



Teton County Related Hunting and Fishing Spending, 2015

For the Wyoming Wildlife Federation



WYOMING WILDLIFE FEDERATION

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Introduction

Expenditures by hunters and anglers make an important contribution to Wyoming's economy. This contribution is particularly important during times of economic downturn in the state's energy sectors. The U.S. Fish and Wildlife Service (USFWS), in its National Survey of Fishing, Hunting, and Wildlife-Associated Recreation report, estimates that 443,000 resident and nonresident hunters and anglers participated in 4.8 million days hunting and fishing in Wyoming during 2011 (Table 1). The report also estimates that during 2011 this recreational activity generated \$683.7 million of spending within the Wyoming economy.

Access to both public and private lands is important for hunting and fishing in Wyoming. For hunting, the USFWS report estimates that 49 percent of hunters in Wyoming hunt exclusively on public land, 35 percent hunt on both public and private land, and 16 percent hunt exclusively on private land. Overall, more than one-third of hunters in Wyoming hunt on both public and private lands.

Although the statewide information on hunting and fishing expenditures is important, residents and local officials are also interested in the local economic importance of hunting and fishing expenditures. In response to this interest, this analysis attempts to estimate the spending associated with hunting and fishing for Teton County, Wyoming.

Methodology

In order to estimate recreational spending, two types of information are needed. One is the amount of recreational use and the other is per unit expenditures associated with that recreational use. For this analysis recreational use for hunting was based on the hunter-day estimates from the Wyoming Game and Fish Department's 2015 Annual Harvest Reports by Hunt Area. Harvest reports were available for the following species: Antelope, Bighorn Sheep, Bison, Black Bear, Deer, Elk, Moose, and Mountain Goat.

Because Hunt Area boundaries are based on habitat rather than county boundaries, not all the Hunt Areas found in Teton County are located entirely within the borders of the county. To account for this, a GIS analysis was conducted by the Wyoming Game and Fish Department to estimate the percent of each Hunt Area that was located within Teton County. This percentage was then used to allocate the proportion of total hunter days for the Hunt Area in Teton County. These percentages by hunt area are detailed in the maps at the end of this report. Unfortunately, there was no data available on fishing-days by sub-regions of the state. Because of this, recreational use for fishing was based on the Game and Fish Department's 2015 data on fishing licenses sold in Teton County.

In order to estimate per unit expenditures for hunting and fishing in this analysis, per unit estimates for Wyoming from the USFWS 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation report were used. These values were adjusted for inflation to 2015 dollars. Combining the recreational

use amounts with the per unit of expenditures amounts provided estimates for hunting and fishing spending related to Teton County. Since the USFWS expenditure estimates are for all of Wyoming, not just Teton County and because the fishing associated with the purchase of a Wyoming fishing license in Teton County can occur throughout the state, it is not possible to assume that 100 percent of these expenditures solely occurred within the Teton County economy. However, based on proximity it seems more than likely that a high percentage of these expenditures occurred within the county's economy.

Results

Table 2 summarizes the estimates of Teton County related hunting and fishing spending for 2015. From Game and Fish Hunt Area data, it is estimated that there were more than 42,000 Big Game and Trophy Game hunting days in Teton County in 2015. Based on USFWS expenditure estimates for Wyoming, adjusted to 2015 dollars (\$90.91 per day for residents and \$579.82 per day for nonresidents), it is estimated that these hunter-days generated spending of \$8.4 million. Information on the hunter-days by individual species can found in the Appendix tables in this report.

Fishing license sales data indicated that more than 47,000 fishing licenses were sold in Teton County in 2015. From USFWS data for average fishing days in Wyoming, it is estimated that the users of these fishing licenses participated in more than 130,000 angler-days in Wyoming. The expenditures associated with these fishing licenses are estimated to be \$21.0 million. This spending estimate was based on USFWS annual individual expenditures in Wyoming by anglers for annual fishing licenses and USFWS daily individual expenditures in Wyoming by anglers for daily fishing licenses. Since USFWS expenditure data only applies to hunters and anglers 16 years-of-age and over, youth annual license sales, which are for ages 14-18, were reduced by 50 percent to account for anglers less than 16 years-of-age. Combined total hunting and fishing related spending related to Teton County in 2015 is estimated to be \$29.5 million. This is probably a conservative estimate of hunting and fishing spending in Teton County since it is based on statewide average expenditures and Teton County tends to have higher prices than other parts of the state.

Summary and Conclusions

Hunting and fishing are economically important to the Teton County economy. It is likely that much of the \$29.5 million of spending by hunters and anglers occurs within the Teton County economy. In addition, those dollars that are spent locally generate secondary impacts in various other support sectors within the local economy. These types of economic contributions become particularly important during times of economic downturn in the state's energy sector. The popularity of hunting and fishing with both residents and nonresidents indicates that these recreational activities are important in terms of both contributions to the local economy and contributions to the residents' quality of life.

Table 1. 2011 Hunting and Fishing Spending in Wyoming					
Participation					
	Total	Resident	Nonresident	Resident	Nonresident
	Fishing	Fishing	Fishing	Fishing	Fishing
Total Individuals	303,000	110,000	193,000	36.3%	63.7%
Total Trips	2,902,000	1,510,000	1,392,000	52.0%	48.0%
Total Days	3,123,000	2,009,000	1,114,000	64.3%	35.7%
Average Days	10.3	18.3	5.8		
	Total	Resident	Nonresident	Resident	Nonresident
	Hunting	Hunting	Hunting	Hunting	Hunting
Total Individuals	140,000	76,000	64,000	54.3%	45.7%
Total Trips	1,204,000	978,000	225,000	81.2%	18.7%
Total Days	1,726,000	1,103,000	623,000	63.9%	36.1%
Average Days	12.3	14.5	9.7		
Source: USFWS, 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Wyoming - Table 3)					
2011 Trip and Equipment Expenditures in Wyoming					
	Total	Resident	Nonresident	Resident	Nonresident
	Fishing	Fishing	Fishing	Fishing	Fishing
Total Amount	\$438,892,000	\$95,365,000	\$343,527,000	21.7%	78.3%
Per Individual	\$1,448.49	\$866.95	\$1,779.93		
Per Trip	\$151.24	\$63.16	\$246.79		
Per Day	\$140.54	\$47.47	\$308.37		
	Total	Resident	Nonresident	Resident	Nonresident
	Hunting	Hunting	Hunting	Hunting	Hunting
Total Amount	\$244,865,000	\$115,763,000	\$129,102,000	47.3%	52.7%
Per Individual	\$3,134.94	\$1,254.80	\$5,367.61		
Per Trip	\$364.53	\$97.51	\$1,526.79		
Per Day	\$254.28	\$86.46	\$551.41		
Source: USFWS, 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Wyoming - Table 21)					

