

**Allotment Evaluation (AE)
For
Rio West (#646)**

Permittee		<u>Authorization Number</u> 3001139		
Livestock Use	Preference AUMs	<u>Allotment</u> 00646	<u>Active</u> 273	<u>Suspended</u> 173
	Period of Use	<u>Allotment</u> Rio West	<u>Kind</u> 460 Cattle	<u>Season of Use</u> 11/08 – 12/05
	Kind of Livestock	Cow Calf		
	Percent Public Land	AUMs are authorized at 79% public land		
Allotment Profile	Physical Description	<p>Allotment 646 is located approximately 20 miles north, northwest of Tres Piedras on the Colorado/New Mexico border, in Rio Arriba County, New Mexico. Elevation on this allotment is roughly 8,000 to 8,400 feet. Landforms on the allotment include uplands. A portion of this allotment is within the San Antonio WSA.</p> <p>Two soil types are identified within the BLM land of this allotment. They include:</p> <p>Luhon-Travelers complex, 3 to 7 percent slopes. These soils consist of loams, with rooting depths between 20 to 60 inches. Parent material of residuum of basalt and eolian sediments comprise these soils. Average annual precipitation in this area ranges from 10 to 12 inches. Vegetation is characterized by western wheat, Indian ricegrass, and winter fat.</p> <p>Stunner-Travelers association, gently sloping. These soils consist of stony loams, with rooting depths between 20 and over 60 inches. Parent material of mixed alluvium, residuum of basalt and eolian sediment comprises this soil. Average annual precipitation in this area ranges from 10 to 12 inches. Vegetation is characterized by western wheat, blue grama, threeawn and winter fat.</p>		

		Vegetation observed during time of review included blue grama, prickly pear, squirreltail, threadleaf groundsel, rabbitbrush, snakeweed, and sagebrush.																						
	Land Status Acreage	<u>BLM</u> <u>State</u> <u>Private</u> 4,343 1,160 89																						
	Management Objectives	The allotment is under an 'Improve' ('I') management category. 'I' category allotments are managed in accordance with the Allotment Management Plan to achieve satisfactory ecological condition.																						
	Key Forage Species	blue grama, western wheat, squirreltail, Indian ricegrass and winter fat																						
	Grazing System	Rotational																						
Management Evaluation	Actual Use	<table border="1"> <thead> <tr> <th><u>AUMs</u></th> <th><u>Year</u></th> </tr> </thead> <tbody> <tr> <td>323</td> <td>2006</td> </tr> <tr> <td>331</td> <td>2005</td> </tr> <tr> <td>370</td> <td>2004</td> </tr> <tr> <td>454</td> <td>2003</td> </tr> <tr> <td>Non use</td> <td>2002</td> </tr> <tr> <td>275</td> <td>2001</td> </tr> <tr> <td>334</td> <td>2000</td> </tr> <tr> <td>346</td> <td>1999</td> </tr> <tr> <td>270</td> <td>1998</td> </tr> <tr> <td>247</td> <td>1997</td> </tr> </tbody> </table>	<u>AUMs</u>	<u>Year</u>	323	2006	331	2005	370	2004	454	2003	Non use	2002	275	2001	334	2000	346	1999	270	1998	247	1997
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	Utilization	Due to the lack of staff, utilization surveys have not been conducted.																						
	Climate	<p>The past water year (Oct. 1, 2006 – Sept. 30, 2007) the temperature and precipitation has been slightly (+1 to +2 degree Fahrenheit and +3 to +6 inches, respectively) above average. This should provide average plant growth.</p> <p>Climate change is a concern not only in New Mexico but globally. "Effects of increasing atmospheric CO₂ 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</p>																						

		<p>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>Two long term trend plots have been established on this allotment, but have not been read since 1997 due to a lack in staff. A Rangeland Health Matrix was completed on July 19, 2007. 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 indicators are relative to a departure from 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>Soil and Site Stability Ten of ten indicators were deemed None to Slight. Rating: 100%</p> <p>Hydrologic Function Ten of ten indicators were deemed None to Slight. Rating: 100%</p> <p>Biotic Integrity Six of nine indicators were deemed None to Slight, while three were deemed Slight to Moderate. Rating: 93%</p> <p>Overall Rating: 98%</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>Livestock do not appear to be adversely affecting the functionality of this allotment.</p>
	Wildlife	<p>Seasonal home ranges in the allotment include those for elk, deer, pronghorn, mountain lion, black bear, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, amphibians, and a variety of insects.</p> <p>Elk, pronghorn and deer are grazers, however there is little dietary overlap between deer and cattle. Best management practices (rotational grazing; enhancement of cool season grasses, Indian ricegrass and winterfat; and promotion of a mixed-aged sagebrush community) would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.</p> <p>Critical wildlife areas on the allotment include winter range for elk deer and pronghorn. An important migratory corridor for avian and big-game species also occurs inside the allotment boundaries.</p>
	Threatened and Endangered Species	<p>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.</p> <p>Special status species that are likely to be found on the allotment include prairie dogs, burrowing owl, mountain plover and ferruginous hawk.</p>
Conclusions and Recommendations		<p>The allotment is in good condition, with fair vegetative diversity. Western wheat and Indian ricegrass were absent during our survey which should have been present according to the NRCS soil survey.</p>

		Monitoring is recommended for the mustard in the area – as it was above normal – and to monitor the grass component.
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