

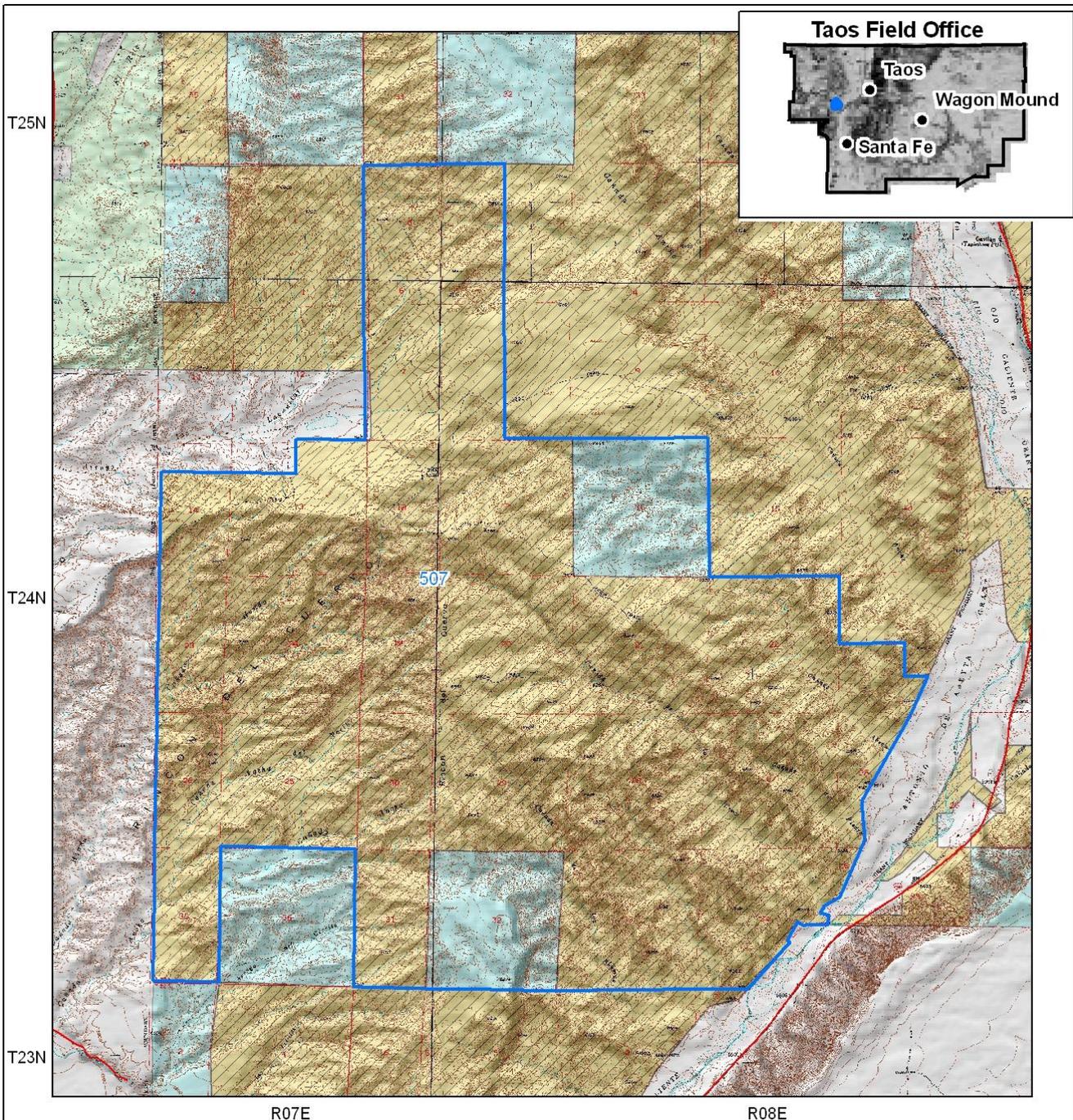
**Allotment Evaluation (AE)  
For  
Canada de la Cruz (#507)**

