0
Boulder	10	80	10	0	0
Boulder Flat	20	80	0	0	0
Combination Creek	5	90	5	0	0
Feltwell	15	85	0	0	0
Glass Creek	81	0	0	0	19
Gluch	55	45	0	0	0
Gluch FFR	90	10	0	0	0
Jim’s Peak FFR	50	30	20	0	0
Morgan	60	40	0	0	0
Rail Creek FFR	0	60	40	0	0
South Mountain Ind.	0	90	10	0	0

Allotment	Early Seral	Mid-Seral	Late Seral	Climax	Treated Lands ²
W. Maher FFR	10	90	0	0	0
Walt's Pond FFR	70	30	0	0	0
Warn	50	50	0	0	0
Wroten	10	70	20	0	0

¹ Seral stage is based on a similarity index to a reference community, in most cases the historic climax plant community or potential natural community (BLM Ecological Site Inventory Handbook: 1734-7). A similarity index of 0-25% is early status; A similarity index of 26-50 percent is mid status; A similarity index of 51-76 percent is late status; A similarity index of 77-100 percent is potential natural community.

² Treated lands include those where brush control or seeding treatments preclude classification within one of the conditions classes.

Recent vegetation cover type (based on mapping done by the Pacific Northwest National Laboratory (PNNL) from 2000/2001 Landsat satellite imagery) in the Morgan Group allotments is shown in Table F-3. The table summarizes vegetation communities within the analysis area. A description of each vegetation group follows the table.

Table F-3: Vegetation communities within the analysis area based on PNNL data

Vegetation Community	Total Acres	Percent of Analysis Area
Mountain Big Sage	15,333	26%
Low Sage	14,114	24%
Juniper	9,211	16%
Bunch Grass	5,520	10%
Mountain Shrub	4,242	7%
Big Sage	3,978	7%
Agriculture	1,540	3%
Wet Meadow	1,418	2%
Aspen	732	1%
Exotic Annuals	695	1%
Big Sage Mix	552	1%
Bitterbrush	279	1%
Conifer	236	1%
Water	71	1%
Rabbitbrush	60	1%

Inter-Mountain Basins Mountain Sagebrush Steppe Group

Includes the following General Cover Types from PNNL:

- Mountain Big Sagebrush
- Mountain Shrub
- Aspen
- Bitterbrush

This vegetation group is more mesic and compositionally diverse than the xeric Inter-Mountain Basins Big Sagebrush Steppe group. It primarily occurs on deep-soiled to stony flats, ridges, nearly flat ridge tops, and mountain slopes. Shrub canopy cover ranges from 10 to 40 percent and is composed primarily of mountain big sagebrush, though bitterbrush may co-dominate some stands. Other common shrubs include snowberry (*Symphoricarpos oreophilus*), serviceberry (*Amelanchier alnifolia*), rubber rabbitbrush, wax currant (*Ribes cereum*), and yellow rabbitbrush. Wyoming big sagebrush may be present to co-dominant. Most stands have an abundant perennial herbaceous layer (greater than 25 percent cover, possibly greater than 40 percent cover). Common grasses include Idaho fescue, bluebunch wheatgrass, Sandberg bluegrass, onespike danthonia (*Danthonia unispicata*), and squirreltail. Wildfire maintains an

open herbaceous-rich steppe condition. Pockets of aspen (*Populus tremuloides*) and mountain mahogany (*Cercocarpus ledifolius*) can be found in this group. Cheatgrass is less competitive in this higher elevation and wetter group, compared to the xeric Inter-Mountain Basins Big Sagebrush Steppe.

Owyhee Plateau Low Sagebrush Steppe Group

Includes the following General Cover Types from PNNL:

- Low Sagebrush
- Stiff Sagebrush
- Bunchgrass

This vegetation group is composed of dwarf sagebrush shrub-steppe that occurs in a variety of shallow-soil habitats in a matrix with other groups throughout the Owyhee High Plateau MLRA. Two sub-species of low sagebrush (*A. arbuscula* ssp. *Arbuscula*, *A. arbuscula* ssp. *Longiloba*) form stands that typically occur on mountain ridges and flanks and broad terraces, ranging from 5,000 to 8,000 feet in elevation. Substrates are shallow, fine-textured soils, poorly drained clays, almost always very stony, characterized by recent rhyolite or basalt. Other shrubs and dwarf-shrubs present may include bitterbrush, buckwheat (*Eriogonum* spp.), and other species of sagebrush. Common grasses include Idaho fescue, onespoke danthonia, bluebunch wheatgrass, and Sandberg bluegrass. Many forbs also occur and may dominate the herbaceous vegetation, especially at the higher elevations. Isolated individuals of Western juniper (*Juniperus occidentalis*) and mountain mahogany can be found in this group.

