

CHAPTER 4

COVER MANAGEMENT FACTOR
(C)

COVER-MANAGEMENT FACTOR (C)

The C-factor is used within both the Universal Soil Loss Equation (USLE) and the Revised USLE (RUSLE) to reflect the effect of cropping and management practices on erosion rates, and is the factor used most often to compare the relative impacts of management options on conservation plans. The C-factor indicates how the conservation plan will affect the average annual soil loss and how that soil loss potential will be distributed in time during construction activities, crop rotations, or other management schemes.

As with most other factors within RUSLE, the C-factor is based on the concept of deviation from standard, in this case an area under clean-tilled continuous-fallow conditions. The Soil Loss Ratio (SLR) is then an estimate of the ratio of soil loss under actual conditions to losses experienced under the reference conditions. Research indicates that the general impact of cropping management on soil losses can be divided into a series of subfactors. Within RUSLE the important parameters are the impacts of previous cropping and management, the protection offered the soil surface by the vegetative canopy, the reduction in erosion due to surface cover and surface roughness, and in some cases the impact of low soil moisture on reduction of runoff from low-intensity rainfall. As used in RUSLE, each of these parameters is assigned a subfactor value, and these values are multiplied together to yield an SLR.

An individual SLR value is thus calculated for each time period over which the important parameters can be assumed to remain constant. Each of the SLR values is then weighted by the fraction of rainfall and runoff erosivity (EI) associated with the corresponding time period, and these weighted values are combined into an overall C-factor value.

USE OF TIME-VARYING OR AVERAGE ANNUAL VALUES

For areas such as pasture or rangeland that have reached a relative equilibrium, the parameters used in computing SLR values may change very slowly with time, so calculated SLR values will also change little. In these cases, it may prove adequate to calculate a C-factor based on a single average SLR representing the entire year. RUSLE provides this option to simplify calculations, but this capability must be used with caution, as the result will no longer reflect changes in the climates's erosive potential through the year.

In almost all cropland scenarios, and in many cases where rangeland or pasture are being managed, crop and soil parameters do change with time due to either specific management practices or natural cyclic effects such as winter knockdown and spring growth. This demands that the SLR values be calculated frequently enough over the course of a year or a crop rotation to provide an adequate measure of how they change. This is especially important because the erosion potential is also changing with time. The calculated average annual soil loss should be high if a cropping or management scheme happens to leave the soil susceptible to erosion at a time of high rainfall erosivity. USLE incorporated this effect into calculations of SLR values based on crop-growth stages. These

values were usually assigned based on tillage type, elapsed time since a tillage operation, canopy development, and date of harvest.

Following the lead of the USLE approach, RUSLE calculations are based on a 15 day time step. This means that SLR values are calculated every 15 days throughout the year, and that the important parameters are assumed to remain constant during those 15 days. If a management operation occurs within the period, the parameters can no longer be assumed constant, the half-month period is then broken into two segments and two SLR values are calculated.

COMPUTATION OF SOIL-LOSS RATIOS

Based on new descriptions of cropping and management practices and their influence on soil loss, soil loss ratios are computed as

$$SLR = PLU * CC * SC * SR * SM$$

where:

SLR = soil loss ratio for given conditions

PLU = the prior landuse subfactor

CC = is the canopy-cover subfactor

SC = is the surface-cover subfactor

SR = is the surface-roughness subfactor

SM = is the soil-moisture subfactor

Each subfactor contains cropping and management variables that affect soil erosion. Individual subfactors in the equation are expressed as functions of one or more variables, including residue cover, canopy cover, canopy height, surface roughness, below-ground biomass (root mass plus incorporated residue), prior cropping, soil moisture, and time.

RUSLE uses a crop database to store the values required to calculate the impact on soil loss of any vegetation within the management plan. These user-defined sets of values specify the growth characteristics of the vegetation, the amount of residue the vegetation will produce, and the characteristics of that residue. The program uses that information to calculate the change with time of the variables listed above and their impact on the subfactors. RUSLE uses another database to store user-supplied information defining the impacts of management operations on the soil, vegetation, and residues, and uses that information to modify the variables accordingly.

The RUSLE program contains a third database that represents the climate for the area of interest. This important to the C-factor calculations in two ways: first, the EI distribution within the database set is used to weigh each SLR value in

calculating the overall C-factor value. Second, the set also contains temperature and rainfall data, which are needed to calculate the rate of residue decomposition. The climate data are not used to modify the crop growth characteristics, because these are already defined in the crop database.

The RUSLE program separately calculates the amount of residue both on the surface and within the soil, and decomposes each according to climatic conditions and residue characteristics. It also accounts for additions of residue to the surface by harvests, senescence, or other management operations, and for incorporation of residue by tillage operations. Each type of residue added to the surface is tracked individually to account for different decomposition characteristics.

The calculations within RUSLE include three additional assumptions concerning residue incorporation and decomposition. First, it is assumed that residue incorporation cannot occur within a soil depth of less than 2 in. regardless of the depth of tillage defined for the field operation. Next, it is assumed that the residue is evenly incorporated throughout the depth of tillage. Finally, it is assumed that all subsurface residue will decompose at the same rate, without regard for the depth to which it is buried. While these assumptions are of limited validity, they provide an appropriate simplified basis on which to make the calculations.

The effectiveness of both surface and incorporated residues in controlling erosion rates has been found to depend on the mechanism by which the soil tends to erode. In general, soils which tend to erode primarily through the formation of rills are substantially more protected by both surface and buried residues than are soils which erode primarily through sheet erosion in the interrill areas. Examples of soils that rill easily include those with naturally weak structure and those whose structure has been destroyed by disturbance and are in an unconsolidated state. Consolidated soils or those with good structure usually have a low ratio of rill to interrill erosion.

PRIOR-LAND-USE SUBFACTOR (PLU)

The prior-land-use subfactor (PLU) expresses (1) the influence on soil erosion of subsurface residual effects from previous crops and (2) the effect of previous tillage practices on soil consolidation. Tillage operations tend to break soil aggregate bond, increasing the potential for erosion. This is reflected in the lower erosion rates associated with the undisturbed soils of rangeland or no-till systems.

The amount of incorporated residue is calculated by the RUSLE program from the additions of residue to the surface and its subsequent burial by tillage operations. The mass of roots when a crop is killed is added to this, as these will also decay and act as incorporated residue. This total is then tracked through use of the decomposition subroutine.

On croplands, the amount of above and below ground biomass present at a given time depends on initial mass of the residue, root mass, fraction of crop residue incorporated by field operations, and decomposition rate of residue and roots.

CANOPY-COVER SUBFACTOR (CC)

The canopy-cover subfactor expresses the effectiveness of vegetative canopy in reducing the energy of rainfall striking the soil surface. Although most rainfall intercepted by crop canopy eventually reaches the soil surface, it usually does so with much less energy than does rainfall which strikes the ground without having been intercepted. The intercepted raindrops fracture into smaller drops with less energy, or drip from leaf edges, or travel down crop stems to the ground.

SURFACE-COVER SUBFACTOR (SC)

Surface cover affects erosion by reducing the transport capacity of runoff water, by causing deposition in ponded areas and by decreasing the surface area susceptible to raindrop impact. It is perhaps the single most important factor in determining soil-loss ratios. Surface cover includes crop residue, rocks, cryptogams, and other nonerodible material that is in direct contact with the soil surface.

SURFACE-ROUGHNESS SUBFACTOR (SR)

Surface roughness has been shown to directly affect soil erosion and to affect it indirectly through the impact on residue effectiveness. A rough surface has many depressions and barriers. During a rainfall event, these trap water and sediment, causing rough surfaces to erode at lower rates than do smooth surfaces under similar conditions. Increasing the surface roughness decreases the transport capacity and runoff detachment by reducing the flow velocity.

Roughness and cloddiness of soils also affect the degree and rate of soil sealing by raindrop impact. Soils that are left rough and cloddy typically have higher infiltration rates. Soils that are finely pulverized are usually smooth, seal rapidly, and have low infiltration rates. Random roughness values vary, depending on the type and degree of surface disturbance. Roughness conditions for a given field operation may vary, depending on previous tillage, implement speed, and field conditions.

SOIL-MOISTURE SUBFACTOR (SM)

Antecedent soil moisture has a substantial influence on infiltration and runoff and hence on soil erosion. In general, antecedent moisture effects are an inherent component of continuous-tilled fallow plots, and these effects are reflected in variation in soil erodibility throughout the year. In most of the continental United States, soil moisture is usually high during susceptible crop stages in spring and early summer, when much of the erosion occurs. Hence the antecedent soil moisture on cropped plots parallels that on the continuous-tilled fallow plots from

which soil-erodibility factors are derived, so no adjustment is made for changes in soil moisture.

COMPUTATION OF THE C-FACTOR

Once the SLR's have been calculated for each time interval, they are multiplied by their corresponding percentage of annual EI. These values are then summed and divided by the total percentage of annual EI value for the entire time period being investigated, as

$$C = (SLR_1 EI_1 + SLR_2 EI_2 + \dots + SLR_n EI_n) / EI_t$$

where C is average annual or crop value, SLR_i is the value for time period i, EI_i is the percentage of the annual or crop EI occurring during that time period, n is the number of periods used in the summation, and EI_t is the sum of the EI percentages for the entire time period.

For those systems where conditions are not rapidly changing (such as for rangeland or continuous pasture or meadow), the PLU, CC, SC, and SR subfactor values are assumed to be annual averages, and are simply multiplied to yield the overall C-factor value. If the assumption of nearly steady-state conditions does not hold, the weighted procedure used for cropland is more appropriate.

COMPUTATION OF C-FACTORS FOR SINGLE DISTURBANCES AND FOR ROTATIONS

RUSLE technology can be used to estimate erosion under two very different sets of circumstances. The first occurs when an area is disturbed once, as in a construction site, a rangeland under an improvement plan, or a disturbed forest site. In this case the soil/crop/residue system is drastically disturbed, but is then allowed to reconsolidate and return to more stable conditions.

The other general circumstance under which RUSLE can be used is that of a normal cropping rotation, in which the soil/crop/residue system is disturbed repeatedly, and in which the entire set of disturbances is repeated in some cycle of one or more years. For example, a conventionally-tilled corn-soybean rotation would have the same field operation (e.g., planting of the corn) at roughly the same time of year (perhaps May 15) every second year.

For the situation of a single disturbance, proper use of the RUSLE program requires definition of all the important soil/crop/residue parameters immediately after the disturbance. For a crop rotation things are somewhat more complicated, as the disturbance is usually not so severe and the previous crops and field operations can still have a significant impact. The RUSLE program handles this by running three times through the calculations for the entire rotation, and only using the SLR values calculated on the third time through. This procedure allows the system to stabilize and minimizes the impact of the initial conditions on the resulting SLR values.

COMPUTATION OF C-FACTORS FOR HILLSLOPES UNDER STRIPCROPPING OR BUFFER STRIPS

In cases such as stripcropping and buffer strips, the vegetation and cropping schemes cause the SLR values to vary not only with time, but also with position on the hillslope. For example, in a stripcropping scheme with alternating strips of conventionally-tilled corn and good sod-forming grass, at any time half of the field would be under each crop.

The impact of such a scheme on the movement of runoff and the deposition of sediment is taken into account in the P-factor, but this does not account for the protection given the soil by the important parameters within the C-factor; things like random roughness, root mass, surface residue cover, and canopy cover. These must still be represented through the C-factor.

This is done by calculating an individual C-factor for each strip, and then weighting these by their area on the hillslope. For example, in any true stripcropping rotation scheme, each strip will be rotated through the same pattern, so we need only make one C-factor calculation. On the other hand, for buffer strips we can calculate a C-factor for the buffer strips themselves and calculate a C-factor for the cropped areas between the buffer strips. We then calculate an overall C-factor by multiplying each of the C-factors by the percentage of the hillslope under that practice.

