MANAGEMENT SYSTEM TEMPLATE

B. CONSERVATION MANAGEMENT SYSTEM OPTIONS 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	*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	QABA1
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 - Trough or Tank
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*

This is land that is operated by individual owners on smaller tracts of land. Logging roads and skid trails shall be designed and constructed with adequate erosion control measures in order to prevent excessive movement of soil by water. This practice alone will tremendously reduce soil erosion associated with this land use. Existing logging roads and skid trails will have adequate erosion control measures installed in order to prevent excessive soil erosion. Log landings and/or decks will also be constructed with adequate erosion control measures. Any existing gullies will be treated using critical area planting techniques. Streambank erosion will be controlled by leaving adequate riparian zones along streambanks, establishing trees and ground cover in riparian areas as needed, and by limiting sediment moving through the riparian area into streams. By reducing erosion on this land use, sediment causing damage to county roads will also be reduced, resulting in reduced road maintenance costs. Timber will be managed according to forest stand improvement standards. Any nesting trees of the Red Cockaded woodpecker will be left when harvesting unless the nesting tree is over mature and in poor health. Older seed trees will be left in order to promote Red Cockaded woodpecker habitat. Any clear cut areas will be replanted in quality seedlings and spaced appropriately. Sanitary harvesting methods will be employed in order to control disease and insect pests. This will include removing and/or destroying infected or infested trees or limbs during each harvesting process, and if necessary, between harvest and thinnings. Chemical controls will be used only when necessary to control large outbreaks of insect pests. Including hardwoods in plantings will be considered on sites with a limited index for pine and along riparian zones. The timber on this land use shall be managed as a crop or enterprise in order for it to reach its peak value over time.

14	RESOURCE CONCERNS	MAGNITUDE/EFFECTS	IMPACTS
	1. Classic Gully	1. Reducing concentrated flow of water and soil disturbance to a minimum by implementing erosion control measure on logging roads and skid trails and by treating existing gully problems using critical area planting techniques will reduce classic gully erosion 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 a 0.1 acre gully with 1 to 2 gullies/ 160 acres of forest being reduced to 0 to 1 gullies per 160 acres of forest.
	2. Streambank Erosion	2. By limiting activity along streambanks within a specified buffer zone, and by implementing practices that reduce the sediment load coming into streams, 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 or more 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 during logging road and skid trail construction, this type of erosion problem will be reduced to a minimum (i.e., less than 5 tons/yr. on each acre of forest road and skid trail with approx. 5 acres of road or trail per 160 ac. of forest).	3. Reduction in erosion associated with forest roads and trails of approximately 225 tons/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 and by treating existing gullies and other erosion problems. Proper management of forests 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.) where timber harvest is occurring.
	5. Establishment, Growth and Harvest	5. By replanting quality trees and/or leaving high quality seed trees adequate stocking rates of high quality trees can be accomplished.	5. Adequate stocking of forest land with high quality trees. Improved potential production. Increased land value.
	6. Plant Pests	6. Application of pesticides when Southern pine beetle or pine tip moth have reached an economic threshold will help prevent excessive damage to pine trees. Prompt removal of infected trees, burning and/or removal of infected branches, harvesting and/or pruning of timber during the dormant season and other sanitation methods will help reduce the risk of future infestations.	6. Reduction in plant pests such as Southern pine beetle and pine tip moth. Increased risk of insecticides contaminating surface or ground water. Increased input costs through purchase of insecticides.
	7. Threatened/Endangered Species (Animal)	7. Leaving tracts of old growth pine in timber stands should help enhance the habitat for the Red cockaded woodpecker. Leaving all healthy nesting trees of the Red Cockaded woodpecker will also help sustain the species.	7. Improved habitat for endangered species. Sustained or increased population of the Red Cockaded woodpecker.
CRA	118B.40.001	SYSTEM TEMPLATE LABEL	QABA1
15	* QUALITY CRITERIA DOCUMENTATION *list resource concerns then indicate yes/no (X)*		

	1. Classic Gully 2. Streambank Erosion 3. Roads, Const., Scoured 4. Soil Deposition Causing Off-site Damage 5. Establishment, Growth and Harvest 6. Plant Pests 7. Threatened/Endangered Species (Animal)	_X_ YES ___ NO _X_ YES ___ NO _X_ YES ___ NO _X_ YES ___ NO _X_ YES ___ NO _X_ YES ___ NO _X_ YES ___ NO

* Provides an indication that the resource quality criteria will be met.

Conservation Practice Physi Effects on Resource Concerns
Candidate Practice List

State	Oklahoma	Field Office	Ada, Atoka, Coalgate, Eufaula, Holdenville, McAlester, Muskogee, Okemah, Stigler, Tulsa, Wagoner	MLRA	118B	System Template Label	OABA1

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	Ada, Atoka, Coalgate, Eufaula, Holdenville, McAlester, Muskogee, Okemah, Stigler, Tulsa, Wagoner	MLRA	118B	System Template Label	OABA1

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 ---