

**GREATER SAGE-GROUSE/GRAZING ECONOMIC ANALYSIS**

Prepared for

Sublette County Commission, Wyoming  
Wyoming Stock Growers Association

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## 1. INTRODUCTION

On September 28, 2011 the U.S. District Court of the District of Idaho in *Western Watersheds Project vs. Salazar, No.08cv516* ruled in favor of Western Watersheds Project (WWP) claim that the Bureau of Land Management (BLM) violated the National Environmental Policy Act and the Federal Land Policy and Management Act in approving the 2008 Pinedale Resource Management Plan. While the BLM is correcting the identified flaws, WWP has asked for interim grazing requirements to be implemented that could have significant impacts on the economy of Sublette County and Lincoln County.

The interim management requirements proposed by the WWP for grazing are:

A1 - Exclude livestock grazing in Sage-grouse nesting and brood-rearing habitats from March 1 until after June 20, and remove livestock by August 1 of each year, with a mandatory goal of leaving at least 70% of the herbaceous production each year to form residual cover to benefit sage-grouse nesting the following spring.

A2 - Prohibit twice-over grazing systems in Sage-grouse habitats, where livestock pass through an area twice in a grazing season (including trailing).

A3 - In Sage-grouse habitats, prohibit constructing new fences, order removal of unnecessary fences; and visually mark remaining fences to reduce Sage-grouse collisions with fences.

A4 - Prohibit vegetation treatments of so-called "decadent" sagebrush.

A5 - Prohibit new livestock water developments and any new rights-of-way for water developments or conveyances in Sage-grouse habitats (Western Watersheds Project v. Ken Salazar 2012).

The first two measurements would have the largest impact on the cattle ranching industry by minimizing the number of days allowed for grazing and prohibiting twice-over grazing. The grazing periods currently allow for over fifteen thousand grazing days in the Planning Area. If all of the allotments in the Planning Area are impacted, the date restrictions would reduce that by 70% to just over four and half thousand days. This reduction has the potential to significantly impact individual cattle ranching operations and the economic, cultural, and social character of the communities within the Planning Area.

In addition, some of the ranchers in the Pinedale Field Office (PFO) Planning Area use their BLM allotments in the spring and/or early summer, then use Forest Service allotments for the remaining portion of the summer and early fall (Booth pers. comm.; Thrift pers. comm.). The cattle are then transported back across the BLM lands using trailing permits. If they were not allowed to pass through twice the Forest Service allotments would be unusable. Based on communications with local ranchers, trucking the cattle back to the home ranch would not be an option in most cases (Bousman pers. comm.). Therefore, the use of these allotments would no longer be possible, increasing the impact of the proposed interim grazing requirements.

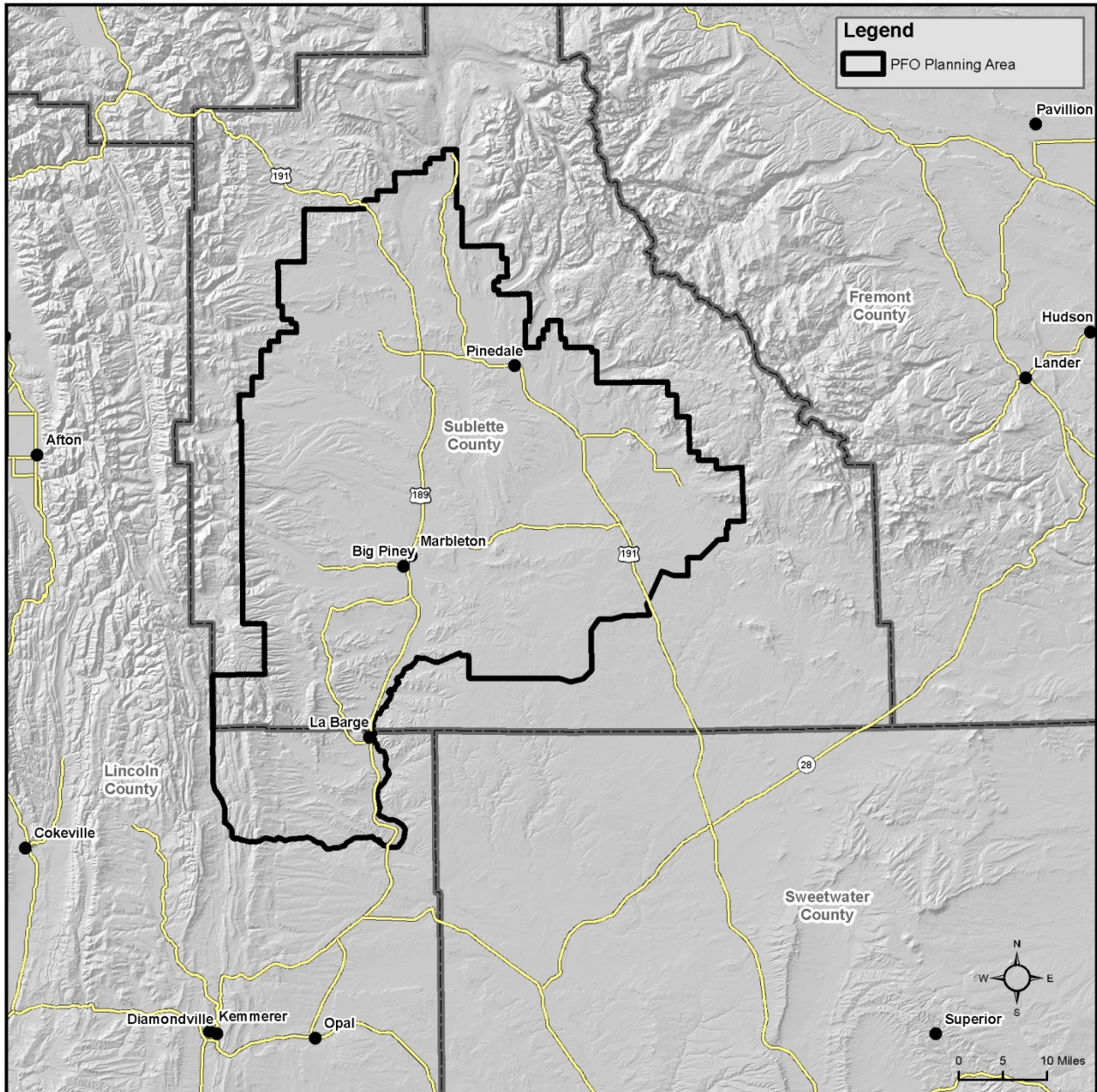
In order to understand the magnitude of these impacts, geographic information systems (GIS) and economic modeling were used to determine which allotments in the Planning Area would be impacted and the potential reduction in AUMs associated with these allotments. A complete description of the

methodology and assumptions used in the analysis can be found in Appendix B – Methodology and Assumptions.

The sections below provide a brief description of the counties of the Planning Area, the scenarios used in the analysis, the potential yearly impacts to the local communities, and the impacts of the proposed interim grazing requirements on the communities over time.

## 2. AFFECTED ENVIRONMENT

The Pinedale Field Office encompasses most of Sublette County and a portion of Lincoln County. Map 1 contains an outline of the PFO Planning Area and shows the cities and counties.



Map 1 Pinedale Field Office with Counties and Cities

Both counties and most of the cities within them have experienced high levels of growth over the past 10 and 20 years. As shown in Table 1, Sublette County has more than doubled in population over the last 20 years, and most of that growth has occurred in the last 10 years. Lincoln County has had lower growth, 43% in the last 20 years. Table 1 also shows that the population increases have not been concentrated in the largest population centers. In Lincoln County, where the population increased 43% over the last 20 years, the population of Kemmerer, its largest city, has decreased by 12%. In Sublette County, the population of the largest city has increased, but the pace is slightly slower than the county as a whole.

**Table 1: County and Largest City Population Changes 1990-2010**

	1990	2000	2010	Percent Change 1990-2000	Percent Change 2000-2010	Percent Change 1990-2010
Lincoln County	12,625	14,573	18,106	15.43%	24.24%	43.41%
Kemmerer	3,020	2,651	2,656	-12.22%	0.19%	-12.05%
Sublette County	4,843	5,920	10,247	22.24%	73.09%	111.58%
Pinedale	1,181	1,412	2,030	19.56%	43.77%	71.89%

Source: US Census 2011

Table 2 shows the population changes for the cities within the two counties. La Barge is the only Lincoln County city within the PFO Planning Area and it has the largest growth of the cities within the county. La Barge grew by almost 28% over the last 10 years. With the exception of Bondurant, all of the cities within Sublette County have experienced significant growth over the last 10 years. The city of Boulder has grown from 20 people in 2000 to 170 people in 2010. While most of the growth is the result of oil and gas drilling and production within the county, the number of farm proprietors in the county has also increased slightly.

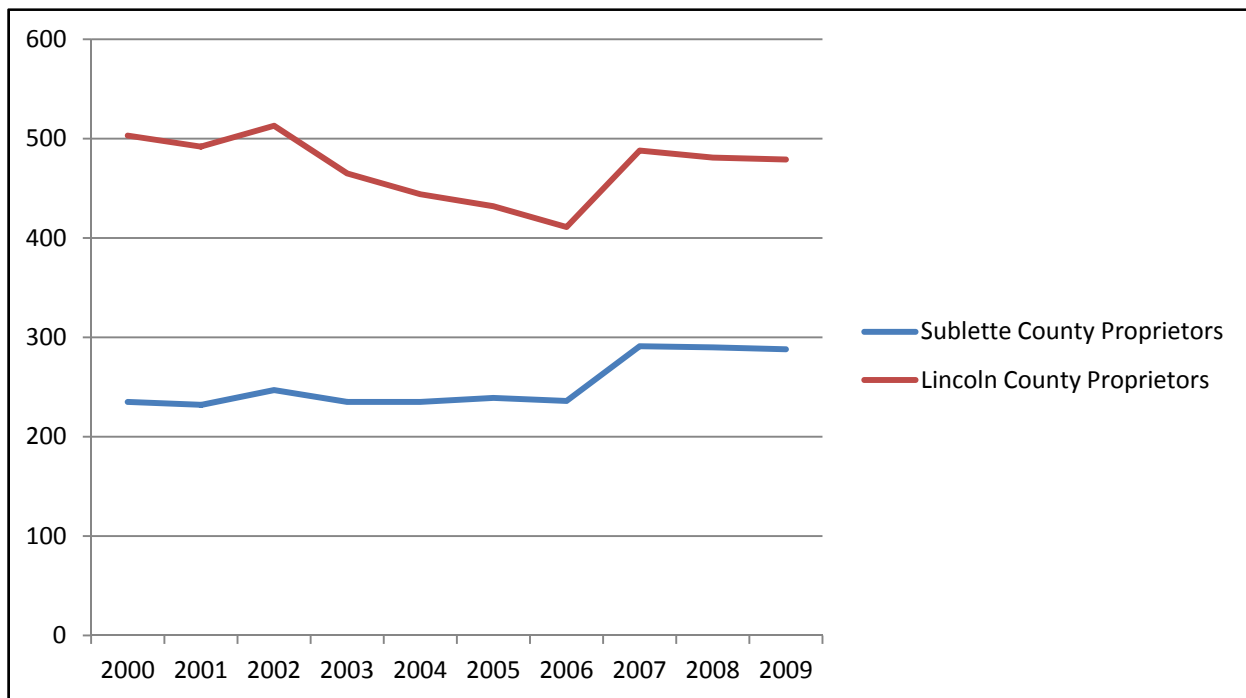
**Table 2: Population Changes of Cities, 2000-2010**

Area	2000	2010	Percent Change 2000- 2010
Kemmerer	2,651	2,656	0.19%
Afton	1,818	1,911	5.12%
La Barge	431	551	27.84%
<b>Lincoln County</b>	<b>14,573</b>	<b>18,106</b>	<b>24.24%</b>
Cora	76	142	86.84%
Daniel	89	150	68.54%
Bondurant	155	93	-40.00%
Boulder	30	170	466.67%
Pinedale	1,412	2,030	43.77%
Marbleton	720	1,094	51.94%

Area	2000	2010	Percent Change 2000-2010
Big Piney	408	552	35.29%
<b>Sublette County</b>	<b>5,920</b>	<b>10,247</b>	<b>73.09%</b>

Source: US Census 2011

Figure 1 shows the increase in farm proprietors in Sublette County from 2000-2010. Farm proprietorship has increased from 235 in 2000 to 288 in 2009 (BEA 2010). While this may also be an indication that ranches are becoming smaller, it does show that it is an important component of attracting new people to the area.



**Figure 1: Number of Farm Proprietors in Sublette County and Lincoln County from 2000-2010**

While the number of farm proprietors has increased over the last 10 years, the cash receipts from livestock and products has decreased as a portion of total farm receipts.

Table 3 shows the cash receipts from farming from 2005-2009. IMPLAN's 2010 dataset shows in Sublette County, livestock sales have consistently accounted for approximately 90% of total farm sales. While this amount accounts for less the 2% of the total output of \$1.4 billion in Sublette County, it is an integral part of the local communities (MIG 1999). The agricultural base of the communities has remained constant during the last century and will hopefully remain after the oil and gas exploration and drilling have vacated the region.

**Table 3: Farm Sales in Lincoln and Sublette County from 2005-2009 (current dollars)**

Description	2005	2006	2007	2008	2009
<b>Lincoln County</b>					
Cash receipts from marketing	\$28,241,000	\$28,515,000	\$26,872,000	\$25,610,000	\$26,427,000
Cash receipts: livestock and products	\$23,768,000	\$23,047,000	\$21,420,000	\$18,379,000	\$19,030,000
Cash receipts: crops	\$4,473,000	\$5,468,000	\$5,452,000	\$7,231,000	\$7,397,000
% of Receipts from Livestock and Products	84.16%	80.82%	79.71%	71.76%	72.01%
<b>Sublette County</b>					
Cash receipts from marketing	\$33,385,000	\$35,039,000	\$32,242,000	\$24,391,000	\$26,714,000
Cash receipts: livestock and products	\$30,964,000	\$32,347,000	\$29,781,000	\$21,778,000	\$23,933,000
Cash receipts: crops	\$2,421,000	\$2,692,000	\$2,461,000	\$2,613,000	\$2,781,000
% of Receipts from Livestock and Products	92.75%	92.32%	92.37%	89.29%	89.59%

Source: BAE 2011 CA45 Farm Income and Expenses



### 3. SCENARIOS ANALYZED

Three scenarios were analyzed based on geographic definitions of Sage-grouse habitat:

Scenario A – Governors Sage-grouse core habitat (Version 3)

Scenario B – Current Sage-grouse distribution

Scenario C – Habitat from the Pinedale RMP ROD

Each of these scenarios was analyzed with the interim management measures in place for 1 year, 5 years, 10 years, and the life of the plan. The number of allotments impacted under each alternative based on GIS data is detailed in Table 4. Also in Table 4 is a comparison of the potential yearly impacts under each alternative, assuming that the requirements will remain in effect for at least 5 years and BLM AUMs are necessary for ranching to remain viable. These numbers can also be found in Table 7. A complete description, map, and impact analysis of each scenario can be found in Appendix A.

**Table 4: Summary of Scenarios**

Impacts	Scenario A	Scenario B	Scenario C
	Core Area (ver. 3)	Current Distribution	Habitat from ROD
Number of allotments impacted	149	212	133
Number of permits impacted	214	296	204
Number of BLM AUMs lost	57,046	81,471	63,148
Number of total AUMs lost in the Planning Area	70,014	102,585	75,882
Number of unusable Forest Service AUMs	43,904	43,904	43,904
<b>Potential Total AUMs lost</b>	<b>113,918</b>	<b>146,489</b>	<b>119,786</b>
Yearly direct output lost per AUM	\$103.78	\$103.78	\$103.78
<b>Potential yearly direct output lost in cattle output</b>	<b>\$11,822,407</b>	<b>\$15,202,644</b>	<b>\$12,431,368</b>
Yearly total output lost per AUM	\$183.41	\$183.41	\$183.41
<b>Yearly total output lost (including indirect and induced impacts)</b>	<b>\$20,893,695</b>	<b>\$26,867,575</b>	<b>\$21,969,910</b>
Yearly total employment lost per AUM	0.002026	0.002026	0.002026
<b>Yearly total employment lost</b>	<b>231</b>	<b>297</b>	<b>243</b>

Variance between Table 4 and Table 7 Due to Rounding

#### 4. IMPACTS

If approved, the interim grazing requirements would measurably impact the economies of the region during the 1st year and for subsequent years if the requirements remain in place. The impact to cattle ranching output and employment would depend on how long the perceived policies would be in place. The impacts should be considered over the following time periods: 1 year, 5 years, 10 years, and 20 years. The 1 year time period provides a basis for the impacts to the local communities. The 5 year period is the probable interim requirement period. The 10 year period coincides with the allotment management plan review period. And the 20 year period covers the life of the RMP.

If the restrictions were viewed as being for only 1 year then the majority of the ranchers would find a way to compensate for that year. However, if ranchers believe the restrictions are for multiple years, or indefinitely, many may choose to cease operations, even in the 1st year. In 2008 two researchers, Brunson and Huntsinger (Brunson and Huntsinger 2008), completed two case studies of ranchers in California and, “one-third to one-half stated that they would have to sell their ranches if they lost their public allotments, because the operation would no longer be viable.” Once the ranches are sold, they most likely would be subdivided as they are worth more as residential developments than they are as agricultural land. There are several studies that show the current trend of fragmentation of ranch lands into smaller ranchettes or residential developments. Either of these two scenarios results in decreased wildlife habitat, including Sage-grouse habitat. For a review of the research in this area see Appendix C – Literature Review.

## 5. POTENTIAL YEARLY ECONOMIC IMPACTS

Table 5 shows the range of potential impacts to output and employment in Sublette County and Lincoln County if the interim grazing requirements were in place for a year and then lifted. The region would potentially lose over \$6 million in cattle ranching output and over \$10 million in total output. Employment would potentially be reduced by 68 cattle ranching and 120 total full-time equivalent positions.

**Table 5: Potential 1 Year Impact to Output and Employment by Scenario (2010 \$s)**

Impact	Scenario A	Scenario B	Scenario C
	Core Area (ver. 3)	Current Distribution	Habitat from ROD
<b>Output</b>			
Direct	\$4,811,896	\$6,187,695	\$5,059,761
Indirect	\$2,538,256	\$3,263,985	\$2,669,003
Induced	\$1,153,777	\$1,483,661	\$1,213,209
Total	\$8,503,930	\$10,935,341	\$8,941,973
<b>Employment</b>			
Direct	53.03	68.19	55.76
Indirect	29.83	38.36	31.37
Induced	11.07	14.23	11.64
Total	93.93	120.78	98.77

If the ranchers assumed that the interim requirements would be in place for up to 5 years the potential impacts for each alternative are shown in Table 6. In this case, the potential yearly loss would be close to \$9 million in cattle output and over \$15 million in total output. Employment would be reduced by almost 100 cattle ranching and 175 total full-time equivalent jobs.

**Table 6: Potential Yearly Impacts if Ranchers Assume Restrictions will be in place for 2-5 years (2010 \$s)**

Impact	Scenario A	Scenario B	Scenario C
	Core Area (ver. 3)	Current Distribution	Habitat from ROD
<b>Output</b>			
Direct	\$6,871,534	\$8,891,718	\$7,225,492

Impact	Scenario A	Scenario B	Scenario C
	Core Area (ver. 3)	Current Distribution	Habitat from ROD
Indirect	\$3,647,474	\$4,690,346	\$3,835,358
Induced	<u>\$1,657,978</u>	<u>\$2,132,021</u>	<u>\$1,743,382</u>
Total	\$12,176,986	\$15,714,085	\$12,804,231
<b><u>Employment</u></b>			
Direct	76.20	97.99	80.13
Indirect	42.87	55.13	45.08
Induced	<u>15.90</u>	<u>20.45</u>	<u>16.72</u>
Total	134.97	173.57	141.93

If the reductions were implemented for longer than 5 years, the ranchers that viewed them as vital to their operation would most likely discontinue operations. With some ranches ceasing to operate the yearly impacts in Table 7 would mostly likely become permanent reductions in cattle output. The reduction in direct cattle output from the loss of AUMs would be over \$15 million dollars and the total reduction in output close to \$27 million dollars. In addition, more than 150 jobs in cattle ranching would be lost and almost 300 total jobs would be lost.

