Revised Universal Soil Loss Equation (RUSLE)

USDA - Natural Resources
Conservation Service
USDA - Agricultural Research Service
Soil and Water Conservation Society

NATURAL RESOURCES CONSERVATION SERVICE
NORTH CAROLINA IMPLEMENTATION
1995

CONTENTS

History of RUSLE i
Background ii
Rainfall Erosivity (R) Factor R-1
List of R Values by County R-3
Adjustment to R to Account for Ponding R-4
Soil Erodibility (K) Factor K-1
Kf Values for Individual Counties ..... K-3 - K-183
Average Annual K Factors - Mountain K-184
Average Annual K Factors - Piedmont K-185
Average Annual K Factors - Coastal Plains K-186
Slope Length and Steepness (LS) Factor LS-1
LS Tables LS-3
Cover Management (C) Factors C-1
Minimum C Factor Table C-2
C Values for Coastal Plain C-3
C Values for Piedmont C-4
C Values for Mountains C-5
Support Practices (P) Factor P-1
10-Year EI Values by County P-5
Cover Management Conditions P-6
Ridge Height Selection P-8
Contour P Subfactors P-9
On-grade Contour P Subfactor P-53
RUSLE P Subfactor Values for Terracing - Procedure P-55
Table 14 - Terrace P Subfactor Values P-57
RUSLE P Subfactor Values for Stripcropping P-58
Example E-1

HISTORY OF RUSLE

The Universal Soil Loss Equation (USLE) was developed in the late 1950's and became widely used in conservation planning on cropland in the 1960's. Beginning in the 1970's, the USLE was applied to many other land used in addition to cropland and to other application besides conservation planning.

The USLE was updated in 1978, but by 1985 with passage of the Farm Bill and much new research information, the USLE needed another update. A project led by G. R. Foster, USDA-Agricultural Research Service, was initiated at a workshop in Lafayette, Indiana in 1985 to update the USLE. This workshop attended by leading US Erosion research scientists and USLE users from the USDA-Natural Resources Conservation Service and Forest Service, USDI-Bureau of Land Management, and US Army Corps of Engineers set objectives and approaches for the update.

By 1987 when K. G. Renard, USDA-Agricultural Research Service, assumed leadership of the project, much of the background work on updating the USLE was well underway and some had been completed. However, the project evolved into much more than an updating of the USLE. The USLE was undergoing a major revision, and hence the USLE became RUSLE, the Revised USLE. Also, another major addition to the project was the development of a computer program to implement RUSLE.

The Soil and Water Conservation Society (SWCS) is currently marketing the RUSLE software. The society maintains a current version of the RUSLE program and database files that have been certified by the society. The society provides training on RUSLE and certifies the database files used in the model.

Cover photo: Bare surface paves the way for runoff and erosion. This gently sloping piedmont field was disked and planted to soybeans. A May thunderstorm produced significant losses of soil and water.

NRCS photo by Jim Canterberry

ABOUT RUSLE

BACKGROUND

The revised universal soil loss equation RUSLE is:

$$A = R\,K\,L\,S\,C\,P$$

Where: A = average annual soil loss from sheet and rill erosion caused by rainfall and its associated overland flow (tons ac^{-1} yr^{-1}), R = the factor for climatic erosivity, K = the factor for soil erodibility measured under a standard condition, L = the factor for slope length, S = the factor for slope steepness, C = the factor for cover-management, and P = the factor for support practices. A value for soil loss A is computed by selecting values for each factor and multiplying them.

These factors represent the effect of climate, soil, topography, and land use on sheet and rill erosion. By assigning values to these factors based on site-specific conditions, *RUSLE* computes soil loss for specific sites, and it can be used to guide conservation planning tailored to individual field sites.

RUSLE is a revision and update of the universal soil loss equation (USLE), which has been widely used since the early 1960's. The first version of the USLE was described in Agriculture Handbook No. 282, published in 1965. The second major version of the USLE was described in Agriculture Handbook No. 537, published in 1978. *RUSLE* is the third version of the USLE. *RUSLE* retains the equation structure of the USLE, but each of its factor relationships has been either updated with recent data, or new relationships have been derived based on modern erosion theory and data.

RUSLE is an empirical equation derived from theory of erosion processes and more than 10,000 plot-years of data from natural runoff plots and an estimated 2,000 plot-years of rainfall simulator data. It is an exceptionally well validated and documented equation that has been proven by more than three decades of use of its predecessor, the USLE. Modern theory on erosion processes of detachment, transport, and deposition of soil particles by raindrop impact and surface runoff was used to derive some of the *RUSLE* relationships. In contrast to process-based models that consider erosion processes individually, *RUSLE* has a lumped equation structure that does not explicitly consider runoff or the individual erosion process of detachment, transport, and deposition.

A strength of *RUSLE* is that it has been developed by a group of experienced and nationally recognized erosion scientists. Data needed to develop and validate *RUSLE* were not complete in all cases, which necessitated using judgment of both scientists and users of the equation to fill gaps. Publications on various *RUSLE* components have been reviewed by peer scientists in a process typical of the reporting of rigorous research results. Thus *RUSLE* can be used with full confidence that the equation meets high scientific standards.

The soil loss computed by *RUSLE* is the amount of sediment lost from the landscape profile represented by the particular *RUSLE* computation; not the amount of sediment leaving a field or watershed. A landscape profile is defined by a slope length, which is the length from the origin of overland flow to the point where the flow reaches a major flow concentration or a major area of deposition like that on concave slopes and near field boundaries.

