

MANAGEMENT SYSTEM TEMPLATE

A. BENCHMARK SYSTEM WORKSHEET

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| 1. | STATE | OK |
| 2. | FIELD OFFICE | Marietta, Sulphur, Ardmore, Tishomingo, Ada, Pauls Valley, Purcell, Madill, Coalgate, Atoka, Durant, Hugo, Idabel |
| 3. | MLRA | 85A - Grand Prairie |
| 4. | COMMON RESOURCE AREA (CRA) | 085A.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 | KAJZ 0 |
| 8. | SYSTEM NAME | Grand Prairie Pasture |
| 9. | PLANNING PHASE | Benchmark |
| 10. | PLANNING LEVEL | N/A |
| 11. | NRCS LANDUSE | Pasture |
| 12. | EXISTING CONSERVATION PRACTICES | |
| | | <ol style="list-style-type: none"> 1. 378 - Pond 2. 382 - Fencing 3. 512 - Pasture and Hayland Planting |
| 13. | SYSTEM NARRATIVE | |
| | | <p>The landscape includes medium to fine textured soils with slopes ranging from gentle to strongly sloping requiring intensive management for erosion control. The original vegetation of the Grand Prairie is of a tall to mixed grass aspect, however vast areas have been tilled and since replanted to introduced grass species. Dominant forage species include alfalfa, annual ryegrass, bermudagrass, bahiagrass, introduced bluestems, tall fescue, weeping lovegrass, and adapted legumes. Woody plants were not common originally but will invade readily. The major limitations to high quality and quantity pasture production are weed control, livestock grazing management, and low fertility. Air quality is good due to the existence of permanent vegetative cover. Areas adjacent to rivers and streams are subject to scour erosion from out-of-bank flow.</p> |
| 14. | RESOURCE CONCERNS | MAGNITUDE/EFFECTS |
| | <ol style="list-style-type: none"> 1. Soil Erosion - Concentrated Flow Classic Gullies 2. Soil Erosion - Streambank 3. Soil Erosion - Scoured Areas 4. Water Quality - Surface Water Contaminates - Suspended Sediment and Turbidity 5. Plants Condition - Plant Productivity 6. Plants Condition - Plant Health and Vigor 7. Plants Management - Establishment, Growth & Harvest | <ol style="list-style-type: none"> 1. 100 Tons/Year; Inadequate vegetative cover, low plant vigor, and steeper slopes contribute to the problem which is then further intensified by overgrazing. 2. 100 Tons/Year; Inadequate vegetative cover and poor management techniques used in riparian areas. 3. 50 Tons/Acre/Year; Inadequate vegetative cover and overgrazing are the major source of the problem. 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. 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. 6. Plant health and vigor is low due to a long history of overgrazing. 7. Poor vigor, regeneration, and harvest efficiency due to overgrazing. |

| 14. | RESOURCE CONCERNS | MAGNITUDE/EFFECTS |
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| | <p>8. Plants Management - Nutrient Management</p> <p>9. Plants Management - Pest (Brush Weeds, Insects, Etc.)</p> <p>10. Animal Habitat - Water</p> <p>11. Animal Management - Population and Resource Balance</p> <p>12. Human - Economics - Management Level</p> | <p>8. With many of these pastures being old cropland that has been established to introduced grasses, the fertility levels were already low. The lack of fertility application is the major limiting factor, however, poor application techniques and timing of applications also contribute to the problem. A current soil analysis is rarely used to determine the fertility levels needed by the plant resources.</p> <p>9. High pest levels, particularly woody species, due to the encroachment caused by the history of continuous overgrazing.</p> <p>10. 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>11. 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>12. 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> |