**Table 7: Potential Yearly Impacts if Ranchers Believe Reductions Would Last for More Than 5 Years (2010 \$s)**

Impacts	Scenario A	Scenario B	Scenario C
	Core Area (ver. 3)	Current Distribution	Habitat from ROD
<b><u>Output</u></b>			
Direct	\$11,822,829	\$15,203,167	\$12,431,832
Indirect	\$6,236,495	\$8,019,610	\$6,557,742
Induced	<u>\$2,834,831</u>	<u>\$3,645,355</u>	<u>\$2,980,855</u>
Total	\$20,894,155	\$26,868,132	\$21,970,428
<b><u>Employment</u></b>			
Direct	130.29	167.54	137
Indirect	73.3	94.26	77.08
Induced	<u>27.19</u>	<u>34.97</u>	<u>28.59</u>

Impacts	Scenario A	Scenario B	Scenario C
	Core Area (ver. 3)	Current Distribution	Habitat from ROD
Total	230.78	296.77	242.67

Variance between Table 4 and Table 7 Due to Rounding

In 2009 the total livestock sales were \$23,933,000 in Sublette County and \$19,030,000 in Lincoln County. Approximately 75% of the AUMs lost are attributable to Sublette County; therefore the potential loss in cattle output per year would be \$11,402,375 for Sublette County, which would equate to half of the cattle output in the county.

## 6. IMPACTS OVER TIME

Cattle ranching and public land grazing are an integral part of the communities of the PFO Planning Area and the Rocky Mountain West. The proposed reductions to public land grazing will not allow adequate time for the home ranches to grow hay to support their herds during the time public lands grazing is not available. While adjustments may be possible for one or several years, the majority of ranches would not be able to survive given their current size and hay requirements. Many ranchers, already operating at a loss and supplementing ranch income with outside wages would opt to sell the ranch. Ranch land is often worth more as development lands and once sold for development is lost to ranching (Synder 2006). This would prohibit ranching from ever returning to the same level. The loss of ranches will also mean the loss of businesses that exist to support the ranches. If there are not enough ranches these businesses will be forced to close creating a ripple effect throughout the communities. Most likely ranch land would be divided into smaller sections which is detrimental to wildlife habitat as well as the ranching customs of Sublette County.

Unlike oil and gas development ranching is not a boom and bust industry. Ranching and agriculture has contributed to the stability and economics of the area for over 100 years. To undermine this culture by placing the interim grazing restriction on lessees would change the traditions and culture of the area forever.

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## **APPENDIX A**

### **Detail of Scenarios**



Based on Greater Sage-grouse habitat and geographic information systems (GIS) datasets, three possible scenarios were developed for the implementation of the interim management requirements. This appendix contains detailed GIS and economic data for each of the three alternatives. Each section contains a brief description of the scenario, a map showing the impacted areas, tables detailing the potential economic impacts, and a table listing the specific allotments impacted by the alternative.

The potential economic impacts are broken into three tables. The first table in each section contains the economic impact of the loss of the Bureau of Land Management (BLM) animal unit months (AUMs) within the impacted allotments. The second table includes the state and private AUMs that are contained within the allotments which would be unusable due to access issues. The interim management requirements prohibit grazing a second time, including trailing. This requirement would make forest service AUMs unusable for many permittees, therefore the third table includes forest service AUMs that have common owners.

Within each table of economic impacts there are three columns. The first column contains the value of output and employment lost using the average value of BLM AUMs. This is the impact of a BLM AUM if the loss of the AUM did not impact the production of the ranch. The second column contains the potential output and employment lost if the ranch is dependent on the BLM AUMs for production, meaning, if the ranch has to change its production structure (such as decreasing herd size), the value of each BLM AUM lost is greater than the average value. The last column contains the potential output and employment lost if the rancher is forced to quit ranching with the loss of the AUMs. (For a more detailed description see Appendix B: Methodology and Assumptions).

Table 1 below contains a summary of the allotments and AUMs impacted under each alternative and the potential yearly impacts to output and employment in the region.

**Table 1: Comparison of Alternatives**

Impacts	Scenario A	Scenario B	Scenario C
	Core Area (ver. 3)	Current Distribution	Habitat from ROD
Number of allotments impacted	149	212	133
Number of permits impacted	214	296	204
Number of BLM AUMs lost	57,046	81,471	63,148
Number of total AUMs lost in the Planning Area	70,014	102,585	75,882
Number of unusable Forest Service AUMs	43,904	43,904	43,904
<b>Potential Total AUMs lost</b>	<b>113,918</b>	<b>146,489</b>	<b>119,786</b>
Yearly direct output lost per AUM	\$103.78	\$103.78	\$103.78
Potential yearly direct output lost	\$11,822,407	\$15,202,644	\$12,431,368
Yearly total output lost per AUM	\$183.41	\$183.41	\$183.41
<b>Yearly total output lost</b>	<b>\$20,893,695</b>	<b>\$26,867,575</b>	<b>\$21,969,910</b>
Yearly total employment lost per AUM	0.002026	0.002026	0.002026

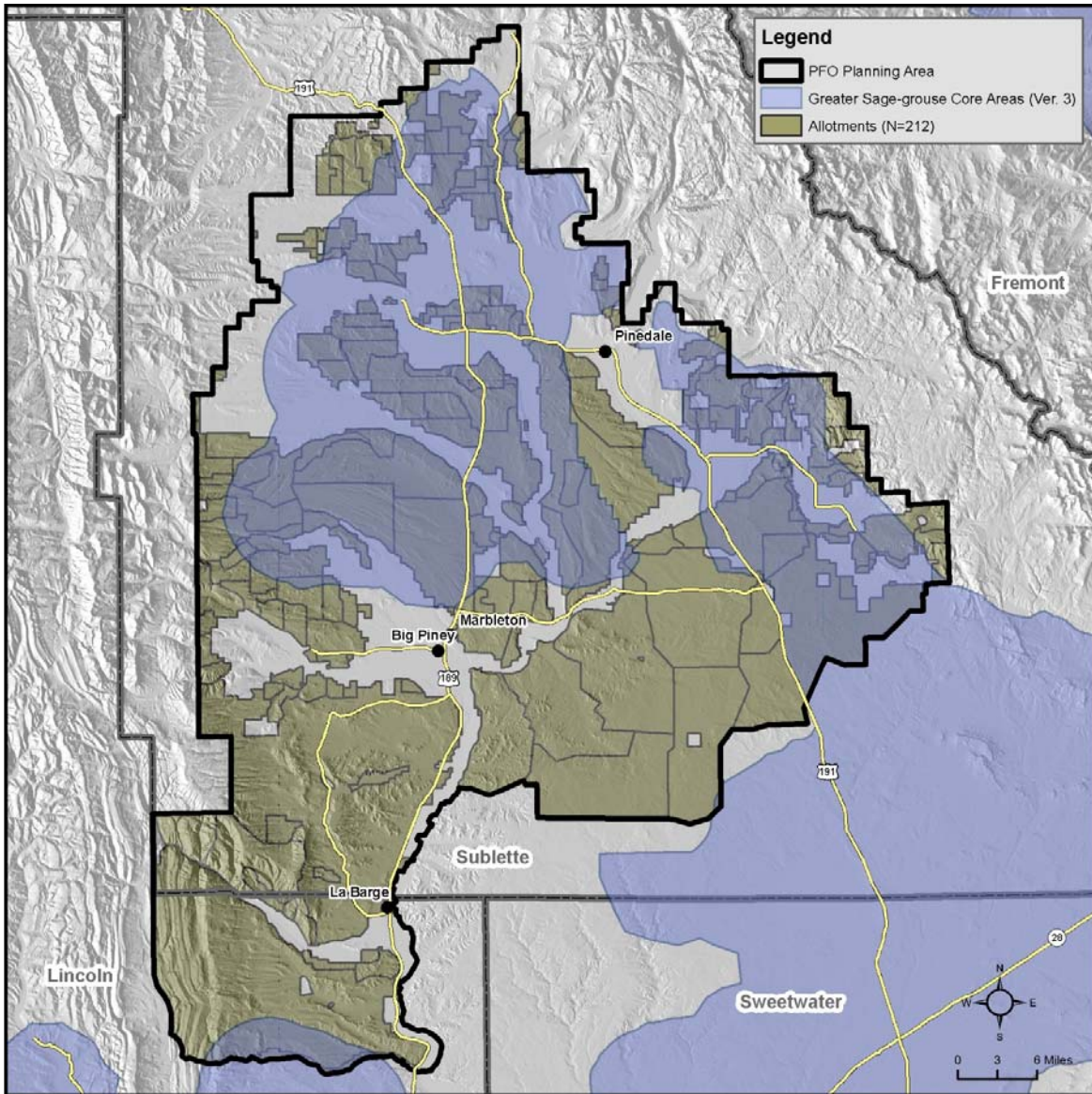
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Impacts	Scenario A	Scenario B	Scenario C
	Core Area (ver. 3)	Current Distribution	Habitat from ROD
Yearly total employment lost	231	297	243

**Scenario A – Core Area (ver.3)**

**Description and Map of Scenario A**

Scenario A uses the Wyoming Governor's Greater Sage-grouse Core Areas Version 3. GIS was utilized to overlay the grazing allotments with the Greater Sage-grouse Core Areas. Map 1 below presents the overlap between the Greater Sage-grouse Core Areas and the 212 allotments in the Pinedale Field Office (PFO).



**Map 1 Scenario A**

**Economic Impacts**

**Table 2: Potential yearly loss in output and employment from 57,046 BLM AUMs Lost**

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM(1)
<b><u>Output</u></b>			
Direct	\$2,409,623	\$3,441,015	\$5,920,444
Indirect	\$1,271,067	\$1,826,523	\$3,123,010
Induced	<u>\$577,770</u>	<u>\$830,255</u>	<u>\$1,419,580</u>
Total	\$4,258,459	\$6,097,792	\$10,463,035
<b><u>Employment</u></b>			
Direct	26.55	38.16	65.24
Indirect	14.94	21.47	36.71
Induced	<u>5.54</u>	<u>7.96</u>	<u>13.62</u>
Total	47.04	67.59	115.57

**Table 3: Potential yearly loss in output and employment from 70,014 AUMs lost in the Planning Area**

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM(1)
<b><u>Output</u></b>			
Direct	\$2,957,391	\$4,223,244	\$7,266,311
Indirect	\$1,560,012	\$2,241,737	\$3,832,950
Induced	<u>\$709,111</u>	<u>\$1,018,993</u>	<u>\$1,742,287</u>
Total	\$5,226,515	\$7,483,975	\$12,841,547
<b><u>Employment</u></b>			
Direct	32.59	46.83	80.07
Indirect	18.34	26.35	45.05
Induced	<u>6.80</u>	<u>9.77</u>	<u>16.71</u>
Total	57.73	82.96	141.84

**Table 4: Potential yearly loss in output and employment from 113,918 AUMs lost in the Region**

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM(1)
<b><u>Output</u></b>			
Direct	\$4,811,896	\$6,871,534	\$11,822,829
Indirect	\$2,538,256	\$3,647,474	\$6,236,495
Induced	<u>\$1,153,777</u>	<u>\$1,657,978</u>	<u>\$2,834,831</u>
Total	\$8,503,930	\$12,176,986	\$20,894,155
<b><u>Employment</u></b>			
Direct	53.03	76.20	130.29
Indirect	29.83	42.87	73.30
Induced	<u>11.07</u>	<u>15.90</u>	<u>27.19</u>
Total	93.93	134.97	230.78

Table 5 Allotments Impacted Under Scenario A

Allotment ID	Allotment Name	# of Permittees	# of Permittees Impacted	Permitted BLM AUMs	Permitted BLM AUMs Impacted	State	Total Permitted AUMs	Total Permitted AUMs Impacted	Grazing - Start Date	Grazing - End Date	# of Days	New Grazing Start Date	New Grazing End Date	# of New Days	% Days Lost	AUMs Lost	Adjusted # of New Days (1)	Adj % Days Lost	Adj AUMs Lost	Total AUMs lost in the Planning Area	County
2061	Eubank South LaBarge Individual	1	0	80	0	21	128	0	10/16	11/14	28									0	Lincoln
2075	LaBarge Creek Ranch Individual	1	0	42	0		42	0	9/16	10/15	29									0	Lincoln
12125	Bondurant Individual	1	0	10	0		10	0	10/15	11/14	29									0	Lincoln
12204	Yose Individual	1	0	150	0		150	0	8/26	9/30	34									0	Lincoln
12223	North LaBarge Bridger Teton Forest Service	1	1	1200	1200		1200	1200	8/1	10/5	64			0	100.00%	1200	0	100.00%	1200	1200	Lincoln
2077	North LaBarge Common	7	0	14500	0	1621	19398	0	5/16	10/15	149									0	Lincoln
2080	Fox LaBarge Individual	1	0	17	0		42	0	5/1	10/15	164									0	Lincoln
12201	Upper North LaBarge Individual	1	0	1985	0	96	2109	0	5/15	9/30	135									0	Lincoln
12202	Viola Individual	1	0	81	0		226	0	5/15	9/14	119									0	Lincoln
22005	South LaBarge Common	7	7	10107	10107	1205	12124	12124	5/1	10/31	180	6/20	7/31	41	77.22%	7805	41	77.22%	7805	9362	Lincoln
22010	Fontenelle Meadow Individual	1	1	56	56		56	56	5/1	11/30	209	6/20	7/31	41	80.38%	45	41	80.38%	45	45	Lincoln
2042	Cottonwood Meadows	1	1	236	236		1036	1036	8/15	2/28	193			0	100.00%	236	0	100.00%	236	1036	Sublette
2047	Circle 9 Individual	1	1	63	63	13	89	89	5/1	6/10	39			0	100.00%	63	0	100.00%	63	89	Sublette
2048	Gilligan Individual	1	1	107	107		257	257	9/15	10/27	42			0	100.00%	107	0	100.00%	107	257	Sublette
2053	Clark-Bloom Common	1	1	239	239		264	264	5/16	6/20	34			0	100.00%	239	0	100.00%	239	264	Sublette
2057	Dack Individual	1	1	90	90		90	90	8/1	8/31	30			0	100.00%	90	0	100.00%	90	90	Sublette
2060	Ryegrass Isolated	1	1	18	18	83	143	143	5/25	6/8	13			0	100.00%	18	0	100.00%	18	143	Sublette
2066	School Section Individual	1	1	158	158	40	210	210	10/1	10/15	14			0	100.00%	158	0	100.00%	158	210	Sublette
2074	South Piney Ranch Individual	1	0	92	0		92	0	9/1	10/15	44									0	Sublette
2078	Johnson Pine Meadows	1	0	45	0		45	0	9/16	10/15	29									0	Sublette
2079	South Piney Place Meadows	1	0	39	0		39	0	9/16	10/15	29									0	Sublette
2082	East Fork River Trail	1	1	3	3		3	3	5/1	5/31	30			0	100.00%	3	0	100.00%	3	3	Sublette
2131	South Ridge Soaphole Common	2	2	97	97	0	154	154	5/5	6/15	40			0	100.00%	97	0	100.00%	97	154	Sublette
2137	Lower Red Canyon Individual	2	2	101	101		183	183	9/13	9/30	17			0	100.00%	101	0	100.00%	101	183	Sublette
2139	Piney Individual	1	0	80	0		80	0	9/1	9/30	29									0	Sublette
2144	Lower Horse Creek Individual	1	1	255	255		255	255	5/22	6/8	16			0	100.00%	255	0	100.00%	255	255	Sublette
2145	Upper Horse Creek Individual	1	1	109	109		179	179	5/1	5/31	30			0	100.00%	109	0	100.00%	109	179	Sublette
2146	Home Individual	1	1	138	138		146	146	5/1	5/30	29			0	100.00%	138	0	100.00%	138	146	Sublette
2147	Daniel "Y" Individual	1	1	107	107		154	154	5/16	6/15	29			0	100.00%	107	0	100.00%	107	154	Sublette
2148	Miller Daniel Ridge	1	1	50	50		50	50	5/10	6/8	28			0	100.00%	50	0	100.00%	50	50	Sublette
2149	Miller Piney Individual	1	1	42	42		42	42	6/1	6/10	9			0	100.00%	42	0	100.00%	42	42	Sublette
2154	Silver Creek Individual	1	1	65	65		445	445	8/1	9/15	44			0	100.00%	65	0	100.00%	65	445	Sublette
2155	Piney Bridge Individual	1	1	131	131	55	200	200	5/5	6/4	29			0	100.00%	131	0	100.00%	131	200	Sublette
2160	Noble Cora Peak Common	2	2	300	300		390	390	5/20	6/19	29			0	100.00%	300	0	100.00%	300	390	Sublette
2163	O'Neil Individual	1	0	80	0		90	0	5/16	6/15	29									0	Sublette
2164	West Cora Peak Individual	1	1	273	273		524	524	5/16	6/9	23			0	100.00%	273	0	100.00%	273	524	Sublette
2174	Q5 Soaphole	1	1	566	566		785	785	5/16	6/20	34			0	100.00%	566	0	100.00%	566	785	Sublette
2179	Spence Place Individual	1	0	8	0		8	0	5/1	5/31	30									0	Sublette
2189	Horse Creek Bluff Individual	1	1	12	12		12	12	5/16	6/15	29			0	100.00%	12	0	100.00%	12	12	Sublette
2191	Butte Individual	0	0	7	7		7	7	5/1	5/15	14			0	100.00%	7	0	100.00%	7	7	Sublette
2199	Horse Creek Road Individual	1	0	43	0		43	0	10/1	12/15	74									0	Sublette
2200	Cora Y Common	1	1	120	120		125	125	5/25	6/14	19			0	100.00%	120	0	100.00%	120	125	Sublette
12113	New Fork Individual	1	0	302	0		361	0	5/10	6/20	40									0	Sublette
12117	Boulter Pasture	1	1	2	2		2	2	11/1	11/30	29			0	100.00%	2	0	100.00%	2	2	Sublette
12126	Hay Gulch	1	1	75	75		75	75	5/16	5/29	13			0	100.00%	75	0	100.00%	75	75	Sublette
12128	Section 18 Individual	1	0	26	0		200	0	10/1	11/30	59									0	Sublette
12132	Marincic Mesa Individual	1	1	350	350		355	355	5/10	6/15	35			0	100.00%	350	0	100.00%	350	355	Sublette
12206	Bird Individual	1	0	14	0	27	52	0	5/20	6/19	29									0	Sublette
12217	Cottonwood Gap Individual	1	1	90	90		155	155	5/1	5/30	29			0	100.00%	90	0	100.00%	90	155	Sublette
12220	Cora Road Individual	1	1	42	42		87	87	6/1	6/15	14			0	100.00%	42	0	100.00%	42	87	Sublette
22002	40 Rod Common	4	4	542	542		542	542	5/18	6/8	20			0	100.00%	542	0	100.00%	542	542	Sublette
22007	Fayette Individual	1	1	270	270		276	276	5/16	6/15	29			0	100.00%	270	0	100.00%	270	276	Sublette
1999	CB Holding Pen	1	1	9	9		9	9	7/3	7/3	1	7/3	7/3	1	0.00%	0	0	100.00%	9	9	Sublette
2156	Sand Draw Allotment	3	3	2324	2324		2324	2324	5/1	6/21	50	6/20	6/21	1	98.00%	2278	0	100.00%	2324	2324	Sublette
2162	5-Acre Pasture Individual	1	0	12	0		12	0	5/22	6/21	29									0	Sublette
12029	Blue Rim Desert	4	4	2826	2826		2826	2826	5/1	6/21	50	6/20	6/21	1	98.00%	2769	0	100.00%	2826	2826	Sublette
2173	Blue Rim Individual	1	1	3258	3258	199	3645	3645	5/10	6/23	43	6/20	6/23	3	93.02%	3031	0	100.00%	3258	3645	Sublette
2049	Mount Airy Common	4	4	757	757		758	758	5/16	6/25	39	6/20	6/25	5	87.18%	660	0	100.00%	757	758	Sublette
2095	Muddy Creek Individual	1	0	113	0		124	0	5/11	6/25	44									0	Sublette
2099	Jory Individual	1	0	50	0		61	0	7/1	7/6	5									0	Sublette
2101	Webb Draw Pasture	1	1	417	417		708	708	5/20	6/25	35	6/20	6/25	5	85.71%	357	0	100.00%	417	708	Sublette
2158	Canyon Ditch Individual	1	1	125	125	40	165	165	6/9	6/25	16	6/20	6/25	5	68.75%	86	0	100.00%	125	165	Sublette
12107	J&K Daniel Ridge	1	1	47	47		61	61	5/26	6/25	29	6/20	6/25	5	82.76%	39	0	100.00%	47	61	Sublette
2142	Beaver Creek Meadow Individual	1	0	20	0		20	0	6/15	6/28	13									0	Sublette
2032	Dan Budd Deer Hill Individual	1	0	293	0		305	0	5/16	6/30	44									0	Sublette
2034	Adjacent to Ranch Individual	1	0	26	0		144	0	5/16	6/30	44									0	Sublette
2035	Deer Hills Individual	1	1	698	698	10	708	708	5/16	6/30	44	6/20	6/30	10	77.27%	539	10	77.27%	539	547	Sublette
2036	Dead Indian Dome Individual	1	1	411	411		461	461	5/20	6/30	40	6/20	6/30	10	75.00%	308	10	75.00%	308	346	Sublette
2062	Bench Corral Individual	1	1	3170	3170	73	3284	3284	5/11	6/30	49	6/20	6/30	10	79.59%	2523	10	79.59%	2523	2614	Sublette
2071	Horse Creek Pasture #2	1	1	350	350	5	300	300	5/1	6/30	59	6/20	6/30	10	83.05%	291	0	100.00%	350	300	Sublette
2081	Fox-Yose Common	2	0	661	0	62	773	0	5/16	6/30	44									0	Sublette
2096	Hittle Individual	1	1	95	95		95	95	5/1	6/30	59	6/20	6/30	10	83.05%	79	10	83.05%	79	79	Sublette
2098	McKinsey Individual	1	1	50	50		68	68	7/21	8/20	29	7/21	7/31	10	65.52%	33	10	65.52%	33	45	Sublette
2118	Jewett Rye Grass Individual	1	1	440	440		440	440	5/22	6/30	38	6/20	6/30	10	73.68%	324	10	73.68%	324	324	Sublette