Furthermore, this soil loss is an average erosion rate for the landscape profile. Even on a uniform slope, erosion varies along the slope, and erosion at the end of the slope length is about 1.5 times the average erosion for the entire slope length. This variation can be significantly greater if slope steepness at the end of the slope length is much greater than the average steepness of the profile.

RUSLE is principally used to estimate the rate that erosion is removing soil from critical parts of the landscape and to guide the choice of conservation practices that will control erosion to a "soil loss tolerance" level. Soil loss tolerance is the average erosion rate that can occur with little or no long term degradation of the soil. Soil loss tolerance, or T, values have been assigned by the NRCS to major soils in the U. S. Typical values of T range from 3 to 5 tons ac^{-1} yr^{-1} with some values as low as 1 ton ac^{-1} yr^{-1} .

In a typical *RUSLE* application, values are assigned to each factor based on site specific conditions including erosivity at the location, erodibility of the soil based on soil survey information, length and steepness of the landscape profile representing the critical portion of the site, and land use. If the computed soil loss is less than the T value, control of sheet and rill erosion is assumed to be adequate. If computed soil loss exceeds the T value, sheet and rill erosion is considered to be excessive and improved erosion control is needed. Alternative conservation practices are proposed and evaluated with *RUSLE*. Those practices that give estimated values of soil loss less than or equal to the T value are considered acceptable.

RUSLE can be used to estimate sediment yield from watersheds by multiplying soil loss estimates by a sediment delivery ratio that depends primarily on watershed area. Sediment yield on a per unit area basis and sediment delivery ratios decrease in general as watershed size increases. *RUSLE* is not a sediment yield equation but is an equation for sediment production by sheet and rill erosion on overland flow areas, which is the major source of sediment in many watersheds. In addition, erosion in concentrated flow areas (ephemeral gullies), classical gullies, stream channels, and mass movement of material into channels are other major sources of sediment that contribute to sediment yield but are not estimated by *RUSLE*.

Sediment yield from most watersheds is often less than sediment production within the watershed. Thus, much sediment is deposited within a typical watershed. *RUSLE* does not consider this deposition in its computations.

RUSLE FACTORS

Rainfall Erosivity (R) Factor

R Values: The erosivity of rainfall varies greatly by location. For example, erosivity in central Mississippi is about 10 times that in western North Dakota. The R factor represents these differences in erosivity among locations. Values for R computed from weather records were used to produce the North Carolina data.

In North Carolina, a single location is usually sufficient for applying *RUSLE* in a county. Both a table and a map are provided for use in determining R values.

Makeup of R: Erosivity for a single storm is the product of the storm's energy E and its maximum 30 minute intensity I_{30} for qualifying storms. Storms less than 0.5 inches are not included in the erosivity computation unless intensity exceeds 0.5 in hr^{-1} because these storms generally add little to the total R value. A value of R for a location is the average of EI_{30}. This, R is an indication of the two most important characteristics of a storm determining its erosivity: amount of rainfall and peak intensity sustained over an extended period.

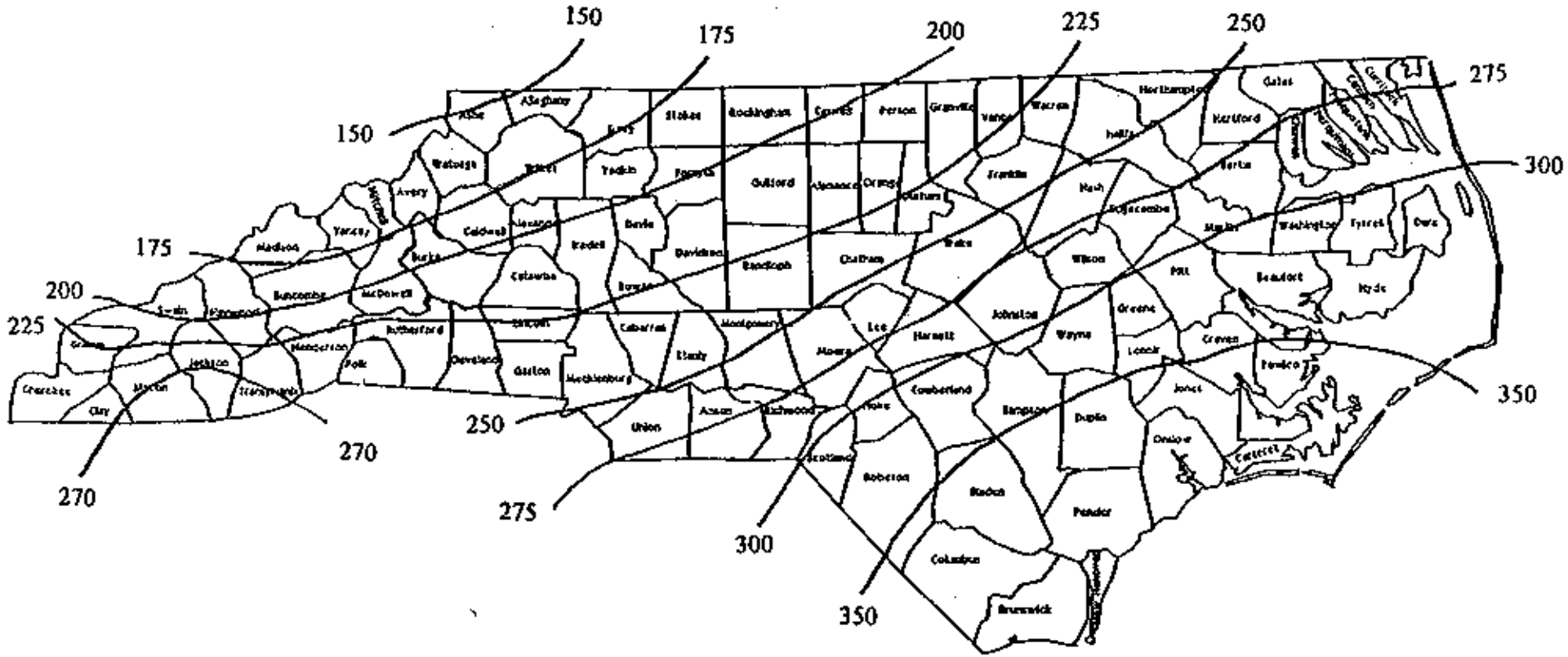
$(EI_{30})_{10}$ Values: The effectiveness of support practices like contouring and stripcropping is computed using the erosivity of the single storm having an erosivity value with a return frequency of once every ten years. Values for $(EI_{30})_{10}$ have also been computed from weather records and both a table and map are provided in this handbook.