Juniper and Conifer Woodlands

Includes PNNL General Cover Types:

- Juniper
- Conifer

Juniper woodlands, dominated by *J. occidentalis*, are found extensively on deep soil sites previously occupied by mountain big sagebrush, as well as rocky outcrops where old growth juniper are typically found. Understory vegetation is often sparse, dominated by *Achnatherum* spp. Relatively small stands of larger conifers such as Douglas-fir and subalpine fir are found on upper elevations slopes in the Silver City Range of the Owyhee Mountains.

Inter-Mountain Basins Big Sagebrush Steppe Group

Includes the following General Cover Types from PNNL:

- Big Sagebrush
- Big Sagebrush Mix
- Rabbitbrush

This vegetation group occurs mostly in the Snake River Plain MLRA but also extends into the Owyhee High Plateau MLRA. Soils are typically deep and non-saline, often with a biological soil crust. The plant community has potential to be dominated by perennial grasses and forbs (more than 25 percent foliar cover) with basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*) and Wyoming big sagebrush dominating or co-dominating the open to moderately dense (10 to 40 percent foliar cover) shrub layer. Shrubs may increase following heavy grazing and/or with fire suppression, particularly in mesic sites. Areas with deeper soils more commonly support basin big sagebrush. Fourwing saltbush (*Atriplex canescens*), yellow rabbitbrush (*Chrysothamnus viscidiflorus*), rubber rabbitbrush (*Ericameria nauseosa*), or broom snakeweed (*Gutierrezia sarothrae*) may be common, especially in disturbed stands. Associated grasses can include Indian ricegrass (*Achnatherum hymenoides*), Thurber's needlegrass, squirreltail, Sandberg bluegrass, or bluebunch wheatgrass. Idaho fescue is uncommon in this vegetation group, although it may occur in areas of higher elevations/precipitation. Sand dropseed (*Sporobolus cryptandrus*) and Fendler threeawn (*Aristida purpurea* var. *longiseta*) are less common but can be found along fringes

with salt brush scrub areas. Common forbs include spiny phlox (*Phlox hoodii*), sandwort (*Arenaria* spp.), penstemon (*Penstemon* spp.) and milkvetch (*Astragalus* spp.). Many of these plant communities have been converted to early seral rangelands by fire. Fire was relatively infrequent in this group historically, but fires have become much more frequent recently due to the naturalization of cheatgrass. Areas that burn repeatedly support little or no sagebrush, but rather an abundance of short-lived perennial grasses and annual species.

Semi-natural Herbaceous

Includes the following General Cover Types from PNNL:

- Exotic Annuals
- Seedings
- Agriculture

With the moderate temperatures in these areas, cheatgrass (*B. tectorum*) is able to germinate in the fall, overwinter, and emerge in the spring with an established root system. This growth habit allows cheatgrass to take advantage of available early spring moisture, giving it a jump start on the growing season. Following disturbance such as fire or improper livestock grazing management, plant communities experience an increase in annual grasses and forbs, sometimes becoming the dominant species. Remnant native grass species are generally the short-short lived Sandberg’s bluegrass and squirreltail. The longer-lived native grasses Thurber’s needlegrass and bluebunch wheatgrass are rarely present. Russian thistle (*Salsola tragus*), curvseed butterwort (*Ceratocephala testiculata*), and a host of annual species from the mustard family are common associates with cheatgrass. Conditions in the higher elevations reduce the risk of cheatgrass dominance, where it must complete a full lifecycle during a spring/summer period. In the higher elevations, cheatgrass could still become a dominant species, but adequate competition from other plants often precludes this from occurring. Crested wheatgrass seedings make up a very small percentage of the affected area. Agricultural lands are mapped as a small percentage (3%) of the affected area.

Table F-4 describes ecological sites within the analysis area by allotment and gives percentage by allotment of dominant sites.

Table F-4: Dominating ecological sites within the analysis area by allotment

Ecological Sites by allotment	Percent of Allotment
Bachelor Flat FFR	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	43.35%
SHALLOW CLAYPAN 11-13 ARAR8/PSSPS	27.58%
LOAMY BOTTOM 12-16 ARTRT/LECI4	11.11%
Berrett FFR	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	47.47%
LOAMY 16+ ARTRV/FEID	24.95%
Big Field FFR	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	76.48%
Bogus Creek FFR	
LOAMY 13-16 ARTRV/PSSPS-FEID	97.64%
Boulder	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	75.90%
LOAMY 13-16 ARTRV/PSSPS-FEID	23.40%
Boulder Flat	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	44.52%
VERY SHALLOW STONY LOAM 10-14 ARAR8/POSE-PSSPS	24.06%
Combination Creek	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	38.93%