Allotment ID	Allotment Name	# of Permittees	# of Permittees Impacted	Permitted BLM AUMs	Permitted BLM AUMs Impacted	State	Total Permitted AUMs	Total Permitted AUMs Impacted	Grazing - Start Date	Grazing - End Date	# of Days	New Grazing Start Date	New Grazing End Date	# of New Days	% Days Lost	AUMs Lost	Adjusted # of New Days (1)	Adj % Days Lost	Adj AUMs Lost	Total AUMs lost in the Planning Area	County
2143	Grindstone Soaphole	1	1	586	586	73	854	854	5/10	6/30	50	6/20	6/30	10	80.00%	469	0	100.00%	586	854	Sublette
2152	Beaver-Horse Creek Individual	1	1	584	584		800	800	6/1	6/30	29	6/20	6/30	10	65.52%	383	10	65.52%	383	524	Sublette
2168	Chalk Butte Common	3	3	244	244	15	268	268	5/10	6/30	50	6/20	6/30	10	80.00%	195	0	100.00%	244	268	Sublette
2171	Brodie Draw Individual	1	1	385	385		814	814	5/15	6/30	45	6/20	6/30	10	77.78%	299	10	77.78%	299	633	Sublette
2193	Merna Horse Creek Individual	1	1	65	65		189	189	6/1	6/30	29	6/20	6/30	10	65.52%	43	10	65.52%	43	124	Sublette
12008	Stud Horse Common	3	0	2106	0	213	1942	0	5/1	6/30	59									0	Sublette
12009	Fremont Butte Common	6	6	2410	2410	92	2568	2568	5/6	6/30	54	6/20	6/30	10	81.48%	1964	0	100.00%	2410	2568	Sublette
12011	East Cora Road Individual	1	1	14	14		14	14	6/1	6/30	29	6/20	6/30	10	65.52%	9	10	65.52%	9	9	Sublette
12017	Lower Pasture Individual	1	1	284	284		288	288	6/1	6/30	29	6/20	6/30	10	65.52%	186	10	65.52%	186	189	Sublette
12026	Desert Land Entry (DLE) Individual	1	1	75	75		75	75	5/15	6/30	45	6/20	6/30	10	77.78%	58	10	77.78%	58	58	Sublette
12028	Upper Bench Corral Common	3	3	2009	2009	44	2063	2063	5/10	6/30	50	6/20	6/30	10	80.00%	1607	0	100.00%	2009	2063	Sublette
12123	Northwest Square Top Individual	1	0	800	0	14	999	0	5/1	6/30	59									0	Sublette
12127	McNinch Deer Hills Individual	1	1	252	252		252	252	5/21	6/30	39	6/20	6/30	10	74.36%	187	10	74.36%	187	187	Sublette
12222	Price-Beecher Creek	1	1	50	50		195	195	6/1	6/30	29	6/20	6/30	10	65.52%	33	0	100.00%	50	195	Sublette
22006	Aspen Ridge Individual	1	1	1692	1692		939	939	5/8	6/30	52	6/20	6/30	10	80.77%	1367	10	80.77%	1367	758	Sublette
22019	Heifer Pasture Individual	1	1	86	86		86	86	6/1	6/30	29	6/20	6/30	10	65.52%	56	10	65.52%	56	56	Sublette
22020	Boulder Lake Common	4	4	835	835		861	861	6/1	6/30	29	6/20	6/30	10	65.52%	547	0	100.00%	835	861	Sublette
32224	Lander Cutoff	1	1	233	233	27	216	216	5/11	6/30	49	6/20	6/30	10	79.59%	185	0	100.00%	233	216	Sublette
2150	Deer Hills Common	2	0	717	0	68	814	0	5/20	7/1	41									0	Sublette
12108	Horse Creek Isolated Tract	1	0	35	0		35	0	7/20	11/1	101									0	Sublette
2072	Spade Individual	1	1	688	688		1604	1604	6/1	7/2	31	6/20	7/2	12	61.29%	422	12	61.29%	422	983	Sublette
2041	Chapel Individual	1	1	257	257	55	362	362	5/15	7/4	49	6/20	7/4	14	71.43%	184	14	71.43%	184	259	Sublette
2064	Camp Creek Individual	1	0	715	0		782	0	7/17	9/30	73									0	Sublette
2136	East of DLE Individual	1	0	271	0		277	0	5/15	7/4	49									0	Sublette
2051	Square Top Common	7	7	4470	4470	237	4731	4731	5/6	7/5	59	6/20	7/5	15	74.58%	3334	15	74.58%	3334	3528	Sublette
2180	Irish Canyon Tracts Individual	1	1	30	30		30	30	5/6	7/5	59	6/20	7/5	15	74.58%	22	15	74.58%	22	22	Sublette
2181	Fremont Butte Individual	1	1	417	417	60	477	477	5/5	7/5	60	6/20	7/5	15	75.00%	313	15	75.00%	313	358	Sublette
2197	Springman Creek Individual	1	0	150	0		155	0	7/16	9/14	58									0	Sublette
12022	East Fork Common	2	2	792	792	413	1244	1244	5/1	7/5	64	6/20	7/5	15	76.56%	606	15	76.56%	606	952	Sublette
12027	Mickelson Bray Common	2	2	238	238	39	287	287	6/11	7/5	24	6/20	7/5	15	37.50%	89	15	37.50%	89	108	Sublette
12205	Round Valley Ryegrass Individual	1	1	1616	1616	31	1647	1647	5/15	7/5	50	6/20	7/5	15	70.00%	1131	15	70.00%	1131	1153	Sublette
2076	Fish Creek Individual (FW)	1	0	168	0		1687	0	6/20	7/7	17									0	Sublette
2088	Horse Creek-Ryegrass	1	1	449	449		449	449	6/15	7/7	22	6/20	7/7	17	22.73%	102	17	22.73%	102	102	Sublette
2068	Muleshoe	1	0	677	0	26	522	0	5/10	7/9	59									0	Sublette
2084	Lower Bench Corral Common	2	2	2635	2635	120	2774	2774	5/10	7/10	60	6/20	7/10	20	66.67%	1757	20	66.67%	1757	1849	Sublette
2196	Johnson Ridge Individual	1	0	165	0		165	0	5/26	7/10	44									0	Sublette
2038	Buyer Horse Creek Individual	1	1	351	351		418	418	5/27	7/11	44	6/20	7/11	21	52.27%	183	21	52.27%	183	219	Sublette
2097	Cottonwood Common	1	1	345	345	2	371	371	6/16	7/11	25	6/20	7/11	21	16.00%	55	21	16.00%	55	59	Sublette
2000	Daniel Ridge Individual	1	1	10	10		10	10	5/15	7/14	59	6/20	7/14	24	59.32%	6	24	59.32%	6	6	Sublette
2055	Lauzer Marsh Creek Individual	1	1	166	166		296	296	6/16	7/15	29	6/20	7/15	25	13.79%	23	25	13.79%	23	41	Sublette
2140	Gilchrist DLE Individual	2	2	42	42		42	42	5/15	7/15	60	6/20	7/15	25	58.33%	25	25	58.33%	25	25	Sublette
2172	Price Horse Creek Individual	1	1	40	40		75	75	5/16	7/15	59	6/20	7/15	25	57.63%	23	25	57.63%	23	43	Sublette
2195	South Piney Individual	1	0	141	0		82	0	6/1	7/15	44									0	Sublette
12119	Soaphole Common	3	3	1014	1014		1849	1849	5/16	7/15	59	6/20	7/15	25	57.63%	584	25	57.63%	584	1066	Sublette
2141	Beaver Creek Individual	1	0	129	0		129	0	7/1	7/28	27									0	Sublette
2054	Cora Peak Individual	1	1	150	150		175	175	7/1	7/30	29	7/1	7/30	29	0.00%	0	29	0.00%	0	0	Sublette
2056	Three Island Individual	1	1	120	120		121	121	7/1	7/30	29	7/1	7/30	29	0.00%	0	29	0.00%	0	0	Sublette
12021	Boulder Creek Tracts	1	1	28	28		28	28	7/1	7/30	29	7/1	7/30	29	0.00%	0	29	0.00%	0	0	Sublette
12124	Luman Individual	1	1	600	600		600	600	5/20	7/19	59	6/20	7/19	29	50.85%	305	29	50.85%	305	305	Sublette
2033	Fish Creek Individual (DB)	1	0	150	0		150	0	7/1	8/15	44									0	Sublette
2039	Maki Creek Individual	1	0	135	0		135	0	7/1	8/15	44									0	Sublette
2063	Upper Muddy Individual	1	1	1874	1874	200	2124	2124	7/1	10/15	104	7/1	7/31	30	71.15%	1333	30	71.15%	1333	1511	Sublette
2065	Beecher Individual	1	1	306	306		768	768	7/1	9/30	89	7/1	7/31	30	66.29%	203	30	66.29%	203	509	Sublette
2067	Johnson Huhtah Individual	1	1	136	136	94	444	444	7/1	10/14	103	7/1	7/31	30	70.87%	96	30	70.87%	96	315	Sublette
2091	LaBarge Individual	1	0	337	0		421	0	7/1	9/30	89									0	Sublette
2133	Ball Horse Creek Individual	1	1	87	87		87	87	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
2134	Cranor Building Pasture	1	1	11	11		11	11	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
2135	Ball Individual	1	1	107	107		668	668	7/1	9/30	89	7/1	7/31	30	66.29%	71	30	66.29%	71	443	Sublette
2165	Rosene Individual	1	1	42	42		162	162	7/1	9/30	89	7/1	7/31	30	66.29%	28	30	66.29%	28	107	Sublette
2182	South Horse Creek Individual	1	0	10	0		10	0	7/1	8/30	59									0	Sublette
2183	Soda Lake Common	2	2	156	156		156	156	7/1	9/15	74	7/1	7/31	30	59.46%	93	30	59.46%	93	93	Sublette
2190	Steele Individual	1	1	182	182		184	184	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
2192	Big Sandy Individual	1	1	30	30		30	30	7/1	11/30	149	7/1	7/31	30	79.87%	24	30	79.87%	24	24	Sublette
2209	Winkelman	1	1	98	98		246	246	7/1	8/31	60	7/1	7/31	30	50.00%	49	30	50.00%	49	123	Sublette
12025	Red Canyon Common	2	2	1075	1075	120	1350	1350	7/1	9/30	89	7/1	7/31	30	66.29%	713	30	66.29%	713	895	Sublette
12103	Reservoir Pasture	1	1	220	220		81	81	7/1	8/16	45	7/1	7/31	30	33.33%	73	30	33.33%	73	27	Sublette
12116	Southwest Pasture Individual	1	1	59	59		89	89	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
12120	Piney Unit Fenced	1	0	19	0		19	0	7/1	9/22	81									0	Sublette
12130	Star Corral Individual	1	0	62	0		113	0	7/1	8/15	44									0	Sublette
12221	Cora Stock Driveway	1	1	854	854		877	877	7/1	10/5	94	7/1	7/31	30	68.09%	581	30	68.09%	581	597	Sublette
2059	Ryegrass Individual	1	1	242	242		247	247	5/25	7/24	59	6/20	7/24	34	42.37%	103	34	42.37%	103	105	Sublette
2085	Upper Billie's Individual	1	1	2214	2214		2231	2231	6/26	9/30	94	6/26	7/31	35	62.77%	1390	35	62.77%	1390	1400	Sublette
2087	Upper Post Individual	1	1	123	123																

Allotment ID	Allotment Name	# of Permittees	# of Permittees Impacted	Permitted BLM AUMs	Permitted BLM AUMs Impacted	State	Total Permitted AUMs	Total Permitted AUMs Impacted	Grazing - Start Date	Grazing - End Date	# of Days	New Grazing Start Date	New Grazing End Date	# of New Days	% Days Lost	AUMs Lost	Adjusted # of New Days (1)	Adj % Days Lost	Adj AUMs Lost	Total AUMs lost in the Planning Area	County
22013	Willow Lake Tracts	1	0	26	0		26	0	6/1	7/30	59									0	Sublette
735	Signal Individual	1	0	178	0				6/1	10/31	150									0	Sublette
736	Kismet Individual	1	0	76	0				6/1	10/31	150									0	Sublette
2024	Bousman Common	2	2	755	755		755	755	5/15	9/15	120	6/20	7/31	41	65.83%	497	41	65.83%	497	497	Sublette
2031	Mesa Common	21	21	4701	4701	197	5003	5003	5/5	11/5	180	6/20	7/31	41	77.22%	3630	41	77.22%	3630	3863	Sublette
2037	West Individual	1	0	525	0	16	1112	0	6/16	9/15	89									0	Sublette
2040	South Desert Allotment	6	0	2631	0	348	3098	0	5/1	8/23	112									0	Sublette
2043	Pole Creek Individual	1	1	66	66	84	350	350	6/1	9/30	119	6/20	7/31	41	65.55%	43	41	65.55%	43	229	Sublette
2044	Fremont Lake Individual	1	0	29	0		94	0	6/1	9/30	119									0	Sublette
2045	Watson Draw	1	0	416	0			0	6/1	10/31	150									0	Sublette
2046	Fall Creek Pasture	1	1	10	10		10	10	6/1	10/31	150	6/20	7/31	41	72.67%	7	41	72.67%	7	7	Sublette
2050	Burch Individual	1	1	37	37		37	37	5/1	8/21	110	6/20	7/31	41	62.73%	23	41	62.73%	23	23	Sublette
2052	Cowley Tract	1	1	10	10		10	10	5/6	8/27	111	6/20	7/31	41	63.06%	6	41	63.06%	6	6	Sublette
2069	Warren Bridge Individual	1	1	48	48		301	301	6/1	9/15	104	6/20	7/31	41	60.58%	29	41	60.58%	29	182	Sublette
2070	Horse Creek Pasture #1	1	1	74	74		296	296	6/1	9/15	104	6/20	7/31	41	60.58%	45	41	60.58%	45	179	Sublette
2073	Reardon Canyon Common	2	0	1121	0	120	1347	0	5/10	9/9	119									0	Sublette
2086	Guio Sections Individual	1	1	417	417	51	1668	1668	6/15	8/10	55	6/20	7/31	41	25.45%	106	41	25.45%	106	425	Sublette
2089	Hansen Tract	1	0	14	0		46	0	5/1	11/30	209									0	Sublette
2090	Rief Individual	1	1	66	66		66	66	6/1	7/31	60	6/20	7/31	41	31.67%	21	41	31.67%	21	21	Sublette
2094	Hicks Pinedale Individual	1	0	10	0		397	0	6/1	10/30	149									0	Sublette
2100	Dry Piney Individual	1	0	30	0		30	0	5/15	10/14	149									0	Sublette
2105	Todd Pasture	1	1	11	11		11	11	6/1	11/15	164	6/20	7/31	41	75.00%	8	41	75.00%	8	8	Sublette
2138	Rathburn Individual	1	1	208	208		472	472	6/1	10/15	134	6/20	7/31	41	69.40%	144	41	69.40%	144	328	Sublette
2151	Hoback Rim Individual	1	0	25	0		3619	0	6/1	10/31	150									0	Sublette
2153	Scab Creek Individual	1	1	607	607	24	889	889	6/1	9/30	119	6/20	7/31	41	65.55%	398	41	65.55%	398	583	Sublette
2157	Hot Spring Pasture Individual	1	1	32	32		32	32	5/30	10/15	135	6/20	7/31	41	69.63%	22	41	69.63%	22	22	Sublette
2159	Noble Tracts Individual	1	1	36	36	100	136	136	5/16	9/15	119	6/20	7/31	41	65.55%	24	41	65.55%	24	89	Sublette
2161	Norris North Piney Individual	1	1	144	144		639	639	5/15	9/14	119	6/20	7/31	41	65.55%	94	41	65.55%	94	419	Sublette
2166	Pine Creek Individual	1	0	20	0		66	0	6/1	10/30	149									0	Sublette
2167	Green River Unit Individual	1	1	40	40		63	63	6/1	7/31	60	6/20	7/31	41	31.67%	13	41	31.67%	13	20	Sublette
2169	North Hoback Rim Individual	1	0	113	0		113	0	6/15	9/15	90									0	Sublette
2175	North Beaver Tracts Individual	1	1	190	190		190	190	6/1	10/16	135	6/20	7/31	41	69.63%	132	41	69.63%	132	132	Sublette
2176	Q5 Antelope Flat Individual	1	1	122	122		122	122	6/1	10/15	134	6/20	7/31	41	69.40%	85	41	69.40%	85	85	Sublette
2177	Hay Draw Individual	1	1	77	77		77	77	6/1	10/15	134	6/20	7/31	41	69.40%	53	41	69.40%	53	53	Sublette
2178	Miller Home Place Individual	1	1	24	24		24	24	5/1	8/31	120	6/20	7/31	41	65.83%	16	41	65.83%	16	16	Sublette
2184	Sandy Fenced Individual	1	1	30	30		2946	2946	6/1	9/30	119	6/20	7/31	41	65.55%	20	41	65.55%	20	1931	Sublette
2186	Muddy Corral Individual	1	1	195	195	29	288	288	5/15	10/31	166	6/20	7/31	41	75.30%	147	41	75.30%	147	217	Sublette
2187	189 Muddy Meadow Individual	1	1	36	36		36	36	5/1	10/30	179	6/20	7/31	41	77.09%	28	41	77.09%	28	28	Sublette
2188	Fall Creek	1	1	70	70		166	166	6/1	8/31	90	6/20	7/31	41	54.44%	38	41	54.44%	38	90	Sublette
2194	LaBarge Unit Individual	1	0	140	0	124	274	0	5/16	9/15	119									0	Sublette
2198	Beaver Tract Individual	1	0	48	0		48	0	5/16	9/15	119									0	Sublette
12102	James Ryegrass	1	1	728	728	100	828	828	6/1	7/31	60	6/20	7/31	41	31.67%	231	41	31.67%	231	262	Sublette
12106	Webb Home Pasture	1	1	5	5		5	5	6/1	10/31	150	6/20	7/31	41	72.67%	4	41	72.67%	4	4	Sublette
12109	Individual Fenced	1	1	11	11		11	11	5/1	10/15	164	6/20	7/31	41	75.00%	8	41	75.00%	8	8	Sublette
12110	Sandy Upper Muddy Individual	1	1	39	39		47	47	5/1	10/15	164	6/20	7/31	41	75.00%	29	41	75.00%	29	35	Sublette
12111	Sandy Individual	1	1	14	14		14	14	5/1	8/15	104	6/20	7/31	41	60.58%	8	41	60.58%	8	8	Sublette
12112	Muddy Meadows	1	1	20	20		20	20	5/1	9/30	149	6/20	7/31	41	72.48%	14	41	72.48%	14	14	Sublette
12114	Scattered Tracts	1	1	41	41		41	41	5/6	9/7	121	6/20	7/31	41	66.12%	27	41	66.12%	27	27	Sublette
12115	North Pasture Individual	1	1	31	31		41	41	5/1	8/28	117	6/20	7/31	41	64.96%	20	41	64.96%	20	27	Sublette
12121	West Fremont Ridge Common	2	0	293	0		293	0	5/15	9/24	129									0	Sublette
12122	Boulder Stock Driveway	1	1	55	55		96	96	5/16	10/30	164	6/20	7/31	41	75.00%	41	41	75.00%	41	72	Sublette
12129	West of Ranch Individual	1	0	130	0		260	0	5/16	8/31	105									0	Sublette
12203	Ditch Individual	1	1	19	19		19	19	6/15	9/1	76	6/20	7/31	41	46.05%	9	41	46.05%	9	9	Sublette
12225	New Fork Tract Isolated	1	0	8	0		8	0	5/16	9/15	119									0	Sublette
20001	Alkali Draw	2	0	1556	0		1556	0	5/1	10/31	180									0	Sublette
22003	Homestead Individual	1	1	45	45		178	178	5/1	9/30	149	6/20	7/31	41	72.48%	33	41	72.48%	33	129	Sublette
22004	Glasgow Individual	1	1	24	24		187	187	5/1	8/30	119	6/20	7/31	41	65.55%	16	41	65.55%	16	123	Sublette
22012	East Cora Road Meadow	1	1	64	64		64	64	6/1	7/31	60	6/20	7/31	41	31.67%	20	41	31.67%	20	20	Sublette
22014	Fish Hatchery Individual	1	1	56	56		56	56	5/1	11/30	209	6/20	7/31	41	80.38%	45	41	80.38%	45	45	Sublette
22015	Antelope Flat Common	2	2	533	533		481	481	6/15	8/31	76	6/20	7/31	41	46.05%	245	41	46.05%	245	222	Sublette
22018	Isolated Tracts Individual	1	1	83	83		83	83	5/1	10/30	179	6/20	7/31	41	77.09%	64	41	77.09%	64	64	Sublette
22030	North Rathburn	1	1	28	28		42	42	6/1	10/17	136	6/20	7/31	41	69.85%	20	41	69.85%	20	29	Sublette
	<b>Totals</b>	<b>297</b>	<b>214</b>	<b>106,520</b>	<b>73,143</b>	<b>6,686</b>	<b>137,923</b>	<b>91,483</b>								<b>55,076</b>			<b>57,046</b>	<b>70,014</b>	<b>0</b>