Variation of Erosivity During the Year: Erosivity varies during the year, more at some locations than at others. This effect of the distribution of R during the year is considered by *RUSLE* in the computation of C.

That is, values of C vary by location according to the distribution of erosivity during the year. A part of the variation of C between crops such as corn and wheat is because tillage occurs at different times with these crops.

Other Weather Variables: Although not used in the R factor, values for average annual precipitation, average monthly precipitation, average monthly temperatures, and average number of freeze-free days during the year are included in the *RUSLE* weather data along with the R value and its distribution during the year. Values for these variables are obtained from local weather records.

Adjustment for Ponding: On a nearly level field, the force of falling raindrops is reduced when the surface is "mulched" with standing water. This can happen when rainfall intensity exceeds infiltration rates. A factor is provided in graph form to make this adjustment.



NORTH CAROLINA

Figure 1

Average Annual Values of the Factor R

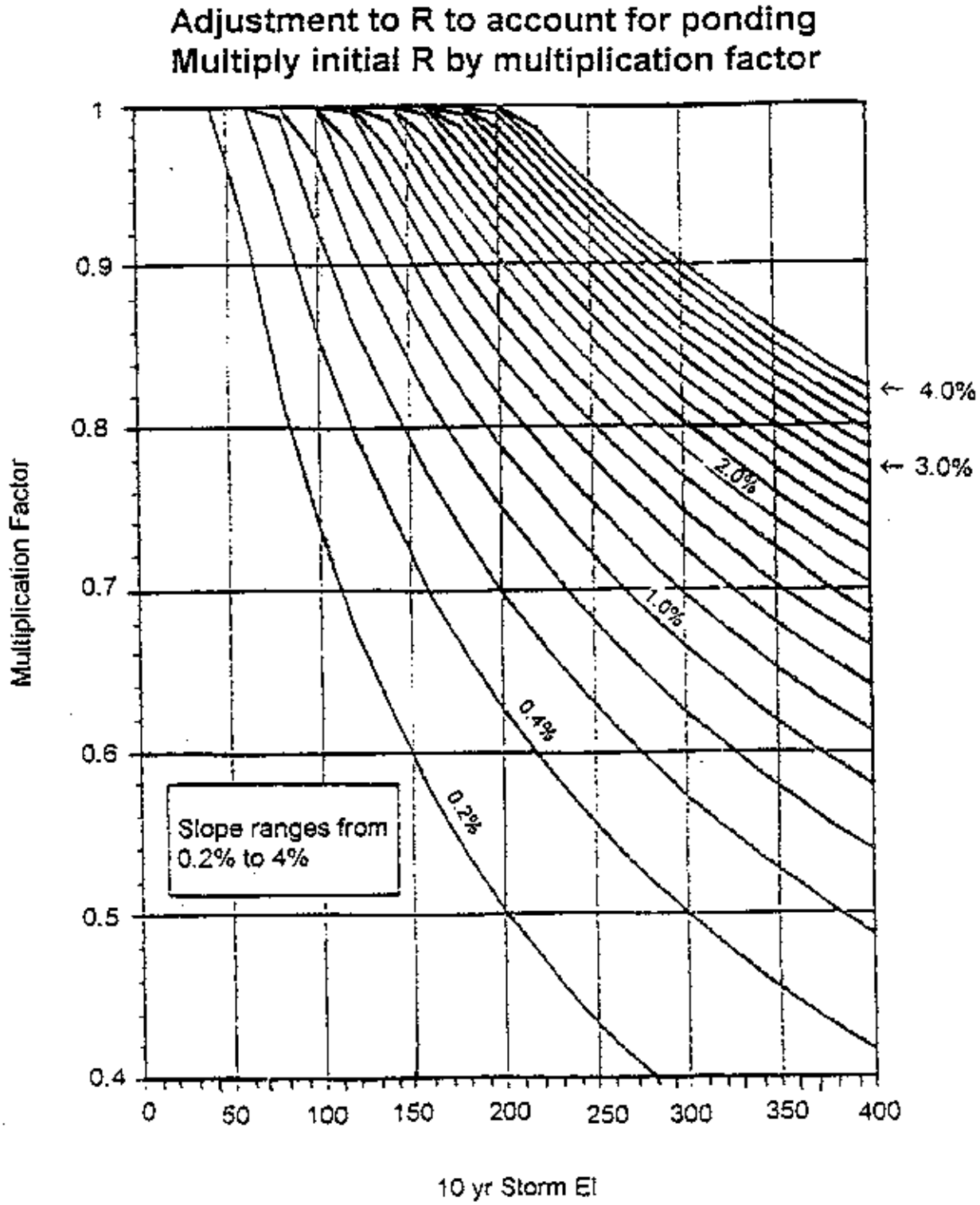
For use with RUSLE, 1995

Table 1.

