

**RECREATION USE ANALYSIS,  
OUTFITTER GUIDE NEED DETERMINATION,  
AND ALLOCATION OF RECREATION USE  
Bighorn National Forest  
February 2006**

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**PART I – RECREATION USE ANALYSIS**

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**INTRODUCTION AND PURPOSE**

Public lands in Wyoming are the major land base for most outdoor recreation activities in the area. Population growth, increased tourism, and increased interest and diversity in outdoor recreation activities have all contributed to more and more demand for use of these public lands. In addition, demand is expected to continue increasing. Land managers are feeling the pressure to do a better job of allocating limited resources. As managers of the land and its resources, we have a responsibility to sustain our resources. With this responsibility comes the questions of “at what point does continued recreation use cause the experiences that are being pursued to be diminished?” and “at what point does recreation use cause unacceptable effects on natural resources?” This document addresses the determination of upper limits of recreation use throughout the Bighorn National Forest.

**DETERMINATION OF NEED**

The basis for permitting commercial recreation services on public lands is the determination of need for those services. Need is determined through several avenues: prospective applicants desire to provide services; market demand and trends in recreation activities; agency and forest’s mission and management goals; other agencies; other users; and current outfitter viability.

**RESOURCE CAPABILITY (Visitor Use Capacity)**

In 1986 a recreation capacity determination was completed as part of the Procedure for Recreation Capacity Determination and Outfitter-Guide Allocation in Dispersed Use Recreation Areas for the Bighorn National Forest. This analysis was driven by the 1985 Forest Plan that directed the establishment of a level of permitted use for commercial recreation services on the Forest. For this updated capacity analysis, the following will be used:

**Recreation Use Compartments**

The land basis for this analysis is 6<sup>th</sup> level watershed compartments. These were further broken down by wilderness and non-wilderness and by district boundaries. Then, some areas were combined based on use patterns and access, leaving a total of 65 compartments across the Forest (see Map 1). These compartments are generally delineated along topographic or watershed boundaries, and define typical use patterns. The compartments vary in size,

depending on the use patterns, topography, and amount of recreation use that occurs.

### **Commonly Used Areas**

Generally, people travel along established road or trail corridors, camping in areas with flat ground, and avoiding steep slopes. To approximate recreation use patterns, a computer model was developed to identify areas on the Forest where steep ground (over 30% slope) exists and areas of rock greater than 10 acres. All areas less than 30% slope and rock less than 10 acres are then classified as commonly used areas. Other areas classified as commonly used include climbing routes, which are typically over 40% slope, but have established use patterns. Miles of fishable streams and total miles of road per area were also identified.

### **Areas Excluded**

The area within the Medicine Wheel Historic Landmark was eliminated from useable acres per the Historic Preservation Plan dated September 1996.

### **ROS Class**

The ROS classes utilized for this project are the current ROS classes for the preferred alternative in the Forest Plan Revision.

### **Recreation Capacity and Recreation Use Coefficients**

The coefficients are derived from a mathematical equation that sets a minimum spacing between people within an area or along a road or trail. The number of acres or miles is multiplied by an appropriate coefficient to obtain the capacity. The capacity is measured in terms of People At One Time or PAOT. PAOTs represent a snapshot in time, where a calculated number of people are within a given area at a point in time. The maximum number of PAOTs that an area can sustain, based on social, physical, and biological conditions, becomes the PAOT capacity for an area. Coefficients vary by ROS class and by the type of terrain or vegetation patterns present.

The following Recreation Opportunity Spectrum (ROS) table comes from a 1982 ROS Forest Service Users guide publication. The table gives a capacity coefficient for each ROS class. It is used as a starting point for establishing capacities as long as further analysis such as usable areas, patterns of use and other factors are considered.

Table I-1 shows figures for both trail capacity and area-wide capacity. The trail capacity process will be utilized by most activities on the forest except for hunting. Most outfitted and guided activities occur along roads and trails. The forestwide capacity estimates will be utilized for hunting and other activities, where use occurs off roads and trails in the general forest area. Guided snowmobile tours occur primarily along groomed snowmobile routes. Capacity

estimates will be based on the Semi-Primitive Motorized ROS class “On Trails” coefficient.

The purpose of establishing capacity standards is to help assure and maintain a specific social setting compatible to the desired recreation experience. It is the social setting that is being monitored no the per-acre or per-mile capacity.

**Table I-1. Area and Trail Coefficients for Capacity by ROS**

ROS Class Coefficients	Very Low	Low	Moderate	High
<b>PRIMITIVE:</b>				
On Trails - PAOT/Mile	0.5	1	2	3
Area Wide – PAOT/M Acres	1	2	7	25
<b>SEMI-PRIMITIVE NON-MOTORIZED:</b>				
On Trails - PAOT/Mile	2	3	9	11
Area Wide – PAOT/M Acres	4	4	50	80
<b>SEMI-PRIMITIVE MOTORIZED:</b>				
On Trails - PAOT/Mile	2	3	9	11
Area Wide – PAOT/M Acres	4	8	50	80
<b>ROADED NATURAL:</b>				
On Trails - PAOT/Mile	2	3	9	11
Area Wide – PAOT/M Acres	40	80	1,200	2,500
<b>ROADED MODIFIED:</b>				
On Trails - PAOT/Mile	2	3	9	11
Area Wide – PAOT/M Acres	40	80	1,200	2,500
<b>RURAL:</b>				
On Trails - PAOT/Mile	2	3	9	11
Area Wide – PAOT/M Acres	500	800	5,000	7,500

Very low and low apply to rock, mountain grass, and clearcuts 1 to 20 years old. Moderate applies to mountain grass, mature and pole-size ponderosa pine, mature aspen, shelterwood cuts 90 to 120 years old, selection cuts 1 to 20 years old, and clearcuts 80 to 120 years old. High applies to mature and pole-size spruce, pole-size aspen, and clearcuts 20 to 80 years old.

Table I-2 below categorizes each ROS class by Forested or Non-Forested and uses an average coefficient from the table above that is used in the Bighorn’s capacity analysis.

**Table I-2. Coefficients for Capacity for Forested and Non- Forested by ROS**

ROS Class Coefficients	Non-Forested	Forested
<b>PRIMITIVE:</b>		
On Trails - PAOT/Mile	0.75	2.5
Area Wide – PAOT/M Acres	1.5	16

<b>SEMI-PRIMITIVE NON-MOTORIZED:</b>		
On Trails - PAOT/Mile	2.5	10
Area Wide – PAOT/M Acres	6	65
<b>SEMI-PRIMITIVE MOTORIZED:</b>		
<b>ROS Class Coefficients</b>	<b>Non-Forested</b>	<b>Forested</b>
On Trails - PAOT/Mile	2.5	10
Area Wide – PAOT/M Acres	6	65
<b>ROADED NATURAL:</b>		
On Trails - PAOT/Mile	2.5	10
Area Wide – PAOT/M Acres	60	1,850
<b>ROADED MODIFIED:</b>		
On Trails - PAOT/Mile	2.5	10
Area Wide – PAOT/M Acres	60	1,850
<b>RURAL:</b>		
On Trails - PAOT/Mile	2.5	10
Area Wide – PAOT/M Acres	650	6,250

Capacity is determined by two methods:

1. Net usable acres in a compartment times the use coefficient for the specific ROS class and vegetative type. The products are totaled for each compartment. (Area Capacity)
2. Total trail miles in a compartment times the use coefficient for the specific ROS class and vegetative type. The products are totaled for each compartment. (Trail Capacity)

The following examples shown in Tables I-3 and I-4 utilize a representative compartment to display the two methods.

**Table 1-3. Area Capacity for Little Bighorn River near Duncum Non-Wilderness Compartment (Medicine Wheel/Paintrock District) broken down by ROS and Vegetative Class**

ROS	Acres	Available Acres	PAOT Coeff.	PAOT Capacity
<b>Semi-Primitive Non-Motorized</b>				
Forested	3,390.693876	1,195.2642910	.065	77.6921730
Non-forested	1,597.874055	485.2534127	.006	2.9115204
Total	4,988.567931	1,680.5177037		80.6036934
<b>Semi-Primitive Motorized</b>				
Forested	5,638.941690	4,468.569103	.065	290.456990
Non-forested	5,083.874873	3,843.114677	.006	23.058687
Total	10,722.816563	8,311.683780		313.515777
<b>Roaded Natural</b>				
Forested	2,423.605669	2,252.5767300	1.85	4,167.26680
Non-forested	3,272.189012	2,830.9221130	.06	169.85532
Total	5,695.794681	5,083.4988430		4,337.12212
<b>Roaded Modified</b>				
Forested	4,778.549925	4,299.336248	1.85	7,953.77190
Non-forested	2,807.944960	2,094.717969	.06	125.68307

Total	7,586.494885	6,394.054217		8,079.45497
<b>Rural</b>				
Forested	32.60489243	31.80147329	6.25	198.75920
Non-forested	809.44778470	803.02870100	.65	521.96865
Total	842.05267713	834.93017429		720.72785
<b>Total</b>	<b>29,835.72721</b>	<b>22,304.58472</b>		<b>13,531.42431</b>

OR

**Table I-4. Trail Capacity for Little Bighorn River near Duncum Non-Wilderness Compartment (Medicine Wheel/Paintrock District) broken down by ROS and Vegetative Class:**

ROS	Miles of Trail	PAOT Coeff.	PAOT Capacity
<b>Semi-Primitive Non-Motorized</b>			
Forested	6.188770263	10	61.887702
Non-forested	4.637054462	2.5	11.592636
Total	10.825824725		73.480338
<b>Semi-Primitive Motorized</b>			
Forested	1.767003005	10	17.67003005
Non-forested	1.793137912	2.5	4.4828447
Total	3.560140917		22.152874
<b>Roaded Natural</b>			
Forested	.27130112	10	2.7130112
Non-forested		2.5	
Total	.27130112		2.7130112
<b>Roaded Modified</b>			
Forested	4.194783552	10	41.94783552
Non-forested	.594187587	2.5	1.4854687
Total	4.788971139		43.4333303
<b>Total</b>	<b>19.44624</b>		<b>141.77955</b>

In addition, the following lakes will be analyzed separately: Meadowlark, West Tensleep, Park Reservoir, and Sibley. Useable acres were multiplied by the appropriate ROS coefficient as above.

Rock climbing areas were identified as follows: Little Tongue River canyon, Twin Buttes, Steamboat Point, Fallen City, Shell canyon, Tensleep canyon, Crazy Woman canyon, and Cloud Peak Wilderness peaks. These will be analyzed separately as well.

### Length of Season

The average amount of days that a visitor typically uses a compartment is represented by the Length of Season. A separate Length of Season was determined for summer, fall and winter.

Summer 4/15 – 8/30 Includes spring bear hunting = 138 days

Fall 9/1 – 12/15 = 106 days

Winter 12/16 – 4/15 = 121 days

### Pattern of Use

Establishing a maximum capacity for compartments - which would be sustained on a daily basis throughout the use season - would not be desirable, nor does it represent actual use patterns. To compensate for how use typically occurs on the BNF, a coefficient was developed to account for a more desirable use pattern throughout the use season. Four categories of use patterns, representing (1) beginning of the season, (2) average, (3) high or weekend/holiday uses, and (4) end of season, were used to determine the coefficient. The days within the season of use were weighted by the four categories to determine a Pattern of Use coefficient. This coefficient varied by the length of season, and in some cases, on a compartment basis as shown in Table I-5 below.

