MANAGEMENT SYSTEM TEMPLATE

B. CONSERVATION MANAGEMENT SYSTEM OPTIONS WORKSHEET

1	STATE	OKLAHOMA
2	FIELD OFFICE	Ottawa, Delaware, Mayes, Cherokee, and Adair
3	MLRA	116A
4.	COMMON RESOURCE AREA (CRA)	116A.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 - WATER QUANTITY AND QUALITY INTERPRETATIONS FOTG, SECTION II - HYDRIC SOILS INTERPRETATIONS FOTG, SECTION II - PASTURE AND HAYLAND INTERPRETATIONS FOTG, SECTION II - WILDLIFE INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - SOIL FOTG, SECTION V-A-1 - CONSERVATION EFFECTS - SOIL FOTG, SECTION V-1-2 - 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 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-2 - EFFECTS FOR GUIDANCE DOCUMENTS
5.4	PLANT	FOTG, SECTION I - THREATENED AND ENDANGERED SPECIES FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - PLANTS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - PASTURE
5.5	ANIMAL	FOTG, SECTION I - THREATENED AND ENDANGERED SPECIES FOTG, SECTION II - WILDLIFE INTERPRETATIONS 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 V-B-1 - CONSERVATION EFFECTS - PRODUCER EXPERIENCES
6	HYDROLOGIC UNIT	
7	SYSTEM TEMPLATE LABEL	NAJZB
8	SYSTEM NAME	PASTURE
9	PLANNING PHASE	NON-BENCHMARK
10	PLANNING LEVEL	RMS
11	NRCS LANDUSE	PASTURE

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

1. 314 - Brush Management
2. 342 - Critical Area Planting
3. 362 - Diversion
4. 378 - Pond
5. 382 - Fencing
6. 391 - Riparian Forest Buffer
7. 410 - Grade Stabilization Structure
8. 512 - Pasture and Hayland Planting
9. 516 - Pipeline
10. 528-A - Prescribed Grazing
11. 580 - Streambank and Shoreline Protection
12. 590 - Nutrient Management
13. 595 - Pest Management
14. 614 - Trough or Tank
15. 642 - Well
16. 644 - Wildlife Wetland Habitat Management
17. 645 - Wildlife Upland Habitat Management

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

Pastureland has generally been and/or will be established in bermudagrass along with adapted legumes and sometimes fescue. Other grass occasionally planted include bahiagrass, dallisgrass, and lovegrass. Pastureland grazing and stocking rates will be managed in such a way in order to leave adequate leaf area on the plant to generate new growth without stressing the plant. Soil nutrient levels will be maintained at an adequate level to sustain plant growth and the production levels desired by the producer that will not adversely affect other natural resources. Proper fertilization should also help prevent encroachment of Broomsedge bluestem and other competitive undesirable grasses and weeds, and help maintain plant health and vigor. Weeds will be controlled, as needed, by either chemical or mechanical means. With the management practices previously described, the need for supplemental livestock feed should be reduced and produce a more efficient livestock operation. Livestock water will be provided by existing springs, streams, ponds, lakes, or other structures and/or structures to be constructed in future work. Riparian area along streams and/or lakes will provide wildlife habitat along with small tracts or plots of native vegetation where needed to support a wildlife ecosystem. Fencing riparian areas in order to manage and/or exclude livestock access will help control streambank erosion problems, along with revegetating areas where necessary. These proper management techniques should improve forage and livestock production, animal health, and wildlife habitat. Occasional loosening of compacted soil may be required on areas where this is a problem. Treatment with organic matter and/or gypsum may also be helpful on compacted soils, especially where high sodium content and soil dispersion are some of the forces involved in the soil compaction problem. Beaver control programs initiated by the U.S. Fish and Wildlife Service and the Oklahoma Department of Wildlife Conservation should help control beaver population and eliminate many problems associated with beaver dams.

