
Appendix R

Livestock Grazing

APPENDIX R

LIVESTOCK GRAZING

SUB-REGION GRAZING DATA

Table R-1 provides allotment specific data for all grazing allotments within PHMA and GHMA in the planning area.

Table R-1
BLM and Forest Service Grazing Allotment Data

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
BLM NEVADA				
Abel Creek	00023	1,956	11,607	5
Achurra Seeding	05401	757	2,529	5
Adobe	02129	526	2,484	5
Adobe Hills	02101	2,208	23,007	5
Alder Creek	00051	5,913	123,363	5
Anderson Creek	03201	5,559	21,560	3
Andorno	00018	883	9,578	5
Andrae	01001	4,565	17,102	5
Annie Creek	02102	592	2,404	5
Antelope	00016	562	4,746	5
Antelope	03202	478	3,250	5
Antelope Basin	03213	3,278	16,774	3
Antelope Mountain	03001	6,362	53,755	3
Antelope Springs FFR	03246	5	40	5
Antelope Valley	04301	5,246	45,950	5
Arambel	10031	1,349	45,526	4
Argenta	20001	17,202	141,689	5
Asa Moore	00044	684	7,074	5
Austin	10004	14,478	235,100	5
Badger Spring	00823	1,412	24,125	4
Badlands	04302	1,018	18,022	3
Baker Creek	10125	4,319	55,515	5

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Bald Mountain	04303	312	31,413	1
Barger FFR	04315	23	144	5
Barnes Seeding	05402	345	3,932	5
Barton	03203	810	2,938	5
Bassett Creek	10114	588	7,328	5
Bastian Creek	10121	1,778	13,527	4
Batterman Wash	11018	2,093	39,878	4
Bear Creek	03204	240	1,248	5
Beaver Creek	02103	14,258	75,139	5
Becky Creek	00404	671	12,904	4
Becky Springs	10101	3,842	40,621	5
Bellinger Seeding	05403	217	2,417	1
Bennett Creek	00409	37	1,473	4
Bennett Field	04304	180	1,125	1
Bennett Spring	21006	3,498	48,264	1
Big Bend	03205	10,207	49,306	5
Big Canyon	03004	3,050	14,898	5
Big Indian Creek	00410	99	6,144	4
Big Meadows	04305	722	13,191	5
Big Rock Seeding	00428	621	1,862	4
Big Six Well	00812	140	2,412	5
Bilk Creek	00147	3,030	40,999	5
Bishop Creek	03206	1,136	6,840	5
Bishop Flat	03207	226	1,519	5
Black Butte	03208	6,489	28,172	5
Black Canyon	11007	1,008	8,438	4
Black Hills	21008	156	3,610	5
Black Point	10032	4,312	59,430	2
Bloody Run	00043	2,084	37,489	5
Blue Basin	02104	6,467	37,700	5
Blue Wing/7 Troughs	00135	17,245	1,192,778	5
Bluff Creek	03209	6,923	51,166	5
Board Corral FFR	02139	24	2,013	5
Boone Springs	04307	2,002	77,888	3
Bottari	05404	687	2,368	1
Bottle Creek	00066	3,434	132,485	3
Boulder Field	02116	838	6,135	5
Brown Knoll	00831	161	10,366	3
Browne	05450	657	19,172	5
Bruffy	05405	1,806	18,399	5
Bruneau River	02105	838	3,655	5
Buckboard Spring	21011	264	10,842	4
Bucket Flat	01002	188	1,551	5

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Buffalo	00017	339	3,651	5
Buffalo Hills	00127	4,114	440,982	5
Buffalo Valley	10021	5,451	137,211	5
Bullhead	00033	12,050	142,361	5
Bullion Road	05406	117	4,128	5
Burner Basin	05408	144	1,308	5
Burnt Creek	03247	28	394	5
Butte Seeding	00507	275	976	4
Butterfield	00073	4,776	122,080	5
Buttermilk	00031	2,525	23,512	5
Caliente	21014	48	2,008	1
Canyon Allotment	03250	1,713	18,813	5
Carico Lake	10003	24,954	562,352	2
Carlin Canyon FFR	02126	51	1,022	5
Carlin Field	01005	2,442	18,797	5
Carson	03003	193	3,090	5
Cattle Camp/Cave Val	00903	6,878	75,846	2
Cave Valley Ranch	00904	2,403	38,524	4
Cave Valley Sdg	00908	200	942	5
Cedar Hill	03212	979	4,644	5
Cherry Creek	00403	6,197	153,107	4
Chimney Creek	00021	460	3,091	5
Chimney Creek	05409	1,551	4,762	5
Chimney Rock	00914	1,233	20,037	5
Chin Creek	10104	12,479	148,017	5
Chokecherry	10131	3,327	32,334	5
City	04313	161	1,477	5
Clan Alpine	03009	10,210	367,703	5
Clear Creek	00109	2,931	48,370	4
Clear Creek	10024	551	24,700	5
Cleveland Ranch	10119	1,021	11,656	4
Cliff Springs	21016	2,052	35,821	4
Clover Creek	21015	609	22,876	4
Clover Creek FFR	04310	2	35	5
Coal Canyon-Poker	00104	3,144	97,829	5
Coal Mine Basin	02106	1,524	8,749	5
Cold Creek	00603	5,803	62,103	2
Cold Spring	00909	1,265	10,253	5
Comet	21018	214	9,146	5
Condor Canyon	21019	676	44,035	1
Connors Summit	00915	2,449	27,316	5
Constantia South	03012	642	10,472	1
Copper Canyon	10002	5,023	60,948	5

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Copper Flat	00427	3,033	40,058	1
Cordero	00002	190	5,347	5
Cornucopia	01006	2,634	15,272	5
Corral Canyon Seeding	05410	525	2,059	5
Corta	10033	128	1,130	4
Corta FFR	05479	92	60	5
Cotant Seeding	02107	720	3,225	5
Cottonwood	00132	2,248	49,975	5
Cottonwood	03214	2,144	16,689	2
Cottonwood	11015	1,177	42,172	1
Cottonwood	20015	5,649	99,629	5
Cottonwood Seeding FFR	05480	2	62	5
Cow Canyon	03015	2,390	146,179	5
Coyote	00130	3,051	34,337	5
Coyote Hills	00053	2,633	38,315	5
Crane Springs	05438	1,281	21,691	5
Crowley Creek	00006	3,303	49,984	5
Currie	04311	5,504	148,254	3
Curtis Spring	04312	557	36,830	5
Cut-Off	05411	182	2,511	5
Dairy Valley	03215	7,231	51,769	5
Dalton	03245	333	1,465	1
Dark Peak	00827	1,826	19,477	5
Dee Gee Spring	00815	200	4,975	5
Deep Creek	10103	2,934	23,932	5
Deer Lodge	21026	167	6,880	1
Deeth	03216	20,548	125,397	3
Desert Valley	00059	1,596	56,965	5
Devils Gate	03217	6,118	49,796	5
Devils Gate	05412	374	3,026	5
Diamond S	00144	1,158	19,070	5
Diamond Springs	10035	3,680	69,679	2
Dixie Flats	05414	1,508	15,266	5
Dixie Valley	03018	6,341	282,801	5
Dolly Hayden	00121	1,066	53,154	5
Dorsey	02134	1,176	6,809	5
Double H	00010	1,687	47,276	5
Double Mountain	02109	5,126	38,242	5
Douglas Canyon	00811	175	11,422	4
Douglas Point	00810	368	19,318	2
Dry Creek	10036	5,702	149,225	5
Dry Farm	11024	1,530	32,464	4
Dry Mountain	00609	1,751	27,552	4

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Duckcreek	00423	321	9,531	4
Duckcreek Basin	00419	436	8,301	4
Duckcreek Flat	00412	1,347	32,406	4
Duckwater	00701	20,844	807,662	1
Dyke Hot	00052	1,636	23,346	5
Eagle Rock	01008	5,505	27,685	5
Eagle Rock I	02108	1,365	8,345	5
East Big Springs	04306	10,150	252,367	3
East Buckhorn	04316	4,189	36,083	5
East Fork	05415	1,300	11,153	5
East Fork FFR	02131	17	40	5
East Wells	00830	122	3,542	5
Eastgate	03020	9,770	306,937	5
Eden Valley	00037	2,628	32,621	5
Edwards Creek	03021	3,300	55,730	3
El Jiggs	05413	5,597	46,716	5
Elko Hills	05416	972	7,099	5
Ely Springs Cattle	11029	4248	55,168	4
Ely Springs Sheep	21030	1800	22,927	1
Emigrant Spring	05417	1,286	13,245	5
Evans	00617	0	1,814	5
Evans FFR	02000	105	1,121	5
Fish Creek Ranch	10038	4,815	287,984	4
Flanigan	03022	5,015	56,079	1
Flat Creek	00007	3,170	24,378	5
Flynn/Parman Individ.	10039	1,357	29,825	5
Forest Moon	01010	2,263	108,273	1
Fort Scott	00026	361	2,702	5
Four Mile Canyon	05420	642	4,948	5
Fox Mountain	11001	6,319	73,412	1
Fox Springs	02111	624	3,259	5
Francisco	00075	1,369	16,896	2
Frost Creek	05421	1,976	10,613	4
Ft Mcdermitt	00003	1,553	12,843	5
Gallagher Gap	00418	169	3,299	4
Gamble Individual	03218	17,938	209,799	5
Georgetown Ranch	00422	1,675	23,688	4
Geyser	05423	1,227	48,332	5
Geyser Ranch	01101	12,308	237,413	1
Gilbert Creek	10014	13,071	248,350	5
Gilford Meadows	00424	420	4,666	4
Giroux Wash	00826	5,326	48,200	1
Goat Ranch	00421	213	5,524	4

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Golconda Butte	00041	1002	16,413	5
Gold Canyon	00413	1,068	23,640	4
Goldbanks	00105	2,357	37,526	5
Gordon Creek	04317	141	794	5
Goshute Basin	00402	449	9,397	2
Goshute Mtn	00102	465	5,771	3
Granite	00027	216	1,966	5
Grass Valley	10006	17,701	282,854	2
Grindstone Mountain	05422	894	6,486	5
Grouse Creek	03220	1,983	16,902	5
Gulley	03221	1,633	11,201	5
Hadley	01011	4,276	27,323	5
Haggerty Wash	00907	194	904	1
Halleck FFR	02112	178	4,037	5
Hallelujah Junction	03026	1176	12,154	1
Hamblin Valley	00133	8,177	105,831	5
Hansel	05424	1,553	7,781	5
Hanson Creek	00025	151	1,664	5
Happy Creek	00056	3,724	95,126	5
Hardscrabble Canyon	03027	1,222	11,575	5
Hardy Spring	11022	3,478	124,008	4
Harmony	10111	348	6,786	5
Harrison	04318	620	7,635	5
HD	03222	22,827	238,165	5
Heusser Mountain	00416	1,486	33,956	2
Hicks Station	10067	117	24,240	2
Highland Peak	11035	3,704	45,542	4
Highway	01036	120	4,251	1
Hog Tommy	05426	211	1,986	1
Holborn	03223	2,267	26,598	5
Home Allotment	10019	901	18,845	5
Home Station Gap	10064	602	10,983	5
Horse Creek	00049	3,521	38,859	5
Horse Haven	00620	1,056	25,000	4
Horse Spring	03032	600	14,548	3
Horseshoe	01012	1,629	14,014	5
Hot Creek	00084	6,363	154,483	5
Hot Creek	03224	4,066	16,856	3
Hot Springs Peak	00032	2,535	53,198	5
Hubbard Vineyard	03225	13,031	112,213	2
Hunts Canyon	00078	2,237	93,558	5
Hylton	04319	839	2,411	3
Indian Creek	00029	250	960	5

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Indian Creek	00401	177	3,167	2
Indian Creek FFR	01015	626	3,969	5
Indian George	10112	2,860	41,650	5
Indian Jake	00804	1,970	47,168	2
Indian Spring	05429	2,669	19,045	5
Ione	10071	2,235	189,099	5
Iron Blossom	05430	1,539	7,689	5
Iron Point	00039	1,240	17,360	5
Jackpot	03226	7,006	67,406	5
Jackson Mountain	00058	8,857	364,991	5
Jackstone	02138	652	7,100	5
Jake's Creek	01016	1392	34,037	5
Jakes Unit Trail	00821	832	15,056	4
JD	10041	7,799	97,740	2
Jersey Valley	00148	1,173	66,498	5
Jiggs	10069	721	4,575	5
Jordan Meadows	00004	11,720	106,495	5
JP	03249	485	6,401	5
Kennedy Seeding	05431	18	54	1
King Seeding	05432	199	614	5
Kings River	00048	12,192	1,459,993	5
Kingston	10042	2,720	78,881	2
Klondike	00124	4,606	85,496	5
Klondike	01085	681	7,072	4
Knott Creek	00065	5,936	64,062	5
Lake Area	00910	2,978	27,556	1
LDS	05433	128	1,097	5
LDS FFR	05485	109	693	5
Lead Hills	04321	3,314	79,936	3
Leadville	00141	1,291	54,013	5
Legarza FFR	05407	4	19	5
Leppy Hills	04322	2,257	49,013	3
Lime Mountain Field	01017	1,769	8,836	5
Lindsay Creek	05434	1,349	9,313	5
Little Goose Creek	03227	6,282	69,447	5
Little Horse Creek	00050	524	3,556	5
Little Humboldt	01018	8,279	68,879	5
Little Mountain	00414	399	18,575	N/A
Little Owyhee	00036	27,800	560,815	5
Little Porter	05435	288	3,595	5
Little Porter FFR	05478	24	105	5
Little White Rock	00913	904	13,012	5
Lone Mountain	02113	7,202	32,927	5

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Long Canyon	00020	1,695	27,025	5
Long Field	02133	209	4,892	5
Lovell Peak	00406	105	2,360	4
Lucky C	10043	3,054	108,666	2
Mahala Creek	02114	2,857	19,250	5
Majors Allotment	10126	12,535	99,193	5
Majuba	00140	3,325	186,083	5
Manhattan Mtn.	10005	1,746	63,234	5
Martin Creek	00068	300	6,160	5
Marys Mountain	01020	1,408	15,184	5
Mason Mountain	02115	186	839	5
Maverick Springs	00621	1,500	42,679	4
Maverick/Ruby#9	04323	2,774	61,037	3
Mccoy Creek	10135	504	5,289	5
Mccutcheon Springs	01054	446	18,276	1
Mckinley FFR	02128	727	5,651	5
Mcqueen Flat	00805	495	10,403	1
Meadow Creek	10113	444	8,273	5
Medicine Butte	00501	7,701	287,368	2
Melody	00103	1,020	4,048	5
Merkley FFR	05419	250	3,414	5
Merkley-Zunino Seeding	05437	139	1,950	5
Metropolis	03228	2,510	23,947	5
Metropolis Seeding	03229	1,126	2,455	1
Mexican Field	02117	546	2,979	5
Midas	01038	711	3,992	5
Middle Steptoe	00411	173	2,361	4
Mill Spring	10109	341	5,587	4
Mineral Hill	05439	1,555	24,907	5
Mitchell Creek	05440	1,301	18,420	5
Monitor	00077	0	92,463	5
Monte Cristo	00614	1,129	6,138	4
Moor Summit	04325	280	7,190	5
Moorman Ranch	00802	4,740	123,491	4
Morey	00083	1,304	72,806	5
Morgan Hill	03230	1,269	13,652	5
Mori	01022	2,245	9,753	5
Mount Airy	10020	3,651	80,093	5
Mountain Well-Laplat	03039	8,004	137,683	3
Mud Springs	03242	196	1,852	5
Mullinix	00030	133	1,485	5
Muncy Creek	20111	12,384	207,906	5
Murphy Wash	03503	728	54,307	5

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
N4/N5	01049	825	43,500	1
Needles	11016	2,679	85,500	4
Negro Creek	00120	3,727	31,985	4
New Pass	03038	177	4,328	5
Newark	00608	9,709	218,105	2
North Buffalo	02145	3,447	55,071	5
North Butte	00502	180	26,467	4
North Butte Valley	04308	2,424	30,993	3
North Diamond	10034	3,579	78,892	2
North Fork Group	02118	16,068	116,336	5
North Four Mile	02136	4,372	25,024	5
North Preston	04097	97	3,113	5
North Steptoe	00405	700	12,701	3
North Steptoe Trail	00426	252	1,181	5
Nyala	00088	13,255	321,274	5
Oak Springs	01050	9,276	193,609	4
Odgers	04328	0	25,304	5
Ogilvie - Orbe	05441	1,573	7,987	5
Olinghouse	03041	696	23,162	1
O'neil	03231	9,663	66,099	5
Osgood	00038	4,965	48,535	5
O'toole Ranches	10018	1,006	11,684	5
Owyhee	01024	23,247	370,300	2
Pah Rah	03042	184	4,504	5
Paiute Canyon	03043	4,800	71,514	5
Paiute Meadows	00057	3,549	168,538	5
Palacio	05443	369	993	5
Palisade	01021	1,336	10,635	5
Panaca Cattle	01053	453	16,275	4
Paradise Hill	00022	2,191	21,712	5
Pearl Creek	05444	659	1,436	5
Peck	01055	408	17,741	5
Petan Owyhee Unit	01019	2,094	12,604	5
Pilot	04330	4,430	101,126	3
Pilot Valley	03219	5,008	43,825	5
Pilot-Table Mountain	03574	5,667	512,449	5
Pine Creek	05445	150	14,771	5
Pine Creek	11012	2,667	34,693	4
Pine Forest	00054	9,700	136,200	5
Pine Mountain	05446	5,550	30,406	5
Pioche	01086	402	13,440	2
Pleasant Valley	00114	10,553	173,400	5
Plumas Station	03047	307	5,432	3

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BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Pole Creek	00008	2,988	34,348	5
Pole Creek	03232	597	5,301	5
Pony Creek	05447	1,629	16,176	5
Porter Canyon	10013	7,241	125,150	3
Potato Patch	05448	748	3,337	5
Potts	10045	9,262	167,600	5
Preston	00806	190	10,250	4
Preston Lund Trail	00822	1,569	10,856	4
Provo	00149	1,120	9,878	5
Pueblo Mountain	00046	2,137	33,648	5
Pumpnickel	00116	9,417	126,142	5
Quarter Circle S	01030	5,191	2,286	5
Rabbit Creek	03233	1,072	5,464	5
Rabbit Spring	01057	884	20,975	5
Ragged Top	00131	0	85,920	5
Railroad Field	03243	113	1,550	5
Railroad Pass	00601	3,542	27,025	2
Ralston	00076	0	368,682	5
Rattlesnake Canyon	02119	2,592	10,393	5
Rebel Creek	00012	990	8,376	5
Red Hills	00108	2,600	35,489	5
Red Rock	03014	454	3,560	1
Red Rock	05452	7,335	66,323	5
Reveille	00085	25,730	657,520	2
River	05453	210	4,978	5
Road Side	01061	32	1,123	1
Roberts Mountain	10046	9,624	151,060	5
Robinson Creek	05454	2,694	17,263	5
Robinson Mountain	05455	3,002	18,661	5
Robinson Mountain FFR	05486	36	262	5
Rock Canyon	00808	432	7,256	5
Rock Creek	00101	2,392	23,275	5
Rodeo Creek	00129	5,540	193,215	5
Romano	10047	2,887	76,070	4
Rough Hills	02121	887	5,233	5
Ruby #1	04332	170	395	1
Ruby #2	04333	236	818	1
Ruby #3	04334	683	5,151	1
Ruby #4	04335	257	1,055	1
Ruby #5	04336	2,058	15,651	1
Ruby #6	04337	1,563	15,061	5
Ruby #7	04338	1,405	10,870	1
Ruby #8	04339	1,963	29,063	1

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Ruby Hill	10048	1,286	14,659	1
Ruby Valley	00619	467	20,081	4
Rye Patch	00106	1980	40,019	5
Sacramento Pass	00123	1,945	40,582	5
Safford Canyon	05456	1,342	7,972	5
Salmon River	03234	27,304	278,157	3
Salt Wells	03050	1,626	58,611	3
Sampson Creek	10105	1,327	13,232	5
San Antone	00072	13,505	442,555	5
San Juan	10023	9,169	64,988	5
Sand Dunes	00060	2,839	87,634	5
Sand Pass	00042	540	20,985	5
Sand Springs	10086	5,727	203,868	4
Sandhill North	05457	330	1,242	5
Sandhill South	05458	173	615	5
Santa Fe/Ferguson	10049	6,410	84,375	5
Sawmill Bench	00807	114	319	2
Sawmill Canyon	01067	192	9177	4
Schellbourne	00407	685	16,316	4
Schoolhouse Spring	00420	191	7,033	4
Scott Spring	00040	419	22,764	5
Scotts Gulch	05459	1211	10,288	5
Scotty Meadows	10128	1,227	17,322	5
Second Creek	00417	358	7,776	4
Seven Mile	10050	5,573	88,420	2
Shannon Station	10051	2,520	32,888	2
Sheep Pass	00905	1,150	26,800	5
Sheep Spring	01070	407	31,077	5
Sheep Trail Seeding	00829	200	564	4
Shingle Creek	09436	575	9302	5
Shingle Pass	00906	2,724	74,788	4
Shoshone	05461	2,888	7,740	5
Shoshone Unit Trail	10140	483	16,517	5
Silverado	00623	338	6,284	4
Simpson Park	10052	3,446	97,167	2
Singus	00024	350	2,774	5
Six Mile	00613	1,209	21,335	4
Six Mile	01026	184	849	5
Six Mile Ranch	00814	162	2,232	4
Sleeman	05462	1,392	5,456	5
Smiley	04342	409	3,546	5
Smiraldo	05463	747	2,811	5
Smith Creek	20117	5,355	68,072	5