Table 2. Teton County Related Hunting and Fishing Spending, 2015				
Big and Trophy Game Hunting				
	Resident	NonResident	Combined	
	Hunter	Hunter	Hunter	
Species	Days (1)	Days (1)	Days (1)	
Antelope	189	51	240	
Bighorn Sheep	167	51	218	
Bison	1,539	255	1,794	
Black Bear	2,592	486	3,078	
Deer	5,562	2,220	7,782	
Elk	22,400	6,319	28,719	
Moose	282	49	332	
Mountain Sheep	56	3	59	
Total Hunting Days	32,788	9,434	42,222	
Total Hunting Days	32,788	9,434	42,222	
Spending Per Day (2)	\$90.91	\$579.82	\$200.16	
Total Hunting Spending	\$2,980,912	\$5,470,126	\$8,451,038	
Fishing Licenses Sold in Teton County 2015				
		Per	Total	Total
	License	Fisherman	Fishing	Angler
Type	Sold (3)	Spending (2)	Spending	Days (2)
Resident Annual	4,117	\$911.62	\$3,753,137	75,341
Resident Youth Annual	72	\$911.62	\$65,181	1,308
Resident Daily	548	\$49.92	\$27,354	548
Non-Resident Annual	1,905	\$1,871.64	\$3,565,475	11,049
Non-Resident Youth Annual	258	\$1,871.64	\$481,947	1,494
Non-Resident Daily	40,479	\$324.26	\$13,125,667	40,479
Total Fishing Spending	47,378	\$443.64	\$21,018,761	130,219
Combined Hunting & Fishing Spending			\$29,469,799	
(1) Based WGFD Annual Harvest Reports by Hunt Area and percent of Hunt Areas that are in the County				
(2) Based on USFWS 2011 National Survey of Fishing, Hunting, and Wildlife -Associated Recreation - Wyoming (Adjusted for inflation)				
(3) Adjusted for Youth under 16				

Appendix Table 1. Teton County Antelope Hunting, 2015								
				Total	Total	County	County	Combined
				Resident	NonResident	Resident	NonResident	County
Hunt	Total	County	County	Hunter	Hunter	Hunter	Hunter	Hunter
Areas	Acres	Acres	Percent	Days	Days	Days	Days	Days
85	493,194	458,670	93.0%	36	2	33	2	35
86	365,150	94,939	26.0%	597	190	155	49	205
Total	858,344	553,609	64.5%	633	192	189	51	240
Source: Wyoming Game and Fish Department Annual Harvest Reports, 2015								

Appendix Table 2. Teton County Bighorn Sheep Hunting, 2015								
				Total	Total	County	County	Combined
				Resident	NonResident	Resident	NonResident	County
Hunt	Total	County	County	Hunter	Hunter	Hunter	Hunter	Hunter
Areas	Acres	Acres	Percent	Days	Days	Days	Days	Days
4	853,277	375,442	44.0%	132	11	58	5	63
6	443,691	377,137	85.0%	55	10	47	9	55
7	1,065,802	671,455	63.0%	98	60	62	38	100
10	237,200	2,372	1.0%	42	9	0	0	1
Total	2,599,969	1,426,406	54.9%	327	90	167	51	218
Source: Wyoming Game and Fish Department Annual Harvest Reports, 2015								

Appendix Table 3. Teton County Bison Hunting, 2015								
				Total	Total	County	County	Combined
				Resident	NonResident	Resident	NonResident	County
Hunt	Total	County	County	Hunter	Hunter	Hunter	Hunter	Hunter
Areas	Acres	Acres	Percent	Days	Days	Days	Days	Days
2	1,690,971	1,437,325	85.0%	1,811	300	1,539	255	1,794
Source: Wyoming Game and Fish Department Annual Harvest Reports, 2015								

Appendix Table 4. Teton County Black Bear Hunting, 2015								
				Total	Total	County	County	Combined
				Resident	NonResident	Resident	NonResident	County
Hunt	Total	County	County	Hunter	Hunter	Hunter	Hunter	Hunter
Areas	Acres	Acres	Percent	Days	Days	Days	Days	Days
17	204,736	28,663	14.0%	925	149	130	21	150
18	194,327	122,426	63.0%	464	77	292	49	341
20	440,740	339,370	77.0%	826	52	636	40	676
21	186,864	186,864	100.0%	364	233	364	233	597
22	415,489	340,701	82.0%	276	54	226	44	271
24	126,989	126,989	100.0%	340	36	340	36	376
26	869,200	34,768	4.0%	695	111	28	4	32
29	325,437	299,402	92.0%	626	64	576	59	635
Total	2,763,782	1,479,183	53.5%	4,516	776	2,592	486	3,078

Source: Wyoming Game and Fish Department Annual Harvest Reports, 2015

Appendix Table 5. Teton County Deer Hunting, 2015								
				Total	Total	County	County	Combined
				Resident	NonResident	Resident	NonResident	County
Hunt	Total	County	County	Hunter	Hunter	Hunter	Hunter	Hunter
Areas	Acres	Acres	Percent	Days	Days	Days	Days	Days
115	213,288	36,259	17.0%	187	143	32	24	56
141	216,100	2,161	1.0%	479	72	5	1	6
146	103,403	76,518	74.0%	649	32	480	24	504
148	435,411	361,391	83.0%	1,090	189	905	157	1,062
149	243,253	243,253	100.0%	618	53	618	53	671
150	45,743	45,743	100.0%	142	0	142	0	142
151	180,079	111,649	62.0%	998	1,446	619	897	1,515
152	258,635	178,458	69.0%	2,803	1,101	1,934	760	2,694
154	138,700	1,387	1.0%	1,470	228	15	2	17
155	198,513	188,587	95.0%	856	125	813	119	932
156	224,249	224,249	100.0%	0	184	0	184	184
Total	2,257,373	1,469,655	65.1%	9,292	3,573	5,562	2,220	7,782