RUSLE C-FACTOR TABLES

The following tables contain C-Factors for crops in Oklahoma. The tables are arranged by C-Factor zone, crop, crop yield and tillage method. The tillage methods include Conventional-till, Mulch-till, and No-till or Ridge-till. For the purposes of RUSLE, the following definitions will be used:

Conventional (Conv.)-till: Tillage consists of implements which provide <10% residue cover after planting.

Mulch-till: The entire field surface is tilled prior to planting. Tillage provides >10% residue cover after planting.

No-till or Ridge-till: The soil surface is left undisturbed. Plant residues will be maintained on the soil surface year round. Crops will be planted in narrow seedbeds or slots created by coulters, disk openers, or row cleaners.

Most C-Factors were developed for single year crops. Those C-Factors developed for *double cropping* have a *DC* in the description. A few rotational C-Factors have been developed and are identified in the tables.

RUSLE C-FACTORS

C-FACTOR ZONE 89A, 93A

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
CGCGCT3001	Corn - Conv.-till, 112 bu., 30" rows	0.21
CGCGCT3002	Corn - Conv.-till, 125 bu., 30" rows	0.19
CGCGCT3003	Corn - Conv.-till, 150 bu., 30" rows	0.16
CGCGMT3001	Corn - Mulch-till, 112 bu., 30" rows	0.10
CGCGMT3002	Corn - Mulch-till, 125 bu., 30" rows	0.09
CGCGMT3003	Corn - Mulch-till, 150 bu., 30" rows	0.07
CGCGNT3001	Corn - No-till, 112 bu., 30" rows	0.04
CGCGNT3002	Corn - No-till, 125 bu., 30" rows	0.03
CGCGNT3003	Corn - No-till, 150 bu., 30" rows	0.02
NUNUCT2001	Peanut - Conv.-till, 2000 lbs., no cover	0.45
NUNUCT2002	Peanut - Conv.-till, 2000 lbs., with cover crop	0.29
NUNUCT3001	Peanut - Conv.-till, 3000 lbs., no cover	0.39
NUNUCT3002	Peanut - Conv.-till, 3000 lbs., with cover crop	0.26
OCOCCT3801	Cotton - Conv.-till, 375 lbs., 38" rows	0.56
OCOCCT3802	Cotton - Conv.-till, 500 lbs., 38" rows	0.49
OCOCCT3803	Cotton - Conv.-till, 750 lbs., 38" row	0.40
OCOCCT3804	Cotton - Conv.-till, Skip row, 375 lbs.	0.58
OCOCCT3805	Cotton - Conv.-till, Skip 2 row, 375 lbs.	0.60
OCOCMT3801	Cotton - Mulch-till, 375 lbs., 38" rows	0.36
OCOCMT3802	Cotton - Mulch-till, 500 lbs., 38" rows	0.31
OCOCMT3803	Cotton - Mulch-till, 750 lbs., 38" rows	0.27
OCOCRT3801	Cotton - Ridge-till, 375 lbs., 38" rows	0.33
OCOCRT3802	Cotton - Ridge-till, 500 lbs., 38" rows	0.28
OCOCRT3803	Cotton - Ridge-till, 750 lbs., 38" rows	0.21
SBSBCT2007	Soybean - Conv.-till, 20 bu., 7" rows	0.45
SBSBCT2019	Soybean - Conv.-till, 20 bu., 19" rows	0.44
SBSBCT2030	Soybean - Conv.-till, 20 bu., 30" rows	0.44
SBSBCT2507	Soybean - Conv.-til, 25 bu., 7" rows	0.41
SBSBCT2519	Soybean - Conv.-till 25 bu., 19" rows	0.42
SBSBCT2530	Soybean - Conv.-till, 25 bu., 30" rows	0.41
SBSBCT3007	Soybean - Conv.-till, 30 bu., 7" rows	0.38
SBSBCT3019	Soybean - Conv.-till, 30 bu., 19" rows	0.41
SBSBCT3030	Soybean - Conv.-till, 30 bu., 30" rows	0.37
SBSBCT3507	Soybean - Conv.-till, 35 bu., 7" rows	0.35
SBSBCT3519	Soybean - Conv.-till, 35 bu., 19" rows	0.37
SBSBCT3530	Soybean - Conv.-till, 35 bu., 30" rows	0.36
SBSBCT4507	Soybean - Conv.-till, 45 bu., 7" rows	0.32
SBSBCT4519	Soybean - Conv.-till, 45 bu., 19" rows	0.33
SBSBCT4530	Soybean - Conv.-till, 45 bu., 30" rows	0.32

RUSLE C-FACTORS

C-FACTOR ZONE 89A, 93A (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SBSBMT2007	Soybean - Mulch-till, 20 bu., 7" rows	0.16
SBSBMT2019	Soybean - Mulch-till, 20 bu., 19" rows	0.16
SBSBMT2030	Soybean - Mulch-till, 20 bu., 30" rows	0.16
SBSBMT2507	Soybean - Mulch-till, 25 bu., 7" rows	0.15
SBSBMT2519	Soybean - Mulch-till, 25 bu., 19" rows	0.15
SBSBMT2530	Soybean - Mulch-till, 25 bu., 30" rows	0.14
SBSBMT3007	Soybean - Mulch-till, 30 bu., 7" rows	0.13
SBSBMT3019	Soybean - Mulch-till, 30 bu., 19" rows	0.15
SBSBMT3030	Soybean - Mulch-till, 30 bu., 30" rows	0.13
SBSBMT3507	Soybean - Mulch-till, 35 bu., 7" rows	0.12
SBSBMT3519	Soybean - Mulch-till, 35 bu., 19" rows	0.13
SBSBMT3530	Soybean - Mulch-till, 35 bu., 30" rows	0.12
SBSBMT4507	Soybean - Mulch-till, 45 bu., 7" rows	0.10
SBSBMT4519	Soybean - Mulch-till, 45 bu., 19" rows	0.11
SBSBMT4530	Soybean - Mulch-till, 45 bu., 30" rows	0.10
SBSBNT2007	Soybean - No-till, 20 bu., 7" rows	0.07
SBSBNT2019	Soybean - No-till, 20 bu., 19" rows	0.04
SBSBNT2030	Soybean - No-till, 20 bu., 30" rows	0.03
SBSBNT2507	Soybean - No-till, 25 bu., 7" rows	0.06
SBSBNT2519	Soybean - No-till, 25 bu., 19" rows	0.03
SBSBNT2530	Soybean - No-till, 25 bu., 30" rows	0.03
SBSBNT3007	Soybean - No-till, 30 bu., 7" rows	0.05
SBSBNT3019	Soybean - No-till, 30 bu., 19" rows	0.03
SBSBNT3030	Soybean - No-till, 30 bu., 30" rows	0.02
SBSBNT3507	Soybean - No-till, 35 bu., 7" rows	0.04
SBSBNT3519	Soybean - No-till, 35 bu., 19" rows	0.02
SBSBNT3530	Soybean - No-till, 35 bu., 30" rows	0.02
SBSBNT4507	Soybean - No-till, 45 bu., 7" rows	0.03
SBSBNT4519	Soybean - No-till, 45 bu., 19" rows	0.02
SBSBNT4530	Soybean - No-till, 45 bu., 30" rows	0.02
SBWWCT2007	Wheat-Soybean - DC, Conv.-till, 20 bu., 7" rows	0.20
SBWWCT2019	Wheat-Soybean - DC, Conv.-till, 20 bu., 19" rows	0.20
SBWWCT2030	Wheat-Soybean - DC, Conv.-till, 20 bu., 30" rows	0.20
SBWWCT2507	Wheat-Soybean - DC, Conv.-till, 25 bu., 7" rows	0.19
SBWWCT2519	Wheat-Soybean - DC, Conv.-till, 25 bu., 19" rows	0.20
SBWWCT2530	Wheat-Soybean - DC, Conv.-till, 25 bu., 30" rows	0.19
SBWWCT3007	Wheat-Soybean - DC, Conv.-till, 30 bu., 7" rows	0.18
SBWWCT3019	Wheat-Soybean - DC, Conv.-till, 30 bu., 19" rows	0.19
SBWWCT3030	Wheat-Soybean - DC, Conv.-till, 30 bu., 30" rows	0.18
SBWWCT3507	Wheat-Soybean - DC, Conv.-till, 35 bu., 7" rows	0.17

RUSLE C-FACTORS

C-FACTOR ZONE 89A, 93A (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SBWWCT3519	Wheat-Soybean - DC, Conv.-till, 35 bu., 19" rows	0.17
SBWWCT3530	Wheat-Soybean - DC, Conv.-till, 35 bu., 30" rows	0.18
SBWWCT4507	Wheat-Soybean - DC, Conv.-till, 45 bu., 7" rows	0.16
SBWWCT4519	Wheat-Soybean - DC, Conv.-till, 45 bu., 19" rows	0.17
SBWWCT4530	Wheat-Soybean - DC, Conv.-till, 45 bu., 30" rows	0.16
SBWWMT2007	Wheat-Soybean - DC, Mulch-till, 20 bu., 7" rows	0.13
SBWWMT2019	Wheat-Soybean - DC, Mulch-till, 20 bu., 19" rows	0.13
SBWWMT2030	Wheat-Soybean - DC, Mulch-till, 20 bu., 30" rows	0.13
SBWWMT2507	Wheat-Soybean - DC, Mulch-till, 25 bu., 7" rows	0.12
SBWWMT2519	Wheat-Soybean - DC, Mulch-till, 25 bu., 19" rows	0.12
SBWWMT2530	Wheat-Soybean - DC, Mulch-till, 25 bu., 30" rows	0.12
SBWWMT3007	Wheat-Soybean - DC, Mulch-till, 30 bu., 7" rows	0.11
SBWWMT3019	Wheat-Soybean - DC, Mulch-till, 30 bu., 19" rows	0.12
SBWWMT3030	Wheat-Soybean - DC, Mulch-till, 30 bu., 30" rows	0.11
SBWWMT3507	Wheat-Soybean - DC, Mulch-till, 35 bu., 7" rows	0.10
SBWWMT3519	Wheat-Soybean - DC, Mulch-till, 35 bu., 19" rows	0.11
SBWWMT3530	Wheat-Soybean - DC, Mulch-till, 35 bu., 30" rows	0.11
SBWWMT4507	Wheat-Soybean - DC, Mulch-till, 45 bu., 7" rows	0.09
SBWWMT4519	Wheat-Soybean - DC, Mulch-till, 45 bu., 19" rows	0.10
SBWWMT4530	Wheat-Soybean - DC, Mulch-till, 45 bu., 30" rows	0.10
SBWWNT2007	Wheat-Soybean - DC, No-till, 20 bu., 7" rows	0.01
SBWWNT2019	Wheat-Soybean - DC, No-till, 20 bu., 19" rows	0.01
SBWWNT2030	Wheat-Soybean - DC, No-till, 20 bu., 30" rows	0.01
SBWWNT2507	Wheat-Soybean - DC, No-till, 25 bu., 7" rows	0.01
SBWWNT2519	Wheat-Soybean - DC, No-till, 25 bu., 19" rows	0.01
SBWWNT2530	Wheat-Soybean - DC, No-till, 25 bu., 30" rows	0.01
SBWWNT3007	Wheat-Soybean - DC, No-till, 30 bu., 7" rows	0.01
SBWWNT3019	Wheat-Soybean - DC, No-till, 30 bu., 19" rows	0.01
SBWWNT3030	Wheat-Soybean - DC, No-till, 30 bu., 30" rows	0.01
SBWWNT3507	Wheat-Soybean - DC, No-till, 35 bu., 7" rows	0.01
SBWWNT3519	Wheat-Soybean - DC, No-till, 35 bu., 19" rows	0.01
SBWWNT3530	Wheat-Soybean - DC, No-till, 35 bu., 30" rows	0.01
SBWWNT4507	Wheat-Soybean - DC, No-till, 45 bu., 7" rows	0.01
SBWWNT4519	Wheat-Soybean - DC, No-till, 45 bu., 19" rows	0.01
SBWWNT4530	Wheat-Soybean - DC, No-till, 45 bu., 30" rows	0.01
SDSDCTGR01	Forage Sorghum - Conv.-till, grazed only	0.39
SDSDCTHY01	Forage Sorghum - Conv.-till, hayed	0.31
SOSOCT3001	Grain Sorghum - Conv.-till, 2300 lbs., 30" rows	0.37
SOSOCT3002	Grain Sorghum - Conv.-till, 3640 lbs., 30" rows	0.25
SOSOCT3003	Grain Sorghum - Conv.-till, 4480 lbs., 30" rows	0.22

RUSLE C-FACTORS

C-FACTOR ZONE 89A, 93A (CONT.)

