

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 - HYDRIC SOIL INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - SOIL FOTG, SECTION V-A-1 - CONSERVATION EFFECTS - SOIL FOTG, SECTION V-A-2 - EFFECTS FOR GUIDANCE DOCUMENTS TREE PLANTING - CENTRAL AND WESTERN OKLAHOMA
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 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 - FORESTLAND INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - PLANTS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - FOREST FOTG, SECTION V-A-1 - CONSERVATION EFFECTS - PLANTS FOTG, SECTION V-A-2 - EFFECTS FOR GUIDANCE DOCUMENTS TREE PLANTING - CENTRAL AND WESTERN OKLAHOMA
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 - CONSERVATION EFFECTS - PRODUCER EXPERIENCES
6	HYDROLOGIC UNIT	
7	SYSTEM TEMPLATE LABEL	QACA0
8	SYSTEM NAME	GRAZED FOREST (INDIVIDUAL)
9	PLANNING PHASE	BENCHMARK
10	PLANNING LEVEL	N/A
11	NRCS LANDUSE	GRAZED FOREST

12	EXISTING CONSERVATION PRACTICES	
	1. 378 - Pond 2. 490 - Forest Site Preparation 3. 612 - Tree/Shrub Establishment 4. 666 - Forest Stand Improvement	
13	SYSTEM NARRATIVE	
	<p>This is land that is operated by individual owners on smaller tracts of land. The main resource problems that exist on this area include soil erosion and sedimentation resulting from inadequate construction and maintenance of logging roads, skid trails and log landings and/or decks. Some of this activity creates gully and streambank erosion. Intensive timber management of pine is destroying habitat of the Red Cockaded woodpecker since some of this area is in its historic range, and it prefers old growth (60 to 70 years) pine timber for habitat. Since this area is in the range of the American Burying Beetle, some of the present practices could be affecting its habitat, however, due to current lack of knowledge of its habitat requirements, it is uncertain if any current practices are having an affect. Southern pine beetle and pine tip moth outbreaks can cause significant damage in some areas. These areas have typically not been managed for pine production due to distances to mills and better suitability to other landuses. Only in recent years has there been an interest and demand for marketable timber in the area. Many of the steeper slopes are better suited to a hardwood-pine mix and are much more suited to uneven-aged management and/or unsuited to timber production. Some of the individual landowners clear-cut areas and never replant the area to quality trees. There is also existing bottomland hardwood forest within this area and comprises more area than pine forest. These areas usually consist of a variety of bottomland oaks, elms, and various other species. Occasionally native or grafted papershell pecan trees are managed on these areas. Less frequently, black walnut is grown for nuts and lumber. Most bottomland hardwood forests serve as riparian areas along streams and occasionally meet the criteria for wetland wildlife habitat. Usually bottomland hardwood forests have few problems other than occasional streambank erosion problems caused from livestock trails or siltation problems associated with other landuses. Over grazing by livestock is a common problem, primarily due to these areas not being under separate fence from other landuses and managed accordingly. Ticks, flies, disease and intestinal parasites are common concerns among livestock producers.</p>	
14	RESOURCE CONCERNS	MAGNITUDE/EFFECTS
	1. Classic Gully	1. Water concentration is causing occasional gullies. Annual soil loss averages 35 tons/year on 0.1 acre of gully and there are approximately 1 to 2 gullies of this size per 160 acre tract of land in this area.
	2. Streambank Erosion	2. Due to clear cutting and lack of adequate riparian area, water velocity and volume are increased causing streambank instability. Current erosion rates are estimated at 13.5 tons/year for every 2 acres of stream. This is primarily limited to areas where pine timber harvesting is occurring or on areas where streambed siltation and aggradation is creating bank erosion.
	3. Roads, Const., Scoured	3. Logging roads and skid trails are creating erosion by concentrating water flow. Estimated erosion loss is approximately 50 tons per acre of road per year, and there is approximately 5 acres of road per 160 acre tract. Roadside erosion is occurring where there is active timber harvest (pine or hardwood).
	4. Soil Deposition Causing Off-site Damage	4. Soil eroding on-site is creating silt bars in streams and barrow ditches off-site which leads to streambank instability, plugged road culverts, and other maintenance problems.
	5. Establishment, Growth and Harvest	5. Clear cut area on private lands is often not replanted and the resulting regrowth is often of low quality. This also contributes to improper tree spacing and an overall lowered production potential.

	6. Plant Pests	6. Southern pine beetle and pine tip moth can and do cause significant damage to commercial pine timber. They usually occur as an outbreak in a specific area, however, the areas of outbreak are very unpredictable. Some hardwood species have a few minor insect and disease problems, but most are not significant.
	7. Threatened/Endangered Species (Animal)	7. Removal of old growth pine is destroying potential habitat of the Red Cockaded woodpecker since this area is within its historic range.
	8. Animals Population - Resource Balance Management	8. Overstocking of livestock on the native understory of forests is a common problem. Much of this is due to lack of fencing to either control or exclude livestock access into the forested area. There is often a lack of understanding on how native species respond to overuse.
	9. Animal Health Management	9. Ticks, flies, disease and intestinal parasites result in a reduction of weight gain, and occasionally loss of life, in livestock.