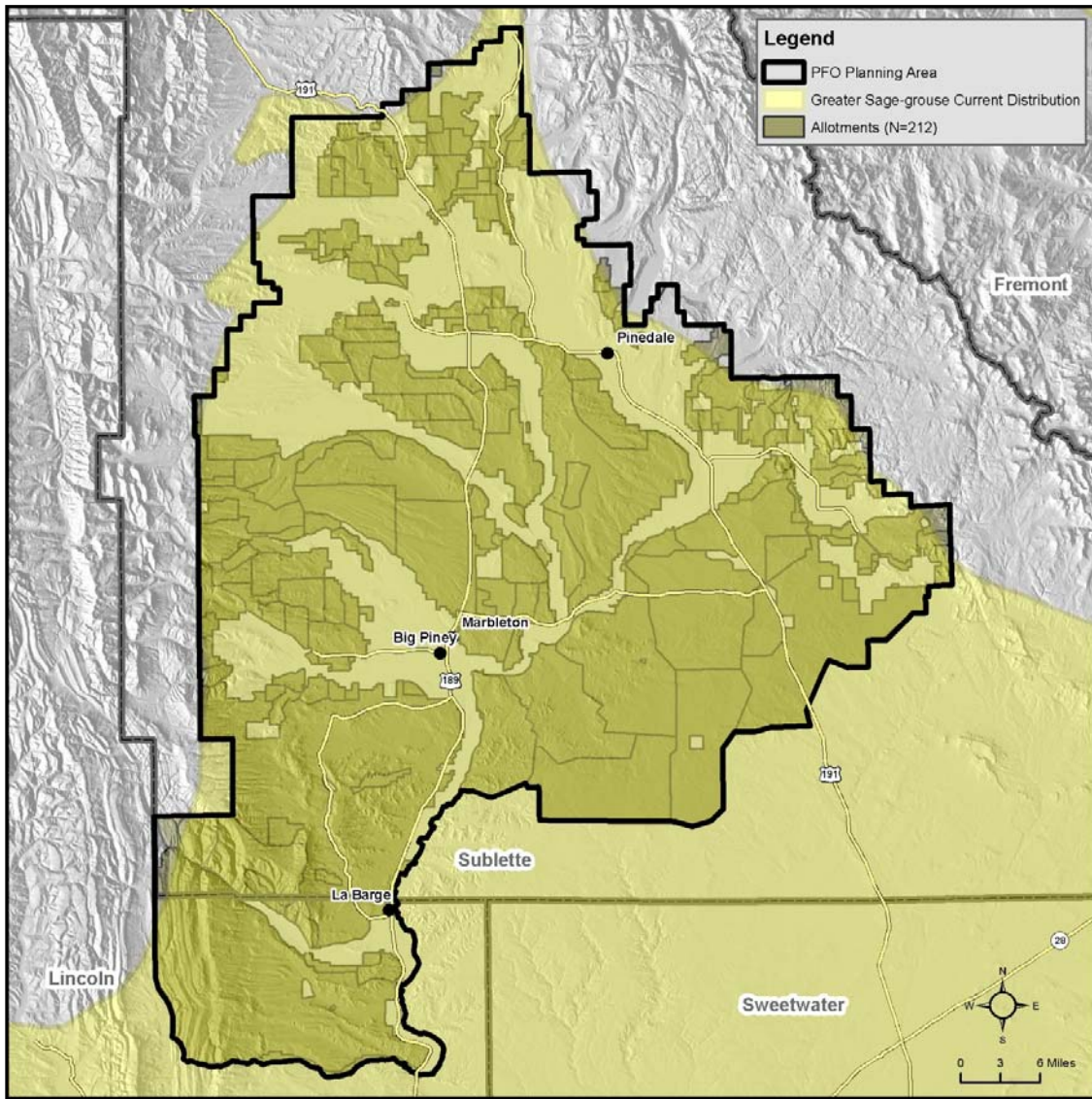
(1) Adjusted based on ranchers decision that there are not enough days to graze, therefore new days is adjusted to 0.  
Not found on Allots\_Joined but almost totals those on allots\_joined that are not found on this sheet. Difference of 73.  
Not impacted in this scenario



## **Scenario B – Current Sage-grouse Distribution**

### **Description and Map of Scenario B**

In 2004 the Western Association of Fish and Wildlife Agencies published the Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats, the lead author was John Connelly. This comprehensive report on Greater Sage-grouse presented a map of the current and historic distribution. We analyzed the current distribution layer as Scenario B. Map 22 below presents the overlap between the current Sage-grouse distribution and the 212 allotments in the PFO.



Map 2 Scenario B

**Economic Impacts**

Table 6: Potential yearly loss in output and employment from 81,471 BLM AUMs lost

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM(1)
<b>Output</b>			
Direct	\$3,441,335	\$4,945,198	\$8,455,360

Indirect	\$1,815,290	\$2,608,572	\$4,460,169
Induced	<u>\$825,150</u>	<u>\$1,185,740</u>	<u>\$2,027,392</u>
Total	\$6,081,775	\$8,739,511	\$14,942,921
<b><u>Employment</u></b>			
Direct	37.92	54.50	93.18
Indirect	21.34	30.66	52.42
Induced	<u>7.92</u>	<u>11.37</u>	<u>19.45</u>
Total	67.17	96.53	165.05

**Table 7: Potential yearly loss in output and employment from 102,585 AUMs lost in the Planning Area**

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM(1)
<b><u>Output</u></b>			
Direct	\$4,333,190	\$6,226,795	\$10,646,649
Indirect	\$2,285,741	\$3,284,609	\$5,616,065
Induced	<u>\$1,038,995</u>	<u>\$1,493,036</u>	<u>\$2,552,811</u>
Total	\$7,657,926	\$11,004,440	\$18,815,524
<b><u>Employment</u></b>			
Direct	47.75	68.62	117.33
Indirect	26.87	38.61	66.01
Induced	<u>9.97</u>	<u>14.32</u>	<u>24.49</u>
Total	84.58	121.55	207.82

**Table 8: Potential yearly loss in output and employment from 146,489 AUMs lost in the Region**

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM(1)
<b><u>Output</u></b>			
Direct	\$6,187,695	\$8,891,718	\$15,203,167
Indirect	\$3,263,985	\$4,690,346	\$8,019,610

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Induced	<u>\$1,483,661</u>	<u>\$2,132,021</u>	<u>\$3,645,355</u>
Total	\$10,935,341	\$15,714,085	\$26,868,132
<b>Employment</b>			
Direct	68.19	97.99	167.54
Indirect	38.36	55.13	94.26
Induced	<u>14.23</u>	<u>20.45</u>	<u>34.97</u>
Total	120.78	173.57	296.77

Table 9 Allotments Impacted Under Scenario B

Allotment ID	Allotment Name	# of Permittees	Permitted BLM AUMs	Grazing - Start Date	Grazing - End Date	# of Days	New Grazing Start Date	New Grazing End Date	# of New Days	% Days Lost	BLM AUMs Lost	Adjusted # of New Days (1)	Adj % Days Lost	Adj AUMs Lost	Total AUMs Lost in the Planning Area	County
2061	Eubank South LaBarge Individual	1	80	10/16	11/14	28			0	100.00%	80	0	100.00%	80	128	Lincoln
2075	LaBarge Creek Ranch Individual	1	42	9/16	10/15	29			0	100.00%	42	0	100.00%	42	42	Lincoln
12125	Bondurant Individual	1	10	10/15	11/14	29			0	100.00%	10	0	100.00%	10	10	Lincoln
12204	Yose Individual	1	150	8/26	9/30	34			0	100.00%	150	0	100.00%	150	150	Lincoln
12223	North LaBarge Bridger Teton FS		1200	8/1	10/5	64			0	100.00%	1200	0	100.00%	1200	1,200	Lincoln
2077	North LaBarge Common	7	14500	5/16	10/15	149	6/20	7/31	41	72.48%	10510	41	72.48%	10510	14,060	Lincoln
2080	Fox LaBarge Individual	1	17	5/1	10/15	164	6/20	7/31	41	75.00%	13	41	75.00%	13	32	Lincoln
12201	Upper North LaBarge Individual	1	1985	5/15	9/30	135	6/20	7/31	41	69.63%	1382	41	69.63%	1382	1,468	Lincoln
12202	Viola Individual	1	81	5/15	9/14	119	6/20	7/31	41	65.55%	53	41	65.55%	53	148	Lincoln
22005	South LaBarge Common	7	10107	5/1	10/31	180	6/20	7/31	41	77.22%	7805	41	77.22%	7805	9,362	Lincoln
22010	Fontenelle Meadow Individual	1	56	5/1	11/30	209	6/20	7/31	41	80.38%	45	41	80.38%	45	45	Lincoln
2042	Cottonwood Meadows	1	236	8/15	2/28	193			0	100.00%	236	0	100.00%	236	1,036	Sublette
2047	Circle 9 Individual	1	63	5/1	6/10	39			0	100.00%	63	0	100.00%	63	89	Sublette
2048	Gilligan Individual	1	107	9/15	10/27	42			0	100.00%	107	0	100.00%	107	257	Sublette
2053	Clark-Bloom Common	1	239	5/16	6/20	34			0	100.00%	239	0	100.00%	239	264	Sublette
2057	Dack Individual	1	90	8/1	8/31	30			0	100.00%	90	0	100.00%	90	90	Sublette
2060	Ryegrass Isolated	1	18	5/25	6/8	13			0	100.00%	18	0	100.00%	18	143	Sublette
2066	School Section Individual	1	158	10/1	10/15	14			0	100.00%	158	0	100.00%	158	210	Sublette
2074	South Piney Ranch Individual	1	92	9/1	10/15	44			0	100.00%	92	0	100.00%	92	92	Sublette
2078	Johnson Place Meadows	1	45	9/16	10/15	29			0	100.00%	45	0	100.00%	45	45	Sublette
2079	South Piney Place Meadows	1	39	9/16	10/15	29			0	100.00%	39	0	100.00%	39	39	Sublette
2082	East Fork River Trail	1	3	5/1	5/31	30			0	100.00%	3	0	100.00%	3	3	Sublette
2131	South Ridge Soapohle Common	2	97	5/5	6/15	40			0	100.00%	97	0	100.00%	97	154	Sublette
2137	Lower Red Canyon Individual	2	101	9/13	9/30	17			0	100.00%	101	0	100.00%	101	183	Sublette
2139	Piney Individual	1	80	9/1	9/30	29			0	100.00%	80	0	100.00%	80	80	Sublette
2144	Lower Horse Creek Individual	1	255	5/22	6/8	16			0	100.00%	255	0	100.00%	255	255	Sublette
2145	Upper Horse Creek Individual	1	109	5/1	5/31	30			0	100.00%	109	0	100.00%	109	179	Sublette
2146	Home Individual	1	138	5/1	5/30	29			0	100.00%	138	0	100.00%	138	146	Sublette
2147	Daniel "Y" Individual	1	107	5/16	6/15	29			0	100.00%	107	0	100.00%	107	154	Sublette
2148	Miller Daniel Ridge	1	50	5/10	6/8	28			0	100.00%	50	0	100.00%	50	50	Sublette
2149	Miller Piney Individual	1	42	6/1	6/10	9			0	100.00%	42	0	100.00%	42	42	Sublette
2154	Silver Creek Individual	1	65	8/1	9/15	44			0	100.00%	65	0	100.00%	65	445	Sublette
2155	Piney Bridge Individual	1	131	5/5	6/4	29			0	100.00%	131	0	100.00%	131	200	Sublette
2160	Noble Cora Peak Common	2	300	5/20	6/19	29			0	100.00%	300	0	100.00%	300	390	Sublette
2163	O'Neil Individual	1	80	5/16	6/15	29			0	100.00%	80	0	100.00%	80	90	Sublette
2164	West Cora Peak Individual	1	273	5/16	6/9	23			0	100.00%	273	0	100.00%	273	524	Sublette
2174	Q5 Soapohle	1	566	5/16	6/20	34			0	100.00%	566	0	100.00%	566	785	Sublette
2179	Spence Place Individual	1	8	5/1	5/31	30			0	100.00%	8	0	100.00%	8	8	Sublette
2189	Horse Creek Bluff Individual	1	12	5/16	6/15	29			0	100.00%	12	0	100.00%	12	12	Sublette
2191	Butte Individual	0	7	5/1	5/15	14			0	100.00%	7	0	100.00%	7	7	Sublette
2199	Horse Creek Road Individual	1	43	10/1	12/15	74			0	100.00%	43	0	100.00%	43	43	Sublette
2200	Cora Y Common	1	120	5/25	6/14	19			0	100.00%	120	0	100.00%	120	125	Sublette
12113	New Fork Individual	1	302	5/10	6/20	40			0	100.00%	302	0	100.00%	302	361	Sublette
12117	Boulter Pasture	1	2	11/1	11/30	29			0	100.00%	2	0	100.00%	2	2	Sublette
12126	Hay Gulch	1	75	5/16	5/29	13			0	100.00%	75	0	100.00%	75	75	Sublette
12128	Section 18 Individual	1	26	10/1	11/30	59			0	100.00%	26	0	100.00%	26	200	Sublette
12132	Marincic Mesa Individual	1	350	5/10	6/15	35			0	100.00%	350	0	100.00%	350	355	Sublette
12206	Bird Individual	1	14	5/20	6/19	29			0	100.00%	14	0	100.00%	14	52	Sublette
12217	Cottonwood Gap Individual	1	90	5/1	5/30	29			0	100.00%	90	0	100.00%	90	155	Sublette
12220	Cora Road Individual	1	42	6/1	6/15	14			0	100.00%	42	0	100.00%	42	87	Sublette
22002	40 Rod Common	4	542	5/18	6/8	20			0	100.00%	542	0	100.00%	542	542	Sublette
22007	Fayette Individual	1	270	5/16	6/15	29			0	100.00%	270	0	100.00%	270	276	Sublette
1999	CB Holding Pen	1	9	7/3	7/3	1	7/3	7/3	1	0.00%	0	0	100.00%	9	9	Sublette
2156	Sand Draw Allotment	3	2324	5/1	6/21	50	6/20	6/21	1	98.00%	2278	0	100.00%	2324	2,324	Sublette
2162	5-Acre Pasture Individual	1	12	5/22	6/21	29	6/20	6/21	1	96.55%	12	0	100.00%	12	12	Sublette
12029	Blue Rim Desert	4	2826	5/1	6/21	50	6/20	6/21	1	98.00%	2769	0	100.00%	2826	2,826	Sublette
2173	Blue Rim Individual	1	3258	5/10	6/23	43	6/20	6/23	3	93.02%	3031	0	100.00%	3258	3,645	Sublette
2049	Mount Airy Common	4	757	5/16	6/25	39	6/20	6/25	5	87.18%	660	0	100.00%	757	758	Sublette
2095	Muddy Creek Individual	1	113	5/11	6/25	44	6/20	6/25	5	88.64%	100	0	100.00%	113	124	Sublette
2099	Jory Individual	1	50	7/1	7/6	5	7/1	7/6	5	0.00%	0	0	100.00%	50	61	Sublette
2101	Webb Draw Pasture	1	417	5/20	6/25	35	6/20	6/25	5	85.71%	357	0	100.00%	417	708	Sublette
2158	Canyon Ditch Individual	1	125	6/9	6/25	16	6/20	6/25	5	68.75%	86	0	100.00%	125	165	Sublette
12107	J&K Daniel Ridge	1	47	5/26	6/25	29	6/20	6/25	5	82.76%	39	0	100.00%	47	61	Sublette
2142	Beaver Creek Meadow Individual	1	20	6/15	6/28	13	6/20	6/28	8	38.46%	8	8	38.46%	8	8	Sublette
2032	Dan Budd Deer Hill Individual	1	293	5/16	6/30	44	6/20	6/30	10	77.27%	226	10	77.27%	226	236	Sublette
2034	Adjacent to Ranch Individual	1	26	5/16	6/30	44	6/20	6/30	10	77.27%	20	10	77.27%	20	111	Sublette
2035	Deer Hills Individual	1	698	5/16	6/30	44	6/20	6/30	10	77.27%	539	10	77.27%	539	547	Sublette
2036	Dead Indian Dome Individual	1	411	5/20	6/30	40	6/20	6/30	10	75.00%	308	10	75.00%	308	346	Sublette
2062	Bench Corral Individual	1	3170	5/11	6/30	49	6/20	6/30	10	79.59%	2523	10	79.59%	2523	2,614	Sublette
2071	Horse Creek Pasture #2	1	350	5/1	6/30	59	6/20	6/30	10	83.05%	291	0	100.00%	350	300	Sublette
2081	Fox-Yose Common	2	661	5/16	6/30	44	6/20	6/30	10	77.27%	511	0	100.00%	661	773	Sublette
2096	Hittle Individual	1	95	5/1	6/30	59	6/20	6/30	10	83.05%	79	10	83.05%	79	79	Sublette
2098	McKinsey Individual	1	50	7/21	8/20	29	7/21	7/31	10	65.52%	33	10	65.52%	33	45	Sublette
2118	Jewett Rye Grass Individual	1	440	5/22	6/30	38	6/20	6/30	10	73.68%	324	10	73.68%	324	324	Sublette