Source: Wyoming Game and Fish Department Annual Harvest Reports, 2015

Appendix Table 6. Teton County Elk Hunting, 2015								
Hunt Areas	Total Acres	County Acres	County Percent	Total	Total	County	County	Combined
				Resident Hunter Days	NonResident Hunter Days	Resident Hunter Days	NonResident Hunter Days	County Hunter Days
60	213,288	36,259	17.0%	294	1,275	50	217	267
68	118,600	2,372	2.0%	4,447	1,328	89	27	116
70	286,101	211,715	74.0%	1,857	867	1,374	642	2,016
71	149,676	149,676	100.0%	548	474	548	474	1,022
72	38,518	38,518	100.0%	0	0	0	0	0
73	243,253	243,253	100.0%	491	94	491	94	585
75	31,059	31,059	100.0%	1,651	1,448	1,651	1,448	3,099
77	25,443	25,443	100.0%	2,669	535	2,669	535	3,204
78	45,743	45,743	100.0%	1,986	149	1,986	149	2,135
79	42,724	42,724	100.0%	55	66	55	66	121
80	53,379	53,379	100.0%	2,539	157	2,539	157	2,696
81	224,249	224,249	100.0%	2,849	954	2,849	954	3,803
82	150,411	139,882	93.0%	1,341	243	1,247	226	1,473
83	103,403	76,518	74.0%	1,742	257	1,289	190	1,479
84	251,153	170,784	68.0%	4,712	959	3,204	652	3,856
85	180,079	111,649	62.0%	3,710	773	2,300	479	2,779
87	138,700	1,387	1.0%	2,919	371	29	4	33
95	216,100	2,161	1.0%	2,951	566	30	6	35
Total	2,511,879	1,606,771	64.0%	36,761	10,516	22,400	6,319	28,719

Source: Wyoming Game and Fish Department Annual Harvest Reports, 2015

Appendix Table 7. Teton County Moose Hunting, 2015								
				Total	Total	County	County	Combined
				Resident	NonResident	Resident	NonResident	County
Hunt	Total	County	County	Hunter	Hunter	Hunter	Hunter	Hunter
Areas	Acres	Acres	Percent	Days	Days	Days	Days	Days
5	225,600	2,256	1.0%	330	70	3	1	4
7	139,102	63,987	46.0%	0	0	0	0	0
8	213,288	36,259	17.0%	0	0	0	0	0
10	169,976	28,896	17.0%	109	14	19	2	21
14	108,531	108,531	100.0%	0	0	0	0	0
15	86,742	86,742	100.0%	0	0	0	0	0
16	124,482	124,482	100.0%	52	2	52	2	54
17	233,035	233,035	100.0%	23	9	23	9	32
18	103,403	76,518	74.0%	26	9	19	7	26
19	23,326	23,326	100.0%	0	0	0	0	0
20	199,824	133,882	67.0%	128	30	86	20	106
21	191,026	175,744	92.0%	87	9	80	8	88
22	138,700	1,387	1.0%	43	36	0	0	1
28	172,772	162,406	94.0%	0	0	0	0	0
32	93,346	93,346	100.0%	0	0	0	0	0
37	118,771	118,771	100.0%	0	0	0	0	0
Total	2,341,925	1,469,568	62.8%	798	179	282	49	332

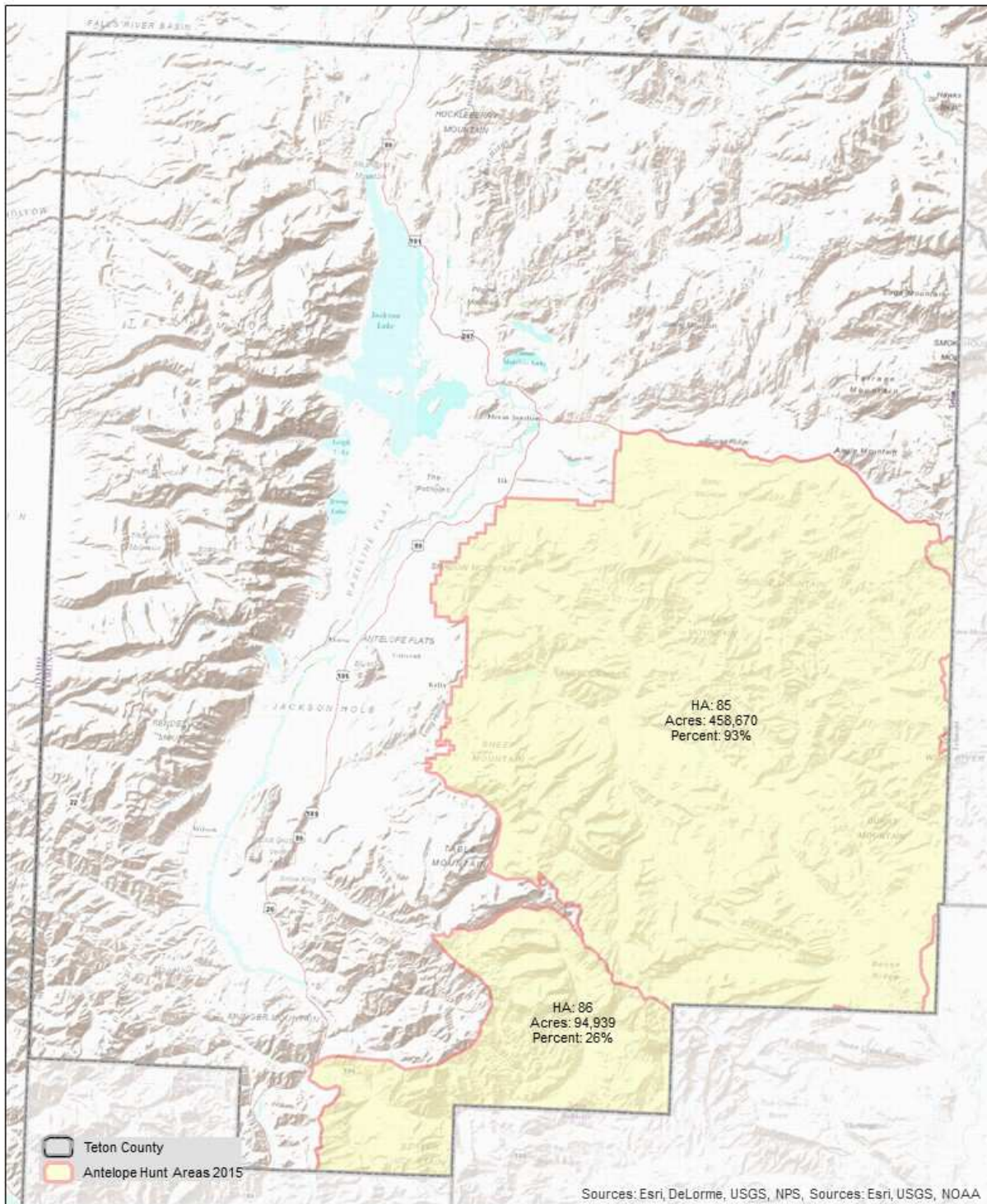
Source: Wyoming Game and Fish Department Annual Harvest Reports, 2015