Ecological Sites by allotment	Percent of Allotment
LOAMY 13-16 ARTRV/PSSPS-FEID	38.44%
Feltwell	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	49.45%
LOAMY 13-16 ARTRV/PSSPS-FEID	41.68%
Glass Creek	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	98.59%
Gluch	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	97.62%
Gluch FFR	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	80.50%
LOAMY BOTTOM 12-16 ARTRT/LECI4	18.09%
Jim`s Peak FFR	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	50.52%
LOAMY 13-16 ARTRV/PSSPS-FEID	21.90%
LOAMY 16+ ARTRV/FEID	20.25%
Morgan	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	54.51%
LOAMY 13-16 ARTRV/PSSPS-FEID	17.15%
SHALLOW CLAYPAN 11-13 ARAR8/PSSPS	10.27%
Rail Creek FFR	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	53.81%
LOAMY 13-16 ARTRV/PSSPS-FEID	39.16%
South Mtn Indv	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	90.92%
W. Maher FFR	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	87.12%
LOAMY 13-16 ARTRV/PSSPS-FEID	12.86%
Walt`s Pond FFR	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	46.72%
LOAMY BOTTOM 12-16 ARTRT/LECI4	14.72%
LOAMY 13-16 ARTRV/PSSPS-FEID	13.54%
Warn	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	57.53%
LOAMY 13-16 ARTRV/PSSPS-FEID	42.47%
Wroten	
SHALLOW CLAYPAN 12-16 ARAR8/FEID	87.60%
LOAMY 13-16 ARTRV/PSSPS-FEID	12.40%

Comparison of Ecological Sites: Potential Reference Community and Existing Seral Condition and PNNL data

The difference between expected overstory vegetation and the reported vegetation is indicated by an increase in exotic annual grasses by approximately 8 percent. Ecological site and PNNL mapping were done at different scales, resulting in imprecise matching, however gross changes in plant community structure are apparent. These changes are departures in reference community to early seral communities. The annual variation in annual grass densities, which can be extreme in some cases, further exacerbates the ability to directly compare the two methodologies.

Appendix F – Wildlife

Table F-1: Special status wildlife species in the Owyhee Field Office and occurrence potential within the Group 5 allotments

Common Name	Species	Status (conservation plans) ¹	General Habitat ²	Habitat Present ³	Species Present ⁴	Species/Habitat Affected
Snake River Physa	<i>Physa natricina</i>	ESA E	Believed to inhabit deep water on the margins of moderately swift rapids or riffles. Individuals have been found in relatively undisturbed areas with gravel, boulder, or cobble substrates and low percentage of epiphytic algae or macrophytes.	No	Not Present	Yes, sediments to Snake River
Columbia Spotted Frog	<i>Rana luteiventris</i>	ESA C (SGCN)	Cool, permanent, quiet water in streams, rivers, lakes, pools, springs, and marshes usually in hilly areas from sea level to about 3000 m. Highly aquatic, but may disperse into forests, grasslands, and shrublands	No	Improbable	Yes
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	ESA C (SGCN/HPBB/BCC)	Broad sagebrush covered valleys and foothills interspersed with wet meadows.	Yes; all allotments	Present	Yes
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	ESA C (SGCN/BCC)	Extensive, mature riparian woodlands, especially of cottonwoods or willows, and other open woodlands with dense understories at lower elevations. Mature riparian areas with willow and alder thickets.	No	Not Present	No
American White Pelican	<i>Pelecanus erythrorhynchos</i>	BLM 2 (SGCN/HPBB)	Typically occur on isolated islands in freshwater lakes, marshes or rivers, on lakes, reservoirs and rivers supporting large fish populations and on mud, sand or gravel shores.	No	Not Present	No
Bald Eagle	<i>Haliaeetus leucocephalus</i>	BGEPA – BLM 2 (SGCN/BCC)	Restricted to large rivers and water bodies near mixed conifer forest, occasionally sagebrush foothills. Nest in oldest trees in the stand. Always associated with aquatic forage area.	No	Not Present	No
Golden Eagle	<i>Aquila chrysaetos</i>	BGEPA (HPBB/BCC)	Open habitats in mountains and hill country, prairies and other grasslands. Open sagebrush areas adjacent to nesting cliffs. Found on prairies, tundra, open wooded country, and barren areas, especially in hilly or mountainous areas. In Idaho, prefers open and semi-open areas in deserts and mountains.	Yes; all allotments	Present	Yes
Northern Leopard Frog	<i>Rana pipiens</i>	BLM 2 (SGCN)	Permanent water sources on the plains, foothill, and in montane zones	Yes	Possible	Yes
Pygmy Rabbit	<i>Brachylagus idahoensis</i>	BLM 2 (SGCN)	Throughout much of the Great Basin; relatively large areas of tall/dense sagebrush and deep soils. In Idaho, closely associated with large stands of sagebrush; prefers areas of tall, dense sagebrush cover with high percent woody cover.	Yes; all allotments	Probable	Yes
Columbia River Redband Trout	<i>Oncorhynchus mykiss gibbsi</i>	BLM 2 (SGCN)	Redband trout are found in a range of stream habitats from desert areas in southwestern Idaho to forested mountain streams in central and northern Idaho.	Yes; Poison Creek and Sands Basin allotments	Present	Yes
White Sturgeon	<i>Acipenser transmontanus</i>	BLM 2 (SGCN)	Rely on streams, rivers, and estuarine habitat as well as marine waters during their lifecycle. Prefer to spawn in rivers with swift currents and large cobble; no nest is built.	No	Not Present	No
Black Tern	<i>Chlidonias niger</i>	BLM 3 (SGCN)	Rivers and ponds. Nests in or on emergent vegetation in alkaline lakes and freshwater marshes, or in marshy areas along rivers, lakes, or ponds. Forages within a few hundred meters of nest.	No	Improbable	No