**Table I-5. Seasonal Pattern of Use Coefficients**

<b>Summer</b> 4/15 – 8/30 including spring bear hunting			
Beginning	62 days 4/15 – 6/15	@ 25% of average	15.5 days
Average	18 days 6/16 – 7/3	@100% of average	18 days
High	42 days 7/4-8/15	@ 150% of average	63 days
End	16 days 8/16 – 8/30	@75% of average	12 days
Totals	138 days		108.5 days
<b><i>108.5 / 138 = .79 pattern of use coefficient</i></b>			
<b>Fall</b> 9/1 – 12/15			
Beginning	15 days 9/1 – 9/15	@ 75% of average	11.25 days
Average	38 days 9/16 – 10/14 & 10/26 – 11/3	@100% of average	38 days
High	11 days 10/15 – 10/25	@ 125% of average	13.75 days
End	42 days 11/4 – 12/15	@25% of average	10.5 days
Totals	106 days		73.5 days
<b><i>73.5 / 106 = .69 pattern of use coefficient</i></b>			

<b>Winter</b> 12/16 – 4/15			
Beginning	16 days 12/16 – 12/31	@ 50% of average	8 days
Average	15 days 1/1 – 1/15	@100% of average	15 days
High	59 days 1/16 – 3/15	@ 125% of average	73.75 days
End	31 days 3/16 – 4/15	@40% of average	12.4 days
Totals	121 days		109.15 days
<b><i>109.15 / 121 = .90 pattern of use coefficient</i></b>			

### Seasonal Capacity Determination

Tables I-6 and I-7 display the format used in determining seasonal capacities for each compartment. Seasonal capacity is shown in terms of the total number of visitor days available within a season.

**Table I-6. Area Capacity for Little Bighorn River near Duncum Non-Wilderness Compartment (Medicine Wheel/Paintrock District)**

Season of Use	PAOT Capacity	Pattern of Use Coefficient	Length of Season	Seasonal Capacity
<b>Summer</b>	13,531.42431	.79	138	1,475,196
<b>Fall</b>	13,531.42431	.69	106	989,688
<b>Winter</b>	13,531.42431	.90	121	1,473,572

**Table I-7. Trail Capacity for Little Bighorn River near Duncum Non-Wilderness Compartment (Medicine Wheel/Paintrock District)**

Season of Use	PAOT Capacity	Pattern of Use Coefficient	Length of Season	Seasonal Capacity
<b>Summer</b>	141.7795	.79	138	15,457
<b>Fall</b>	141.7795	.69	106	10,370
<b>Winter</b>	141.7795	.90	121	15,440

### EXISTING RECREATION USE

The level of existing use was determined for both commercial and general public use on National Forest system lands. For general public use, estimates were developed through RIM records, consistently recorded from 1989 to 2001. Table I-8 below displays the use from 1994 to 2001 by district.

**Table I-8. Recreation Use 1994-2001**

District	1994	1995	1996	1997	1998	1999	2000	2001
Buffalo	281,500	254,100	271,800	305,000	274,048	269,328	263,120	264,240
Med Whl	235,000	203,400	205,700	194,600	205,536	201,996	197,340	198,180
Paintrock	353,500	318,900	319,700	277,200	325,432	319,827	312,455	313,785
Tensleep	371,900	349,100	365,000	378,900	359,688	353,493	345,345	346,815
Tongue	561,700	561,300	567,300	496,300	548,096	538,656	526,240	528,480

For Total	1,803,600	1,686,800	1,729,500	1,661,600	1,712,800	1,683,300	1,644,500	1,651,500
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The capacity coefficients applied on an area wide basis assume an even distribution of PAOTs per acre. Forest direction contained in the Plan allows the manager to change the above use level coefficients as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS User Guide, Chapter 25. Examples of such areas are destination points and travel corridors such as trails within a compartment. The Forest Plan also allows the manager to reduce the use level coefficients where unacceptable changes to the bio-physical resources will occur. Potential resource damage could occur on a seasonal basis, spring bear hunting season for example, in which case use may be reduced or not permitted.

From a practical standpoint, the capacity coefficients for forested vegetative types may need to be reduced. For instance, it is difficult to visualize .08 PAOT/acre realistically possible in spruce/fir/lodgepole types. This is eight people per 100 acres. People generally tend to conduct their activities on the fringes or edges of timber stands, not throughout the entire stand.

Lands classified under Management Prescription 2B, Rural and Roded Natural, are not included in these calculations because outfitter guide operations are inclined to not use these areas for commercial operations due to already heavy levels of public use. There are some exceptions, such as van or bus tours, bicycle tours, etc., but this is not something currently being permitted.

Total number of PAOTs by compartment for each District have been calculated and are on file in District offices and at the Supervisor's Office. The land manager should assess the number of PAOTs in each compartment and ask whether it is realistic for this number of PAOTs to occur. Adjustments to the number of PAOTs can be made by reducing the capacity coefficient using the criteria listed in the Forest Plan, but this needs to be defensible based on the manager's best professional judgement.

Dispersed recreation use has been compiled from the RIM records up until 2001. A high portion of dispersed recreation use (59%) occurs and has been reported in the Rural and Roded Natural ROS classes. As previously mentioned, since most outfitter guide use does not occur within these classes, they have been deleted from the total dispersed recreation use on the Forest (Table 3) to enable a better comparison with the outfitter guide segment of dispersed use. Outfitter guide use may be permitted within Roded Natural and Rural classes, but should not occur to any great extent.

Outfitter guide use historically has been reported in terms of service days. By Forest Service definition, a service day is "a day or any part of a day on National Forest System lands for which an outfitter or guide provides goods or services, including transportation, to a client." For the purposes of this analysis, a service day is estimated to average 12 hours. Dispersed recreation use is reported in



terms of recreation visitor days or RVDs, which is recreation occurring for a 12-hour period. Therefore, for analysis purposes, RVDs and service days are considered equivalent. Permitted outfitter guide use from 1994-2001 has been compiled for the Forest by District and is displayed in Table 3. Permitted use was subdivided into three categories: 1) summer use (5/1 to 8/30) and includes spring bear hunting, 2) fall hunting use (9/1 to 11/15) which includes archery hunting, and 3) winter use (12/1 to 4/30) which includes lion hunting, snowmobile tours. Outfitter guide permitted use during the fall hunting period average xx% of all outfitter guide permitted use for the eight-year period.

Table I-9 compares dispersed recreation use with permitted outfitter guide use from 1994 to 2001 and Table I-10 displays the 13-year average by district and forest. Permitted outfitter guide use for all years averages three percent of the dispersed recreation use on the Forest.

**Table I-9. Recreation Use and Permitted Outfitter Guide Use 1994-2001**

<b>District 2001 Use</b>	<b>RM</b>	<b>SPM</b>	<b>SPNM</b>	<b>P</b>	<b>Total</b>	<b>Permitted O&amp;G SDs</b>	<b>% Permitted Use by O&amp;G</b>
Powder River	61,106	140,542	36,663	12,221	250,532	13,464	5%
Med Wheel/Paintrock	51,197	117,752	30,718	10,240	209,906	7,442	3%
Tongue	52,848	121,550	31,709	10,570	216,677	5,127	2%
Forest Total	165,150	379,845	99,090	33,030	677,115	26,033	4%
<b>District 2000 Use</b>	<b>RM</b>	<b>SPM</b>	<b>SPNM</b>	<b>P</b>	<b>Total</b>	<b>Permitted O&amp;G SDs</b>	<b>% Permitted Use by O&amp;G</b>
Powder River	60,847	139,947	36,508	12,169	249,470	13,704	5%
Med Wheel/Paintrock	50,980	117,253	30,587	10,196	209,016	5,706	3%
Tongue	52,624	121,035	31,574	10,525	215,758	4,113	2%
Forest Total	164,450	378,235	98,670	32,890	674,245	23,523	3%
<b>District 1999 Use</b>	<b>RM</b>	<b>SPM</b>	<b>SPNM</b>	<b>P</b>	<b>Total</b>	<b>Permitted O&amp;G SDs</b>	<b>% Permitted Use by O&amp;G</b>
Powder River	62,282	143,248	37,370	12,457	255,356	13,690	5%
Med Wheel/Paintrock	52,183	120,019	31,310	10,437	213,947	5,706	3%
Tongue	53,866	123,891	32,319	10,773	220,849	3,471	2%
Forest Total	168,330	387,159	100,998	33,666	690,153	22,867	3%
<b>District 1998 Use</b>	<b>RM</b>	<b>SPM</b>	<b>SPNM</b>	<b>P</b>	<b>Total</b>	<b>Permitted O&amp;G SDs</b>	<b>% Permitted Use by O&amp;G</b>
Powder River	63,374	145,759	38,024	12,675	259,832	13,736	5%
Med Wheel/Paintrock	53,097	122,122	31,858	10,620	217,697	5,730	3%
Tongue	54,810	126,062	32,886	10,962	224,719	3,106	1%
Forest Total	171,280	393,944	102,768	34,256	702,248	22,572	3%
<b>District 1997 Use</b>	<b>RM</b>	<b>SPM</b>	<b>SPNM</b>	<b>P</b>	<b>Total</b>	<b>Permitted O&amp;G SDs</b>	<b>% Permitted Use by O&amp;G</b>
Powder River	68,390	157,297	41,034	13,678	280,399	13,632	5%
Med Wheel/Paintrock	47,180	108,514	28,308	9,436	193,438	5,588	3%
Tongue	49,630	114,149	29,778	9,926	203,483	2,870	1%
Forest Total	166,160	382,168	99,696	33,232	681,256	22,090	3%

District 1996 Use	RM	SPM	SPNM	P	Total	Permitted O&G SDs	% Permitted Use by O&G
Powder River	63,680	146,464	38,208	12,736	261,088	13,590	5%
Med Wheel/Paintrock	52,540	120,842	31,524	10,508	215,414	5,731	3%
Tongue	56,730	130,479	34,038	11,346	232,593	2,580	1%
Forest Total	172,950	397,785	103,770	34,590	709,095	21,901	3%
District 1995 Use	RM	SPM	SPNM	P	Total	Permitted O&G SDs	% Permitted Use by O&G
Powder River	60,320	138,736	36,192	12,064	247,312	13,643	5%
Med Wheel/Paintrock	52,230	120,129	31,338	10,446	214,143	5,571	3%
Tongue	56,130	129,099	33,678	11,226	230,133	2,418	1%
Forest Total	168,680	387,964	101,208	33,736	691,588	21,632	3%
District 1994 Use	RM	SPM	SPNM	P	Total	Permitted O&G SDs	% Permitted Use by O&G
Powder River	65,340	150,282	39,204	13,068	267,894	13,643	5%
Med Wheel/Paintrock	58,850	135,355	35,310	11,770	241,285	5,430	2%
Tongue	56,170	129,191	33,702	11,234	230,297	2,499	1%
Forest Total	180,360	414,828	108,216	36,072	739,476	21,572	3%

**Table I-10. Average Recreation Use and Permitted Outfitter Guide Use**

District	Total Use Average 1994-2001	Permitted O&G Days Average 1994-2001	% Permitted Use by O&G Average 1994-2001
Powder River	258,985	13,638	5%
Med Wheel/Paintrock	214,356	5,863	3%
Tongue	221,814	3,273	1%
Forest Total Average	9,263,310	22,774	3%

The 2002 National Visitor Use Monitoring Report for the Bighorn National Forest indicated a total of 704,941 visits for the 2000-2001 sampling period. Forest records state that approximately 70% of total use is dispersed recreation use (see Appendix A). This would correlate to a total of 493,529 total visits for dispersed use. This number represents a 37% reduction from the forest estimate for 2001 in the table above. If the same assumptions are made using this reduced number the following use break-downs in Table I-10 would result. The differences are not significant. The table above shows an average of 3% for total outfitter guide authorized use and the table below shows an average of 5%.