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Smoky	00074	5,593	125,247	2
Snow Water Lake	04343	1,106	12,599	5
Snowball	10053	991	27,261	2
Soldier Meadows	00128	12,168	331,691	5
Solid Silver	00028	246	1,901	5
Sonoma	10102	1,485	20,089	5
Sorensen Well	00818	193	5,880	5
South Buckhorn	05465	19,094	222,822	5
South Buffalo	00142	122	229,587	5
South Butte	00504	396	26,081	4
So. Butte Seeding	00506	245	968	1
Southfork FFR	05464	47	1,026	5
South Four Mile	02135	2,778	1,981	5
South Pancake	00615	1,155	31,088	4
Rochester	00117	3,177	170,807	5
South Smith Creek	20010	5,331	149,857	5
South Spring Valley	10130	6,329	79,323	5
Spanish Gulch	10054	647	5,985	2
Spanish Ranch	01023	22,201	142,173	5
Spanish Spr/Mustang	03052	1,542	25,521	3
Spratling	03235	1,013	5,449	5
Spring Creek	00034	2,488	22,791	5
Spruce	04346	10,965	534,447	3
Squaw Valley	01025	26,796	212,105	5
Stag Mountain	03236	8,273	40,000	5
Star Peak	00118	3,075	83,656	5
Stephens Creek	10118	318	3,784	5
Steptoe	00415	2,836	44,025	2
Steven's	02137	479	2,095	5
Stone Cabin	00082	13,963	389,499	5
Stone Flat	02123	717	3,117	5
Stone Flat Fenced Fr	02130	41	273	5
Stormy	03237	8,836	50,671	3
Strawberry	00607	1,032	21,135	2
Sugar Loaf	00045	602	5,567	5
Sunnyside	21023	5,402	219,519	4
Swamp Cedar	00832	192	6,333	5
Sweeney Wash	10055	478	7,220	2
T Lazy S	01027	11,907	68,797	5
Taft Creek	10116	1,831	28,294	4
Tamberlaine	00901	0	31,692	5
Taylor Canyon	01014	2,369	8,672	5
Ten Mile Creek	05466	343	5,636	5

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Thirty Mile Spring	00503	8,405	178,716	2
Thomas Creek	05467	1,078	4,857	5
Thomas Creek	10107	533	11,780	5
Thomas Creek FFR	05483	60	130	5
3-Bars	00064	5,840	76,740	5
Three Mile	10056	850	26,635	2
Tierney Creek	10022	817	17,642	5
Tippett	10106	7,092	200,041	5
Tippett Pass	20107	8,177	77,161	5
Tobar	04348	1,698	16,186	5
Tom Plain	00803	4,439	77,039	1
Tonka	05468	1,614	20,266	5
Town Creek	03238	1,110	5,507	5
Trail Canyon	10057	581	24,298	5
Trout Creek	03239	642	2,129	5
Tuscarora	01031	9,166	49,303	5
25 Allotment	01032	34,130	309,390	5
Twin Bridges	05469	358	1,668	5
Twin Creek East	05470	646	2,608	5
Twin Creek North	05471	747	2,670	5
Twin Creek South	05472	390	1,274	5
U C	00005	12,902	45,248	5
Underwood	10058	1,462	19,832	5
Union Mountain	05473	1,759	20,940	5
Upper Quinn River	00015	435	6,292	5
Valley Mountain	03248	4,532	260,930	3
Vn Pocket Petan	01039	983	6,623	5
Vn Pocket-Allied	01033	1,310	8,613	5
W & C Ruby #9 FFR	04359	70	188	1
Wagon Johnnie	00079	1,219	28,157	5
Walther	05474	47	198	5
Warm Creek	04349	118	1,537	5
Warm Springs	00606	7,709	306,971	4
Warm Springs	01080	74	1,401	1
Warm Springs Trl	00622	2,480	16,385	4
Washburn	10001	1,465	32,203	5
Washington Creek	10022	360	10,976	5
Wells	03240	494	2,658	5
Wells Station	00819	312	13,926	5
West Big Springs	00152	3,651	107,946	3
West Buckhorn	03210	2,586	22,017	5
West Cherry Creek	04350	2,674	62,939	5
West Schell Bench	00433	1,389	25,915	5

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Westside	03241	1,725	7,232	5
White Cloud	03057	1,884	79,663	1
White Flats FFR	02120	110	2,519	5
White Hills	01082	101	2,755	3
White Hills	03058	1,206	25,875	3
White Horse	00143	1,969	21,973	5
White Horse	04353	2,154	61,335	3
White River Trail	11005	1,505	19,300	4
White Rock	00902	5,622	80,513	2
White Rock	02124	795	5,318	5
Whiteman Creek	00408	384	5,417	4
Wild Horse Group	02125	5,095	29,478	5
Wildcat Canyon	10060	2,677	65,658	5
Wilder-Quinn	00047	14,379	188,274	5
Willard Creek	10127	438	10,246	4
William Stock	00035	5,905	63,989	5
Willow	05475	546	5,238	5
Willow Creek	00081	338	12,691	5
Willow Creek Pockets	05477	675	6,684	5
Willow Race Track	10061	252	590	5
Willow Ranch	00062	3,621	63,510	5
Willow Spr Addition	00825	103	660	4
Willow Spr Seeding	00824	63	300	4
Willow Springs	10129	6,608	46,967	5
Wilson Creek	01201	44,587	1,077,994	1
Wilson FFR	05484	188	1,398	5
Wilson Mountain	01035	308	3,168	5
Winnemucca Ranch	03059	3,230	43,457	5
Wood Hills	04354	815	38,466	5
Y P Allotment	01037	13,023	97,111	5
Total		1,791,226	33,467,227	

Source: BLM 2012, and BLM and Forest Service GIS 2015

Category 1—Information indicates standards met

Category 2—Determination signed, livestock a causal factor

Category 3—Determination not signed but information indicates possible grazing conflict

Category 4—One or more standards not achieved; livestock not a cause

Category 5—Determination not complete

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
BLM NORTHERN CALIFORNIA DISTRICT				
South Tablelands	00101	2,504	15,932	3
Russell Slough/Capik	00105	167	1,517	4
Portuguese Flat	00109	521	3,516	2
Blacks Canyon Rim	00127	59	823	3
Neer	00131	882	77	3
XL	00133	120	1,747	3
Prock	00134	58	548	3
Pine Creek Mesa	00135	257	2,390	3
North Tablelands	00137	3,612	24,202	3
Yankee Jim	00138	300	1,400	3
Thomas Creek	00140	69	467	3
Westside	00146	515	5,095	1
Pine Creek Field	00148	18	320	3
Corbie Field	00150	27	173	3
Loomis	00200	84	670	2
Chase Valley	00203	214	2,460	3
Dixie Valley	00205	1,291	16,332	2
Bald Mountain	00206	677	9,547	2
Haury	00211	64	769	3
South Juniper	00217	32	507	3
Silva Flat	00218	1,247	14,750	1
Indian Peak	00229	44	694	3
North Juniper	00232	263	1,753	3
Butte Creek	00236	42	511	3
Daisy Dean Spring	00237	37	1,025	3
Thompson	00244	613	5,460	2
Muck Valley	00246	1,371	12,186	2
Hencraft Field	00248	154	1,222	3
North Mitchell Hill	00299	400	4,055	2
North Ash Valley	00300	2,510	17,465	1
Cold Springs	00302	2,574	17,661	1
Crabtree	00303	15	340	1
Cramer	00304	36	645	3
South McDonald	00305	930	11,607	1
Dry Cow	00306	920	5,203	1
Rocky Prairie	00308	537	10,182	1
Tule Mountain	00310	7,606	49,376	3
Nelson Corral	00311	1,802	12,849	1
Warm Springs	00312	128	949	3
South Ash Valley	00316	1,714	15,467	1
Fillman-Diablo	00319	151	1,490	3
McDonald Mountain	00320	2,608	14,874	1

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
South Mitchell Hill	00321	460	3,593	2
Lower Highway	00322	90	640	3
Said Valley	00323	110	826	2
Dry Valley	00324	274	1,960	3
South Fork	00325	947	3,804	4
Summit Field	00326	146	1,238	3
Williams Allotment	00328	84	1,791	1
Brockman	00329	70	1,195	3
Coffin Allotment	00330	70	1,457	3
Walton Individual	00401	94	920	2
Said Valley	00402	232	1,483	2
Grasshopper Ridge	00403	204	4,165	2
Dry Valley South	00404	20	398	2
New Bailey Creek	00405	2,022	17,360	2
Williams Individual	00406	519	3,080	4
Rave A.M.P.	00407	2,848	29,691	2
North Horse Lake	00408	1,968	24,300	2
Slate Creek AMP	00409	2,132	31,855	2
Bucks Bay	00410	840	5,404	3
Crest	00413	154	11,835	2
Snowstorm	00414	3,605	45,480	2
Erick Allotment	00415	232	2,280	2
Wood Individual	00416	253	2,499	2
Cottonwood Fenced	00417	150	1,680	2
Stone Individual	00418	50	928	3
Walsh Mountain	00419	291	5,260	3
Barron Individual	00420	121	4,000	2
South Horse Lake	00421	3,036	41,720	2
Humphrey 3-C	00422	306	2,945	2
Tablelands	00423	2,354	16,052	4
Coffin Individual	00424	194	1,559	3
Rice Canyon	00425	715	11,520	3
Willow Creek	00426	234	7,124	3
Shaffer Mountain	00427	1,613	25,752	2
Ulch	00503	24	240	3
East Bald Mountain	00507	148	3,000	4
North Fort Sage	00510	189	6,410	2
West Fort Sage	00511	502	6,532	4
South Fort Sage	00512	127	4,879	1
Twin Peaks	00701	13,430	379,788	2
Winter Range Nevada	00702	1,504	45,393	4
Observation	00703	6,968	151,639	2
Deep Cut	00704	2,426	53,438	1

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Spanish Springs Individual	00708	259	958	2
Twin Buttes	00709	210	2,160	2
Spanish Springs AMP	00710	1,103	6,986	2
Shinn Peak	00711	270	4,725	2
Selic-Alaska	00800	821	4,982	3
Tuledad	00802	5,320	143,307	2
Red Rock Lake	00803	198	990	3
Bare	00900	13,260	193,211	2
Duck Lake	00901	3,284	60,625	1
Denio	00902	1,542	23,515	3
Home Camp	00903	9,088	142,434	1
Highway	00904	25	1,360	3
Lower Lake	00905	483	20,331	3
Wall Canyon (West)	00906	2,609	36,475	2
Bicondoa	00907	200	10,845	4
Corral	00908	88	1,560	3
Boggs	01001	1,483	18,734	2
Bull Creek	01002	2,178	65,716	1
Little Basin	01004	1,857	28,776	2
Long Valley	01005	2,660	59,079	2
Bitner	01006	1,702	24,640	2
Massacre Lakes	01007	3,215	44,480	1
Massacre Mountain	01008	4,200	121,381	3
McCulley	01009	28	1,000	2
Nut Mountain	01010	4,893	74,721	1
Sand Creek	01012	3,563	65,716	2
Granger	01013	30	440	3
Wall Canyon (East)	01014	3,215	49,227	1
Upper Sand Creek	01015	42	480	2
Alkali Lake	01017	11	160	3
Calcutta	01100	778	10,260	2
Bally Mountain	01101	198	1,700	2
Board Corral	01102	690	15,330	1
South Larkspur	01103	1,040	17,243	2
East	01106	510	8,700	2
Crooks Lake	01107	2,880	35,277	2
Lartirigoyen	01108	364	988	2
Gravelly	01110	270	2,270	2
Mosquito Valley	01111	2,203	19,751	2
Nevada Coleman	01112	4,477	55,701	2
Nevada Cowhead	01113	2,880	38,460	1
North Cowhead	01114	453	3,983	2
North Larkspur	01115	150	5,432	2

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
12 Mile	01116	192	970	2
Warner Valley	01117	321	3,165	2
East Bally Mountain	01119	58	731	2
Scammon	01121	57	440	2
Ninemile	01123	30	440	2
Upper Lake	01125	168	759	2
Horse Lake	01126	2,124	31,417	3
Winter Range California	03737	617	11,388	4
Bloody Point	01308	175	956	2
Bryant Mountain	01309	495	2,570	3
Lava Flow	01317	139	965	3
Casuse Mountain	01325	30	195	3
North Bloody Point	01327	5	80	2
Cloud	10104	9	80	3
Strip	10106	246	7,398	2
Ryegrass Swale	10108	225	4,244	4
Fisher	10111	28	511	3
South Graves	10112	1,487	12,950	2
West Field	10114	25	864	2
East Field	10115	467	4,520	2
Crowder	10117	161	2,088	2
North Graves / Mackey	10118	421	3,901	2
Lakeshore	10119	10	516	3
Hagge	10120	33	400	3
Kelley	10122	7	80	3
Rimrock	10123	282	2,446	4
Total		181,471	2,773,552	

Source: BLM 2008a, 2008b, 2008c

Category 1—Areas where one or more standards have not been met, nor has significant progress been made toward meeting the standards, and livestock grazing is a significant factor.

Category 2—Areas where all standards have been met or significant progress has been made toward meeting the standards.

Category 3—Areas where one or more of the standards is not known or the cause of the failure to meet the standards is not known.

Category 4—Areas where one or more standards have not been met, nor has significant progress been made toward meeting the standards due to causes other than (or in addition to) livestock grazing. (Allotments where livestock grazing is the primary cause for failure are also included in Category 1.)

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
FOREST SERVICE				
76 Creek	00152	1,123	2,022	N/A
Allied C&H	00136	1,866	17,647	N/A
Angel Creek C&H	00235	143	459	N/A
Bade Flat	30300	1,527	3,685	N/A
Badger Creek	00150	413	6,913	N/A
Beadles Creek	00126	0	4,686	N/A
Beaver Creek	00142	358	7,131	N/A
Belmont C&H	00201	529	2,786	N/A
Berry Creek (Com.Use)	00421	782	5,306	N/A
Big Creek	00412	0	208	N/A
Birch Creek	30301	677	2,070	N/A
Black Rock	00403	540	3,015	N/A
Blue Jacket	00127	1,164	3,927	N/A
Boneyard (Com.Use)	00419	767	4,478	N/A
Boulder Creek Cu	00241	79	1,409	N/A
Bradshaw C&H	N/A	N/A	3,470	N/A
Brennan Creek C&H	00234	37	1,911	N/A
Bruneau Summer	00100	688	4,834	N/A
Buck Creek C&H	00302	5,149	4,120	N/A
Buffalo	00513	824	4,146	N/A
Bull Run	00102	1,993	9,044	N/A
Bunker	30323	1,504	178	N/A
Bureau C&H	00247	154	2,404	N/A
Burger Creek C&H	00242	44	661	N/A
Buttermilk	00501	3,225	35,483	N/A
Cahill	30314	1,010	3,801	N/A
Camp Creek S&G	00318	0	7,300	N/A
Carville Creek C&H	00211	1,959	11,929	N/A
Cass House Cu	00296	44	519	N/A
Cat Creek	00103	3,947	11,975	N/A
Caudle Creek C&H	00303	4,652	12,748	N/A
Cave Creek C&H	00203	795	3,364	N/A
Cherry Creek	00413	1,278	3,162	N/A
Cherry Creek C&H	00333	2,023	4,214	N/A
Cherry Springs C&H	00204	1,504	479	N/A
Chicken Creek	00104	2,589	9,345	N/A
Clear Creek C&H	00165	626	2,738	N/A
Cleve Creek	00432	826	2,913	N/A
Clover Creek C&H	00227	75	585	N/A
Cloverdale Winter	40400	338	1,852	N/A
Cloverdale-Reese River	40401	326	36,157	N/A
Cobb Creek	00133	370	1,639	N/A

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Columbia Basin	00134	1,164	5,186	N/A
Cooper	00417	1,743	2,041	N/A
Copper Basin	00135	14,974	74	N/A
Copper-Cottonwood	00157	0	1,389	N/A
Corral Creek C&H	00205	1,584	10,975	N/A
Corta S&G	00243	5,584	23,080	N/A
Cottonwood C&H	00249	664	4,437	N/A
Cottonwood Creek C&H	00304	557	11,885	N/A
Currant Creek	00405	1,382	1,789	N/A
Dave Creek C&H	00307	1,628	1,318	N/A
Deep Creek C&H	00166	895	11,099	N/A
Deer Creek C&H	00334	1,828	4,579	N/A
Diamond A	00105	1,378	8,536	N/A
Drown Peak C&H	00233	401	141	N/A
Dry Creek	00106	428	1,289	N/A
Duck Creek (Com.Use)	00420	796	1,704	N/A
East Blue Jacket	00138	1,164	3,887	N/A
East Independence	00107	1,614	22,989	N/A
East Ward	00406	266	143	N/A
Eight Mile	00502	0	7,987	N/A
Elkhorn	30302	1,076	15,765	N/A
Ellison Basin	00404	1,901	15,512	N/A
Fitzhugh	00424	962	2,116	N/A
Foreman Creek	00108	2,986	19,155	N/A
Francisco C&H	40416	158	1,382	N/A
Gedney Creek C&H	00208	273	940	N/A
Gilbert Creek C&H	00209	599	8,141	N/A
Goat Creek Cu	00322	232	2,472	N/A
Gold Park	30303	1,300	337	N/A
Granite Peak	00503	6,060	31,896	N/A
Gravel Creek	00161	1,104	4,679	N/A
Greys Creek C&H	00212	230	46	N/A
Guerry Sheep S&G	00326	4,333	15,163	N/A
Harrison Pass C&H	00213	1,043	2,969	N/A
Haystack Mtn	00129	1,914	10,792	N/A
Herder Creek C&H	00200	83	1,947	N/A
Hole In The Mountain C&H	00210	403	4,789	N/A
Home Place C&H	00256	116	762	N/A
Hooper Canyon	00411	0	608	N/A
Horse Creek C&H	00214	998	8,428	N/A
Horse Heaven C&H	30304	668	1,060	N/A
Hot Creek	40420	0	1,120	N/A
Hot Springs Winter	30305	997	33,090	N/A

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Humboldt Peak C&H	00236	409	5,539	N/A
Illipah	00401	895	22,318	N/A
Indian	00504	1,398	18,675	N/A
Irwin Canyon	00409	0	155	N/A
Jack Creek	00140	1,089	7,785	N/A
Jerrett Canyon S&G	00141	0	5,235	N/A
Jerritt Canyon C&H	00109	377	4,791	N/A
Kelly Creek/North Monitor	30306	0	26,662	N/A
Kingston	30307	0	1,043	N/A
Krenka Creek C&H	00220	371	1,241	N/A
Lake Flat	30345	210	21,631	N/A
Lamance	00505	1,314	5,858	N/A
Lamoille Canyon	00262	0	150	N/A
Lindsay-Brown C&H	00264	748	4,910	N/A
Little Fish Lake	40402	545	25,481	N/A
Lower Marys River C&H	00308	0	11,547	N/A
Lutts Creek C&H	00216	1,397	2,900	N/A
Martin Basin	00506	9,685	28,701	N/A
Marys River Basin S&G	00324	793	469	N/A
Marysville C&H	30308	1,617	11,102	N/A
Mayhew C&H	00239	465	1,152	N/A
Mc Donald Cr	00110	1,936	13,883	N/A
Mccoy	00430	791	241	N/A
Meadow Canyon	40422	0	36,239	N/A
Merritt Creek	00112	5,474	10,202	N/A
Mica C&H	00240	747	5,874	N/A
Mill Creek	00113	70	1,180	N/A
Miller Creek	00125	2,794	6,318	N/A
Monitor Complex	40403	1,733	13,977	N/A
Monitor Valley (East And West)	40417	0	19,476	N/A
Monitor Winter	30309	1,188	26,419	N/A
Moores Creek C&H	40406	371	13,164	N/A
Morey	40421	0	5,275	N/A
Mose Creek C&H	00217	636	1,229	N/A
Mountain City	00114	234	15,339	N/A
Muncy	00428	1,058	11,752	N/A
Murphy Wash	N/A	N/A	3,633	N/A
Myers Creek C&H	00218	850	1,241	N/A
North Copper Mtn	00146	0	686	N/A
North Fork	00507	1,282	5,857	N/A
North Huntington C&H	00207	11	850	N/A
North Monitor Winter	30311	198	5,922	N/A
North Moores Creek (Winter)	40407	998	13,637	N/A

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
North Shoshone	30312	5,312	7,615	N/A
Northumberland	30313	930	1,279	N/A
O'neil C&H	00309	2,742	4,914	N/A
Overland C&H	00221	465	423	N/A
Pablo Wall Canyon C&H	40408	132	11,260	N/A
Paradise	00508	2,235	4,405	N/A
Piermont	00429	1,048	9,619	N/A
Pine Creek Quinn Canyon	00414	1,376	43	N/A
Pixley Creek	00122	2,090	13,683	N/A
Polar Star C&H	00222	148	6,338	N/A
Pole Canyon C&H	00251	91	9,710	N/A
Pole Creek C&H	00310	2,196	4,460	N/A
Queen Springs (Com.Use)	00425	936	8,546	N/A
Quinn River	00509	13,886	56,243	N/A
Rebel Creek	00510	1,008	4,162	N/A
Reeds/Indian Canyon C&H	30315	1,832	4,387	N/A
Riffe Creek C&H	00164	1,261	5,469	N/A
Road Canyon C&H	00244	455	1,629	N/A
Robinson Hole C&H	00335	202	3,000	N/A
Rockwall C&H	00245	269	3,181	N/A
Round Mountain (Winter)	40415	315	N/A	N/A
Ruby C&H	00206	2,188	8,346	N/A
Ruby Guard C&H	00202	638	2,970	N/A
Ruby Mattier	00427	722	11,206	N/A
Schmitt Creek	00116	991	7,057	N/A
School Creek C&H	00223	822	3,255	N/A
Segunda C&H	00237	219	53	N/A
Seigel (Com.Use)	00426	874	11,113	N/A
Seitz C&H	00274	253	244	N/A
Sherman Creek C&H	00224	1,496	4,624	N/A
Silver Creek	00434	758	2,276	N/A
Slaughterhouse	00130	466	1,262	N/A
Smith Creek C&H	00276	539	4,008	N/A
Snow Canyon	00147	1,337	12,591	N/A
South Clover C&H	00225	86	1,502	N/A
South Copper Mtn	00145	0	134	N/A
South Fork C&H	00226	523	2,343	N/A
South Kingston	30325	1,504	3,855	N/A
South Monitor	30316	0	93,780	N/A
South Shoshone	30317	2,377	48,484	N/A
Spring Creek C&H	00311	2,855	7,515	N/A
Stepoe	00418	566	144	N/A
Stone Cabin	40412	197	3,618	N/A

**Table R-1
BLM and Forest Service Grazing Allotment Data**

Allotment Name	Allotment Number	Permitted Active AUMs	Allotment Acres	Rangeland Health Category
Stoneberger	30318	1,098	54,364	N/A
Strawberry	N/A	N/A	205	N/A
Sun Creek S&G	00327	417	5,626	N/A
Sunflower Flat	00117	4,495	20,310	N/A
Table Mountain C&H	40413	0	11,937	N/A
Taft	00431	499	626	N/A
Telephone C&H	00169	1,500	14,680	N/A
Tennessee Mountain S&G	00170	2,707	6,679	N/A
Tent Mountain C&H	00228	397	6,366	N/A
Thorpe Creek	00272	1,129	1,939	N/A
Tierney Creek C&H	30319	1,415	5,460	N/A
Timber Creek	00422	1,936	11,619	N/A
Timber Gulch	00118	502	2,722	N/A
Tom Plain	00402	2,647	20,345	N/A
Toyn Creek C&H	00231	1,134	4,617	N/A
Treasure Hill	00400	2,198	40,513	N/A
Trout Creek C&H	00229	519	619	N/A
Troy Mountain	00410	719	3,017	N/A
Twin Rivers	40414	0	135	N/A
Upper Marys River S&G	00328	793	529	N/A
Van Duzer	00162	2,167	6,842	N/A
Wagon Johnnie	40418	4,486	91,381	N/A
Washington	30320	2,616	16,612	N/A
West Bruneau River	00148	4,443	13,545	N/A
West Marys River S&G	00329	661	2,603	N/A
West Northumberland	N/A	N/A	451	N/A
West Side Flat Creek	00511	1,720	5,659	N/A
White Elephant C&H	00313	985	5,614	N/A
White Rock C&H	00121	6,275	8,112	N/A
Whiterock S&G	00155	1,164	3,244	N/A
Wickiup	00156	1,610	5,159	N/A
Wild Bill	00512	3,159	11,882	N/A
Wildcat C&H	00314	3,780	5,072	N/A
Wildhorse C&H	20226	2,647	15,494	N/A
Wildhorse S&G	00151	0	4,467	N/A
Willow Creek C&H	00315	0	6,865	N/A
Wilson Creek C&H	00316	1,688	5,790	N/A
Wilson Creek Pasture C&H	00317	1,426	4,486	N/A
Wines Creek C&H	00230	647	1,076	N/A
Wiseman C&H	00292	166	3,510	N/A
Wood Gulch	00163	1,639	6,653	N/A
Yankee Bill	00123	1,737	3,864	N/A
Total		278,253	1,792,696	

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BLM NEVADA RESOURCE ADVISORY COUNCIL STANDARDS AND GUIDELINES

Mojave-Southern Great Basin Standards and Guidelines

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Standards and Guidelines for Nevada's Mojave-Southern Great Basin Area

September 2006

PREAMBLE - GRAZING

The Standards and Guidelines for grazing administration on Bureau of Land Management (BLM) lands in southern Nevada apply to livestock grazing. The Mojave-Southern Great Basin Resource Advisory Council (RAC) intends that the Standards and Guidelines will result in a balance of sustainable development and multiple use along with progress, over time, toward attaining desired rangeland conditions. Standards are expressions of physical and biological conditions required for sustaining rangelands for multiple uses. Guidelines point to management actions related to livestock grazing for achieving the Standards. Guidelines are options that move rangeland conditions toward the multiple use Standards. Guidelines are based on science, best rangeland management practices, and public input. Thus Guidelines indicate the types of grazing methods and practices for achieving the Standards for multiple use, are developed for functional watersheds and implemented at the allotment level.

