

T.G. Section III-A-2 Resource Management System
Deming Field Office
Irrigated Cropland Guide Sheet
Resource Data

MLRA 42

Soils: All irrigated soils in WEG 2 thru 7.

WEQ values: C-150 or less, I-134 or less, and L-3000 or less

If WEQ values listed above are exceeded, erosion losses for each rotation will be computed individually to ensure that total average wind erosion loss is within acceptable levels during February to May, which is the critical blow season.

MANAGEMENT REQUIREMENTS addressing all 6 Resource Concerns

The Conservation Cropping Sequence needed for Erosion Control and to Protect the Resource Base may include crops grown in any order and sequence that meet the CCS specifications to maintain tilth for each soil group. Crops are rotated to control disease, to utilize fertilizers and pesticides, to prevent or control salt buildup and give an economic return.

The existing Irrigation System will be maintained as irrigation is essential for growing crops to control wind erosion. If needed, Land Leveling and Irrigation Water Conveyance practices become essential.

Irrigation Water Management is essential when needed: Examples are; if water is inadequate or expensive, is needed to control deep percolation or excess runoff, where crop needs are not being met, where water quality is a problem and/or where pattern or overall efficiencies are low.

Crop Residue Use for erosion protection requires leaving the residues from the previous crop on the surface until tillage operations for the next crop begins. After this, no residue is required if the land is planted, rough plowed or listed when irrigated. Avoid leaving the land in a smooth, dry, pulverized condition during the critical blow period. Maintain a 2 inch stubble on growing crops as alfalfa and small grain.

CRU for maintaining tilth requires returning over 2500# of crop residue /ac./yr. to the soil, or every other year or every third year based on soil type. Mulching with manure or other residues as gin trash to meet the soil needs as outlined in the CCS specifications is an acceptable alternative. Grasses And Legumes In Rotation and Cover And Green Manure Crops are other practices suited to maintain tilth.

If land is left fallow or idle manage the rotation where the idle land is preceded by a high residue crop, which has adequate residue for erosion protection. These residues will be maintained on the soil surface to leave the following "Small Grain Equivalents", (SGE) for the following soil types and Wind Erodibility Groups, (WEG). Loamy sands WEG-2, 2750# SGE/ac.; sandy loams, clays, and highly calcareous loams in WEG-3, 4 and 4L, 2250# SGE/ac.; and loams in WEG-5, 6, and 7, 1750# SGE/ac.

The following crops normally produce the following SGE under normal management if left standing. Alfalfa, small grain, corn, milo, and chile produce over 3000# SGE/ac. Cotton produces about 2500# SGE/ac. If flat or shredded, cotton and chile produce less than 1750# SGE/ac.

If inadequate residue is present and where adequate moisture is present on soils that will produce stable clods; plowing or listing is an adequate temporary alternative but should not exceed one year in the rotation.

If land is to be left idle for extended periods, irrigation may be needed to re-establish the minimum residue, or the land may be planted to a perennial cover.

Where sodium or salinity is a problem Toxic Salt Reduction is essential.

Where Water Disposal is a problem a Surface or Subsurface Drainage System can become essential.

Off-Site Effects such as flooding, sediment, dust, erosion, and pesticides and nutrients needs addressed if a problem, as well as Animal Wastes and Agricultural Chemicals, which can contaminate air and water others use.

Deming SWCD [Signature] Date 2 June 88
District Conservationist Billy K. Hanna Date 2 JUNE, 1988
Area Conservationist [Signature] Date 6/16/88
State Office [Signature] Date 7/7/88