**Table I-11. Recreation Use and Permitted Outfitter Guide Use 2001 (NVUM)**

District 2001 Use	RM	SPM	SPNM	P	Total	Permitted O&G SDs	% Permitted Use by O&G
Powder River	43,825	102,259	27,391	9,130	182,606	13,643	7%
Med Wheel/Paintrock	36,719	85,677	22,949	7,650	152,994	7,442	5%
Tongue	37,903	88,440	23,689	7,896	157,929	5,127	3%
Forest Total	118,447	276,376	74,029	24,676	493,529	26,225	5%

## **ALLOCATION**

Once a capacity for a compartment is defined, a determination is made to allocate the capacity to general-public, institutional (semi-public), and commercial recreation use (outfitter-guides). All three represent use by the public. Whether people do the trip on their own or are with an organized group, or have the assistance of a professional outfitter-guide determines the category to which they are allocated. This allocation allows Forest land managers to determine what level of commercial use is appropriate and needed for a compartment. Part II of this document details the Needs Analysis for outfitter-guide use and describes how capacity is allocated.

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## **PART II – OUTFITTER-GUIDE NEED DETERMINATION**

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### **AGENCY GOALS (taken from Outfitter and Guide Guidebook)**

1. Conservation/stewardship of natural and cultural resources – air, water, soil, vegetation, wildlife, cultural. Promote responsible use so that natural systems are sustained for future generations.
2. Public service - enable people to obtain benefits such as personal growth, family/friend bonding, spiritual re-connection, stress relief/personal reflection, physical exercise, challenge, learning/mental stimulation, etc.
3. Visitor Safety – enable people to experience wildland settings in a manner that they perceive the risk is within their control.
4. Retain lands in the public domain so people of all races, gender, and economic categories have the opportunity to re-connect with nature and experience their common heritage.
5. Contribute to the people’s quality of life and economic sustainability in communities – foster small business, provide clean water and air, add beauty to people’s lives, etc.

### **MANAGEMENT DIRECTION AND GOALS**

**Wilderness Act, section 4(d)(6)** states that “Commercial services may be performed to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes.”

#### **FSM 2320 – Wilderness Management**

FSM 2323.13g – Outfitter and Guide Operations. Requires the need for and role of outfitters and guides to be addressed in the forest plan. This policy emphasizes that outfitters provide their service to the public in a manner that is compatible with use by other wilderness visitors and which maintains the wilderness resource.

#### **FSM 2340 – Privately Provided Recreation Opportunities**

Emphasizes the need to do analysis as part of the forest plan to determine the public need for outfitters and the needs to analyze allocation issues between the outfitted and non-outfitted publics. It recognizes that the authorized officer consider the outfitter and guides as an extension of the agency’s delivery system. The policy stresses the need to coordinate with appropriate licensing boards.

#### **FSH 2709.11-2000-1**

41.53a – Objectives.

1. As identified in forest land and resource management plans, provide for commercial outfitting and guiding services that address concerns of public health and safety and that foster small businesses.

2. Encourage skilled and experienced individuals and entities to conduct outfitting and guiding activities in a manner that protects environmental resources and ensures that National Forest visitors receive high quality services.

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## **BIGHORN FOREST REVISED LAND AND RESOURCE MANAGEMENT PLAN**

### **Goals and Objectives**

#### **Goal 2 – Multiple Benefits to People**

**Objective 2.a:** Improve the capability of the Bighorn National Forest to provide diverse, high-quality outdoor recreation opportunities.

##### **Strategies for 2.a.:**

6. Express clear expectations of travel opportunities. Minimize conflicts among users.
7. Continue permitting outfitter guide services on NFS lands.
8. Encourage, establish, and sustain a diverse range of recreational facilities and services on NFS land. Partnerships are one mechanism for accomplishing this.

**Objective 2.b.:** Improve the capability wilderness and protected areas to sustain a desired range of benefits and values.

##### **Strategies for 2.b.:**

###### ***Wilderness***

1. Favor wilderness-dependent activities in wilderness. Discourage activities that are not consistent with wilderness values.

**Objective 2.c.:** Improve the capability of the Bighorn National Forest to provide a desired sustainable level of uses, values, products, and services.

##### **Strategies for 2.c.:**

###### ***Tourism and Recreation***

2. Foster a sense of place unique to the Bighorns by appropriately integrating cultural resources and natural resources into education and recreation opportunities.

**Objective 4.a.:** Improve the safety and economy of the Bighorn National Forest roads, trails, facilities, and operations and provide greater security for the public and employees.

##### **Strategies for 4.a.:**

3. Provide recreation opportunities to accommodate a wide range of abilities and ensure non-discrimination in the delivery of Bighorn National Forest programs.

**Objective 4.c.:** Enhance the public services provided by the Bighorn National Forest through the pursuit of cooperation and public and private partnerships.

##### **Strategies for 4.c.:**

4. Create and foster partnerships with other agencies, accredited educational and research institutions, tribal colleges, and other appropriate public and private sector organizations to further research, education, protection, and interpretation.

## **Forestwide Standards and Guidelines**

### *Heritage Resources Guideline*

Enhance and interpret significant heritage sites for the education and enjoyment of the public when such development will not degrade heritage property or conflict with other resource considerations.

### *General Recreation Guideline*

Manage recreation use to stay within the capacity allowed for the prescribed Recreation Opportunity Spectrum (ROS) objective.

### *Wilderness Resources Standard*

If current permits are relinquished or terminated, evaluate options to minimize impacts (minimum tool evaluation).

## **Management Area Prescriptions**

### **1.11 Pristine Wilderness**

#### Recreation Standard

3. Include non-guided visitors and outfitter/guide operations in calculations of level-of-use capacities.

#### Recreation Guidelines

3. Set trail and area-wide use capacity at 0.001-0.002 PAOT per acre for open land, meadow, and alpine areas.  
Set trail and area-wide use capacity at 0.003-0.007 PAOT per acre for forested lands and shrub lands.  
Reduce the above use levels where unacceptable changes to the biophysical resource are likely to occur.
4. Manage outfitter-guide operations in the same manner as other visitors. The activities of non-guided visitors and outfitter-guides should not be in conflict.

#### Special Uses Standards

1. Do not permit "assigned sites" in outfitter-guide base camps.
2. Do not allow caches of equipment or supplies under outfitter-guide permits.

#### Special Uses Guidelines

1. Permit only those uses authorized by wilderness legislation, which cannot be reasonably located on non-wilderness lands.

### **1.13 Semi-primitive Wilderness**

#### Recreation Standard

2. Include outfitter/guide operations in calculations of level-of-use capacities.

#### Recreation Guidelines

4. Manage summer use within area-wide capacities:
  - Alpine, krummolz = 4 PAOTs per 1000 acres
  - Rock, mountain grass = 8 PAOTs per 1000 acres
  - Forest and shrub lands, ponderosa pine,  
Douglas fir, riparian areas, white pine = 50 PAOTs per 1000 acres
  - Spruce/fir, lodgepole pine, aspen = 80 PAOTs per 1000 acres

6. Limit the maximum trail capacity to 2-3 PAOT/mile in open country and 9-11 PAOT/mile in forested terrain.
9. Manage outfitter-guide operations in the same manner as other visitors. The activities of non-guided visitors and outfitter-guide should not be in conflict.

#### Special Uses Standards

1. Allow camps for permittees only in sites specified in special-use permits.
2. Restrict outfitter-guide assigned sites to the current number permitted.
3. Do not allow caches of equipment or supplies under outfitter-guide permits.

#### Special Uses Guidelines

1. Issue permits for parties larger than the established limit when their presence can be adequately screened from the sights and sounds of other parties in the area.
2. Require outfitter-guides to be certified in "Leave No Trace" techniques.

### **1.2 Recommended Wilderness**

#### Special Uses Standards

2. Prohibit new special-use facilities
4. Permit only those uses authorized by wilderness legislation which cannot be reasonably met on non-wilderness land.

#### Special Uses Guideline

1. Allow compatible special uses.

### **1.31 Backcountry Recreation, Nonmotorized Use and**

### **1.32 Backcountry Recreation, Nonmotorized Summer Use with Limited Winter Motorized Use and**

### **1.33 Backcountry Recreation with Limited Summer and Winter Motorized Use**

#### Special Uses Standards

3. Prohibit new special-use facilities

#### Special Uses Guidelines

1. Discourage competitive contest and group events. Such events may be permitted on a case-by-case basis.

### **1.5 National River System – Wild Rivers**

#### Special Uses Standard

1. Do not approve special uses that could preclude the area from designation.

### **2.2 Research Natural Areas**

#### Special Uses Guidelines

1. Permit special uses if they do not conflict with the values for which the RNA was proposed or established.
2. Allow existing outfitter-guide permitted use to continue, subject to normal permit processes, within RNAs as long as it is compatible with the establishment objectives.

### **3.31 Backcountry Recreation, Year-round Motorized Use**

#### Special Uses Guideline

1. Permit competitive and group events on a case-by-case basis.

### **3.4 National River System – Scenic Rivers (Outside Wilderness)**

#### Special Uses Standard

1. Authorize special uses only if they are compatible with the scenic river values.

### **5.41 Deer and Elk Winter Range**

#### Special Uses Guideline

1. Limit special use activities during the winter and spring periods.

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## **PUBLIC COMMENT ON NEED FOR OUTFITTER AND GUIDE SERVICES FOR THE FOREST PLAN REVISION**

In February, 2002, a letter was sent to a mailing list of 128 people, including all commercial outfitter and guiding operations currently under special use permit on the Bighorn National Forest; people who had expressed interest in conducting commercial outfitting and guiding operations; state agencies related to outfitting and guiding operations; and local Chamber of Commerce offices (Appendix A)

The letter requested input regarding the need for outfitting and guiding services on the Bighorn National Forest as a part of the Forest Plan revision process. The letter indicated that the forest was evaluating management areas and the activities that should be allowed within those management areas. The letter also included four questions related to the need for outfitting and guiding services as well as a general comment section.

### **Public Comment Questions and Responses**

The following is a summation of the results. A total of 17 responses were received.

#### **1. Is there a need to provide additional outfitting/guiding assistance due to need for specialized equipment and/or technical skills? If yes, for what activities? (examples – llama packers, ATV's, technical climbing, Nordic skiing, snowcat skiing, mountain biking)**

Need to teach people why wilderness and all of the earth is so important

Additions should be low impact activities

Yes to provide horseback rides and pack out elk and deer

Need snowmobile rentals and guides out of Ten Sleep

No – we have limited inquiries for technical climbing and mountain biking

Yes, need to provide llama guides

Yes, for any of the above if an outfitter is interested in providing these recreation opportunities

Yes, teen treks with an educational emphasis in Leave No Trace, especially in wilderness



**2. Has there been a demand and/or public need for outfitting/guiding assistance for certain additional activities in certain areas? If yes, please describe the demand or need and the corresponding area.**

No room for more hunting outfitters in order to have a viable business

There have been inquiries for where to rent snowmobiles and tour services

Yes, drop camps, trail rides, fishing guides in areas held by other outfitters but not used.

Yes, need to offer permits to colleges studying ecosystems – maybe on a rotating system

Yes, people request llama guides

Public is demanding more winter sport outfitter/guide activities like backcountry skiing, dogsled trips. Demands for mountain biking are also increasing and ATV trips

Yes, several requests to provide packing out service for harvested game such as elk and deer using horses and snowmobiles during hunting season.

**3. Is the public need adequately served by outfitting/guiding operations currently under permit? Please explain your answer.**

No – there is a need to allow educational groups to conduct business

Yes, and if not, existing permit holders should be given the opportunity to expand.

No – need to provide packing out service for hunters

No – I teach survival and primitive living skills as a way to bring people and earth together as one.

We run a wilderness trip with an environmental education camp – currently limited by the number of user days allowed

Yes – because of the limited quota drawing by Game and Fish and the easy access to the Bighorns, most out-of-state hunters don't want outfitted services

It would be better if we were not restricted in the wilderness and had more open dates for "last minute" clients and more of other areas for those returning.

Yes for big game hunting with the exception of hunters wanting only drop camps or animal retrieval service. I don't think summer use for group camps, trail rides, fishing trips are up to meeting the need.