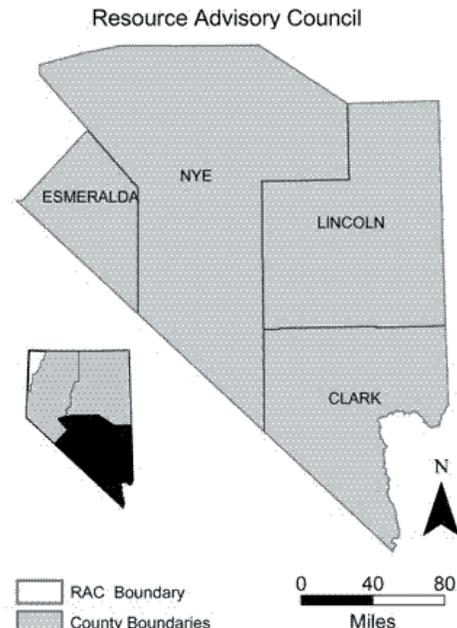
The Mojave-Southern Great Basin Resource Advisory Council recognizes that it will sometimes be a long-term process to restore rangelands to proper functioning condition. In some areas, it may take many years to achieve healthy rangelands.

The Resource Advisory Council may be requested by any party to assist reaching agreement in resolving disputes.

STANDARDS AND GUIDELINES

STANDARD 1. SOILS:

Watershed soils and stream banks should have adequate stability to resist accelerated erosion, maintain soil productivity, and sustain the hydrologic cycle.



Soil indicators:

- Ground cover (vegetation, litter, rock, bare ground);
- Surfaces (e.g., biological crusts, pavement); and
- Compaction/infiltration.

Riparian soil indicators:

- Stream bank stability.

All of the above indicators are appropriate to the potential of the ecological site.

GUIDELINES:

1.1 Upland management practices should maintain or promote adequate vegetative ground cover to achieve the standard.

1.2 Riparian-wetland management practices should maintain or promote sufficient residual vegetation to maintain, improve, or restore functions such as stream flow energy dissipation, sediment capture,

groundwater recharge, and streambank stability.

1.3 When proper grazing practices alone are not likely to restore areas, land management practices may be designed and implemented where appropriate.

1.4 Rangeland management practices should address improvement beyond this standard, significant progress toward achieving standards, time necessary for recovery, and time necessary for predicting trends.

STANDARD 2. ECOSYSTEM COMPONENTS:

Watersheds should possess the necessary ecological components to achieve state water quality criteria, maintain ecological processes, and sustain appropriate uses.

Riparian and wetlands vegetation should have structural and species diversity characteristic of the stage of stream channel succession in order to provide forage and cover, capture sediment, and capture, retain, and safely release water (watershed function).

Upland Indicators:

- Canopy and ground cover, including litter, live vegetation, biological crust, and rock appropriate to the potential of the ecological site.

- Ecological processes are adequate for the vegetative communities.

Riparian Indicators:

- Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows.

- Elements indicating proper functioning condition such as avoiding accelerating erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics:

- Width/Depth ratio;
- Channel roughness;
- Sinuosity of stream channel;

- Bank stability;
- Vegetative cover (amount, spacing, life form); and
- Other cover (large woody debris, rock).

- Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.

Water Quality Indicators:

- Chemical, physical and biological constituents do not exceed the state water quality standards. The above indicators shall be applied to the potential of the ecological site.

GUIDELINES:

2.1 Management practices should maintain or promote appropriate stream channel morphology and structure consistent with the watershed.

2.2 Watershed management practices should maintain, restore or enhance water quality and flow rate to support desired ecological conditions.

2.3 Management practices should maintain or promote the physical and biological conditions necessary for achieving surface characteristics and desired natural plant community.

2.4 Grazing management practices will consider both economic and physical environment, and will address all multiple uses including, but not limited to, (i) recreation, (ii) minerals, (iii) cultural resources and values, and (iv) designated wilderness and wilderness study areas.

2.5 New livestock facilities will be located away from riparian and wetland areas if they conflict with achieving or maintaining riparian and wetland functions. Existing facilities will be used in a way that does not conflict with achieving or maintaining riparian and wetland functions, or they will be relocated or modified when necessary to mitigate adverse impacts on riparian and wetland functions. The location, relocation, design and use of livestock facilities will consider economic feasibility and benefits to be gained for management of lands outside the riparian area along with the effects on riparian functions.

2.6 Subject to all valid existing rights, the design of spring and seep developments shall include provisions to protect ecological functions and processes.

2.7 When proper grazing practices alone are not likely to restore areas of low infiltration or permeability, land management practices may be designed and implemented where appropriate. Grazing on designated ephemeral rangeland watersheds should be allowed only if (i) reliable estimates of production have been made, (ii) an identified level of annual growth or residue to remain on site at the end of the grazing season has been established, and (iii) adverse effects on perennial species and ecosystem processes are avoided.

2.8 Rangeland management practices should address improvement beyond these standards, significant progress toward achieving standards, time necessary for recovery, and time necessary for predicting trends.

STANDARD 3. HABITAT AND BIOTA:

Habitats and watersheds should sustain a level of biodiversity appropriate for the area and conducive to appropriate uses. Habitats of special status species should be able to sustain viable populations of those species.

Habitat Indicators:

- Vegetation composition (relative abundance of species);
- Vegetation structure (life forms, cover, height, and age classes);
- Vegetation distribution (patchiness, corridors);
- Vegetation productivity; and
- Vegetation nutritional value.

Wildlife Indicators:

- Escape terrain;
- Relative abundance;
- Composition;
- Distribution;
- Nutritional value; and
- Edge-patch snags.

The above indicators shall be applied to the potential of the ecological site.

GUIDELINES:

3.1 Mosaics of plant and animal communities that foster diverse and productive ecosystems should be maintained or achieved.

3.2 Management practices should emphasize native species except when others would serve better for attaining desired communities.

3.3 Intensity, frequency, season of use and distribution of grazing use should provide for growth, reproduction, and when environmental conditions permit, seedling establishment of those plant species needed to reach long-term land use plan objectives. Measurements of ecological condition, trend, and utilization will be in accordance with techniques identified in the Nevada Rangeland Handbook.

3.4 Grazing management practices should be planned and implemented to provide for integrated use by domestic livestock and wildlife, as well as wild horses and burros inside Herd Management Areas (HMAs).

3.5 Management practices will promote the conservation, restoration and maintenance of habitat for special status species.

3.6 Livestock grazing practices will be designed to protect fragile ecosystems of limited distribution and size that support unique sensitive/endemic species or communities. Where these practices are not successful, grazing will be excluded from these areas.

3.7 Where grazing practices alone are not likely to achieve habitat objectives, land management practices may be designed and implemented as appropriate.

3.8 Vegetation manipulation treatments may be implemented to improve native plant communities, consistent with appropriate land use plans, in areas where identified standards cannot be achieved through proper grazing management practices alone. Fire is the preferred vegetation manipulation practice on B. (1) The combined aerial parts of plants and

cannot be achieved through proper grazing management practices alone. Fire is the preferred vegetation manipulation practice on areas historically adapted to fire; treatment of native vegetation with herbicides or through mechanical means will be used only when other management techniques are not effective.

3.9 Rangeland management practices should address improvement beyond this standard, significant progress toward achieving standards, time necessary for recovery, and time necessary for predicting trends.

GLOSSARY

Definitions are taken from “A Glossary of Terms Used in Range Management” developed through the Society for Range Management or Bureau of Land Management Technical Reference or from the Dictionary of Ecology, Evolution and Systematics except where noted. Other definitions are from Grazing Administration Regulations Code of Federal Regulations, Chapter 43 Sec. 4100.0.5. Definitions also include meanings that were developed by the Mojave-Southern Great Basin Resource Advisory Council to understand their intent in the Standards and Guidelines.

-A-

Annual Growth. The amount of production of new above ground plant biomass for a given site during a given year.

-B-

Biodiversity. The diversity of organisms in a region; made up of species diversity in individual community-types and the turnover of species across different community-types.

Biological (Cryptogamic) Crust. Community of non-vascular primary producers that occur as a “crust” on the surface of soils; made up of a mixture of algae, lichens, mosses, and cyanobacteria (bluegreen algae).

Biotic. Refers to living components of an ecosystem, e.g., plants and animals and micro-organisms.

-C-

Canopy. (1) The vertical projection downward of the aerial portion of vegetation, usually expressed as a percent of the ground so occupied; (2) The aerial portion of the overstory vegetation.

Canopy Cover. The percentage of ground covered by a vertical projection of the outermost perimeter of the natural spread of foliage of plants. Small openings within the canopy are included. (BLM Technical Reference 4400-7)

Climate. The average or prevailing weather conditions of a place over a period of years. (BLM Technical Reference 4400-7)

Conservation. The planned management of natural resources; the retention of natural balance, diversity and evolutionary change in the environment.

The use and management of natural resources according to principles that assure their sustained economic and/or social benefits without impairment of environmental quality.

Cover. a. (1) The plants or plant parts, living or dead, on the surface of the ground. Vegetative cover or herbage cover is composed of living plants and litter cover of dead parts of plants; (2) The area of ground cover by plants of one or more species.

b. (1) The combined aerial parts of plants and mulch, and (2) Shelter and protection for animals and birds. (BLM Manual 4400)

c. (1) Plant material, living (vegetative cover) and dead (litter cover) on the soil surface; (2) The area of ground covered by the canopy projections of a particular plant species, expressed as a scale or as a percentage of total ground surface area.

Cultural Resources. A broad, general term meaning any cultural property and any traditional lifeway value. (BLM Manual 8100)

Cultural property. A definite location of past human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence. (Manual 8100)

-D-

Desert Pavement. A cemented, hydrophobic layer of rocks or small pebbles that occurs over time on desert soil surfaces; prevents water infiltration into soils and wind/water erosion of the soil; often covered with a chemical varnish layer.

Desired Natural Plant Community. The type of plant community which is desired for a particular ecological site. This could include native and non-native species depending on the desired land use, but as a natural plant community it must have native species adapted to the climate and soil type as dominants or co-dominants in the community.

Desired Plant Community. Of the several plant communities that may occupy a site, the one that has been identified through a management plan to best

meet the plan's objectives for the site. It must protect the site as a minimum.

Diversity. (1) The absolute number of species in a community; species richness; (2) A measure of the number of species and their relative abundance in a community; low diversity refers to few species or unequal abundances, high diversity to many species or equal abundances.

-E-

Ecological Processes. Natural functions including the hydrologic cycle, the nutrient cycle, and energy flow (see also 43 CFR 4180.1(b)).

Ecological Site. The kind of land with a specific potential natural community and specific physical site characteristics, differing from other kinds of land in its ability to produce vegetation and to respond to management. (BLM Manual 4400)

Edaphic. Refers to the soil.

Endemic Species. Native to, and restricted to, a particular geographical region, community type, or specific habitat.

Ephemeral Rangelands. Rangelands characterized by low, highly seasonal and often episodic rainfall, resulting in annual plants comprising a significant proportion of annual primary production.

Erosion. (v.) Detachment and movement of soil or rock fragments by the action of water, wind, ice or gravity. (n.) The land surface worn away by running water, wind, ice, or other geologic agents, including such processes as gravitational creep.

Exotic. An organism or species which is not native to the region in which it is found. Synonym *non-native*: Not native; alien; a species that has been introduced into an area.

-F-

Forage. The plant material actually consumed by (or available to) grazing animals.

Fragile Ecosystems. Uncommon ecosystems of limited distribution and size that support unique sensitive/endemic species or communities; ecosystems that have low resilience to environmental stress or to disturbance.

Frequency. The ratio between the number of sample units that contain a species and the total number of sample units.

A quantitative expression of the presence of absence of individuals of a species in a population. It is defined as the percentage of occurrence of a species in a series of samples of uniform size. (BLM Technical Reference 4400-4)

-G-

Grazing Distribution. Dispersion of livestock grazing within a management unit or area.

Ground Cover. The percentage of material, other than bare ground, covering the land surface. It may include live and standing dead vegetation, litter, cobble, gravel, stones and bedrock. Ground cover plus bare ground would total 100 percent. (BLM Technical Reference 4400-4)

Ground Water. Subsurface water that is in the zone of saturation. The top surface of the ground water is the "water table." Source of water for wells, seepage and springs.

-H-

Habitat. The natural abode of a plant or animal, including all biotic, climatic, and edaphic factors affecting life.

Hydrologic Balance. The balance between hydrological inputs (infiltration of incident precipitation, run-on) and hydrological outputs (run-off, deep drainage) for an ecological site.

-I-

Infiltration. The flow of a fluid into a substance through pores or small openings. The process by which water seeps into a soil, as influenced by soil texture, aspect and vegetation cover.

Infiltration Rate. Maximum rate at which soil under specified conditions can absorb rain or shallow impounded water, expressed in quantity of water absorbed by the soil per unit of time, e.g., inches/hour.

Integrated Use. To merge the use of each type of public land use through a series of land management practices.

-L-

Land Use Plan. Land use plan means a resource management plan, developed under the provisions of 43 CFR part 1600, or management framework plan. These plans are developed through public participation in accordance with the provisions of the Federal Land Policy and Management Act of 1976 and establish management direction for resource uses of public lands. (43 CFR 4100)

Litter. The uppermost layer of organic debris on the soil surface; essentially the freshly fallen or slightly decomposed vegetal material. (BLM Technical Reference 4400-4)

-M-

Management Objective. The objectives for which rangeland and rangeland resources are managed which includes specified users accompanied by a description of the desired vegetation and the expected products and/or values.

Management Plan. A program of action designed to reach a given set of objectives.

Marsh. Flat, wet, treeless areas usually covered by standing water and supporting a native growth of grasses and grasslike plants.

Monitoring. The orderly collection, analysis, and interpretation of resource data to evaluate progress toward meeting management objectives. (BLM Technical Reference 4400-7)

Monitoring. Monitoring means the periodic observation and orderly collection of data to evaluate: (1) Effects of management actions; and (2) Effectiveness of actions in meeting management objectives. (43 CFR 4100.0.5)

Morphology. The form and structure of an organism, with special emphasis on external features.

Multiple Use. The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals watershed, wildlife and fish, natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return of the greatest unit output. (Federal Land Policy and Management Act)

-N-

Native Species. A species which is a part of the original fauna or flora of the area in question. Indigenous; living naturally within a given area and was part of the areas flora or fauna prior to human settlement of the region.

Naturalized Species. An exotic or introduced spe-

cies that has become established and exhibits successful reproduction in an ecosystem.

-P-

Percolation. The flow of a liquid through a porous substance.

Productivity. The potential rate of incorporation or generation of energy or organic matter (biomass) by an organism, population or trophic unit per unit time per unit area; plant productivity is termed primary production, and animal productivity is termed secondary production.

Proper Functioning Condition. Riparian-wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve flood-water retention and ground-water recharge; develop root masses that stabilize streambank against cutting action; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. (BLM Technical Reference 1737-9)

-R-

Range Improvement. Range improvement means an authorized physical modification or treatment which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes but is not limited to, structures, treatment projects, and use of mechanical devices or modifications achieved through mechanical means.

Residual Vegetation. Amount, cover, and species composition of the vegetation on a site after it has been grazed for a period of time.

Resource. Any component of the environment that can be utilized by an organism.

Riparian. Pertaining to, living or situated on, the banks of rivers and streams. 'Xeroriparian' refers to being situated on dry washes (ephemeral streams).

-S-

Seep. Wet areas, normally not flowing, arising from an underground water source.

Soil. (1) The unconsolidated mineral and organic

material on the immediate surface of the earth that serves as a natural medium for the growth of land plants. (2) The unconsolidated mineral matter on the surface of the earth that has been subjected to and influenced by genetic and environmental factors of parent material, climate (including moisture and temperature effects), macro- and micro-organisms, and topography, all acting over a period of time and producing a product -soil- that differs from the material it was derived in many physical, chemical, biological, and morphological properties and characteristics.

Soil Productivity. The organic fertility or capacity of a given area or habitat.

Species. A taxon of the rank species; which is the basic unit, and lowest principal category, of biological classification; in the hierarchy of biological classification, the category below genus; a group of organisms formally recognized as distinct from other groups.

Species Composition. The proportions of various plant species in relation to the total on a given area. It may be expressed in terms of cover, density, weight, etc. Synonym *Vegetative composition*.

Surface Characteristics. The amount of bare ground, litter, rock and basal cover of live vegetation, which may include cryptogams. (Nevada Rangeland Handbook.)

Sustained Yield. The achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use. (FLPMA)

-T-

Traditional lifeway values. The quality of being useful in or important to the maintenance of a specified social and/or cultural group's traditional systems of (a) religious belief, (b) cultural practice, or (c) social interaction, not closely identified with

definite locations. Another group's shared values are abstract, nonmaterial, ascribed ideas that one cannot know about without being told. (BLM Manual 8100)

Trend. The direction of change in ecological status or resource value rating observed over time. Trend in ecological status should be described as *toward*, or *away from* the potential natural community, or as *not apparent*. (BLM Technical Reference 4400-4)

-U-

Upland. Terrestrial ecosystems located away from riparian zones, wetlands, springs, seeps and dry washes; ecosystems made up of vegetation not in contact with groundwater or other permanent water sources.

-V-

Vegetative Life Form. The characteristic structural features and method of perennation of a plant species, e.g., annuals, perennial forbs, shrubs, trees and succulents.

-W-

Watershed. (1) A total area of land above a given point on a waterway that contributes runoff water to the flow at that point. (2) A major subdivision of a drainage basin.

Wetlands. Areas characterized by soils that are usually saturated or ponded, i.e., hydric soils, that support mostly water-loving plants (hydrophytic plants).

In areas of arid low lying land that is submerged or inundated periodically by water, and is characterized by hydric soils that support mostly water-loving (hydrophytic) plants.



*Cow grazing
on Nevada
rangelands.*

STANDARDS AND GUIDELINES IMPLEMENTATION PROCESS

It is a requirement that grazing permits and leases shall contain terms and conditions that ensure conformance with the approved Standards and Guidelines.

The implementation process for Standards and Guidelines will occur under two separate processes as described below:

1. During the supervision and/or monitoring of an allotment, if it is determined that the existing terms and conditions of a grazing permit are not in conformance with the approved Standards and Guidelines and that livestock grazing was determined to be a significant factor in the non-attainment of a standard, then as soon as possible, or no later than the start of the next grazing year, the terms and conditions of the permit/lease will be modified to ensure that the grazing management practices or the levels of the grazing use will be in conformance with the Standards and/or Guidelines. The modification of the terms and conditions of the permit/lease will be implemented by agreement and/or by decision.
2. The allotment evaluation process will continue to be the process used to determine if existing multiple uses for allotments are meeting or making progress towards meeting land use plan objectives, allotment specific objectives, Rangeland Program Summary objectives and land use plan decisions, in addition to the Standards and Guidelines for grazing administration. Additionally, allotment specific objectives may have to be developed or amended, objectives in the land use plans further quantified at the allotment specific level, and terms and conditions of permits changed or revised to reflect the Standards and Guidelines. Allotment evaluations will continue to be completed based on district priorities.
 - a. The allotment evaluation consists of or involves:
 - 1) The evaluation of current grazing use by all users (livestock, wild horses, wildlife) based on monitoring data analysis and interpretation;
 - 2) Recommendations to change or adjust grazing systems;
 - 3) Recommendations to change or adjust

- stocking levels; and
- 4) Establishment of stocking levels for wild horses.
 - b. The allotment evaluation also serves as the basis for either issuing multiple use decisions, agreements, or a no-change determination. Multiple use decisions are prepared subsequent to completion of land use plans and are based on the attainment or non-attainment of objectives established in the land use plans and allotment evaluations.