14	RESOURCE CONCERNS	MAGNITUDE/EFFECTS	IMPACTS
	1. Classic Gully	1. By using critical area planting techniques, constructing diversions, fencing, constructing grade stabilization structures, protecting riparian areas, and by establishing and properly managing tame pasture, classic gullies can be adequately treated and/or prevented.	1. Reduction in gully erosion of 39 tons/ year and acres affected to 0.
	2. Streambank Erosion	2. By fencing riparian areas to control access by livestock and by using critical area planting techniques to revegetate unstable areas, streambank erosion can be reduced to minimal levels.	2. Reduction in streambank erosion of 29 tons/year and a reduction in acres affected to 0.1 acres/160 acre tract.
	3. Plants Unsuitable for Intended Use	3. By applying fertilizer according to current soil test recommendations and by using prescribed grazing techniques, broomsedge bluestem and other undesirable grasses can be reduced to more manageable levels.	3. Reduction and/or elimation of invasion of Broomsedge bluetem into bermudagrass pastures.

	4. Plants Health and Vigor	4. By controlling brush and weeds, using prescribed grazing techniques and applying adequate fertility, plant health and vigor will improve.	4. Improvement in plant health and vigor.
	5. Plants Productivity	5. By controlling brush and weeds, using prescribed grazing techniques, and by properly distributing livestock grazing through strategic placing of fences and watering facilities, plant productivity can be improved.	5. Increase in forage production of 2 AUM's or more per acre.
	6. Nutrient Management	6. All nutrients will be applied according to current soil test recommendations and production goals, and placement will be properly timed for the best utilization and to prevent loss of nutrients into streams, etc.	6. Improvement in efficiency of the utilization of applied plant nutrients. Improvement in plant growth.
	7. Plant Pests	7. Brush and weeds will be controlled by biological, chemical or mechanical methods. If herbicides are used, they will be applied according to label directions adhering to all cautions and warnings.	7. Reduction in brush and weed competition. Improved utilization of nutrients and moisture by desirable forage species.
	8. Domestic Animal Food Requirements	8. By using prescribed grazing techniques, properly fertilizing and controlling weeds and brush, as needed, supplemental feeding requirements of livestock will be reduced.	8. Reduction in winter feeding costs.
	9. Domestic Animal Water Requirements	9. By constructing and/or installing ponds, wells, pipelines, troughs and tanks, an adequate supply of quality livestock water can be supplied.	9. Adequate supply of livestock water. Improved grazing distribution.
	10. Wildlife Food Requirements	10. By protecting riparian areas, by using wildlife upland and wetland habitat management techniques, and by establishing wildlife food plots and native grass areas, wildlife food requirments can be more adequately met. These practices should help offset the reduction in desirable habitat caused by the establishment of tame pasture.	10. Improvement in wildlife food production. Improvement in wildlife population.

	11. Wildlife Habitat Suitability	11. By protecting riparian areas, establishing food plots and/or native grass areas and by managing other areas of associated land uses, wildlife habitat suitability can be improved.	11. Improvement in wildlife habitat.
	12. Animals Population - Resource Balance Management	12. By applying prescribed grazing techniques, livestock numbers can be balanced with forage production and improve the efficiency in use of the forage base.	12. Improvement in efficiency of use of the forage base and overall improvement in livestock and forage production.
	13. Animal Management - Other	13. Beaver damage control programs sponsored by the U.S. Fish and Wildlife Service and the Oklahoma Department of Wildlife Conservation should help control pasture damage caused by beaver activities.	13. Reduction on beaver damage.
CRA		**SYSTEM TEMPLATE LABEL**	
15	*** QUALITY CRITERIA DOCUMENTATION** *list resource concerns then indicate yes/no (X)*		
	1. Classic Gully 2. Streambank Erosion 3. Plants Unsuitable for Intended Use 4. Plants Health and Vigor 5. Forage Production 6. Nutrient Management 7. Plant Pests 8. Domestic Animal Food Requirements 9. Domestic Animal Water Requirements 10. Wildlife Food Requirements 11. Wildlife Habitat Suitability 12. Animals Population - Resource Balance Management 13. Animal Management - Other		_X_YES __NO _X_YES __NO _X_YES __NO _X_YES __NO _X_YES __NO _X_YES __NO _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 Physical Effects on Resource Concerns
Candidate Practice List