No, as a non-profit educational institution school, we should have equal access to national resources like the Cloud Peak wilderness.

The present system is NOT being serviced for llama trekking. There is a demand to use llamas as shown in other forests of Wyoming.

I think we need to supply more outfitter/guide opportunities for some of the non-traditional activities such as mentioned on the first page.

No – there is a need to allow educational groups to conduct business regardless fo whether for profit or not

**4. Are wilderness recreation needs being adequately served by outfitter/guiding operations currently under permit? Please explain**

Yes and no. Yes there is plenty of wilderness recreation going on, but there is actually too much. We need to be more "low impact" in our approach to our wilderness.

Yes, there are plenty of operators trying to make a living with the public that is using outfitters.

No, many outfitters are not wanting to change their programs to serve summer time users such as rock climbers, group camps, day rides

No, local outfitters have greater access to permits that reduce the availability of permits to out-of-state non-profit educational institutions.

In our opinion a policy that puts the interests of for-profit operations ahead of not-for-profit that wants to give kids an opportunity to go backpacking needs rethought. We have been unable to get a permit to use the wilderness for backpacking.

Present operators are NOT servicing the public in llama trekking.

Yes, if the definition is recreation. How is this helping our desperate need to educate people?

### **Additional Comments**

Moratoriums do not help the overuse problem. Individuals can do more damage when they are uneducated.

Good outfitters can be good partners and help educate the public on tread lightly and resource ethics.

I would like to be considered on a rotating basis for a special use permit for Joliet Junior College in Illinois.

I have worked with outfitters and dude ranches for the past ten years. I think the outfitters generally serve the big game hunting quite well, but are seriously lacking on service to other forest and wilderness activities.

Thanks for staying in touch with the little businesses.

Anyone going into the wilderness should have a guide.

I believe a college instructor should not be required to hold an outfitter/guide permit to use the wilderness for educational purposes. To restrict such activity seems counter to the philosophy of educating the public to respect and proper use.

These national forests and wilderness areas are our last hope as a nation to change the tremendous ignorance the American public is plagued by.

If there are existing permit holders who are not utilizing their permits, every effort should be made to pull their permits or reissue to an existing holder.

### **Summary of Responses**

Respondents indicated a need for a variety of outfitted services including wilderness education, horseback trips, packing services, snowmobile trips, llama treks, back country skiing, dog sled trips, mountain biking, ATV tours, educational tours, survival and primitive living skills. They indicated that hunting outfitting was maximized and because of Game and Fish drawings and quotas and easy access within the forest, that out-of-state hunters don't want outfitted services.

Some respondents indicated there was already too much use occurring in the Cloud Peak Wilderness and that uses emphasizing minimum impact techniques should be first and foremost in wilderness. Some respondents felt existing outfitters should be given the opportunity to expand and diversify services offered before allowing additional outfitters.

**CATEGORIES OF COMMERCIAL OUTFITTING AND GUIDING OPERATIONS**

There are two categories of commercial outfitting and guiding operations currently authorized under permit and/or for which requests have been received for conducting outfitting and guiding operations on the Bighorn National Forest.

**Category 1 – Public**

Clientele is not limited. This category IS eligible for Priority Use Service Days.

**Category 2 – Semi-public**

Constituency is limited. Group is limited to a specific segment of society. Membership or enrollment is required to participate. Adherence to a specific set of beliefs or philosophy is required (religious, political, etc.). This category is NOT eligible for Priority Use Service Days.

This category includes three types of groups:

- Institutional – i.e., rehabilitation centers, religious organizations, camps
- Educational – i.e., universities, schools, clubs, political groups
- non-profits – i.e., special or common interest groups

**Table II-2. Requests for Outfitting and Guiding activities from 1997 to 2006**

Activity	Tongue District	MWPR District	Powder River District
Backpacking	10	1 for drop camps	13
Environmental Ed/Backpacking	1		
ATV tours	2	1	
Snowmobiling	1	2	3
Horseback trips	9		7
Fishing	3		2
Wildlife tours	2		
Photography trips	2		
Mountain bikes and drop off tours	2		1
Hiking and mountain biking	2		4
Historic and natural history tours, hiking and horseback	1		2
4 wheel drive tours	1		
Dog sledding	1		
Rock climbing	2		
Drop camps (packing)	2		
Ice Climbing	1		
Cattle Drives	1		
Spelunking	1		

Big Game hunting	7		12
Lion hunting	2		3
Moose hunting	2		5
Winter survival			1
Skiing			1

**Table II-3. Currently authorized Outfitting and Guiding operations on the Bighorn National Forest (Priority Use only)\*\***

Activity	Tongue	Powder River	Medicine Wheel Paintrock	Totals
<b>Spring</b>				
spring bear hunting	149	0	25*	174 *
<b>Summer</b>				
trail rides, camping, fishing	2,400	10,394	965 +475 temp available	13,759 +475 temp available
fishing	51	172	0	223
cattle drives	420	0	250 + 160 temp available	670 +160 temp available
rock climbing		160		160
backpacking		660		660
enviro. education, backpacking			1,790	1,790
<b>Fall</b>				
big game hunting	349	245	1,741 +402 temp available	2,335 +402 temp available
<b>Winter</b>				
snowmobile guiding	1,600	1,750 1,500	710 +250 temp available	3,810 +250 temp available
lion hunting	32	40	0 *	72 *
<b>Total service days provided for outfitting on the Bighorn National Forest</b>				<b>23,903 +1,372 temp available</b>

\* Spring bear and lion service days are included in the total for big game service days for three outfitter/guides on the MWPR District.

\*\* There are 21 outfitters providing service to Cloud Peak Wilderness during summer and fall seasons. Those numbers are represented in the above table.

**Table II-4. Comparison of Current and Requested Outfitting and Guiding Activities**

Activity	Current Service Days/ # of permits	# of requests
Horseback/Camping/Fishing	13,759 + 475 temp / 22	16
Day Horseback Rides	1,122 + 85 temp / 4	Combined in above
Fishing	223 / 4	6
Cattle Drives	670 + 160 temp / 2	1
Rock Climbing	160 / 1	2

Backpacking	660 / 2	24
Activity	Current Service Days/ # of permits	# of requests
Enviro Ed/Backpacking	1,790 / 1	1
Big Game Hunting	2,335 + 402 temp / 29	18
Snowmobiling	3,810 + 250 temp / 8	6
Dog Sledding	0	1
Lion Hunting	72 * / 8	5
Spring Bear Hunting	174 * / 8	7
Wildlife Tours	0	2
ATV tours	0	3
Photography Trips	0	2
Mountain Bike/ drop camps	0	4
Mountain bike/hike	0	7
Historic and natural history tours, hiking and horseback	0	3
4 wheel drive tours	0	1
Ice climbing	0	1
Spelunking	0	1
Winter survival	0	1
Skiing	0	1
Mountain survival	0	1
Drop camps (packing)	0	2

\* Spring bear and lion service days are included in the total for big game service days for three outfitter/guides on the MWPR District.

## DEMAND AND SUPPLY

- Existing Use
- Allocated vs. actual use
- Activities well represented/underrepresented

Historical recreation use has been estimated for the RIM reporting from the early 1980s until 2000. Use was determined by professional judgment (observation) and supported in part, by actual use records. All of the use by the outfitted public has been in the dispersed recreation category. The Bighorn Forest has utilized the following figures for the Forest Plan Revision process.

Over a 15-year period from 1986-2000, numbers of total RVDs on a forest-wide basis for all activities fluctuated from a low of 1,295,100 in 1989 to a high of 1,712,800 in 1998. RVDs increased by 26 percent (340,000 RVDs) with an annual average increase of approximately 0.6 percent. Table II-2 below displays use by specific activities categorized as dispersed recreation. These activities are also either currently provided by outfitter and guiding services or are included in those requested.

**Table II-1. Change in Use for Dispersed Recreation Activities 1989-2000**

Activity	RVD Range 1989/2000	% Change
Hiking/Walking/Backpacking	77,500 / 123,200	+ 1.20%
Horseback Riding	39,400 / 84,200	+ 1.96%

Activity	RVD Range 1989/2000	% Change
Mountain Climbing	2,400 / 4,400	+ 1.53%
Bicycle (mountain bikes and road bikes)	5,800 / 8,900	+ 1.17%
Ice/Snow Travel (Snowmobiling)	39,700 / 52,300	+ 0.76%
Special Landcraft (ATVs, etc)	2,700 / 14,300	+ 4.81%
Hunting, Big Game	34,400 / 41,200	+ 0.49%
Nature Study	8,900 / 16,400	+ 1.60%
Touring – Guided	500 / 100	+ 3.22%
Walking – Guided	500 / 4,500	+ 9.76%
Fishing	86.3 / 85	+ .026%

Dispersed recreation use, especially snowmachine and ATV (all terrain vehicle) motorized use, has increased since 1985. There were few if any ATVs on the forest at that time and now there may be several hundred on any weekend day on the forest. The use of ATVs is very popular for summer riding and camping and also during the fall hunting season. Because of this growth, there are more conflicts for those seeking a more primitive experience on the forest. Snowmobile use has also increased since 1985. The number of snowmobile registrations for the Bighorns increased an average of three percent per year over the past five years (1997-2002). In addition to the actual increase in use of ATVs and snowmobiles on the Bighorn National Forest, the technology itself is ever-improving, allowing users an ever-increasing range of movement within the forest in spite of challenges from terrain, soil/snow composition, etc.

### **CRITERIA FOR DETERMINING NEED**

- Skills and Equipment
- Knowledge
- Safety
- Education
- Demand/Utilization
- Feasibility of services offered elsewhere
- Contribution to local economies
- Capability of resources

### **Evaluation Criteria for Assessing Need for Outfitting and Guiding Assistance**

1. Skills and equipment – outfitting and guiding skills and equipment are needed by a portion of the public because of one or more of the following:
  - a. Specific skills required for activities appropriate for the area require substantial time and/or talent to learn.
  - b. Learning necessary skills and participating in the activity requires acquisition and consistent use of expensive, specialized equipment for which the public could not or normally would not expend the dollars or time.

- c. The skills required are so unique that outfitting and guiding assistance is almost a prerequisite if the public is to have any opportunity to participate in and enjoy the activity.
- 2. Knowledge – Outfitting and guiding knowledge of the resources within the activity area and the activity itself is needed by the public, especially nonresidents, in order to enjoy recreational opportunities in a manner that reduces resource damage and user conflicts. This includes knowing where and by what method to best access and travel through an area.
- 3. Safety – Outfitting and guiding special skills and equipment are needed to assure a reasonable level of safety for the participants. Without outfitter assistance, members of the public could seriously endanger their health or lives.
- 4. Unique service provided – Outfitting and guiding assistance is needed to:
  - a. Provide recreational opportunities for people with disabilities
  - b. Provide environmental education and interpretive information
  - c. Provide for additional recreational activities that are not in conflict with management area goals and objectives and which will:
    - 1. Increase the diversity of recreational activities and public enjoyment
    - 2. Encourage innovation in the outfitter industry.
- 5. Wilderness Dependency – Outfitting and guiding assistance is typically needed for the following types of activities:
  - a. Roving trips that last over five days or cover over 20 miles and do not operate out of a single camp for over three days except during hunting season.
  - b. Educational trips focusing on a specific resource for conditions found only in the Cloud Peak Wilderness.
  - c. Trips in which solitude and unconfined primitive recreation are the central components of the experience.
- 6. Education – Outfitting and guiding assistance may be needed for obtaining historical and/or biological/botanical information and history of the forest or a specific area within the forest. This education can help stimulate a greater appreciation and protection of forest resources by prospective clients/publics.
- 7. Demand/Utilization – Is a particular service currently being provided and if so, to what degree of utilization and capability? Are there demands for services not currently being offered?
- 8. Feasibility of services offered elsewhere – What is the potential for existing and demanded services being conducted or offered on non-NFS lands?
- 9. Contribution to local economies – What can outfitting and guiding business bring to the local businesses?
- 10. Capability of resources – Are the resources located on the forest capable of withstanding pressure from outfitted use?