During the evaluation process, the existing terms and conditions of a permit will be evaluated to determine if they are in conformance with the approved Standards and Guidelines. If it is determined that the existing terms and conditions are not in conformance and that livestock grazing was a significant factor in the non-attainment, then as soon as possible or no later than the start of the next grazing year, the terms and conditions of the permit/lease will be modified to ensure that the grazing management practices or the levels of grazing use will be in conformance.

At the conclusion of the evaluation process, the multiple use decision process will continue to be used to establish:

- 1) The terms and conditions of the grazing permits;
- 2) The appropriate management level for wild horses and burros that occur within the allotment; and
- 3) Any recommendations for wildlife populations or habitat management actions required if it is determined that these actions are necessary.

The preamble to the final regulations contains additional information regarding implementation. The following preamble language is found on page 9956 of the Federal Register notice:

“... The Department intends that failing to comply with a standard in an isolated area would not necessarily result in corrective action. “The Department recognizes that it will sometimes be a long-term process to restore rangelands to

proper functioning condition. The Department intends that Standards and Guidelines will result in a balance of sustainable development and multiple use along with progress towards attaining healthy, properly functioning rangelands. For that reason, wording has been adopted in the final rule that will require the authorized officer to take appropriate action upon determining that existing grazing management practices are failing to ensure appropriate progress toward the fulfillment of standards. . . .”

“In some areas, it may take many years to achieve healthy rangelands, as evidenced by the fundamentals, established Standards, and Guidelines. The Department recognizes, that in some cases, trends may be hard to even document in the first year. The Department will use a variety of data, including monitoring records, assessments, and knowledge of the locale to assist in making the “significant progress determination.”

The acceptance of progress toward reaching the desired end state is also addressed in the regulatory text in 43 CFR 4180.1 Fundamentals of Rangeland

Health which includes the “making significant progress toward” language in each of the four fundamentals.

The concept of “making progress toward” is a specific consideration when determining a course of action during implementation. Determining whether a standard is being met is a distinctly different concept from determining whether progress is being made toward or away from the standard. Determining a course of action is then dependent on a variety of factors, one of which is whether progress is being made toward the standard.

With regard to actions, it is the BLM’s policy and intent to work in a collaborative manner to achieve or maintain the Standards necessary for healthy, productive rangelands. It is not the policy or intent of the BLM to arbitrarily and immediately remove all livestock from an entire allotment based solely on finding a range site that is not meeting a standard. As a practical matter, the BLM has neither policy, intent, desire nor capability to arbitrarily remove all livestock where acceptable progress is being made toward meeting the Standards.



Sloan Canyon in southeastern Nevada.

PREAMBLE - WILD HORSE AND BURRO MANAGEMENT

Nevada is an arid State. The Standards for rangeland health and Guidelines for wild horse and burro management on BLM-administered lands in southern Nevada apply to HMAs. The Mojave-Southern Great Basin RAC intends that the Standards and Guidelines will result in a balance of sustainable development and multiple use.

The standards for rangeland health will be reached and maintained by managing wild horse and burro numbers so as not to exceed Appropriate Management Levels (AML) for each HMA. Controlling wild horse and burro numbers through gathers and other control programs is essential.

Standards are expressions of physical and biological conditions required for sustaining rangelands for multiple uses. Guidelines point to management actions related to HMAs for achieving the Standards. Guidelines are options that move rangeland conditions toward the multiple use Standards. Guidelines are based on science, best rangeland management practices, and public input. Guidelines indicate the types of management methods and practices for achieving the Standards for multiple use and are developed for functional watersheds and implemented within HMAs.

The Mojave-Southern Great Basin RAC recognizes that it may be a long-term process to achieve proper functioning condition(s) on degraded rangelands. Healthy rangelands contribute to healthy herds.

The RAC may be requested by any party to assist in addressing issues related to these Standards and Guidelines.

STANDARDS AND GUIDELINES

STANDARD 1. SOILS:

Watershed soils and stream banks should have adequate stability to resist accelerated erosion, maintain soil productivity, and sustain the hydrologic cycle.

Soil indicators:

- Ground cover (vegetation, litter, rock, bare ground);

- Surfaces (e.g., biological crusts, pavement); and
- Compaction/infiltration.

Riparian soil indicators:

- Stream bank stability.

All of the above indicators are appropriate to the potential of the ecological site.

GUIDELINES: (for Soils Standard)

1.1 Upland management practices should maintain or promote adequate vegetative ground cover to achieve the Standards.

1.2 Riparian-wetland management practices should maintain or promote sufficient residual vegetation to maintain, improve, or restore functions such as stream flow energy dissipation, sediment capture, groundwater recharge, and streambank stability.

1.3 When wild horse and burro herd management practices alone are not likely to restore areas, land management practices may be designed and implemented where appropriate.

1.4 Wild horse and burro herd management practices should address improvement beyond this standard, significant progress toward achieving standards, time necessary for recovery, and time necessary for predicting trends.

STANDARD 2. ECOSYSTEM

COMPONENTS:

Watersheds should possess the necessary ecological components to achieve State water quality criteria, maintain ecological processes, and sustain appropriate uses.

Riparian and wetlands vegetation should have structural and species diversity characteristic of the stage of stream channel succession in order to provide forage and cover, capture sediment, and capture, retain, and safely release water (watershed function).

Upland Indicators:

- Canopy and ground cover including litter, live vegetation, biological crust, and rock appropriate to

the potential of the ecological site.

- Ecological processes are adequate for the vegetative communities.

Riparian Indicators:

- Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows.

- Elements indicating proper functioning condition such as avoiding accelerating erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics:

- Width/Depth ratio;
- Channel roughness;
- Sinuosity of stream channel;
- Bank stability;
- Vegetative cover (amount, spacing, life form); and
- Other cover (large woody debris, rock).

- Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.

Water Quality Indicators:

- Chemical, physical and biological constituents do not exceed the State water quality Standards.

GUIDELINES: (for ECOSYSTEM COMPONENTS STANDARD)

2.1 Management practices should maintain or promote appropriate stream channel morphology and structure consistent with the watershed.

2.2 Watershed management practices should maintain, restore or enhance water quality and flow rate to support desired ecological conditions.

2.3 Management practices should maintain or promote the physical and biological conditions necessary for achieving surface characteristics and desired natural plant community.

2.4 Wild horse and burro herd management practices will consider both economic and physical

environment and will address all multiple uses including, but not limited to, (i) recreation, (ii) minerals, (iii) cultural resources, (iv) wildlife, (v) domestic livestock, (vi) community economics, (vii) Areas of Critical Environmental Concern, (viii) designated wilderness (iv) and wilderness study areas (WSAs).

2.5 New facilities should be located away from riparian and wetland areas if existing facilities conflict with achieving or maintaining riparian and wetland functions. Existing facilities will be used in a way that does not conflict with achieving or maintaining riparian and wetland functions or they will be relocated or modified when necessary to mitigate adverse impacts on riparian and wetland functions.

2.6 Subject to all valid existing rights, the design of spring and seep developments shall include provisions to maintain or promote ecological functions and processes.

2.7 When proper wild horse and burro herd management is not likely to restore areas of low infiltration or permeability, land management practices may be designed and implemented where appropriate. When setting herd management levels on ephemeral rangeland watersheds, reliable estimates of production for drought conditions should be used to avoid adverse effects on perennial species and ecosystem processes and retain a desired minimum level of annual growth or residue remaining.

2.8 Wild horse and burro herd management practices should address improvement beyond this standard, significant progress toward achieving standards, time necessary for recovery, and time necessary for predicting trends.

STANDARD 3. HABITAT AND BIOTA:

Habitats and watersheds should sustain a level of biodiversity appropriate for the area and conducive to appropriate uses. Habitats of special status species should be able to sustain viable populations of those species.

Habitat Indicators:

- Vegetation composition (relative abundance of species);

- Vegetation structure (life forms, cover, height, and age classes);
- Vegetation distribution (patchiness, corridors);
- Vegetation productivity; and
- Vegetation nutritional value.

Wildlife Indicators:

- Escape terrain;
- Relative abundance;
- Composition;
- Distribution;
- Nutritional value; and
- Edge-patch snags.

The above indicators shall be applied to the potential of the ecological site.

GUIDELINES: (for HABITAT AND BIOTA STANDARD)

3.1 Mosaics of plant and animal communities that foster diverse and productive ecosystems should be maintained or achieved.

3.2 Management practices should emphasize native species except when others would serve better for attaining desired communities.

3.3 Wild horse and burro herd management should provide for growth, reproduction, and seedling establishment of those plant species needed to reach long-term land use plan objectives. Measurements of ecological conditions, trend, and utilization will be in accordance with techniques identified in the Nevada Rangeland Handbook.

3.4 Wild horse and burro herd management practices should be planned and implemented to provide for integrated use by domestic livestock and wildlife.

3.5 Wild horse and burro herd management practices will promote the conservation, restoration and maintenance of habitat for special status species.

3.6 Wild horse and burro herd management practices will be designed to protect fragile ecosystems of limited distribution and size that support unique sensitive/endemic species or communities. Where these practices are not successful, herd levels will be reduced or eliminated from these areas.

3.7 When wild horse and burro herd management practices alone are not likely to restore areas, land management practices may be designed and implemented where appropriate.

3.8 Vegetation manipulation treatments may be implemented to improve native plant communities, consistent with appropriate land use plans, in areas where identified standards cannot be achieved through wild horse and burro herd management practices alone. Fire is the preferred vegetation manipulation practice on areas historically adapted to fire; treatment of native vegetation with herbicides or through mechanical means will be used only when other management techniques are not effective.

3.9 Wild horse and burro herd management practices should address improvement beyond this standard, significant progress toward achieving standards, time necessary for recovery, and time necessary for predicting trends.

STANDARD 4: WILD HORSES AND BURROS

Wild horses and burros within HMAs should be managed for herd viability and sustainability. HMAs should be managed to maintain a healthy ecological balance among wild horse and/or burro populations, wildlife, livestock, and vegetation.

Herd health indicators.-

- General horse and/or burro appearance: Problems are often apparent and can be easily identified by just looking at the herd.

- Crippled or injured horses and/or burros: Excessive injuries can indicate problems.

Herd demographics indicators.

- Size of bands: A band with one stud or jack, one mare or jenny, and one foal indicates a problem. An oversized band also indicates there is a problem. Band sizes of 5-10 animals with one dominant stud per band is a good indicator.

- Size of Bachelor Bands: Large bachelor bands in the immediate vicinity of other bands could indicate potential problems.

Herd viability indicators.

- Heavy trailing into water sources may indicate a

significant problem with forage availability or water distribution. Animals may be traveling considerable distances to obtain water or forage.

- Waiting for water. When available water becomes so scarce that a waiting line develops, horses and burros are in trouble.

- Availability of water. Address legal and/or climatic considerations. Situations exist where wild horses and burros are present only because they currently have access to water which they could legally be deprived of under Nevada Water Laws. Situations exist where existing wild horse and burro populations are dependent upon water hauling. If water hauling were to cease these animals would die within a matter of days.

- Depleted forage near all available water sources. Adequate water and forage adjacent to water sources are essential.

GUIDELINES: (for WILD HORSES AND BURROS STANDARD)

4.1 Wild horse and burro population levels in HMAs should not exceed AML.

4.2 AMLs should be set to reflect the carrying capacity of the land in dry conditions based upon the most limiting factor: living space, water or forage. Management levels will not conflict with achieving or maintaining standards for soils, ecological components, or diversity of habitat and biota.

4.3 Interaction with herds should be minimized. Intrusive gathers should remove sufficient numbers of animals to ensure a period between gathers that reflects national wild horse and burro management strategies. Non intrusive gathers such as water trapping can be done on an “as needed” basis.

4.4 Herd Management Plans should be made with the best predictive information available. When emergency actions occur the Herd Management Plan should be re-evaluated.

4.5 Viable sex and age distribution should be a long-term goal of any wild horse and burro herd management plan. Sex and age distribution of the herd should be addressed when (after) AML has been reached.

4.6 When wild horse and burro herd management alone is not likely to restore areas, land management practices may be designed and implemented where appropriate.

4.7 Wild horse and burro herd management practices should address improvement beyond this standard, significant progress toward achieving standards, time necessary for recovery, and time necessary for predicting trends.

Wild horses roaming Nevada's rangelands.



OFF HIGHWAY VEHICLE ADMINISTRATION GUIDELINES FOR NEVADA PUBLIC LANDS

INTRODUCTION

The Nevada Northeastern Great Basin RAC, the Sierra Front-Northwestern Great Basin RAC, and the Mojave-Southern Great Basin RAC, as chartered by the Department of the Interior, have developed Guidelines for the administration of Off-Highway Vehicle (OHV) use on public lands within the State of Nevada. These guidelines are intended to promote cooperation among user groups, to share resources, and to minimize conflicts in accordance with the Nevada Standards for Rangeland Health. While recognizing the legitimacy and necessity of OHV use on public lands, it has become necessary to define guidelines for management of OHVs to ensure the protection of land health and the availability of the public lands for all multiple users. These guidelines are to assist land managers in administrative and planning decisions. Administrators may use the guidelines for managing for land health and making decisions with regard to restricting, or not restricting OHV activity. Additionally, administrators may use the educational guidelines as tools to provide training for land managers and to inform the public on OHV use issues and ethics. Planners should use these guidelines in developing timely plans for resources and recreation use, while addressing the increasing demand for OHV use.

ON-THE-GROUND MANAGEMENT GUIDELINES

- Encourage OHV use on existing or designated roads and trails, except in closed areas, prior to land use plans being updated and road and trail inventories completed.
- Locate and manage OHV use to conserve soil functionality, vegetative cover, and watershed health. Manage OHV use to minimize the impact on the land, while maintaining OHV access.
- Manage OHV use by type, season, intensity, distribution, and/or duration to minimize the impact on plant and animal habitats. If seasonal closures become appropriate to minimize adverse OHV impact(s) on public lands resources, managers will strive to preserve public access by designating alternative routes.
- Manage OHV activities to conserve watershed and water quality.
- Monitor the impact(s) of OHV activities on all public land, water, air and other resources and uses.
- Maintain an inventory of existing road and trail systems.
- Manage OHV use to preserve cultural, historical, archaeological, and paleontological resources.
- Engineer, locate, and relocate roads and trails to accommodate OHV activities while minimizing resource impacts.
- Encourage cooperation in law enforcement among all agencies.
- OHV use pursuant to a permitted activity shall be governed by the terms of the permit.

PLANNING GUIDELINES

- In land use plans or plan amendments, designate areas as open, limited, or closed to OHV use.
- Address OHV management including land use and/or route designations, monitoring and adaptive management strategies, such as applying the Limits of Acceptable Change process, when developing new land use plans or amending existing land use plans. Work closely with local, state, tribal, and other affected parties and other resource users in OHV planning.
- Establish and maintain an inventory of existing routes and trails as part of the land use planning process.
- Provide for other resources and uses in OHV planning. This includes livestock grazing, other recreational uses, archaeological sites, wildlife, horses and burros, and mineral extractions and coordinate with other users of public lands.
- Conduct an assessment of current and future OHV demand, and plan for and balance the demand for this use with other multiple uses/users when developing all land use plans.
- Include in land use plans, social/economic effects of OHV use, including special

recreation events.

- Integrate concepts of habitat connectivity into OHV planning to minimize habitat fragmentation.
- For addressing/resolving local site-specific OHV issues/concerns, use collaborative planning groups consisting of local representative(s), affected/interested group(s) and agency(s).
- Clearly identify route and area designations.
- Where land health permits, develop sustainable OHV use areas to meet current and future demands, especially for urban interface.

EDUCATION GUIDELINES

- Cooperatively develop/improve public outreach programs to promote trail etiquette, environmental ethics, and responsible-use stewardship ethic.
- Promote/expand/disseminate materials from programs such as, but not limited to, “Tread Lightly!” and “Leave No Trace.”

- Provide OHV management education and training for managers, staff, partners and volunteers. Training should focus on the art practices and be tailored to meet local needs. Encourage communication between agencies, managers, staff, partners and volunteers to share expertise and effective techniques.
- Encourage the private sector, as well as the public sector, to conduct responsible marketing of activities on public lands while avoiding the promotion of products, behaviors and services that are inconsistent with existing regulations and land use plans.
- Develop communication and environmental education plan(s). Assess all situations where OHV use may require public information and education. Develop materials and programs appropriate to each situation.
- Utilize high use areas and special events to maximize the dissemination of responsible use education materials and concepts to the public.

GEOGRAPHIC AREA COVERED BY THE STANDARDS AND GUIDELINES

The three RAC areas in Nevada are based on combinations of major land resource areas as developed by the Natural Resource Conservation Service for Nevada. This land classification system is recognized by the Bureau of Land Management, the Forest Service and other agencies as a basis for ecosystem data collection and analysis. The soil, vegetal and geophysical characteristics of each of the three areas are different and the text offered by the three RACs incorporates their understanding of the differing physical and biological needs of the rangeland ecosystems.

Recognition of these differences is critical to the successful protection of rangelands in Nevada. As a result of basing the RAC boundaries according to an ecosystem approach as opposed to strictly an administrative or jurisdictional

approach, the RAC’s advice and recommendations are more relevant to the on-the-ground management of natural resources. The area covered by the Standards and Guidelines is as follows. Adjustments will be made for grazing allotments that overlap the boundaries between the RAC areas.

The Mojave-Southern Great Basin RAC recommends actions to the BLM Nevada State Director for all or portions of Clark, Nye and White Pine counties. This includes all of the Las Vegas Field Office and portions of the Battle Mountain and Ely Field Offices.

BLM NEVADA OFFICES

NEVADA STATE OFFICE

State Director: Ron Wenker
Associate State Director: Amy Lueders
1340 Financial Blvd.
Reno, NV 89502
775-861-6590
FAX: 775-861-6601
Hours: 7:30am - 4:30pm weekdays

BATTLE MOUNTAIN FIELD OFFICE

Field Manager: Gerald Smith
50 Bastian Road
Battle Mountain, Nevada 89820
775-635-4000
FAX: 775-635-4034
Hours: 7:30am - 4:30pm weekdays

Tonopah Field Station

Field Station Manager: Bill Fisher
1553 South Main St.
PO Box 911
Tonopah, Nevada 89049-0911
775-482-7800
FAX: 775-482-7810
Hours: 7:30am - 4:30pm weekdays

ELY FIELD OFFICE

Field Manager: John Ruhs
775 North Industrial Way
HC33 Box 33500
Ely, Nevada 89301-9408
775-289-1800
FAX: 775-289-1910
Hours: 7:30am - 4:30pm weekdays

Caliente Field Station

Field Station Manager: Ron Clementsen
U.S. Highway 93, PO Box 237
Caliente, Nevada 89008-0237
775-726-8100
FAX: 775-726-8111
Hours: 7:30am - 4:30pm weekdays

LAS VEGAS FIELD OFFICE

Field Manager: Juan Palma
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130-2301
702-515-5000
FAX: 702-515-5023
Hours: 7:30a.m. – 4:15pm weekdays

CARSON CITY FIELD OFFICE

Field Manager: Don Hicks
5665 Morgan Mill Road
Carson City, Nevada 89701
775-885-6000
FAX: 775-885-6147
Hours: 7:30am - 5:00pm weekdays

WINNEMUCCA FIELD OFFICE

Field Manager: Gail Givens
5100 East Winnemucca Boulevard
Winnemucca, Nevada 89445
775-623-1500
FAX: 775-623-1503
Hours: 7:30am - 4:30pm weekdays

ELKO FIELD OFFICE

Field Manager: Helen Hankins
3900 East Idaho Street
Elko, Nevada 89801
775-753-0200
FAX: 775-753-0255
Hours: 7:30am - 4:30pm weekdays

NAT'L WILD HORSE & BURRO CENTER AT PALOMINO VALLEY

Facility Manager: John Neill
PO Box 3270
Sparks, Nevada 89432-3272
775-475-2222
FAX: 775-475-2053
Hours: 8:00am – 4:00pm weekdays

NORTHEASTERN GREAT BASIN AREA STANDARDS AND GUIDELINES FOR GRAZING AND WILD HORSES AND BURROS

Preamble

The Nevada Northeastern Great Basin Resource Advisory Council (RAC), as chartered by the Department of the Interior to promote healthy rangelands, has developed Standards and Guidelines for grazing administration on about 16.2 million acres of public lands and Standards and Guidelines for maintaining healthy wild horse and burro herds on Herd Management Areas (HMA's) administered by the Bureau of Land Management within the designated geographic area of the Northeastern Great Basin.

The RAC, in developing these Standards and Guidelines, understands and agrees that grazing and wild horses and burros are two of the multiple uses recognized under the Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 1739, 1740). The RAC recognizes the limited management options currently available for wild horses and burros. Unlike domestic stock that can be husbanded and controlled regularly, or wildlife that can be controlled through sport harvest, free-roaming wild horses and burros must be managed by capture and adoption or placement in sanctuaries to achieve a sustainable relationship with land and resources year-round.

The RAC, in recommending these Standards and Guidelines, urges the Bureau to aggressively implement the management strategies to expeditiously establish, achieve and maintain Appropriate Management Level's (AML's) of wild horses and burros within HMA's and remove them from outside HMA's. These recommended Standards and Guidelines reflect the stated goals of improving rangeland health while providing for the viability of the livestock industry, all wildlife species and wild horses and burros in the Northeastern Great Basin Area.

NE RAC's Intended Use of Standards and Guidelines

Standards and Guidelines will be implemented through terms and conditions of grazing permits, leases, and other authorizations, grazing-related portions of activity plans (including Allotment Management Plans), and through range improvement-related activities.

Standards and Guidelines for wild horses and burros will be implemented through control of population levels within established HMA's, related portions of activity plans (including Allotment Management Plans), and through range restoration related activities. Wild horse and burro herd management practices should consider both economic and physical environment and will address all multiple uses including, but not limited to recreation, minerals, cultural resources, wildlife, domestic livestock, community economics, Areas of Critical Environmental Concern, designated wilderness and wilderness study areas (WSAs).

