

## MANAGEMENT SYSTEM TEMPLATE

### A. BENCHMARK SYSTEM WORKSHEET

1.	STATE	Oklahoma	
2.	FIELD OFFICE	Buffalo - Harper County	
3.	MLRA	77E	
4.	COMMON RESOURCE AREA (CRA)	077E.40.001	
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	11100201-015, 035, 040, 155; 11100301-010	
7.	SYSTEM TEMPLATE LABEL	EAAOA	
8.	SYSTEM NAME	Sandy Uplands and Dunes	
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.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> </ol>		
13.	SYSTEM NARRATIVE		
	<p>This system consists of cropland fields on gently rolling to moderately sloped land with sandy soils. These fields are annually sown to wheat for grain production and soils are normally quite marginal and long term productivity is usually low. Bindweed and Cheat are common weeds found throughout the area. These fields are susceptible to wind erosion when adequate amounts of crop residue are not left on the soil surface. Terrace systems are commonly installed to control ephemeral erosion, caused by occasional high intensity rainfall events. Fertilizers are applied without determining the needs of the plants. Excessive application of fertilizers and pesticides is a potential source of groundwater contamination due to the sandy texture of the soils.</p>		
14.	RESOURCE CONCERNS		MAGNITUDE/EFFECTS
	<ol style="list-style-type: none"> <li>1. Soil - Erosion - Wind</li> <li>2. Soil - Erosion - Ephemeral Gullies</li> <li>3. Soil - Condition - Tilth</li> <li>4. Water - Quality - Contaminants</li> <li>5. Plants - Mngmt - Nutrient</li> <li>6. Plants - Mngmt - Pest</li> <li>7.</li> <li>8.</li> <li>9.</li> <li>10.</li> </ol>		<ol style="list-style-type: none"> <li>1. Soil loss 15 tons/ac/yr.</li> <li>2. Soil loss 4 tons/ac/yr.</li> <li>3. Soil Condition Index &lt;0.0</li> <li>4. Ground water contaminants</li> <li>5. Low soil fertility</li> <li>6. Reduce crop yield</li> <li>7.</li> <li>8.</li> <li>9.</li> <li>10.</li> </ol>

Conservation Management Systems

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>						
<b>Quantity</b>						
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>						
<b>Quality</b>						
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						
Condition						
Productivity						
Health and vigor						
Management						
Establishment						
Growth						
Harvest						
Nutrient management		✓				
Pests		✓				
Threatened and endangered species						
<b>ANIMALS(domestic/wildlife)</b>						
Habitat						
Food						
Cover						
Shelter						
Water						
Threatened and endangered species						
Management						
Population and Resource Balance						
Animal Health						

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