Common Name	Species	Status (conservation plans) ¹	General Habitat ²	Habitat Present ³	Species Present ⁴	Species/Habitat Affected
Brewer's Sparrow	<i>Spizella breweri</i>	BLM 3 (SGCN/HPBB/BCC)	Sagebrush steppe. Idaho study found Brewer's Sparrows prefer large, living sagebrush for nesting. A recent study in southwestern Idaho concluded that their distribution was influenced by both local vegetation cover and landscape-level features such as patch size.	Yes; all allotments	Present	Yes
California Bighorn Sheep	<i>Ovis canadensis californiana</i>	BLM 3 (SGCN)	Extremely rugged mountain areas with jutting crags, deep canyons and precipitous cliffs. Grassy slopes near cliffs and rocky ridges in mountains. Mesic to xeric grass. Avoids dense vegetation cover. Semi-desert grassland. Canyonlands and foothills of the Owyhee River drainage.	Yes, all allotments	Probable	Yes
Calliope Hummingbird	<i>Stellula calliope</i>	BLM 3 (HPBB/BCC)	Secondary successional shrub/sapling. Aspen thickets, along streams, open montane forests. Shrubby riparian areas and sparsely timbered sites. In Idaho, found in mountains along meadows, canyons and streams, in open montane forests and willow and alder thickets	Yes	Possible	Yes
Columbia Sharp-tailed Grouse	<i>Tympanuchus phasianellus columbianus</i>	BLM 3 (SGCN/HPBB)	Found in grasslands (especially with scattered woodlands), arid sagebrush, brushy hills, oak savannas, and edges of riparian woodlands. In west-central Idaho study, grouse preferred big sagebrush to other summer cover types; mountain shrub and riparian cover types were critical components of winter habitat.	No	Not Present	No
Common Garter Snake	<i>Thamnophis sirtalis</i>	BLM 3	Usually found in habitats associated with water, such as streams, rivers, lakes, ponds and marshes. They can also be found in open meadows and coniferous forests.	Yes; streams	Possible	Yes
Ferruginous Hawk	<i>Buteo regalis</i>	BLM 3 (SGCN/HPBB/BCC)	Found in shrub steppe at periphery of juniper or other woodlands.	Yes; all allotments	Present	Yes
Flammulated Owl	<i>Otus flammeolus</i>	BLM 3 (SGCN/HPBB/BCC)	Prefers old growth. In Idaho, occupies older ponderosa pine, Douglas-fir, and mixed coniferous forests.	No	Improbable	No
Fringed Myotis	<i>Myotis thysanodes</i>	BLM 3 (SGCN)	Found primarily in desert shrublands, sagebrush-grassland, and woodland habitats (ponderosa pine forest, oak and pine habitats, Douglas-fir). Roosts in caves, mines, rock crevices, buildings, and other protected sites. Prefer to forage in riparian areas characterized by intermittent streams with wider channels (5.5 to 10.5 meters) than ones with channels less than 2.0 meters wide.	Yes	Possible	Yes
Hammond's Flycatcher	<i>Empidonax hammondi</i>	BLM 3 (HPBB)	Found in coniferous forests and woodlands. In Idaho, old-growth associates in Douglas-fir/ponderosa pine forests.	No	Improbable	No
Lewis' Woodpecker	<i>Melanerpes lewis</i>	BLM 3 (SGCN/HPBB/BCC)	Found in open forests and woodlands (often logged or burned), including oak, coniferous forests (primarily ponderosa pine), and riparian woodlands and orchards.	Yes	Probable	Yes
Loggerhead Shrike	<i>Lanius ludovicianus</i>	BLM 3 (HPBB/BCC)	Found in open country with scattered trees and shrubs, in savannas, desert scrub and, occasionally, in open juniper woodlands. Often found on poles, wires or fenceposts.	Yes; all allotments	Present	Yes
Longnose Snake	<i>Rhinocheilus lecontei</i>	BLM 3 (SGCN)	Found in desert lowland areas that have sandy or loose soil and numerous burrows.	Yes	Probable	Yes
Mojave Black-collared Lizard	<i>Crotaphytus bicinctores</i>	BLM 3 (SGCN)	Associated with arid habitats with sparse vegetation and the presence of rocks and boulders.	Yes; Poison Creek and Alkali-Wildcat allotments near Jump Creek ACEC	Present	Yes
Mountain Quail	<i>Oreortyx pictus</i>	BLM 3 (SGCN/HPBB)	Mountain quail breed and winter in shrub-dominated riparian communities of hawthorn, willow, and chokecherry in the intermountain	Yes	Not Present	No

