MANAGEMENT SYSTEM TEMPLATE

A. BENCHMARK SYSTEM WORKSHEET

1	**STATE**	OKLAHOMA
2	**FIELD OFFICE**	Antlers, Atoka, Coalgate, Hugo, Idabel, McAlester, Poteau, Stigler, Wilburton
3	**MLRA**	119
4.	**COMMON RESOURCE AREA (CRA)**	0119.40.001
5	**RESOURCE INTERPRETATIONS**	***see Section II FOTG for interpretations***
5.1	**SOIL**	FOTG, SECTION I - EROSION PREDICTION FOTG, SECTION II - SOILS LEGENDS FOTG, SECTION II - SOIL DESCRIPTIONS - NONTECHNICAL FOTG, SECTION II - SOIL DESCRIPTIONS - TECHNICAL FOTG, SECTION II - HYDRIC SOIL INTERPRETATIONS FOTG, SECTION II - NONAGRICULTURAL INTERPRETATIONS FOTG, SECTION II - ENGINEERING INTERPRETATIONS FOTG, SECTION II - WASTE DISPOSAL INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - SOIL FOTG, SECTION V-A-1 - EFFECTS FOR CMS FORMULATION - SOIL FOTG, SECTION V-B - EFFECT FOR DECISIONMAKING
5.2	**WATER**	FOTG, SECTION I - CLIMATIC DATA FOTG, SECTION I - STATE/LOCAL LAWS, ORDINANCES, REGULATIONS FOTG, SECTION II - WATER QUANTITY AND QUALITY INTERPRETATIONS FOTG, SECTION II - NONAGRICULTURAL INTERPRETATIONS FOTG, SECTION II - WASTE DISPOSAL INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - WATER FOTG, SECTION V-A-1 - EFFECTS FOR CMS FORMULATION - WATER
5.3	**AIR**	FOTG, SECTION I - CLIMATIC DATA FOTG, SECTION I - STATE/LOCAL LAWS, ORDINANCES, REGULATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - AIR FOTG, SECTION V-A-1 - EFFECTS FOR CMS FORMULATION - AIR
5.4	**PLANT**	FOTG, SECTION II - FORESTLAND INTERPRETATIONS FOTG, SECTION II - PASTURELAND AND HAYLAND INTERPRETATIONS FOTG, SECTION II - WINDBREAK INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - PLANTS FOTG, SECTION V-A-1 - EFFECTS FOR CMS FORMULATION - PLANTS
5.5	**ANIMAL**	FOTG, SECTION I - THREATENED AND ENDANGERED SPECIES LIST FOTG, SECTION I - STATE/LOCAL LAWS, ORDINANCES, REGULATIONS FOTG, SECTION II - WILDLIFE INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - ANIMALS FOTG, SECTION V-A-1 - EFFECTS FOR CMS FORMULATION - ANIMALS
5.6	**HUMAN**	FOTG, SECTION I - COST DATA FOTG, SECTION I - CULTURAL RESOURCE INFORMATION FOTG, SECTION I - STATE/LOCAL LAWS, ORDINANCES, REGULATIONS FOTG, SECTION V-B-1 - PRODUCER EXPERIENCES
6	**HYDROLOGIC UNIT**	
7	**SYSTEM TEMPLATE LABEL**	RALZ0
8	**SYSTEM NAME**	URBAN LAND, ROADS, ETC.
9	**PLANNING PHASE**	BENCHMARK
10	**PLANNING LEVEL**	N/A
11	**NRCS LANDUSE**	URBAN

12	EXISTING CONSERVATION PRACTICES	
	1. 410 - Grade Stabilization Structure 2. 412 - Grassed Waterway 3. 560 - Access Road 4. 561 - Heavy Use Area Protection	
13	SYSTEM NARRATIVE	
	County road barrow ditches are one of the primary soil erosion problems within this area. This erosion also contributes a considerable amount of silt load to streams, rivers and lakes. One of the main reasons for the high erosion rates in many of the barrow ditches is due to improper design of the carrying capacity of the barrow ditch (Note: This problem is partially due to lack of enough easement to allow for proper barrow ditch design and construction.). Heavy silt loads in streams have often resulted in excessive streambank erosion. Soil deposition on county roads, and/or gullying of the roads, has often resulted in safety hazards to local traffic. Housing construction sites also contribute a relatively high amount of silt from erosion, however, this is for a very short duration, and the total land area affected at this time is relatively small and has an insignificant impact on the area as a whole. Once housing construction is completed, vegetation is usually established and is more than adequate to control soil erosion problems. An additional problem that also exists on some of the older rural homes within the area is an inadequate septic disposal system. In some instances raw sewage is being piped directly into streams. In some instances a septic tank is in place, but no filter field or lagoon is in place to handle the proper discharge of the effluent. There are also problems with overuse and/or over application of chemicals (both commercial fertilizers and pesticides) in some urban areas, however, these are limited. Flooding is a problem with both previously constructed and new construction of homes. This problem is usually the result of the lack of knowledge about flood plains by the home owner.	
14	RESOURCE CONCERNS	MAGNITUDE/EFFECTS
	1. Sheet and Rill Erosion	1. Sheet and rill erosion on construction sites will generally range from 8 to 10 tons/acre/year or more, and is usually only a temporary problem.
	2. Ephemeral Gully Erosion	2. Ephemeral gully erosion on construction sites will generally range between 8 to 10 tons/acre/year, but is usually only a temporary problem.
	3. Classic Gully Erosion	3. Classic gully erosion is usually a problem in barrow ditches where they are improperly designed for the amount of water they carry. Soil structure and dispersion problems also tend to add and/or aggravate this problem in some situations. Erosion rates are approximately 15 to 20 tons/acre/year with approximately 0.5 acre of gully occurring for each mile of road.
	4. Streambank Erosion	4. Streambank erosion problems tend to be created and/or aggravated by large sediment loads being deposited in the streambed by adjoining barrow ditches along county roads.
	5. Roadbanks, Et. Al. Erosion	5. Improper design of barrow ditches, along with soil structure and dispersion problems in some areas, have lead to deteriorated roadbanks along many county roads. Lack of adequate easement to allow for proper barrow ditch design capacity has added to this problem.
	6. Soil Deposition Causing Off-site Damage	6. Sedimentation of streambeds from eroding barrow ditches has resulted in erosion of streambanks for extended distances downstream from the road.
	7. Soil Deposition - On-site Safety Hazard	7. Sediment deposition on county roads from adjoining barrow ditches has often resulted in hazardous driving situations for traffic using the county road affected.

	8. Runoff/Flooding	8. Houses previously constructed and new construction within flood plains is sometimes a problem, along with overhead water problems in some situations.