

**APPENDIX D**

**GUSG GIS DATA:  
HABITAT TYPE, LANDOWNERSHIP, EASEMENTS**

**Habitat Categories – All GUSG Populations**

Table 1. Areas of habitat categories (see pg. 54 for definitions) in each GUSG population area.

<b>GUSG Area</b>	<b>Occupied Habitat (acres)</b>	<b>Potentially Suitable Habitat (acres)</b>	<b>Vacant/Unknown Habitat (acres)</b>
Cerro Summit – Cimarron – Sims Mesa	37,160	20,624	4,923
Crawford	35,014	62,107	18,192
Dove Creek	28,262	237,677	53,190
Gunnison Basin	592,926	157,298	22,937
Monticello, Utah	70,658	75,320	56,847
Piñon Mesa	38,890	136,414	63,807
Poncha Pass	20,415	27,875	0
San Miguel Basin	100,496	62,054	41,508
Utah (adjacent to Piñon Mesa)	0	3,788	2,233

### Landownership in Each GUSG Population

This information was derived from the expert knowledge of field biologists. The “activity areas” (as defined below) were collected by having biologists use stand-up, real-time digitizing to draw on an interactive whiteboard that was connected to a GIS (Cowardin and Flenner 2003). A variety of scales was used to capture the data. CDOW GIS personnel coordinated and managed the GIS data capture sessions.

Nesting habitat is defined as areas that would include the majority of important GUSG nesting habitat. These are mapped as a 2-mile buffer zone around an active lek. Winter range represents the area known to be used by GUSG during winter. Severe winter range is defined as that part of the winter range where 90% of the individual GUSG are located when annual snowpack is at its maximum and/or temperatures are at a minimum in the 2 worst winters out of 10. The winters of 1983-84, or 1996-97 are good examples.

Table 2. Landownership data for entire Cerro Summit – Cimarron – Sims Mesa GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	<b>Potentially Suitable Habitat acres (%)</b>	<b>Vacant/Unknown Habitat acres (%)</b>
Private	28,219 (75.9%)	16,190 (78.5%)	3,778 (76.7%)
BLM	4,853 (13.1%)	4,271 (20.7%)	1,145 (23.3%)
CDOW	4,046 (10.9%)	0	0
NPS	43 (0.1%)	163 (0.8%)	0
<b>Lek Habitat (subset of Occupied Habitat)</b>			
Private	275 (95.1%)		
BLM	9 (3.2%)		
CDOW	5 (1.7%)		
<b>Nesting Habitat (subset of Occupied Habitat)</b>			
Private	12,832 (76.7%)		
BLM	2,198 (13.1%)		
CDOW	1,704 (10.2%)		

Table 3. Landownership data in Occupied Habitat for Cerro Summit – Cimarron and Sims Mesa GUSG subpopulations.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	
	<b>Cerro Summit – Cimarron</b>	<b>Sims Mesa</b>
Private	25,915 (81.3%)	2,304 (43.6%)
BLM	2,165 (6.8%)	2,688 (50.8%)
CDOW	3,750 (11.8%)	296 (5.6%)
NPS	43 (0.1%)	0
<b>TOTAL</b>	<b>31,873</b>	<b>5,288</b>

Table 4. Landownership data for Crawford GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	<b>Potentially Suitable Habitat acres (%)</b>	<b>Vacant/Unknown Habitat acres (%)</b>
Private	8,240 (23.5%)	43,908 (70.7%)	15,901 (87.4%)
USFS	0	2,216 (3.6%)	0
BLM	22,172 (63.3%)	8,076 (13.0%)	2,292 (12.6%)
NPS	4,603 (13.2%)	7,908 (12.7%)	0
<b>Lek Habitat (subset of Occupied Habitat)</b>			
BLM	172 (100%)		
<b>Nesting Habitat (subset of Occupied Habitat)</b>			
Private	980 (6.5%)		
BLM	11,594 (77.3%)		
NPS	2,427 (16.2%)		
<b>Winter Habitat (subset of Occupied Habitat)</b>			
Private	2,553 (10.9%)		
BLM	18,806 (80.1%)		
NPS	2,114 (9.0%)		
<b>Severe Winter Range (subset of Occupied Habitat and Winter Habitat)</b>			
Private	2,553 (10.9%)		
BLM	18,808 (80.1%)		
NPS	2,113 (9.0%)		