Allotment ID	Allotment Name	# of Permittees	Permitted BLM AUMs	Grazing - Start Date	Grazing - End Date	# of Days	New Grazing Start Date	New Grazing End Date	# of New Days	% Days Lost	BLM AUMs Lost	Adjusted # of New Days (1)	Adj % Days Lost	Adj AUMs Lost	Total AUMs Lost in the Planning Area	County
2143	Grindstone Soaphole	1	586	5/10	6/30	50	6/20	6/30	10	80.00%	469	0	100.00%	586	854	Sublette
2152	Beaver-Horse Creek Individual	1	584	6/1	6/30	29	6/20	6/30	10	65.52%	383	10	65.52%	383	524	Sublette
2168	Chalk Butte Common	3	244	5/10	6/30	50	6/20	6/30	10	80.00%	195	0	100.00%	244	268	Sublette
2171	Brodie Draw Individual	1	385	5/15	6/30	45	6/20	6/30	10	77.78%	299	10	77.78%	299	633	Sublette
2193	Merna Horse Creek Individual	1	65	6/1	6/30	29	6/20	6/30	10	65.52%	43	10	65.52%	43	124	Sublette
12008	Stud Horse Common	3	2106	5/1	6/30	59	6/20	6/30	10	83.05%	1749	0	100.00%	2106	1,942	Sublette
12009	Fremont Butte Common	6	2410	5/6	6/30	54	6/20	6/30	10	81.48%	1964	0	100.00%	2410	2,568	Sublette
12011	East Cora Road Individual	1	14	6/1	6/30	29	6/20	6/30	10	65.52%	9	10	65.52%	9	9	Sublette
12017	Lower Pasture Individual	1	284	6/1	6/30	29	6/20	6/30	10	65.52%	186	10	65.52%	186	189	Sublette
12026	Desert Land Entry (DLE) Individual	1	75	5/15	6/30	45	6/20	6/30	10	77.78%	58	10	77.78%	58	58	Sublette
12028	Upper Bench Corral Common	3	2009	5/10	6/30	50	6/20	6/30	10	80.00%	1607	0	100.00%	2009	2,063	Sublette
12123	Northwest Square Top Individual	1	800	5/1	6/30	59	6/20	6/30	10	83.05%	664	10	83.05%	664	830	Sublette
12127	McNinch Deer Hills Individual	1	252	5/21	6/30	39	6/20	6/30	10	74.36%	187	10	74.36%	187	187	Sublette
12222	Price-Beecher Creek	1	50	6/1	6/30	29	6/20	6/30	10	65.52%	33	0	100.00%	50	195	Sublette
22006	Aspen Ridge Individual	1	1692	5/8	6/30	52	6/20	6/30	10	80.77%	1367	10	80.77%	1367	758	Sublette
22019	Heifer Pasture Individual	1	86	6/1	6/30	29	6/20	6/30	10	65.52%	56	10	65.52%	56	56	Sublette
22020	Boulder Lake Common	4	835	6/1	6/30	29	6/20	6/30	10	65.52%	547	0	100.00%	835	861	Sublette
32224	Lander Cutoff	1	233	5/11	6/30	49	6/20	6/30	10	79.59%	185	0	100.00%	233	216	Sublette
2150	Deer Hills Common	2	717	5/20	7/1	41	6/20	7/1	11	73.17%	525	11	73.17%	525	596	Sublette
12108	Horse Creek Isolated Tract	1	35	7/20	11/1	101	7/20	7/31	11	89.11%	31	11	89.11%	31	31	Sublette
2072	Spade Individual	1	688	6/1	7/2	31	6/20	7/2	12	61.29%	422	12	61.29%	422	983	Sublette
2041	Chapel Individual	1	257	5/15	7/4	49	6/20	7/4	14	71.43%	184	14	71.43%	184	259	Sublette
2064	Camp Creek Individual	1	715	7/17	9/30	73	7/17	7/31	14	80.82%	578	14	80.82%	578	632	Sublette
2136	East of DLE Individual	1	271	5/15	7/4	49	6/20	7/4	14	71.43%	194	14	71.43%	194	198	Sublette
2051	Square Top Common	7	4470	5/6	7/5	59	6/20	7/5	15	74.58%	3334	15	74.58%	3334	3,528	Sublette
2180	Irish Canyon Tracts Individual	1	30	5/6	7/5	59	6/20	7/5	15	74.58%	22	15	74.58%	22	22	Sublette
2181	Fremont Butte Individual	1	417	5/5	7/5	60	6/20	7/5	15	75.00%	313	15	75.00%	313	358	Sublette
2197	Springman Creek Individual	1	150	7/16	9/14	58	7/16	7/31	15	74.14%	111	15	74.14%	111	115	Sublette
12022	East Fork Common	2	792	5/1	7/5	64	6/20	7/5	15	76.56%	606	15	76.56%	606	952	Sublette
12027	Mickelson Bray Common	2	238	6/11	7/5	24	6/20	7/5	15	37.50%	89	15	37.50%	89	108	Sublette
12205	Round Valley Ryegrass Individual	1	1616	5/15	7/5	50	6/20	7/5	15	70.00%	1131	15	70.00%	1131	1,153	Sublette
2076	Fish Creek Individual (FW)	1	168	6/20	7/7	17	6/20	7/7	17	0.00%	0	17	0.00%	0	0	Sublette
2088	Horse Creek-Ryegrass	1	449	6/15	7/7	22	6/20	7/7	17	22.73%	102	17	22.73%	102	102	Sublette
2068	Muleshoe	1	677	5/10	7/9	59	6/20	7/9	19	67.80%	459	19	67.80%	459	354	Sublette
2084	Lower Bench Corral Common	2	2635	5/10	7/10	60	6/20	7/10	20	66.67%	1757	20	66.67%	1757	1,849	Sublette
2196	Johnson Ridge Individual	1	165	5/26	7/10	44	6/20	7/10	20	54.55%	90	20	54.55%	90	90	Sublette
2038	Buyer Horse Creek Individual	1	351	5/27	7/11	44	6/20	7/11	21	52.27%	183	21	52.27%	183	219	Sublette
2097	Cottonwood Common	1	345	6/16	7/11	25	6/20	7/11	21	16.00%	55	21	16.00%	55	59	Sublette
2000	Daniel Ridge Individual	1	10	5/15	7/14	59	6/20	7/14	24	59.32%	6	24	59.32%	6	6	Sublette
2055	Lauzer Marsh Creek Individual	1	166	6/16	7/15	29	6/20	7/15	25	13.79%	23	25	13.79%	23	41	Sublette
2140	Gilchrist DLE Individual	2	42	5/15	7/15	60	6/20	7/15	25	58.33%	25	25	58.33%	25	25	Sublette
2172	Price Horse Creek Individual	1	40	5/16	7/15	59	6/20	7/15	25	57.63%	23	25	57.63%	23	43	Sublette
2195	South Piney Individual	1	141	6/1	7/15	44	6/20	7/15	25	43.18%	61	25	43.18%	61	35	Sublette
12119	Soaphole Common	3	1014	5/16	7/15	59	6/20	7/15	25	57.63%	584	25	57.63%	584	1,066	Sublette
2141	Beaver Creek Individual	1	129	7/1	7/28	27	7/1	7/28	27	0.00%	0	27	0.00%	0	0	Sublette
2054	Cora Peak Individual	1	150	7/1	7/30	29	7/1	7/30	29	0.00%	0	29	0.00%	0	0	Sublette
2056	Three Island Individual	1	120	7/1	7/30	29	7/1	7/30	29	0.00%	0	29	0.00%	0	0	Sublette
12021	Boulder Creek Tracts	1	28	7/1	7/30	29	7/1	7/30	29	0.00%	0	29	0.00%	0	0	Sublette
12124	Luman Individual	1	600	5/20	7/19	59	6/20	7/19	29	50.85%	305	29	50.85%	305	305	Sublette
2033	Fish Creek Individual (DB)	1	150	7/1	8/15	44	7/1	7/31	30	31.82%	48	30	31.82%	48	48	Sublette
2039	Maki Creek Individual	1	135	7/1	8/15	44	7/1	7/31	30	31.82%	43	30	31.82%	43	43	Sublette
2063	Upper Muddy Individual	1	1874	7/1	10/15	104	7/1	7/31	30	71.15%	1333	30	71.15%	1333	1,511	Sublette
2065	Beecher Individual	1	306	7/1	9/30	89	7/1	7/31	30	66.29%	203	30	66.29%	203	509	Sublette
2067	Johnson Huhtah Individual	1	136	7/1	10/14	103	7/1	7/31	30	70.87%	96	30	70.87%	96	315	Sublette
2091	LaBarge Individual	1	337	7/1	9/30	89	7/1	7/31	30	66.29%	223	30	66.29%	223	279	Sublette
2133	Ball Horse Creek Individual	1	87	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
2134	Cranor Building Pasture	1	11	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
2135	Ball Individual	1	107	7/1	9/30	89	7/1	7/31	30	66.29%	71	30	66.29%	71	443	Sublette
2165	Rosene Individual	1	42	7/1	9/30	89	7/1	7/31	30	66.29%	28	30	66.29%	28	107	Sublette
2182	South Horse Creek Individual	1	10	7/1	8/30	59	7/1	7/31	30	49.15%	5	30	49.15%	5	5	Sublette
2183	Soda Lake Common	2	156	7/1	9/15	74	7/1	7/31	30	59.46%	93	30	59.46%	93	93	Sublette
2190	Steele Individual	1	182	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
2192	Big Sandy Individual	1	30	7/1	11/30	149	7/1	7/31	30	79.87%	24	30	79.87%	24	24	Sublette
2209	Winkelman	1	98	7/1	8/31	60	7/1	7/31	30	50.00%	49	30	50.00%	49	123	Sublette
12025	Red Canyon Common	2	1075	7/1	9/30	89	7/1	7/31	30	66.29%	713	30	66.29%	713	895	Sublette
12103	Reservoir Pasture	1	220	7/1	8/16	45	7/1	7/31	30	33.33%	73	30	33.33%	73	27	Sublette
12116	Southwest Pasture Individual	1	59	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
12120	Piney Unit Fenced	1	19	7/1	9/22	81	7/1	7/31	30	62.96%	12	30	62.96%	12	12	Sublette
12130	Star Corral Individual	1	62	7/1	8/15	44	7/1	7/31	30	31.82%	20	30	31.82%	20	36	Sublette
12221	Cora Stock Driveway	1	854	7/1	10/5	94	7/1	7/31	30	68.09%	581	30	68.09%	581	597	Sublette
2059	Ryegrass Individual	1	242	5/25	7/24	59	6/20	7/24	34	42.37%	103	34	42.37%	103	105	Sublette
2085	Upper Billie's Individual	1	2214	6/26	9/30	94	6/26	7/31	35	62.77%	1390	35	62.77%	1390	1,400	Sublette
2087	Upper Post Individual	1	123	6/26	9/30	94	6/26	7/31	35	62.77%	77	35	62.77%	77	77	Sublette
2185	Chain Lakes Individual	1	265	6/26	7/31	35	6/26	7/31	35	0.00%	0	35	0.00%	0	0	Sublette
12104	Long Pasture	1	352	6/25	10/15	110	6/25	7/31	36	67.27%	237	36	67.27%	237	515	Sublette

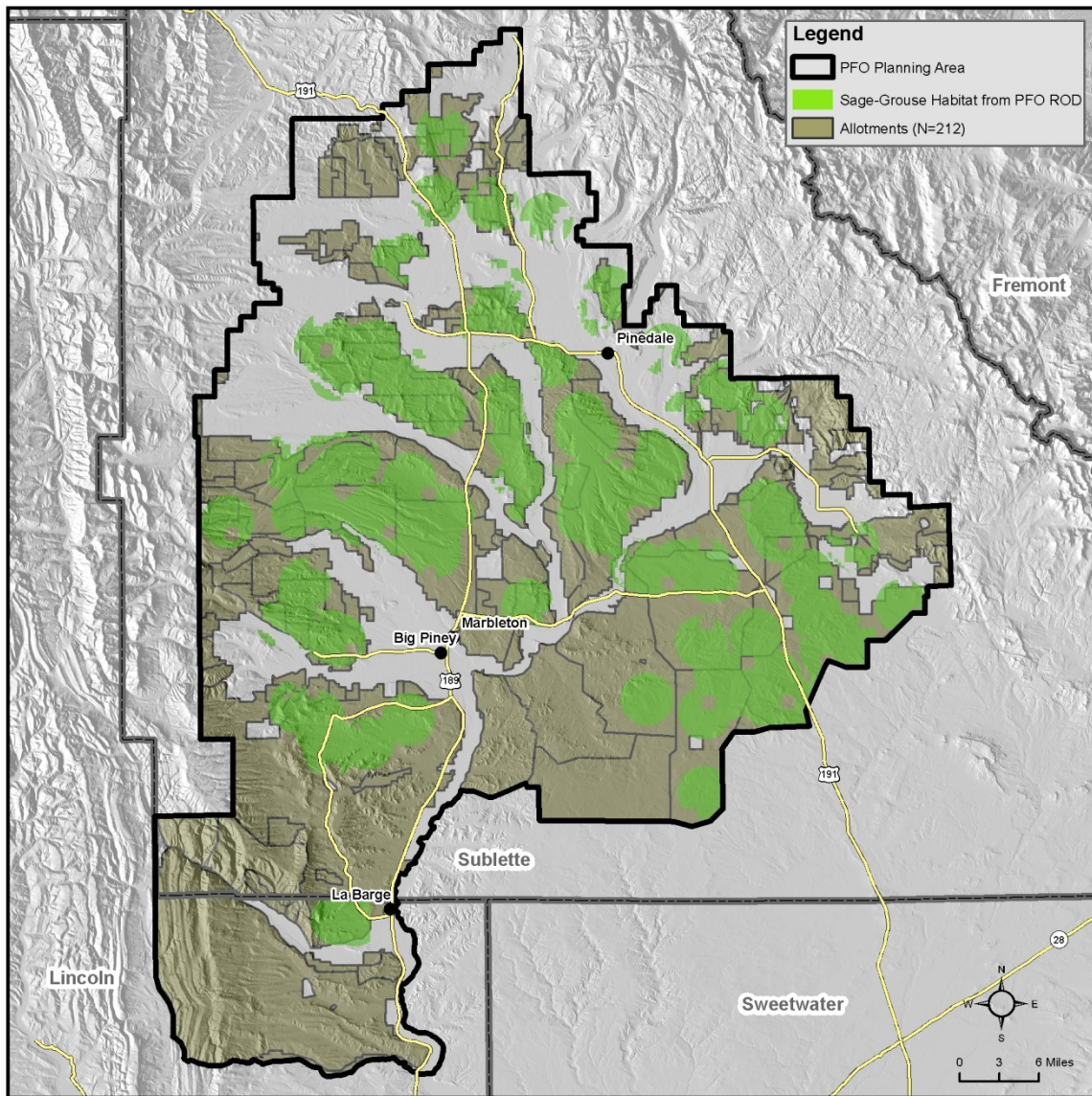
Allotment ID	Allotment Name	# of Permittees	Permitted BLM AUMs	Grazing - Start Date	Grazing - End Date	# of Days	New Grazing Start Date	New Grazing End Date	# of New Days	% Days Lost	BLM AUMs Lost	Adjusted # of New Days (1)	Adj % Days Lost	Adj AUMs Lost	Total AUMs Lost in the Planning Area	County
2030	Horse Creek Individual	1	80	6/10	7/30	50	6/20	7/30	40	20.00%	16	40	20.00%	16	59	Sublette
22013	Willow Lake Tracts	1	26	6/1	7/30	59	6/20	7/30	40	32.20%	8	40	32.20%	8	8	Sublette
735	Signal Individual	1	178	6/1	10/31	150	6/20	7/31	41	72.67%	129	41	72.67%	129	0	Sublette
736	Kismet Individual	1	76	6/1	10/31	150	6/20	7/31	41	72.67%	55	41	72.67%	55	0	Sublette
2024	Bousman Common	2	755	5/15	9/15	120	6/20	7/31	41	65.83%	497	41	65.83%	497	497	Sublette
2031	Mesa Common	21	4701	5/5	11/5	180	6/20	7/31	41	77.22%	3630	41	77.22%	3630	3,863	Sublette
2037	West Individual	1	525	6/16	9/15	89	6/20	7/31	41	53.93%	283	41	53.93%	283	600	Sublette
2040	South Desert Allotment	6	2631	5/1	8/23	112	6/20	7/31	41	63.39%	1668	41	63.39%	1668	1,964	Sublette
2043	Pole Creek Individual	1	66	6/1	9/30	119	6/20	7/31	41	65.55%	43	41	65.55%	43	229	Sublette
2044	Fremont Lake Individual	1	29	6/1	9/30	119	6/20	7/31	41	65.55%	19	41	65.55%	19	62	Sublette
2045	Watson Draw	1	416	6/1	10/31	150	6/20	7/31	41	72.67%	302	41	72.67%	302	0	Sublette
2046	Fall Creek Pasture	1	10	6/1	10/31	150	6/20	7/31	41	72.67%	7	41	72.67%	7	7	Sublette
2050	Burch Individual	1	37	5/1	8/21	110	6/20	7/31	41	62.73%	23	41	62.73%	23	23	Sublette
2052	Cowley Tract	1	10	5/6	8/27	111	6/20	7/31	41	63.06%	6	41	63.06%	6	6	Sublette
2069	Warren Bridge Individual	1	48	6/1	9/15	104	6/20	7/31	41	60.58%	29	41	60.58%	29	182	Sublette
2070	Horse Creek Pasture #1	1	74	6/1	9/15	104	6/20	7/31	41	60.58%	45	41	60.58%	45	179	Sublette
2073	Reardon Canyon Common	2	1121	5/10	9/9	119	6/20	7/31	41	65.55%	735	41	65.55%	735	883	Sublette
2086	Guio Sections Individual	1	417	6/15	8/10	55	6/20	7/31	41	25.45%	106	41	25.45%	106	425	Sublette
2089	Hansen Tract	1	14	5/1	11/30	209	6/20	7/31	41	80.38%	11	41	80.38%	11	37	Sublette
2090	Rief Individual	1	66	6/1	7/31	60	6/20	7/31	41	31.67%	21	41	31.67%	21	21	Sublette
2094	Hicks Pinedale Individual	1	10	6/1	10/30	149	6/20	7/31	41	72.48%	7	41	72.48%	7	288	Sublette
2100	Dry Piney Individual	1	30	5/15	10/14	149	6/20	7/31	41	72.48%	22	41	72.48%	22	22	Sublette
2105	Todd Pasture	1	11	6/1	11/15	164	6/20	7/31	41	75.00%	8	41	75.00%	8	8	Sublette
2138	Rathburn Individual	1	208	6/1	10/15	134	6/20	7/31	41	69.40%	144	41	69.40%	144	328	Sublette
2151	Hoback Rim Individual	1	25	6/1	10/31	150	6/20	7/31	41	72.67%	18	41	72.67%	18	2,630	Sublette
2153	Scab Creek Individual	1	607	6/1	9/30	119	6/20	7/31	41	65.55%	398	41	65.55%	398	583	Sublette
2157	Hot Spring Pasture Individual	1	32	5/30	10/15	135	6/20	7/31	41	69.63%	22	41	69.63%	22	22	Sublette
2159	Noble Tracts Individual	1	36	5/16	9/15	119	6/20	7/31	41	65.55%	24	41	65.55%	24	89	Sublette
2161	Norris North Piney Individual	1	144	5/15	9/14	119	6/20	7/31	41	65.55%	94	41	65.55%	94	419	Sublette
2166	Pine Creek Individual	1	20	6/1	10/30	149	6/20	7/31	41	72.48%	14	41	72.48%	14	48	Sublette
2167	Green River Unit Individual	1	40	6/1	7/31	60	6/20	7/31	41	31.67%	13	41	31.67%	13	20	Sublette
2169	North Hoback Rim Individual	1	113	6/15	9/15	90	6/20	7/31	41	54.44%	62	41	54.44%	62	62	Sublette
2175	North Beaver Tracts Individual	1	190	6/1	10/16	135	6/20	7/31	41	69.63%	132	41	69.63%	132	132	Sublette
2176	Q5 Antelope Flat Individual	1	122	6/1	10/15	134	6/20	7/31	41	69.40%	85	41	69.40%	85	85	Sublette
2177	Hay Draw Individual	1	77	6/1	10/15	134	6/20	7/31	41	69.40%	53	41	69.40%	53	53	Sublette
2178	Miller Home Place Individual	1	24	5/1	8/31	120	6/20	7/31	41	65.83%	16	41	65.83%	16	16	Sublette
2184	Sandy Fenced Individual	1	30	6/1	9/30	119	6/20	7/31	41	65.55%	20	41	65.55%	20	1,931	Sublette
2186	Muddy Corral Individual	1	195	5/15	10/31	166	6/20	7/31	41	75.30%	147	41	75.30%	147	217	Sublette
2187	189 Muddy Meadow Individual	1	36	5/1	10/30	179	6/20	7/31	41	77.09%	28	41	77.09%	28	28	Sublette
2188	Fall Creek	1	70	6/1	8/31	90	6/20	7/31	41	54.44%	38	41	54.44%	38	90	Sublette
2194	LaBarge Unit Individual	1	140	5/16	9/15	119	6/20	7/31	41	65.55%	92	41	65.55%	92	180	Sublette
2198	Beaver Tract Individual	1	48	5/16	9/15	119	6/20	7/31	41	65.55%	31	41	65.55%	31	31	Sublette
12102	James Ryegrass	1	728	6/1	7/31	60	6/20	7/31	41	31.67%	231	41	31.67%	231	262	Sublette
12106	Webb Home Pasture	1	5	6/1	10/31	150	6/20	7/31	41	72.67%	4	41	72.67%	4	4	Sublette
12109	Individual Fenced	1	11	5/1	10/15	164	6/20	7/31	41	75.00%	8	41	75.00%	8	8	Sublette
12110	Sandy Upper Muddy Individual	1	39	5/1	10/15	164	6/20	7/31	41	75.00%	29	41	75.00%	29	35	Sublette
12111	Sandy Individual	1	14	5/1	8/15	104	6/20	7/31	41	60.58%	8	41	60.58%	8	8	Sublette
12112	Muddy Meadows	1	20	5/1	9/30	149	6/20	7/31	41	72.48%	14	41	72.48%	14	14	Sublette
12114	Scattered Tracts	1	41	5/6	9/7	121	6/20	7/31	41	66.12%	27	41	66.12%	27	27	Sublette
12115	North Pasture Individual	1	31	5/1	8/28	117	6/20	7/31	41	64.96%	20	41	64.96%	20	27	Sublette
12121	West Fremont Ridge Common	2	293	5/15	9/24	129	6/20	7/31	41	68.22%	200	41	68.22%	200	200	Sublette
12122	Boulder Stock Driveway	1	55	5/16	10/30	164	6/20	7/31	41	75.00%	41	41	75.00%	41	72	Sublette
12129	West of Ranch Individual	1	130	5/16	8/31	105	6/20	7/31	41	60.95%	79	41	60.95%	79	158	Sublette
12203	Ditch Individual	1	19	6/15	9/1	76	6/20	7/31	41	46.05%	9	41	46.05%	9	9	Sublette
12225	New Fork Tract Isolated	1	8	5/16	9/15	119	6/20	7/31	41	65.55%	5	41	65.55%	5	5	Sublette
20001	Alkali Draw	2	1556	5/1	10/31	180	6/20	7/31	41	77.22%	1202	41	77.22%	1202	1,202	Sublette
22003	Homestead Individual	1	45	5/1	9/30	149	6/20	7/31	41	72.48%	33	41	72.48%	33	129	Sublette
22004	Glasgow Individual	1	24	5/1	8/30	119	6/20	7/31	41	65.55%	16	41	65.55%	16	123	Sublette
22012	East Cora Road Meadow	1	64	6/1	7/31	60	6/20	7/31	41	31.67%	20	41	31.67%	20	20	Sublette
22014	Fish Hatchery Individual	1	56	5/1	11/30	209	6/20	7/31	41	80.38%	45	41	80.38%	45	45	Sublette
22015	Antelope Flat Common	2	533	6/15	8/31	76	6/20	7/31	41	46.05%	245	41	46.05%	245	222	Sublette
22018	Isolated Tracts Individual	1	83	5/1	10/30	179	6/20	7/31	41	77.09%	64	41	77.09%	64	64	Sublette
22030	North Rathburn	1	28	6/1	10/17	136	6/20	7/31	41	69.85%	20	41	69.85%	20	29	Sublette
	<b>Totals</b>	<b>296</b>	<b>106,520</b>								<b>78,931</b>			<b>81,471</b>	<b>102,585</b>	