Permittee		<u>Authorization Number</u> 3000271 3001273		
Livestock Use	Preference AUMs	<u>Allotment</u> 00507	<u>Active</u> 293 230	<u>Suspended</u> 0 0
	Period of Use	<u>Allotment</u> Canada de la Cruz	<u>Kind</u> 88 Cattle 72 Cattle	<u>Season of Use</u> 11/01 - 02/28 11/01 - 02/28
	Kind of Livestock	Cow Calf		
	Percent Public Land	AUMs are authorized at 84% public land		
Allotment Profile	Physical Description	<p>Allotment 507 is located approximately 3 miles west of Ojo Caliente, in Rio Arriba County, New Mexico. Elevation on this allotment is roughly between 6,000 and 6,700 feet. Landforms on the allotment include; uplands, escarpments and hills.</p> <p>Three soil types are identified within the federal lands in this allotment. They include:</p> <p>Florita-Rock outcrop complex, 15 to 45 percent slopes. These soils consist of gravelly and sandy loams with rooting depths over 60 inches and sandstone outcrops. Parent material of alluvium and eolian derived from sandstone comprise these soils. Average annual precipitation in this complex ranges from 10 to 12 inches. Vegetation is characterized by pinyon, juniper, sideoats grama, black grama, blue grama, needle and thread and muttongrass.</p> <p>Parida-Palacid very gravelly sandy loams, 10 to 40 percent slopes. These soils consist of very gravelly loams, with rooting depths over 60 inches. Parent material of alluvium and colluvium derived for sedimentary and metamorphic rock comprise these soils. Average annual precipitation in this complex ranges from 10 to 12 inches. Vegetation is characterized by sideoats grama, black grama, blue grama, and galleta.</p> <p>Pinavetes loamy sand, 3 to 12 percent slopes. This soil consists of loamy sand with rooting depths over 60 inches. Parent material of eolian derived from sandstone comprises this soil. Average annual precipitation ranges from 10 to 12 inches. Vegetation is characterized by blue grama, Indian ricegrass, black grama, bottlebrush squirreltail, sideoats grama, threeawn</p>		

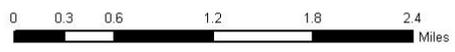
		and Sand sagebrush.  Penistaja fine sandy loam, 2 to 8 percent slopes. This soil consists of fine sandy and sandy clay loam, with rooting depths over 60 inches. Parent material of eolian and alluvium derived from sandstone and shale comprise this soil. Average annual precipitation ranges from 10 to 12 inches. Vegetation is characterized blue grama, Indian ricegrass, needleandthread, western wheatgrass, winterfat and bottlebrush squirreltail.																																																
	Land Status Acreage	<table border="1"> <thead> <tr> <th><u>BLM</u></th> <th><u>State</u></th> <th><u>Private</u></th> </tr> </thead> <tbody> <tr> <td>11,644</td> <td>2,212</td> <td>0</td> </tr> </tbody> </table>	<u>BLM</u>	<u>State</u>	<u>Private</u>	11,644	2,212	0																																										
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11,644	2,212	0																																																
	Management Objectives	The allotment is under an 'Improve' ('I') management category. 'I' category allotments are managed in a manner to help the allotment achieve satisfactory ecological condition.																																																
	Key Forage Species	sideoats grama, black grama, blue grama, needleandthread, galleta, bottlebrush squirreltail, threeawn, Indian ricegrass, western wheatgrass, winterfat and muttongrass																																																
	Grazing System	Dormant season grazing																																																
Management Evaluation	Actual Use	<p>Actual use has not been reported, the following values are based of paid bill reports.</p> <table border="1"> <thead> <tr> <th colspan="2">3000271</th> <th colspan="2">3001273</th> </tr> <tr> <th><u>AUMs</u></th> <th><u>Year</u></th> <th><u>AUMs</u></th> <th><u>Year</u></th> </tr> </thead> <tbody> <tr> <td>non-use</td> <td>2007</td> <td>230</td> <td>2007</td> </tr> <tr> <td>non-use</td> <td>2006</td> <td>230</td> <td>2006</td> </tr> <tr> <td>non-use</td> <td>2005</td> <td>230</td> <td>2005</td> </tr> <tr> <td>29</td> <td>2004</td> <td>230</td> <td>2004</td> </tr> <tr> <td>231</td> <td>2003</td> <td>no permit</td> <td>2003</td> </tr> <tr> <td>292</td> <td>2002</td> <td>no permit</td> <td>2002</td> </tr> <tr> <td>no permit</td> <td>2001</td> <td>no permit</td> <td>2001</td> </tr> <tr> <td>no permit</td> <td>2000</td> <td>no permit</td> <td>2000</td> </tr> <tr> <td>no permit</td> <td>1999</td> <td>no permit</td> <td>1999</td> </tr> <tr> <td>no permit</td> <td>1998</td> <td>no permit</td> <td>1998</td> </tr> </tbody> </table>	3000271		3001273		<u>AUMs</u>	<u>Year</u>	<u>AUMs</u>	<u>Year</u>	non-use	2007	230	2007	non-use	2006	230	2006	non-use	2005	230	2005	29	2004	230	2004	231	2003	no permit	2003	292	2002	no permit	2002	no permit	2001	no permit	2001	no permit	2000	no permit	2000	no permit	1999	no permit	1999	no permit	1998	no permit	1998
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	Utilization	Due to the lack of staff utilization studies have not been conducted. During the assessment visit it was determined that the allotment was either receiving slight to moderate amounts of utilization.																																																
	Climate	<p>The past water year (Oct. 1, 2007 – Sept. 30, 2008) the average temperature has been nearly average (-1 to 0 degrees Fahrenheit below average) and precipitation has been nearly average (0 to 1 inches above average). This should provide average plant growth on cool season and warm season plants.</p> <p>During the past 10 years (1998-2007) the temperature has been at or above average and precipitation has been fluctuating annually, but it is important to note that between 2000 and 2004 the 12 month running average was below the annual average. (Based on the Northern Mountains Climate Division, New Mexico from the Western Regional Climate Center.)</p> <p>Climate change is a concern not only in New Mexico but</p>																																																