The RAC anticipates that in most cases the Standards and Guidelines themselves will not be terms and conditions of various authorizations but that the terms and conditions will reflect the Standards and Guidelines.

The RAC intends that the Standards and Guidelines will result in a balance of sustainable development and multiple use along with progress towards attaining healthy, properly functioning rangelands and healthy wild horse and burro herds. For that reason, wording has been adopted in this final rule that will require the authorized officer to take appropriate action upon determining the existing management practices are failing to ensure significant progress toward the fulfillment of the Standards and towards conformance with the guidelines.

The RAC intends that assessments and corrective actions will be undertaken in priority order as determined by BLM. The BLM will use a variety of data including monitoring records, assessments, and knowledge of the locale to assist in making the “significant progress” determination. It is anticipated that in many cases it will take numerous seasons to determine direction and magnitude of trend. However, actions will be taken to establish significant progress toward conformance as soon as sufficient data are available to make informed changes relative to numbers of wild horses and burros, herd management decisions and grazing practices.

Standards and Guidelines

Standard 1. Upland Sites:

Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and land form.

As indicated by: Indicators are canopy and ground cover, including litter, live vegetation and rock, appropriate to the potential of the site.

Guidelines:

1.1 Livestock grazing management and wild horse and burro population levels are appropriate when in combination with other multiple uses they maintain or promote upland vegetation and other organisms and provide for infiltration and permeability rates, soil moisture storage, and soil stability appropriate to the ecological site within management units.

1.2 When livestock grazing management and wild horse and burro herd management alone are not likely to restore areas of low infiltration or permeability, land management treatments should be designed and implemented where appropriate.

1.3 Livestock grazing management and wild horse and burro herd management are adequate when significant progress is being made toward this standard.

See Appendix C(a) for additional guidelines for vegetation management.

Standard 2. Riparian and Wetland Sites:

Riparian and wetland areas exhibit a properly functioning condition and achieve state water quality criteria.

As indicated by:

Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows. Elements indicating proper functioning condition such as avoiding accelerating erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics:

- Width/Depth ratio; Channel roughness; Sinuosity of stream channel; Bank stability; Vegetative cover (amount, spacing, life form); and Other cover (large woody debris, rock).

Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.

Chemical, physical and biological water constituents are not exceeding the state water quality standards.

Guidelines:

2.1 Livestock grazing management and wild horse and burro population levels will maintain or promote sufficient vegetation cover, large woody debris, or rock to achieve proper functioning condition in riparian and wetland areas. Supporting the processes of energy dissipation, sediment capture, groundwater recharge, and stream bank stability will thus promote stream channel morphology (e.g., width/depth ratio, channel roughness, and sinuosity) appropriate to climate, landform, gradient, and erosional history.

2.2 Where livestock grazing management and wild horse and burro herd management are not likely to restore riparian and wetland sites, land management treatments should be designed and implemented where appropriate to the site.

2.3 Livestock grazing management and wild horse and burro herd management will maintain, restore or enhance water quality and ensure the attainment of water quality that meets or exceeds state standards.

2.4 Livestock grazing management and wild horse and burro herd management are adequate when significant progress is being made toward this standard.

See Appendix c(a) for additional guidelines for vegetation management.

Standard 3. Habitat:

Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet the life cycle requirements of threatened and endangered species.

As indicated by:

- Vegetation composition (relative abundance of species);
- Vegetation structure (life forms, cover, heights, or age classes)
- Vegetation distribution (patchiness, corridors);
- Vegetation productivity; and Vegetation nutritional value.

Guidelines:

3.1 Livestock grazing management and wild horse and burro population levels will promote the conservation, restoration and maintenance of habitat for threatened and endangered species, and other special status species as may be appropriate.

3.2 Livestock grazing intensity, frequency, season of use and distribution and wild horse and burro population levels should provide for growth and reproduction of those plant species needed to reach long-term land use plan objectives. Measurements of ecological condition and trend/utilization will be in accordance with techniques identified in the Nevada Rangeland Monitoring Handbook.

3.3 Livestock grazing management and wild horse and burro management should be planned and implemented to allow for integrated use by domestic livestock, wildlife, and wild horses and burros consistent with land use plan objectives.

3.4 Where livestock grazing management and wild horse and burro herd management alone are not likely to achieve habitat objectives, land treatments may be designed and implemented as appropriate.

3.5 When native plant species adapted to the site are available in sufficient quantities, and it is economically and biologically feasible to establish or increase them to meet management objectives, they will be emphasized over non-native species.

3.6 Livestock grazing management and wild horse and burro herd management are adequate when significant progress is being made toward this Standard.

See Appendix C(a) for additional guidelines for vegetation management.

Standard 4. Cultural Resources:

Land use plans will recognize cultural resources within the context of multiple use.

Guidelines:

4.1 Rangeland management plans will consider listings of known sites that are National Historic Register eligible or considered to be of cultural significance and new eligible sites as they become known.

4.2 Wild horse and burro herd management will be designed to avoid or mitigate damage to significant cultural resources.

Standard 5. Healthy Wild Horse and Burro Populations:

Wild horses and burros exhibit characteristics of a healthy, productive, and diverse population. Age structure and sex ratios are appropriate to maintain the long term viability of the population as a distinct group. Herd management areas are able to provide suitable feed, water, cover and living space for wild horses and burros and maintain historic patterns of habitat use.

As indicated by:

- Healthy rangelands that provide sufficient quantities and quality of forage and water to sustain the appropriate management level on a yearlong basis within a herd management area.

Wild horses and/or burros managed on a year-long basis for a condition class greater than or equal to five to allow them normal chances for survival in the winter (See glossary for equine body conditioning definitions).

Highly adoptable wild horses and burros that are readily available from herd management areas.

Wild horse and burro herds that exhibit appropriate age structure and sex ratio for short and long term genetic and reproductive health.

Guidelines:

5.1 Implement the objectives outlined in the Wild Free-Roaming Horses and Burros Tactical Plan for Nevada (May 1999).

5.2 Manage for wild horses and/or burros in herd management areas based on the capability of the HMA to provide suitable feed, water, cover and living space for all multiple uses.

5.3 Set appropriate Management Levels based on the most limiting habitat factor (e. g., available water, suitable forage, living space and cover) in the context of multiple use.

5.4 Manage herd management area populations to preserve and enhance physical and biological characteristics that are of historical significance to the herd.

5.5 Manage wild horse and burro herds for short and long term increases and to enhance adoptability by ensuring that wild horses and burros displaying desirable traits are preserved in the herd thus providing a reproductive base to increase highly adoptable horses and burros for future demands.

5.6 Identify and preserve historic traits and characteristics within the herd which have proven to be highly desirable by the adoption public to increase the long term availability of animals bearing these features.

5.7 Wild horse and burro selective removal criteria are modified on a per herd basis to correct deficiencies in population age and sex ratios which threaten short and long term genetic diversity and reproductive health.

Glossary

Most Definitions are taken from "A Glossary of Terms Used in Range Management" developed through the Society for Range Management. If a definition has been slightly modified it is marked with an *. Other definitions are from Grazing Administration Regulations Code of Federal Regulations, Chapter 43, Sec. 4100.0-5 or Bureau of Land Management Technical Reference. Definitions also include meanings that were developed by the Northeastern Great Basin Resource Advisory Council to understand their intent in the Standards and Guidelines.

B

Biotic - Refers to living components of an ecosystem, e.g., plants and animals.

C

Canopy - (1) The vertical projection downward of the aerial portion of vegetation, usually expressed as a percent of the ground so occupied. (2) The aerial portion of the overstory vegetation.

Canopy Cover - The percentage of ground covered by a vertical projection of the outermost perimeter of the natural spread of foliage of plants. Small openings within the canopy are included.

Climate - The average or prevailing weather conditions of a place over a period of years.

D

*Distribution (Grazing) - Dispersion of grazing animals within a management unit or area.

E

Ecological Site - The kind of land with a specific potential natural community and

specific physical site characteristics, differing from other kinds of land in its ability to produce vegetation and to respond to management.

Edaphic - Refers to the soil.

Equine body conditioning -

1. Poor. Extremely emaciated; spinal processes, ribs, tailhead, tuber coxae and ischii projecting prominently, no fatty tissue can be seen.
2. Very Thin. Emaciated; slight fatty covering over base of spinal processes; transverse processes of lumbar vertebrae feel rounded; spinal processes, ribs, tailhead, tuber coxae and ischii prominent; withers, shoulders, and neck structure faintly discernible.
3. Thin. Fat buildup about halfway on spinal processes; transverse processes cannot be felt; slight fat covering over ribs; spinal processes and ribs easily discernible; tailhead prominent, but individual vertebrae cannot be identified visually; tuber coxae appear rounded but easily discernible, tuber ischii not distinguishable; withers, shoulders, and neck accentuated.
4. Moderately Thin. Slight ridge along back; faint outline of ribs discernible; tailhead prominence depends on conformation – fat can be felt around it; tuber coxae not discernible; withers, shoulders and neck not obviously thin.
5. Moderate. Back is flat (no crease or ridge); ribs not visually distinguishable but easily felt around tailhead and area beginning to feel spongy; withers appear rounded over spinal processes; shoulders and neck blend smoothly into body.
6. Moderately Fleshy. May have slight crease down back; fat over ribs spongy; fat around tailhead soft; fat beginning to be deposited along the side of withers, behind shoulders, and along sides of neck.
7. Fleshy. May have crease down back; individual ribs can be felt, but noticeable filling between ribs with fat; fat around tailhead soft; fat deposited along withers, behind shoulders and along neck.
8. Fat. Crease down back; difficult to feel ribs; fat around tailhead very soft; area along withers filled with fat; area behind shoulder filled with fat; noticeable thickening of neck; fat deposited along inner thighs.
9. Extremely Fat. Obvious crease down back; patchy fat appearing over ribs; bulging fat around tailhead, along withers, behind shoulders, and along neck; fat along inner thighs may rub together, flank filled with fat.

Erosion - (v.) Detachment and movement of soil or rock fragments by water, wind, ice or gravity. (n) The land surface worn away by running water, wind, ice, or other geologic agents, including such processes as gravitational creep.

Exotic - An organism or species which is not native to the region in which it is found. Synonym non-native.

G

*Grazing - For the purposes of this document grazing refers to the removal of vegetation by domestic livestock.

Ground Cover - The percentage of material, other than bare ground, covering the land surface. It may include live and standing dead vegetation, litter, cobble, gravel, stones and bedrock. Ground cover plus bare ground would total 100 percent.

Ground Water - Subsurface water that is in the zone of saturation. The top surface of the ground water is the "water table". Source of water for wells, seepage, springs.

Guidelines - Guidelines are livestock management practices (e.g. tools, methods, strategies and techniques) designed to achieve healthy public lands as defined by Standards and portrayed by Indicators. Guidelines are designed to provide direction, yet offer flexibility for local implementation through activity plans and grazing permits. Activity plans may add specificity to the Guidelines based on local goals and objectives as provided for in adopted manuals, handbooks and policy. Not all Guidelines fit all circumstances. Monitoring or site specific evaluation will determine if significant progress is being made towards achieving the standards, and if the appropriate guidelines are being applied.

H

Habitat - The natural abode of a plant or animal, including all biotic, climatic, and edaphic factors affecting life.

Herd Area - means the geographic area identified as having been used by a herd as its habitat in 1971.

Herd Management Area - Herd Area or portion of a Herd Area that has been designated through the planning process where horses and/or burros can be managed as a component of the public lands.

I

Indicators - Indicators are observations or measurements of physical, chemical or biological factors used to evaluate site conditions or trends, appropriate to the potential of the site. Indicators will be used to determine whether or not Standards are being met.

Infiltration - The flow of a fluid into a substance through pores or small openings. It connotes flow into a substance in contradistinction to the word percolation.

Infiltration Rate - Maximum rate at which soil under specified conditions can absorb rain or shallow impounded water, expressed in quantity of water absorbed by the soil per unit of time, e.g., inches/hour.

Intensity (Grazing) - A reference to grazing density per unit of time.

L

Land Use Plan - Land use plan means a resource management plan, developed under the provisions of 43 CFR part 1600, or management framework plan. These plans are developed through public participation in accordance with the provisions of the Federal Land Policy and Management Act of 1976 and establish management direction for resource uses of public lands. (43 CFR 4100.5)

Litter - The uppermost layer of organic debris on the soil surface; essentially the freshly fallen or slightly decomposed vegetal material.

M

Management Objective - The objectives for which rangeland and rangeland resources are managed which includes specified uses accompanied by a description of the desired vegetation and the expected products and/or values.

Management Plan - A program of action designed to reach a given set of objectives.

Marsh - Flat, wet, treeless areas usually covered by standing water and supporting a native growth of grasses and grasslike plants.

Monitoring - The orderly collection, analysis, and interpretation of resource data to evaluate progress toward meeting management objectives.

Morphology - The form and structure of an organism, with special emphasis on external features.

N

*Native Species - A species which is a part of the indigenous fauna or flora of the area in question.

O

Overstory - The upper canopy or canopies of plants. Usually refers to trees, tall shrubs and vines.

P

Percolation - The flow of a liquid through a porous substance.

Plant Cover - (1) The plants or plant parts, living or dead, on the surface of the ground. Vegetative cover or herbage cover is composed of living plants and litter cover of dead parts of plants. (2) The area of ground cover by plants of one or more species.

Proper Functioning Condition - Riparian-Wetland areas are functioning properly when adequate vegetation, land-form, or large woody debris is present to dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve flood-water retention and ground-water recharge; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. [BLM Technical Reference 1737-9]

R

Range Improvement - Range improvement means an authorized physical modification or treatment which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes but is not limited to, structures, treatment projects, and use of mechanical devices or modifications achieved through mechanical means.

Riparian - Referring to or relating to areas adjacent to water or influenced by free water associated with streams or rivers on geologic surfaces occupying the lowest position of a watershed.

S

Seep - Wet areas, normally not flowing, arising from an underground water source.

Soil - (1) The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants. (2) The unconsolidated mineral matter on the surface of the earth that has been subjected to and influenced by genetic and environmental factors of parent material, climate (including moisture and temperature effects), macro- and micro-organisms, and topography, all acting over a period of time and producing a product - soil - that differs from the material it was derived in many physical, chemical, biological, and morphological properties and characteristics.

Species - A taxon or rank species; in the hierarchy or biological classification, the category below genus.

Species Composition - The proportions of various plant species in relation to the total on a given area. It may be expressed in terms of cover, density, weight, etc. Synonym Vegetative composition.

Spring - Flowing water originating from an underground source.

T

Trend - The direction of change in ecological status or resource value rating observed over time. Trend in ecological status should be described as toward, or away from the potential natural community, or as not apparent. Trend in a resource value rating for a specific use should be described as up, down or not apparent. Trends in resource value ratings for several uses on the same site at a given time may be in different directions, and there is no necessary correlation between trends in resource value ratings and trend in ecological status. Some agencies use trend only in the context of ecological status. Syn. range condition trend.

U

Utilization - The proportion of current year's forage production that is consumed or destroyed by grazing animals. May refer either to a single species or to the vegetation as a whole.

W

Watershed - (1) A total area of land above a given point on a waterway that contributes runoff water to the flow at that point. (2) A major subdivision of a drainage basin.

Wetlands - Areas characterized by soils that are usually saturated or ponded, i.e., hydric soils that support mostly water loving plants (hydrophytic plants).

Reference

This information was taken directly from the Northeastern Great Basin RAC website for Standards and Guidelines for Grazing and Wild Horses and Burros. http://www.blm.gov/nv/st/en/res/resource_advisory/northeastern_great/s_gs/wild_horses.html.

RAC STANDARDS AND GUIDELINES FOR RANGELAND HEALTH FOR THE SIERRA FRONT-NORTHWESTERN GREAT BASIN AREA

Preamble Standards for Rangeland Health

The Standards and Guidelines for livestock grazing on Bureau of Land Management lands are written to accomplish the four fundamentals of rangeland health, insofar as they are affected by livestock grazing practices. Those fundamentals are:

- Watersheds are properly functioning;
- Ecological processes are in order;
- Water quality complies with State Standards; and
- Habitats of protected species are in order.

Other uses can affect the health of the land, and Guidelines for these currently exist or will be developed as needed. In addition, implementation of livestock grazing guidelines must be coordinated with other uses of the land, and collectively these uses should not detract from the goal of achieving public land health.

Standards, Indicators and Guidelines will be implemented through Standard public land management practices as defined in the Nevada Rangeland Monitoring Handbook and the other documents listed in Appendix A [of this appendix].

Standards: The goal to be achieved.

Indicators: Indicators are observations or measurements of physical, chemical or biological factors that should be used to evaluate site conditions or trends, appropriate to the potential of the site. Indicators assist in determining whether Standards are met or Guidelines followed.

Guidelines: Guidelines are livestock management practices (e.g., tools, methods, strategies and techniques) designed to achieve healthy public lands as defined by Standards and portrayed by Indicators. Guidelines are designed to provide direction, yet offer flexibility for local implementation through activity plans and grazing permits. Activity plans may add specificity to the Guidelines based on local goals and objectives as provided for in adopted manuals, handbooks and policy. Not all Guidelines fit all circumstances. Monitoring and site specific evaluation will determine if the Standards are being met or the trend on a particular site is toward desired objectives, and if the correct Guidelines are being applied. The BLM Authorized Officer, in consultation with public land users, will identify and document acceptable or unavoidable exceptions on a case-by-case basis.

Standard 1. Soils:

Soil processes will be appropriate to soil types, climate and land form.

As indicated by:

- Surface litter is appropriate to the potential of the site;
- Soil crusting formations in shrub interspaces, and soil compaction are minimal or not in evidence, allowing for appropriate infiltration of water;
- Hydrologic cycle, nutrient cycle and energy flow are adequate for the vegetative communities;
- Plant communities are diverse and vigorous, and there is evidence of recruitment; and
- Basal and canopy cover (vegetative) is appropriate for site potential.

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- Watersheds are properly functioning;
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- Water quality complies with State Standards; and
- Habitats of protected species are in order.

Other uses can affect the health of the land, and Guidelines for these currently exist or will be developed as needed. In addition, implementation of livestock grazing guidelines must be coordinated with other uses of the land, and collectively these uses should not detract from the goal of achieving public land health.

Standards, Indicators and Guidelines will be implemented through Standard public land management practices as defined in the Nevada Rangeland Monitoring Handbook and the other documents listed in Appendix A [of this appendix].

Standard 2. Riparian/Wetlands:

Riparian/Wetland systems are in properly functioning condition.

As indicated by:

- Sinuosity, width/depth ratio and gradient are adequate to dissipate streamflow without excessive erosion or deposition;

- Riparian vegetation is adequate to dissipate high flow energy and protect banks from excessive erosion; and
- Plant species diversity is appropriate to riparian-wetland systems.

Standard 3. Water Quality:

Water quality criteria in Nevada or California State Law shall be achieved or maintained.

As indicated by:

- Chemical constituents do not exceed the water quality Standards;
- Physical constituents do not exceed the water quality Standards;
- Biological constituents do not exceed the water quality Standards; and
- The water quality of all water bodies, including ground water located on or influenced by BLM lands will meet or exceed the applicable Nevada or California water quality Standards. Water quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and antidegradation requirements set forth under State law, and as found in Section 303(c) of the Clean Water Act.

Standard 4. Plant and Animal Habitat:

Populations and communities of native plant species and habitats for native animal species are healthy, productive and diverse.

As indicated by:

- Good representation of life forms and numbers of species;
- Good diversity of height, size, and distribution of plants;
- Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and
- Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation.

Standard 5. Special Status Species Habitat:

Habitat conditions meet the life cycle requirements of special status species.

As indicated by:

- Habitat areas are large enough to support viable populations of special status species;
- Special status plant and animal numbers and ages appear to ensure stable populations;

- Good diversity of height, size, and distribution of plants;
- Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and
- Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation.

Guidelines for Grazing Management:

1. Waters must be free from high temperature, biocides, organisms pathogenic to human beings, toxic, corrosive or other deleterious substances attributable to domestic or industrial waste or other controllable sources at levels or combinations to interfere with any beneficial use of the water. Compliance with the provisions of this subsection may be determined in accordance with methods of testing prescribed by the State. If used as an Indicator, survival of test organisms must not be significantly less in test water than in control water.
2. Grazing management practices should be planned and implemented to meet water quality provisions in either California State water law or Nevada Administrative Code Section 445A.120-121 as applicable.
3. Management practices within allotments will maintain or promote stream channel morphology, appropriate soil organisms; adequate amounts of ground cover to support infiltration, maintain soil moisture storage, and stabilize soils; and the hydrologic cycle, nutrient cycle and energy flow.
4. After a range fire or other natural catastrophic event, vegetation should be returned to the native species as rapidly as possible, to afford forage and habitat for native animals. If a nurse crop is needed to protect the land from erosion, all native nurse crops should be used first.
5. Treated areas will be rested from livestock grazing for two growing seasons or until seedlings are established or the vegetative response has achieved objective levels. Wild horse and burros removed from Herd Management Areas will be restored after rehabilitation objectives have been met.
6. Alternative solutions (e.g., reseeding, funding, labor, equipment use or rental) to facilitate fire rehabilitation may be included in cooperative agreements involving qualified groups and individuals who want to participate.
7. Appropriate livestock grazing treatments will be implemented to control the frequency, duration, and level of grazing use. Where livestock grazing is authorized, grazing systems will provide within any one grazing year one or more of the following treatments:

- a. Rest or deferment from livestock grazing on a specified area as appropriate to meet Standards.
 - b. Systematic rotation of deferred use and/or rest from livestock grazing among two or more units.
 - c. Continuous, season-long use where it has been demonstrated to be consistent with achieving identified Standards. Once season long use is determined to be unacceptable, an alternative system will be developed and implemented before termination of season long use, prior to the next grazing season.
 - d. Excluding further livestock grazing within the affected use area through appropriate techniques when utilization objectives are reached.
8. Conservation of Federal threatened or endangered, proposed, species of concern (formally Category One and Two) and other special status species is promoted by the restoration and maintenance of their habitats.
 9. Salt and/or supplements will be placed at least 1/4 mile from live waters (springs/streams) and outside of associated riparian areas, permanent livestock watering facilities, wet or dry meadows, and aspen stands. Also salt should not be placed in known historic properties.
 10. Night bedding of sheep will be located at least 1/4 mile from live waters, streams, springs, seeps, associated riparian areas, wet or dry meadows, and aspen stands.
 11. Encourage the use of prescribed and natural fires, meeting prescription objectives, for the restoration and maintenance of healthy rangelands.
 12. Departure from traditional grazing management practices may be authorized by BLM to achieve Standards on a case by case experimental basis for rangeland restoration and rehabilitation.
 13. The best available science and technology will be utilized in monitoring and assessing the condition of rangelands from the pasture to the BLM District level.
 14. Recognizing State Water Law requirements, wildlife and wild horses/burros within their Herd Management Areas will have access to surface water they customarily use.
 15. Design of water facilities will incorporate features to ensure safe access and escape for small animals and birds.