Based on the potential activities identified in the public comment period and from the national and local use projections, Table II-5 displays each of the above criteria by activity and rates the level of need for outfitter guide services.

**Table II-5. Summary of Evaluation Criteria Rating by Type of Activity**

Type of Activity and Criteria	Rating Summary
Horseback/Camping/Fishing 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	High Skill required High cost of stock/equipment High to moderate High for extended length trips High for extended length horse trips High for extended length trips Low Being met Moderate Low Moderate
Day Horseback Rides 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Moderate Skill required, High cost of stock/equipment Low Moderate - Low Low Low Low Under-represented Moderate Moderate to high Moderate
Fishing 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Moderate Skill required, Moderate to low cost for equip. Moderate Low Low Low Low Being met Low Moderate to high High
Cattle Drives 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Moderate Skill required, High cost for stock/equipment High to Moderate High for extended length trips High for extended length trips Low Moderate to high Being met Low Low Moderate



Type of Activity and Criteria	Rating Summary
<b>Rock and Ice Climbing</b> 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	High Skill required, Moderate cost for equipment Moderate High - Moderate Moderate Low Low Under-represented Low to moderate Moderate Moderate
<b>Backpacking</b> 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Moderate to low Skill required, Moderate cost for equip. Moderate High for extended length trips High for extended length trips High for extended length trips Low Being met Low Low to moderate High
<b>Big Game Hunting (includes spring bear)</b> 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	High Skill required, High cost of stock/equipment High to moderate High for extended length trips High for extended length horse trips High for extended length trips Low Over-represented Low Moderate Moderate
<b>Snowmobiling</b> 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Moderate Skill required, High cost for equipment Moderate Moderate High Not permitted Low Being met Low High Moderate to High

Type of Activity and Criteria	Rating Summary
Dog Sled Tours 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	High Skill required, Moderate cost for dogs/equipment Moderate to low depending on location Moderate High Low Moderate Under-represented Low Low to moderate Moderate
Lion Hunting 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	High to low Skill required, Moderate cost for dogs/equip. High to low High Low Low Low Being met Low to moderate Moderate to low Moderate
Motorized Vehicle Tours (Roads) Wildlife, Geology, History, etc. 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Low Skill required, Moderate cost for vehicles/equip. Low Low Moderate to low Low Moderate to high Under-represented Low Moderate to high Moderate to high
ATV Tours 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Moderate Skill required, High cost for equipment Moderate Moderate Moderate Not permitted Low Under-represented Low Moderate to high Low to moderate

Type of Activity and Criteria	Rating Summary
Photography Trips 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Low Skill required , Moderate cost for equipment – depends on if clients using own equipment Low Low Moderate to low Low Moderate to high Under-represented Moderate to low Moderate to high High
Mountain Bikes – drop camps/hiking 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Moderate to high skill required, Moderate cost for equip. Moderate to high Moderate to high Moderate Not permitted Low Under-represented Low Moderate to high Moderate
Non-Motorized Historic, Natural History, and Geology Tours (hiking and horseback) 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Moderate Skill required, High cost of stock/equipment for horseback Low Moderate - Low Moderate to high Low High Under-represented Low Moderate to high High
4-Wheel Drive Tours 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Low Skill required, Moderate cost for vehicles Low Low Low Not permitted Low Under-represented Moderate Moderate to high Moderate

<b>Type of Activity and Criteria</b>	<b>Rating Summary</b>
Shuttle Services/Packing Services, Drop Camps 1. Skills & Equipment 2. Knowledge 3. Safety Risk 4. Unique Services Provided 5. Wilderness Dependency 6. Education Opportunities 7. Demand/Utilization 8. Feasibility elsewhere 9. Local economies 10. Capability of resources	Low Skill required, Moderate cost for vehicles Low Low Low Not permitted Low Under-represented Moderate Moderate to high High

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## PART III – ALLOCATION OF RECREATION USE

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### SUMMARY

In the representative compartments, the Forest is from 0.2% to 504% of the physical capacity for trail based activities. The District ranges are as follows:

Tongue: 0.2% to 2%

Medicine Wheel Paintrock: 2% to 504% (Many of the days authorized are not being utilized and numbers are being reduced to reflect actual use as permits are re-issued)

Powder River: 0.0 to 102.0%

The only activities that fall under area-wide capacity would be fishing and hunting and the days are insignificant compared to total physical capacity. If you look at number of days authorized for fishing compared to total miles of fishable stream in those compartments, we have the following per district:

Tongue: 40 days for 68 miles in one compartment and 11 days for 19 miles in another compartment. This is 23% of physical capacity (using a trail based coefficient for SPNM/SPM/RM non-forested which is 2.5)

Medicine Wheel Paintrock: 72 days for 33 miles in the non-Wilderness and 110 days for 16 miles in the Wilderness in one compartment. This is 31% of physical capacity (uses blended coefficient of 1.625 for P/SPNM/SPM/RM non-forested).

Powder River: 164 days for 117 miles of streams. Six non-wilderness compartments have 103 miles of streams and one wilderness compartment has 14 miles of streams. This is 25% of the physical capacity using a blended coefficient of 1.625 for P/SPNM/SPM/RM.

For hunting, the authorized service days are much less of a total percentage because so much of the use is spread over numerous compartments.

Of the activities identified in the Needs Assessment completed for the Forest Plan Revision and incorporated into our current Capacity Study document, the breakdown is as follows:

Activities where Demand is currently being met:

Horseback/Camping/Fishing

Cattle drives

Fishing

Backpacking

Big Game hunting

Snowmobiling

Lion Hunting

Activities that are currently under-represented:

Day horseback rides

Rock and Ice climbing

Dog Sled tours

Motorized vehicle tours (roads)/Wildlife/Geology/History, etc.  
 ATV Tours  
 Photography trips  
 Non-Motorized Historic, Natural History, and Geology tours (hiking/horseback)  
 4-Wheel drive tours  
 Shuttle services/Packing services/Drop camps

Additional requests for permits that have been submitted since the Needs Assessment does not identify any additional services.

**HUNTING**

According to the Needs Assessment, hunting outfitting is currently maximized and because of Game and Fish drawings and quotas and easy access within the forest, many out-of-state hunters don't want outfitted services. Authorized service days for hunting use is compared to the actual number of tags issued to non-resident hunters to help determine an appropriate allocation. Information from Wyoming Game and Fish was obtained over the past five years. The use is displayed by Hunt Area by District, although hunt area totals are only given by area, not by district. Information was not available on number of tags issued for mountain lion and bear. Deer and antelope areas also include private, state, and BLM land so it is impossible to determine use on NFS lands. Consequently the only capacities that can be determined are for elk and moose hunting.

Service day use Forest wide has ranged from 4% to 141% of the highest number of non-resident tags issued in any given year. Refer to Table III-1. District ranges are as follows:

Tongue: 20% - 35%  
 Medicine Wheel Paintrock: 34% -141%  
 Powder River: 4% - 42%

**Table III-1. Authorized Service Days by Hunt Area**

Hunt Area	District	Highest # of Tags Issued	Avg Trip Length	Capacity	SD Avg/%
Elk 34	PR	207	6	1242	45/4%
Elk 35	PR	62	6	372	44/12%
Elk 36	PR	72	6	432	185/42%
Elk 37	TNG	120	5	600	137/23%
Elk 38	TNG	200	6	1200	247/21%
Elk 39	MWPR	35	7	245	346/141%
Elk 40	MWPR	84	4	336	351/104%
Elk 41	MWPR	132	4	528	180/34%
Elk 42	MWPR	16	8	128	154/120%
Moose 1	TNG	13	7	91	32/35%
Moose 34	PR	13	7	91	15/16%
Moose 42	PR	1	7	7	0/0%

Blending historic forest use data with the national projection index for dispersed motorized recreation, by the year 2055, hunting use is expected to increase 31%. The Forest recommendation is to leave service day authorizations as they are and allow 10% for potential growth (where possible) for existing permits until the next planning period. In addition, a pool of temporary days may be set aside for additional use needs for any given year for outfitters currently permitted on this forest and adjacent forests.

## **SNOWMOBILE**

Miles of groomed snowmobile trails were split out between the northern and southern portions of the Forest. The ROS trail-based coefficient (average of 6.5 for forested and non-forested) for Semi-Primitive Motorized was multiplied by the trail mileage and then by length of season and pattern of use coefficient to determine the capacity. Authorized service days are compared to these capacities in Table III-2. Service day use has averaged 1% of capacity for the northern portion of the forest and 1.5% for the southern portion.

Forest data indicates that snowmobiling use increased 32% from 1989-2000. Blending historic forest use data with the national projection index for dispersed motorized recreation, by the year 2055, this type use is expected to increase 24%. Recent drought conditions have had negative impacts to existing snowmobile outfitter guides, and non-use for many authorized service days has been granted. The needs assessment recommended that snowmobiling guided use be kept at current levels as the demand for this service is being met.

Use data was obtained from the State snowmobile registrations and the 2000-2001 State Snowmobile Survey. To determine the season use estimate, the average number of use days for both resident and non-resident users was taken and multiplied by the five-year averages of snowmobile registrations obtained from the State Trails program as follows:

Five-year average for resident on N½ = 1,643 x 19 (average # of use days) = 31,217  
Five-year average for non-resident on N½ = 4,397 x 10.8 (average # of use days) = 47,488  
Total for N ½ = 78,705

Five-year average for resident on S½ = 871 x 19 (average # of use days) = 16,549  
Five-year average for non-resident on S½ = 808 x 10.8 (average # of use days) = 8,726  
Total for S½ = 25,275

These sources indicate that total use for the northern half of the forest is at 53% of capacity and the southern half is at 26% of capacity. The recommendation is to increase the existing service day authorization to approximately 2% of total capacity for the northern portion of the forest. This would allow for growth for current outfitters and set the allocation at 3,000 service days. The recommendation for the southern half of the forest is to keep the service day use at 1,500. Refer to Table III-2.

**Table III-2. Allocation for Snowmobile Tours**

Area	Miles of Snow Trail	SPM Coeff	Length of Season	Pattern of Use Coeff.	Season Capacity	Season Use Estimate	% of Capacity	SD Avg/%	Commercial Allocation
N ½	241.75	6.25	108	0.9	146,863	78,705	53%	2100/1%	3,000
S ½	157.90	6.25	108	0.9	95,924	25,275	26%	1,500/1.5%	1,500

**HORSEBACK/CAMPING/FISHING; CATTLE DRIVES; FISHING; BACKPACKING**

The needs assessment recommended that these activities be kept at current levels for service day use as the demand is being met. In representative compartments Forestwide, the number of authorized service days for all area-based activities is significantly less than 1% of total capacity. The trail-based capacities differed slightly district by district as follows:

Tongue: 0.01% and 23% of total capacity with an average of 1.5%. The recommendation is to leave authorized service days for these activities as is and add 10% for potential growth for existing permits until the next planning period.

Medicine Wheel/Paintrock: 2% and to 504% (small compartment and even though a large amount of days are authorized hardly any are used) of total capacity with an average of 20.7% (without the 504% compartment included). Demand for horseback activities is being met. The recommendation is to leave authorized service days for horseback activities as is and add 10% for potential growth for existing permits until the next planning period. The district will look at adding opportunities for under-represented trail-based activities if capacity exists in the compartment.

Powder River: 0.0% to 47.4% of capacity for compartments. The demand for horseback activities is met on the eastern portion of the district. The western portion would be met if the currently available 600 days were put under authorization.