(1) Adjusted based on ranchers decision that there are not enough days to graze, therefore new days is adjusted to 0.  
 Not found on Allots\_Joined but almost totals those on allots\_joined that are not found on this sheet. Difference of 64.  
 These allotments are grouped together in Allots\_Joined

### Scenario C – Habitat from ROD

#### Description and Map of Scenario C

The PFO in the Record of Decision (ROD) for the RMP FEIS presented a map showing Greater Sage-grouse nesting and brood rearing habitats (Map 2-36). These shapes were provided by the PFO and were comprised two mile buffers on leks. We analyzed these buffered leks as Scenario C. Map below presents the overlap between the nesting and brood rearing habitat from the ROD and the 212 allotments in the PFO.



Map 3 Scenario C



**Economic Impacts**

**Table 10: Potential yearly loss in output and employment from 63,148 BLM AUMs lost**

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM(1)
<b><u>Output</u></b>			
Direct	\$2,667,372	\$3,809,087	\$6,553,732
Indirect	\$1,407,028	\$2,021,899	\$3,457,067
Induced	<u>\$639,572</u>	<u>\$919,064</u>	<u>\$1,571,428</u>
Total	\$4,713,971	\$6,750,051	\$11,582,227
<b><u>Employment</u></b>			
Direct	29.39	42.24	72.22
Indirect	16.54	23.76	40.63
Induced	<u>6.13</u>	<u>8.82</u>	<u>15.07</u>
Total	52.07	74.82	127.93

**Table 11: Potential yearly loss in output and employment from 75,882 AUMs lost in the Planning Region**

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM(1)
<b><u>Output</u></b>			
Direct	\$3,205,256	\$4,577,202	\$7,875,313
Indirect	\$1,690,760	\$2,429,621	\$4,154,196
Induced	<u>\$768,543</u>	<u>\$1,104,397</u>	<u>\$1,888,311</u>
Total	\$5,664,559	\$8,111,221	\$13,917,821
<b><u>Employment</u></b>			
Direct	35.32	50.76	86.79
Indirect	19.87	28.56	48.83
Induced	<u>7.37</u>	<u>10.59</u>	<u>18.11</u>
Total	62.57	89.91	153.73

**Table 12: Potential yearly loss in the output and employment from 119,786 AUMs lost in the Region**

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM(1)
<b><u>Output</u></b>			
Direct	\$5,059,761	\$7,225,492	\$12,431,832
Indirect	\$2,669,003	\$3,835,358	\$6,557,742
Induced	<u>\$1,213,209</u>	<u>\$1,743,382</u>	<u>\$2,980,855</u>
Total	\$8,941,973	\$12,804,231	\$21,970,428
<b><u>Employment</u></b>			
Direct	55.76	80.13	137.00
Indirect	31.37	45.08	77.08
Induced	<u>11.64</u>	<u>16.72</u>	<u>28.59</u>
Total	98.77	141.93	242.67

Table 13 Allotments Impacted Under Scenario C

Allotment ID	Allotment Name	# of Permittees	# of Permittees Impacted	Permitted BLM AUMs	Permitted BLM AUMs Impacted	State	Total Permitted AUMs	Total Permitted AUMs Impacted	Grazing - Start Date	Grazing - End Date	# of Days	New Grazing Start Date	New Grazing End Date	# of New Days	% Days Lost	AUMs Lost	Adjusted # of New Days (1)	Adj % Days Lost	Adj AUMs Lost	Total AUMs lost in the Planning Area	County
2061	Eubank South LaBarge Individual	1	0	80	0	21	128	0	10/16	11/14	28									0	Lincoln
2075	LaBarge Creek Ranch Individual	1	0	42	0		42	0	9/16	10/15	29									0	Lincoln
12125	Bondurant Individual	1	0	10	0		10	0	10/15	11/14	29									0	Lincoln
12204	Yose Individual	1	1	150	150		150	150	8/26	9/30	34				0	100.00%	150	0	100.00%	150	Lincoln
12223	North LaBarge Bridger Teton Forest Service	1	1	1200	1200		1200	1200	8/1	10/5	64				0	100.00%	1200	0	100.00%	1200	Lincoln
2077	North LaBarge Common	7	7	14500	14500	1621	19398	19398	5/16	10/15	149	6/20	7/31	41	72.48%	10510	41	72.48%	10510	14,060	Lincoln
2080	Fox LaBarge Individual	1	0	17	0		42	0	5/1	10/15	164									0	Lincoln
12201	Upper North LaBarge Individual	1	0	1985	0	96	2109	0	5/15	9/30	135									0	Lincoln
12202	Viola Individual	1	0	81	0		226	0	5/15	9/14	119									0	Lincoln
22005	South LaBarge Common	7	0	10107	0	1205	12124	0	5/1	10/31	180									0	Lincoln
22010	Fontenelle Meadow Individual	1	0	56	0		56	0	5/1	11/30	209									0	Lincoln
2042	Cottonwood Meadows	1	0	236	0		1036	0	8/15	2/28	193									0	Sublette
2047	Circle 9 Individual	1	0	63	0	13	89	0	5/1	6/10	39									0	Sublette
2048	Gilligan Individual	1	0	107	0		257	0	9/15	10/27	42									0	Sublette
2053	Clark-Bloom Common	1	1	239	239		264	264	5/16	6/20	34				0	100.00%	239	0	100.00%	239	Sublette
2057	Dack Individual	1	0	90	0		90	0	8/1	8/31	30									0	Sublette
2060	Ryegrass Isolated	1	0	18	0	83	143	0	5/25	6/8	13									0	Sublette
2066	School Section Individual	1	1	158	158	40	210	210	10/1	10/15	14				0	100.00%	158	0	100.00%	158	Sublette
2074	South Piney Ranch Individual	1	1	92	92		92	92	9/1	10/15	44				0	100.00%	92	0	100.00%	92	Sublette
2078	Johnson Place Meadows	1	0	45	0		45	0	9/16	10/15	29									0	Sublette
2079	South Piney Place Meadows	1	0	39	0		39	0	9/16	10/15	29									0	Sublette
2082	East Fork River Trail	1	0	3	0		3	0	5/1	5/31	30									0	Sublette
2131	South Ridge Soaphole Common	2	2	97	97	0	154	154	5/5	6/15	40				0	100.00%	97	0	100.00%	97	Sublette
2137	Lower Red Canyon Individual	2	2	101	101		183	183	9/13	9/30	17				0	100.00%	101	0	100.00%	101	Sublette
2139	Piney Individual	1	0	80	0		80	0	9/1	9/30	29									0	Sublette
2144	Lower Horse Creek Individual	1	1	255	255		255	255	5/22	6/8	16				0	100.00%	255	0	100.00%	255	Sublette
2145	Upper Horse Creek Individual	1	1	109	109		179	179	5/1	5/31	30				0	100.00%	109	0	100.00%	109	Sublette
2146	Home Individual	1	1	138	138		146	146	5/1	5/30	29				0	100.00%	138	0	100.00%	138	Sublette
2147	Daniel "Y" Individual	1	1	107	107		154	154	5/16	6/15	29				0	100.00%	107	0	100.00%	107	Sublette
2148	Miller Daniel Ridge	1	0	50	0		50	0	5/10	6/8	28									0	Sublette
2149	Miller Piney Individual	1	0	42	0		42	0	6/1	6/10	9									0	Sublette
2154	Silver Creek Individual	1	0	65	0		445	0	8/1	9/15	44									0	Sublette
2155	Piney Bridge Individual	1	1	131	131	55	200	200	5/5	6/4	29				0	100.00%	131	0	100.00%	131	Sublette
2160	Noble Cora Peak Common	2	2	300	300		390	390	5/20	6/19	29				0	100.00%	300	0	100.00%	300	Sublette
2163	O'Neil Individual	1	1	80	80		90	90	5/16	6/15	29				0	100.00%	80	0	100.00%	80	Sublette
2164	West Cora Peak Individual	1	1	273	273		524	524	5/16	6/9	23				0	100.00%	273	0	100.00%	273	Sublette
2174	Q5 Soaphole	1	1	566	566		785	785	5/16	6/20	34				0	100.00%	566	0	100.00%	566	Sublette
2179	Spence Place Individual	1	1	8	8		8	8	5/1	5/31	30				0	100.00%	8	0	100.00%	8	Sublette
2189	Horse Creek Bluff Individual	1	1	12	12		12	12	5/16	6/15	29				0	100.00%	12	0	100.00%	12	Sublette
2191	Butte Individual	0	0	7	0		7	0	5/1	5/15	14									0	Sublette
2199	Horse Creek Road Individual	1	0	43	0		43	0	10/1	12/15	74									0	Sublette
2200	Cora Y Common	1	1	120	120		125	125	5/25	6/14	19				0	100.00%	120	0	100.00%	120	Sublette
12113	New Fork Individual	1	1	302	302		361	361	5/10	6/20	40				0	100.00%	302	0	100.00%	302	Sublette
12117	Boulter Pasture	1	0	2	0		2	0	11/1	11/30	29									0	Sublette
12126	Hay Gulch	1	1	75	75		75	75	5/16	5/29	13				0	100.00%	75	0	100.00%	75	Sublette
12128	Section 18 Individual	1	0	26	0		200	0	10/1	11/30	59									0	Sublette
12132	Marincin Mesa Individual	1	1	350	350		355	355	5/10	6/15	35				0	100.00%	350	0	100.00%	350	Sublette
12206	Bird Individual	1	0	14	0	27	52	0	5/20	6/19	29									0	Sublette
12217	Cottonwood Gap Individual	1	0	90	0		155	0	5/1	5/30	29									0	Sublette
12220	Cora Road Individual	1	1	42	42		87	87	6/1	6/15	14				0	100.00%	42	0	100.00%	42	Sublette
22002	40 Rod Common	4	4	542	542		542	542	5/18	6/8	20				0	100.00%	542	0	100.00%	542	Sublette
22007	Fayette Individual	1	1	270	270		276	276	5/16	6/15	29				0	100.00%	270	0	100.00%	270	Sublette
1999	CB Holding Pen	1	1	9	9		9	9	7/3	7/3	1	7/3	7/3	1	0.00%	0	0	100.00%	9	9	Sublette
2156	Sand Draw Allotment	3	3	2324	2324		2324	2324	5/1	6/21	50	6/20	6/21	1	98.00%	2278	0	100.00%	2324	2,324	Sublette
2162	5-Acre Pasture Individual	1	0	12	0		12	0	5/22	6/21	29									0	Sublette
12029	Blue Rim Desert	4	4	2826	2826		2826	2826	5/1	6/21	50	6/20	6/21	1	98.00%	2769	0	100.00%	2826	2,826	Sublette
2173	Blue Rim Individual	1	1	3258	3258	199	3645	3645	5/10	6/23	43	6/20	6/23	3	93.02%	3031	0	100.00%	3258	3,645	Sublette
2049	Mount Airy Common	4	4	757	757		758	758	5/16	6/25	39	6/20	6/25	5	87.18%	660	0	100.00%	757	758	Sublette
2095	Muddy Creek Individual	1	1	113	113		124	124	5/11	6/25	44	6/20	6/25	5	88.64%	100	0	100.00%	113	124	Sublette
2099	Jory Individual	1	0	50	0		61	0	7/1	7/6	5									0	Sublette
2101	Webb Draw Pasture	1	1	417	417		708	708	5/20	6/25	35	6/20	6/25	5	85.71%	357	0	100.00%	417	708	Sublette
2158	Canyon Ditch Individual	1	1	125	125	40	165	165	6/9	6/25	16	6/20	6/25	5	68.75%	86	0	100.00%	125	165	Sublette
12107	J&K Daniel Ridge	1	1	47	47		61	61	5/26	6/25	29	6/20	6/25	5	82.76%	39	0	100.00%	47	61	Sublette
2142	Beaver Creek Meadow Individual	1	1	20	20		20	20	6/15	6/28	13	6/20	6/28	8	38.46%	8	8	38.46%	8	8	Sublette
2032	Dan Budd Deer Hill Individual	1	1	293	293		305	305	5/16	6/30	44	6/20	6/30	10	77.27%	226	10	77.27%	226	236	Sublette
2034	Adjacent to Ranch Individual	1	1	26	26		144	144	5/16	6/30	44	6/20	6/30	10	77.27%	20	10	77.27%	20	111	Sublette
2035	Deer Hills Individual	1	1	698	698	10	708	708	5/16	6/30	44	6/20	6/30	10	77.27%	539	10	77.27%	539	547	Sublette
2036	Dead Indian Dome Individual	1	1	411	411		461	461	5/20	6/30	40	6/20	6/30	10	75.00%	308	10	75.00%	308	346	Sublette
2062	Bench Corral Individual	1	1	3170	3170	73	3284	3284	5/11	6/30	49	6/20	6/30	10	79.59%	2523	10	79.59%	2523	2,614	Sublette
2071	Horse Creek Pasture #2	1	1	350	350	5	300	300	5/1	6/30	59	6/20	6/30	10	83.05%	291	0	100.00%	350	300	Sublette
2081	Fox-Yose Common	2	0	661	0	62	773	0	5/16	6/30	44									0	Sublette
2096	Hittle Individual	1	0	95	0		95	0	5/1	6/30	59									0	Sublette
2098	McKinsey Individual	1	0	50	0		68	0	7/21	8/20	29									0	Sublette
2118	Jewett Rye Grass Individual	1	1	440	440		440	440	5/22	6/30	38	6/20	6/30	10	73.68%	324	10	73.68%	324	324	Sublette
2143	Grindstone Soaphole	1	1	586	586	73	854	854	5/10	6/30	50	6/20	6/30	10	80.00%	469	0	100.00%	586	854	Sublette
2152	Beaver-Horse Creek Individual	1	1	584	584		800	800	6/1	6/30	29	6/20	6/30	10	65.52%	383	10	65.52%	383	524	Sublette
2168	Chalk Butte Common	3	3	244	244	15	268	268	5/10	6/30	50	6/20	6/30	10	80.						

