

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.40.002	
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		
7.	SYSTEM TEMPLATE LABEL	EBAOA	
8.	SYSTEM NAME	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"> 1. Contour Farming (330) 2. Residue Management, Seasonal (344) 3. Diversions (362) 4. Grassed Waterway (412) 5. Terraces (600) 	
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. Cheat and Bindweed are common weed pests found in the cropland fields. 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 frequently causing major structural damage to existing conservation practices and increasing sheet, rill and ephemeral erosion. Soil till is low and compaction exists because of continuous, excessive tillage operations. This results in poor water infiltration, low plant vigor and lower plant productivity with a reduced crop harvest. Fertilizer is generally applied without regard to plant needs. Drought conditions can persist for prolonged periods and directly effect the amount of residues available to control wind erosion. Wind erosion not only reduces the productivity of the soil but also contributes to poor air quality from blowing soil particles. Grazing exists on this landuse whenever moisture conditions are favorable. Existing irrigation systems are typically outdated and using water inefficiently.</p>	
14.	RESOURCE CONCERNS	MAGNITUDE/EFFECTS	
	<ol style="list-style-type: none"> 1. Soil - Erosion - Sheet & Rill 2. Soil - Erosion - Wind 3. Soil - Erosion - Ephemeral Gullies 4. Soil - Condition - Tilth 5. Soil - Condition - Compaction 6. Soil - Deposition - Damage On-site 7. Water - Quantity - Flooding 8. Water - Quantity - Mngmt. Irr. 9. Air - Quality - Sediment 10. Plants - Condition - Productivity 11. Plants - Condition - Health/Vigor 12. Plants - Mngmt - Est/Grwth/Harvest 13. Plants - Mngmt - Nutrient 14. Plants - Management - Pest 15. Animal - Pop. & Resource Balance 	<ol style="list-style-type: none"> 1. Soil loss 8 tons/ac/yr. 2. Soil loss 12 tons/ac/yr. 3. Soil loss 4 tons/ac/yr. 4. Soil Condition Index < 0.0 5. Decreased infiltration 6. Excess sedimentation 7. Practice deterioration 8. Inefficient water usage 9. Deteriorates quality of life 10. Reduce production 11. Reduce plant vigor 12. Reduce plant growth 13. 5 bushel decreased yield 14. 25% decreased yield 15. Overgrazing forage 	

Conservation Management Systems

Certification of Quality Criteria

RESOURCE CONSIDERATION/PROBLEM	Term Effect		Meets Quality Criteria			
	Short	Long	Benchmark		Planned	
			Yes	No	Yes	No
SOIL						
Erosion						
Sheet and rill				✓		
Wind				✓		
Irrigation induced			✓			
Concentrated flow						
Cropland ephemeral gully				✓		
Classic gully			✓			
Soil mass movement			✓			
Roadbank and construction sites			✓			
Streambank erosion			✓			
Condition						
Tilth				✓		
Compaction				✓		
Soil contaminants			✓			
Deposition (Onsite & Offsite)						
Damage				✓		
Safety			✓			
WATER						
Quantity						
Seeps			✓			
Flooding				✓		
Subsurface water			✓			
Restricted capacity			✓			
Conveyance			✓			
Inadequate outlets			✓			
Restricted capacity, water bodies			✓			
Water management--irrigated				✓		
Water management--non-irrigated			✓			
Quality						
Contaminants			✓			
Aquatic habitat suitability			✓			
AIR						
Quality						
Sediment				✓		
Smoke			✓			
Chemical drift			✓			
Odors			✓			
Fungi			✓			
Molds			✓			
Pollen			✓			
Condition						
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
PLANTS						
Suitability						
Adapted to site			✓			
Intended use			✓			
Condition						
Productivity				✓		
Health and vigor				✓		
Management						
Establishment			✓			
Growth				✓		
Harvest				✓		
Nutrient management				✓		
Pests				✓		
Threatened and endangered species			✓			
ANIMALS(domestic/wildlife)						
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