Table 5. Landownership data for Dove Creek GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	<b>Potentially Suitable Habitat acres (%)</b>	<b>Vacant/Unknown Habitat acres (%)</b>
Private	24,538 (86.8%)	208,776 (87.8%)	18,801 (35.4%)
USFS	0	3,355 (1.4%)	6,577 (12.4%)
BLM	3,725 (13.2%)	25,486 (10.7%)	22,292 (42.2%)
CDOW	0	23 (0.0%)	0
NPS	0	39 (0.0%)	0
Colorado	0	0	5,522 (10.4%)
<b>Lek Habitat (subset of Occupied Habitat)</b>			
Private	900 (100%)		
<b>Nesting Habitat (subset of Occupied Habitat)</b>			
Private	21,317 (87.4%)		
BLM	3,079 (12.6%)		

Table 6. Landownership data for Gunnison Basin GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	<b>Potentially Suitable Habitat acres (%)</b>	<b>Vacant/Unknown Habitat acres (%)</b>
Private	182,916 (30.9%)	65,359 (41.6%)	2,274 (9.9%)
USFS	82,682 (13.9%)	18,763 (11.9%)	20,663 (90.1%)
BLM	301,354 (50.8%)	63,584 (40.4%)	0
CDOW	9,142 (1.5%)	0	0
NPS	12,411 (2.1%)	9,191 (5.8%)	0
Colorado	4,269 (0.7%)	401 (0.3%)	0
<b>Lek Habitat (subset of Occupied Habitat)</b>			
Private	1,275 (36.6%)		
USFS	151 (4.3%)		
BLM	1,862 (53.5%)		
CDOW	91 (2.6%)		
Colorado	97 (2.8%)		
NPS	6 (0.2%)		
<b>Nesting Habitat (subset of Occupied Habitat)</b>			
Private	70,412 (32.9%)		
USFS	12,743 (6.0%)		
BLM	123,146 (57.6%)		
CDOW	2,646 (1.2%)		
Colorado	1,283 (0.6%)		
NPS	3,533 (1.7%)		
<b>Winter Habitat (subset of Occupied Habitat)</b>			
Private	113,393 (30.7%)		
USFS	34,667 (9.4%)		
BLM	201,152 (54.5%)		
CDOW	6,984 (1.9%)		
Colorado	3,326 (0.9%)		
NPS	9,772 (2.6%)		
<b>Severe Winter Range (subset of Occupied Habitat and Winter Habitat)</b>			
Private	51,243 (23.6%)		
BLM	155,433 (71.5%)		
CDOW	2,645 (1.2%)		
Colorado	171 (0.1%)		
NPS	7,755 (3.6%)		

Table 7. Landownership data for Monticello, Utah GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	<b>Potentially Suitable Habitat (acres)</b>	<b>Vacant/Unknown Habitat (acres)</b>
Private	66,789 (94.5%)	73,669 (97.8%)	15,509 (27.3%)
BLM	2,885 (4.2%)	1,651 (2.2%)	36,483 (64.2%)
State of Utah	921 (1.3%)	0	1,769 (3.1%)
USFS	0	0	3,048 (5.4%)

Table 8. Landownership data for Piñon Mesa GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	<b>Potentially Suitable Habitat (acres)</b>	<b>Vacant/Unknown Habitat (acres)</b>
Private	27,295 (70.2%)	59,564 (43.7%)	3,929 (6.2%)
USFS	687 (1.8%)	572 (0.4%)	42,184 (66.1%)
BLM	10,908 (28.1%)	76,258 (55.9%)	17,695 (27.7%)
<b>Nesting Habitat (subset of Occupied Habitat)</b>			
Private	16,259 (85.8%)		
USFS	559 (3.0%)		
BLM	2,139 (11.3%)		
<b>Winter Habitat (subset of Occupied Habitat)</b>			
Private	3,877 (43.4%)		
BLM	5,054 (56.6%)		

Utah – across state border from Piñon Mesa GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	<b>Potentially Suitable Habitat (acres)</b>	<b>Vacant/Unknown Habitat (acres)</b>
Private	0	27 (0.7%)	621 (27.9%)
BLM	0	3,691 (97.4%)	1,611 (72.1%)
State of Utah	0	70 (1.9%)	0