State	Oklahoma	Field Office		MLRA		System Template Label	
Soil Interpretations							

Resource Concerns / Conservation Practices	Classic Gully	Streambank Erosion	Plants Unsuitable for Intended Use	Plants Health and Vigor	Plants Productivity	Nutrient Management	Plant Pests	Domestic Animal Food Requirements
314-Brush Management	+	-	N/A	+ + +	+ + +	N/A	+ + +	+ + +
342-Critical Area Planting	+ + +	+ + +	N/A	+ +	+ +	+ +	+ + +	+ +
362-Diversion	+ + +	N/A	N/A	N/A	N/A	N/A	N/A	N/A
378-Pond	+ + +	+	N/A	N/A	N/A	+	N/A	N/A
382-Fencing	F+ +	F+ +	N/A	F+ +	F+ +	N/A	F+	F+ +
391-Riparian Forest Buffer	F+ + +	F+ + +	N/A	N/A	N/A	F+	N/A	N/A
410-Grade Stabilization Structure	+ + +	+	N/A	N/A	N/A	+	N/A	N/A
512-Pasture & Hayland Planting	+	N/A	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +
516-Pipeline	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
528A-Prescribed Grazing	+ +	+	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +
580-Streambank & Shoreline Prot.	F+	F+ + +	N/A	+ +	+ +	F+ + +	N/A	N/A
590-Nutrient Management	N/A	N/A	+ + +	+ + +	+ + +	+ + +	+	+ + +
595-Pest Management	N/A	N/A	N/A	+ + +	+ +	N/A	+ + +	+ +

RATINGS:

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

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Conservation Practice Physical Effects on Resource Concerns
Candidate Practice List

State	Oklahoma	Field Office		MLRA		System Template Label	
Soil Interpretations							

Resource Concerns / Conservation Practices	Domestic Animal Water Requirements	Wildlife Food Requirements	Wildlife Habitat Suitability	Animals Population - Resource Balance Management	Animal Management - Other			
314-Brush Management	+	0	+	+ + +	+			
342-Critical Area Planting	+ + +	+ + +	+ + +	+ +	0			
362-Diversion	+ + +	N/A	N/A	N/A	0			
378-Pond	+ + +	+	+ + +	+ + +	-			
382-Fencing	+	+ + +	+ + +	+ + +	0			
391-Riparian Forest Buffer	+	+ + +	+ + +	+	-			
410-Grade Stabilization Structure	+ + +	+	+ + +	+ + +	-			
512-Pasture & Hayland Planting	+	--	--	+ + +	0			
516-Pipeline	+ + +	N/A	N/A	+ + +	0			
528A-Prescribed Grazing	+ +	+ +	+ +	+ + +	0			
580-Streambank & Shoreline Prot.	+ + +	+ + +	+ + +	+	-			
590-Nutrient Management	+	+	+ +	+ + +	0			
595-Pest Management	+	0	+	+ + +	0			

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		MLRA		System Template Label	
Soil Interpretations							

Resource Concerns / Conservation Practices	Classic Gully	Streambank Erosion	Plants Unsuitable for Intended Use	Plants Health and Vigor	Plants Productivity	Nutrient Management	Plant Pests	Domestic Animal Food Requirements
614-Trough or Tank	+	+ +	+ +	+	+	0	0	+
642-Well	+	+ +	+ +	+	+	0	0	+
644-Wildlife Wetland Habitat Mgt.	N/A	+ + +	+	+ +	+ +	+	0	+ +
645-Wildlife Upland Habitat Mgt.	+ +	+ + +	+	+ +	+ +	+	0	+ +

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		MLRA		System Template Label	
Soil Interpretations							

Resource Concerns / Conservation Practices	Domestic Animal Water Requirements	Wildlife Food Requirements	Wildlife Habitat Suitability	Animals Population - Resource Balance Management	Animal Management - Other			
614-Trough or Tank	+ + +	N/A	N/A	+ + +	+ +			
642-Well	F+ + +	N/A	N/A	F+ + +	F+ +			
644-Wildlife Wetland Habitat Mgt.	N/A	N/A	N/A	N/A	N/A			
645-Wildlife Upland Habitat Mgt.	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 ---