List of counties in North Carolina with R values based on information by USDA-ARS and NRCS, for use in RUSLE.

County	R	County	R
Alamance	220	Johnston	290
Alexander	200	Jones	355
Alleghany	160	Lee	265
Anson	275	Lenoir	345
Ashe	150	Lincoln	225
Avery	165	Macon	270
Beaufort	330	Madison	170
Bertie	285	Martin	300
Bladen	360	McDowell	200
Brunswick	380	Mecklenburg	240
Buncombe	200	Mitchell	165
Burke	200	Montgomery	255
Cabarrus	235	Moore	270
Caldwell	185	Nash	265
Camden	275	New Hanover	370
Carteret	350	Northampton	250
Caswell	200	Onslow	365
Catawba	215	Orange	225
Chatham	245	Pamlico	350
Cherokee	245	Pasquotank	280
Chowan	285	Pender	360
Clay	250	Perquimans	285
Cleveland	235	Person	210
Columbus	370	Pitt	320
Craven	350	Polk	235
Cumberland	320	Randolph	230
Currituck	275	Richmond	285
Dare	310	Robeson	340
Davidson	220	Rockingham	190
Davie	210	Rowan	225
Duplin	355	Rutherford	235
Durham	230	Sampson	340
Edgecombe	280	Scotland	310
Forsyth	200	Stanly	245
Franklin	250	Stokes	190
Gaston	240	Surry	175
Gates	260	Swain	200
Graham	225	Transylvania	260
Granville	225	Tyrrell	310
Greene	320	Union	270
Guilford	220	Vance	225
Halifax	250	Wake	270
Harnett	285	Warren	230
Haywood	200	Washington	310
Henderson	235	Watauga	165
Hertford	260	Wayne	325
Hoke	300	Wilkes	175
Hyde	330	Wilson	285
Iredell	215	Yadkin	185
Jackson	270	Yancey	170

Figure 2


Adjustment to R to account for ponding
Multiply initial R by multiplication factor
Multiplication Factor
1
0.9
0.8
0.7
0.6
0.5
0.4
0
50
100
150
200
250
300
350
400
10 yr Storm EI
← 4.0%
← 3.0%
2.0%
1.0%
0.4%
0.2%
Slope ranges from
0.2% to 4%

Soil Erodibility (K) Factor

Soils vary in their susceptibility to erosion. The soil erodibility factor K is a measure of erodibility for a standard condition. This standard condition is the unit plot, which is an erosion plot 72.6 ft long on a 9 percent slope, maintained in continuous fallow, tilled up and down hill periodically to control weeds and break crusts that form on the surface of the soil. The plots are plowed, disked, and cultivated the same as for a row crop of corn or soybeans except that no crop is grown on the unit plot. Values of K are determined by fitting the equation:

$$A_U = EI_{30}K$$

to the erosion and rainfall data measured at the unit plot. The variable A_U is the soil loss measured for individual storms and EI_{30} is the erosivity of the storms that produced the respective soil loss values.

What K Represents: The soil erodibility factor K represents both susceptibility of soil to erosion and the amount and rate of runoff, as measured under the standard unit plot condition. Fine textured soils high in clay have low K values, about 0.05 to 0.15, because they are resistant to detachment. Coarse textured soils, such as sandy soils, have low K values, about 0.05 to 0.2, because of low runoff even though these soils are easily detached. Medium textured soils, such as the silt loam soils, have moderate K values, about 0.25 to 0.4, because they are moderately susceptible to detachment and they produce moderate runoff. Soils having a high silt content are most erodible of all soils. They are easily detached and they tend to crust and produce large amounts and rates of runoff. Values of K for these soils send to be greater than 0.4.

Organic matter reduces erodibility because it reduces the susceptibility of the soil to detachment, and it increases infiltration, which reduces runoff and thus erosion. Addition or accumulation of increased organic matter through management such as incorporation of manures is represented in the C factor rather than the K factor. Extrapolation of the K factor nomograph beyond an organic matter of 4% is not recommended or allowed in *RUSLE*. Also, soil structure affects both susceptibility to detachment and infiltration. Permeability of the soil profile affects K because it affects runoff.

Plant growth and management practices affect the susceptibility of a soil to detachment and its infiltration rate, both of which affect erosion. These effects are considered in the cover-management factor C. Values for K represent the erodibility and are considered elsewhere in *RUSLE*.

Seasonal K Values: K values are difficult to estimate mainly because of antecedent soil-water and soil-surface conditions and because of seasonal variations in soil properties. Because the value of these conditions and properties tends to be consistent for a season, it is thought that seasonal K values can reduce errors in soil-loss estimates.

Variations in K through the seasons seem to be primarily related to three factors: soil freezing, soil texture, and soil-water. Of these, the soil-freezing effect is probably the most difficult to evaluate. The effects of all three are now included in the average annual value.

It has been shown that the soil-water content at the time of initial freezing, the rate of soil freezing, and the number of freeze-thaw cycles can significantly affect soil aggregation and aggregate

stability in the spring at the time of thawing. Freeze-thaw cycling generally leads to low bulk density of the surface soil. Conditions of low density and high soil-water provide a soil surface that is very susceptible to soil detachment and transport. Differences in soil density may persist even after frost layers have thawed. This, combined with intense spring rains, often results in large soil losses. Thus, freezing and thawing tend to increase the soil erodibility factor. Soil-erosion resistance is at a minimum immediately after the soil has thawed and tends to increase with time after thawing. The greater the number of freeze-thaw cycles, the longer the erosion resistance of a soil is at a minimum.

Selection of K Values: Values for the soil erodibility factor K are selected from county-level soil survey information provided in this handbook.