Common Name	Species	Status (conservation plans) ¹	General Habitat ²	Habitat Present ³	Species Present ⁴	Species/Habitat Affected
			West. Diet is dominated by plant material though invertebrates are very important during the first 8 weeks.			
Northern Goshawk	<i>Accipiter gentilis</i>	BLM 3 (HPBB)	Found in deciduous and coniferous forests, along forest edges and in open woodlands. In Idaho, summers and nests in coniferous and aspen forests; winters in riparian and agricultural areas.	No	Improbable	No
Olive-sided Flycatcher	<i>Contopus borealis</i>	BLM 3 (HPBB)	Found in forests and woodlands (especially in burned-over areas with standing dead trees)	No	Not Present	No
Peregrine Falcon	<i>Falco peregrinus</i>	BLM 3 (SGCN/BCC)	Cliffs near forest, lakes, ponds, and rivers. Most are thought to migrate south of Idaho during winter but individuals remain near urban nest sites in Nampa and Boise year around.	No	Possible	No
Piute Ground Squirrel	<i>Spermophilus mollis</i>	BLM 3 (SGCN)	Sagebrush and grasslands.	Yes	Possible	Yes
Prairie Falcon	<i>Falco mexicanus</i>	BLM 3 (HPBB)	Cliffs and rock outcrops in sagebrush steppe, grassland, montane meadows, marshes, and riparian areas.	Yes; all allotments	Present	Yes
Sage Sparrow	<i>Amphispiza belli</i>	BLM 3 (HPBB/BCC)	Shrub steppe, mixed desert shrub/grassland communities.	Yes; all allotments	Present	Yes
Spotted Bat	<i>Euderma maculatum</i>	BLM 3 (SGCN)	Various habitats from desert to montane coniferous forests. Observed in canyons of Owyhee County. Normally roost in deep rock crevices of canyon and cliff walls but specific roost characteristics are not well documented.	Yes; all allotments	Present	Yes
Townsend's Big-eared Bat	<i>Plecotus townsendii</i>	BLM 3 (SGCN)	Juniper, desert shrub, and dry coniferous forest throughout Idaho; day roosts and hibernates in caves and abandoned mines, forages over water	Yes; all allotments	Possible	Yes
Western Groundsnake	<i>Sonora semiannulata</i>	BLM 3 (SGCN)	Xeric habitat characterized by sandy or loose soil textures, talus slopes, and boulder fields. Vegetation is typically sparse, comprising of shrubs, such as shadscale, sagebrush, greasewood, and bunchgrasses and annual grasses.	Yes	Probable	Yes
Western Toad	<i>Bufo boreas</i>	BLM 3	Wide variety of habitats such as desert springs and streams, meadows and woodlands, and in and around ponds, lakes, reservoirs, and slow-moving rivers and streams.	Yes; all allotments	Possible	Yes
Williamson's Sapsucker	<i>Sphyrapicus thyroideus</i>	BLM 3 (HPBB/BCC)	Dry open woods, orchards, farmlands, and foothills	No	Not Present	No
Willow Flycatcher	<i>Empidonax trailii</i>	BLM 3 (HPBB/BCC)	Found in thickets, scrubby and brushy areas, open second growth, swamps, and open woodlands. In Idaho, associated with mesic and xeric willow (riparian) habitats.	Yes	Possible	Yes
Woodhouse Toad	<i>Bufo woodhousii</i>	BLM 3 (SGCN)	Found in grasslands, shrub steppe, woods, river valleys, floodplains, and agricultural lands, usually in areas with deep, friable soils.	No	Not Present	No
Black-throated Sparrow	<i>Amphispiza bilineata</i>	BLM 4	Open shrub areas with Sagebrush, Atriplex, Rabbitbrush, saltsage, horsebrush. Not found in dense sagebrush stands. Found in desert scrub, thorn bush. In Idaho prefers open shrub areas dominated by big sage, spiny hopsage, or horsebrush exceeding 50cm in height.	Yes	Possible	Yes
Dark Kangaroo Mouse	<i>Microdipodops megacephalus</i>	BLM 4	Soft, sandy soils in hot dry sagebrush areas. In Idaho found in loose sands and gravel in shadscale scrub, sagebrush scrub, and alkali sink plant communities. May occur in sand dunes near margins of range	No	Improbable	No
Kit Fox	<i>Vulpes velox</i>	BLM 4	Inhabits arid and semi-arid regions encompassing desert scrub, chaparral, halophytic, and grassland communities. Loose	Yes	Improbable	No

