

MANAGEMENT SYSTEM TEMPLATE

A. BENCHMARK SYSTEM WORKSHEET

1.	STATE	Oklahoma	
2.	FIELD OFFICE	Boise City - Cimarron County	
3.	MLRA	77A	
4.	COMMON RESOURCE AREA (CRA)	077A.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	11100101-025, 035, 050; 11040002-045, 054	
7.	SYSTEM TEMPLATE LABEL	CAAOC	
8.	SYSTEM NAME	Flatlands - Irrigated Wheat	
9.	PLANNING PHASE	Benchmark	
10.	PLANNING LEVEL	N/A	
11.	NRCS LANDUSE	Crop	
12.	EXISTING CONSERVATION PRACTICES	<ol style="list-style-type: none"> 1. Residue Management, Seasonal - 344 2. Residue Management, Mulch Till - 329B 3. Nutrient Management - 590 4. Pest Management - 595 5. 	
13.	SYSTEM NARRATIVE	<p>This system consists of the production of small grains under sprinkler irrigation. Many of the irrigation systems are outdated and use water inefficiently. The average rainfall for the area is 16"/year. The terrain is nearly level to gently sloping with soils ranging from sandy loams to clay loams. Excessive tillage operations have created compaction problems and low soil tilth which reduces crop health, vigor and productivity. Dry feedlot animal wastes and fertilizers are commonly applied without consideration of the plant needs. Cheat and Bindweed infestations can reduce expected crop yields. There are numerous abandoned water wells which are providing a direct source to groundwater contamination.</p>	
14.	RESOURCE CONCERNS	MAGNITUDE/EFFECTS	
	<ol style="list-style-type: none"> 1. Soil - Condition - Tilth 2. Soil - Condition - Compaction 3. Water - Quality - Groundwater Cont. 4. Water - Quant - Irrig. Water Mgt 5. Plants - Condition - Productivity 6. Plants - Condition - Health & Vigor 7. Plants - Mngmt. Est., Growth, Har. 8. Plants - Mngmt. - Nutrient Mngmt. 9. Plants - Mngmt. - Plant Pests 10. 	<ol style="list-style-type: none"> 1. Soil Cond. Index < 0.0 2. Plow pan 3. Abandoned wells 4. Inefficient systems 5. 35 Bu./Ac. 6. Poor root growth 7. Decreased crop growth 8. Inaccurate fertilizer rates 9. Weeds reduce crop yields 10. 	

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			✓			

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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