Appendix Table 8. Teton County Mountain Goat Hunting, 2015								
				Total	Total	County	County	Combined
				Resident	NonResident	Resident	NonResident	County
Hunt	Total	County	County	Hunter	Hunter	Hunter	Hunter	Hunter
Areas	Acres	Acres	Percent	Days	Days	Days	Days	Days
2	443,852	377,274	85.0%	66	3	56	3	59

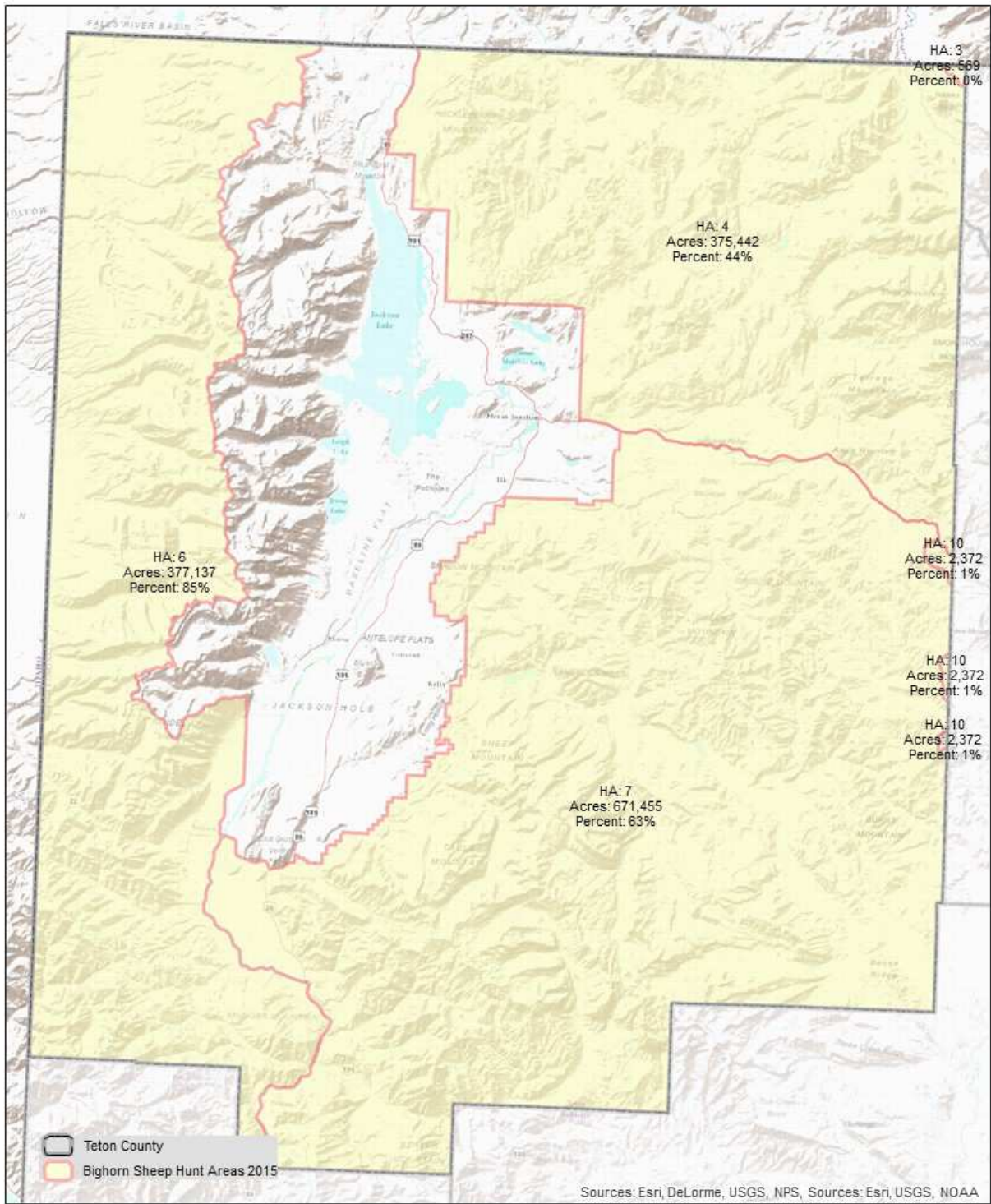
Source: Wyoming Game and Fish Department Annual Harvest Reports, 2015

