

## MANAGEMENT SYSTEM TEMPLATE

### A. BENCHMARK SYSTEM WORKSHEET

1.	STATE	Oklahoma	
2.	FIELD OFFICE	Buffalo - Harper County	
3.	MLRA	78C	
4.	COMMON RESOURCE AREA (CRA)	078C.40.002	
5.	RESOURCE INTERPRETATIONS		
5.1	SOIL	Soil Legends, Technical/Non-Technical Soils Interpretations	
5.2	WATER	Water Quantity and Quality Interpretations	
5.3	AIR		
5.4	PLANT	Cropland Interpretations	
5.5	ANIMAL	Threatened and Endangered Species List	
5.6	HUMAN		
6.	HYDROLOGIC UNIT	11140008-014, 034; 11050001-010, 025	
7.	SYSTEM TEMPLATE LABEL	FBAZA	
8.	SYSTEM NAME	78C - Rolling Uplands	
9.	PLANNING PHASE	Benchmark	
10.	PLANNING LEVEL	N/A	
11.	NRCS LANDUSE	Crop	
12.	EXISTING CONSERVATION PRACTICES		
		<ol style="list-style-type: none"> <li>1. Contour Farming (330)</li> <li>2. Residue Management, Seasonal (344)</li> <li>3. Diversions (362)</li> <li>4. Grassed Waterway (412)</li> <li>5. Terraces (600)</li> </ol>	
13.	SYSTEM NARRATIVE		
		<p>This system consists of nearly level to strongly sloping cropland fields. These fields are predominantly small grains with intermingled areas of forage sorghums. Soil erosion can occur from both wind and water. Terraces and waterways are in place in most fields and residue management is an integral part of controlling erosion along with the terraces and waterways. High intensity storms occur all too frequently, creating flooding which causes major structural damage to existing conservation practices. On the other hand, drought conditions can persist for prolonged periods and directly effect the amount of residues available for soil protection. Excessive use of tillage implements has deteriorated soil tilth and created compaction problems which lowers plant health, vigor and productivity while lowering crop yields. Fertilizer is commonly applied without the use of soil testing. Bindweed and annual cheat are common pests found throughout the area. Grazing exists on this landuse whenever moisture conditions are favorable. Center pivot irrigation systems are scattered throughout the area and are typically outdated and ineffciently using water.</p>	
14.	RESOURCE CONCERNS	MAGNITUDE/EFFECTS	
	<ol style="list-style-type: none"> <li>1. Soil - Erosion - Sheet &amp; Rill</li> <li>2. Soil - Erosion - Wind</li> <li>3. Soil - Erosion - Ephemeral Gullies</li> <li>4. Soil - Condition - Tilth</li> <li>5. Soil - Condition - Compaction</li> <li>6. Soil - Deposition - Damage On-site</li> <li>7. Water - Quantity - Flooding</li> <li>8. Water - Quantity - Mngmt. Irr.</li> <li>9. Air - Quality - Sediment</li> <li>10. Plants - Condition - Productivity</li> <li>11. Plants - Condition - Health/Vigor</li> <li>12. Plants - Mngmt - Est/Grwth/Harvest</li> <li>13. Plants - Mngmt - Nutrient</li> <li>14. Plants - Management - Pest</li> <li>15. Animal - Pop. &amp; Resource Balance</li> </ol>	<ol style="list-style-type: none"> <li>1. Soil loss 8 tons/ac/yr.</li> <li>2. Soil loss 12 tons/ac/yr.</li> <li>3. Soil loss 4 tons/ac/yr.</li> <li>4. Low organic matter</li> <li>5. Decreased infiltration</li> <li>6. Excess sedimentation</li> <li>7. Practice deterioration</li> <li>8. Inefficient water usage</li> <li>9. Deteriorates quality of life</li> <li>10. Reduce production</li> <li>11. Reduce plant vigor</li> <li>12. Reduce plant growth</li> <li>13. 5 bushel decreased yield</li> <li>14. 25% decreased yield</li> <li>15. Overgrazing forage</li> </ol>	

Conservation Management Systems

ROLLING UPLANDS -  
CROP

Certification of Quality Criteria

RESOURCE CONSIDERATION/PROBLEM	Term Effect		Meets Quality Criteria			
	Short	Long	Benchmark		Planned	
			Yes	No	Yes	No
<b>SOIL</b>						
Erosion						
Sheet and rill		✓		✓		
Wind		✓		✓		
Irrigation induced			✓			
<b>Concentrated flow</b>						
Cropland ephemeral gully		✓		✓		
Classic gully			✓			
Soil mass movement			✓			
Roadbank and construction sites			✓			
Streambank erosion			✓			
<b>Condition</b>						
Tilth		✓		✓		
Compaction		✓		✓		
Soil contaminants			✓			
<b>Deposition (Onsite &amp; Offsite)</b>						
Damage		✓		✓		
Safety			✓			
<b>WATER</b>						
Quantity						
Seeps			✓			
Flooding		✓		✓		
Subsurface water			✓			
Restricted capacity			✓			
Conveyance			✓			
Inadequate outlets			✓			
Restricted capacity, water bodies			✓			
Water management--irrigated		✓		✓		
Water management--non-irrigated			✓			
<b>Quality</b>						
Contaminants			✓			
Aquatic habitat suitability			✓			
<b>AIR</b>						
Quality						
Sediment		✓		✓		
Smoke			✓			
Chemical drift			✓			
Odors			✓			
Fungi			✓			
Molds			✓			
Pollen			✓			
<b>Condition</b>						
Temperature			✓			
Air movement			✓			
Humidity			✓			

## Conservation Management Systems

### Certification of Quality Criteria

RESOURCE CONSIDERATION/PROBLEM	Term Effect		Meets Quality Criteria			
	Short	Long	Benchmark		Planned	
			Yes	No	Yes	No
<b>PLANTS</b>						
Suitability						
Adapted to site			✓			
Intended use			✓			
<b>Condition</b>						
Productivity		✓		✓		
Health and vigor		✓		✓		
<b>Management</b>						
Establishment			✓			
Growth		✓		✓		
Harvest			✓			
Nutrient management		✓		✓		
Pests		✓		✓		
Threatened and endangered species			✓			
<b>ANIMALS(domestic/wildlife)</b>						
Habitat						
Food			✓			
Cover			✓			
Shelter			✓			
Water			✓			
Threatened and endangered species			✓			
<b>Management</b>						
Population and Resource Balance		✓		✓		
Animal Health			✓			

References:  
 NPPH Pages 75-78  
 FOTG Section III - Quality Criteria  
 GM -450 Part 401 Paragraph 401.03