SINGLE YEAR C-FACTOR

FOCS CODE	DESCRIPTION	C-FACTOR
SOSOCT3004	Grain Sorghum - Conv.-till, 5600 lbs., 30" rows	0.18
SOSOMT3001	Grain Sorghum - Mulch-till, 2300 lbs., 30" rows	0.16
SOSOMT3002	Grain Sorghum - Mulch-till, 3640 lbs., 30" rows	0.10
SOSOMT3003	Grain Sorghum - Mulch-till, 4480 lbs., 30" rows	0.08
SOSOMT3004	Grain Sorghum - Mulch-till, 5600 lbs., 30" rows	0.06
SOSONT3001	Grain Sorghum - No-till, 2300 lbs., 30" rows	0.04
SOSONT3002	Grain Sorghum - No-till, 3640 lbs., 30" rows	0.02
SOSONT3003	Grain Sorghum - No-till, 4480 lbs., 30" rows	0.01
SOSONT3004	Grain Sorghum - No-till, 5600 lbs., 30" rows	0.01
WARCCTCC01	Watermelon - Conv.-till, w/ rye cover crop	0.31
WPRCCTCC01	Sweet Potato - Conv.-till, w/ rye cover crop	0.24
WWWWCT0100	Wheat - Conv.-till, grazed out	0.32
WWWWCT0120	Wheat - Conv.-till, grazed, 20 bu.	0.23
WWWWCT0125	Wheat - Conv.-till, grazed, 25 bu.	0.22
WWWWCT0130	Wheat - Conv.-till, grazed, 30 bu.	0.20
WWWWCT0135	Wheat - Conv.-till, grazed, 35 bu.	0.19
WWWWCT0145	Wheat - Conv.-till, grazed, 45 bu.	0.17
WWWWCT2001	Wheat - Conv.-till, 20 bu.	0.20
WWWWCT2502	Wheat - Conv.-till, 25 bu.	0.19
WWWWCT3003	Wheat - Conv.-till, 30 bu.	0.17
WWWWCT3504	Wheat - Conv.-till, 35 bu.	0.15
WWWWCT4505	Wheat - Conv.-till, 45 bu.	0.13
WWWWMT2001	Wheat - Mulch-till, 20 bu.	0.14
WWWWMT2502	Wheat - Mulch-till, 25 bu.	0.12
WWWWMT3003	Wheat - Mulch-till, 30 bu.	0.11
WWWWMT3504	Wheat - Mulch-till, 35 bu.	0.09
WWWWMT4505	Wheat - Mulch-till, 45 bu.	0.08
WWWWNT2001	Wheat - No-till, 20 bu.	0.04
WWWWNT2502	Wheat - No-till, 25 bu.	0.03
WWWWNT3003	Wheat - No-till, 30 bu.	0.02
WWWWNT3504	Wheat - No-till, 35 bu.	0.02
WWWWNT4505	Wheat - No-till, 45 bu.	0.01

C-FACTOR ZONE 89A, 93A (CONT.)

ROTATIONAL C-FACTOR

FOCS CODE	DESCRIPTION	C-FACTOR
AL5YRWW201	Alfalfa 5 yrs. - Wheat 2 yrs. rotation	0.06
AL5YRWW302	Alfalfa 5 yrs. - Wheat 3 yrs., rotation	0.07

RUSLE C-FACTORS

C-FACTOR ZONE 89B

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
CGCGCT3001	Corn - Conv.-till, 112 bu. 30" rows	0.25
CGCGCT3002	Corn - Conv.-till, 125 bu., 30" rows	0.23
CGCGCT3003	Corn - Conv.-till, 150 bu., 30" rows	0.20
CGCGMT3001	Corn - Mulch-till, 112 bu., 30" rows	0.14
CGCGMT3002	Corn - Mulch-till, 125 bu., 30" rows	0.13
CGCGMT3003	Corn - Mulch -till, 150 bu., 30" rows	0.10
CGCGNT3001	Corn - No-till, 112 bu., 30" rows	0.06
CGCGNT3002	Corn - No-till, 125 bu., 30" rows	0.05
CGCGNT3003	Corn - No-till, 150 bu., 30" rows	0.04
NUNUCT2001	Peanut - Conv.-till, 2000 lbs., no cover	0.48
NUNUCT2002	Peanut - Conv.-till, 2000 lbs., with cover crop	0.33
NUNUCT3003	Peanut - Conv.-till, 3000 lbs., no cover	0.42
NUNUCT3004	Peanut - Conv.-till, 3000 lbs., with cover crop	0.28
OCOCCT3801	Cotton - Conv.-till, 375 lbs., 38" row	0.61
OCOCCT3802	Cotton - Conv.-till, 500 lbs., 38" rows	0.54
OCOCCT3803	Cotton - Conv.-till, 750 lbs., 38" rows	0.46
OCOCMT3801	Cotton - Mulch-till, 375 lbs., 38" rows	0.38
OCOCMT3802	Cotton - Mulch-till, 500 lbs., 38" rows	0.34
OCOCMT3803	Cotton - Mulch-till, 750 lbs., 38" rows	0.30
OCOCRT3801	Cotton - Ridge-till, 375 lbs., 38" rows	0.38
OCOCRT3802	Cotton - Ridge-till, 500 lbs., 38" rows	0.33
OCOCRT3803	Cotton - Ridge-till, 750 lbs., 38" rows	0.26
SBSBCT2007	Soybean - Conv.-till, 20 bu., 7" rows	0.43
SBSBCT2019	Soybean - Conv.-till, 20 bu., 19" rows	0.43
SBSBCT2030	Soybean - Conv.-till, 20 bu., 30" rows	0.42
SBSBCT2507	Soybean - Conv.-till, 25 bu., 7" rows	0.39
SBSBCT2519	Soybean - Conv.-till, 25 bu., 19" rows	0.41
SBSBCT2530	Soybean - Conv.-till, 25 bu., 30" rows	0.39
SBSBCT3007	Soybean - Conv.-till, 30 bu., 7" rows	0.36
SBSBCT3019	Soybean - Conv.-till, 30 bu., 19" rows	0.39
SBSBCT3030	Soybean - Conv.-till, 30 bu., 30" rows	0.35
SBSBCT3507	Soybean - Conv.-till, 35 bu., 7" rows	0.34
SBSBCT3519	Soybean - Conv.-till, 35 bu., 19" rows	0.36
SBSBCT3530	Soybean - Conv.-till, 35 bu., 30" rows	0.35
SBSBCT4507	Soybean - Conv.-till, 45 bu., 7" rows	0.30
SBSBCT4519	Soybean - Conv.-till, 45 bu., 19" rows	0.32
SBSBCT4530	Soybean - Conv.-till, 45 bu., 30" rows	0.31
SBSBMT2007	Soybean - Mulch-till, 20 bu., 7" rows	0.18
SBSBMT2019	Soybean - Mulch-till, 20 bu., 19" rows	0.18

RUSLE C-FACTORS

C-FACTOR ZONE 89B (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SBSBMT2030	Soybean - Mulch-till, 20 bu., 30" rows	0.18
SBSBMT2507	Soybean - Mulch-till, 25 bu., 7" rows	0.16
SBSBMT2519	Soybean - Mulch-till, 25 bu., 19" rows	0.17
SBSBMT2530	Soybean - Mulch-till, 25 bu., 30" rows	0.15
SBSBMT3007	Soybean - Mulch-till, 30 bu., 7" rows	0.14
SBSBMT3019	Soybean - Mulch-till, 30 bu., 19" rows	0.16
SBSBMT3030	Soybean - Mulch-till, 30 bu., 30" rows	0.14
SBSBMT3507	Soybean - Mulch-till, 35 bu., 7" rows	0.13
SBSBMT3519	Soybean - Mulch-till, 35 bu., 19" rows	0.14
SBSBMT3530	Soybean - Mulch-till, 35 bu., 30" rows	0.13
SBSBMT4507	Soybean - Mulch-till, 45 bu., 7" rows	0.11
SBSBMT4519	Soybean - Mulch-till, 45 bu., 19" rows	0.12
SBSBMT4530	Soybean - Mulch-till, 45 bu., 30" rows	0.12
SBSBNT2007	Soybean - No-till, 20 bu., 7" rows	0.08
SBSBNT2019	Soybean - No-till, 20 bu., 19" rows	0.05
SBSBNT2030	Soybean - No-till, 20 bu., 30" rows	0.05
SBSBNT2507	Soybean - No-till, 25 bu., 7" rows	0.07
SBSBNT2519	Soybean - No-till, 25 bu., 19" rows	0.05
SBSBNT2530	Soybean - No-till, 25 bu., 30" rows	0.04
SBSBNT3007	Soybean - No-till, 30 bu., 7" rows	0.06
SBSBNT3019	Soybean - No-till, 30 bu., 19" rows	0.04
SBSBNT3030	Soybean - No-till, 30 bu., 30" rows	0.03
SBSBNT3507	Soybean - No-till, 35 bu., 7" rows	0.05
SBSBNT3519	Soybean - No-till, 35 bu., 19" rows	0.03
SBSBNT3530	Soybean - No-till, 35 bu., 30" rows	0.03
SBSBNT4507	Soybean - No-till, 45 bu., 7" rows	0.04
SBSBNT4519	Soybean - No-till, 45 bu., 19" rows	0.03
SBSBNT4530	Soybean - No-till, 45 bu., 30" rows	0.02
SBWWCT2007	Wheat-Soybean - DC, Conv.-till, 20 bu., 7" rows	0.23
SBWWCT2019	Wheat-Soybean - DC, Conv.-till, 20 bu., 19" rows	0.23
SBWWCT2030	Wheat-Soybean - DC, Conv.-till, 20 bu., 30" rows	0.23
SBWWCT2507	Wheat-Soybean - DC, Conv.-till, 25 bu., 7" rows	0.22
SBWWCT2519	Wheat-Soybean - DC, Conv.-till, 25 bu., 19" rows	0.22
SBWWCT2530	Wheat-Soybean - DC, Conv.-till, 25 bu., 30" rows	0.22
SBWWCT3007	Wheat-Soybean - DC, Conv.-till, 30 bu., 7" rows	0.21
SBWWCT3019	Wheat-Soybean - DC, Conv.-till, 30 bu., 19" rows	0.22
SBWWCT3030	Wheat-Soybean - DC, Conv.-till, 30 bu., 30" rows	0.21
SBWWCT3507	Wheat-Soybean - DC, Conv.-till, 35 bu., 7" rows	0.19
SBWWCT3519	Wheat-Soybean - DC, Conv.-till, 35 bu., 19" rows	0.20
SBWWCT3530	Wheat-Soybean - DC, Conv.-till, 35 bu., 30" rows	0.20