Appendix Table 9. Fishing Licenses Sold in Teton County 2015			
		Adjustment	County
	County	Youth Under	Spending
Type	Licenses	16	Licenses
Resident Annual	4,117		4,117
Resident Youth Annual	143	50.0%	72
Resident Daily	548		548
Non-Resident Annual	1,905		1,905
Non-Resident Youth Annual	515	50.0%	258
Non-Resident Daily	40,479		40,479
Total	47,707		47,378

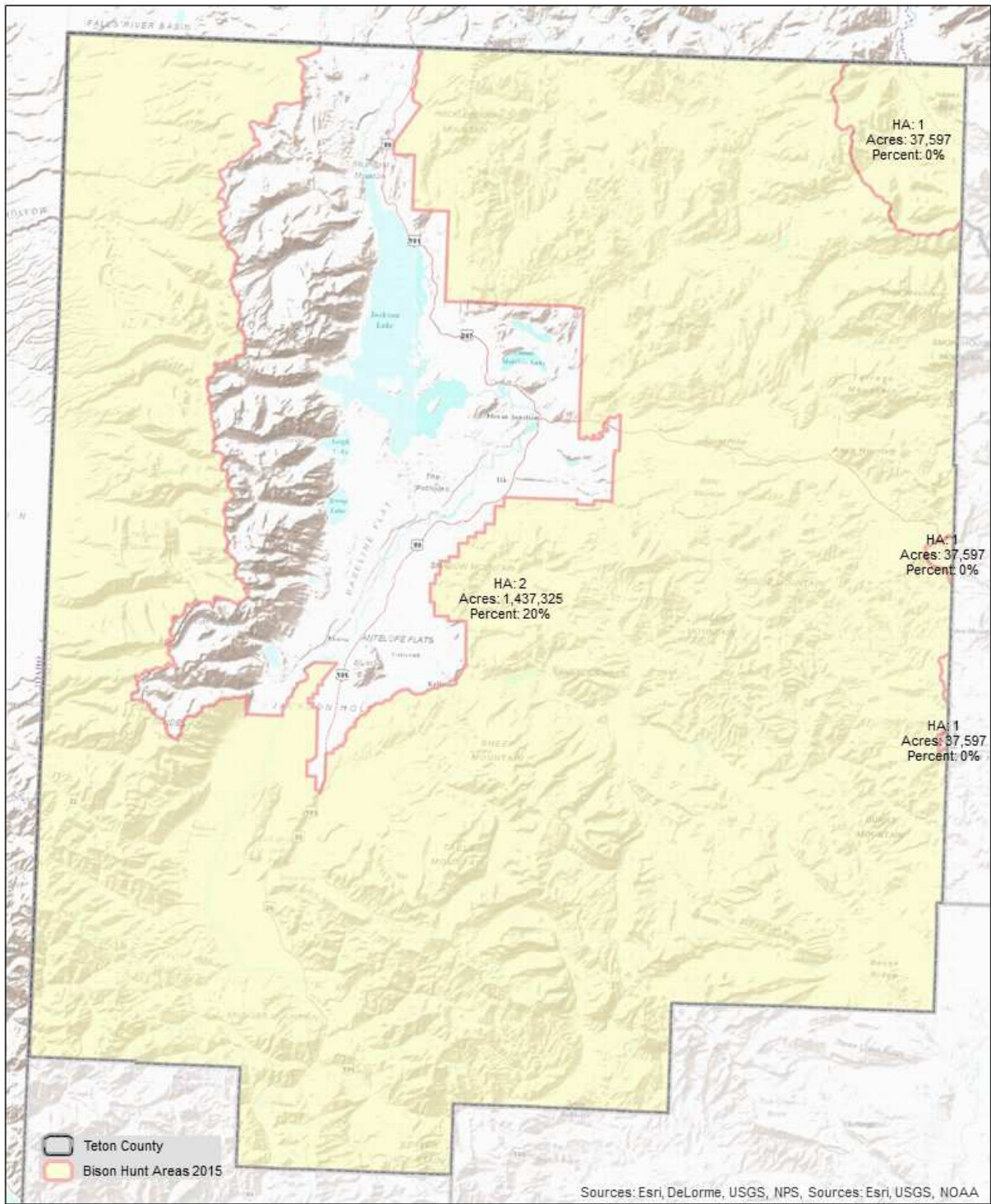
Source: Wyoming Game and Fish Department, 2015