**DAY HORSEBACK RIDES; ROCK AND ICE CLIMBING; DOG SLED TOURS; MOTORIZED VEHICLE TOURS; ATV TOURS, PHOTOGRAPHY TRIPS; NON-MOTORIZED HISTORIC/NATURAL HISTORY/GEOLOGY TOURS; 4-WHEEL DRIVE TOURS; SHUTTLE SERVICES/PACKING SERVICES/DROP CAMPS**

The needs assessment identified these activities as ones that are currently under-represented on the Bighorn NF. Many of these activities are noted as ones where both local and national use projections indicate increases in use over the next 50 years. These activities are all trail-based activities.

Recommendation is to begin at a 10% allocation for outfitted services for each compartment, and vary up or down depending on specific conditions within the compartments. Each compartment will have a justification on how the final allocation was determined.

The allocation of commercial recreation use is based on the overall capacity determination, as described in Part 1 of this document. Recreation use is allocated to three categories: general public, institutional (semi-public), and commercial permit holders or outfitter-guides. All three represent use by the public. Whether



people do the trip on their own or are with an organized group, or have the assistance of a professional outfitter-guide determines the category to which they are allocated.

## **DETERMINATION OF MIX OF COMMERCIAL, SEMI-PUBLIC, AND GENERAL PUBLIC USE**

One of the key decisions is the mix or percentage that constitutes an allocation between commercial, semi-public, and general public use in an area. Allocation will be determined within compartment boundaries.

There are no magic formulas for determining the correct mix of uses. Traditionally, it has been a judgmental decision, often based on historic patterns. As we take a thorough look at our objectives and needs, historical patterns may not be what the future holds. In areas where capacity is not a problem, these mixes will not become the issue. Where there is competition for a limited allocation, however, the question of who gets what piece of the pie becomes critical.

Some considerations that can be used to determine the appropriate mix are:

- Availability of services and experience at other locations, on both private and public lands. Is the service provided dependent on the resources available in the area?
- Assure that the general public is not pushed out or adversely affected by a preponderance of commercial-use activities.
- Wildlife management considerations.
- Potential conflicts with other resource users and activities.
- Type of clientele involved (disabled).
- Forest objectives.
- Terrain, distances from access points, safety considerations.
- Traditional patterns of commercial and public use.
- Interpretation needs

Table III-3 displays available acres, area and trail capacities, miles of fishable stream and miles of open road by compartment.

Table III-4 displays the allocation for trail-based recreation use on the BNF by compartment by district. Allocation is shown by season (summer/fall/winter).

- **Commercial allocation** is the total visitor days allocated to commercial recreation uses within a compartment, based on the total trails capacity, the needs assessment, and any specific justification that may exist, which is explained in the accompanying narrative.
- **Semi-public allocation**, a percentage of the total trail capacity is taken to derive this figure. This temporary pool can be used for semi-public groups that apply for available days.
- **General public use days** available within a compartment.

The narrative that follows the tables corresponds to the tables by the compartment name and number.

## APPENDIX A

### Recreation Use and the Forest Service Recreation Agenda

Recreation participation has grown, and continues to grow with the expanding population. Survey results from the National Survey on Recreation and the Environment (NSRE) estimates that “98.5 percent of Americans 16 years of age or older participated in at some type of outdoor recreation in the 12 months prior to being interviewed, which means that almost 210 million people age 16 or older are involved in some form of outdoor recreation.” (Cordell, March 2002).

In response to the growing importance of the National Forests for recreation, the Forest Service, in the spring of 2001, finalized a Recreation Agenda meant to direct management on Forests into the Agency’s second millennium (USDA Forest Service 2000a). As stated in the Agenda, “National Forests have a unique niche of nature-based, dispersed recreation to offer, including undeveloped settings, built environments reinforcing the natural character, and wildland settings that complement enjoyment of these special places.”

Although there are numerous opportunities to recreate off of the Forest since Wyoming is 49% federally owned, the Bighorn Mountains offer an environment which is in sharp contrast to the surrounding semiarid and desert lands. As a result, they will remain particularly attractive to the recreating public.

Outdoor recreation expenditures contribute significantly to Wyoming’s economy. Tourism in Wyoming is the second largest industry behind minerals. Recent studies indicate that visitors have spend \$34.6 million and generated \$56.3 million in total economic impact for the four county area surrounding the Big Horn Mountains.

National trends in outdoor recreation will also affect visitation in the Forest. Recreational use of forests and grasslands has been increasing for decades, and is expected to continue to increase. Almost 99 percent of the U.S. population 16 years old and older participate in some form of outdoor recreation (NSRE, 2002). The most popular activities are walking, family gathering, viewing natural scenery, visiting a nature center, nature trail or zoo and picnicking. The five fastest-growing outdoor recreation activities through the year 2050 are projected to be visiting historic places, downhill skiing, snowmobiling, sightseeing, and participating in nonconsumptive wildlife activity. The Rocky Mountain region is expected to experience a significant increase in hunting participation though 2050. Other national trends that will most likely affect the Bighorn, given its location and what it has to offer, include increased visitation by families, single people and the elderly. Use by the elderly is likely to increase proportionately faster than the other groups given the national aging phenomenon. At the same time, use by younger (20-30 year olds) may increase as the popularity of high risk, individual sports such as rock and ice climbing and back country skiing increase.

Nationally, ATV and snowmobile use continue to grow in popularity. On the Bighorn, an increase in use of ATVs and snowmobiles will increase conflicts between them and the non-motorized user groups. In addition, these motorized vehicles will make larger and larger portions of the Forest accessible to a greater number of users, which will impact recreational experience, habitat and aesthetics. According to SnoWest magazine (2002), the Big Horn Mountains are rated ninth in the nation among the “Top 10” snowmobile trail systems. However, results from the Bighorn Social Assessment (2002) indicate that fewer than five percent of the four-county area respondents list snowmobiling, skiing/snowshoeing, or ATV/off road among their three favorite Forest activities. Snowboarders are a growing use group as are cross-country skiers. Day hiking and walking are also increasingly popular pastimes.

Dispersed recreation includes all those activities that occur outside of developed sites (i.e., campgrounds, picnic areas, visitor centers, etc) and wilderness. From 1989 to 2000, dispersed use accounted for 70 percent of the total Forest RVDs. Dispersed use increased at an average of 2.25 percent. All activities identified in dispersed use increased during this period except fishing, which remained fairly constant.

Many areas off the Forest provide hunting opportunities for deer, antelope, and small game. Elk, moose, and lion hunting occur almost entirely on the Forest. Quality fishing opportunities are available in areas off the Forest, but occur in different settings and sometimes for different fish species than on the Forest.

Forest trails provide the means of access for many dispersed recreation activities. The Forest has approximately 1,158 miles of trail with 143 miles within the Cloud Peak Wilderness, including 12 miles of National Recreation Trail (Bucking Mule Falls). This mileage also includes groomed snowmobile and ski trails. There are over 700 miles open to motorized vehicles. There are a total of 11 developed trailheads with a capacity of 1,001 PAOTs. The majority of trailheads are undeveloped with no facilities, some with spacious area for parking, others with limited parking area. Motorized trails include those trails where ATVs and/or dirt bikes are acceptable uses. Nonmotorized trails include those trails for hiking, horseback riding and mountain biking. Total miles includes miles of trail added to the forest trail system with the 1997 Little Goose/Park Reservoir decision on the Tongue Ranger District and miles of trail in the Cloud Peak Wilderness. Trail use projections are included in dispersed recreation and wilderness projections. Table A-1 displays approximate trail miles on the Bighorn National Forest and Table A-2 displays summer use at developed site trailheads and trails.

**Table A-1. Miles of Trail**

Use Type	Snow Trails	Non-snow Trails	Totals by Use Type
Motorized	286	432	718

Non-Motorized	41	399	440
Totals by Snow/ Non-snow	327	831	1,158

**Table A-2. Summer Use Developed Site Trailheads and Trails**

Trail and Trailhead Location	Non-motorized Trails outside Wilderness (miles)	Miles of Wilderness Trails	Miles of Motorized Trails	Capacity (PAOT)*	Season-long Capacity**
Bucking Mule Falls	12	0	2.6	90	12,510
Coney	5.6	1.8	0	80	11,120
Battle Park	.9	6.4	18.5	75	9,300
Circle Park	2.4	13	0	70	11,550
Edelman	.6	5.6	0	50	6,200
Hunter	26.7	22.7	1.8	133	21,945
West Tensleep Lake	3.6	17.5	0	250	34,750
Elgin Park	2.6	0	9.3	70	11,550
Paintrock Lake	0	8.3	13.9	60	7,440
Coffeen Park	1	20.1	0	25	3,475
<b>Total</b>	<b>55.4</b>	<b>95.4</b>	<b>46.1</b>	<b>1,001</b>	<b>129,840</b>

\*PAOT Capacity is defined as persons at one time per parking site.

\*\*Season-long Capacity is PAOT capacity multiplied by number of days in a season.

Season-long capacities for trailheads are calculated based on design capacity of 3.5 people per parking site per day, for the whole season. Use is generally split unevenly between weekend and weekday, but this system provides an average. All developed facility capacities are estimated using this same method. The majority of trails (634 miles) are not accessed by a developed trailhead, although these facilities attract a large share of the overall users.

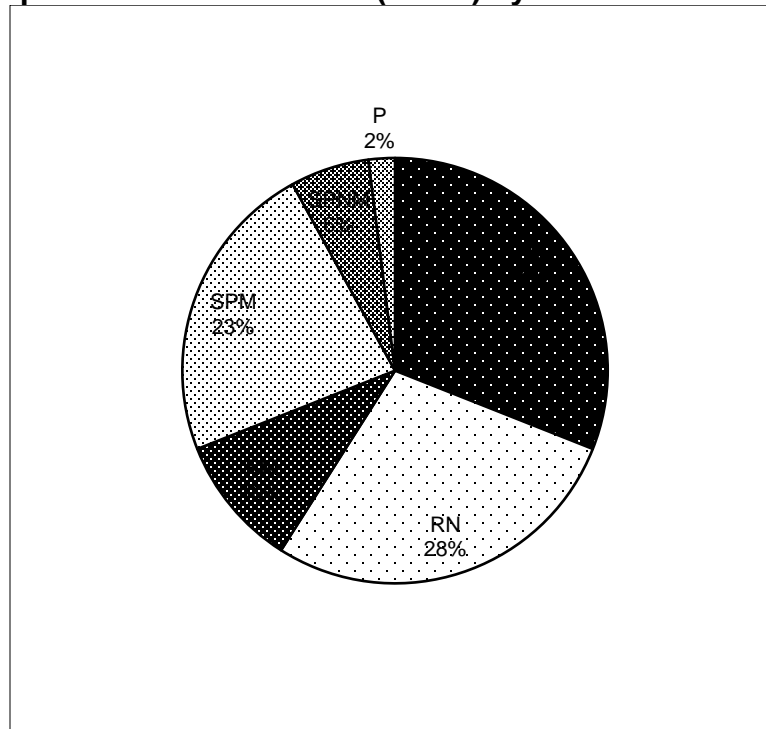
Several caves are located within the Forest, four of which have been determined as significant, as defined and described in the Federal Cave Resources Protection Act, of 1988. One of these caves, Tongue River cave, receives a tremendous amount of recreational use due to its relatively easy access and close proximity to several communities.

### **Dispersed Recreation Demand and Trends**

Demand for dispersed recreation opportunities is high and expected to rise. From 1991-2000 dispersed recreation accounted for 70 percent of the total

Forest RVDs and increased at an average of 2.25 percent. Original estimates in the 1985 Forest Plan have been updated and revised using historical growth patterns (Bighorn RVD data specific to dispersed recreation) adjusted to reflect the national projection index by activity (Bowker, English, Cordell). This data was further broken down into use by ROS class based on current use patterns. These estimates are very similar to those estimated in the original Forest Plan and the ASQ Amendment.