		<p>globally. “Effects of increasing atmospheric CO<sub>2</sub> levels on plants are predicted to cause dramatic changes in native vegetation. Global climate change may accelerate rates of plant extinction, while ecosystem structure and function may shift. Ecological response to global changes in climate could shift ecosystems (i.e., shrublands replacing grasslands) and have effects, not only to an individual species, but to the ecosystem itself by additions and deletions of vegetation species” (Johnson, H.B., and H.S. Mayeux. 1992. Viewpoint: A view on species additions and deletions and the balance of nature. Journal of Wildlife Management 45:322-333.)</p> <p>We anticipate that our monitoring efforts will help indicate vegetation shifts, allowing for management modifications to address global climate change.</p>
	<p>Trend</p>	<p>One long term trend plot has been established on this allotment but due to the lack of staff it has not been read since 1989. A Rangeland Health Matrix was completed on September 16, 2008. The actual survey forms are available within the allotment file. Below is a summation of the information gathered by the survey. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be <math>5(\text{score}) * 10(\text{indicators}) = 50 / 50 * 100 = 100\%</math> similarity, or what is expected based on an Ecological Site Description. Standards for each individual category are met when they are rated Proper Functioning Condition or Functioning at Risk-Upward Trend. Not meeting standards are ratings of; Functioning at Risk-Static, Functioning at Risk-Downward Trend and Non Functional.</p> <p><b>Soil and Site Stability</b> Two indicators were deemed None to Slight, five were deemed Slight to Moderate and three were deemed Moderate. Rating: 78%</p> <p><b>Hydrologic Function</b> Three indicators were deemed None to Slight, four were deemed Slight to Moderate and three were deemed Moderate. Rating: 80%</p> <p><b>Biotic Integrity</b> Five indicators were deemed None to Slight, while four were</p>

		<p>deemed Slight to Moderate. Rating: 91%</p> <p>Overall Rating: 83%</p> <p>Soils were rated at Proper Functioning Condition, Biotic Flora was rated at Proper Functioning Condition and Biotic Fauna was rated at Proper Functioning Condition.</p> <p>Current livestock does not appear to be adversely affecting this allotment - all standards are being met.</p>
	Riparian	There is no riparian vegetation within this allotment.
	Wildlife	<p>Seasonal home ranges in the allotment include those for elk, deer, mountain lion, black bear, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, and a variety of insects.</p> <p>Elk and deer are grazers/browsers; however there is little dietary overlap between deer and cattle. Best management practices i.e. rotational grazing would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.</p>
	Threatened and Endangered Species	It is determined that there are no state or federally listed threatened or endangered species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment.
Conclusions and Recommendations		Overall, the vegetation appears to be in good condition with good diversity. The soils appeared to be eroding some but monitoring will determine if livestock are having any affect. It is recommended that grazing be renewed for another 10 years without any changes to the permit.



### Canada de la Cruz (507)



**Legend**

-  Allotment Boundary
-  Bureau of Land Management
-  State
-  Private
-  Forest Service

Produced by the BLM Taos Field Office - GIS on:  
 Tuesday, October 21, 2008  
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7.5' Topos: El Rito, Lyden, Medanales & Ojo Caliente