The K value to use is determined by: (1) select the Kf value for the county, (2) use the "Adjusted Average Annual *RUSLE* K" from the appropriate table (mountain, piedmont, or coastal plains).

NOTE:

Handbooks for use in more than one county will contain the soils data for the entire state. Handbooks for use in one county will contain only that information.

RUSLE Soil Data

Survey Area ALAMANCE COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rocl Cove %
AaB	ALAMANCE	SIL	100	B	.43	4	5
AbB	APPLING	SL	100	B	.28	4	5
AbB2	APPLING	SL	100	B	.28	4	5
AbC	APPLING	SL	100	B	.28	4	5
AbC2	APPLING	SL	100	B	.28	4	5
AcC3	APPLING	SCL	100	B	.28	3	5
AdB	APPLING	SL	100	B	.28	4	5
AdB2	APPLING	SL	100	B	.28	4	5
AdC	APPLING	SL	100	B	.28	4	5
AdC2	APPLING	SL	100	B	.28	4	5
AdD	APPLING	SL	100	B	.28	4	5
AdD2	APPLING	SL	100	B	.28	4	5
AdE	APPLING	SL	100	B	.24	3	5
Ba	BUNCOMBE	LFS	100	A	.10	5	0
CaC3	CECIL	CL	100	B	.28	3	10
CaD3	CECIL	CL	100	B	.28	3	10
CbB	CECIL	FSL	100	B	.28	4	5
CbB2	CECIL	FSL	100	B	.28	4	5
CbC	CECIL	FSL	100	B	.28	4	5
CbC2	CECIL	FSL	100	B	.28	4	5
CbD	CECIL	FSL	100	B	.28	4	5
CbD2	CECIL	FSL	100	B	.28	4	5
CbE	CECIL	FSL	100	B	.28	4	5
CcB	CECIL	SL	100	B	.28	4	5
CcB2	CECIL	SL	100	B	.28	4	5
CcC	CECIL	SL	100	B	.28	4	5
CcC2	CECIL	SL	100	B	.28	4	5
Cd	CHEWACLA	FSL	100	C	.24	5	0
Ce	COLFAX	SL	100	C	.17	3	5
Cf	COLFAX	SIL	100	C	.32	3	5
Cg	CONGAREE	FSL	100	B	.24	5	0
DaC3	DAVIDSON	CL	100	B	.28	5	5
DaD3	DAVIDSON	CL	100	B	.28	5	5
DbB	DAVIDSON	CL	100	B	.28	5	5
DbC	DAVIDSON	CL	100	B	.28	5	5
DbD	DAVIDSON	CL	100	B	.28	5	5
DcB	DURHAM	SL	100	B	.24	5	5
DcC	DURHAM	SL	100	B	.24	5	5
DdB	DURHAM	SL	100	B	.24	5	5
DdB2	DURHAM	SL	100	B	.24	5	5
DdB3	DAVIDSON	CL	100	B	.28	5	5
DdC	DURHAM	SL	100	B	.24	5	5
DdC2	DURHAM	SL	100	B	.24	5	5
EaB	EFLAND	CN-SIL	100	B	.37	2	40
EaB2	EFLAND	CN-SIL	100	B	.37	2	40
EaC	EFLAND	CN-SIL	100	B	.37	2	40

RUSLE Soil Data

Survey Area ALAMANCE COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
EaC2	EFLAND	CN-SICL	100	B	.28	2	35
EaD	EFLAND	CN-SICL	100	B	.28	2	35
EbC3	EFLAND	SICL	100	B	.24	2	10
EbD3	EFLAND	SICL	100	B	.24	2	10
EcC3	ENON	CL	100	C	.24	2	5
EcD3	ENON	CL	100	C	.24	2	5
EdB	ENON	FSL	100	C	.28	3	10
EdB2	ENON	FSL	100	C	.28	3	10
EdC	ENON	FSL	100	C	.28	3	10
EdC2	ENON	FSL	100	C	.28	3	10
EeB	ENON	L	100	C	.32	3	5
EeB2	ENON	L	100	C	.32	3	5
EeC	ENON	L	100	C	.32	3	5
EeC2	ENON	L	100	C	.32	3	5
EeD	ENON	L	100	C	.32	3	5
EeD2	ENON	L	100	C	.32	3	5
GaB	GEORGEVILLE	SIL	100	B	.49	4	5
GaB2	GEORGEVILLE	SIL	100	B	.49	4	5
GaC	GEORGEVILLE	SIL	100	B	.49	4	5
GaC2	GEORGEVILLE	SIL	100	B	.49	4	5
GaD2	GEORGEVILLE	SIL	100	B	.49	4	5
GaE	GEORGEVILLE	SIL	100	B	.49	4	5
GbB3	GEORGEVILLE	SICL	100	B	.49	4	5
GbC3	GEORGEVILLE	SICL	100	B	.49	4	5
GbD3	GEORGEVILLE	SICL	100	B	.49	4	5
GbE3	GEORGEVILLE	SICL	100	B	.49	4	5
GcC	GOLDSTON	CN-SIL	100	C	.32	1	50
GcD	GOLDSTON	CN-SIL	100	C	.32	1	50
GcE	GOLDSTON	CN-SIL	100	C	.32	1	50
GdD	GEORGEVILLE	SIL	100	B	.49	4	5
HaC3	HELENA	CL	100	C	.28	3	5
HbB	HELENA	SL	100	C	.24	4	5
HbB2	HELENA	SL	100	C	.24	4	5
HbC	HELENA	SL	100	C	.24	4	5
HbC2	HELENA	SL	100	C	.24	4	5
HcB	HELENA	SL	100	C	.24	4	5
HcB2	HELENA	SL	100	C	.24	4	5
HcC	HELENA	SL	100	C	.24	4	5
HcC2	HELENA	SL	100	C	.24	4	5
HdB	HERNDON	SIL	100	B	.43	5	5
HdB2	HERNDON	SIL	100	B	.43	5	5
HdC	HERNDON	SIL	100	B	.43	5	5
HdC2	HERNDON	SIL	100	B	.43	5	5
HdD	HERNDON	SIL	100	B	.43	5	5
HdD2	HERNDON	SIL	100	B	.43	5	5
HdE	HERNDON	SIL	100	B	.49	4	5