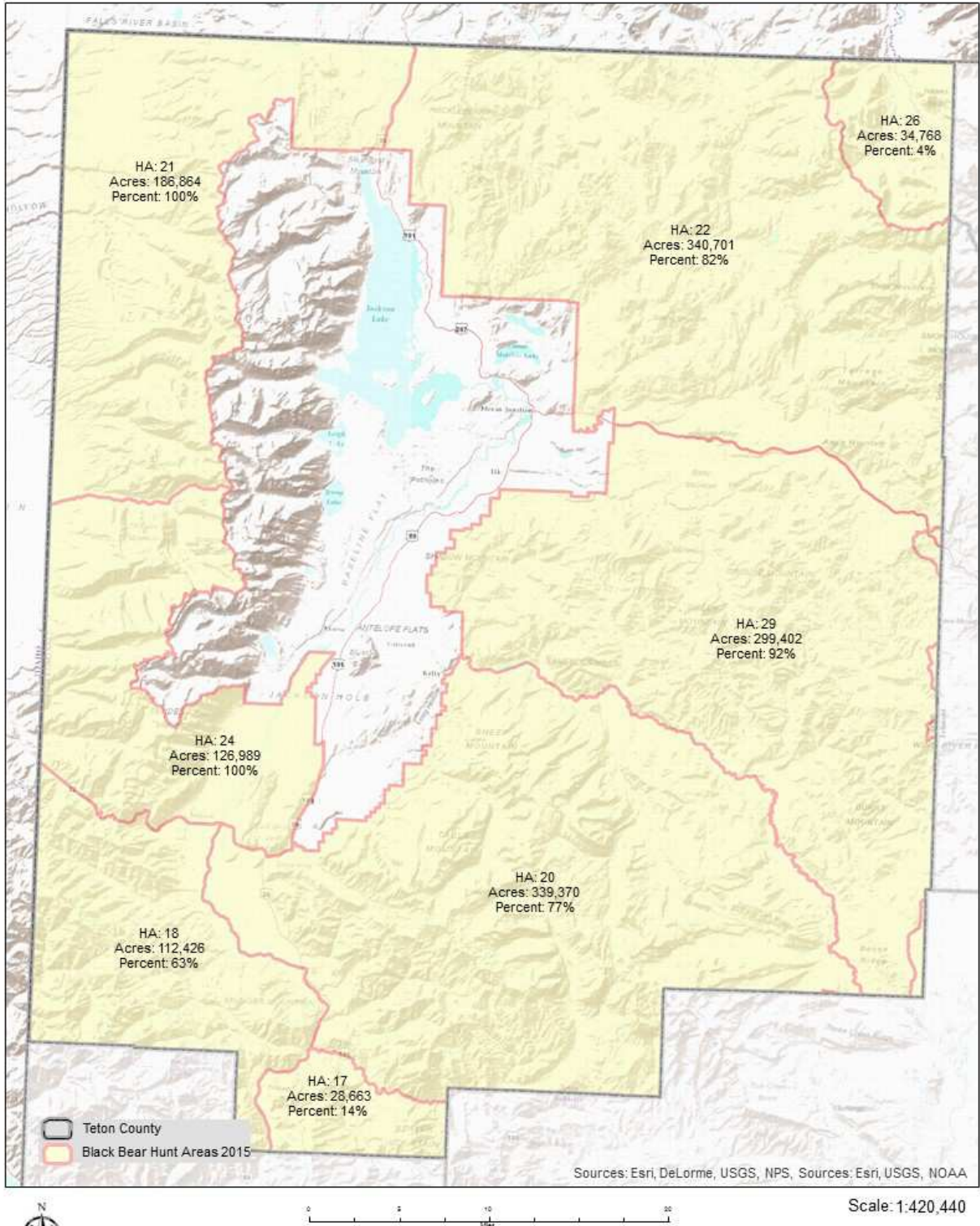
Percentage of 2015 Antelope Hunt Areas (HA) within Teton County



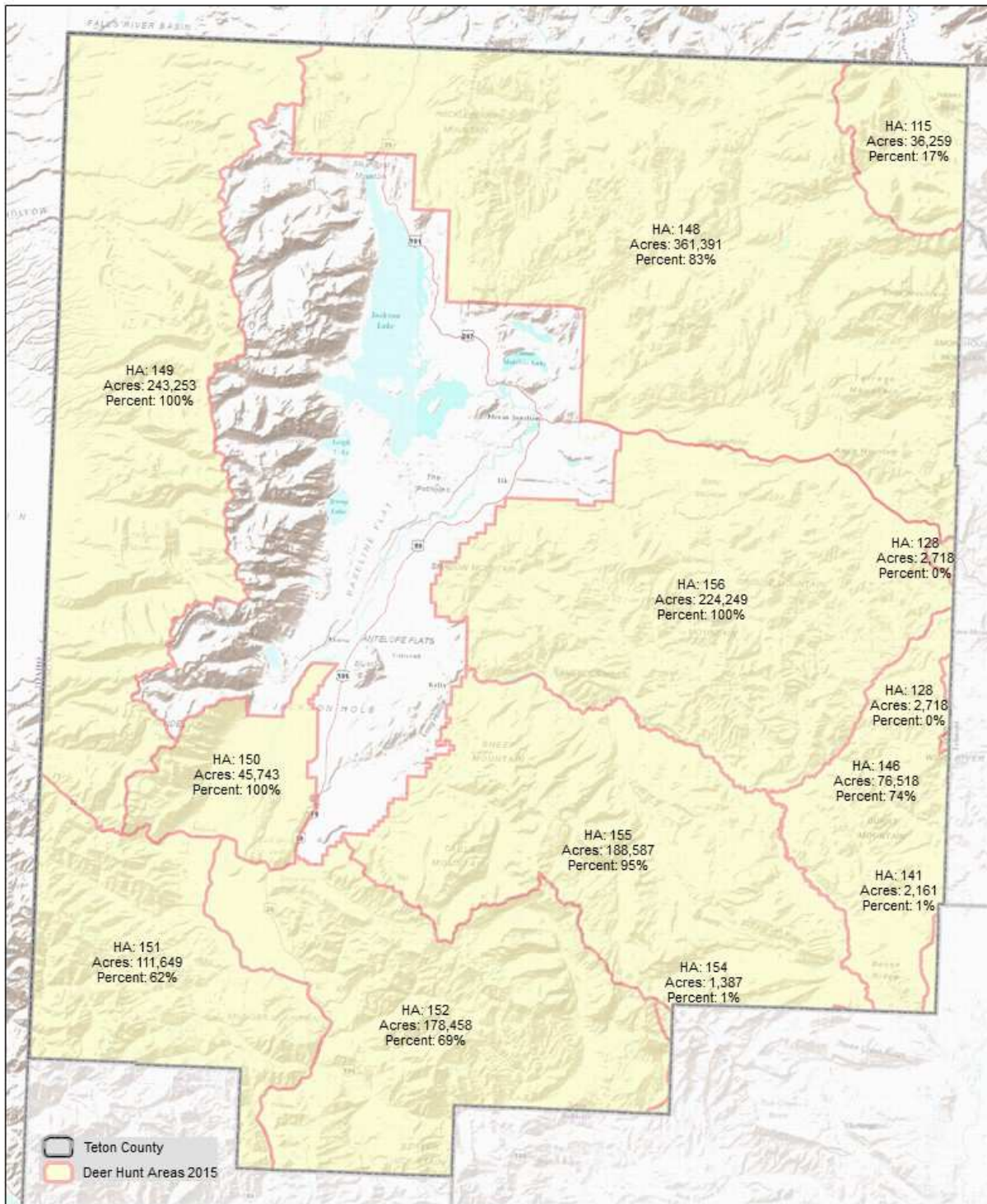
Percentage of 2015 Bighorn Sheep Hunt Areas (HA) within Teton County