Table 9. Landownership data for Poncha Pass GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	<b>Potentially Suitable Habitat acres (%)</b>	<b>Vacant/Unknown Habitat acres (%)</b>
Private	4,845 (23.7%)	11,089 (39.8%)	0
USFS	5,324 (26.1%)	187 (0.7%)	0
BLM	9,768 (47.9%)	14,993 (53.8%)	0
Colorado	478 (2.3%)	1,606 (5.8%)	0
<b>Lek Habitat (subset of Occupied Habitat)</b>			
Private	0.8 (2.0%)		
BLM	39.2 (98.0%)		
<b>Winter Habitat (subset of Occupied Habitat)</b>			
Private	300 (23.7%)		
BLM	813 (64.3%)		
Colorado	151 (12.0%)		

Table 10. Landownership data for entire San Miguel Basin GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>	<b>Potentially Suitable Habitat acres (%)</b>	<b>Vacant/Unknown Habitat acres (%)</b>
Private	52,423 (52.2%)	39,178 (63.1%)	29,741 (71.7%)
USFS	1,450 (1.4%)	0	11,767 (28.3%)
BLM	35,628 (35.5%)	22,546 (36.3%)	0
CDOW	9,313 (9.3%)	0	0
Colorado	1,682 (1.7%)	329 (0.5%)	0
<b>Lek Habitat (subset of Occupied Habitat)</b>			
Private	41 (50.6%)		
BLM	7 (8.9%)		
CDOW	33 (40.5%)		
<b>Nesting Habitat (subset of Occupied Habitat)</b>			
Private	20,238 (59.6%)		
USFS	181 (0.5%)		
BLM	5,498 (16.2%)		
CDOW	7,689 (22.6%)		
Colorado	379 (1.1%)		
<b>Winter Habitat (subset of Occupied Habitat)</b>			
Private	8,307 (41.0%)		
BLM	5,218 (25.7%)		
CDOW	6,209 (30.6%)		
Colorado	545 (2.7%)		

Table 11. Landownership data in Occupied Habitat for subpopulations in San Miguel Basin GUSG area.

<b>Ownership</b>	<b>Occupied Habitat acres (%)</b>					
	<b>Dry Creek Basin</b>	<b>Hamilton Mesa</b>	<b>Gurley Reservoir</b>	<b>Miramonte</b>	<b>Beaver Mesa</b>	<b>Iron Springs</b>
Private	18,148 (29.6)	4,059 (84.7)	6,863 (91.0)	8,866 (76.2)	8,769 (99.5)	5,717 (88.7)
USFS	0	0	334 (4.4)	746 (6.4)	0	370 (5.8)
BLM	34,959 (57.1)	202 (4.2)	191 (2.5)	234 (2.0)	42 (0.5)	0
CDOW	7,517 (12.3)	0	0	1,796 (15.4)	0	0
Colorado	641 (1.0)	529 (11.0)	156 (2.1)	0	0	356 (5.5)
<b>TOTAL</b>	<b>61,265</b>	<b>4,790</b>	<b>7,544</b>	<b>11,642</b>	<b>8,811</b>	<b>6,443</b>

**Easements in Each GUSG Population**

Table 12. Acreage of easements currently held in each GUSG area.

<b>GUSG Population or Subpopulation</b>	<b>Occupied Habitat</b>	<b>Potentially Suitable Habitat</b>	<b>Vacant/Unknown Habitat</b>	<b>Lek Sites<sup>1</sup></b>	<b>Nesting Habitat<sup>1</sup></b>	<b>Winter Range<sup>1</sup></b>	<b>Severe Winter Range<sup>1</sup></b>
Cerro Summit – Cimarron – Sims Mesa	2,805	603	0	92	2,125	0	0
Crawford	523	936	0	0	398	209	209
Dove Creek	1,012	0	0	57	1,012	0	0
Gunnison Basin	26,145	3,884	0	703	14,865	21,162	10,774
Monticello, Utah	2,569	0	0	0	0	0	0
Piñon Mesa	7,314	13,789	0	0	1,312	145	0
Poncha Pass	0	0	0	0	0	0	0
San Miguel Basin	884	0	0	0	20	0	0

<sup>1</sup> This habitat category is a subset of “Occupied Habitat”. Overlap may occur among easements in these seasonal categories (e.g., one easement may protect habitat that serves both as a lek site and nesting habitat)