# MANAGEMENT SYSTEM TEMPLATE

## B. CONSERVATION MANAGEMENT SYSTEM OPTIONS WORKSHEET

| | | |
|---|---|---|
| 1. | STATE | Oklahoma |
| 2. | FIELD OFFICE | El Reno, Enid, Guthrie, Kingfisher, Medford and Newkirk |
| 3. | MLRA | 80A |
| 4. | COMMON RESOURCE AREA (CRA) | 080A.40.003 |
| 5. | RESOURCE INTERPRETATIONS | *for each resource enter available interp data* |
| 5.1 | SOIL | Soils Legends, Technical/Non-Technical Soils Interpretations<br>Hydric Soil Interpretations |
| 5.2 | WATER | Water Quantity and Quality Interpretations/Water Budgets |
| 5.3 | AIR | |
| 5.4 | PLANT | Cropland Interpretations/Windbreak Interpretations |
| 5.5 | ANIMAL | Threatened & Endangered Species List, Wildlife Interpretations |
| 5.6 | HUMAN | |
| 6. | HYDROLOGIC UNIT | |
| 7. | SYSTEM TEMPLATE LABEL | GCAZB |
| 8. | SYSTEM NAME | (80A) Wheat, Grain/Forage Sorghum - Sandy Soils |
| 9. | PLANNING PHASE | Non-benchmark |
| 10. | PLANNING LEVEL | RMS |
| 11. | NRCS LANDUSE | Crop |
| 12. | PLANNED CONSERVATION PRACTICES | *list practices in the system* |

1. (328) Conservation Crop Rotation
2. (329B) Residue Management, Mulch Till
3. (342) Critical Area Planting
4. (380) Windbreak and Shelterbelt Establishment
5. (393) Filter Strip
6. (391) Riparian Forest Buffer
7. (580) Streambank and Shoreline Protection
8. (344) Residue Management, Seasonal
9. (589B) Cross Wind Stripcropping
10. (590) Nutrient Management
11. (595) Pest Management
12. (512) Pasture and Hayland Planting
13. (550) Range Seeding

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

This system includes continuous wheat (grain and/or grazed out), grain sorghum and forage sorghum (or various rotations of these) on rolling, deep sandy soils. When properly applied and maintained, crop rotation, pest and residue management will aid in breaking pest cycles. Filter strips, strip cropping, windbreaks, riparian forest buffers, streambank protection, residue management, critical area planting and/or conservation tillage will reduce wind and streambank erosion. Pasture and range seeding will provide an alternative to cropland to provide protection from erosion. Reduced sediment and resulting silt deposition will aid in maintenance of outlets, reduction of standing water and flooding due to improved stream capacity and flow. Nutrient management will benefit production, economics and water quality by keying application rates to plant needs and desired production.

| 14. | RESOURCE CONCERNS | MAGNITUDE/EFFECTS | IMPACTS |
|---|---|---|---|
| | 1. Soil-Erosion-Wind | 1. 5 T/Ac/Yr soil loss | 1. 10 T/Ac/Yr saved |
| | 2. Soil-Eros.-Streambank | 2. 0 T/Yr soil loss | 2. 50 T/Yr soil saved |
| | 3. Soil-Dep.-Damage | 3. Reduced sediment | 3. Improved drainage |
| | 4. Water-Quan.-Flooding | 4. Improved stream cap. | 4. Reduced damage/prod. losses |
| | 5. Water-Quan.-Inad. Out. | 5. Improved drainage | 5. Red. ponding/lost prod. |
| | 6. Plants-Mgmt.-Nutrient | 6. Proper application. | 6. Prod./plant needs met |
| | 7. Plants-Mgmt.-Pests | 7. Pests controlled | 7. Red. comp./Imp. prod. |

| CRA con't | SYSTEM TEMPLATE LABEL cont'd | | |
|---|---|---|---|
| 17. | QUALITY CRITERIA DOCUMENTATION *List resource concerns, then indicate yes/no* | | |
| | 1. Soil - Erosion - Wind | _X_YES | ___NO |
| | 2. Soil - Erosion - Streambank | _X_YES | ___NO |
| | 3. Soil - Deposition - Damage | _X_YES | ___NO |
| | 4. Water - Quantity - Flooding | _X_YES | ___NO |
| | 5. Water - Quantity - Inadequate Outlets | _X_YES | ___NO |
| | 6. Plants - Management - Nutrient | _X_YES | ___NO |
| | 7. Plants - Management - Pests | _X_YES | ___NO |

080A.40.003
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**Conservation Management Systems**

