

# MANAGEMENT SYSTEM TEMPLATE

## A. BENCHMARK SYSTEM WORKSHEET

1.	STATE	OK
2.	FIELD OFFICE	Ardmore, Sulphur, Tishomingo
3.	MLRA	85B - Arbuckle Mountains
4.	COMMON RESOURCE AREA (CRA)	085B.40.001
5.	RESOURCE INTERPRETATIONS	
5.1	SOIL	
5.2	WATER	
5.3	AIR	
5.4	PLANT	
5.5	ANIMAL	
5.6	HUMAN	
6.	HYDROLOGIC UNIT	
7.	SYSTEM TEMPLATE LABEL	LADZO
8.	SYSTEM NAME	Arbuckle Mountains Grazed Range
9.	PLANNING PHASE	Benchmark
10.	PLANNING LEVEL	N/A
11.	NRCS LANDUSE	Grazed Range
12.	EXISTING CONSERVATION PRACTICES	
	<ol style="list-style-type: none"> <li>1. 378 - Pond</li> <li>2. 382 - Fencing</li> </ol>	
13.	SYSTEM NARRATIVE	
	<p>Grazed range is the primary landuse in this Major Land Resource Area. The landscape consists of gently rolling to hilly, dissected limestone plateaus with deep, steep sloped valleys of the low, rugged Arbuckle Mountains. Deep groundwater is abundant, and many springs and wells are throughout the area. The soils have a wide range of textures, with a lot of gravelly and stony soils on the limestone ridges and plateaus. Slopes range from gentle to very strongly sloping. This area requires intensive management and a thorough understanding of all of the natural resources. The original vegetation of the Arbuckle Mountains is of a tall to mixed grass aspect with scattered trees. The vegetation is more of a mixed grass to short grass aspect with scattered scrub oak and juniper trees on the very shallow soils and along escarpments. Consistent overgrazing by livestock will cause a shift to a mid to short grass aspect, or an increase in weed and brush problems. Ecological condition ranges from poor to excellent condition, plant vigor ranges from low to high, and forage production varies considerably (depending on the varied condition of the plant resources). Woody plants were scattered originally, but will invade to severe conditions with continued abuse of the natural resources. Areas adjacent to rivers and streams are subject to scour erosion from out-of-bank flow. Air quality is good due to the existence of permanent native plant cover. Grazing distribution tends to be a problem due to the topography and the size of the grazing unit. Livestock watering sources are abundantly available in the form of springs, creeks, and previously constructed ponds, however, the distribution of the watering sources sometimes causes grazing distribution problems, particularly with the larger grazing units. The cost of reclaiming the previously abused sites or the sites in poor ecological condition and reestablishing grasslands is prohibitive due to the high cost of reclamation and reestablishment, and the low production potential of many of the soils.</p>	
14.	RESOURCE CONCERNS	MAGNITUDE/EFFECTS
	<ol style="list-style-type: none"> <li>1. Soil Erosion - Concentrated Flow Classic Gullies</li> <li>2. Soil Erosion - Streambank</li> <li>3. Soil Erosion - Scoured Areas</li> </ol>	<ol style="list-style-type: none"> <li>1. 100 Tons/Year; Inadequate vegetative cover, low plant vigor, and steeper slopes contribute to the problem which is then further intensified by overgrazing.</li> <li>2. 100 Tons/Year; Inadequate vegetative cover and poor management techniques used in riparian areas.</li> <li>3. 50 Tons/Acre/Year; Inadequate vegetative cover and overgrazing are the major source of the problem.</li> </ol>

14.	RESOURCE CONCERNS	MAGNITUDE/EFFECTS
	<p>4. Water Quality - Surface Water Contaminates - Suspended Sediment and Turbidity</p> <p>5. Plants Condition - Plant Productivity</p> <p>6. Plants Condition - Plant Health and Vigor</p> <p>7. Plants Management - Establishment, Growth &amp; Harvest</p> <p>8. Plants Management - Pest (Brush Weeds, Insects, Etc.)</p> <p>9. Animal Habitat - Water</p> <p>10. Animal Management - Population and Resource Balance</p> <p>11. Human - Economics - Management Level</p>	<p>4. High sediment yields from the erosion problems contributes to the sedimentation process which substantially degrades water quality in lakes and streams due to suspended sediment and turbidity.</p> <p>5. Forage production is less than 50% of the potential for the site due to consistent overgrazing. Pests are a problem and plant vigor is low.</p> <p>6. Plant health and vigor is low due to a long history of overgrazing.</p> <p>7. Poor vigor, regeneration, and harvest efficiency due to overgrazing.</p> <p>8. High pest levels, particularly woody species, due to the encroachment caused by the history of continuous overgrazing.</p> <p>9. Livestock water supplies are not adequately located in each grazing unit to facilitate grazing distribution and better disperse livestock usage of the natural resources.</p> <p>10. An imbalance between animal numbers and forage availability causes animal performance to decline due to reduced quality and quantity of forage. As forage and livestock performance decrease, soil erosion and water quality problems tend to worsen.</p> <p>11. Producers often lack an adequate knowledge of good grazing management techniques and strategies. They need in the field training on some of the basics to grazing management (plant identification, grazing heights, forage utilization, rotational grazing, etc.).</p>