Allotment ID	Allotment Name	# of Permittees	# of Permittees Impacted	Permitted BLM AUMs	Permitted BLM AUMs Impacted	State	Total Permitted AUMs	Total Permitted AUMs Impacted	Grazing - Start Date	Grazing - End Date	# of Days	New Grazing Start Date	New Grazing End Date	# of New Days	% Days Lost	AUMs Lost	Adjusted # of New Days (1)	Adj % Days Lost	Adj AUMs Lost	Total AUMs lost in the Planning Area	County
2171	Brodie Draw Individual	1	1	385	385		814	814	5/15	6/30	45	6/20	6/30	10	77.78%	299	10	77.78%	299	633	Sublette
2193	Merma Horse Creek Individual	1	0	65	0		189	0	6/1	6/30	29									0	Sublette
12008	Stud Horse Common	3	3	2106	2106	213	1942	1942	5/1	6/30	59	6/20	6/30	10	83.05%	1749	0	100.00%	2106	1,942	Sublette
12009	Fremont Butte Common	6	6	2410	2410	92	2568	2568	5/6	6/30	54	6/20	6/30	10	81.48%	1964	0	100.00%	2410	2,568	Sublette
12011	East Cora Road Individual	1	0	14	0		14	0	6/1	6/30	29									0	Sublette
12017	Lower Pasture Individual	1	1	284	284		288	288	6/1	6/30	29	6/20	6/30	10	65.52%	186	10	65.52%	186	189	Sublette
12026	Desert Land Entry (DLE) Individual	1	0	75	0		75	0	5/15	6/30	45									0	Sublette
12028	Upper Bench Corral Common	3	3	2009	2009	44	2063	2063	5/10	6/30	50	6/20	6/30	10	80.00%	1607	0	100.00%	2009	2,063	Sublette
12123	Northwest Square Top Individual	1	1	800	800	14	999	999	5/1	6/30	59	6/20	6/30	10	83.05%	664	10	83.05%	664	830	Sublette
12127	McNinch Deer Hills Individual	1	1	252	252		252	252	5/21	6/30	39	6/20	6/30	10	74.36%	187	10	74.36%	187	187	Sublette
12222	Price-Beecher Creek	1	0	50	0		195	0	6/1	6/30	29									0	Sublette
22006	Aspen Ridge Individual	1	1	1692	1692		939	939	5/8	6/30	52	6/20	6/30	10	80.77%	1367	10	80.77%	1367	758	Sublette
22019	Heifer Pasture Individual	1	0	86	0		86	0	6/1	6/30	29									0	Sublette
22020	Boulder Lake Common	4	4	835	835		861	861	6/1	6/30	29	6/20	6/30	10	65.52%	547	0	100.00%	835	861	Sublette
32224	Lander Cutoff	1	0	233	0	27	216	0	5/11	6/30	49									0	Sublette
2150	Deer Hills Common	2	2	717	717	68	814	814	5/20	7/1	41	6/20	7/1	11	73.17%	525	11	73.17%	525	596	Sublette
12108	Horse Creek Isolated Tract	1	0	35	0		35	0	7/20	11/1	101									0	Sublette
2072	Spade Individual	1	1	688	688		1604	1604	6/1	7/2	31	6/20	7/2	12	61.29%	422	12	61.29%	422	983	Sublette
2041	Chapel Individual	1	1	257	257	55	362	362	5/15	7/4	49	6/20	7/4	14	71.43%	184	14	71.43%	184	259	Sublette
2064	Camp Creek Individual	1	0	715	0		782	0	7/17	9/30	73									0	Sublette
2136	East of DLE Individual	1	1	271	271		277	277	5/15	7/4	49	6/20	7/4	14	71.43%	194	14	71.43%	194	198	Sublette
2051	Square Top Common	7	7	4470	4470	237	4731	4731	5/6	7/5	59	6/20	7/5	15	74.58%	3334	15	74.58%	3334	3,528	Sublette
2180	Irish Canyon Tracts Individual	1	0	30	0		30	0	5/6	7/5	59									0	Sublette
2181	Fremont Butte Individual	1	1	417	417	60	477	477	5/5	7/5	60	6/20	7/5	15	75.00%	313	15	75.00%	313	358	Sublette
2197	Springman Creek Individual	1	0	150	0		155	0	7/16	9/14	58									0	Sublette
12022	East Fork Common	2	2	792	792	413	1244	1244	5/1	7/5	64	6/20	7/5	15	76.56%	606	15	76.56%	606	952	Sublette
12027	Mickelson Bray Common	2	2	238	238	39	287	287	6/11	7/5	24	6/20	7/5	15	37.50%	89	15	37.50%	89	108	Sublette
12205	Round Valley Ryegrass Individual	1	1	1616	1616	31	1647	1647	5/15	7/5	50	6/20	7/5	15	70.00%	1131	15	70.00%	1131	1,153	Sublette
2076	Fish Creek Individual (FW)	1	0	168	0		1687	0	6/20	7/7	17									0	Sublette
2088	Horse Creek-Ryegrass	1	1	449	449		449	449	6/15	7/7	22	6/20	7/7	17	22.73%	102	17	22.73%	102	102	Sublette
2068	Muleshoe	1	1	677	677	26	522	522	5/10	7/9	59	6/20	7/9	19	67.80%	459	19	67.80%	459	354	Sublette
2084	Lower Bench Corral Common	2	2	2635	2635	120	2774	2774	5/10	7/10	60	6/20	7/10	20	66.67%	1757	20	66.67%	1757	1,849	Sublette
2196	Johnson Ridge Individual	1	1	165	165		165	165	5/26	7/10	44	6/20	7/10	20	54.55%	90	20	54.55%	90	90	Sublette
2038	Buyer Horse Creek Individual	1	1	351	351		418	418	5/27	7/11	44	6/20	7/11	21	52.27%	183	21	52.27%	183	219	Sublette
2097	Cottonwood Common	1	0	345	0	2	371	0	6/16	7/11	25									0	Sublette
2000	Daniel Ridge Individual	1	1	10	10		10	10	5/15	7/14	59	6/20	7/14	24	59.32%	6	24	59.32%	6	6	Sublette
2055	Lauzer Marsh Creek Individual	1	0	166	0		296	0	6/16	7/15	29									0	Sublette
2140	Gilchrist DLE Individual	2	2	42	42		42	42	5/15	7/15	60	6/20	7/15	25	58.33%	25	25	58.33%	25	25	Sublette
2172	Price Horse Creek Individual	1	1	40	40		75	75	5/16	7/15	59	6/20	7/15	25	57.63%	23	25	57.63%	23	43	Sublette
2195	South Piney Individual	1	1	141	141		82	82	6/1	7/15	44	6/20	7/15	25	43.18%	61	25	43.18%	61	35	Sublette
12119	Soaphole Common	3	3	1014	1014		1849	1849	5/16	7/15	59	6/20	7/15	25	57.63%	584	25	57.63%	584	1,066	Sublette
2141	Beaver Creek Individual	1	1	129	129		129	129	7/1	7/28	27	7/1	7/28	27	0.00%	0	27	0.00%	0	0	Sublette
2054	Cora Peak Individual	1	1	150	150		175	175	7/1	7/30	29	7/1	7/30	29	0.00%	0	29	0.00%	0	0	Sublette
2056	Three Island Individual	1	1	120	120		121	121	7/1	7/30	29	7/1	7/30	29	0.00%	0	29	0.00%	0	0	Sublette
12021	Boulder Creek Tracts	1	1	28	28		28	28	7/1	7/30	29	7/1	7/30	29	0.00%	0	29	0.00%	0	0	Sublette
12124	Luman Individual	1	1	600	600		600	600	5/20	7/19	59	6/20	7/19	29	50.85%	305	29	50.85%	305	305	Sublette
2033	Fish Creek Individual (DB)	1	0	150	0		150	0	7/1	8/15	44									0	Sublette
2039	Maki Creek Individual	1	0	135	0		135	0	7/1	8/15	44									0	Sublette
2063	Upper Muddy Individual	1	1	1874	1874	200	2124	2124	7/1	10/15	104	7/1	7/31	30	71.15%	1333	30	71.15%	1333	1,511	Sublette
2065	Beecher Individual	1	1	306	306		768	768	7/1	9/30	89	7/1	7/31	30	66.29%	203	30	66.29%	203	509	Sublette
2067	Johnson Huhtah Individual	1	1	136	136	94	444	444	7/1	10/14	103	7/1	7/31	30	70.87%	96	30	70.87%	96	315	Sublette
2091	LaBarge Individual	1	0	337	0		421	0	7/1	9/30	89									0	Sublette
2133	Ball Horse Creek Individual	1	1	87	87		87	87	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
2134	Cranor Building Pasture	1	1	11	11		11	11	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
2135	Ball Individual	1	1	107	107		668	668	7/1	9/30	89	7/1	7/31	30	66.29%	71	30	66.29%	71	443	Sublette
2165	Rosene Individual	1	1	42	42		162	162	7/1	9/30	89	7/1	7/31	30	66.29%	28	30	66.29%	28	107	Sublette
2182	South Horse Creek Individual	1	0	10	0		10	0	7/1	8/30	59									0	Sublette
2183	Soda Lake Common	2	2	156	156		156	156	7/1	9/15	74	7/1	7/31	30	59.46%	93	30	59.46%	93	93	Sublette
2190	Steele Individual	1	1	182	182		184	184	7/1	7/31	30	7/1	7/31	30	0.00%	0	30	0.00%	0	0	Sublette
2192	Big Sandy Individual	1	0	30	0		30	0	7/1	11/30	149									0	Sublette
2209	Winkelman	1	1	98	98		246	246	7/1	8/31	60	7/1	7/31	30	50.00%	49	30	50.00%	49	123	Sublette
12025	Red Canyon Common	2	2	1075	1075	120	1350	1350	7/1	9/30	89	7/1	7/31	30	66.29%	713	30	66.29%	713	895	Sublette
12103	Reservoir Pasture	1	0	220	0		81	0	7/1	8/16	45									0	Sublette
12116	Southwest Pasture Individual	1	0	59	0		89	0	7/1	7/31	30									0	Sublette
12120	Piney Unit Fenced	1	1	19	19		19	19	7/1	9/22	81	7/1	7/31	30	62.96%	12	30	62.96%	12	12	Sublette
12130	Star Corral Individual	1	1	62	62		113	113	7/1	8/15	44	7/1	7/31	30	31.82%	20	30	31.82%	20	36	Sublette
12221	Cora Stock Driveway	1	1	854	854		877	877	7/1	10/5	94	7/1	7/31	30	68.09%	581	30	68.09%	581	597	Sublette
2059	Ryegrass Individual	1	1	242	242		247	247	5/25	7/24	59	6/20	7/24	34	42.37%	103	34	42.37%	103	105	Sublette
2085	Upper Billie's Individual	1	1	2214	2214		2231	2231	6/26	9/30	94	6/26	7/31	35	62.77%	1390	35	62.77%	1390	1,400	Sublette
2087	Upper Post Individual	1	0	123	0		123	0	6/26	9/30	94									0	Sublette
2185	Chain Lakes Individual	1	1	265	265		266	266	6/26	7/31	35	6/26	7/31	35	0.00%	0	35	0.00%	0	0	Sublette
12104	Long Pasture	1	0	352	0		766	0	6/25	10/15	110									0	Sublette
2030	Horse Creek Individual	1	0	80	0		296	0	6/10	7/30	50									0	Sublette
22013	Willow Lake Tracts	1	0	26	0		26														

Allotment ID	Allotment Name	# of Permittees	# of Permittees Impacted	Permitted BLM AUMs	Permitted BLM AUMs Impacted	State	Total Permitted AUMs	Total Permitted AUMs Impacted	Grazing - Start Date	Grazing - End Date	# of Days	New Grazing Start Date	New Grazing End Date	# of New Days	% Days Lost	AUMs Lost	Adjusted # of New Days (1)	Adj % Days Lost	Adj AUMs Lost	Total AUMs lost in the Planning Area	County
2040	South Desert Allotment	6	0	2631	0	348	3098	0	5/1	8/23	112									0	Sublette
2043	Pole Creek Individual	1	1	66	66	84	350	350	6/1	9/30	119	6/20	7/31	41	65.55%	43	41	65.55%	43	229	Sublette
2044	Fremont Lake Individual	1	0	29	0		94	0	6/1	9/30	119									0	Sublette
2045	Watson Draw	1	0	416	0			0	6/1	10/31	150									0	Sublette
2046	Fall Creek Pasture	1	1	10	10		10	10	6/1	10/31	150	6/20	7/31	41	72.67%	7	41	72.67%	7	7	Sublette
2050	Burch Individual	1	1	37	37		37	37	5/1	8/21	110	6/20	7/31	41	62.73%	23	41	62.73%	23	23	Sublette
2052	Cowley Tract	1	1	10	10		10	10	5/6	8/27	111	6/20	7/31	41	63.06%	6	41	63.06%	6	6	Sublette
2069	Warren Bridge Individual	1	1	48	48		301	301	6/1	9/15	104	6/20	7/31	41	60.58%	29	41	60.58%	29	182	Sublette
2070	Horse Creek Pasture #1	1	0	74	0		296	0	6/1	9/15	104									0	Sublette
2073	Reardon Canyon Common	2	0	1121	0	120	1347	0	5/10	9/9	119									0	Sublette
2086	Guio Sections Individual	1	1	417	417	51	1668	1668	6/15	8/10	55	6/20	7/31	41	25.45%	106	41	25.45%	106	425	Sublette
2089	Hansen Tract	1	0	14	0		46	0	5/1	11/30	209									0	Sublette
2090	Rief Individual	1	1	66	66		66	66	6/1	7/31	60	6/20	7/31	41	31.67%	21	41	31.67%	21	21	Sublette
2094	Hicks Pinedale Individual	1	0	10	0		397	0	6/1	10/30	149									0	Sublette
2100	Dry Piney Individual	1	0	30	0		30	0	5/15	10/14	149									0	Sublette
2105	Todd Pasture	1	1	11	11		11	11	6/1	11/15	164	6/20	7/31	41	75.00%	8	41	75.00%	8	8	Sublette
2138	Rathburn Individual	1	0	208	0		472	0	6/1	10/15	134									0	Sublette
2151	Hoback Rim Individual	1	0	25	0		3619	0	6/1	10/31	150									0	Sublette
2153	Scab Creek Individual	1	1	607	607	24	889	889	6/1	9/30	119	6/20	7/31	41	65.55%	398	41	65.55%	398	583	Sublette
2157	Hot Spring Pasture Individual	1	0	32	0		32	0	5/30	10/15	135									0	Sublette
2159	Noble Tracts Individual	1	0	36	0	100	136	0	5/16	9/15	119									0	Sublette
2161	Norris North Piney Individual	1	0	144	0		639	0	5/15	9/14	119									0	Sublette
2166	Pine Creek Individual	1	1	20	20		66	66	6/1	10/30	149	6/20	7/31	41	72.48%	14	41	72.48%	14	48	Sublette
2167	Green River Unit Individual	1	0	40	0		63	0	6/1	7/31	60									0	Sublette
2169	North Hoback Rim Individual	1	0	113	0		113	0	6/15	9/15	90									0	Sublette
2175	North Beaver Tracts Individual	1	1	190	190		190	190	6/1	10/16	135	6/20	7/31	41	69.63%	132	41	69.63%	132	132	Sublette
2176	Q5 Antelope Flat Individual	1	1	122	122		122	122	6/1	10/15	134	6/20	7/31	41	69.40%	85	41	69.40%	85	85	Sublette
2177	Hay Draw Individual	1	1	77	77		77	77	6/1	10/15	134	6/20	7/31	41	69.40%	53	41	69.40%	53	53	Sublette
2178	Miller Home Place Individual	1	0	24	0		24	0	5/1	8/31	120									0	Sublette
2184	Sandy Fenced Individual	1	1	30	30		2946	2946	6/1	9/30	119	6/20	7/31	41	65.55%	20	41	65.55%	20	1,931	Sublette
2186	Muddy Corral Individual	1	1	195	195	29	288	288	5/15	10/31	166	6/20	7/31	41	75.30%	147	41	75.30%	147	217	Sublette
2187	189 Muddy Meadow Individual	1	0	36	0		36	0	5/1	10/30	179									0	Sublette
2188	Fall Creek	1	1	70	70		166	166	6/1	8/31	90	6/20	7/31	41	54.44%	38	41	54.44%	38	90	Sublette
2194	LaBarge Unit Individual	1	1	140	140	124	274	274	5/16	9/15	119	6/20	7/31	41	65.55%	92	41	65.55%	92	180	Sublette
2198	Beaver Tract Individual	1	1	48	48		48	48	5/16	9/15	119	6/20	7/31	41	65.55%	31	41	65.55%	31	31	Sublette
12102	James Ryegrass	1	1	728	728	100	828	828	6/1	7/31	60	6/20	7/31	41	31.67%	231	41	31.67%	231	262	Sublette
12106	Webb Home Pasture	1	1	5	5		5	5	6/1	10/31	150	6/20	7/31	41	72.67%	4	41	72.67%	4	4	Sublette
12109	Individual Fenced	1	1	11	11		11	11	5/1	10/15	164	6/20	7/31	41	75.00%	8	41	75.00%	8	8	Sublette
12110	Sandy Upper Muddy Individual	1	0	39	0		47	0	5/1	10/15	164									0	Sublette
12111	Sandy Individual	1	1	14	14		14	14	5/1	8/15	104	6/20	7/31	41	60.58%	8	41	60.58%	8	8	Sublette
12112	Muddy Meadows	1	1	20	20		20	20	5/1	9/30	149	6/20	7/31	41	72.48%	14	41	72.48%	14	14	Sublette
12114	Scattered Tracts	1	1	41	41		41	41	5/6	9/7	121	6/20	7/31	41	66.12%	27	41	66.12%	27	27	Sublette
12115	North Pasture Individual	1	1	31	31		41	41	5/1	8/28	117	6/20	7/31	41	64.96%	20	41	64.96%	20	27	Sublette
12121	West Fremont Ridge Common	2	2	293	293		293	293	5/15	9/24	129	6/20	7/31	41	68.22%	200	41	68.22%	200	200	Sublette
12122	Boulder Stock Driveway	1	1	55	55		96	96	5/16	10/30	164	6/20	7/31	41	75.00%	41	41	75.00%	41	72	Sublette
12129	West of Ranch Individual	1	1	130	130		260	260	5/16	8/31	105	6/20	7/31	41	60.95%	79	41	60.95%	79	158	Sublette
12203	Ditch Individual	1	1	19	19		19	19	6/15	9/1	76	6/20	7/31	41	46.05%	9	41	46.05%	9	9	Sublette
12225	New Fork Tract Isolated	1	0	8	0		8	0	5/16	9/15	119									0	Sublette
20001	Alkali Draw	2	0	1556	0		1556	0	5/1	10/31	180									0	Sublette
22003	Homestead Individual	1	1	45	45		178	178	5/1	9/30	149	6/20	7/31	41	72.48%	33	41	72.48%	33	129	Sublette
22004	Glasgow Individual	1	0	24	0		187	0	5/1	8/30	119									0	Sublette
22012	East Cora Road Meadow	1	1	64	64		64	64	6/1	7/31	60	6/20	7/31	41	31.67%	20	41	31.67%	20	20	Sublette
22014	Fish Hatchery Individual	1	1	56	56		56	56	5/1	11/30	209	6/20	7/31	41	80.38%	45	41	80.38%	45	45	Sublette
22015	Antelope Flat Common	2	2	533	533		481	481	6/15	8/31	76	6/20	7/31	41	46.05%	245	41	46.05%	245	222	Sublette
22018	Isolated Tracts Individual	1	0	83	0		83	0	5/1	10/30	179									0	Sublette
22030	North Rathburn	1	1	28	28		42	42	6/1	10/17	136	6/20	7/31	41	69.85%	20	41	69.85%	20	29	Sublette
	<b>Totals</b>	<b>297</b>	<b>204</b>	<b>106,520</b>	<b>81,128</b>	<b>6,686</b>	<b>137,923</b>	<b>99,706</b>								<b>60,874</b>			<b>63,148</b>	<b>75,882</b>	

(1) Adjusted based on ranchers decision that there are not enough days to graze, therefore new days is adjusted to 0  
Not found on Allots\_Joined but almost totals those on allots\_joined that are not found on this sheet. Difference of 64  
Not impacted in this scenario

Connelly, J. W., S. T. Knick, M. A. Schroeder, and S. J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, Wyoming.