**Certification of Quality Criteria**

| RESOURCE CONSIDERATION/PROBLEM | Term Effect Short | Term Effect Long | Meets Quality Criteria Benchmark Yes | Meets Quality Criteria Benchmark No | Meets Quality Criteria Planned Yes | Meets Quality Criteria Planned No |
|---|---|---|---|---|---|---|
| **SOIL** | | | | | | |
| **Erosion** | | | | | | |
| Sheet and rill | | | ✓ | | | |
| Wind | | | | ✓ | | |
| Irrigation induced | | | N/A | | | |
| **Concentrated flow** | | | | | | |
| Cropland ephemeral gully | | | ✓ | | | |
| Classic gully | | | ✓ | | | |
| Soil mass movement | | | ✓ | | | |
| Roadbank and construction sites | | | N/A | | | |
| Streambank erosion | | | | ✓ | | |
| **Condition** | | | | | | |
| Tilth | | | ✓ | | | |
| Compaction | | | ✓ | | | |
| Soil contaminants | | | ✓ | | | |
| **Deposition (Onsite & Offsite)** | | | | | | |
| Damage | | | | ✓ | | |
| Safety | | | ✓ | | | |
| **WATER** | | | | | | |
| **Quantity** | | | | | | |
| Seeps | | | ✓ | | | |
| Flooding | | | | ✓ | | |
| Subsurface water | | | ✓ | | | |
| Restricted capacity | | | ✓ | | | |
| Conveyance | | | ✓ | | | |
| Inadequate outlets | | | | ✓ | | |
| Restricted capacity, water bodies | | | ✓ | | | |
| Water management--irrigated | | | N/A | | | |
| Water management--non-irrigated | | | N/A | | | |
| **Quality** | | | | | | |
| Contaminants | | | ✓ | | | |
| Aquatic habitat suitability | | | ✓ | | | |
| **AIR** | | | | | | |
| **Quality** | | | | | | |
| Sediment | | | ✓ | | | |
| Smoke | | | ✓ | | | |
| Chemical drift | | | ✓ | | | |
| Odors | | | ✓ | | | |
| Fungi | | | ✓ | | | |
| Molds | | | ✓ | | | |
| Pollen | | | ✓ | | | |
| **Condition** | | | | | | |
| Temperature | | | ✓ | | | |
| Air movement | | | ✓ | | | |
| Humidity | | | ✓ | | | |

**Conservation Management Systems**

**Certification of Quality Criteria**

| RESOURCE CONSIDERATION/PROBLEM | Term Effect Short | Term Effect Long | Meets Quality Criteria Benchmark Yes | Meets Quality Criteria Benchmark No | Meets Quality Criteria Planned Yes | Meets Quality Criteria Planned No |
|---|---|---|---|---|---|---|
| **PLANTS** | | | | | | |
| **Suitability** | | | | | | |
| Adapted to site | | | ✓ | | | |
| Intended use | | | ✓ | | | |
| **Condition** | | | | | | |
| Productivity | | | ✓ | | | |
| Health and vigor | | | ✓ | | | |
| **Management** | | | | | | |
| Establishment | | | ✓ | | | |
| Growth | | | ✓ | | | |
| Harvest | | | ✓ | | | |
| Nutrient management | | | | ✓ | | |
| Pests | | | | ✓ | | |
| Threatened and endangered species | | | ✓ | | | |
| **ANIMALS(domestic/wildlife)** | | | | | | |
| **Habitat** | | | | | | |
| Food | | | ✓ | | | |
| Cover | | | ✓ | | | |
| Shelter | | | ✓ | | | |
| Water | | | ✓ | | | |
| Threatened and endangered species | | | ✓ | | | |
| **Management** | | | | | | |
| Population and Resource Balance | | | ✓ | | | |
| Animal Health | | | ✓ | | | |

References:
NPPH Pages 75-78
FOTG Section III - Quality Criteria
GM -450 Part 401 Paragraph 401.03

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**Conservation Practice Physical Effects on Resource Concerns**
**Candidate Practice List**

| State | Oklahoma | Field Office | | MLRA | 80A |
|---|---|---|---|---|---|

**Soil Interpretations**

| Resource Concerns / Cons. Practices | SOIL Erosion Wind | SOIL Erosion Streambank | SOIL Deposition Damage (On) | WATER Quantity Flooding | WATER Quantity Inad. Outlets | PLANTS Management Nutrient | PLANTS Management Pest | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 328 | + | 0 | + | + | 0 | 0 | 0 | | | |
| 329B | + | 0 | + | + | 0 | 0 | 0 | | | |
| 342 | + | + | + | + | 0 | + | N/A | | | |
| * 380 | + | + | + | 0 | 0 | 0 | 0 | | | |
| 393 | + | + | + | N/A | 0 | N/A | – | | | |
| 391 | + | + | + | + | 0 | 0 | – | | | |
| 580 | 0 | + | + | + | + | 0 | 0 | | | |
| 344 | + | 0 | + | + | 0 | 0 | – | | | |
| * 589B | + | 0 | + | 0 | 0 | 0 | 0 | | | |
| * 590 | 0 | 0 | 0 | 0 | 0 | + | 0 | | | |
| * 595 | 0 | 0 | 0 | 0 | 0 | 0 | + | | | |
| 512 | + | + | + | + | + | + | + | | | |
| * 550 | + | + | + | + | + | N/A | + | | | |

* Not in FOT6, Sec. V