RUSLE C-FACTORS

C-FACTOR ZONE 89B (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SBWWCT4507	Wheat-Soybean - DC, Conv.-till, 45 bu., 7" rows	0.18
SBWWCT4519	Wheat-Soybean - DC, Conv.-till, 45 bu., 19" rows	0.19
SBWWCT4530	Wheat-Soybean - DC, Conv.-till, 45 bu., 30" rows	0.19
SBWWMT2007	Wheat-Soybean - DC, Mulch-till, 20 bu., 7" rows	0.15
SBWWMT2019	Wheat-Soybean - DC, Mulch-till, 20 bu., 19" rows	0.15
SBWWMT2030	Wheat-Soybean - DC, Mulch-till, 20 bu., 30" rows	0.15
SBWWMT2507	Wheat-Soybean - DC, Mulch-till, 25 bu., 7" rows	0.14
SBWWMT2519	Wheat-Soybean - DC, Mulch-till, 25 bu., 19" rows	0.15
SBWWMT2530	Wheat-Soybean - DC, Mulch-till, 25 bu., 30" rows	0.14
SBWWMT3007	Wheat-Soybean - DC, Mulch-till, 30 bu., 7" rows	0.13
SBWWMT3019	Wheat-Soybean - DC, Mulch-till, 30 bu., 19" rows	0.14
SBWWMT3030	Wheat-Soybean - DC, Mulch-till, 30 bu., 30" rows	0.13
SBWWMT3507	Wheat-Soybean - DC, Mulch-till, 35 bu., 7" rows	0.12
SBWWMT3519	Wheat-Soybean - DC, Mulch-till, 35 bu., 19" rows	0.13
SBWWMT3530	Wheat-Soybean - DC, Mulch-till, 35 bu., 30" rows	0.13
SBWWMT4507	Wheat-Soybean - DC, Mulch-till, 45 bu., 7" rows	0.11
SBWWMT4519	Wheat-Soybean - DC, Mulch-till, 45 bu., 19" rows	0.12
SBWWMT4530	Wheat-Soybean - DC, Mulch-till, 45 bu., 30" rows	0.12
SBWWNT2007	Wheat-Soybean - DC, No-till, 20 bu., 7" rows	0.02
SBWWNT2019	Wheat-Soybean - DC, No-till, 20 bu., 19" rows	0.02
SBWWNT2030	Wheat-Soybean - DC, No-till, 20 bu., 30" rows	0.02
SBWWNT2507	Wheat-Soybean - DC, No-till, 25 bu., 7" rows	0.02
SBWWNT2519	Wheat-Soybean - DC, No-till, 25 bu., 19" rows	0.02
SBWWNT2530	Wheat-Soybean - DC, No-till, 25 bu., 30" rows	0.02
SBWWNT3007	Wheat-Soybean - DC, No-till, 30 bu., 7" rows	0.02
SBWWNT3019	Wheat-Soybean - DC, No-till, 30 bu., 19" rows	0.02
SBWWNT3030	Wheat-Soybean - DC, No-till, 30 bu., 30" rows	0.02
SBWWNT3507	Wheat-Soybean - DC, No-till, 35 bu., 7" rows	0.02
SBWWNT3519	Wheat-Soybean - DC, No-till, 35 bu., 19" rows	0.02
SBWWNT3530	Wheat-Soybean - DC, No-till, 35 bu., 30" rows	0.02
SBWWNT4507	Wheat-Soybean - DC, No-till, 45 bu., 7" rows	0.01
SBWWNT4519	Wheat-Soybean - DC, No-till, 45 bu., 19" rows	0.01
SBWWNT4530	Wheat-Soybean - DC, No-till, 45 bu., 30" rows	0.01
SDSDCTGR01	Forage Sorghum - Conv.-till, grazed only	0.40
SDSDCTHY01	Forage Sorghum - Conv.-till, hayed	0.32
SOSOCT0141	Grain Sorghum - Conv.-till, 2300 lbs., 30" rows	0.40
SOSOCT0265	Grain Sorghum - Conv.-till, 3640 lbs., 30" rows	0.29
SOSOCT0380	Grain Sorghum - Conv.-till, 4480 lbs., 30" rows	0.26
SOSOCT0410	Grain Sorghum - Conv.-till, 5600 lbs., 30" rows	0.22
SOSOMT0141	Grain Sorghum - Mulch-till, 2300 lbs., 30" rows	0.20

RUSLE C-FACTORS

C-FACTOR ZONE 89B (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SOSOMT0265	Grain Sorghum - Mulch-till, 3640 lbs., 30" rows	0.12
SOSOMT0380	Grain Sorghum - Mulch-till, 4480 lbs., 30" rows	0.10
SOSOMT0410	Grain Sorghum - Mulch-till, 5600 lbs., 30" rows	0.08
SOSONT0141	Grain Sorghum - No-till, 2300 lbs., 30" rows	0.05
SOSONT0265	Grain Sorghum - No-till, 3640 lbs., 30" rows	0.03
SOSONT0380	Grain Sorghum - No-till, 4480 lbs., 30" rows	0.02
SOSONT0410	Grain Sorghum - No-till, 5600 lbs., 30" rows	0.01
SOWWNT0141	Wheat-Sorghum - DC, No-till, 2300 lbs., 30" rows	0.02
SOWWNT0165	Wheat-Sorghum - DC, No-till, 3640 lbs., 30" rows	0.01
SOWWNT0180	Wheat-Sorghum - DC, No-till, 4480 lbs., 30" rows	0.01
WWWWCT0100	Wheat - Conv.-till, grazed out	0.37
WWWWCT0120	Wheat - Conv.-till, grazed, 20 bu.	0.29
WWWWCT0125	Wheat - Conv.-till, grazed, 25 bu.	0.27
WWWWCT0130	Wheat - Conv.-till, grazed, 30 bu.	0.26
WWWWCT0135	Wheat - Conv.-till, grazed, 35 bu.	0.24
WWWWCT0145	Wheat - Conv.-till, grazed, 45 bu.	0.22
WWWWCT2001	Wheat - Conv.-till, 20 bu.	0.27
WWWWCT2502	Wheat - Conv.-till, 25 bu.	0.25
WWWWCT3003	Wheat - Conv.-till, 30 bu.	0.24
WWWWCT3504	Wheat - Conv.-till, 35 bu.	0.23
WWWWCT4505	Wheat - Conv.-till, 45 bu.	0.21
WWWWMT2001	Wheat - Mulch-till, 20 bu.	0.18
WWWWMT2502	Wheat - Mulch-till, 25 bu.	0.16
WWWWMT3003	Wheat - Mulch-till, 30 bu.	0.15
WWWWMT3504	Wheat - Mulch-till, 35 bu.	0.12
WWWWMT4505	Wheat - Mulch-till, 45 bu.	0.11
WWWWNT2001	Wheat - No-till, 20 bu.	0.05
WWWWNT2502	Wheat - No-till, 25 bu.	0.04
WWWWNT3003	Wheat - No-till, 30 bu.	0.04
WWWWNT3504	Wheat - No-till, 35 bu.	0.03
WWWWNT4505	Wheat - No-till, 45 bu.	0.02

C-FACTOR ZONE 89B (CONT.)

ROTATIONAL C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
AL5YRWW201	Alfalfa 5 yrs. - Wheat 2 yrs., rotation	0.08
AL5YRWW302	Alfalfa 5 yrs. - Wheat 3 yrs., rotation	0.10

RUSLE C-FACTORS

C-FACTOR ZONE 90

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
CGCGCT3001	Corn - Conv.-till, 112 bu., 30" rows	0.28
CGCGCT3002	Corn - Conv.-till, 125 bu., 30" rows	0.26
CGCGCT3003	Corn - Conv.-till, 150 bu., 30" rows	0.23
CGCGMT3001	Corn - Mulch-till, 112 bu., 30" rows	0.16
CGCGMT3002	Corn - Mulch-till, 125 bu., 30" rows	0.14
CGCGMT3003	Corn - Mulch-till, 150 bu., 30" rows	0.12
CGCGNT3001	Corn - No-till, 112 bu., 30" rows	0.07
CGCGNT3002	Corn - No-till, 125 bu., 30" rows	0.06
CGCGNT3003	Corn - No-till, 150 bu., 30" rows	0.05
NUNUCT2001	Peanut - Conv.-till, 2000 lbs., no cover	0.51
NUNUCT2002	Peanut - Conv.-till, 2000 lbs., w/ cover crop	0.35
NUNUCT3003	Peanut - Conv.-till, 3000 lbs., no cover	0.45
NUNUCT3004	Peanut - Conv.-till, 3000 lbs., w/ cover crop	0.31
OCOCCT3801	Cotton - Conv.-till, 375 lbs., 38" rows	0.59
OCOCCT3802	Cotton - Conv.-till, 500 lbs., 38" rows	0.53
OCOCCT3803	Cotton - Conv.-till, 750 lbs., 38" rows	0.48
OCOCMT3801	Cotton - Mulch-till, 350 lbs., 38" rows	0.40
OCOCMT3802	Cotton - Mulch-till, 500 lbs., 38" rows	0.36
OCOCMT3803	Cotton - Mulch-till, 750 lbs., 38" rows	0.32
OCOCRT3801	Cotton - Ridge-till, 375 lbs., 38" rows	0.40
OCOCRT3802	Cotton - Ridge-till, 500 lbs., 38" rows	0.34
OCOCRT3803	Cotton - Ridge-till, 750 lbs., 38" rows	0.27
SBSBCT2007	Soybean - Conv.-till, 20 bu., 7" rows	0.45
SBSBCT2019	Soybean - Conv.-till, 20 bu., 19" rows	0.45
SBSBCT2030	Soybean - Conv.-till, 20 bu., 30" rows	0.45
SBSBCT2507	Soybean - Conv.-till, 25 bu., 7" rows	0.41
SBSBCT2519	Soybean - Conv.-till, 25 bu., 19" rows	0.43
SBSBCT2530	Soybean - Conv.-till, 25 bu., 30" rows	0.41
SBSBCT3007	Soybean - Conv.-till, 30 bu., 7" rows	0.39
SBSBCT3019	Soybean - Conv.-till, 30 bu., 19" rows	0.42
SBSBCT3030	Soybean - Conv.-till, 30 bu., 30" rows	0.38
SBSBCT3507	Soybean - Conv.-till, 35 bu., 7" rows	0.36
SBSBCT3519	Soybean - Conv.-till, 35 bu., 19" rows	0.38
SBSBCT3530	Soybean - Conv.-till, 35 bu., 30" rows	0.38
SBSBCT4507	Soybean - Conv.-till, 45 bu., 7" rows	0.33
SBSBCT4519	Soybean - Conv.-till, 45 bu., 19" rows	0.35
SBSBCT4530	Soybean - Conv.-till, 45 bu., 30" rows	0.34
SBSBMT2007	Soybean - Mulch-till, 20 bu., 7" rows	0.20
SBSBMT2019	Soybean - Mulch-till, 20 bu., 19" rows	0.20
SBSBMT2030	Soybean - Mulch-till, 20 bu., 30" rows	0.19
SBSBMT2507	Soybean - Mulch-till, 25 bu., 7" rows	0.17