16. The development of springs and seeps or other projects affecting water and associated resources shall be designed to maintain the associated riparian area and assure the attainment of Standards.
17. Grazing management practices shall be planned and implemented to allow for habitat requirements of wildlife and wild horses and burros within Herd Management Areas.
18. Implement aggressive action to reduce the invasion of exotic plant species into native plant communities. Control the spread of noxious weeds through various methods such as, grazing management, fire management and other vegetative management practices.
19. Riparian structural developments (i.e., gabions, dams, etc.) designed to achieve improvement in riparian and wetland conditions shall only be implemented in conjunction with changes in existing grazing management practices, where grazing is a significant factor contributing to a riparian condition needing such attention. Where grazing is not a significant factor causing a riparian condition needing attention, structural developments designed to achieve improvement in riparian and wetland conditions may be implemented independent of changes in existing grazing management practices.
20. The utilization, monitoring and evaluation process will be used as a tool to promote healthy rangelands and achieve Standards.
21. Implement grazing management practices that sustain biological diversity across the landscape.
22. To prevent transmission of disease between domestic and bighorn sheep, adopt and implement the "Guidelines for Domestic Sheep Management in Bighorn Sheep Habitats" contained in *Mountain Sheep Ecosystem Management Strategy in the 11 Western States and Alaska*.
23. Rangeland management plans will consider listings of known historic properties and new eligible properties as they become known.

Reference

This information was taken directly from the Sierra Front – Northwestern Great Basin RAC website for Standards and Guidelines for Rangeland Health. http://www.blm.gov/nv/st/en/res/resource_advisory/sierra_front-northwestern/standards_and_guideline.html

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BLM CALIFORNIA RESOURCE ADVISORY COUNCIL STANDARDS AND GUIDELINES

**Northeastern California and Northwestern Nevada Standards for Rangeland Health and
Guidelines for Livestock Grazing Management**

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Washington, D.C. 20240
<http://www.blm.gov>



In Reply Refer To:
4180 (220)

MEMORANDUM

To: The Secretary

Through: Sylvia V. Baca *Sylvia V. Baca* JUN 13 2000
Assistant Secretary, Land and Minerals Management

From: Director, Bureau of Land Management *W. H. H. H. H.*

Subject: Approval of Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing

In accordance with 43 CFR 4180.2(b), the Acting California State Director is submitting for Secretarial approval the attached Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing. BLM review finds that they comply with the requirements of the regulations. Standard and Guidelines development occurred in consultation with the Northeast California and Northwest Nevada Resource Advisory Council and with full public participation. BLM analyzed these standards and guidelines in an Environmental Impact Statement (EIS), which was protested. BLM appropriately considered and addressed the issues stated in the protests, and used them when it developed the Record of Decision (ROD) following the EIS. The ROD also incorporated the Standards and Guidelines into the appropriate land use plans.

I recommend that you approve the Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing.

I concur with (concur/not concur) with your recommendation and (approve/not approve) the Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing.

Approved: *Be Bull*

Date: JUL 13 2000

Attachment

**Northeastern California
and
Northwestern Nevada**

STANDARDS

for Rangeland Health

and

GUIDELINES

for Livestock Grazing Management

Prepared by the Bureau of Land Management
California State Office
June 1999

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

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STANDARDS AND GUIDELINES for RANGELAND HEALTH in NORTHEASTERN CALIFORNIA and NORTHWESTERN NEVADA

1. PREAMBLE

Healthy rangelands contribute to the social and economic well being of rural communities in Northeastern California and Northwestern Nevada, and they provide, over the long-term, the most reliable harvest of rangeland resources. The objective of rangeland resource planning is to integrate BLM resources with other resources to achieve the mandate of multiple-use and sustained yield management of renewable resources in an environmentally sound and cost-effective manner.

The standards of rangeland health are expressions of physical and biological condition or degree of function required for healthy sustainable rangelands. The Standards are applied on a landscape scale. Some standards may not apply to all acres. For example, a mosaic of vegetation types and age classes may produce the diversity associated with healthy rangelands; however, some individual vegetation communities within the mosaic may lack diversity.

The Standards always relate to the capability or potential of a specific site. The land will not be expected to produce vegetation or support habitats not attainable due to climate, soils, or other limiting attributes. The Standards are designed to establish the threshold for healthy rangelands. The Standards contain exceptions for certain necessary or unavoidable circumstances (see, for example, Standard 4); however, the exceptions should be applied under extreme conditions only, and must be fully justified.

The guidelines for grazing management are the types of grazing management methods and practices determined to be appropriate to ensure that standards can be met or that significant progress can be made toward meeting the standard. The Guidelines were designed to provide direction, yet offer flexibility for implementation through activity plans and terms and conditions for grazing permits. The BLM must operate within the constraints of other regulatory requirements that may affect how S&G's are applied for livestock grazing, for example the Wild Free-Roaming Horse and Burro Act (1971).

2. STANDARDS for RANGELAND HEALTH

STANDARD 1: UPLAND SOILS

Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, and landform, and exhibit functional biological, chemical, and physical characteristics.

Meaning that:

Precipitation is able to enter the soil surface and move through the soil profile at a rate appropriate to soil type, climate, and landform; the soil is adequately protected against human-caused wind or water erosion; and the soil fertility is maintained at, or improved to, the appropriate level.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

Criteria to Meet Standard:

- * Groundcover (vegetation, litter, and other types of groundcover such as rock fragments) is sufficient to protect sites from accelerated erosion.
- * Evidence of wind and water erosion, such as rills and gullies, pedestaling, scour or sheet erosion, and deposition of dunes is either absent or, if present, does not exceed what is natural for the site.
- * Vegetation is vigorous, diverse in species composition and age class, and reflects the potential natural vegetation or desired plant community (DPC) for the site.

STANDARD 2: STREAMS

Stream channel form and function are characteristic for the soil type, climate, and landform.

Meaning that:

Channel gradient, pool frequency, width to depth ratio, roughness, sinuosity, and sediment transport are able to function naturally and are characteristic of the soil type, climate, and landform.

Criteria to Meet Standard:

- * Gravel bars and other coarse textured stream deposits are successfully colonized and stabilized by woody riparian species.
- * Stream bank vegetation is vigorous and diverse, mostly perennial, and holds and protects banks during high stream flow events.
- * The stream water surface has a high degree of shading, resulting in cooler water in summer and reduced icing in winter.
- * Portions of the primary floodplain are frequently flooded (inundated every 1-5 years).

STANDARD 3: WATER QUALITY

Water will have characteristics suitable for existing or potential beneficial uses. Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California and Nevada State standards, excepting approved variances.

Management Objective: For water bodies, the primary objective is to maintain the existing quality and beneficial uses of water, protect them where they are threatened, and restore them where they are currently degraded. This objective is of even higher priority in the following situations:

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

- a. where beneficial uses of water bodies have been listed as threatened or impaired pursuant to Section 303(d) of the Federal Clean Water Act;
- b. where aquatic habitat is present, has been present, or is potentially present for Federal threatened or endangered, candidate, and other special status species dependent on water resources; and
- c. in designated water resource sensitive areas such as riparian and wetland areas.

Meaning That:

BLM will:

Maintain the physical, biological, and chemical integrity of waters flowing across or underlying the lands it administers.

Protect the integrity of these waters where it is currently threatened.

Insofar as is feasible, restore the integrity of these waters where it is currently impaired.

Not contribute to pollution and take action to remedy any pollution resulting from its actions that violates California and Nevada water quality standards, Tribal water quality standards, or other applicable water quality requirements (e.g., requirements adopted by SWRCB or RWQCB in California, or Environmental Protection Agency (EPA) pursuant to Section 303(d) of the Clean Water Act or the Coastal Zone Reauthorization Act). Where action related to grazing management is required, such action will be taken as soon as practicable but not later than the start of the next grazing year (in accordance with 43 CFR 4180.1).

Be consistent with the nondegradation policies as identified by the States.

Develop and execute a Management Agency Agreement with the States of California and Nevada for the efficient protection of water quality associated with the BLM's management.

Work with the States' water quality administrative agencies and the EPA to establish appropriate beneficial uses for public waters, establish appropriate numeric targets for 303(d)-listed water bodies, and implement the applicable requirements to ensure that water quality on public lands meets the objectives for the designated beneficial uses of the water.

Develop and implement Best Management Practices (BMP's) approved by the States to protect and restore the quality and beneficial uses of water, and monitor both implementation and effectiveness of the BMP's. These BMP's will be developed in full consultation, coordination, and cooperation with permittees and other interests.

State or Tribal approved variances or exceptions to water quality standards may be applicable within their Basin Plans for specific types of activities or actions. The BLM will follow State or Tribal administrative procedures associated with variances.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

As Indicated By:

- * The following do not exceed the applicable requirements for physical, chemical, and biological constituents including but not limited to: temperature, nutrients, fecal coliform, turbidity, sediment, dissolved oxygen, and aquatic organisms and plants (e.g., indicator macroinvertebrates, fish, algae, and plants).
- * Achievement of the standards for riparian, wetlands, and water bodies.
- * Monitoring results or other data that show water quality is meeting the standard.

STANDARD 4: RIPARIAN and WETLAND SITES

Riparian and Wetland areas are in properly functioning condition and are meeting regional and local management objectives.

Meaning that:

The riparian and wetland vegetation is controlling erosion, stabilizing stream banks, shading water areas to reduce water temperature, filtering sediment, aiding in floodplain development, dissipating energy, delaying floodwater, and increasing recharge of ground water that is characteristic for these sites. Vegetation surrounding seeps and springs is controlling erosion and reflects the potential natural vegetation for the site.

Criteria to Meet Standard:

- * Riparian vegetation is vigorous and mostly perennial and diverse in species composition, age class, and life form sufficient to stabilize stream banks and shorelines.
- * Riparian vegetation and large woody debris are well anchored and capable of withstanding high stream flow events.
- * Negligible accelerated erosion as a result of human related activities is evident.
- * Age class and structure of woody riparian and wetland vegetation are appropriate for the site.

Exceptions and Exemptions to Standard 4 (where Standard 4 is not applicable)

- * Structural facilities constructed for livestock/wildlife water or other purposes are not natural wetland and/or riparian areas. Examples are: water troughs, stock ponds, flood control structures, tailings ponds, water gaps on fenced or otherwise restricted stream corridors, etc.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

STANDARD 5: BIODIVERSITY

Viable, healthy, productive, and diverse populations of native and desired plant and animal species, including special status species, are maintained.

Meaning that:

Native and other desirable plant and animal populations are diverse, vigorous, able to reproduce and support nutrient cycles and energy flows.

Criteria to Meet Standard:

- * Wildlife habitats include seral stages, vegetation structure, and patch size to promote diverse and viable wildlife populations.
- * A variety of age classes is present for most species.
- * Vigor is adequate to maintain desirable levels of plant and animal species to ensure reproduction and recruitment of plants and animals when favorable events occur.
- * Distribution of plant species and their habitats allow for reproduction and recovery from localized catastrophic events.
- * Natural disturbances such as fire are evident but not catastrophic.
- * Nonnative plant and animal species are present at acceptable levels.
- * Habitat areas are sufficient to support diverse, viable, and desired populations and are connected adequately with other similar habitat areas.
- * Adequate organic matter (litter and standing dead plant material) is present for site protection and decomposition to replenish soil nutrients and maintain soil health.

3. GUIDELINES FOR LIVESTOCK GRAZING MANAGEMENT

The following guidelines are meant to apply to one or more of the standards for rangeland health.

Guideline 1: Adequate stubble will be present on all stream-side areas at the end of the growing season, or at the end of the grazing season if grazing occurs after fall dormancy. The residual or regrowth should provide sufficient herbaceous forage biomass to meet the requirement of plant vigor maintenance, bank protection, and sediment entrapment. Stubble height thresholds will be set on a site-specific basis, except for those allotments to which Guideline 16 applies (see Guideline 16 for an explanation of when Guideline 16 applies).

Utilization of stream-side herbaceous and woody plants should be limited to a specified amount of the current growth, and/or livestock should be removed to allow sufficient time for plant regrowth.

- a. Late season use (summer or fall grazed pastures) requires more restrictive utilization based on site specific situations.
- b. Special situations such as fragile fisheries habitats or easily eroded stream banks may require more restrictive utilization thresholds.
- c. Hoof action impacts or chiseling on stream banks will not exceed specified thresholds so that stream bank stability is maintained or improved.

Guideline 2: Desired seral states will be determined through the allotment management plan (AMP) development process; generally the goal will be to achieve advanced ecological status in the riparian zone, except where site-specific objectives call for lower ecological status (such as meadows in important sage grouse habitat, where the objective might call for a pattern of meadows in different seral stages from mid-seral to the potential natural community). These site-specific objectives will be determined through AMP's or other plans and analyzed through the NEPA process.

Guideline 3: Periods of rest from livestock grazing or other avoidable disturbances must be provided during/after periods of stress on the land (e.g., fire, flood, drought) and during critical times of plant growth.

Guideline 4: Plans for grazing on any allotment must consider other uses (recreation, archaeological sites, wildlife, horses and burros, mineral resource extraction, etc.) and be coordinated with the other users of public lands so that overall use does not detract from the goal of achieving rangeland health.

Guideline 5: Intensity, frequency, season-of-use, and distribution of grazing shall provide for growth and reproduction of desired plant species and the achievement of the potential natural vegetation or DPC.

Guideline 6: Grazing permits will include site-specific, measurable terms and conditions.

Guideline 7: Design and work towards implementation of a grazing management strategy for livestock for each grazing unit (pasture) within I (Improvement) and M (Maintenance) category allotments, to maintain or improve rangeland health. This may consist of, but not be limited to, season-of-use, rotation, or by setting utilization levels for desirable plants. Each management plan implemented will incorporate the factors necessary to maintain the health of desirable plants.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

Guideline 8: Determination of grazing use by livestock must provide for the habitat requirements of fish and wildlife.

Guideline 9: Grazing management practices must sustain biological diversity across the landscape. A mosaic of seral stages, vegetation corridors, and minimal habitat fragmentation must be maintained.

Guideline 10: Take aggressive action to reduce the invasion of undesirable exotic plant species into native plant communities. The spread of noxious weeds will be controlled through appropriate methods such as grazing management, fire management, and other management practices.

Guideline 11: Prescribed fire and (natural) prescribed fire will be utilized to promote a mosaic of healthy plant communities and vegetative diversity.

Guideline 12: Grazing and other management practices shall take advantage of transitional opportunities (e.g., drought, flood, fire) to enhance or establish populations of desirable tree, shrub, herbaceous, and grass species. Utilization levels will be established for desired seedlings, saplings, and/or mature plants to promote their presence in the plant community.

Guideline 13: Development of springs, seeps, and other water related projects shall be designed to promote rangeland health. Wherever possible, water sources shall be available year long for use by wildlife.

Guideline 14: Apply the management practices recognized and approved by the States of California and Nevada as Best Management Practices (BMP's) for grazing related activities to protect and maintain water quality.

Guideline 15: In watersheds draining into water bodies that have been listed or are proposed for listing as having threatened or impaired beneficial uses, and where grazing activities may contribute to the pollutants causing such impairment, the management objective is to fully protect, enhance, and restore the beneficial uses of the water.

Guideline 16: Utilization Levels to be Applied to those Allotments Not Meeting or Making Significant Progress Toward Meeting the Standards

If monitoring or documented observation indicates that one or more of the standards is not being met, and if significant progress is not being made toward meeting all of those standards that are not being met, and if there is evidence that current grazing practices are causing or contributing to this unsatisfactory condition, then the following utilization levels will be applied.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

Utilization of key upland herbaceous species

UTILIZATION GUIDELINES (adapted from Holechek 1988 and Holechek et al. 1998)	
Community Type	Percent of Use of Key Herbaceous Species
Salt desert shrubland	25-35
Semi-desert grass and shrubland	30-40
Sagebrush grassland	30-40
California annual grassland	50-60*
Perennial grass communities within the California annual grassland vegetation type	30-40
Coniferous forest	30-40
Mountain shrubland	30-40
Oak woodland	30-40
Pinyon-juniper woodland	30-40
Alpine tundra	20-30

* Residual dry matter (RDM) guidelines will be used instead of these utilization levels for management of annual species in the California annual grassland. These RDM levels correspond approximately with these utilization levels. The RDM levels given in the table in the Final EIS under Alternative 5, Ukiah RAC Recommended Standards and Guidelines (Section 2.92), will be used for those few annual allotments within the area covered by the Northeastern California and Northwestern Nevada Standards and Guidelines.

Utilization of key upland browse species

There will be no more than 20 percent utilization of annual growth on key browse species prior to October 1 within identified deer concentration areas. These concentration areas are those areas within mule deer habitat where mule deer numbers are most likely to be concentrated during the winter season (winter season normally occurs from December 16 through March 31). These areas have been identified through State Fish and Game Agency fall and spring counts over a period of several years. Maps of these deer concentration areas are on file at the BLM Eagle Lake Field Office.

Utilization of key riparian species

A 4-6 inch minimum stubble height will remain at the end of the growing season in most riparian areas.

There should be no more than 20 percent utilization on key riparian trees and shrub species in those areas where the presence of woody riparian species is necessary to meet standards.

Application of the above utilization levels

These utilization guidelines will be applied to those areas of the allotment responsible for the determination that the allotment is not meeting the standards. For example, an allotment has 10 riparian areas, of which six have been determined to be in proper functioning condition and four have been determined to be functional-at risk. The utilization guidelines for riparian species given above would be applied to the four riparian areas that are functional-at risk, not to the six that are in proper functioning condition (although *all* of the riparian areas will be managed to meet the standards). Also, only those guidelines that are applicable to making progress toward meeting the standards that are not being met would be applied. For example, if only riparian standards are not being met, then only the guidelines applicable to utilization and stubble height of riparian vegetation would be applied.

These utilization levels will be implemented unless and until a current site-specific analysis is completed and new utilization levels are developed for specific allotments and documented in AMP's, other management plans, and/or in terms and conditions of grazing permits/leases. New site-specific utilization levels that are developed may be more restrictive than the guidelines presented above, consistent with achieving the desired resource conditions (as prescribed in land use plans and activity plans) and progress toward meeting the standards.

Implementation of this guideline

1. Uplands (including perennial grass and browse communities).

Guideline 16 will be implemented only on those upland areas that are responsible for the determination that the allotment is not meeting one or more of the standards and for which lighter utilization would be expected to move these areas toward meeting the standard(s).

Management changes (such as changes in season of use, timing, duration, and/or intensity; rotational grazing; fencing; herding; and/or adjustments in stocking rates) will be implemented if utilization guidelines on the average of the upland key areas across the pasture (or allotment if there is only one pasture) are exceeded for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70 percent of upland key areas on the pasture (or allotment) are not to exceed maximum utilization guidelines in most years. Because of the potential long-term damage to perennial grass species associated with severe grazing, severe grazing use (>70 percent utilization) in any upland key area in any year will result in a management change the following year. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents. The average (mean) utilization on key species will be estimated at each key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few years. See Appendix 20 of the Final EIS for further discussion on this issue.

The management options to be implemented to meet this guideline will be determined in full consultation, cooperation, and coordination with affected permittees and other interests.

For allotments not meeting or making significant progress toward meeting the standards (and for which lower utilization levels of perennial upland species would be expected to help move these allotments toward the standards), utilization data already in hand will be used to determine whether a management

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

change is necessary. Thus, for example, if utilization on a particular key area has exceeded the thresholds for the 2 years previous to the approval of these standards and guidelines, a management change will be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring utilization levels within threshold values, close monitoring will follow to ensure that the grazing use levels are not exceeded during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

2. Riparian areas (including herbaceous and woody plant communities).

Guideline 16 will be implemented only on those riparian areas that are nonfunctional or functional--at risk and lighter utilization levels would be expected to move these areas toward meeting the standards. The guideline will apply where the riparian area in a healthy state has the capability to produce vegetation of the prescribed height. The stubble heights will be measured at the end of the growing season to determine if the guideline has been met. Management changes (such as changes in season of use, timing, duration, and/or intensity; rotational grazing; fencing; herding; and/or adjustments in stocking rates) will be implemented if stubble heights on the average of the key riparian areas across the pasture (or allotment if there is only one pasture) fall below the guidelines for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70 percent of riparian key areas on the allotment are to exceed minimum stubble heights in most years. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents.

Because stream banks may be inadequately protected by heavy use in any one year and because stubble heights below 3 inches result in cattle shifting their preference to shrubs, stubble heights below 2 inches in any one year will require a management change in the following year.

The mean stubble height on key riparian species will be estimated at each riparian key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few years. See Appendix 20 of the Final EIS for further discussion on this issue.

For allotments not meeting or making significant progress toward meeting the standards (and for which higher stubble would be expected to help move these allotments toward the standards), stubble height data already in hand will be used to determine whether a management change is necessary. Thus, for example, if stubble heights on a particular key area have fallen below the thresholds for the 2 years previous to the approval of these standards and guidelines, a management change will be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring stubble heights within threshold values, close monitoring will follow to ensure that the grazing use levels are not exceeded during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

The management options to be implemented to meet this guideline will be determined in full consultation, coordination, and cooperation with affected permittees and other interests.

If reductions in permitted use are required

Any reductions in permitted use required as a result of implementing this guideline will be held in suspension and apportioned back to the permittee(s) or lessee(s) authorized to graze in the affected allotment if rangeland health improves to the extent that the authorized officer determines additional forage to be available.

Guideline 17: Rangeland monitoring to determine utilization of forage resources and trend of rangeland health will be conducted in each allotment based on current accepted practices and techniques as directed in the Interagency Technical References: *Utilization Studies and Residual Measurements* (BLM et al. 1996b) and *Sampling Vegetation Attributes* (BLM et al. 1996a). Monitoring methodologies will be applicable to local conditions and developed in consultation with permittees and interested publics.