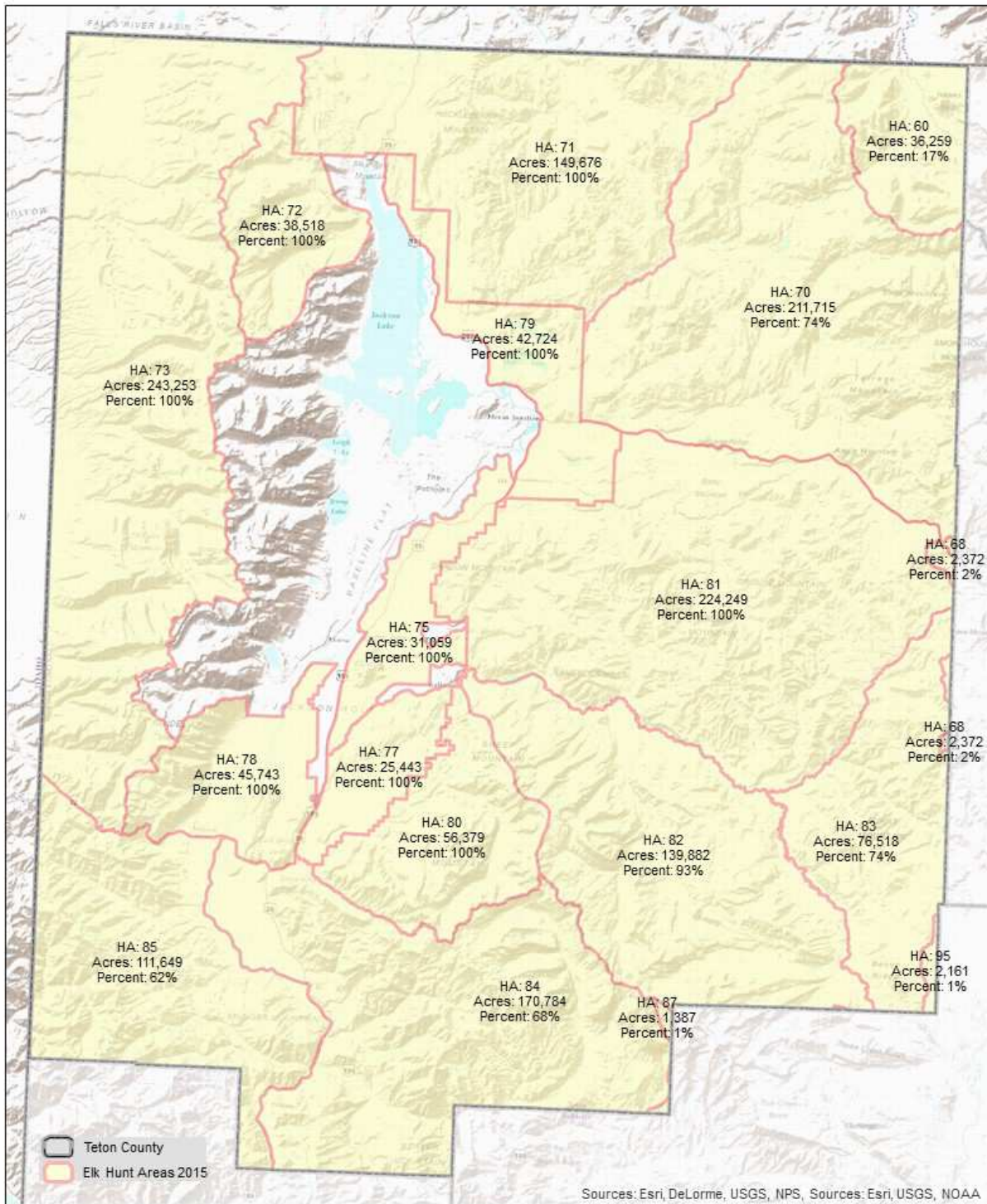
Percentage of 2015 Bison Hunt Areas (HA) within Teton County



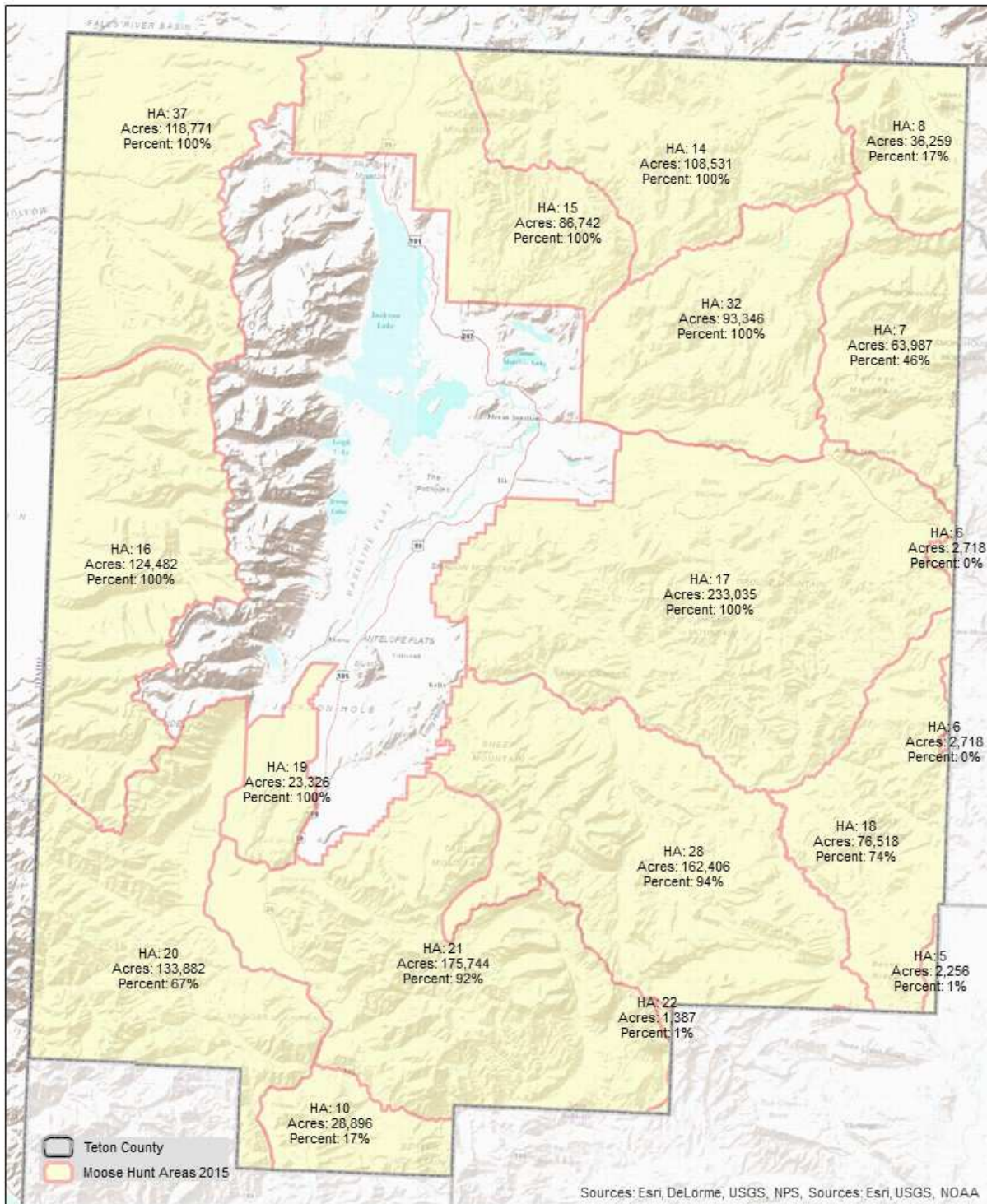
Percentage of 2015 Black Bear Hunt Areas (HA) within Teton County