RUSLE Soil Data

Survey Area ALAMANCE COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
HeC3	HERNDON	SICL	100	B	.49	4	0
HeD3	HERNDON	SICL	100	B	.49	4	0
IaA	IREDELL	L	100	C/D	.32	3	0
IaB	IREDELL	L	100	C/D	.32	3	0
IaB2	IREDELL	L	100	C/D	.32	3	0
IaC2	IREDELL	L	100	C/D	.32	3	0
IbA	IREDELL	SL	100	C/D	.28	3	10
IbB	IREDELL	SL	100	C/D	.28	3	10
IbB2	IREDELL	SL	100	C/D	.28	3	10
IbC2	IREDELL	SL	100	C/D	.28	3	10
IcB	IREDELL	STV-L	100	C	.32	3	65
LaB3	LLOYD	CL	100	C	.28	4	5
LaC3	LLOYD	CL	100	C	.28	4	5
LaD3	LLOYD	CL	100	C	.28	4	5
LaE3	LLOYD	CL	100	B	.28	3	10
LbA	LLOYD	L	100	C	.32	4	5
LbB	LLOYD	L	100	C	.32	4	5
LbB2	LLOYD	L	100	C	.32	4	5
LbC	LLOYD	L	100	B	.28	4	5
LbC2	LLOYD	L	100	B	.28	4	5
LbD2	LLOYD	L	100	B	.28	4	5
LbE	LLOYD	L	100	B	.28	4	5
Lc	LOCAL ALLUVIAL	LSL	100	D	.28	4	5
Ld	LOCAL ALLUVIAL	LSL	100	C	.24	5	5
LdD	LLOYD	L	100	B	.28	4	5
MaC3	MECKLENBURG	CL	100	C	.28	2	5
MbB2	MECKLENBURG	L	100	C	.24	4	5
MbC2	MECKLENBURG	L	100	C	.24	4	5
MbD2	MECKLENBURG	L	100	C	.24	4	5
Mc	MIXED ALLUVIAL	LSL	100	D	.24	5	0
Md	MIXED ALLUVIAL	LLS	100	A	.10	5	0
Me	MODERATELY GULLI	CL	100	B	.28	3	10
Mf	MODERATELY GULLI	SICL	100	B	.49	4	5
OaA	ORANGE	SIL	100	D	.28	3	5
OaB	ORANGE	SIL	100	D	.28	3	5
OaB2	ORANGE	SIL	100	D	.28	3	5
ObB	ORANGE	SIL	100	D	.28	3	5
ObB2	ORANGE	SIL	100	D	.28	3	5
ObC	ORANGE	SIL	100	D	.28	3	5
ObC2	ORANGE	SIL	100	D	.28	3	5
Sb	STARR	L	100	C	.28	5	5
TaB	TIRZAH	SIL	100	B	.32	3	5
TaB2	TIRZAH	SIL	100	B	.37	4	5
TaC	TIRZAH	SIL	100	B	.32	3	5
TaC2	TIRZAH	SIL	100	B	.37	4	5
TaD	TIRZAH	SIL	100	B	.32	3	5

RUSLE Soil Data

Survey Area ALAMANCE COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
TaD2	TIRZAH	SIL	100	B	.37	4	5
TbB3	TIRZAH	SICL	100	B	.32	3	10
TbC3	TIRZAH	SICL	100	B	.32	3	10
TbD3	TIRZAH	SICL	100	B	.32	3	10
VaB	VANCE	COSL	100	C	.24	3	10
VaB2	VANCE	COSL	100	C	.24	3	10
VaC2	VANCE	COSL	100	C	.24	3	10
VbC3	VANCE	CL	100	C	.28	2	5
VcB	VANCE	SL	100	C	.24	3	10
VcB2	VANCE	SL	100	C	.24	3	10
VcC2	VANCE	SL	100	C	.24	3	10
VcD2	VANCE	SL	100	C	.24	3	10
WBD2	WILKES	SL	100	C	.24	1	10
Wa	WEHADKEE	FSL	100	D	.24	5	0
WbB	WILKES	SL	100	C	.24	1	10
WbC	WILKES	SL	100	C	.24	1	10
WbC2	WILKES	SL	100	C	.24	1	10
WbD	WILKES	SL	100	C	.24	1	10
WbE	WILKES	SL	100	C	.24	1	10
WcD	WILKES	STV-SL	100	C	.24	1	25
WcE	WILKES	STV-SL	100	C	.24	1	25
Wd	WORSHAM	SL	100	D	.28	4	5
We	WORSHAM	SIL	100	D	.37	4	5

