

MANAGEMENT SYSTEM TEMPLATE

A. BENCHMARK SYSTEM WORKSHEET

1	STATE	OKLAHOMA
2	FIELD OFFICE	Ada, Atoka, Coalgate, Eufaula, Holdenville, McAlester, Muskogee, Okemah, Stigler, Tulsa, Wagoner
3	MLRA	118B
4.	COMMON RESOURCE AREA (CRA)	118B.40.001
5	RESOURCE INTERPRETATIONS	<i>see Section II FOTG for interpretations</i>
5.1	SOIL	FOTG, SECTION I - EROSION PREDICTION FOTG, SECTION II - SOIL AND SITE INFORMATION FOTG, SECTION II - SOILS LEGEND FOTG, SECTION II - SOIL DESCRIPTIONS - NONTECHNICAL FOTG, SECTION II - SOIL DESCRIPTIONS - TECHNICAL FOTG, SECTION II - WATER QUANTITY AND QUALITY INTERPRETATIONS FOTG, SECTION II - HYDRIC SOIL INTERPRETATIONS FOTG, SECTION II - MINED LAND INTERPRETATIONS FOTG, SECTION II - WILDLIFE INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - SOIL FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - MINED FOTG, SECTION V-A-1 - CONSERVATION EFFECTS - SOIL FOTG, SECTION V-A-2 - EFFECTS FOR GUIDANCE DOCUMENTS
5.2	WATER	FOTG, SECTION I - CLIMATIC DATA FOTG, SECTION II - WATER QUANTITY AND QUALITY INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - WATER FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - MINED FOTG, SECTION V-A-1 - CONSERVATION EFFECTS - WATER FOTG, SECTION V-A-2 - EFFECTS FOR GUIDANCE DOCUMENTS
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 - CONSERVATION EFFECTS - AIR FOTG, SECTION V-A-2 - EFFECTS FOR GUIDANCE DOCUMENTS
5.4	PLANT	FOTG, SECTION I - THREATENED AND ENDANGERED SPECIES FOTG, SECTION II - RANGELAND INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - PLANTS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - MINED FOTG, SECTION V-A-1 - CONSERVATION EFFECTS - PLANTS FOTG, SECTION V-A-2 - EFFECTS FOR GUIDANCE DOCUMENTS
5.5	ANIMAL	FOTG, SECTION I - THREATENED AND ENDANGERED SPECIES FOTG, SECTION II - WILDLIFE INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - ANIMALS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - WILDLIFE FOTG, SECTION V-A-1 - CONSERVATION EFFECTS - ANIMALS FOTG, SECTION V-A-2 - EFFECTS FOR GUIDANCE DOCUMENTS
5.6	HUMAN	FOTG, SECTION I - CULTURAL RESOURCE INFORMATION FOTG, SECTION I - STATE/LOCAL LAWS, ORDINANCES, REGULATIONS FOTG, SECTION V-B-1 - CONSLRVATION EFFECTS - PRODUCER EXPERIENCES
6	HYDROLOGIC UNIT	
7	SYSTEM TEMPLATE LABEL	QAGZ0
8	SYSTEM NAME	CURRENTLY MINED AND/OR ABANDONED MINE LAND
9	PLANNING PHASE	BENCHMARK
10	PLANNING LEVEL	N/A

11	NRCS LANDUSE	MINED
12	EXISTING CONSERVATION PRACTICES	
	1. 452 - Land Reclamation-Shaft and Adit Closing 2. 454 - Land Reclamation-Subsidence Treatment 3. 455 - Land Reclamation-Toxic Discharge Control 4. 456 - Land Reclamation-Highwall Treatment 5. 543 - Land Reconstruction (AML) 6. 544 - Land Reconstruction (CML)	
13	SYSTEM NARRATIVE	
	<p>These are areas that are either currently being mined, or have been mined in the past and abandoned. Present laws required currently mined land to be reclaimed when mining operations cease. Many of the abandoned mine sites have been reclaimed under federal and state programs such as RAMP and AML, however, there are still many that are not reclaimed and are hazardous to both humans and livestock. Sheet and rill, ephemeral, and classic gully erosion on unvegetated mine spoils, of both current and abandoned mined land, is extremely high. Many of the spoils on abandoned sites have grown up in trees and shrubs and are not as subject to sheet and rill erosion, but ephemeral and gully erosion are still relatively high. Where mine lands have been reclaimed, especially on abandoned sites, topsoil, subsoil and parent material have usually been mixed in the surface layer. These areas are usually low in productivity. Much of the water in abandoned mine pits and seepage water from abandoned shaft mines (25% to 50% of the sites) is extremely low in pH. This can, and has in some instances, lead to other environmental problems. Due to low productivity of the soils on reclaim sites, establishment and growth of many plants is difficult and production for harvest is low. This problem makes it easy for livestock to overgraze these areas, which is a common problem on reclaimed mine sites.</p>	
14	RESOURCE CONCERNS	MAGNITUDE/EFFECTS
	1. Sheet and Rill Erosion	1. Mine spoils without vegetation erode at rates of 10 tons/acre/year or more.
	2. Ephemeral Erosion	2. Ephemeral erosion rates on mine spoils without vegetation are 1 to 5 tons/acre/year or more.
	3. Classic Gully	3. Classic gullies on mine spoils and areas near mine pits are usually in excess of 20 tons/year/acre of gully.
	4. Soil Condition - Other	4. Exposed mine spoils are mainly parent material. On reclaimed mine sites, soils are usually a mixture of topsoil, subsoil and parent material and are limited in production potential.
	5. Surface Water pH	5. Water in 25% to 50% of mine pits and water seepage from 25% to 50% of mine shafts has a very low pH (usually 4.5 or less), which can create numerous potential hazards.
	6. Establishment Growth and Harvest	6. Establishment, growth and harvest of forages, trees and/or shrubs is very limited on these sites due to very low production potential.
	7. Animals Population - Resource Balance Management	7. Under current average conditions, livestock numbers usually exceed forage production because of the low productivity of the soils and lack of fencing to separate these areas from other landuses.