To the extent possible, monitoring methods will be simple and easily accomplished. BLM, permittees, or others will do the monitoring. BLM will be responsible for ensuring that the monitoring is conducted in accordance with currently accepted practices and techniques, for analyzing and interpreting the data collected (in consultation, coordination, and cooperation with affected permittees and other interests), and for the accuracy of the data.

Existing key areas will be used where they exist. New key areas will be selected in full consultation, coordination, and cooperation with affected permittees and other interests. BLM will periodically review established key areas to determine if they continue to be appropriate to management. This review will be done in full consultation, coordination, and cooperation with affected permittees and other interests. If there is disagreement between BLM, permittees, and other interests over the location of key areas, the RAC will be asked for ideas on resolution. The final decision on the placement of key areas, however, rests with BLM.

BLM, in cooperation with other agencies, including Cooperative Extension, the Natural Resources Conservation Service, and the Forest Service, will provide training for permittees and other interested parties on rangeland monitoring methods.

**IMPLEMENTATION of
STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA**

IMPLEMENTATION

The fallback standards (43 CFR 4180.2(f)(1)) have been in effect since August 12, 1997. An initial screening of allotments was made, based on existing information, to determine the status of each allotment with respect to meeting the fallback standards. Each allotment was placed into one of four categories as follows:

- Category 1: Areas where one or more standards are not being met, or significant progress is not being made toward meeting the standards(s), and livestock grazing is a significant contributor to the problem.
- Category 2: Areas where all standards are being met, or significant progress is being made toward meeting the standard(s).
- Category 3: Areas where the status for one or more standards is not known, or the cause of the failure to not meet the standard(s) is not known.
- Category 4: Allotments where one or more of the standards are not being met or significant progress is not being made toward meeting the standards due to causes other than (or in addition to) livestock grazing activities. (Those allotments where current livestock grazing is also a cause for not meeting the standards are included in Category 1 in addition to this category.) The authorized officer should take appropriate action based on regulation or policy; however, these actions not related to livestock grazing are outside the scope of this implementation plan and will not be addressed in this document.

An assumption has been made by the BLM field managers that, with few possible exceptions, the implementation needed for the regulatory fallback standards and guidelines will essentially be the same as for any anticipated set of final approved standards and guidelines implemented pursuant to this Record of Decision (ROD). Consequently, the categorization of allotments under the standards in this ROD is likely to be the same as the categorization under the fallback standards and guidelines. Existing allotment assessments and their resulting determinations as to category will be reviewed to ensure that the determination is correct under the standards set in place by this ROD.

New allotment assessments, reviews of existing allotment assessments, and determination of allotment category will be conducted in full consultation, coordination, and cooperation with permittees and other interests.

We intend to conduct rangeland health assessments on all allotments within the next 5 years. First priority for these assessments will be given to those allotments where we already know or suspect one or more of the standards is not being met. These include those allotments placed in Category 1 under the fallback standards and those allotments currently in Category 3 that we have reason to believe may not be meeting standards. After these allotments have been assessed, the remaining allotments will be assessed using the BLM I, M, and C priority management system, with first priority to I, second to M, and last to C.

**IMPLEMENTATION of
STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA**

For those allotments where the standards are not being met (Category 1), management actions will be implemented to correct the situation prior to the next grazing season turn-out period for the allotment. The management options will be determined in full coordination, consultation, and cooperation with permittees and other interests.

Monitoring will be conducted to evaluate the progress towards improving rangeland health and to evaluate the success of the specific management measures applied (see Guideline 17).

APPLICATION OF GUIDELINES

Once the guidelines are approved by the Secretary of the Interior, they will be applicable to the management of livestock grazing on all allotments not meeting the health standards. Some guidelines will be applicable regardless of the specific rangeland health condition, as they are designed to help protect and sustain rangeland health and are not intended to be applied only to remedy problems. Many of the guidelines will need to be more specifically identified and then applied as terms and conditions of a permit or lease, based upon the specific needs for meeting rangeland health standards. There will be instances where specific terms and conditions will be applied to grazing use authorizations for reasons other than those directly related to rangeland health, such as to accommodate other resource needs and land uses or to meet administrative requirements. Examples of this may include protecting cultural resource sites, requiring a specific breed of livestock to be used that is compatible with the needs of other permittees or lessees using the same allotment, or for meeting various regulatory requirements for grazing administration purposes. In some instances, existing terms and conditions will be carried over from previously made plans and commitments, such as those identified in allotment management plans or coordinated management plans. In these instances, the terms and conditions may or may not be related to rangeland health needs.

Any terms or conditions specified for a permit or lease must be consistent with and support appropriate BLM land use plans or other land use plans applicable to the public lands. BLM will also adhere to requirements such as those identified as terms or conditions from a biological opinion for protecting the habitat of a plant or animal under the Endangered Species Act.

Terms and conditions will be applied to grazing permits, leases, or other grazing authorizations as the authorized officer (Field Manager) determines the need. The determination of what terms and conditions will be applied will be made in full consultation, coordination, and cooperation with the respective permittees/lessees and other interested parties involved in the particular allotment. The same process will be used for making needed changes to any existing terms and conditions. Information from assessments and evaluations of monitoring data will be used to determine the management changes needed. Management options that would be expected to move allotments toward meeting the standards will be determined in full coordination, consultation, and cooperation with permittees/lessees and other interested parties.

Alternative management changes will be considered and evaluated through the NEPA process prior to making final determinations. It is anticipated that in most instances, the terms and conditions will be identified cooperatively and be agreed upon by the affected permittee/lessee and all interested parties. Where an agreement cannot be reached, then a formal decision (which is appealable) will be issued.

**IMPLEMENTATION of
STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA**

If reductions in permitted use are necessary to achieve the standards or meet the guidelines, the animal unit months (AUMs) by which the permitted use is reduced will be held in suspension. Once the authorized officer determines that rangeland health has recovered to an extent that all or part of the suspended permitted use can be restored, this suspended permitted use shall first be apportioned in satisfaction of suspended permitted use to the permittee(s) or lessee(s) authorized to graze in the allotment in which the forage is available (this is in accordance with 43 CFR 4110.3-1(b)).

REPORTING PROGRESS IN RANGELAND HEALTH ACHIEVEMENTS

Rangeland health conditions will be reported annually for each grazing allotment. This information will include the determinations of rangeland health conditions through assessments and monitoring and the progress made towards meeting rangeland health standards. At a minimum the report will identify, by allotment: (1) what standards, if any, are not being met; (2) whether significant progress is being made toward meeting those standards that are not currently being met; (3) the magnitude of those standards not being met, in terms such as acres, miles of stream, number of sites, etc.; (4) the progress that has been made in determining and implementing needed management changes; and (5) the results of making the management changes as determined from monitoring and assessment information. Additionally, any changes in the management categories of the allotments will be identified, accompanied by an explanation of the reasons for the change.

The above information will be gathered at the field office which administers the respective allotment(s). A summary of this information will be consolidated for all of the allotments within the EIS area and made available to the public annually.

Tables were provided in the Final EIS that showed all allotments in the State and the category to which they were assigned in 1997. Since that list was compiled, management changes have been implemented and additional assessment and monitoring work has been completed that makes those lists obsolete. When the annual report is compiled each year, an updated list of all allotments, by category, will be provided as part of the report.

Throughout all processes the public is encouraged to participate in the identification of rangeland health conditions, developing management remedies, monitoring results, and reviewing progress towards achieving rangeland health standards.

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FOREST SERVICE STANDARDS AND GUIDELINES

Humboldt LRMP Standards and Guidelines

Range	
GOAL: Manage all allotments to maintain suitable range presently in satisfactory ecological condition, and improve suitable range that is in less than satisfactory condition.	Humboldt LRMP Page IV-5 Range Goal 16
Objective: a. Develop improved management systems for all allotments by 1988. b. Develop grazing systems which include periodic rest, where possible.	Humboldt LRMP Page IV-5 Range Objective
MD: Manage allotments to maintain suitable range in satisfactory ecological condition and improve range in less than satisfactory ecological condition by developing management plans on all allotments and wild horse territories by 1988.	Humboldt LRMP Page IV-32 Range Management Direction
MD: Describe ecological sites and develop score cards to range ecological status and resource value. Define management strategies for rangeland.	Humboldt LRMP Page IV-37 Range Management Direction
MD: Conduct monitoring and evaluation on all allotments in accordance with Forest Service Regional Handbook. The Nevada Rangeland Monitoring Handbook will be used as a guideline.	Humboldt LRMP Page IV-37 Range Management Direction
S&G: Develop allotment management and territory plans for each allotment and wild horse territory. Update allotment management and territory plans to reflect Forest standards and guidelines	Humboldt LRMP Page IV-32 Range Standard and Guidelines
S&G: Each new or updated allotment management or wild horse territory plan will contain specific monitoring standards developed with an interdisciplinary team	Humboldt LRMP Page IV-33 Range Standard and Guidelines
S&G: Develop an annual operating plan for each allotment which identifies the specific action items and techniques to be utilized during the current grazing season. the annual operating plan will consist of written section will include, where applicable: 1. Clear and definite instructions concerning management of livestock while on the allotment. This should include the schedule for each unit to be grazed, expected amount of time each unit will be grazed, how the livestock will be moved from unit, and standards for getting the livestock moved and “cleaned out” of a grazing unit. 2. Range improvement maintenance responsibility for the current year, when the maintenance will be accomplished, and the maintenance standards to be attained. 3. A list of range improvement projects to be started or completed during the year. 4. Any necessary instructions concerning training and/or trucking livestock.	Humboldt LRMP Page IV-33 Range Standard and Guidelines

Humboldt LRMP Standards and Guidelines

Range	
<p>5. Special instructions on camp sanitation and fire prevention responsibilities of permittee.</p> <p>6. Multiple use coordination requirements with which the permittee is expected to comply, including animal control practices and compliance with endangered and threatened species requirements.</p> <p>The graphic section should include:</p> <ol style="list-style-type: none"> 1. A map showing allotment and management unit boundaries, range improvement, closed areas and special management situations. 2. Acceptable forms for recording actual use, losses, improvement, maintenance, and other management data. 	
Update range allotment analysis according to Regional Guidelines Analysis or updates will be conducted according to Regional Guidelines	Humboldt LRMP Page IV-36 Range Standard and Guidelines
Evaluate livestock conversion requests based on resource needs capabilities and not solely on the desires of the livestock permittee	Humboldt LRMP Page IV-39 Range Standard and Guidelines
Vacant allotments and allotments in a nonuse status that are in satisfactory ecological conditions will be considered for livestock use.	Humboldt LRMP Page IV-39 Range Standard and Guidelines
GOAL: Produce a sustained yield of forage on all lands available and suitable for livestock grazing while maintaining or enhancing the productivity of the land	Humboldt LRMP Page IV-6 Range Goal 17
<p>Objective:</p> <ol style="list-style-type: none"> a. Develop an acceptable balance between the available grazing capacity and livestock numbers through proper monitoring of allotment management plans, to insure that resource objectives are met. b. Complete vegetative treatment projects that are prescribed in allotment management plans that are compatible with other resources and are cost effective. c. Complete coordinated LUPs where private lands, BLM lands and other Federal lands can be managed in conjunction with National Forest System lands 	Humboldt LRMP Page IV-5 Range Objective
S&G: Forage utilization standards are established for each grazing allotment as a part of the allotment management plan. As plans are updated the standards of utilization may be adjusted. These utilization standards are developed by an interdisciplinary team to insure that specific resource objectives are met	Humboldt LRMP Page IV-33 Range Standard and Guidelines
S&G: The District I.D. Team as supported by other resource specialists is responsible for determining Proper-use criteria. It is essential that the Team consider the full spectrum of resource needs and values. The following forage utilization values are presented by non-riparian (upland) and riparian categories. They are applicable to key species and areas.	Humboldt LRMP Range Amendment #2

Humboldt LRMP Standards and Guidelines

Range		
Maximum Forage Utilization Values		
<i>Riparian</i>		
Management Vegetation	Management Category Value	Percent Utilization Key Species/Grass
Season long	I-II Highest to high III-IV,	35
	Moderate to Limited	50
	V, Low	55
Deferred Rotation	I-II Highest to high III-IV,	45
	Moderate to Limited	55
	V, Low	65
Rest Rotation	I-II Highest to high III-IV,	45
	Moderate to Limited	60
	V, Low	65
High Intensity Short Duration (early season)	I-II Highest to high III-IV,	55
	Moderate to Limited	65
	V, Low	70
<ol style="list-style-type: none"> 1. Utilization of crested wheatgrass seedings may periodically exceed the above rates by 5-10% to regulate growth form. 2. The maximum utilization levels would normally be used only where the plan community is at or near the desired future condition. 3. The listed value is the maximum rate which can be prescribed unless otherwise approved by the Forest supervisor. - 4. Key species can vary by range site and management system. 5. Proper use based on the utilization of shrubs will normally not exceed 50% of the current year's growth. 6. Under the High intensity short duration (early season), timing in relation to the period remaining for regrowth is key. The system is dependent upon sufficient regrowth to meet plant physiological needs and other resource values. Physical damage to the vegetative and soils resource to be considered. 7. Sediment entrapment is essential to streambank restoration. This is an objective at least 3-4 inches of herbaceous stubble height is needed on site during high flow periods. 		
S&G: Allotment management plans will identify and schedule detailed forage improvement opportunities and structural/nonstructural improvement needs		Humboldt LRMP Page IV-34 Range Standard and Guidelines
S&G: Range readiness, livestock numbers and ownership and compliance with annual plan of use will be monitored.		Humboldt LRMP Page IV-39 Range Standard and Guidelines

Humboldt LRMP Standards and Guidelines

Range	
S&G: Treatment of rangeland pests by APHIS will be requested when serious forage loss is expected.	Humboldt LRMP Page IV-40 Range Standard and Guidelines
GOAL: Manage livestock to recognize the special needs relating to wet meadows and riparian areas, and fisheries habitat	Humboldt LRMP Page IV-6 Range Goal 18
Objective: a. Emphasize proper range management techniques that will improve livestock distribution. b. Utilize the latest research information available in designing and implementing grazing systems. c. Fence developed springs or small wet meadows that cannot otherwise be protected. d. Consider conversions from sheep allotments to cattle allotments only after careful consideration of these areas through an environmental analysis process.	Humboldt LRMP Page IV-6 Range Objective
S&G: Grazing systems will be developed to enhance riparian zones	Humboldt LRMP Page IV-32 Range Standard and Guidelines
S&G: Where possible, relocate stock driveways and trailing areas away from riparian zones.	Humboldt LRMP Page IV-33 Range Standard and Guidelines
S&G: Conversion from sheep grazing to cattle grazing will not be allowed where riparian areas would be adversely affected.	Humboldt LRMP Page IV-33 Range Standard and Guidelines
S&G: Minimize livestock/fisheries habitat conflicts in riparian areas: 1. Implement grazing systems that enhance riparian area streambank stability and vegetative cover. 2. Apply vegetative treatment which will improve habitat conditions. 3. Install structural improvements (range and fisheries) to aid recovery of riparian area resources.	Humboldt LRMP Page IV-36 Range Standard and Guidelines
S&G: Fence spring sources developed for livestock use to maintain water quality	Humboldt LRMP Page IV-38 Range Standard and Guidelines
S&G: Management will be directed toward having riparian areas in good or better ecological condition and stable or upward trend.	Humboldt LRMP Page IV-35 Range Standard and Guidelines

Humboldt LRMP Standards and Guidelines

Range	
S&G: Livestock management will consider sensitive areas such as riparian areas and critical wildlife habitat to maintain or enhance special values	Humboldt LRMP Page IV-35 Range Standard and Guidelines
GOAL: Reduce conflicts between livestock and wildlife for forages on key winter ranges.	Humboldt LRMP Page IV-6 Range Goal 19
S&G: Build all fences to provide ease of wildlife passage	Humboldt LRMP Page IV-35 Range Standard and Guideline
S&G: Coordinate livestock grazing with the wildlife habitat improvement program	Humboldt LRMP Page IV-35 Range Standard and Guideline
Minimize livestock/big game conflicts on key winter range: <ol style="list-style-type: none"> 1. Hold stocking levels of livestock on key winter ranges to the carrying capacity needed to meet objectives. 2. Implement grazing systems that reduce competition for forage on winter ranges. 3. Apply vegetative treatment on winter range which will improve habitat conditions. 4. Install structural improvements on winter range which will aid in controlling and distributing livestock use. 	Humboldt LRMP Page IV-35 Range Standard and Guideline
S&G: Coordinate non-structural improvements with wildlife habitat requirements. Complete non-structural improvements projects to treat deteriorated range, treat range to sustain existing use, and to improve range condition.	Humboldt LRMP Page IV-37 Range Standard and Guideline
S&G: Locate improvements to minimize adverse impacts on wildlife	Humboldt LRMP Page IV-38 Range Standard and Guideline
GOAL: Manage the Cherry Springs, Monte Cristo, and Quinn Wild Horse Territories in accordance with the Wild Horse and Burro Act and the approved territory plans.	Humboldt LRMP Page IV-6 Range Goal 20
MD: Manage allotments to maintain suitable range in satisfactory ecological condition and improve range in less than satisfactory ecological condition by developing management plans on all allotments and wild horse territories by 1988.	Humboldt LRMP Page IV-32 Range Management Direction
S&G: Develop allotment management and territory plans for each allotment and wild horse territory. Update allotment management and territory plans to reflect Forest standards and guidelines	Humboldt LRMP Page IV-32 Range Standard and Guidelines

Humboldt LRMP Standards and Guidelines

Range	
S&G: Each new or updated allotment management or wild horse territory plan will contain specific monitoring standards developed with an interdisciplinary team	Humboldt LRMP Page IV-32 Range Standard and Guidelines
S&G: Manage wild free-roaming horses and burros to population levels compatible with the resource capabilities and needs.	Humboldt LRMP Page IV-40 Range Standard and Guidelines
GOAL: Support predator control program by making recommendations on the need for control, methods to be used, and special precautions needed and by evaluating the environmental effects of predator control	Humboldt LRMP Page IV-7 Range Goal 23
S&G: Allow predator control on grazing allotments where there is a demonstrated need as shown by permittee reports or as verified on site by Forest Service or APHIS personnel.	Humboldt LRMP Page IV-39 Range Standard and Guidelines
S&G: Allow the use of only environmentally acceptable methods of predator control.	Humboldt LRMP Page IV-39 Range Standard and Guidelines
GOAL: Emphasize the control of priority I noxious weeds.	Humboldt LRMP Page IV-7 Range Goal 24
Objective: a. Cooperate with counties in the treatment and control of noxious weeds. b. Re-treat those areas where priority I noxious weeds have not been eliminated and concentrate new treatment on those areas posing the greatest threat.	Humboldt LRMP Page IV-7 Range Objective
S&G: Incorporate noxious weed control into mineral operating plans and allotment management plans.	Humboldt LRMP Page IV-38 Range Standard and Guidelines
S&G: Treat new infestation and priority one noxious weeds first.	Humboldt LRMP Page IV-38 Range Standard and Guidelines
S&G: Coordinate with permittees to treat poisonous plants where livestock losses have occurred and/or have the potential to occur.	Humboldt LRMP Page IV-38 Range Standard and Guidelines
Timber	
GOAL: Promote the utilization of fire-killed trees, chaining, and green pinyon-juniper through an aggressive firewood program.	Humboldt LRMP Page IV-7 Timber Goal 26

Humboldt LRMP Standards and Guidelines

Range	
<p>Objective:</p> <p>a. By 1995, harvest 200 cords of green hardwood annually for firewood or other products. Initially, offer at least 50 cords per year.</p> <p>b. Develop a personal use firewood program that will provide 5,000 cords annually through the first two decades.</p> <p>c. Design sales of green softwoods to accomplish silvicultural, fuel management, wildlife, and other resource management goals.</p> <p>d. Open pinyon-juniper areas planned for type conversion for greenwood cutting prior to chaining or burning.</p> <p>e. Utilize the temporary roads concept to provide access to fuelwood not available by the existing road system.</p>	<p>Humboldt LRMP Page IV-7 Timber Objective</p>
<p>S&G:</p> <p>Encourage commercial firewood sales in more remote areas.</p>	<p>Humboldt LRMP Page IV-42 Timber Standard and Guidelines</p>
<p>S&G:</p> <p>Maintenance and improvement of wildlife habitat will be incorporated into fuelwood harvesting programs</p>	<p>Humboldt LRMP Page IV-44 Timber Standard and Guidelines</p>
Range	
<p>GOAL: Manage all allotments to maintain suitable range presently in satisfactory ecological condition, and improve suitable range that is in less than satisfactory condition.</p>	<p>Humboldt LRMP Page IV-5 Range Goal 16</p>
<p>Objective:</p> <p>a. Develop improved management systems for all allotments by 1988.</p> <p>b. Develop grazing systems which include periodic rest, where possible.</p>	<p>Humboldt LRMP Page IV-5 Range Objective</p>
<p>MD: Manage allotments to maintain suitable range in satisfactory ecological condition and improve range in less than satisfactory ecological condition by developing management plans on all allotments and wild horse territories by 1988.</p>	<p>Humboldt LRMP Page IV-32 Range Management Direction</p>
<p>MD: Describe ecological sites and develop score cards to range ecological status and resource value. Define management strategies for rangeland.</p>	<p>Humboldt LRMP Page IV-37 Range Management Direction</p>
<p>MD: Conduct monitoring and evaluation on all allotments in accordance with Forest Service Regional Handbook. The Nevada Rangeland Monitoring Handbook will be used as a guideline.</p>	<p>Humboldt LRMP Page IV-37 Range Management Direction</p>
<p>S&G: Develop allotment management and territory plans for each allotment and wild horse territory. Update allotment management and territory plans to reflect Forest standards and guidelines</p>	<p>Humboldt LRMP Page IV-32 Range Standard and Guidelines</p>