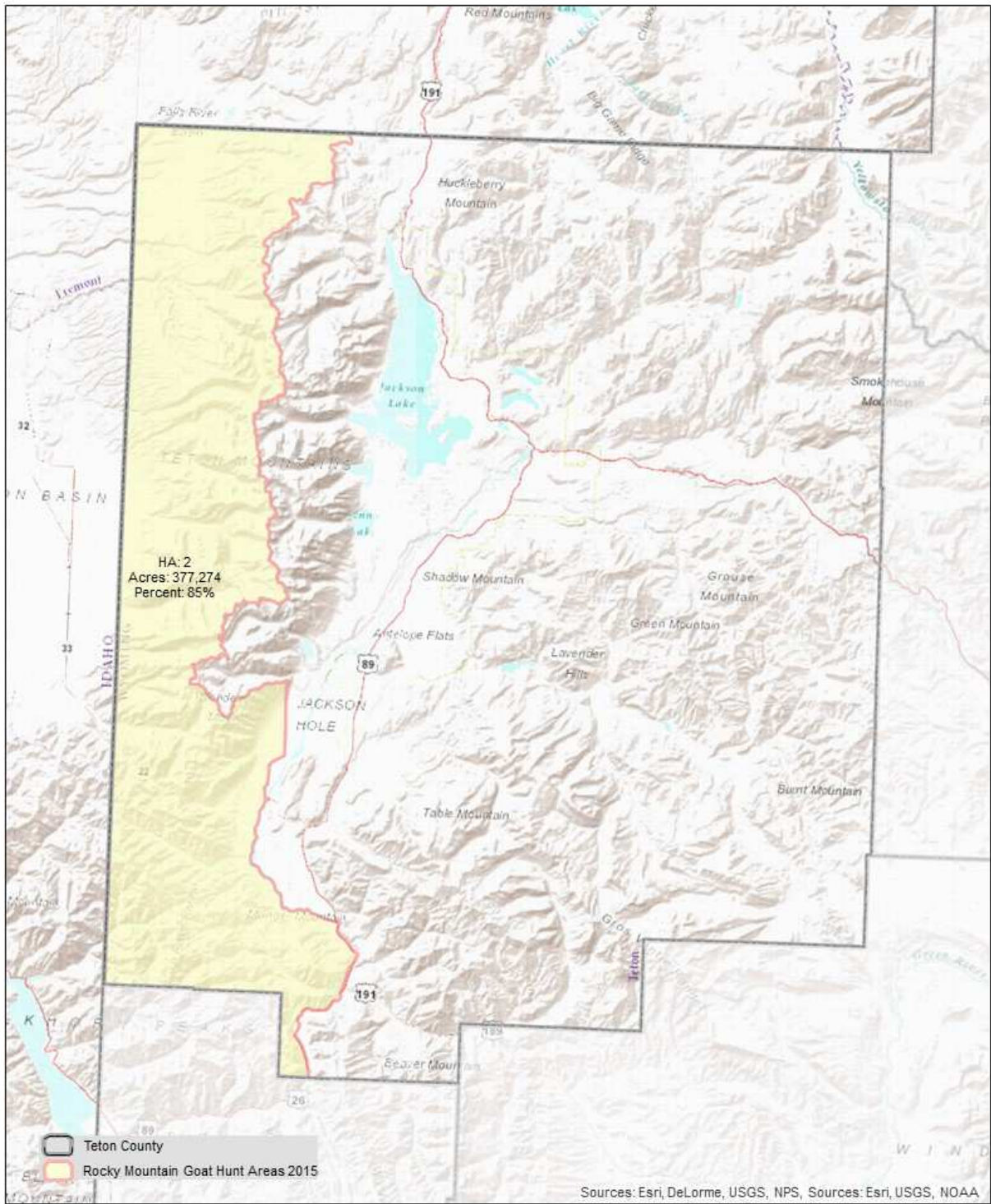
Percentage of 2015 Deer Hunt Areas (HA) within Teton County



Percentage of 2015 Elk Hunt Areas (HA) within Teton County



Percentage of 2015 Moose Hunt Areas (HA) within Teton County



Percentage of 2015 Rocky Mountain Goat Hunt Areas (HA) within Teton County