Common Name	Species	Status (conservation plans) ¹	General Habitat ²	Habitat Present ³	Species Present ⁴	Species/Habitat Affected
			textured soils may be preferred for denning.			
Little Pocket Mouse	<i>Perognathus longimembris</i>	BLM 4	Shadscale and low sage areas on lower slopes of alluvial fans with pea-sized gravel. Found in sagebrush, creosote bush, and cactus communities. On slopes with widely spaced shrubs, found in firm, sandy soil overlain with pebbles. In Idaho, found in shadscale/low sage on lower slopes of alluvial fans.	No	No	No
Merriam's Ground Squirrel	<i>Spermophilus canus vigilis</i>	BLM 4	Prefers sandy soils in dry, open sagebrush and grassland habitats. Occurs in the lower Snake River Valley south and west of the Snake River in Owyhee County, Idaho and Malheur County, Oregon from Reynolds Creek to Huntington and west to Westfall.	Yes	Present	Yes
White-faced Ibis	<i>Plegadis chihi</i>	BLM 4 (SGCN/HPBB)	Found mostly in freshwater areas, on marshes, swamps, ponds and rivers. In Idaho, prefers shallow-water areas.	No	No	No
Wyoming Ground Squirrel	<i>Spermophilus elegans nevadensis</i>	BLM 4	Mountainous areas and higher plateaus in open and semi-forested habitats. Grasslands. In Idaho found in grasslands and sagebrush, especially on upland slopes with loose, sandy soils. Occupies a variety of sage plain and grassland habitats such as valley bottoms and foothills, montane meadows, subalpine talus slopes, and reclaimed surface-mine areas.	Yes	Possible	Yes

¹ Status includes Endangered (ESA E) and Candidate (ESA C) species listed under the Endangered Species Act (16 U.S.C. § 1531-1544), eagles (BGEPA) protected by the Bald and Golden Eagle Protection Act (16 U.S.C. § 668-668d), and BLM Type 2 (BLM 2), Type 3, (BLM 3), and Type 4 (BLM 4) special status species (USDI-BLM 2003). Additional designations under state and national conservation plans include Idaho Species of Greatest Conservation Need (SGCN; IDFG 2006), Idaho Partners in Flight High Priority Breeding Bird (HPBB; IPIF 2000), and U.S. Fish and Wildlife Service Birds of Conservation Concern (BCC; USDI-FWS 2008).

² Habitat descriptions modified from IDVMD 2011.

³ Presence of habitat within project area was determined from IDVMD 2011; OWE 2011; Yensen and Sherman 2003; Idaho, Oregon and Nevada BLM unpublished data; and specialist expertise.

⁴ Categories include species presence documented (**Present**), species likely to occur based on preferred habitat and local species abundance and nearby (<5 miles) occurrences within 5 miles (**Probable**), species may occur based on preferred habitat and/or occurrences within 25 miles (**Possible**), species not likely to occur based on limited or lack of preferred habitat and/or occurrence over 50 miles (**Improbable**), and species not present due to lack of habitat (**Not Present**).

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Appendix G – Socioeconomics

Explanation of Model

The model used in calculating the ranch-level economic effects of changes in permitted range AUMs implements a partial-budgeting, marginal analysis approach to economic analysis of an agricultural enterprise. The model is based on a series of assumptions related to both market conditions and how the affected ranches might respond to changes in AUMs given those conditions, as outlined below.

The AUMs used as the baseline for comparison in the model are taken from current active AUMs listed in the descriptions of the alternatives. AUMs and months of use for each alternative were plugged into the model to evaluate the economic effects of the increase or decrease in AUMs that would occur if a specific alternative were implemented. Transfers of livestock from one allotment to another by the same owner were treated as internal sales of animals and were evaluated as separate enterprises.

In the analysis, it is assumed that the maximum AUMs permitted in any given month on the allotment serve as the limiting factor in determining the maximum size of the herd from which annual production can be obtained. The total supported number of animal units (AUs) is set by the number of range AUMs divided by the number of months on the allotment. In other words, an allotment with 180 permitted AUMs spread over 6 months would be able to support no more than 30 animal units, and the size of the herd is assumed to be constant throughout the year, regardless of how many months the herd grazes on the allotment being evaluated. Each animal unit is assumed to be equal to one cow-calf pair.

Under each alternative, if the total number of AUs decreases it is assumed that the rancher will sell the excess cattle (either internally within the overall ranch operation, or externally at auction) at a sale weight of 900 pounds and a sale price of \$1.10 per pound. It is also assumed that the rancher will invest or save the proceeds from the sale at a rate of return or interest rate of 1 percent. Although under current financial market conditions a rancher might be able to realize a much higher rate of return, 1 percent is a reasonable rate to use under the assumption that ranchers would prefer to put revenue into relatively safe, conservative investments. In the model, the proceeds from selling excess cattle are annualized as a stream of revenue over ten years. This revenue stream is added to the overall net revenue associated with the allotment. The mathematical model includes a provision for evaluating cases in which rather than selling excess animals, a rancher chooses to retain them and feed them elsewhere. Because of limited information and complexities regarding assumptions about the actual business decisions that ranchers might make, this type of case was not included in the completed analyses.