RUSLE C-FACTORS

C-FACTOR ZONE 90 (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SBSBMT2519	Soybean - Mulch-till, 25 bu., 19" rows	0.19
SBSBMT2530	Soybean - Mulch-till, 25 bu., 30" rows	0.17
SBSBMT3007	Soybean - Mulch-till, 30 bu., 7" rows	0.16
SBSBMT3019	Soybean - Mulch-till, 30 bu., 19" rows	0.17
SBSBMT3030	Soybean - Mulch-till, 30 bu., 30" rows	0.15
SBSBMT3507	Soybean - Mulch-till, 35 bu., 7" rows	0.15
SBSBMT3519	Soybean - Mulch-till, 35 bu., 19" rows	0.16
SBSBMT3530	Soybean - Mulch-till, 35 bu., 30" rows	0.15
SBSBMT4507	Soybean - Mulch-till, 45 bu., 7" rows	0.13
SBSBMT4519	Soybean - Mulch-till, 45 bu., 19" rows	0.14
SBSBMT4530	Soybean - Mulch-till, 45 bu., 30" rows	0.13
SBSBNT2007	Soybean - No-till, 20 bu., 7" rows	0.10
SBSBNT2019	Soybean - No-till, 20 bu., 19" rows	0.06
SBSBNT2030	Soybean - No-till, 20 bu., 30" rows	0.05
SBSBNT2507	Soybean - No-till, 25 bu., 7" rows	0.08
SBSBNT2519	Soybean - No-till, 25 bu., 19" rows	0.05
SBSBNT2530	Soybean - No-till, 25 bu., 30" rows	0.04
SBSBNT3007	Soybean - No-till, 30 bu., 7" rows	0.07
SBSBNT3019	Soybean - No-till, 30 bu., 19" rows	0.05
SBSBNT3030	Soybean - No-till, 30 bu., 30" rows	0.04
SBSBNT3507	Soybean - No-till, 35 bu., 7" rows	0.06
SBSBNT3519	Soybean - No-till, 35 bu., 19" rows	0.04
SBSBNT3530	Soybean - No-till, 35 bu., 30" rows	0.03
SBSBNT4507	Soybean - No-till, 45 bu., 7" rows	0.05
SBSBNT4519	Soybean - No-till, 45 bu., 19" rows	0.03
SBSBNT4530	Soybean - No-till, 45 bu., 30" rows	0.03
SBWWCT2007	Wheat-Soybean - DC, Conv.-till, 20 bu., 7" rows	0.17
SBWWCT2019	Wheat-Soybean - DC, Conv.-till, 20 bu., 19" rows	0.16
SBWWCT2030	Wheat-Soybean - DC, Conv.-till, 20 bu., 30" rows	0.16
SBWWCT2507	Wheat-Soybean - DC, Conv.-till, 25 bu., 7" rows	0.16
SBWWCT2519	Wheat-Soybean - DC, Conv.-till, 25 bu., 19" rows	0.16
SBWWCT2530	Wheat-Soybean - DC, Conv.-till, 25 bu., 30" rows	0.15
SBWWCT3007	Wheat-Soybean - DC, Conv.-till, 30 bu., 7" rows	0.15
SBWWCT3019	Wheat-Soybean - DC, Conv.-till, 30 bu., 19" rows	0.15
SBWWCT3030	Wheat-Soybean - DC, Conv.-till, 30 bu., 30" rows	0.14
SBWWCT3507	Wheat-Soybean - DC Conv.-till, 35 bu., 7" rows	0.14
SBWWCT3519	Wheat-Soybean - DC, Conv.-till, 35 bu., 19" rows	0.13
SBWWCT3530	Wheat-Soybean - DC, Conv.-till, 35 bu. 30" rows	0.14
SBWWCT4507	Wheat-Soybean - DC, Conv.-till, 45 bu., 7" rows	0.13
SBWWCT4519	Wheat-Soybean - DC, Conv.-till, 45 bu., 19" rows	0.13
SBWWCT4530	Wheat-Soybean - DC, Conv.-till, 45 bu., 30" rows	0.13

RUSLE C-FACTORS

C-FACTOR ZONE 90 (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SBWWMT2007	Wheat-Soybean - DC, Mulch-till, 20 bu., 7" rows	0.11
SBWWMT2019	Wheat-Soybean - DC, Mulch-till, 20 bu., 19" rows	0.10
SBWWMT2030	Wheat-Soybean - DC, Mulch-till, 20 bu., 30" rows	0.11
SBWWMT2507	Wheat-Soybean - DC, Mulch-till, 25 bu., 7" rows	0.10
SBWWMT2519	Wheat-Soybean - DC, Mulch-till, 25 bu., 19" rows	0.10
SBWWMT2530	Wheat-Soybean - DC, Mulch-till, 25 bu., 30" rows	0.10
SBWWMT3007	Wheat-Soybean - DC, Mulch-till, 30 bu., 7" rows	0.09
SBWWMT3019	Wheat-Soybean - DC, Mulch-till, 30 bu., 19" rows	0.10
SBWWMT3030	Wheat-Soybean - DC, Mulch-till, 30 bu., 30" rows	0.09
SBWWMT3507	Wheat-Soybean - DC, Mulch-till, 35 bu., 7" rows	0.09
SBWWMT3519	Wheat-Soybean - DC, Mulch-till, 35 bu., 19" rows	0.09
SBWWMT3530	Wheat-Soybean - DC, Mulch-till, 35 bu., 30" rows	0.09
SBWWMT4507	Wheat-Soybean - DC, Mulch-till, 45 bu., 7" rows	0.08
SBWWMT4519	Wheat-Soybean - DC, Mulch-till, 45 bu., 19" rows	0.08
SBWWMT4530	Wheat-Soybean - DC, Mulch-till, 45 bu., 30" rows	0.09
SBWWNT2007	Wheat-Soybean - DC, No-till, 20 bu., 7" rows	0.01
SBWWNT2019	Wheat-Soybean - DC, No-till, 20 bu., 19" rows	0.01
SBWWNT2030	Wheat-Soybean - DC, No-till, 20 bu., 30" rows	0.01
SBWWNT2507	Wheat-Soybean - DC, No-till, 25 bu., 7" rows	0.01
SBWWNT2519	Wheat-Soybean - DC, No-till, 25 bu., 19" rows	0.01
SBWWNT2530	Wheat-Soybean - DC, No-till, 25 bu., 30" rows	0.01
SBWWNT3007	Wheat-Soybean - DC, No-till, 30 bu., 7" rows	0.01
SBWWNT3019	Wheat-Soybean - DC, No-till, 30 bu., 19" rows	0.01
SBWWNT3030	Wheat-Soybean - DC, No-till, 30 bu., 30" rows	0.01
SBWWNT3507	Wheat-Soybean - DC, No-till, 35 bu., 7" rows	0.01
SBWWNT3519	Wheat-Soybean - DC, No-till, 35 bu., 19" rows	0.01
SBWWNT3530	Wheat-Soybean - DC, No-till, 35 bu., 30" rows	0.01
SBWWNT4507	Wheat-Soybean - DC, No-till, 45 bu., 7" rows	0.01
SBWWNT4519	Wheat-Soybean - DC, No-till, 45 bu., 19" rows	0.01
SBWWNT4530	Wheat-Soybean - DC, No-till, 45 bu., 30" rows	0.01
SDSDCTGR01	Forage Sorghum - Conv.-till, grazed only	0.42
SDSDCTHY01	Forage Sorghum - Conv.-till, hayed	0.34
SOSOCT0141	Grain Sorghum - Conv.-till, 2300 lbs., 30" rows	0.42
SOSOCT0265	Grain Sorghum - Conv.-till, 3640 lbs., 30" rows	0.31
SOSOCT0380	Grain Sorghum - Conv.-till, 4480 lbs., 30" rows	0.28
SOSOCT0410	Grain Sorghum - Conv.-till, 5600 lbs., 30" rows	0.24
SOSOMT0141	Grain Sorghum - Mulch-till, 2300 lbs., 30" rows	0.17
SOSOMT0265	Grain Sorghum - Mulch-till, 3640 lbs., 30" rows	0.10
SOSOMT0380	Grain Sorghum - Mulch-till, 4480 lbs., 30" rows	0.08
SOSOMT0410	Grain Sorghum - Mulch-till, 5600 lbs., 30" rows	0.06
SOSONT0141	Grain Sorghum - No-till, 2300 lbs., 30" rows	0.06

RUSLE C-FACTORS

C-FACTOR ZONE 90 (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SOSONT0265	Grain Sorghum - No-till, 3640 lbs., 30" rows	0.03
SOSONT0380	Grain Sorghum - No-till, 4480 lbs., 30" rows	0.03
SOSONT0410	Grain Sorghum - No-till, 5600 lbs., 30" rows	0.02
WARCCTCC01	Watermelon - Conv.-till , w/ rye cover crop	0.38
WPRCCTCC01	Sweet Potato - Conv.-till, w/ rye cover crop	0.31
WWWWCT0100	Wheat - Conv.-till, grazed out	0.37
WWWWCT0120	Wheat - Conv.-till, grazed, 20 bu.,	0.27
WWWWCT0125	Wheat - Conv.-till, grazed, 25 bu.	0.25
WWWWCT0130	Wheat - Conv.-till, grazed, 30 bu.,	0.23
WWWWCT0135	Wheat - Conv.-till, grazed, 35 bu.	0.22
WWWWCT0145	Wheat - Conv.-till, grazed, 45 bu.	0.20
WWWWCT2001	Wheat - Conv.-till, 20 bu.	0.25
WWWWCT2502	Wheat - Conv.-till, 25 bu.	0.23
WWWWCT3003	Wheat - Conv.-till, 30 bu.	0.21
WWWWCT3504	Wheat - Conv.-till, 35 bu.	0.18
WWWWCT4505	Wheat - Conv.-till, 45 bu.	0.17
WWWWMT2001	Wheat - Mulch-till, 20 bu.	0.19
WWWWMT2502	Wheat - Mulch-till, 25 bu.	0.17
WWWWMT3003	Wheat - Mulch-till, 30 bu.	0.15
WWWWMT3504	Wheat - Mulch-till, 35 bu.	0.13
WWWWMT4505	Wheat - Mulch-till, 45 bu.	0.11
WWWWNT2001	Wheat - No-till, 20 bu.	0.06
WWWWNT2502	Wheat - No-till, 25 bu.	0.04
WWWWNT3003	Wheat - No-till, 30 bu.	0.04
WWWWNT3504	Wheat - No-till, 35 bu.	0.03
WWWWNT4505	Wheat - No-till, 45 bu.	0.02

C-FACTOR ZONE 90 (CONT.)

ROTATIONAL C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
AL5YRWW201	Alfalfa 5 yrs. - Wheat 2 yrs., rotation	0.08
AL5YRWW302	Alfalfa 5 yrs. - Wheat 3 yrs., rotation	0.09
CSW3YRCT01	Soybean-Corn-Wheat - Conv.-till, 3 yr. rotation	0.16
CSW3YRMT03	Soybean-Corn-Wheat - Mulch-till, 3 yr. rotation	0.14
CSW3YRNT02	Soybean-Corn-Wheat - No-till, 3 yr. rotation	0.10
OCW2YRCT01	Cotton-Wheat - Conv.-till, 2 yr. rotation	0.23
OCW3YRCT02	Cotton-Corn-Wheat - Conv.-till, 3 yr. rotation	0.21
OSW3YRCT05	Cotton-Soybean-Wheat - Conv.-till, 3 yr. rotation	0.26
PCW3YRCTO4	Peanut-Corn-Wheat - Conv.-till, 3 yr rotation	0.24