RUSLE Soil Data

Survey Area ALEXANDER COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cov %
AcD	ASHE	GR-SL	45	B	.24	2	15
AcD	CLEVELAND	GR-SL	45	C	.28	1	25
AcE	ASHE	GR-SL	45	B	.24	2	15
AcE	CLEVELAND	GR-SL	45	C	.28	1	25
BeB	BETHLEHEM	GR-SL	100	B	.32	2	35
BeC	BETHLEHEM	GR-SL	100	B	.32	2	35
BrC	BETHLEHEM	GR-SL	45	B	.32	2	35
BsC2	BRADDOCK	CL	50	B	.32	3	10
BsC2	HAYESVILLE	CL	40	B	.24	5	5
BsD2	BRADDOCK	CL	60	B	.32	3	10
BsD2	HAYESVILLE	CL	30	B	.24	5	5
BuA	BUNCOMBE	LS	100	A	.10	5	0
CeB2	CECIL	SCL	100	B	.28	3	10
CfB	CECIL	SCL	50	B	.28	3	10
ChA	CHEWACLA	L	100	C	.28	5	0
CnF	CLEVELAND	GR-SL	45	C	.28	1	25
CsD	COWEE	GR-SL	70	B	.28	2	20
CsD	SALUDA	GR-SL	15	C	.28	2	25
CsE	COWEE	GR-SL	70	B	.28	2	20
CsE	SALUDA	GR-SL	15	C	.28	2	25
DaB2	DAVIDSON	CL	100	B	.28	5	5
DaC2	DAVIDSON	CL	100	B	.28	5	5
DoB	DOGUE	SL	100	C	.28	5	5
EcD	EVARD	GR-SL	75	B	.28	5	25
EcD	COWEE	GR-SL	20	B	.28	2	20
EcE	EVARD	GR-SL	80	B	.28	5	25
EcE	COWEE	GR-SL	15	B	.28	2	20
HbC	HIBRITEN	CBV-SL	100	B	.24	2	50
HbE	HIBRITEN	CBV-SL	100	B	.24	2	50
MaB2	MASADA	SCL	100	C	.24	4	10
MaC2	MASADA	SCL	100	C	.24	4	10
PaD	PACOLET	SL	100	B	.20	3	5
PcB2	PACOLET	SCL	100	B	.24	2	5
PcC2	PACOLET	SCL	100	B	.24	2	5
PuC	PACOLET	SCL	50	B	.24	2	5
RnC	RION	SL	100	B	.24	3	5
RnD	RION	SL	100	B	.24	3	5
RnE	RION	SL	100	B	.24	3	5
RwB	RION	SL	45	B	.24	3	5
RwB	WEDOWEE	SL	35	B	.24	3	5
RxA	RIVERVIEW	FSL	100	B	.24	5	5
StB	STATE	SL	100	B	.28	5	0
TfB	TATE	SL	45	B	.24	5	5
TfB	FRENCH	SL	30	C	.24	3	10
WeA	WEHADKEE	L	100	D	.24	5	0

RUSLE Soil Data

Survey Area ALLEGHANY COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
Ad	ALLUVIAL LAND	SL	100	D	.24	5	0
AhE	ASHE	FSL	100	B	.24	2	5
AhF	ASHE	FSL	100	B	.24	2	5
AsF	ASHE	ST-FSL	100	B	.24	2	25
AsG	ASHE	ST-FSL	100	B	.24	2	25
CaE	CHANDLER	FSL	100	B	.32	3	5
CaF	CHANDLER	FSL	100	B	.32	3	5
CdF	CHANDLER	FSL	100	B	.32	3	5
CdG	CHANDLER	FSL	100	B	.32	3	5
CeB	CHESTER	L	100	B	.32	5	5
CeC	CHESTER	L	100	B	.32	5	5
CeE	CHESTER	L	100	B	.32	5	5
CeF	CHESTER	L	100	B	.32	5	5
ChF2	CHESTER	CB-L	100	B	.28	5	25
ClD	CHESTER	CB-L	100	B	.28	5	25
ClF	CHESTER	CB-L	100	B	.28	5	25
CmC	CLIFTON	L	100	B	.17	4	5
CmE	CLIFTON	L	100	B	.17	4	5
CmF	CLIFTON	L	100	B	.17	4	5
CsF	CLIFTON	ST-L	100	B	.28	4	25
Cx	CODORUS	SIL	100	C	.37	5	10
Cy	COMUS	FSL	100	B	.43	3	5
FnC2	FANNIN	SIL	100	B	.32	3	5
FnE2	FANNIN	SIL	100	B	.32	3	5
FnF	FANNIN	SIL	100	B	.32	3	5
FoF2	FANNIN	SIL	100	B	.32	3	5
HaC	HAYESVILLE	L	100	B	.20	5	5
HaE	HAYESVILLE	L	100	B	.20	5	5
PoE	PORTERS	L	100	B	.28	3	5
PoF	PORTERS	L	100	B	.28	3	5
PsE	PORTERS	ST-L	100	B	.24	3	20
PsF	PORTERS	ST-L	100	B	.24	3	20
PsG	PORTERS	ST-L	100	B	.24	3	20
Su	SUNCOOK	LFS	100	A	.10	5	5
TaB	TATE	L	100	B	.24	5	5
TaC	TATE	L	100	B	.24	5	5
TaD	TATE	L	100	B	.24	5	5
TlC	TUSQUITEE	L	100	B	.28	5	10
TlD	TUSQUITEE	L	100	B	.28	5	10
TlE	TUSQUITEE	L	100	B	.28	5	10
TsD	TUSQUITEE	ST-L	100	B	.20	5	25
TsE	TUSQUITEE	ST-L	100	B	.20	5	25
WaC	WATAUGA	L	100	B	.24	3	10
WaE	WATAUGA	L	100	B	.24	3	10
WaF	WATAUGA	L	100	B	.24	3	10
WsF	WATAUGA	CB-L	100	B	.24	3	25