Humboldt LRMP Standards and Guidelines

Range	
S&G: Each new or updated allotment management or wild horse territory plan will contain specific monitoring standards developed with an interdisciplinary team	Humboldt LRMP Page IV-33 Range Standard and Guidelines
<p>S&G: Develop an annual operating plan for each allotment which identifies the specific action items and techniques to be utilized during the current grazing season. the annual operating plan will consist of written section will include, where applicable:</p> <ol style="list-style-type: none"> 1. Clear and definite instructions concerning management of livestock while on the allotment. This should include the schedule for each unit to be grazed, expected amount of time each unit will be grazed, how the livestock will be moved from unit, and standards for getting the livestock moved and “cleaned out” of a grazing unit. 2. Range improvement maintenance responsibility for the current year, when the maintenance will be accomplished, and the maintenance standards to be attained. 3. A list of range improvement projects to be started or completed during the year. 4. Any necessary instructions concerning training and/or trucking livestock. 5. Special instructions in camp sanitation and fire prevention responsibilities of permittee. 6. Multiple use coordination requirements with which the permittee is expected to comply, including animal control practices and compliance with endangered and threatened species requirements. <p>The graphic section should include:</p> <ol style="list-style-type: none"> 1. A map showing allotment and management unit boundaries, range improvement, closed areas and special management situations. 2. Acceptable forms for recording actual use, losses, improvement, maintenance, and other management data. 	Humboldt LRMP Page IV-33 Range Standard and Guidelines
Update range allotment analysis according to Regional Guidelines Analysis or updates will be conducted according to Regional Guidelines	Humboldt LRMP Page IV-36 Range Standard and Guidelines
Evaluate livestock conversion requests based on resource needs capabilities and not solely on the desires of the livestock permittee	Humboldt LRMP Page IV-39 Range Standard and Guidelines
Vacant allotments and allotments in a nonuse status that are in satisfactory ecological conditions will be considered for livestock use.	Humboldt LRMP Page IV-39 Range Standard and Guidelines
GOAL: Produce a sustained yield of forage on all lands available and suitable for livestock grazing while maintaining or enhancing the productivity of the land	Humboldt LRMP Page IV-6 Range Goal 17

Humboldt LRMP Standards and Guidelines

Range																																	
<p>Objective:</p> <p>a. Develop an acceptable balance between the available grazing capacity and livestock numbers through proper monitoring of allotment management plans, to insure that resource objectives are met.</p> <p>b. Complete vegetative treatment projects that are prescribed in allotment management plans that are compatible with other resources and are cost effective.</p> <p>c. Complete coordinated LUPs where private lands, BLM lands, and other Federal lands can be managed in conjunction with National Forest System lands</p>		<p>Humboldt LRMP Page IV-5 Range Objective</p>																															
<p>S&G: Forage utilization standards are established for each grazing allotment as a part of the allotment management plan. As plans are updated the standards of utilization may be adjusted. These utilization standards are developed by an interdisciplinary team to insure that specific resource objectives are met</p>		<p>Humboldt LRMP Page IV-33 Range Standard and Guidelines</p>																															
<p>S&G: The District I.D. Team as supported by other resource specialists is responsible for determining Proper-use criteria. It is essential that the Team consider the full spectrum of resource needs and values. The following forage utilization values are presented by non-riparian (upland) and riparian categories. They are applicable to key species and areas.</p> <p>Maximum Forage Utilization Values Riparian</p> <table border="1"> <thead> <tr> <th>Management Vegetation</th> <th>Management Category Value</th> <th>Percent Utilization Key Species/Grass</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Season long</td> <td>I-II Highest to high III-IV,</td> <td>35</td> </tr> <tr> <td>Moderate to Limited</td> <td>50</td> </tr> <tr> <td>V, Low</td> <td>55</td> </tr> <tr> <td rowspan="3">Deferred Rotation</td> <td>I-II Highest to high III-IV,</td> <td>45</td> </tr> <tr> <td>Moderate to Limited</td> <td>55</td> </tr> <tr> <td>V, Low</td> <td>65</td> </tr> <tr> <td rowspan="3">Rest Rotation</td> <td>I-II Highest to high III-IV,</td> <td>45</td> </tr> <tr> <td>Moderate to Limited</td> <td>60</td> </tr> <tr> <td>V, Low</td> <td>65</td> </tr> <tr> <td rowspan="3">High Intensity Short Duration (early season)</td> <td>I-II Highest to high III-IV,</td> <td>55</td> </tr> <tr> <td>Moderate to Limited</td> <td>65</td> </tr> <tr> <td>V, Low</td> <td>70</td> </tr> </tbody> </table> <p>1. Utilization of crested wheatgrass seedings may periodically exceed the above rates by 5-10% to regulate growth form.</p> <p>2. The maximum utilization levels would normally be used only where the plan community is at or near the desired future condition.</p>		Management Vegetation	Management Category Value	Percent Utilization Key Species/Grass	Season long	I-II Highest to high III-IV,	35	Moderate to Limited	50	V, Low	55	Deferred Rotation	I-II Highest to high III-IV,	45	Moderate to Limited	55	V, Low	65	Rest Rotation	I-II Highest to high III-IV,	45	Moderate to Limited	60	V, Low	65	High Intensity Short Duration (early season)	I-II Highest to high III-IV,	55	Moderate to Limited	65	V, Low	70	<p>Humboldt LRMP Range Amendment #2</p>
Management Vegetation	Management Category Value	Percent Utilization Key Species/Grass																															
Season long	I-II Highest to high III-IV,	35																															
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Humboldt LRMP Standards and Guidelines

Range	
<p>3. The listed value is the maximum rate which can be prescribed unless otherwise approved by the Forest supervisor. -</p> <p>4. Key species can vary by range site and management system.</p> <p>5. Proper use based on the utilization of shrubs will normally not exceed 50% of the current year's growth. -</p> <p>6. Under the High intensity short duration (early season), timing in relation to the period remaining for regrowth is key. The system is dependent upon sufficient regrowth to meet plant physiological needs and other resource values. Physical damage to the vegetative and soils resource to be considered.</p> <p>7. Sediment entrapment is essential to streambank restoration. This is an objective at least 3-4 inches of herbaceous stubble height is needed on site during high flow periods.</p>	
S&G: Allotment management plans will identify and schedule detailed forage improvement opportunities and structural/nonstructural improvement needs	Humboldt LRMP Page IV-34 Range Standard and Guidelines
S&G: Range readiness, livestock numbers and ownership and compliance with annual plan of use will be monitored.	Humboldt LRMP Page IV-39 Range Standard and Guidelines
S&G: Treatment of rangeland pests by APHIS will be requested when serious forage loss is expected.	Humboldt LRMP Page IV-40 Range Standard and Guidelines
GOAL: Manage livestock to recognize the special needs relating to vet meadows and riparian areas, and fisheries habitat	Humboldt LRMP Page IV-6 Range Goal 18
<p>Objective:</p> <p>a. Emphasize proper range management techniques that will improve livestock distribution.</p> <p>b. Utilize the latest research information available in designing and implementing grazing systems.</p> <p>c. Fence developed springs or small wet meadows that cannot otherwise be protected.</p> <p>d. Consider conversions from sheep allotments to cattle allotments only after careful consideration of these areas through an environmental analysis process.</p>	Humboldt LRMP Page IV-6 Range Objective
S&G: Grazing systems will be developed to enhance riparian zones	Humboldt LRMP Page IV-32 Range Standard and Guidelines
S&G: Where possible, relocate stock driveways and trailing areas away from riparian zones.	Humboldt LRMP Page IV-33 Range Standard and Guidelines

Humboldt LRMP Standards and Guidelines

Range	
S&G: Conversion from sheep grazing to cattle grazing will not be allowed where riparian areas would be adversely affected.	Humboldt LRMP Page IV-33 Range Standard and Guidelines
S&G: Minimize livestock/fisheries habitat conflicts in riparian areas: <ol style="list-style-type: none"> 1. Implement grazing systems that enhance riparian area streambank stability and vegetative cover. 2. Apply vegetative treatment which will improve habitat conditions. 3. Install structural improvements (range and fisheries) to aid recovery of riparian area resources. 	Humboldt LRMP Page IV-36 Range Standard and Guidelines
S&G: Fence spring sources developed for livestock use to maintain water quality	Humboldt LRMP Page IV-38 Range Standard and Guidelines
S&G: Management will be directed toward having riparian areas in good or better ecological condition and stable or upward trend.	Humboldt LRMP Page IV-35 Range Standard and Guidelines
S&G: Livestock management will consider sensitive areas such as riparian areas and critical wildlife habitat to maintain or enhance special values	Humboldt LRMP Page IV-35 Range Standard and Guidelines
GOAL: Reduce conflicts between livestock and wildlife for forages on key winter ranges.	Humboldt LRMP Page IV-6 Range Goal 19
S&G: Build all fences to provide ease of wildlife passage	Humboldt LRMP Page IV-35 Range Standard and Guideline
S&G: Coordinate livestock grazing with the wildlife habitat improvement program	Humboldt LRMP Page IV-35 Range Standard and Guideline
Minimize livestock/big game conflicts on key winter range: <ol style="list-style-type: none"> 1. Hold stocking levels of livestock on key winter ranges to the carrying capacity needed to meet objectives. 2. Implement grazing systems that reduce competition for forage on winter ranges. 3. Apply vegetative treatment on winter range which will improve habitat conditions. 4. Install structural improvements on winter range which will aid in controlling and distributing livestock use. 	Humboldt LRMP Page IV-35 Range Standard and Guideline

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Range	
S&G: Coordinate non-structural improvements with wildlife habitat requirements. Complete non-structural improvements projects to treat deteriorated range, treat range to sustain existing use, and to improve range condition.	Humboldt LRMP Page IV-37 Range Standard and Guideline
S&G: Locate improvements to minimize adverse impacts on wildlife	Humboldt LRMP Page IV-38 Range Standard and Guideline
GOAL: Manage the Cherry Springs, Monte Cristo, and Quinn Wild Horse Territories in accordance with the Wild Horse and Burro Act and the approved territory plans.	Humboldt LRMP Page IV-6 Range Goal 20
MD: Manage allotments to maintain suitable range in satisfactory ecological condition and improve range in less than satisfactory ecological condition by developing management plans on all allotments and wild horse territories by 1988.	Humboldt LRMP Page IV-32 Range Management Direction
S&G: Develop allotment management and territory plans for each allotment and wild horse territory. Update allotment management and territory plans to reflect Forest standards and guidelines	Humboldt LRMP Page IV-32 Range Standard and Guidelines
S&G: Each new or updated allotment management or wild horse territory plan will contain specific monitoring standards developed with an interdisciplinary team	Humboldt LRMP Page IV-32 Range Standard and Guidelines
S&G: Manage wild free-roaming horses and burros to population levels compatible with the resource capabilities and needs.	Humboldt LRMP Page IV-40 Range Standard and Guidelines
GOAL: Support predator control program by making recommendations on the need for control, methods to be used, and special precautions needed and by evaluating the environmental effects of predator control	Humboldt LRMP Page IV-7 Range Goal 23
S&G: Allow predator control on grazing allotments where there is a demonstrated need as shown by permittee reports or as verified on site by Forest Service or APHIS personnel.	Humboldt LRMP Page IV-39 Range Standard and Guidelines
S&G: Allow the use of only environmentally acceptable methods of predator control.	Humboldt LRMP Page IV-39 Range Standard and Guidelines
GOAL: Emphasize the control of priority I noxious weeds.	Humboldt LRMP Page IV-7 Range Goal 24

Humboldt LRMP Standards and Guidelines

Range	
Objective: a. Cooperate with counties in the treatment and control of noxious weeds. b. Re-treat those areas where priority I noxious weeds have not been eliminated and concentrate new treatment on those areas posing the greatest threat.	Humboldt LRMP Page IV-7 Range Objective
S&G: Incorporate noxious weed control into mineral operating plans and allotment management plans.	Humboldt LRMP Page IV-38 Range Standard and Guidelines
S&G: Treat new infestation and priority one noxious weeds first.	Humboldt LRMP Page IV-38 Range Standard and Guidelines
S&G: Coordinate with permittees to treat poisonous plants where livestock losses have occurred and/or have the potential to occur.	Humboldt LRMP Page IV-38 Range Standard and Guidelines

Toiyabe LRMP Standards and Guidelines

Range Management	
GOAL: Rangelands will be in satisfactory condition or better	Toiyabe LRMP Range Mgt. PG IV-4 Goal I
Objective: Ninety-five percent of all rangelands will have been brought to satisfactory condition. Management plans will have been approved for all grazing allotments and wild and free-roaming horse and burro territories. Livestock and wild hone/burro use will have been maintained at pre-existing levels. Noxious farm weeds will be under control.	Toiyabe LRMP Range Mgt PG IV-4 DFC
S&G: Describe ecological sites, develop SCORE cards to rate ecological status and resource values, and define management strategies for rangeland management	Toiyabe LRMP Forest S&G Range PG IV-26 S&G 10
S&G: Utilize Toiyabe National Forest range suitability standards	Toiyabe LRMP Forest S&G Range PG IV-26 S&G 11
S&G: Strive to achieve or maintain a minimum of 60 percent ground cover on upland rangelands with the exceptions of low sagebrush types, Wyoming big sagebrush types, crested wheatgrass seedings, pinyon/juniper types, and south facing sagebrush types on granitic slopes of the Sierra Nevada.	Toiyabe LRMP Forest S&G Range PG IV-26 S&G 12
S&G: Conduct monitoring and evaluation in accordance with FSH 2209.21, Range Environmental Analysis Handbook, and the Nevada Rangeland Monitoring Handbook	Toiyabe LRMP Forest S&G Range PG IV-26 S&G 14
S&G: Achieve or maintain rangeland in satisfactory condition which is defined as: (1) having a resource value rating (RVR) of 50 or above for vegetation or other features; or (2) being in a mid-succession or higher class of ecological status; and (3) having a stable or upward trend in soil and vegetation. NOTE: Criteria for RVR of vegetation include species, growth forum, Collage type, forage value, roper use factor, production, cover, density, frequency, abundance, or other. The criteria used depend upon the particular use or benefit of highest Importance of the site or area. For example, status of soil and vegetation on a watershed may be the most Important resource value; or the production of braise on key dear winter range; or vegetative cover along stream; or plant diversity as related to scenic beauty.	Toiyabe LRMP Forest S&G Range PG IV-26 S&G 15
S&G: Complete range analysis, including inventory and evaluation, following Regional standards and the schedule set by the Forest Supervisor.	Toiyabe LRMP Forest S&G Range PG IV-27 S&G 18
S&G: Priority will be given to range improvement on allotments with a high percentage of land in unsatisfactory condition	Toiyabe LRMP Forest S&G Range PG IV-28 S&G 24

Toiyabe LRMP Standards and Guidelines

Range Management					
<p>S&G: Forage Utilization Standards described below are to be used as maximum standards for the development of proper use criteria. Deign of management systems will include the specific utilization standards to be applied. These standards should be applied based on utilization of key plant species by key area. Soil disturbance any also be used to determine proper use and is often the best measure of proper use on sheep ranges and on granitic slopes.</p>					<p>Toiyabe LRMP Forest S&G Range PG IV-28 S&G 25</p>
<p>TABLE IV-6 MAXIMUM FORAGE UTILIZATION STANDARDS</p>					
Manage ment System	Vegetation Type	Maximum Percent Utilization By Key Species			
		GRASS OR FORB		SHRUB	
Season Long	Aspen Sagebrush, Mountain	Conditions Class Unsatisfactory Satisfactory		Conditions Class Unsatisfactory Satisfactory	
	Brush and Grassland	40%	45%	30%	40%
	Riparian	45%	55%	20%	30%
	Alpine	30%	40%	20%	30%
Best or Deferred	Sagebrush, Mountain brush and grassland, Aspen	45%	55%	40%	50%
	Riparian	55%	65%	25%	35%
	Alpine	40%	45%	25%	35%
<p>S&G: Proper use criteria will be established, in writing, for each unit of each crazing allotment. Proper use criteria are a mandatory pert of each allotment management plan. Long-term trend studies are also mandatory to determine if proper use criteria are correct and to determine what is occurring in regard to range condition. Proper use criteria will be developed through m tern input. It is necessary that criteria be based on the factor that becomes critical first - the limiting factor. In some range units or pastures, it may be necessary to establish more than one set of proper use criteria. This is especially true where riparian areas are involved.</p> <p>Establishing proper use criteria requires the ID Team involvement. Proper use criteria define the permissible grazing level in the range unit or pasture.</p> <p>The following standard. mist be observed when identifying limiting factors and proper use criteria:</p> <p>A. Soil and vegetation are the basic resources. The condition of these two resources oust be maintained or improved. If they are in satisfactory condition, then they must be maintained in this condition. If they are in less than satisfactory condition, then allowance oust be nude for improvement in condition. Any use causing a downtrend condition of these two resources should be modified or elimination whether coed by livestock, wildlife or any other use.</p> <p>B. After requirements for the soil and vegetative resources have been provided, the other resources, such as livestock grazing, wildlife, and aesthetics, can be considered. This is the point where the tern is involved.</p> <p>Trampling of soils by grazing animals by result in either soil displacement or soil displacement. This effect of grazing may become a limiting factor before the maxima allowed utilization of the key plant species is reached. In this situation, the amount of soil displacement or compaction will determine the limit of allowable grazing use rather than utilization of key species.</p> <p>Proper use guides based on soil displacement should generally be as follows: On steeper</p>					<p>Toiyabe LRMP Forest S&G Range PG IV-30 S&G 26</p>

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Range Management	
<p>slopes and on loose sandy soils, evidence of trampling should not exceed 10 percent as determined within sample plots. Usually trampling can be tolerated on slopes less than five percent and on slopes up 11 to 30 percent with heavier textured soils. Certain stream baa zones may be an exception.</p> <p>Soil compaction is detrimental on heavy soils, particularly if they are wet. Meadows are most susceptible to compaction. Proper use is defined as moderate compaction or less.</p>	
<p>S&G: Allow no livestock grazing for two grazing seasons after prescribed or natural fires and plantings or seedings.</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-30 S&G 27</p>
<p>S&G: Allow livestock conversions based on resource needs, capability, and management objectives and not solely based on the desires of the livestock</p> <p>A. Conversions will be made in accordance with a management plan, and current range analysis, and if the necessary range improvement structures are in place.</p> <p>B. When conversions are made mainly for convenience of the permittee, the range improvement structures necessary to complete the conversion will be financed and constructed by the permittee. Construction will be in accordance with Forest Service standards</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-31 S&G 30</p>
<p>GOAL: All grazing allotments and wild and free-roaming horse and burro territories will be under approved management plans</p>	<p>Toiyabe LRMP Range Mgt PG IV-4 Goal 2</p>
<p>Objective: Ninety-five percent of all rangelands will have been brought to satisfactory condition. Management plans will have been approved for all grazing allotments and wild and free-roaming horse and burro territories. Livestock and wild hone/burro use will have been maintained at pre-existing levels. Noxious farm weeds will be under control.</p>	<p>Toiyabe LRMP Range Mgt PG IV-4 DFC</p>
<p>S&G: Maintain range administration improvements at a level sufficient to meet the purpose of the project and for the life of the project</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-26 S&G 2</p>
<p>S&G: Develop allotment management plans for all active range allotments and wild free—roaming horse and burro territories.</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-26 S&G 4</p>
<p>S&G: Ensure that water developments and other range improvements meet wildlife needs.</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-26 S&G 6</p>
<p>S&G: Update allotment and territory management plans that are not consistent with the Forest Plan, following the schedule found in Chapter V.</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-27 S&G 17</p>
<p>S&G: Develop allotment management plan in consultation with all parties Involved, including permittee(s), state, or other federal agencies, and any other organizations or individuals.</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-27 S&G 19</p>

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Range Management	
<p>S&G: Each allotment management plan shall preset administrative and management requirements of the specific range allotment or wild free-ranging horse or burro territory. Each plan will contain sections on objectives, actions, monitoring, and evaluation.</p> <p>A. The action section will include seasons of use, mater of livestock permitted, the grazing system, schedule of range rehabilitation, and schedules for initiating and maintaining rage improvements. Schedules are to Include priorities, responsibilities, and planed completion dates. The action section fiat also include a statement of actions required to allow for other uses and resources, and for resolving conflicts.</p> <p>B. The monitoring and evaluation section will address actual use by livestock, production and utilization, ecological, status and trends, and permittee compliance with management requirements.</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-27 S&G 20</p>
<p>S&G: Prepare an annual operating plan for each grazing allotment. The annual operating plan is the action plan that implements management decisions during the current year. Anal operating plans should be mutually developed by the District Ranger and permittee. The annual operating plan will consist of a narrative and graphics.</p> <p>A. The narrative will include, where applicable:</p> <ol style="list-style-type: none"> 1. Clear and definite instructions concerning management of livestock while on the allotment. This should include the schedule for each unit to be grazed, expected anoint of time each unit will be grazed, allowable forage, utilization, how the livestock will be moved from unit to unit, and standards for livestock removal from the allotment. 2. Range improvement maintenance responsibility for the current year, when the maintenance will be accomplished, and the maintenance standards to be attained. 3. A list of range improvement projects to be started or completed during the current year. 4. Any necessary instructions concerning trailing and/or trucking livestock to and/or the allotment. 5. Special instructions on amp sanitation and fire prevention responsibilities of the permittee. 6. Multiple-use coordination requirements with which the permittee is expected to comply, including animal control practices and compliance with endangered and threatened species requirements. <p>B. The graphic section should include:</p> <ol style="list-style-type: none"> 1. A map showing allotment and management unit boundaries, range improvements, closed areas, and special management situations. 2. Acceptable forms for recording actual use, losses, improvement maintenance, and other management data. 	<p>Toiyabe LRMP Forest S&G Range PG IV-27 S&G 22</p>
<p>S&G: Involve livestock permittees, other federal and state agencies, and interested parties in the development of allotment and territory management plans. Utilize the Coordinated Resource Management and Planning Process as appropriate.</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-28 S&G 23</p>
<p>S&G: Allow no livestock grazing for two grazing seasons after prescribed or natural fires and plantings or seedings.</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-30 S&G 27</p>
<p>S&G: Notify the Nevada Department of Wildlife and the California Department of Fish and Game one year in advance of implementation of re-vegetation projects.</p>	<p>Toiyabe LRMP Forest S&G Range PG IV-31 S&G 29</p>

Toiyabe LRMP Standards and Guidelines

Range Management	
<p>S&G: WILD FREE-ROAMING HORSES AND BURROS</p> <ol style="list-style-type: none"> 1. Manage wild free-roaming horses and burros in accordance with the Wild Free-Roaming Horse and Burro Act of 1971. 2. Carry out interagency agreements with the Inyo National Forest and the BLM. 3. Involve interested federal and state agencies and other groups in the management of wild free-roaming horses and burros. 4. Manage wild free-roaming horses and burros to population levels compatible with resource capabilities and requirements 	<p>Toiyabe LRMP Forest S&G Range PG IV-31</p>