RUSLE C-FACTORS

C-FACTOR ZONE 91

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
CGCGCT2401	Corn - Conv.-till, 125 bu., 24" rows	0.16
CGCGCT2402	Corn - Conv.-till, 150 bu., 24" rows	0.14
CGCGCT2403	Corn - Conv.-till, 175 bu., 24" rows	0.12
CGCGCT2404	Corn - Conv.-till, 200 bu., 24" rows	0.10
CGCGCT3001	Corn - Conv.-till, 112 bu., 30" rows	0.20
CGCGCT3002	Corn - Conv.-till, 125 bu., 30" rows	0.18
CGCGCT3003	Corn - Conv.-till, 150 bu., 30" rows	0.15
CGCGMT2401	Corn - Mulch-till, 125 bu., 24" rows	0.08
CGCGMT2402	Corn - Mulch-till, 150 bu., 24" rows	0.06
CGCGMT2403	Corn - Mulch-till, 175 bu., 24" rows	0.05
CGCGMT2404	Corn - Mulch-till, 200 bu., 24" rows	0.04
CGCGMT3001	Corn - Mulch-till, 112 bu., 30" rows	0.10
CGCGMT3002	Corn - Mulch-till, 125 bu., 30" rows	0.09
CGCGMT3003	Corn - Mulch-till, 150 bu., 30" rows	0.07
CGCGNT2401	Corn - No-till, 125 bu., 24" rows	0.03
CGCGNT2402	Corn - No-till, 150 bu., 24" rows	0.02
CGCGNT2403	Corn - No-till, 175 bu., 24" rows	0.01
CGCGNT2404	Corn - No-till, 200 bu., 24" rows	0.01
CGCGNT3001	Corn - No-till, 112 bu., 30" rows	0.03
CGCGNT3002	Corn - No-till, 125 bu., 30" rows	0.03
CGCGNT3003	Corn - No-till, 150 bu., 30" rows	0.02
SDSDCTGR01	Forage Sorghum - Conv.-till, grazed only	0.34
SDSDCTHY01	Forage Sorghum - Conv.-till, hayed	0.29
SOSOCT3001	Grain Sorghum - Conv.-till, 2300 lbs., 30" rows	0.36
SOSOCT3002	Grain Sorghum - Conv.-till, 3640 lbs., 30" rows	0.25
SOSOCT3003	Grain Sorghum - Conv.-till - 4480 lbs., 30" rows	0.21
SOSOCT3004	Grain Sorghum - Conv.-till, 5600 lbs., 30" rows	0.19
SOSOMT3001	Grain Sorghum - Mulch-till, 2300 lbs., 30" rows	0.14
SOSOMT3002	Grain Sorghum - Mulch-till, 3640 lbs., 30" rows	0.08
SOSOMT3003	Grain Sorghum - Mulch-till, 4480 lbs., 30" rows	0.07
SOSOMT3004	Grain Sorghum - Mulch-till, 5600 lbs., 30" rows	0.05
SOSONT3001	Grain Sorghum - No-till, 2300 lbs., 30" rows	0.05
SOSONT3002	Grain Sorghum - No-till, 3640 lbs., 30" rows	0.02
SOSONT3003	Grain Sorghum - No-till, 4480 lbs., 30" rows	0.02
SOSONT3004	Grain Sorghum - No-till, 5600 lbs., 30" rows	0.01
WWWCT0100	Wheat - Conv.-till, grazed out	0.34
WWWCT0120	Wheat - Conv.-till, grazed, 20 bu.	0.26
WWWCT0125	Wheat - Conv.-till, grazed, 25 bu.	0.24
WWWCT0130	Wheat - Conv.-till, grazed, 30 bu.	0.23
WWWCT0135	Wheat - Conv.-till, grazed, 35 bu.	0.22

RUSLE C-FACTORS

C-FACTOR ZONE 91 (CONT.)

SINGLE YEAR C-FACTOR

FOCS CODE	DESCRIPTION	C-FACTOR
WWWWCT0145	Wheat - Conv.-till, grazed, 45 bu.	0.20
WWWWCT2001	Wheat - Conv.-till, 20 bu.	0.24
WWWWCT2502	Wheat - Conv.-till, 25 bu.	0.22
WWWWCT3003	Wheat - Conv.-till, 30 bu.	0.21
WWWWCT3504	Wheat - Conv.-till, 35 bu.	0.18
WWWWCT4505	Wheat - Conv.-till, 45 bu.	0.16
WWWWMT2001	Wheat - Mulch-till, 20 bu.	0.16
WWWWMT2502	Wheat - Mulch-till, 25 bu.	0.14
WWWWMT3003	Wheat - Mulch-till, 30 bu.	0.12
WWWWMT3504	Wheat - Mulch-till, 35 bu.	0.10
WWWWMT4505	Wheat - Mulch-till, 45 bu.	0.09
WWWWNT2001	Wheat - No-till, 20 bu.	0.04
WWWWNT2502	Wheat - No-till, 25 bu.	0.03
WWWWNT3003	Wheat - No-till, 30 bu.	0.02
WWWWNT3504	Wheat - No-till, 35 bu.	0.02
WWWWNT4505	Wheat - No-till, 45 bu.	0.01

C-FACTOR ZONE 91 (CONT.)

ROTATIONAL C-FACTOR

FOCS CODE	DESCRIPTION	C-FACTOR
AL5YRWW201	Alfalfa 5 yrs. - Wheat 2 yrs., rotation	0.07
AL5YRWW302	Alfalfa 5 yrs. - Wheat 3 yrs., rotation	0.08

RUSLE C-FACTORS

C-FACTOR ZONE 97

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
CGCGCT3001	Corn - Conv.-till, 112 bu., 30" rows	0.27
CGCGCT3002	Corn - Conv.-till, 125 bu., 30" rows	0.25
CGCGCT3003	Corn - Conv.-till, 150 bu., 30" rows	0.22
CGCGMT3001	Corn - Mulch-till, 112 bu., 30" rows	0.19
CGCGMT3002	Corn - Mulch-till, 125 Bu., 30" rows	0.17
CGCGMT3003	Corn - Mulch-till, 150 bu., 30" rows	0.14
CGCGNT3001	Corn - No-till, 112 bu., 30" rows	0.09
CGCGNT3002	Corn - No-till, 125 bu., 30" rows	0.08
CGCGNT3003	Corn - No-till, 150 bu., 30" rows	0.06
NUNUCT2001	Peanut - Conv.-till, 2000 lbs., no cover	0.53
NUNUCT2002	Peanut - Conv.-till, 2000 lbs., w/cover	0.33
NUNUCT3001	Peanut - Conv.-till, 3000 lbs., no cover	0.47
NUNUCT3002	Peanut - Conv.-till, 3000 lbs., w/ cover	0.30
SBSBCT2007	Soybean - Conv.-till, 20 bu., 7' rows	0.46
SBSBCT2019	Soybean - Conv.-till, 20 bu., 19" rows	0.48
SBSBCT2030	Soybean - Conv.-till, 20 bu., 30" rows	0.46
SBSBCT2507	Soybean - Conv.-till, 25 bu., 7" rows	0.42
SBSBCT2519	Soybean - Conv.-till, 25 bu., 19" rows	0.45
SBSBCT2530	Soybean - Conv.-till, 25 bu., 30" rows	0.42
SBSBCT3007	Soybean - Conv.-till, 30 bu., 7" rows	0.39
SBSBCT3019	Soybean - Conv.-till, 30 Bu., 19" rows	0.43
SBSBCT3030	Soybean - Conv.-till, 30 bu., 30" rows	0.39
SBSBCT3507	Soybean - Conv.-till, 35 bu., 7" rows	0.37
SBSBCT3519	Soybean - Conv.-till, 35 bu., 19" rows	0.40
SBSBCT3530	Soybean - Conv.-till, 35 bu., 30" rows	0.38
SBSBCT4507	Soybean - Conv.-till, 45 bu., 7" rows	0.33
SBSBCT4519	Soybean - Conv.-till, 45 bu., 19" rows	0.36
SBSBCT4530	Soybean - Conv.-till, 45 bu., 30" rows	0.35
SBSBMT2007	Soybean - Mulch-till, 20 bu., 7" rows	0.17
SBSBMT2019	Soybean - Mulch-till, 20 bu., 19" rows	0.17
SBSBMT2030	Soybean - Mulch-till, 20 bu., 30" rows	0.16
SBSBMT2507	Soybean - Mulch-till, 25 bu., 7" rows	0.15
SBSBMT2519	Soybean - Mulch-till, 25 bu., 19" rows	0.16
SBSBMT2530	Soybean - Mulch-till, 25 bu., 30" rows	0.14
SBSBMT3007	Soybean - Mulch-till, 30 bu., 7" rows	0.14
SBSBMT3019	Soybean - Mulch-till, 30 bu., 19" rows	0.15
SBSBMT3030	Soybean - Mulch-till, 30 bu., 30" rows	0.13
SBSBMT3507	Soybean - Mulch-till, 35 bu., 7" rows	0.13
SBSBMT3519	Soybean - Mulch-till 35 bu., 19" rows	0.13

RUSLE C-FACTORS

C-FACTOR ZONE 97 (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SBSBMT3530	Soybean - Mulch-till, 35 bu., 30" rows	0.13
SBSBMT4507	Soybean - Mulch-till, 45 bu., 7" rows	0.11
SBSBMT4519	Soybean - Mulch-till, 45 bu., 19" rows	0.12
SBSBMT4530	Soybean - Mulch-till, 45 bu., 30" rows	0.11
SBSBNT2007	Soybean - No-till, 20 bu., 7" rows	0.08
SBSBNT2019	Soybean - No-till, 20 bu., 19" rows	0.05
SBSBNT2030	Soybean - No-till, 20 bu., 30" rows	0.04
SBSBNT2507	Soybean - No-till, 25 bu., 7" rows	0.06
SBSBNT2519	Soybean - No-till, 25 bu., 19" rows	0.05
SBSBNT2530	Soybean - No-till, 25 bu., 30" rows	0.04
SBSBNT3007	Soybean - No-till, 30 bu., 7" rows	0.06
SBSBNT3019	Soybean - No-till, 30 bu., 19" rows	0.04
SBSBNT3030	Soybean - No-till, 30 bu., 30" rows	0.03
SBSBNT3507	Soybean - No-till, 35 bu., 7" rows	0.06
SBSBNT3519	Soybean - No-till, 35 bu., 19" rows	0.03
SBSBNT3530	Soybean - No-till, 35 bu., 30 rows	0.03
SBSBNT4507	Soybean - No-till, 45 bu., 7" rows	0.04
SBSBNT4519	Soybean - No-till, 45 bu., 19" rows	0.03
SBSBNT4530	Soybean - No-till, 45 bu., 30" rows	0.02
SBWWCT2007	Wheat-Soybean - DC, Conv.-till, 20 bu., 7" rows	0.16
SBWWCT2019	Wheat-Soybean - DC, Conv.-till, 20 bu., 19" rows	0.15
SBWWCT2030	Wheat-Soybean - DC, Conv.-till, 20 bu., 30" rows	0.16
SBWWCT2507	Wheat-Soybean - DC, Conv.-till, 25 bu., 7" rows	0.15
SBWWCT2519	Wheat-Soybean - DC, Conv.-till, 25 bu., 19" rows	0.15
SBWWCT2530	Wheat-Soybean - DC, Conv.-till, 25 bu., 30" rows	0.15
SBWWCT3007	Wheat-Soybean - DC, Conv.-till, 30 bu., 7" rows	0.14
SBWWCT3019	Wheat-Soybean - DC, Conv.-till, 30 bu., 19" rows	0.15
SBWWCT3030	Wheat-Soybean - DC, Conv.-till, 30 bu., 30" rows	0.14
SBWWCT3507	Wheat-Soybean - DC, Conv.-till, 35 bu., 7" rows	0.13
SBWWCT3519	Wheat-Soybean - DC, Conv.-till, 35 bu., 19" rows	0.13
SBWWCT3530	Wheat-Soybean - DC, Conv.-till, 35 bu., 30" rows	0.14
SBWWCT4507	Wheat-Soybean - DC, Conv.-till, 45 bu., 7" rows	0.13
SBWWCT4519	Wheat-Soybean - DC, Conv.-till, 45 bu., 19" rows	0.13
SBWWCT4530	Wheat-Soybean - DC, Conv.-till, 45 bu., 30" rows	0.13
SBWWMT2007	Wheat-Soybean - DC, Mulch-till, 20 bu., 7" rows	0.10
SBWWMT2019	Wheat-Soybean - DC, Mulch-till, 20 bu., 19" rows	0.10
SBWWMT2030	Wheat-Soybean - DC, Mulch-till, 20 bu., 30" rows	0.10
SBWWMT2507	Wheat-Soybean - DC, Mulch-till, 25 bu., 7" rows	0.10
SBWWMT2519	Wheat-soybean - DC, Mulch-till, 25 bu., 19" rows	0.10
SBWWMT2530	Wheat-Soybean - DC, Mulch-till, 25 bu., 30" rows	0.10

