MANAGEMENT SYSTEM TEMPLATE

B. CONSERVATION MANAGEMENT SYSTEM OPTIONS WORKSHEET

1	STATE	OKLAHOMA
2	FIELD OFFICE	Sequoyah, Muskogee, Cherokee, Mayes, Adair
3	MLRA	117
4.	COMMON RESOURCE AREA (CRA)	0117.40.001
5	RESOURCE INTERPRETATIONS	*see Section II FOTG for interpretations*
5.1	SOIL	FOTG, SECTION I - EROSION PREDICTION FOTG, SECTION II - SOILS LEGENDS FOTG, SECTION II - SOIL DESCRIPTIONS - NONTECHNICAL FOTG, SECTION II - SOIL DESCRIPTIONS - TECHNICAL FOTG, SECTION II - HYDRIC SOIL INTERPRETATIONS FOTG, SECTION II - NONAGRICULTURAL INTERPRETATIONS FOTG, SECTION II - ENGINEERING INTERPRETATIONS FOTG, SECTION II - WASTE DISPOSAL INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - SOIL FOTG, SECTION V-A-1 - EFFECTS FOR CMS FORMULATION - SOIL FOTG, SECTION V-B - EFFECT FOR DECISIONMAKING
5.2	WATER	FOTG, SECTION I - CLIMATIC DATA FOTG, SECTION I - STATE/LOCAL LAWS, ORDINANCES, REGULATIONS FOTG, SECTION II - WATER QUANTITY AND QUALITY INTERPRETATIONS FOTG, SECTION II - NONAGRICULTURAL INTERPRETATIONS FOTG, SECTION II - WASTE DISPOSAL INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - WATER FOTG, SECTION V-A-1 - EFFECTS FOR CMS FORMULATION - WATER
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 - EFFECTS FOR CMS FORMULATION - AIR
5.4	PLANT	FOTG, SECTION II - FORESTLAND INTERPRETATIONS FOTG, SECTION II - PASTURELAND AND HAYLAND INTERPRETATIONS FOTG, SECTION II - WINDBREAK INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - PLANTS FOTG, SECTION V-A-1 - EFFECTS FOR CMS FORMULATION - PLANTS
5.5	ANIMAL	FOTG, SECTION I - THREATENED AND ENDANGERED SPECIES LIST FOTG, SECTION I - STATE/LOCAL LAWS, ORDINANCES, REGULATIONS FOTG, SECTION II - WILDLIFE INTERPRETATIONS FOTG, SECTION III - RESOURCE MANAGEMENT SYSTEMS - ANIMALS FOTG, SECTION V-A-1 - EFFECTS FOR CMS FORMULATION - ANIMALS
5.6	HUMAN	FOTG, SECTION I - COST DATA FOTG, SECTION I - CULTURAL RESOURCE INFORMATION FOTG, SECTION I - STATE/LOCAL LAWS, ORDINANCES, REGULATIONS FOTG, SECTION V-B-1 - PRODUCER EXPERIENCES
6	HYDROLOGIC UNIT	
7	SYSTEM TEMPLATE LABEL	OALZB
8	SYSTEM NAME	URBAN LAND, ROADS, ETC.
9	PLANNING PHASE	NON-BENCHMARK
10	PLANNING LEVEL	RMS
11	NRCS LANDUSE	URBAN

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

1. 327 - Conservation Cover
2. 342 - Critical Area Planting
3. 362 - Diversion
4. 380 - Windbreak/Shelterbelt Establishment
5. 382 - Fencing
6. 394 - Firebreak
7. 410 - Grade Stabilization Structure
8. 412 - Grassed Waterway
9. 484 - Mulching
10. 512 - Pasture and Hayland Planting
11. 560 - Access Road
12. 561 - Heavy Use Area Protection
13. 590 - Nutrient Management
14. 595 - Pest Management
15. 606 - Subsurface Drain
16. 612 - Tree/Shrub Establishment
17. 642 - Well
18. 660 - Tree/Shrub Pruning

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

Erosion, siltation, flooding, and water quality problems associated with this landuse can be greatly reduced and/or alleviated through the establishment of vegetative cover and by applying adequate structural measures to control the source(s) of the problem(s). These practices will be applied in combinations, as needed, to address different problems. County roadside erosion problems will need a cooperative effort between County Commissioners, the Oklahoma Department of Transportation (ODOT), the Natural Resources Conservation Service (NRCS), and adjoining landowners in order to fully address the needed solutions to these problems. Some of the water quality issues will need cooperative efforts between the Oklahoma Department of Environmental Quality (DEQ), NRCS, and the landowners in order to apply the needed treatments to resolve these problems. Flood damage will be reduced through public information, technical assistance from NRCS, and through the development of Floodplain Management Boards. Runoff problems will be treated using structural measures such as diversion, grassed waterways, etc.

