

Cultural Resources- Many cultural resource sites have been identified within the Little High Rock Home Range. These are normally associated with perennial water sources such as springs and associated creeks. Due to the heavy and severe utilization levels and resultant trampling occurring at these sites, damage to cultural resources is also occurring. Land use decisions require actions up to and including total removal of animals if damage is found to be taking place.

## 7. APPROPRIATE MANAGEMENT LEVEL DETERMINATION

It is difficult to determine an appropriate management level utilizing water sources, when there are various sources present. Besides production, there are other factors, such as recharge, animal distribution, basin or trough size, social dynamics, etc., which determines how many animals can be watered on a certain area. For example, a spring may produce enough water to supply 1000 head of horses over a 24 hour period. However, if a band of animals must spend 30 minutes at the water source to obtain adequate water, there might be inadequate time for all bands to obtain adequate water that day. Another factor which makes an AML based on water production difficult, is that inspections revealed that animals changed between the water sources they used during the season.

For the above reasons, the appropriate level has been determined by applying a utilization formula on the most preferred and used riparian sources within the Home Range.

<u>Water Source</u>	<u>2000 utilization (Midpoint)</u>	<u>Average</u>
Laxague Spring	Severe (90%)	
Powers Spring	Severe (90%)	
Cherry Spring	Severe (90%)	83%
Yellow Rock Spring	Heavy (70%)	
Mahogany Creek	Severe (90%)	
Pappys Corral	Heavy (70%)	
Woodruff Camp	pvt	

The riparian zones are approximately the same size for each water source, therefore, a weighted average is not found to be necessary.

Then, applying the simple utilization formula,

$$\frac{4008 \text{ AUMs (334 adult wild horses X 12 Months )}^*}{83\%} \quad \times \quad \frac{\text{AUMs}}{20\%}^{**}$$

$$\frac{4008 \text{ AUMs X 20\%}}{83\%} = 965 \text{ AUMs}$$

For potential stocking rate:

$\frac{965 \text{ AUMs}}{12 \text{ months}} = 80 \text{ wild horses maximum}$

\* 4008 AUMs is determined to be the amount of use made on both the uplands and riparian. The amount of AUMs on just the riparian could not be broken out. It is assumed that 334 head (the number of adults counted during the 2001 census) contributed to the utilization levels found during 2000 since utilization occurs preferentially in riparian areas.

\*\* 20% utilization is the maximum utilization desired in the riparian areas. At this level it is expected improvement would occur.

80 wild horses is considered the upper limit of the appropriate management level range. The lower limit of this range is determined as follows:

$80 \text{ wild horses (AML)} \times 60\% = 48 \text{ wild horses}$

Thus, it is determined a population range of 48-80 wild horses is appropriate for the Little High Rock Home Range.

The low range is 60% of the appropriate management level and is the level which the population would be gathered to so that in 4 years, it would be at the maximum level.

Note: It is recognized that the maintenance of the above population range may not result in the improvement of all riparian areas to PFC. For this reason, it is recommended that monitoring continue to further define the optimum numbers.

Attachments