RUSLE C-FACTORS

C-FACTOR ZONE 97 (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C FACTOR
SBWWMT3007	Wheat-Soybean - DC, Mulch-till, 30 bu., 7" rows	0.09
SBWWMT3019	Wheat-Soybean - DC, Mulch-till, 30 bu., 19" rows	0.10
SBWWMT3030	Wheat-Soybean - DC, Mulch-till, 30 bu., 30" rows	0.09
SBWWMT3507	Wheat-Soybean - DC, Mulch-till, 35 bu., 7" rows	0.09
SBWWMT3519	Wheat-Soybean - DC, Mulch-till, 35 bu., 19" rows	0.09
SBWWMT3530	Wheat-Soybean - DC, Mulch-till, 35 bu., 30" rows	0.09
SBWWMT4507	Wheat-Soybean - DC, Mulch-till, 45 bu., 7" rows	0.08
SBWWMT4519	Wheat-Soybean - DC, Mulch-till, 45 bu., 19" rows	0.09
SBWWMT4530	Wheat-Soybean - DC, Mulch-till, 45 bu., 30" rows	0.08
SBWWNT2007	Wheat-Soybean - DC, No-till, 20 bu., 7" rows	0.01
SBWWNT2019	Wheat-Soybean - DC, No-till, 20 Bu., 19" rows	0.01
SBWWNT2030	Wheat-Soybean - DC, No-till, 20 bu., 30" rows	0.01
SBWWNT2507	Wheat-Soybean - DC, No-till, 25 bu., 7" rows	0.01
SBWWNT2519	Wheat-Soybean - DC, No-till, 25 bu., 19" rows	0.01
SBWWNT2530	Wheat-Soybean - DC, No-till, 25 bu., 30" rows	0.01
SBWWNT3007	Wheat-Soybean - DC, No-till, 30 bu., 7" rows	0.01
SBWWNT3019	Wheat-Soybean - DC, No-till, 30 bu., 19" rows	0.01
SBWWNT3030	Wheat-Soybean - DC, No-till, 30 bu., 30" rows	0.01
SBWWNT3507	Wheat-Soybean - DC, No-till, 35 bu., 7" rows	0.01
SBWWNT3519	Wheat-Soybean - DC, No-till, 35 bu., 19" rows	0.01
SBWWNT3530	Wheat-Soybean - DC, No-till, 35 bu., 30" rows	0.01
SBWWNT4507	Wheat-Soybean - DC, No-till, 45 bu., 7" rows	0.01
SBWWNT4519	Wheat-Soybean - DC, No-till, 45 bu., 19" rows	0.01
SBWWNT4530	Wheat-Soybean - DC, No-till, 45 bu., 30" rows	0.01
SDSDCTGR01	Forage Sorghum - Conv.-till, grazed only	0.45
SDSDCTHY01	Forage Sorghum - Conv.-till, hayed	0.33
SOSOCT3001	Grain Sorghum - Conv.-till, 2300 lbs., 30" rows	0.40
SOSOCT3002	Grain Sorghum - Conv.-till, 3640 lbs., 30" rows	0.29
SOSOCT3003	Grain Sorghum - Conv.-till, 4480 lbs., 30" rows	0.26
SOSOCT3004	Grain Sorghum - Conv.-till, 5600 lbs, 30" rows	0.22
SOSOMT3001	Grain Sorghum - Mulch-till, 2300 lbs., 30" rows	0.17
SOSOMT3002	Grain Sorghum - Mulch-till, 3640 lbs., 30" rows	0.11
SOSOMT3003	Grain Sorghum - Mulch-till, 4480 bu., 30" rows	0.10
SOSOMT3004	Grain Sorghum - Mulch-till, 5600 lbs., 30" rows	0.08
SOSONT3001	Grain Sorghum - No-till, 2300 lbs., 30" rows	0.07
SOSONT3002	Grain Sorghum - No-till, 3640 lbs., 30 ' rows	0.04
SOSONT3003	Grain Sorghum - No-till, 4480 bu., 30" rows	0.03
SOSONT3004	Grain Sorghum - No-till, 5600 lbs., 30" rows	0.03
WWWVCT0100	Wheat - Conv.-till, grazed out	0.36

RUSLE C-FACTORS

C-FACTOR ZONE 97 (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
WWWWCT0120	Wheat - Conv.-till, grazed, 20 bu.	0.29
WWWWCT0125	Wheat - Conv.-till, grazed, 25 bu.	0.28
WWWWCT0130	Wheat - Conv.-till, grazed, 30 bu.	0.26
WWWWCT0135	Wheat - Conv.-till, grazed, 35 bu.	0.24
WWWWCT0145	Wheat - Conv.-till, grazed, 45 bu.	0.22
WWWWCT2001	Wheat - Conv.-till, 20 bu.	0.27
WWWWCT2502	Wheat - Conv.-till, 25 bu.	0.27
WWWWCT3003	Wheat - Conv.-till, 30 bu.	0.25
WWWWCT3504	Wheat - Conv.-till, 35 bu.	0.22
WWWWCT4505	Wheat - Conv.-till, 45 bu.	0.20
WWWWMT2001	Wheat - Mulch-till, 20 bu.	0.23
WWWWMT2502	Wheat - Mulch-till, 25 bu.	0.21
WWWWMT3003	Wheat - Mulch-till, 30 bu.	0.19
WWWWMT3504	Wheat - Mulch-till, 35 bu.	0.16
WWWWMT4505	Wheat - Mulch-till, 45 bu.	0.15
WWWWNT2001	Wheat - No-till, 20 bu.	0.06
WWWWNT2502	Wheat - No-till, 25 bu.	0.05
WWWWNT3003	Wheat - No-till, 30 bu.	0.04
WWWWNT3504	Wheat - No-till, 35 bu.	0.03
WWWWNT4505	Wheat - No-till, 45 bu.	0.03

C-FACTOR ZONE 97 (CONT.)

ROTATIONAL C-FACTOR

FOCS CODE	DESCRIPTION	C-FACTOR
AL5YRWW201	Alfalfa 5 yrs. - Wheat 2 yrs., rotation	0.09
AL5YRWW302	Alfalfa 5 yrs. - Wheat 3 yrs., rotation	0.10

RUSLE C-FACTORS

C-FACTOR ZONE 98A, 98B

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
CGCGCT2401	Corn - Conv.-till, 125 bu., 24" rows	0.24
CGCGCT2402	Corn - Conv.-till, 150 bu., 24" rows	0.21
CGCGCT2403	Corn - Conv.-till, 175 bu., 24" rows	0.20
CGCGCT2404	Corn - Conv.-till, 200 bu., 24" rows	0.18
CGCGCT3001	Corn - Conv.-till, 112 bu., 30" rows	0.26
CGCGCT3002	Corn - Conv.-till, 125 bu., 30" rows	0.24
CGCGCT3003	Corn - Conv.-till, 150 bu., 30" rows	0.21
CGCGMT2401	Corn - Mulch-till, 125 bu., 24" rows	0.16
CGCGMT2402	Corn - Mulch-till, 150 bu., 24" rows	0.15
CGCGMT2403	Corn - Mulch-till, 175 bu., 24" rows	0.12
CGCGMT2404	Corn - Mulch-till, 200 bu., 24" rows	0.10
CGCGMT3001	Corn - Mulch-till, 112 bu., 30" rows	0.18
CGCGMT3002	Corn - Mulch-till, 125 bu., 30" rows	0.16
CGCGMT3003	Corn - Mulch-till, 150 bu., 30" rows	0.13
CGCGNT2401	Corn - No-till, 125 bu., 24" rows	0.06
CGCGNT2402	Corn - No-till, 150 bu., 24" rows	0.05
CGCGNT2403	Corn - No-till, 175 bu., 24" rows	0.04
CGCGNT2404	Corn - No-till, 200 bu., 24" rows	0.03
CGCGNT3001	Corn - No-till, 112 bu., 30" rows	0.08
CGCGNT3002	Corn - No-till, 125 bu., 30" rows	0.07
CGCGNT3003	Corn - No-till, 150 bu., 30" rows	0.06
NUNUCT2001	Peanut - Conv.-till, 2000 lbs., no cover crop	0.53
NUNUCT2002	Peanut - Conv.-till, 2000 lbs., with cover crop	0.35
NUNUCT3003	Peanut - Conv.-till, 3000 lbs., no cover crop	0.47
NUNUCT3004	Peanut - Conv.-till, 3000 lbs., with cover crop	0.31
SBSBCT2007	Soybean - Conv.-till, 20 bu., 7" rows	0.45
SBSBCT2019	Soybean - Conv.-till, 20 bu., 19" rows	0.46
SBSBCT2030	Soybean - Conv.-till, 20 bu., 30" rows	0.45
SBSBCT2507	Soybean - Conv.-till, 25 bu., 7" rows	0.41
SBSBCT2519	Soybean - Conv.-till, 25 bu., 19" rows	0.44
SBSBCT2530	Soybean - Conv.-till, 25 bu., 30" rows	0.41
SBSBCT3007	Soybean - Conv.-till, 30 bu., 7" rows	0.38
SBSBCT3019	Soybean - Conv.-till, 30 bu., 19" rows	0.42
SBSBCT3030	Soybean - Conv.-till, 30 bu., 30" rows	0.38
SBSBCT3507	Soybean - Conv.-till, 35 bu., 7" rows	0.35
SBSBCT3519	Soybean - Conv.-till, 35 bu., 19" rows	0.39
SBSBCT3530	Soybean - Conv.-till, 35 bu., 30" rows	0.37
SBSBCT4507	Soybean - Conv.-till, 45 bu., 7" rows	0.32
SBSBCT4519	Soybean - Conv.-till, 45 bu., 19" rows	0.35

RUSLE C-FACTORS

C-FACTOR ZONE 98A, 98B (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SBSBCT4530	Soybean - Conv.-till, 45 bu., 30" rows	0.34
SBSBMT2007	Soybean - Mulch-till, 20 bu., 7" rows	0.19
SBSBMT2019	Soybean - Mulch-till, 20 bu., 19" rows	0.19
SBSBMT2030	Soybean - Mulch-till, 20 bu., 30" rows	0.18
SBSBMT2507	Soybean - Mulch-till, 25 bu., 7" rows	0.17
SBSBMT2519	Soybean - Mulch-till, 25 bu., 19" rows	0.18
SBSBMT2530	Soybean - Mulch-till, 25 bu., 30" rows	0.16
SBSBMT3007	Soybean - Mulch-till, 30 bu., 7" rows	0.15
SBSBMT3019	Soybean - Mulch-till 30 bu., 19" rows	0.17
SBSBMT3030	Soybean - Mulch-till, 30 bu., 30" rows	0.15
SBSBMT3507	Soybean - Mulch-till, 35 bu., 7" rows	0.14
SBSBMT3519	Soybean - Mulch-till, 35 bu., 19" rows	0.15
SBSBMT3530	Soybean - Mulch-till, 35 bu., 30" rows	0.14
SBSBMT4507	Soybean - Mulch-till, 45 bu., 7" rows	0.12
SBSBMT4519	Soybean - Mulch-till, 45 bu., 19" rows	0.13
SBSBMT4530	Soybean - Mulch-till, 45 bu., 30" rows	0.12
SBSBNT2007	Soybean - No-till, 20 bu., 7" rows	0.05
SBSBNT2019	Soybean - No-till, 20 bu., 19" rows	0.06
SBSBNT2030	Soybean - No-till, 20 bu., 30" rows	0.05
SBSBNT2507	Soybean - No-till, 25 bu., 7" rows	0.04
SBSBNT2519	Soybean - No-till, 25 bu., 19" rows	0.05
SBSBNT2530	Soybean - No-till, 25 bu., 30" rows	0.04
SBSBNT3007	Soybean - No-till, 30 bu., 7" rows	0.04
SBSBNT3019	Soybean - No-till, 30 bu., 19" rows	0.05
SBSBNT3030	Soybean - No-till, 30 bu., 30" rows	0.04
SBSBNT3507	Soybean - No-till, 35 bu., 7" rows	0.03
SBSBNT3519	Soybean - No-till, 35 bu., 19" rows	0.04
SBSBNT3530	Soybean - No-till, 35 bu., 30" rows	0.03
SBSBNT4507	Soybean - No-till, 45 bu., 7" rows	0.03
SBSBNT4519	Soybean - No-till, 45 bu., 19" rows	0.03
SBSBNT4530	Soybean - No-till, 45 bu., 30" rows	0.03
SBWWCT2007	Wheat-Soybean - DC, Conv.-till, 20 bu., 7" rows	0.18
SBWWCT2019	Wheat-Soybean - DC, Conv.-till, 20 bu., 19" rows	0.17
SBWWCT2030	Wheat-Soybean - DC, Conv.-till, 20 bu., 30" rows	0.18
SBWWCT2507	Wheat-Soybean - DC, Conv.-till, 25 bu., 7" rows	0.17
SBWWCT2519	Wheat-Soybean - DC, Conv.-till, 25 bu., 19" rows	0.17
SBWWCT2530	Wheat-Soybean - DC, Conv.-till, 25 bu., 30" rows	0.17
SBWWCT3007	Wheat-Soybean - DC, Conv.-till, 30 bu., 7" rows	0.16
SBWWCT3019	Wheat-Soybean - DC, Conv.-till, 30 bu., 19" rows	0.17
SBWWCT3030	Wheat-Soybean - DC, Conv.-till, 30 bu., 30" rows	0.16

RUSLE C-FACTORS

C-FACTOR ZONE 98A, 98B (CONT.)