**Figure A-1. Dispersed Recreation Use (RVDs) by ROS Class**



R=Rural; RN=Roaded Natural; RM=Roaded Modified; SPM=Semi-primitive Motorized; SPMN=Semi-primitive Non-Motorized; P= Primitive

The NSRE report indicates that participation in numerous activities categorized as dispersed recreation can be expected to increase over the next 50 years (Bowker et al. 1999). From 1982 to 1995, NRSE reports that bird watching increased significantly at 155 percent; sightseeing activities increased 40%; backpacking 73%; off-road vehicle driving 44%; hiking 93%; primitive area camping 73%; snowmobiling 34%; cross-country skiing 23%.

Forest-wide use data indicates that snowmobile use has increased 32 percent from 1989 to 2000. Other winter use (ice skating, sledding, snowplay, and cross-country skiing) increased 91 percent during this time.

Use projections based on historic RVD data and national projection index by Bowker et al. 1999 predict that by 2055 dispersed non-motorized recreation will

notably increase by 128 percent; dispersed motorized recreation will increase 24 percent; big game hunting will increase 31 percent; fishing will increase one percent; and non-consumptive wildlife recreation will increase tremendously at 150 percent.

Summer motorized trail uses include riding off-road vehicles (ATVs, OHVs, and ORVs), 4-wheelers, and motorbikes on rough trails and 2-track roads. Motorized trail participation rates increased tremendously between 1989 and 2000, over 400 percent. This was overwhelmingly from ATV, as motorcycle use decreased. According to the Bighorn Social Assessment, respondents indicated a desire for designated ATV trails. Neither snowmobiling nor ATV/off road vehicle use ranked among the top favorite activities for these local respondents. This points to the fact that most of the increase in motorized use is from non-local visitors.

## APPENDIX B

### Current Outfitter and Guide Permits authorized on the Bighorn National Forest

<b>TONGUE RANGER DISTRICT</b>			
<b>Permittee</b>	<b>Activity</b>	<b>Season</b>	<b>Service Days</b>
Bear Lodge	snowmobile	winter	1,000
Black Mountain Outfitters (Stewart)	archery, rifle, big game	fall	42
Grizzly Outfitters (Benton)	archery, big game	fall	36
	rifle, big game	fall	75
	lion	winter	20
Angling Destinations (terminated)	fishing	summer	15
Big Horn Safari (terminated)	snowmobile	winter	600
Bliss Creek Outfitters (Doud)	spring bear, horseback	spring	56
The Trophy Connection " (Helferich)	trail rides, camping	summer	150
	spring bear	spring	28
	archery, rifle, big game	fall	84
Eaton Brothers	trail rides, camping, fishing	summer	700
HF Bar (Schroth)	trail rides, camping	summer	550
Big Horn Mountain Outfitters (Johnson)	moose	fall	6
Double Rafter Cattle Drives " (Kerns)	cattle drives	summer	180
	trail rides, camping	summer	250
Beaver Trap Outfitters (Adney)	spring bear	spring	30
	archery, big game	fall	42
	rifle, big game	fall	56
Powder Horn Outfitters (Powers)	lion	winter	20
	rifle, big game	fall	40
Triple Three Outfitters (Smith)	archery, big game	fall	60
Spear-O-Wigwam	trail rides, fishing, camping	summer	1,000
Elk Rock Inc. (Paul Wallop)	fishing	summer	65
Nelson Outfitters (Dave Nelson)	spring bear	spring	35
Wyoming Wildlife Outfitters (Rob Marosok)	lion	winter	12
<i>Total use by season– Tongue Ranger District</i>		spring	149
		summer	2,910
		fall	441
		winter	1,652
<b><i>Total service days offered - Tongue Ranger District</i></b>			<b>5,152</b>
<b>POWDER RIVER RANGER DISTRICT</b>			
<b>Permittee</b>	<b>Activity</b>	<b>Season</b>	<b>Service Days</b>
Bear Track Outfitters	pack trips, drop camps, fishing	summer	300
Big Horn Basin	pack trips, fishing	summer	80
	hunting	fall	15



Broken Horseshoe	hunting	fall	75
Dairyland Expeditions	rock climbing	summer	160
D&D Outfitters	lion	winter	20
<b>Permittee</b>	<b>Activity</b>	<b>Season</b>	<b>Service Days</b>
Deer Haven Lodge	snowmobile	winter	1,000
Granstrom Outfitters	pack trips, hunting, fishing	summer	80
Just Gone Fishing	fishing	summer	130
Klondike Ranch	hiking, trail riding, fishing	summer	50
Meadowlark Lake Resort	snowmobile	winter	750
Outlaw Ranch	backpacking	summer	360
Paradise Ranch	trail rides, camping, fishing	summer	5,050
Pines Lodge	trail rides	summer	222
Rafter B Outfitters	drop camps, fishing	summer	20
	hunting	fall	55
South Fork Inn	trail rides, camping	summer	4,000
Sports Lure	fishing	summer	42
Trails West Outfitters	trail rides, drop camps	summer	214
	hunting, pack service	fall	100
Trophies Unlimited	lion	winter	20
Big Horn Cowboys	trail rides, camping, drop camps, fishing	summer	600
YMCA Camp Widjiwagan	backpacking	summer	300
<i>Total use by season– Powder River Ranger District</i>		spring	0
		summer	11,608
		fall	245
		winter	1,790
<b>Total service days offered - Powder River Ranger District</b>			<b>13,643</b>
<b>MEDICINE WHEEL/PAINTROCK RANGER DISTRICT</b>			
<b>Permittee</b>	<b>Activity</b>	<b>Season</b>	<b>Service Days</b>
Big Horn Outfitters (Nation)	pack trips	summer	82
	hunting,	fall	94
	Lion	winter	Included in big game days
	Spring Bear	spring	Included in big game days
Diamondtail Outfitters (Stan Flitner)	camping	summer	50
	hunting	fall	42
Hideout Ranch	trail rides, cattle drives	summer	250 (+160 temp available)
	Trail rides leased from Ranger Creek	summer	85 temp days
	hunting	fall	40
	Lion		Included in big game days
	Snowmobile	winter	250 temp days
Lazy Boot Outfitters (Forrester)	Fishing, hiking, photography, horseback archery big game	summer	206 (+110 temp available)
		fall	30
Kedesh Guest Ranch	trail rides	summer	100
NOLS	education, backpacking	summer	1,790
Paintrock Adventures	drop trips pack trips, fishing	summer	166

	hunting	fall	138
Paintrock Outfitters	fishing, trail rides	summer	800
	hunting	fall	550

<b>Permittee</b>	<b>Activity</b>	<b>Season</b>	<b>Service Days</b>
Rawhide Outfitters	horseback riding, camping	summer	120
	archery, big game	fall	60
	rifle, big game	fall	162
Ranger Creek Ranch	trail rides, camping	summer	Leased to Hideout
	hunting	fall	Leased to Hideout
	snowmobile	winter	500
Rough Country Outfitters	trail rides, pack trips, fishing	summer	120 temp days
	archery, big game	fall	35 (+49 temp available)
	rifle, big game	fall	144 (+70 temp available)
Shell Creek Guest Ranch	camping, trail rides	summer	51 (+150 temp available)
	hunting	fall	74
	spring bear	spring	Included in big game days
	lion	winter	Included in big game days
Michael Smith Outfitters	hunting	fall	77
Great West Outfitters (Szewc)	spring bear	spring	25
	hunting	fall	168
	snowmobiling	winter	130
Tinney & Sons	hunting	fall	36 (+38 temp available)
Wyo. High Country LLC	trail rides, pack trips, fishing	summer	290 (+95 temp available)
	archery, big game	fall	28 (+140 temp available)
	rifle, big game	fall	63 (+ 105 temp available)
	snowmobile	winter	80
	spring bear	spring	Included in big game days
	lion	winter	Included in big game days
<i>Total use by season– Medicine Wheel / Paintrock Ranger District</i>		spring	25 *
		summer	3,905 (+720 temp available)
		fall	1,741 (+402 temp available)
		winter	710 (+250 temp available) *
<b><i>Total service days offered - Medicine Wheel / Paintrock Ranger District</i></b>			<b>6,381 (+1,372 temp available)</b>

- Three outfitter/guide operations include spring bear and lion hunt service days in with the big game service days.

## **APPENDIX C**

### **Mailing list for outfitter/guide needs analysis (February 2002)**

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Cody, Wyoming 82414

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& Professional Guides  
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Belinda Daugherty  
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Stan Armstrong  
#64 Crazy Women Canyon  
Buffalo, WY 82834

Jerry Kysar  
1211 S. Lane  
Worland, WY 82401

Leslie Flocchini

T James Tinney  
P.O. Box 135  
Vernon, AZ 85940

Julia Dube  
The Trophy Connection  
440 Adkins Valley Lane  
Sheridan, WY 82801

The Outdoorsman  
632 Big Horn Ave.  
Worland, WY 82401

Kris Weum  
YMCA/Camp Widjiwagan  
3788 North Arm Road  
Ely, MN 55731

Rick Washut  
5 Red Cloud Drive  
Story, WY 82842

Ted Schumacher  
P.O. Box 578  
Buffalo, WY 82834

Tim Vadders  
Rt 1 Box 258  
Spring Valley, MN 55975

J.H. Kling  
438 N. Adams Ave.  
Buffalo, WY 82834

Ken Welshimer  
TA Ranch  
P.O. Box 2437  
Gillette, WY 82717

Greg Turner  
31 Cedar Mountain Dr.  
Cody, WY 82414

Len Gross  
3 Birchwood Heights Dr.  
Ottumwa, IA 52501

Jim Ratz

Women & Nature  
7835 State Hwy. 59 S.  
Gillette, WY 82718

Brian Ensign  
2145 Passi Rd.  
Ely, MN 55731

Robert deYoung  
High Lonesome Outfitters  
16410 84<sup>th</sup> St. NE  
Lake Stevens, WA 98258

Boys & Girls Club of the Big Horns  
235 S. Main  
Buffalo, WY 82834

Randy Caillier  
1061 Secret Trail  
Sugar Hill, GA 30518

Mikel Carmon  
Spirit Riders Wagon Train  
5897 South 12 Mile Road  
Casper, WY 82604