## **APPENDIX B**

### **Methodology and Assumptions**

Economic and geographic information systems (GIS) methods were combined to measure the potential economic losses in the Pinedale Field Office's (PFO) Planning Area from reductions in grazing should the interim management requirements posed by the Western Watersheds Project (WWP) in *Western Watersheds Project vs. Salazar, No.08cv516* be implemented. GIS layers of Greater Sage-grouse habitat and grazing allotments were combined in order to determine which allotments, and the number of animal unit months (AUMs) associated with them, would be impacted by the proposed management requirements. The number of AUMs lost due to time restrictions outlined in the management requirements was calculated and the potential loss in output and employment were estimated. Specific assumptions and methods of each step are outlined below.

GIS Layers

GIS data were collected from the PFO, United States Department of the Interior and the United States Department of Agriculture, Forest Service's LANDFIRE Program, the United States Geologic Survey's SAGEMAP Program, and Wyoming Geographic Information Science Center.

Key to the analysis was starting with an accurate allotment layer; then utilizing GIS to overlay the various Greater Sage-grouse habitats to quantify the effects of the interim management requirements posed by WWP. The 'allotments' shapefile provided by the PFO had a sum of 237,720 AUMs when the 'TOTAL\_AUMS' field is summed. This was drastically different from the total AUMs presented in Appendix 21 from the PFO Resource Management Plan and Final Environmental Impact Statement (RMP/FEIS) (USDI 2008), which presented 107,775 total AUMs. The discrepancy was identified in the 'allotments' shapefile which had several allotments with multiple pasture polygons attributed with the same allotment ID and AUMs. To remove this 'double counting' the 'allotments' shapefile was dissolved on the following fields: ALLOT\_NAME, CLASS, TOTAL\_AUMS, NO\_PERMIT, SEL\_MGMT\_C, STAND\_ASMT, PUBLIC\_AUM, STATE\_AUM, and PRVT\_AUM. This dissolve created a new shapefile with 212 allotments, totaling 1,100,179 total acres and 138,287 total AUMs. Appendix 21 in the FEIS presents 214 allotments, totaling 1,138,282 acres (BLM, State, and Private), and 141,475 AUMs (BLM, State, and Private). These methods were reviewed with PFO's Resource Data Manager who reaffirmed our methods by saying, "I don't know how the analysts got to the numbers they produced for the FEIS, but it sounds like you are on the right track (Gregory pers. comm.)."

The PFO's RMP/FEIS, Record of Decision (ROD), and GIS data presented conflicting figures for number of allotments, allotment acres, and AUMs. Table 1 below presents some of the discrepancies encountered.

**Table 1 Discrepancies Encountered with Allotment Information**

Source	Number of Allotments	BLM AUMs	Total AUMs	Total Acres
RMP/FEIS pg. 3-29	219	107,536		
RMP/FEIS pg. 3-30	213			1,053,646



Source	Number of Allotments	BLM AUMs	Total AUMs	Total Acres
RMP/FEIS pg. 3-33	214			931,630
RMP/FEIS Appendix 20	213	106,663		
RMP/FEIS Appendix 21	214	107,775	141,475	1,138,282
ROD pg. 2-17	213			
ROD pg. 2-18		107,907		
PFO GIS Data	218			1,100,004
Edited GIS Data	212	107,109	137,987	1,099,637

Once the edited PFO allotment shapefile closely approximated the figures presented in the RMP/FEIS and ROD the layer was frozen and used it to analyze the following six Greater Sage-grouse habitat scenarios:

Scenario A uses the Wyoming Governor's Greater Sage-grouse Core Areas Version 3. GIS was utilized to overlay the grazing allotments with the Greater Sage-grouse Core Areas.

Scenario B uses the current distribution of Greater Sage-grouse. In 2004 the Western Association of Fish and Wildlife Agencies published the Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats, the lead author was John Connelly. This comprehensive report on Greater Sage-grouse presented a map of the current and historic distribution.

The PFO in the ROD for the RMP/FEIS presented a map showing Greater Sage-grouse nesting and brood rearing habitats (Map 2-36). These shapes were provided by the PFO and were comprised two mile buffers on leks. These buffered leks were analyzed as Scenario C.

Method of Determining Number of AUMs Lost

Appendix 20 RMP/EIS contains information on 212 active BLM allotments, including allotment ID, allotment name, AUMs, and grazing dates. Using this table as a base, the GIS information was used to determine which allotments were impacted and the total number of AUMs associated with the allotments. The proposed interim requirements contain a time frame for grazing and this was used to calculate the number of AUMs lost. The tables in appendix A detail all 212 allotments and the information available through Appendix 20 and GIS data sets obtained from the BLM.

**Assumptions**

Two sections of the proposed interim management requirements were assumed to affect the ranchers' ability to utilize AUMs. The first proposed management measurement is to "exclude livestock grazing in Sage-grouse nesting and brood-rearing habitats from March 1 to June 20, and remove livestock by August 1 of each year, with a mandatory goal of leaving at least 70 percent of the herbaceous production each year to form residual cover to benefit Sage-grouse nesting the following spring." Using this as a

guideline, it was assumed that AUMs utilized would be reduced by the same percentage as the number of days of grazing. It may be possible for ranchers to utilize more AUMs during a shorter period of time by placing more cattle on the allotment; however, given that this would require the home ranch to support a larger herd during the rest of the season, it was assumed herd size would not be increased.

While the acres of Sage-grouse habitat may not cover an entire allotment, it was assumed that the date restrictions would pertain to the entire allotment. One of the other interim management measures specifies that no new fences would be allowed. Without the ability to fence off the Sage-grouse habitat from the rest of the allotment, the rancher must forego the use of the entire allotment during the date restrictions. In addition, the BLM allotments have State and private lands interspersed throughout. The use of these must also be foregone without the ability to erect new fences.

Based on personal communication with Sublette County permittees, it was assumed that if the new grazing period was less than five days the rancher would forego use of the allotment and if the new grazing period was between five and ten days and it was a common allotment the ranchers would also forego use of the allotment. According to local ranchers, if it was an individual allotment and the new time period was over five days they would send cattle to the allotment. However, if it was less than 10 days and a common allotment, the exercise of separating their cattle would drive the decision to forego use.

The second measure calls for prohibiting grazing twice in the same season (including trailing). According to local permittees, those with Forest Service allotments typically use a trailing permit to bring cattle back across the BLM Planning Area at the end of the season. Prohibiting this would force ranchers to forego use of Forest Service allotments without means to bring the cattle back to the home ranch. Therefore it was assumed that all of the Forest Service AUMs on allotments that were used by BLM permittees would be lost.

### **Calculations of AUMs Lost**

Using Appendix 20 of the RMP, GIS results, and the assumptions outlined above, the potential loss in AUMs for each allotment was calculated for both BLM allotments and total allotments in the Planning Area. The first step was to calculate the total number of days in the grazing period for each allotment. Then the number of new days was calculated based on the date restrictions. Once the new days were calculated, all allotments with five or fewer days was set to zero new days. All allotments with ten days or less on common allotments was also set to zero. The adjusted number of new days was compared to the original number of days to calculate a percentage of days lost. The percentage of days lost was applied to both BLM AUMs in the allotment and total AUMs permitted in the allotment (included State AUMs and private AUMs). This amount was totaled and added to the Forest Service allotments that were no longer usable. These categories of lost AUMs, BLM AUMs, AUMs in the Planning Area, and AUMs in the Region, were used to calculate impacts to local economics. The table in appendix A contain columns for each of these categories.

### Measurement of Impacts to Cattle Ranching and Local Communities

Impacts to output and employment in the region were estimated using a modified IMPLAN© model provided by David T. Taylor. IMPLAN© is a regional input/output economic model utilized by the BLM to measure indirect and induced changes to local economies. Indirect impacts are changes in industries that sell inputs to the industries that are directly impacted. Induced impacts are changes in household spending that result from increases or decreases in household income.

Impacts to ranching, particularly for ranches that utilize public lands for grazing, are difficult to model for several reasons. The first is that many ranches are supplemented by outside income. The second is that prices in the cattle market and hay market fluctuate a great deal from year to year. A ranch may realize a large profit one year and then not profit again for several years. Also, many times the rancher and his family are also the workers, which obscures employment impacts. For a complete review of the difficulties of modeling ranching decisions see Appendix C – Literature Review.

The analysis utilized AUM valuation methods developed by David T. Taylor et al. for Fremont County, Wyoming in 2004. Three valuations were developed based on dependency of the ranch on public land grazing. An average value for a BLM AUM, where 1 AUM is the equivalent of 1 AUM in livestock output, is used when the ranch is not dependent on BLM AUM. This would be the case when there are perfect substitutes for the BLM AUM. If the ranch is seasonally dependent on the public AUMs, meaning that it is not possible to simply replace the public AUM with other AUMs, then the value per public AUM is higher. In this case, 1BLM AUM is the equivalent of 1.45 AUMs in livestock output. If the ranch is so dependent of the public AUMs that production will cease without them then the value per public AUM is higher still. Then 1 BLM AUM is equivalent to 2.46 AUMs in livestock production. (Taylor 2004)

According to Taylor et al. (2004) which of these values are appropriate to use is based on several factors, including:

1. Individual ranch's level of dependency on Federal grazing;
2. Magnitude of proposed change in grazing;
3. Financial solvency of the ranch;
4. Availability of alternative sources of forage; and
5. Desire of the rancher to remain in ranching.

The direct output values are calculated using a representative ranch budget and running Monte-Carlo simulations. The direct output values for average BLM AUM and Ranch Viability BLM AUM remain the same for any level of reduction in BLM grazing. The Ranch Production BLM AUM value changes for different levels of reduction in grazing. In Table 2, there are two values for direct output. For a 75% reduction in AUMs the direct output value is \$60.70 and for the 50% reduction the value is \$60.32. Using these numbers in 2010 IMPLAN© for Lincoln and Sublette County the indirect, induced, and total values were calculated for output and employment.

**Table 2: Values per AUM used in Impact Calculations**

	Average BLM AUM	Ranch Production BLM AUM(1)	Ranch Viability BLM AUM
<b><u>Output</u></b>			
Direct	\$42.24	\$60.70 (\$60.32)	\$103.78
Indirect	\$22.28	\$32.02	\$54.75
Induced	<u>\$10.13</u>	<u>\$14.55</u>	<u>\$24.88</u>
Total	\$74.65	\$107.27	\$183.41
<b><u>Employment</u></b>			
Direct	0.000465	0.000669	0.001144
Indirect	0.000262	0.000376	0.000643
Induced	0.000097	0.000140	0.000239
Total	0.000825	0.001185	0.002026

Source: David T. Taylor 2012

For purposes of this analysis, the impacts from the foregone use of State and private AUMs that are within the BLM allotments are calculated using these values.

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## **APPENDIX C**

### **Literature Review**

A literature review was conducted to understand the economic and social impacts of imposing the interim management requirements in the Pinedale Planning Area. This review is summarized below and is categorized by resource issue in order to provide a better understanding of the potential impacts. First, literature on the economic values and history of public land grazing permits is offered. This is followed by research examining the variables affecting ranchers' decisions to continue ranching, including representative budgets and quality of life factors, and studies that have measured the impact of decreases in public land grazing. Lastly, other studies that have examined the costs and benefits of ranch land fragmentation in smaller "ranchettes" is presented.

### **1. Economic Value and History of Public Land Grazing Permits**

Van Tassell and Richardson (1998) explained that during the settlement of the west, "when federal grazing lands were originally allocated, livestock operators who met the commensurate and prior-use requirements were given preference for receiving available grazing permits. Grazing fees were set below 'fair market value,' and permits were allocated to encourage settlement and stability of local communities. Public lands were incorporated quickly into the ranchers' forage rotations and became an integral ingredient to successful ranching in the arid west."

Torell, Rimbey, and Tanaka (2006) in *On Why Grazing Permits Have Economic Value* evaluated permit values in New Mexico and the Great Basin and found that grazing permits added to ranchland value for ranches with a high percentage of public land. The value is in the land itself and not the cattle. "It has long been recognized that western ranches are overpriced relative to their income earning potential and that the lifestyle and social fulfillment experienced by ranchers are major reasons for ranch purpose." For their two case studies they estimated changes to permit value based on public land acreages, grazing use, and grazing fees change.

In *Explication of and Rationale for the Voluntary Grazing Permit Waiver Provision in the Proposed Central Idaho Economic Development and Recreation Act* the National Public Lands Grazing Campaign (2005) state, "grazing permits do possess economic value that permittees rely upon when buying, selling, and financing their ranch. Financial institutions use grazing permits as collateral for loans. The real estate industry recognizes increased value in private 'base properties' with attached federal grazing permits. Even the Internal Revenue Service recognizes value in federal grazing permits, taxing them when a rancher transfers their permit or dies."

### **2. Measuring Impacts of Reductions in Federal Grazing Permits**

Taylor et al. (2004b) studied the economic impact of a reduction of grazing on BLM land in Fremont County, Wyoming. The study analyzed how profitability at the ranch level might be affected by a reduction in BLM grazing and then analyzed the regional level impacts on jobs and income at the county level. They found that federal livestock grazing is an important part of livestock production in terms of the number of producers affected, the acres of land involved and economic effects on the individual agriculture operations. Federal livestock grazing also has important economic implications for the local

community. The total economic impact estimates for BLM grazing in Fremont County range from 277 to 681 jobs and \$3.9 to \$9.7 million in labor income.

Van Tassel and Richardson (1998) conducted a study that examined the profitability of a ranching operation that adjusted to a reduced stocking rate resulting from a decrease in public land use. A linear programming model of production alternatives was developed to assess how a ranch would adjust to a reduction in federal Animal Unit Months (AUMs). Findings suggest that federal grazing permits were important to the success of the representative ranch used in the study. Economies of size, obtained through the additional cows the ranch was able to maintain because of the federal grazing permits, were an important aspect of this success. Equity rapidly eroded as federal permits were removed or reduced potentially causing the loss of the ranch. The potential exists, therefore, that without federal grazing permits, much of the land around national forest could change ownership. The danger is that those lands would be subdivided into ranchettes, or other residences, rather than remaining as open space or productive agriculture use.

Foulke, Coupal, and Taylor (2006) studied the role of federal grazing in the economy of Park County, Wyoming and how changes in permitted use may affect individual agricultural producers, land use patterns and the local economy. The results of their study indicated that the availability of federal grazing may be critical to the economic viability of many federal grazing dependent ranches. The ranch level analysis showed the net profits for federal grazing dependent ranches without federal grazing approaches zero. In regard to land use patterns they found that if grazing is lost, these base ranch properties that are so important as open space and wildlife habitat are in jeopardy of being developed into ranchettes or residential. Results show that replacing 35 acres of agricultural land with one average size household generates more revenues, but considerably more county expenditures.

A similar study to the Park County analysis was conducted by Torell, Garrett, and Ching (1981). The study assessed an increase in grazing fees, elimination of spring grazing, and reductions in BLM grazing allotments of 20, 40, and 60%. It was determined that grazing fee increases have an obvious impact on net ranch income but not an appreciable effect on the production of beef or the use of forage resources. On the other hand, allotment reductions and elimination of early spring grazing have significant effects. It was thus concluded that allotment reductions may have the most serious impact on the ranching sector.

Lewandrowski and Ingram (2011) and Taylor et al. (2004a) looked at impacts of restricting grazing on federal lands to protect Threatened and Endangered Species. Lewandrowski and Ingram (2004) found that a 10% reduction in grazing would have relatively minor impacts on economic activity at the regional, state, and national level. But, for many ranches at the local level the negative impacts of even a relatively modest reduction in grazing on federal lands would be significant. Taylor et al. (2004a) found that designating critical habitat would have the potential to significantly impact agricultural operations and the economy of local communities.



Resource Concepts Inc prepared a study for the State of Nevada and Nevada Association of Counties that examined the economic changes that have occurred as a result of grazing allocation changes. Based on this study it was concluded that decisions to increase or decrease livestock numbers on federal lands in Nevada have an important trickle down negative impact to the economy.

Bartlett et al. (2002) found that forage value studies in the last 40 years have resulted in low or negative estimates of public land forage value. Livestock production returns are low when compared to any standard investment criteria. Yet ranchers still graze livestock on public lands and purchase ranches with grazing permits. The authors concluded that public land forage values include not only traditional livestock production value, but also other quality-of-life values.

### **3. Fragmentation of Ranchlands**

Some of the essential information and data regarding the benefits of ranches, the trend of fragmentation, and the costs of fragmentation are listed below:

#### **Benefits (Ecological, Social, Cultural and Economic)**

- “Ranches are said to safeguard rangeland ecosystems services, protect open space, and maintain a unique and cherished American heritage while maintaining local property tax revenue and agricultural economics and cultures.” (Brunson and Huntsinger 2008)
- “Under nineteenth century land disposition policies, more productive and well-watered rangelands were claimed by private landowners, along with critical wildlife habitat. Much evidence exists that under extensive rangeland livestock production these lands have been stewarded reasonably well. Researchers have found that biodiversity levels are higher on private ranch lands than they are on public lands.” (Synder 2006)
- “Habitat for 95% of all federally threatened and endangered flora and fauna is on private lands in the United States, and 262 of these species (19%) survive only on private parcels.” (Brunson and Huntsinger 2008)
- In Wyoming, winter range for big game is 56% private land. (Coupal et al. 2004)
- “The culture of the American West, with its themes of heroic deeds in a larger-than-life landscape and a struggle against adversity both anthropogenic and natural, has relied heavily on images of livestock production.” (Brunson and Huntsinger 2008)
- “This tradition [public lands grazing] has been part of the western North American landscape since the 17<sup>th</sup> century, and may be considered an element of ranching culture.” (Brunson and Huntsinger 2008)

#### **Fragmentation Trend**

- “As many as 45% of US ranches are being sold each decade.” (Brunson and Huntsinger 2008)
- During the period from 1990 to 2001 one-fourth of the large agricultural operations in the Greater Yellowstone Ecosystem were sold. (Gosnell et al. 2006)
- Only 25% of the ranches sold from 1990 to 2001 in the Greater Yellowstone Ecosystem were sold to traditional ranchers. Amenity buyers bought 44% of the ranches that sold and investors bought 12%. (Gosnell et al 2006)

## Costs of Fragmentation

- “Anecdote and our interviews with public land managers suggest that amenity-oriented owners are more open to changes (especially reductions) in grazing permits. (Gosnell et al. 2006)
- “Loss of local knowledge should be a concern regarding both public lands and common problems like water and weeds, suggesting the need for efforts to build bridges between new and established landowners.” (Gosnell et al. 2006)
- “The current transition probably implies a long period of instability in ranchland status and uncertainty about the role ranchlands will play in maintaining the ecological integrity of the Greater Yellowstone Ecosystem.” (Gosnell et al. 2006)
- “Natural resource lands within fragmented landscapes are also harder to manage from a logistical as well as a legal standpoint. Prescribed burning and some forms of invasive species control are more difficult when small, unmanaged lands are intermixed with extensive rangelands...Public land conflicts also increase with more people using the lands more frequently.” (Snyder 2006)

An important variable in the viability of ranching in the west is the continuation of federal allotments for livestock grazing. Following is some of the data that exists highlighting the effect of reductions or uncertainty with regard to the future of federal grazing permits:

- “Seventy percent of public land permittees ...had adopted a passive, “wait-and-see” management strateg(y) rather than taking steps to improve viability of their operations.” (Brunson and Huntsinger 2008)
- “It is likely that if federal forage resources are lost, or if land values become high enough, ranchers will sell their private parcels. Further, if neighboring ranches are sold for development, and ranchers experience a loss in local infrastructure and community, they also will be more likely to sell their ranches for development.” (Snyder 2006)

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