If the total number of AUs increases under an alternative, it is assumed that the rancher will purchase additional cattle under the same conditions as outlined above for excessed cattle. The cost of additional cattle is annualized over ten years as a stream of costs, added to overall operating costs for the allotment.

In the model, it is assumed that ranchers will realize a 92 percent success rate in taking calves to market. In other words, 92 percent of cow-calf pairs will result in a calf being sold at the end of the summer season. Sold animals are equal to total AUs x 0.92. This calculation assumes that bulls are not included in the total number of AUs on range. The model assumes an average calf sale weight of 500 lbs. The market price for calves is an estimate based on recent published Chicago Mercantile Exchange prices for feeder cattle.² Since early 2011, prices have ranged from \$0.95 per pound up to one short-lived spike at approximately \$1.60 per pound with prices mostly remaining below \$1.50 per pound but fluctuating between \$1.40 and \$1.55 since early 2012. Higher short-term price spikes in excess of \$1.70 per pound

² Source: www.theFinancials.com, accessed on February 21, 2013.

have been observed in regional markets but have not persisted at the national level. To reflect these market conditions, a price of \$1.45 per pound was used in the model.

The annual herd maintenance costs used in the model are derived from standard national cost figures for grazing on public land³ and include veterinary bills, anticipated mortality losses, vaccination supplies, etc. On public land, the standard cost of herd maintenance is estimated at \$18.54 per AUM.

The annual cost of moving the herd is also derived from the standard national cost figures for grazing on public land and includes the cost of trailing and/or trucking animals between pastures, allotments, and/or ranch headquarters as well as herding costs. It also includes the value of the rancher's time plus all herding-related wages and expenses. Current typical costs for trucking range from \$2.50 to \$3.00 per mile per truck, regardless of the number of animals in the load. On public land, the standard cost of herd moving is estimated at \$14.69 per AUM.

The grazing permit cost used in the model is \$1.35 per AUM. Expected annual revenue includes proceeds from calf sales and any revenue stream derived from the sale of excess cattle. Expected annual costs include herd maintenance costs, herd moving costs, "off-allotment" feeding costs, grazing permit costs, and any stream of costs resulting from the purchase of additional cattle. The model does not include ranch operations' fixed costs, costs or returns on land investments, or depreciation. The mathematical model provides the ability to include investments in fixed infrastructure on range allotments as part of the overall economic analysis. In order to make the analysis comparable across allotments, however, infrastructure costs were not included in the completed economic analysis. Total expected annual net revenue in the model equals expected annual revenue minus expected annual costs. Ten-year net revenue equals expected annual net revenue multiplied by 10.

³ Source: Grazing Costs: What's the Current Situation? Neil Rimbey and L. Allen Torell, University of Idaho, 2011. <http://web.cals.uidaho.edu/idaohagbiz/files/2013/01/GrazingCost2011.pdf>

Appendix H – Common and Scientific Plant Names

Common Name	Scientific Name
aspen	<i>Populus tremuloides</i>
astragalus	<i>Astragalus spp.</i>
Indian ricegrass	<i>Achnatherum hymenoides</i>
basin wildrye	
basin big sagebrush	<i>Artemisia tridentata ssp. tridentata</i>
balsam root	<i>Balsamorhiza sagittata</i>
bitterbrush	<i>Purshia tridentata</i>
bluebunch wheatgrass	<i>Pseudoroegneria spicata</i>
broom snakeweed	<i>Gutierrezia sarothrae</i>
buckwheat	<i>Eriogonum spp.</i>
bud sagebrush	<i>Picrothamnus desertorum</i>
bulbous bluegrass	<i>Poa bulbosa</i>
Canada thistle	<i>Cirsium arvense</i>
ceanothus	<i>Ceanothus velutinus</i>
cheatgrass	<i>Bromus tectorum</i>
Columbia needlegrass	<i>Achnatherum nelsonii</i>
crested wheatgrass	<i>Agropyron cristatum</i>
curl-leaf mountain mahogany	<i>Cercocarpus ledifolius</i>
currant	<i>Ribes spp.</i>
curvseed butterwort (bur buttercup)	<i>Ceratocephala testiculata</i>
Davis' peppergrass	<i>Lepidium davisii</i>
Fendler threeawn	<i>Artistida purpurea var. longiseta</i>
fourwing saltbush	<i>Atriplex canescens</i>
green rabbitbrush	<i>Ericameria teretifolia</i>
Hooker's balsamroot	<i>Balsamorhiza hookeri</i>
Horsemint	<i>Agastache spp.</i>
Idaho fescue	<i>Festuca idahoensis</i>
inch-high lupine	<i>Lupinus uncialis</i>
juniper	<i>Juniperus occidentalis</i>
longleaf phlox	<i>Phlox longifolia</i>
low sagebrush	<i>Artemisia arbuscula</i>
lupine	<i>Lupinus spp.</i>
medusahead	<i>Taeniatherum caput-medusae</i>
mountain ball cactus	<i>Pediocactus simpsonii</i>
mountain big sagebrush	<i>Artemisia tridentata ssp. vaseyana</i>
mountain brome	<i>Bromus marginatus</i>
mountain mahogany	<i>Cercocarpus ledifolius</i>
needlegrass	<i>Achnatherum spp.</i>
Newberry's milkvetch	<i>Astragalus newberryi var. castoreus</i>
Nevada bluegrass	<i>Poa nevadensis</i>
onespike danthonia	<i>Danthonia unispicata</i>
Penstemon	<i>Penstemon spp.</i>

