MANAGEMENT SYSTEM TEMPLATE

B. CONSERVATION MANAGEMENT SYSTEM OPTIONS 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 - 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	RABA1
8	SYSTEM NAME	FOREST (INDIVIDUAL OWNERSHIP)
9	PLANNING PHASE	NON-BENCHMARK
10	PLANNING LEVEL	RMS
11	NRCS LANDUSE	FOREST

12	PLANNED CONSERVATION PRACTICES	*enter code / name of practice*

1. 338 - Prescribed Burning
2. 342 - Critical Area Planting
3. 378 - Pond
4. 382 - Fencing
5. 391 - Riparian Forest Buffer
6. 394 - Firebreak
7. 410 - Grade Stabilization Structure
8. 472 - Use Exclusion
9. 490 - Forest Site Preparation
10. 560 - Access Road
11. 561 - Heavy Use Area Protection
12. 580 - Streambank and Shoreline Protection
13. 590 - Nutrient Management
14. 595 - Pest Management
15. 612 - Tree/Shrub Establishment
16. 614 - Watering Facility
17. 644 - Wildlife Wetland Habitat Management
18. 645 - Wildlife Upland Habitat Management
19. 655 - Forest Harvest Trails and Landings
20. 660 - Tree/Shrub Pruning
21. 666 - Forest Stand Improvement

13	SYSTEM NARRATIVE	*describe how the practices work together as a system*

All or a combination of any of the listed practices will be used to treat resource problems on privately owned timber lands. Many of these practices can be used to treat soil erosion problems including critical area planting, riparian forest buffers, grade stabilization structures, access (logging) roads, streambank and shoreline protection, tree/shrub establishment, and forest harvest trails and landings, while others can also have beneficial impacts on soil erosion once they are implemented. When soil erosion problems have been reduced, sediment problems will also be reduced or possibly eliminated. These practices will be used to treat erosion and sedimentation problems caused by inadequate construction and maintenance of logging roads, skid trails and log landings and/or decks and the gully and streambank erosion problems created by this activity. By managing tree diversity through tree/shrub establishment, wildlife wetland and upland habitat management, and forest stand improvement, habitat problems with threatened and endangered species can be curtailed. Insect pests such as the southern pine beetle and pine tip moth can be controlled through the use of integrated pest management methods (i.e. - Pest Management standard). Areas that are very marginal in suitability (30% slopes or greater) should be managed with uneven-aged management techniques, and naturally occurring hardwoods should also be allowed to remain in the stand in those areas to maintain plant diversity and soil stability, which can be accomplished by implementing tree/shrub establishment, wildlife upland habitat management, and forest stand improvement practices. Clear cut areas should be replanted to good quality pine stock and/or high quality seed trees should be left during logging operations to allow for natural reseeding of the area. In general, uneven-aged management techniques will supply private landowners with a more frequent income from the forest tract.

14	RESOURCE CONCERNS	MAGNITUDE/EFFECTS	IMPACTS
	1. Classic Gully	1. By reducing concentrated flow of water and soil disturbance to a minimum using access roads, heavy use area protection, streambank and shoreline protection, forest harvest trails and landings, and forest stand improvement practices, and by treating existing gully problems using critical area planting and grade stabilization structures, classic gully erosion should be reduced to a minimum level (i.e. - less than 0.5 tons/year on 0.1 acre of gully with less than 3 to 5 gullies per 160 acres being created).	1. Reduction in gully erosion of 34.5 tons/ year on 0.1 acre gully with 3 to 5 gullies/ 160 acres of forest being reduced to 1 to 3 gullies per 160 acres of forest.