SINGLE YEAR C-FACTOR

FOCS CODE	DESCRIPTION	C-FACTOR
SBWWCT3507	Wheat-Soybean - DC, Conv.-till, 35 bu., 7" rows	0.16
SBWWCT3519	Wheat-Soybean - DC, Conv.-till, 35 bu., 19" rows	0.15
SBWWCT3530	Wheat-Soybean - DC, Conv.-till, 35 bu., 30" rows	0.16
SBWWCT4507	Wheat-Soybean - DC, Conv.-till, 45 bu., 7" rows	0.14
SBWWCT4519	Wheat-Soybean - DC, Conv.-till, 45 bu., 19" rows	0.15
SBWWCT4530	Wheat-Soybean - DC, Conv.-till, 45 bu., 30" rows	0.15
SBWWMT2007	Wheat-Soybean - DC, Mulch-till, 20 bu., 7" rows	0.12
SBWWMT2019	Wheat-Soybean - DC, Mulch-till, 20 bu., 19" rows	0.12
SBWWMT2030	Wheat-Soybean - DC, Mulch-till, 20 bu., 30" rows	0.12
SBWWMT2507	Wheat-Soybean - DC, Mulch-till, 25 bu., 7" rows	0.11
SBWWMT2519	Wheat-Soybean - DC, Mulch-till, 25 bu., 19" rows	0.11
SBWWMT2530	Wheat-Soybean - DC, Mulch-till, 25 bu., 30" rows	0.11
SBWWMT3007	Wheat-Soybean - DC, Mulch-till, 30 bu., 7" rows	0.10
SBWWMT3019	Wheat-Soybean - DC, Mulch-till, 30 bu., 19" rows	0.11
SBWWMT3030	Wheat-Soybean - DC, Mulch-till, 30 bu., 30" rows	0.10
SBWWMT3507	Wheat-Soybean - DC, Mulch-till, 35 bu., 7" rows	0.10
SBWWMT3519	Wheat-Soybean - DC, Mulch-till, 35 bu., 19" rows	0.10
SBWWMT3530	Wheat-Soybean - DC, Mulch-till, 35 bu., 30" rows	0.10
SBWWMT4507	Wheat-Soybean - DC, Mulch-till, 45 bu., 7" rows	0.09
SBWWMT4519	Wheat-Soybean - DC, Mulch-till, 45 bu., 19" rows	0.10
SBWWMT4530	Wheat-Soybean - DC, Mulch-till, 45 bu., 30" rows	0.09
SBWWNT2007	Wheat-Soybean - DC, No-till, 20 bu., 7" rows	0.02
SBWWNT2019	Wheat-Soybean - DC, No-till, 20 bu., 19" rows	0.02
SBWWNT2030	Wheat-Soybean - DC, No-till, 20 bu., 30" rows	0.02
SBWWNT2507	Wheat-Soybean - DC, No-till, 25 bu., 7" rows	0.01
SBWWNT2519	Wheat-Soybean - DC, No-till, 25 bu., 19" rows	0.02
SBWWNT2530	Wheat-Soybean - DC, No-till, 25 bu., 30" rows	0.01
SBWWNT3007	Wheat-Soybean - DC, No-till, 30 bu., 7" rows	0.01
SBWWNT3019	Wheat-Soybean - DC, No-till, 30 bu., 19" rows	0.02
SBWWNT3030	Wheat-Soybean - DC, No-till, 30 bu., 30" rows	0.01
SBWWNT3507	Wheat-Soybean - DC, No-till, 35 bu., 7" rows	0.01
SBWWNT3519	Wheat-Soybean - DC, No-till, 35 bu., 19" rows	0.01
SBWWNT3530	Wheat-Soybean - DC, No-till, 35 bu., 30" rows	0.01
SBWWNT4507	Wheat-Soybean - DC, No-till, 45 bu., 7" rows	0.01
SBWWNT4519	Wheat-Soybean - DC, No-till, 45 bu., 19" rows	0.01
SBWWNT4530	Wheat-Soybean - DC, No-till, 45 bu., 30" rows	0.01
SDSDCTGR01	Forage Sorghum - Conv.-till, grazed only	0.44
SDSDCTHY01	Forage Sorghum - Conv.-till, hayed	0.34
SOSOCT3001	Grain Sorghum - Conv.-till, 2300 lbs., 30" rows	0.38

RUSLE C-FACTORS

C-FACTOR ZONE 98A, 98B (CONT.)

SINGLE YEAR C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
SOSOCT3002	Grain Sorghum - Conv.-till, 3640 lbs., 30" rows	0.27
SOSOCT3003	Grain Sorghum - Conv.-till, 4480 lbs., 30" rows	0.24
SOSOCT3004	Grain Sorghum - Conv.-till, 5600 lbs., 30" rows	0.20
SOSOMT3001	Grain Sorghum - Mulch-till, 2300 lbs., 30" rows	0.17
SOSOMT3002	Grain Sorghum - Mulch-till, 3640 lbs., 30" rows	0.10
SOSOMT3003	Grain Sorghum - Mulch-till, 4480 lbs., 30" rows	0.09
SOSOMT3004	Grain Sorghum - Mulch-till, 5600 lbs., 30" rows	0.07
SOSONT3001	Grain Sorghum - No-till, 2300 lbs., 30" rows	0.05
SOSONT3002	Grain Sorghum - No-till, 3640 lbs., 30" rows	0.03
SOSONT3003	Grain Sorghum - No-till, 4480 lbs., 30" rows	0.02
SOSONT3004	Grain Sorghum - No-till, 5600 lbs., 30" rows	0.02
WWWWCT0100	Wheat - Conv.-till, grazed out	0.37
WWWWCT0120	Wheat - Conv.-till, grazed, 20 bu.	0.29
WWWWCT0125	Wheat - Conv.-till, grazed, 25 bu.	0.27
WWWWCT0130	Wheat - Conv.-till, grazed, 30 bu.	0.26
WWWWCT0135	Wheat - Conv.-till, grazed, 35 bu.	0.25
WWWWCT0145	Wheat - Conv.-till, grazed, 45 bu.	0.22
WWWWCT2001	Wheat - Conv.-till, 20 bu.	0.28
WWWWCT2502	Wheat - Conv.-till, 25 bu.	0.27
WWWWCT3003	Wheat - Conv.-till, 30 bu.	0.25
WWWWCT3504	Wheat - Conv.-till, 35 bu.	0.22
WWWWCT4505	Wheat - Conv.-till, 45 bu.	0.20
WWWWMT2001	Wheat - Mulch-till, 20 bu.	0.21
WWWWMT2502	Wheat - Mulch-till, 25 bu.	0.19
WWWWMT3003	Wheat - Mulch-till, 30 bu.	0.17
WWWWMT3504	Wheat - Mulch-till, 35 bu.	0.14
WWWWMT4505	Wheat - Mulch-till, 45 bu.	0.13
WWWWNT2001	Wheat - No-till, 20 bu.	0.07
WWWWNT2502	Wheat - No-till, 25 bu.	0.05
WWWWNT3003	Wheat - No-till, 30 bu.	0.05
WWWWNT3504	Wheat - No-till, 35 bu.	0.03
WWWWNT4505	Wheat - No-till, 45 bu.	0.03

C-FACTOR ZONE 98A, 98B (CONT.)

ROTATIONAL C-FACTORS

FOCS CODE	DESCRIPTION	C-FACTOR
AL5YRWW201	Alfalfa 5 yrs. - Wheat 2 yrs., rotation	0.09
AL5YRWW302	Alfalfa 5 yrs. - Wheat 3 yrs., rotation	0.11

PASTURE C-FACTORS FOR ALL OKLAHOMA ZONES

The following table contains C-factors for pasture grasses for use with RUSLE soil loss calculations. These C-factors are to be used for established permanent grass stands. These C-factors should not be used for grasses in normal cropping rotations where tillage will occur. The C-factors are to be used in all climate zones in Oklahoma. The table is designed to establish a C-factor based on the percent cover of the soil and on the vigor of the vegetation.

COVER

The total cover percentage is the sum of the ground cover plus the canopy cover. The total cover percentage will not exceed 100. Ground cover is any plant material, dead or alive, which is in contact with the soil surface. Canopy cover is plant material, dead or alive, standing above the soil surface. Canopy cover intercepts raindrops but does not affect surface runoff.

ESTIMATING PERCENT COVER

The line transect method shall be used to determine the total cover percentage. Follow standard procedures established for measuring crop residue cover with the line stretched above the canopy. When both canopy and ground cover occur below a point on the line, count this hit only as ground cover since it has the greater impact on erosion. After making line transect measurements in various kinds of cover types, one should be capable of making reliable visual estimates.

PLANT VIGOR, FERTILITY, AND PRODUCTIVITY

Plant vigor, soil fertility, and productivity of the grass stand are grouped into classes of (H) HIGH, (M) MEDIUM and (L) LOW.

A HIGH rating would be associated with a dense stand of grass, with strong plant vigor, good productivity, good soil fertility, and a high level of management.

A MEDIUM rating would be associated with a stand of grass where plant vigor is not at maximum, productivity is average, and fertility and management are adequate.

A LOW rating would be associated with a stand of grass of poor vigor and reproduction, poor management, and low soil fertility. Sheet and rill erosion may be evident in the field.

PASTURE C-FACTORS

C-FACTORS ARE FOR USE IN ALL ZONES FOR OKLAHOMA

CANOPY COVER (PERCENT)

GROUND COVER %	0	10	20	30	40	50	60	70	80	90
10 - H							.007	.005	.003	.002
10 - M						.025	.020	.015	.010	
10 - L		.137	.122	.107	.092	.077	.062	.047		
20 - H						.006	.005	.004	.003	
20 - M					.024	.020	.016	.012		
20 - L	.119	.107	.095	.083	.072	.060	.048			
30 - H					.006	.005	.004	.003		
30 - M				.021	.018	.015	.012			
30 - L	.092	.083	.074	.065	.056	.047				
40 - H				.005	.005	.004	.003			
40 - M			.019	.017	.014	.012				
40 - L	.072	.065	.058	.051	.043					
50 - H			.005	.004	.004	.003				
50 - M		.017	.015	.013	.011					
50 - L	.056	.050	.045	.039						
60 - H		.004	.004	.003	.003					
60 - M	.014	.013	.011	.010						
60 - L	.044	.039	.035							
70 - H	.004	.003	.003	.003						
70 - M	.011	.010	.009							
70 - L	.034	.031								
80 - H	.003	.003	.002							
80 - M	.009	.008								
80 - L	.026									
90 - H	.002	.002								
90 - M	.007									
100 - H	.002									