Common Name	Scientific Name
prairie junegrass	<i>Koeleria macrantha</i>
rabbitbrush	<i>Chrysothamnus & Ericameria spp.</i>
rattlesnake stickseed	<i>Hackelia ophiobia</i>
rubber rabbitbrush	<i>Ericameria nauseosa</i>
sagebrush	<i>Artemisia spp.</i>
sand dropseed	<i>Sporaobolus crypantrus</i>
Sandberg bluegrass	<i>Poa secunda</i>
Scotch cottonthistle (Scotch thistle)	<i>Onopordum acanthium</i>
serviceberry	<i>Amelanchier alnifolia</i>
Slickspot peppergrass	<i>Lepidium papilliferum</i>
small burnet	<i>Sanguisorba minor</i>
snowberry	<i>Symphoricarpos oreophilus</i>
spiny phlox	<i>Phlox hoodii</i>
squirreltail	<i>Elymus elymoides</i>
Stream orchid	<i>Epipactis gigantea</i>
tapertip hawksbeard	<i>Crepis acuminata</i>
thinleaf goldenhead	<i>Pyrocoma linearis</i>
thickspike wheatgrass	<i>Elymus lanceolatus</i>
Thurber's needlegrass	<i>Achnatherum thurberianum</i>
Ute ladies'-tresses	<i>Spiranthes diluvialis</i>
wax currant	<i>Ribes cereum</i>
Western germander	<i>Teucrium canadense var. occidentale</i>
western juniper (juniper)	<i>Juniperus occidentalis</i>
whitetop	<i>Cardaria draba</i>
Wood's rose	<i>Rosa woodsii</i>
willow	<i>Salix spp.</i>
ventenata	<i>Ventenata dubia</i>
yellow rabbitbrush	<i>Chrysothamnus viscidiflorus</i>

Appendix I – Range Readiness Criteria

SPRING RANGE READINESS CRITERIA

Date: _____

Allotment: _____

Field Office _____

Pasture: _____

Recorded by: _____

UTM/Legal: _____

Plant Species	Range Readiness Criteria	Recorded Condition				
BRTE (Cheatgrass) with few perennials	3 rd leaf stage and 2” green active growth					
BRTE (cheatgrass) (with substantial perennial grass component)	3 rd leaf stage and 2” green active growth with old growth, or 4” without old growth					
TACA8 (Medusahead)	Soils must be firm- 3 rd leaf stage with at least 2” green active growth					
POSE (Sandberg bluegrass)	Greater than 1” active growth and seed stalks forming					
Wheatgrass seedings	Average 4” active growth with old growth present or 6” active growth without old growth					
ELEL5 (squirreltail)	Average 3-4” active growth with old growth present or 5” active growth without old growth					
PSSP6 (Bluebunch)	4” active growth with old growth present or 6” active growth without old growth					
FEID (Idaho fescue)	3-4” active growth, old growth present, or 5” active growth without old growth					
Soils	Is snow present? (circle) Yes No	Percentage of snow present				
		5 to 20%	20 to 40%	40 to 60%	60 to 80%	80 to 100%
Soils	Observe soil moisture or puddles	None	Few	Mod	Numerous	
	Frost is present (circle)	Yes		No		
Soils	Upland soils and including riparian soils above last high water mark are firm enough to support grazing with little to no pugging/hummocking.	Yes		No		
Slickspot soils (where appropriate)	Slickspots not saturated, i.e., no evidence of puddles, soil within slickspot firm					

Species Dominance and Phenology

Dominant Species		Phenologic Stage
1		
2		
3		

	Forb Species	Phenologic Stage
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Phenologic Stages

Stage	Grasses	Forbs	Shrub
1	Early Germination	--	--
2	Mid Vegetative Stage	same	same
3	--	--	--
4	Boot	bud	bud
5	Headed Out	bud	bud
6	Flowering	same	same
7	--	--	--
8	Soft Dough	same	same
9	Cured/Hard Dough	same	same
10	Seed shattered/dormant	same	same

	Grass Species	Phenologic Stage
1		
2		
3		
4		
5		
6		

	Shrub Species	Phenologic Stage
1		
2		
3		
4		
5		
6		

Comments: _____

Range Readiness – Conclusions & Recommendation: _____

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