Lorrie Wnuk  
3330 Navarre  
Casper, WY 82601

Karl Worth  
717 Fieldcrest Ave.  
Stevens Point, WI 54481

Andrew Puryear  
514 Hwy. 16 E.  
Buffalo, WY 82834

Debbie Osmundsen  
47 N. Lobban  
Buffalo, WY 82834

Karen Fettig  
689 State Hwy. 31  
Manderson, WY 82432

Sherry Bailey  
2603 Grand View Dr.  
Gillette, WY 82718

Kathy Watson

Jackson Hole Mtn. Guides  
8 Pheasant Run Rd.  
Lander, WY 82520

Brent & Jill Switzer  
8741 Hwy 14  
Ranchester, WY 82839

Johnson County YMCA  
c/o Doug Schultze  
101 Klondike Dr.  
Buffalo, WY 82834

Ron Edmiston  
190 Shell Cr. Rd.  
Buffalo, WY 82834

Ireta Remsburg  
P.O. Box 165  
Greybull, WY 82426

Anderson Tours  
Gary & Bonnie Anderson  
430 High St.  
Buffalo, WY 82834

J.B. Vondra  
P.O. Box 404  
Evansville, WY 82636

Trail's End Ranch  
P.O. Box 581  
Ekalaka, MT 59324

Tommy Caudle  
1569 Road 9 1/2  
Lovell, WY 82431

Gail Granum  
827 Cow Creek Rd.  
Gillette, WY 82716

Jerry Welfl  
P.O. Box 241  
Worland, WY 82401

BJ & Mike Carlson  
P.O. Box 98  
Burlington, WY 82411

Steve Dow

110 Quarterhorse Dr.  
Newcastle, WY 82701

Andy Neill  
Joliet Jr. College  
1215 Houbolt Rd.  
Joliet, IL 60431

Dave Nelson  
900 Big Goose Road  
Sheridan, WY 82801

Mary Homan  
1938 West 5<sup>th</sup> St.  
Sheridan, WY 82801

David Hutt  
Story Pines Inn  
Story, WY 82834

Jerry Nelson  
P.O. Box 44  
Ranchester, WY 82839

Dale Rehder  
15 Carl Street  
Ranchester, WY 82839

Jabe Beal  
3110 S. 56<sup>th</sup>  
Omaha, NE 68101

Wade & Chasta Taylor  
28621 Old Hwy. 87  
Buffalo, WY 82834

Christian Bisson  
Northland College  
1411 Ellis Ave.  
Ashland, WI 54806

Doug Shey  
Voyageur Outward Bound  
P.O. Box 470  
Red Lodge, MT 59068

Casey O'Dea  
P.O. Box 1111  
Buffalo, WY 82834

5 East Court  
Gillette, WY 82716

William Hankee  
Thron Tree Adventures  
P.O. Box 165  
Worland, WY 82401

David Buehrer  
P.O. Box 931  
Gardner, MT 59030

Malcolm Traylor  
520 Upper Prairie Dog  
Banner, WY 82832

Rene Steinhorst  
56 Paradise Park Rd.  
Sheridan, WY 82801

Sue Bond  
807 Woodman Dr.  
Buffalo, WY 82834

Holly Van Zandt  
2413 Lucas Road  
Muscatine, IA 52761

Bill Hankee  
4254 Ashland Road  
Rapid City, SD 57701

Dan Barks  
1119 Granite Street  
Gillette, WY 82718

Pete & Carey Dube  
Bear Track Outfitters  
8885 US 16 West  
Buffalo, WY 82834

Al Martin  
Beaver Trap Outfitters  
P.O. Box 22  
Dayton, WY 82836

Robert Meek  
Camp Kooch-I-Ching  
230 Northland Blvd., Suite 327

**Special Use Permit Inquiries 1997 - Present**

**Tongue Ranger District**

Kermit Krokker 935 South Main Sheridan, WY 82801	backpacking, ecology
Dave Nelson 900 Big Goose Road Sheridan, Wyoming 82801	pack trips
David Buehrer P.O. Box 931 Gardner, Montana 59030	historic and natural history tours, hiking and horseback
David Hutt Story Pines Inn Story, Wyoming	fishing trips, guided 4 wheel drive tours
Mary Homan 1938 West 5 <sup>th</sup> Street Sheridan, Wyoming 82801	guided photography trips
Rene Steinhorst 56 Paradise Park Road Sheridan, Wyoming 82801	backpacking and guiding fishing for women
Al Martin	wildlife tours
Malcolm Traylor 520 Upper Prairie Dog Banner, Wyoming 82832	horseback trips up Story/Penrose from Horse corral
Jerry Nelson P.O. Box 44 Ranchester, Wyoming 82839	horseback trips up Tongue River Canyon
Doug Shey Voyageur Outward Bound P.O. Box 470 Red Lodge, Montana 59068	Backpacking
Carmine Loguidice	fishing
Robert Meek	backpacking



Camp Kooch-I-Ching  
230 Northland Blvd., Suite 327  
Cincinnati, Ohio 45246

John Sundberg  
N8890 Forest Lane  
Westboro, Wisconsin 54490

wilderness trips – backpacking, climbing for Bible camp

Allen Williams  
Route 4 96A  
Grandview, Texas 76050

photography and backpacking

Geoff Kuzara

mountain bikes and drop off tours

Tommy Caudle  
1569 Road Nine and one-half  
Lovell, Wyoming

dog sledding

Michael Severance  
430 Tschirgi  
Sheridan, Wyoming 82801

mountain bikes

Steve Edwards

rock climbing

Noel Rader  
6 Cottontail Lane  
Sheridan, Wyoming 82801

snowmobiling

Kathy Johnston  
P.O. Box 64  
Dayton, Wyoming 82836

ATV tours

Bear Lodge

wildlife tours

Bighorn Safari

ATV tours

Kevin Cashman  
Overland  
P.O. Box 31  
Williamstown, MA 01267

hiking, biking, mountain biking

Larry Gold  
1021 Big Goose Rd.  
Sheridan, WY 82801

Horseback trips

Bob Barlow  
Barlow Outfitting  
P.O. Box 3065  
Alpine, WY 82128

Spring bear, summer trips, fall hunting

Glenn Wolzen  
P.O. Box 507  
Hendley, NE 68946

Horseback trips

Tom Wilcock  
Fly Shop of the Big Horns  
227 North Main St.  
Sheridan, WY 82801

Fishing

Kris Powers  
1050 N. Sheridan Ave.  
Sheridan, WY 82801

Mountain Lion guiding

Steward Tennyson  
229 East Lathrop Rd. #19  
Evansville, WY 82363

Backpacking trips

Jim Ratz  
Jackson Hole Mtn. Guides  
8 Pheasant Run Rd.  
Lander, WY 82520

Ice climbing

Andrew Arnold  
Solid Rock  
617 Plaza Court  
Laramie, WY 82070

Camping, backpacking, and rock climbing

Dave Johnson  
1532 DeSmet Ave.  
Sheridan, WY 82801

Elk archery

Randy Reece  
1612 South Thurmond  
Sheridan, WY 82801

Moose hunting

Paul Hansen  
383 Pine Ridge Rd.  
Moorcroft, WY 82721

Hunting

Dale Bakke  
373 Johnson Lane  
Sheridan, WY 82801

Moose hunting

Harry Washut  
P.O. Box 92  
Moran, WY 83013

Horseback day trips out of the Story area

John Johnson  
Seven Cross Adventures

Elk, deer, bear, & lion hunting

Yonkee Land and Livestock  
691 Pass Creek Rd.  
Parkman, WY 82838

Bob Welsh  
87 Deer Run Rd.  
Gillette, WY 82716

Horseback trips

Steven Nephew  
840 N. Carrington  
Buffalo, WY 82834

Mountain Bike rentals @ Trailheads

**Medicine Wheel/Paintrock District**

Tom Goton  
Shell Route  
Greybull, Wyoming 82426

Pat Puckett  
82 Peno Road  
Sheridan, Wyoming 82801

drop camps for backpackers

Gary Fales Outfitting, Inc.  
2768 Northfork Route  
Cody, Wyoming 82414

snowmobiling

Bryce Antley  
P.O. Box 707  
Basin, Wyoming 82410

ATV trail rides

Steven Nephew  
840 N. Carrington  
Buffalo, WY 82834

Mountain Bike rentals @ Trailheads

**Powder River Ranger District**

Peter Kloess  
Sierra Club Outings  
85 2<sup>nd</sup> St. 2<sup>nd</sup> Floor  
San Francisco, CA 94105

Backpacking (CPW)

Big City Mountaineers  
Erin McVoy, Program Director

backpacking; at risk youth

Jake Clark  
Cody, WY

moose hunting

Bob Barlow  
BTNF and Targhee NF permittee  
P.O. Box 3065  
Alpine, WY 83128

moose area 34 (gov. tags)

Boys & Girls Club, Worland

hiking; field trips

c/o Shannon Christian

Steve LaForge  
P.O. Box 168  
Riverton, WY 82501

Lion hunting

Kari Smith and husband  
712B West Sunnyside Lane  
Thermopolis, WY 82443

Elk, antelope, deer, & lion hunting

Sharon Rinker  
Recluse Wyoming School

School field trip

Ted Hamersma

Fishing

Mike Strohbusch

School overnight campout

Jae Camino  
Buffalo High School

School camp trip

Andy Stafford  
Clear Creek Middle School  
Buffalo, WY

School field trip

Bill Hankie  
P.O. Box 165  
Worland, WY 82401

Mountain biking (Old Tensleep Hwy; FR 018)

Larry Marlow  
P.O. Box 770  
Jardine, MT

Educational winter survival; tracking

Syd Sparks  
N8890 Forest Lane  
Westboro, WI 54490

Youth backpacking (CPW)

TA Ranch  
Barbara Madsen  
Buffalo, WY 82834

Trail rides

Ed Stidolph  
4625 Orchard Bench Rd.  
Basin, WY

Pack trips

Todd Harstad  
107 Lower River Rd.  
Fromberg, MT 59029

Trail rides/pack trips: Tensleep Canyon (CPW)

Jilaena Childs  
P.O. Box 257  
Tensleep, WY 82442

Backpacking

BJ & Mike Carlson  
P.O. Box 98  
1100 Lane 38  
Burlington, WY 8241

Andy Neill  
1215 Houbolt Rd.  
Joliet, IL 60431-8938

Paul Nelson

J.H. Kling  
438 N. Adams Ave.  
Buffalo, WY 82834

Fly fishing

Dale Parrish  
Tensleep, WY 82442

Snowmobile tours

Jon T. Kilpinen  
Valparaiso, IN 46383-6493

Guide

Doug Shey  
P.O. Box 470  
302 S. Broadway  
Red Lodge, MT 59068

Backpacking

Kathy Watson  
110 Quarterhorse Dr.  
New Castle, WY 82701

John Sundberg  
Trails End Ranch  
MT

Backpacking

Sheri Sigoloff  
Camp Thunderbird  
MN

Youth backpacking

Scott Petri

Extreme snowmobile tours

Debbie Norman  
9 Turkey Lane  
Buffalo, WY 82834

Hiking

Karen Fettig  
Basin, WY

Herb collecting field trip

Barbara Bomack  
Rochester, MN 55362

Backpacking

Laura Tyson	Backpack leadership program
Dan Barks 1119 Granite St. Gillette, WY 82718	Outfitter/Guide
Kevin Breen Kalamazoo, MI 49003	Backpacking
Brad Wold Minneapolis, MN 55440	Backpacking
Pat Goodyear	Bear hunting
Casey O'Sea P.O. Box 1111 Buffalo, WY 82834	Big game: lion & bear
Jerry Kysar 1211 S. Lane Worland, WY 82401	Horse rides
Len Gross 3 Birchwood Heights Dr. Ottawa, IA 52501	
Tim Vadders Rt. 1, Box 258 Spring Valley, MN 55975	Youth backpacking
Greg Turner 31 Cedar Mtn. Dr. Cody, WY 82414	Spring bear hunting
George McGargle 1507 29 <sup>th</sup> St. Cody, WY 82414	Bear & elk hunting outfitter
Bill Haddleston	Snowmobile guide
Stan Armstrong #64 Crazy Woman Canyon Buffalo, WY 82834	Guided horse trips
Ted Schumacher P.O. Box 578 Buffalo, WY 82834	Bear hunting
Ken Welshimer TA Ranch P.O. Box 2437	Hiking/skiing

Gillette, WY 82717

Carl Worth  
Beloit, WI 53511

Field geology

Trent Greener  
Laramie, WY 82070

Hunting

Carroll Johnson  
Grand Junction  
Durango, CO 81301

Rawhide outfitting

Peter Cloud

Youth hiking

Everett Wyman/  
Lou McArdle (Realtor)

Outfitting camp

Judy Motlas  
70 S. Main  
Buffalo, WY 82834

Gold panning

Steve Hoyle  
Sheridan College  
3059 Coffeen Ave.  
Sheridan, WY 82801

Outfitter

Dale Lyman

Outfitting

Richard Tass

Deer hunting

Belinda Daugherty  
HC 30  
P.O. Box 15  
Tensleep, WY 82442

Pack trips/trail rides

George Sperry  
P.O. Box 502  
Worland, WY 82401

Pack trips/trail rides

Steven Nephew  
840 N. Carrington  
Buffalo, WY 82834

Mountain Bike rentals @ Trailheads