14	RESOURCE CONCERNS	MAGNITUDE/EFFECTS	IMPACTS
	1. Sheet and Rill Erosion	1. By establishing a vegetative cover and/or mulching, and installing diversions and/or grassed waterways erosion will be reduced to 1 ton/acre/year or less. This will apply primarily to housing and/or business construction sites.	1. A reduction in erosion of 7 to 9 tons/acre/ year or more.
	2. Ephemeral Gully Erosion	2. By adequately mulching and/or vegetating construction sites, ephemeral gully erosion will be reduced to 1 ton/acre/year or less, or even eliminated. This will apply primarily to housing and/or business construction sites.	2. A reduction in erosion of 7 to 9 tons/acre/ year or more.
	3. Classic Gully Erosion	3. By using critical area planting techniques and by constructing diversions and/or grade stabilization structures, gullies can be controlled and erosion reduced to minimal levels or eliminated. This will apply primarily to county roads, but will also apply to housing and business sites.	3. Reduction in erosion from 14 to 19 tons/ year or more and acres affected by gully erosion reduced to 0 for each mile of county road.
	4. Streambank Erosion	4. By properly treating and vegetating other related erosion problems, sedimentation that results in agrading of streambeds, which then promotes stream-bank erosion, can be greatly reduced.	4. See other landuses for amount of erosion reduction. Streambank erosion is usually not directly associated with this land use, but is often a direct result of sedimentation from roadside erosion.

	5. Roadbanks, Et. Al. Erosion	5. By installing grade stabilization structures and roadside waterways and establishing adequate vegetation, roadbank and other associated erosion can be adequately controlled. In order to apply these practices, however, it may be necessary for County Commissioners to acquire construction easements (and possibly maintenance easements) from adjoining landowners. A cooperative effort between the County Commissioners, NRCS, and the Oklahoma Department of Transportation (ODOT) will be necessary in order to provide needed training and engineering assistance to the County Commissioners.	5. Reduction in roadbank and other associated erosion. Temporary increase in construction costs. Long term decrease in county road maintenance costs. Improved road safety. Improvement in all weather road conditions.
	6. Soil Deposition Causing Off-site Damage	6. By minimizing roadside erosion and erosion on construction sites, sedimentation problems resulting in off-site damage will be minimized.	6. Reduction in stream instability caused by sedimentation of streambed.
	7. Soil Deposition - On-site Safety Hazard	7. Vegetative and constructed practices that reduce roadside erosion will help reduce the safety hazard caused by soil deposition on and along roadbeds.	7. Reduction in hazardous road conditions resulting from soil deposition on the roadbed and erosion of roadbanks. Overall improvement of road safety conditions.
	8. Runoff/Flooding	8. By informing the public, providing homesite evaluations, and through the cooperative development of Floodplain Management Boards, flooding problems associated with housing development can be held to a minimum.	8. Reduction in flood damage to homes. Reduction in flood insurance costs. Reduced need for disaster relief funds. Overall savings to the general public.
CRA		**SYSTEM TEMPLATE LABEL**	
15	*** QUALITY CRITERIA DOCUMENTATION** *list resource concerns then indicate yes/no (X)*		
	1. Sheet and Rill Erosion 2. Ephemeral Gully Erosion 3. Classic Gully Erosion 4. Streambank Erosion 5. Roadbanks, Et. Al. Erosion 6. Soil Deposition Causing Off-site Damage 7. Soil Deposition - On-site Safety Hazard 8. Runoff/Flooding	_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	Sheet and Rill Erosion	Ephemeral Gully	Classic Gully	Streambank Erosion	Roadbanks, Et. Al. Erosion	Soil Deposition Causing Off-site Damage	Soil Deposition On-site Safety Hazard	Runoff/ Flooding
327-Conservation Cover	+ + +	+ + +	+ + +	+	+	+ +	+ +	+
342-Critical Area Planting	+ + +	+ + +	+ + +	+ +	+ + +	+ + +	+ + +	+
362-Diversion	+ +	+ + +	+ + +	+ +	+ +	+ +	+ + +	+ + +
380-Windbreak/Shelterbelt Estab.	+	N/A	N/A	N/A	N/A	+	+	+
382-Fencing	N/A	N/A	N/A	N/A	F+	N/A	N/A	N/A
394-Firebreak	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
410-Grade Stabilization Structure	N/A	+ +	+ + +	+	N/A	+ + +	+ + +	+ +
412-Grassed Waterway	+ +	+ + +	+ + +	N/A	N/A	+ + +	+ + +	+
484-Mulching	+ + +	+ + +	+ + +	+	+ + +	+ + +	+ + +	+
512-Pasture & Hayland Planting	+ + +	+ + +	+ + +	+	+ + +	+ + +	+ + +	+
560-Access Road	+	+	N/A	N/A	+ +	+	+	+
561-Heavy Use Area Protection	+ + +	+ + +	+ + +	N/A	+	+ + +	+ + +	+
590-Nutrient Management	N/A	N/A	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 ---**

Conservation Practice Physical Effects on Resource Concerns
Candidate Practice List

State	Oklahoma	Field Office		MLRA		System Template Label	
Soil Interpretations							

Resource Concerns / Conservation Practices	Sheet and Rill Erosion	Ephemeral Gully	Classic Gully	Streambank Erosion	Roadbanks, Et. Al. Erosion	Soil Deposition Causing Off-site Damage	Soil Deposition On-site Safety Hazard	Runoff/ Flooding
595-Pest Management	N/A	N/A	N/A	N/A	+	N/A	N/A	+
606-Subsurface Drain	+	+	+	+	+	+	+	+
612-Tree/Shrub Establishment	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ +
642-Well	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
660-Tree/Shrub Pruning	-	-	-	-	-	-	-	-

RATINGS:

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