	2. Streambank Erosion	2. By limiting activity along streambanks within a specified buffer zone using riparian forest buffer and use exclusion practices, and implementing practices that reduce the sediment load coming into streams such as critical area planting, grade stabilization structures, forest site preparation, access roads, heavy use area protection, streambank and shoreline protection, tree/ shrub establishment, wildlife wetland and upland habitat management, forest harvest trails and landings, and forest stand improvement, this type of erosion should be reduced to a minimum (i.e. - less than 10 tons/year on 2 acres of stream/160 acres of forest).	2. Reduction in streambank erosion of at least 3.5 tons/year on 2 acres of stream/160 acres of forest.
	3. Roads, Const., Scoured	3. By constructing adequate numbers of cut-outs, water-bars, low water crossings, and other soil conserving measures according to access road and forest harvest trails and landings standards, this type of erosion problem will be reduced to a minimum (i.e. - less than 5 tons/yr. /acre of road with approx. 5 acres of road per 160 ac. of forest.	3. Reduction in erosion associated with forest roads and trail of approximately 45 tons/acre/ year on approximately 5 acres of road per 160 acres of forest.
	4. Soil Deposition Causing Off-site Damage	4. By reducing soil erosion on-site, soil deposition causing off-site damage can be reduced or eliminated. This can be accomplished by proper installation of roads with appropriate erosion control measures, including access roads, heavy use area protection, and forest harvest trails and landings, and by treating existing gullies and other erosion problems using critical area plantings, riparian forest buffers, grade stabilization structures, and streambank and shoreline protection. Proper management of forests using forest site preparation, tree/shrub establishment, tree/shrub pruning, and forest stand improvement practices will also help reduce soil erosion losses.	4. Reduction in off-site damage (i.e. - fewer plugged road culverts, less silt bars in streams, less streambank instability, etc.).

Conservation Practice Physic ffects on Resource Concerns
Candidate Practice List

State	Oklahoma	Field Office	Antlers, Atoka, Coalgate, Hugo, Idabel, McAlester, Poteau, Stigler Wilburton	MLRA	119	System Template Label	RABA1

Resource Concerns / Conservation Practices	Classic Gully	Streambank Erosion	Roads, Const., Scoured	Soil Deposition Causing Off-site Damage	Establishment, Growth and Harvest	Plant Pests	Threatened/ Endangered Species (Animal)	
338-Prescribed Burning	-	-	N/A	-	+ +	+ + +	-	
342-Critical Area Planting	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	
378-Pond	+ + +	+ + +	N/A	+ + +	N/A	N/A	+ + +	
382-Fencing	F+ + +	F+ + +	N/A	F+ + +	F+ + +	N/A	F+ + +	
391-Riparian Forest Buffer	F+ + +	F+ + +	+	F+ + +	F+ + +	N/A	F+ + +	
394-Firebreak	N/A	N/A	N/A	0	N/A	N/A	F+	
410-Grade Stabilization Structure	+ + +	+ + +	+ +	+ + +	N/A	N/A	+ + +	
472-Use Exclusion	F+ +	F+ +	N/A	F+ +	F+ + +	N/A	F+ +	
490-Forest Site Preparation	--	N/A	N/A	-	+ + +	+ +	0	
560-Access Road	N/A	N/A	0	-	N/A	N/A	-	
561-Heavy Use Area Protection	0	N/A	0	-	N/A	N/A	N/A	
580-Streambank & Shoreline Prot.	+ + +	+ + +	+ +	+ + +	+ + +	N/A	+ + +	
590-Nutrient Management	N/A	N/A	N/A	N/A	+	N/A	+	

RATINGS :

Not Applicable	=	**N/A**	**Slight**	=	**+ or -**
Negligible	=	**0**	**Moderate**	=	**+ + or --**
Facilitating	=	**F**	**Significant**	=	**+ + + or ---**

Conservation Practice Physical Effects on Resource Concerns
Candidate Practice List

State	Oklahoma	Field Office	Antlers, Atoka, Coalgate, Hugo, Idabel, McAlester, Poteau, Stigler Wilburton	MLRA	119	System Template Label	RABA1

Resource Concerns / Conservation Practices	Classic Gully	Streambank Erosion	Roads, Const., Scoured	Soil Deposition Causing Off-site Damage	Establishment, Growth and Harvest	Plant Pests	Threatened/ Endangered Species (Animal)	
595-Pest Management	N/A	N/A	N/A	N/A	+ +	+ + +	N/A	
612-Tree/Shrub Establishment	+ + +	+ + +	N/A	+ + +	+ + +	N/A	+ + +	
614-Trough or Tank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
644-Wildlife Wetland Habitat Mgt.	N/A	+ +	N/A	N/A	+ +	N/A	+ + +	
645-Wildlife Upland Habitat Mgt.	+ +	+ +	N/A	+ +	+ + +	N/A	+ + +	
655-Forest Harvest Trails & Land.	+	+	+ +	+ +	N/A	N/A	N/A	
660-Tree/Shrub Pruning	N/A	N/A	N/A	N/A	+ +	N/A	N/A	
666-Forest Stand Improvement	N/A	N/A	N/A	N/A	+ + +	N/A	N/A	

RATINGS :

Not Applicable = N/A		**Slight** =	+ or -
Negligible = 0		**Moderate** =	+ + or --
Facilitating = F		**Significant** =	+ + + or ---