RUSLE Soil Data

Survey Area ANSON COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Roc Cov %
1A	RIVERVIEW	L	100	B	.32	5	0
4A	CHEWACLA	L	100	C	.28	5	0
8A	WEHADKEE	L	100	D	.24	5	0
16A	STATE	FSL	100	B	.28	5	0
17B	LILLINGTON	GR-SL	100	B	.15	5	45
17C	LILLINGTON	GR-SL	100	B	.15	5	45
25A	PAGELAND	SIL	40	C	.43	2	5
25A	MISENHEIMER	CN-SIL	30	C	.32	1	45
37B	TURBEVILLE	SL	100	C	.32	5	10
46A	AUGUSTA	FSL	100	C	.20	4	5
50B	ENON	L	100	C	.32	3	5
50C	ENON	L	100	C	.32	3	5
58A	HORNSBORO	L	100	D	.37	5	0
68B	GOLDSTON	CN-SIL	100	C	.32	1	50
68C	GOLDSTON	CN-SIL	100	C	.32	1	50
68D	GOLDSTON	CN-SIL	100	C	.32	1	50
68E	GOLDSTON	CN-SIL	100	C	.32	1	50
74B	PELION	LS	100	B/D	.15	3	0
76B	EMPORIA	LS	100	C	.15	5	5
76C	EMPORIA	LS	100	C	.15	5	5
81A	WORSHAM	L	100	D	.37	4	5
88A	ROANOKE	L	100	D	.37	4	5
106B	PACOLET	GR-SL	100	B	.20	3	15
106C	PACOLET	GR-SL	100	B	.20	3	15
106D	PACOLET	GR-SL	100	B	.20	3	15
106E	PACOLET	GR-SL	100	B	.20	3	15
130B	NASON	SIL	100	C	.43	4	10
130C	NASON	SIL	100	C	.43	4	10
131B	NASON	GR-FSL	100	B	.43	4	25
131C	NASON	GR-FSL	100	B	.43	4	25
146B	BADIN	CN-SIL	40	B	.37	2	40
146B	GOLDSTON	CN-SIL	40	C	.32	1	50
146C	BADIN	CN-SIL	40	B	.37	2	40
146C	GOLDSTON	CN-SIL	40	C	.32	1	50
206B2	GEORGEVILLE	SICL	100	B	.49	4	5
206C2	GEORGEVILLE	SICL	100	B	.49	4	5
208B	TATUM	GR-SIL	100	B	.37	4	25
208C	TATUM	GR-SIL	100	B	.37	4	25
228B	GRANVILLE	SL	100	B	.24	4	5
228C	GRANVILLE	SL	100	B	.24	4	5
246B	BADIN	CN-SIL	100	B	.37	2	40
246C	BADIN	CN-SIL	100	B	.37	2	40
246D	BADIN	CN-SIL	100	B	.37	2	40
248B2	BADIN	SICL	100	B	.24	2	10
248C2	BADIN	SICL	100	B	.24	2	10
307B	MAYODAN	FSL	100	B	.24	4	5

RUSLE Soil Data

Survey Area ANSON COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
307C	MAYODAN	FSL	100	B	.24	4	5
307D	MAYODAN	FSL	100	B	.24	4	5
309B	MAYODAN	GR-SL	100	B	.24	4	30
309C	MAYODAN	GR-SL	100	B	.24	4	30
309D	MAYODAN	GR-SL	100	B	.24	4	30
310B2	HANCEVILLE	L	100	B	.24	5	5
310C2	HANCEVILLE	L	100	B	.24	5	5
311B2	STONEVILLE	CL	100	B	.32	3	5
311C2	STONEVILLE	CL	100	B	.32	3	5
321B	CECIL	SL	100	B	.28	4	5
321C	CECIL	SL	100	B	.28	4	5
322B2	CECIL	SCL	100	B	.28	3	10
322C2	CECIL	SCL	100	B	.28	3	10
323B2	PACOLET	CL	100	B	.24	2	5
323C2	PACOLET	CL	100	B	.24	2	5
323D	PACOLET	SL	100	B	.20	3	5
323E	PACOLET	SL	100	B	.20	3	5
324B	MECKLENBURG	L	100	C	.24	4	5
324C	MECKLENBURG	L	100	C	.24	4	5
324D	MECKLENBURG	L	100	C	.24	4	5
325B2	HIWASSEE	CL	100	B	.28	5	0
325C2	HIWASSEE	CL	100	B	.28	5	0
325D	HIWASSEE	FSL	100	B	.28	5	5
359B	ORANGEBURG	LS	100	B	.10	5	0
359C	ORANGEBURG	LS	100	B	.10	5	0
365A	DOTHAN	LS	100	B	.15	5	0
370B	FUQUAY	LS	100	B	.15	5	5
510B	IREDELL	FSL	100	C/D	.28	3	10
511C	IREDELL	ST-L	100	C/D	.32	3	20
530A	CLAYCREEK	VFSL	100	C	.43	3	5
532B	CREEDMOOR	FSL	100	C	.28	3	0
537B	WHITE STORE	FSL	100	D	.28	3	0
537C	WHITE STORE	FSL	100	D	.28	3	0
537D	WHITE STORE	FSL	100	D	.28	3	0
538B2	WHITE STORE	CL	40	D	.37	3	0
538B2	POLKTON	SCL	30	D	.37	2	0
538C2	WHITE STORE	CL	40	D	.37	3	0
538C2	POLKTON	SCL	30	D	.37	2	0
538D2	WHITE STORE	CL	45	D	.37	3	0
538D2	POLKTON	SCL	40	D	.37	2	0
540B	MCQUEEN	L	100	C	.37	5	5
544A	ALTAVISTA	FSL	100	C	.24	5	5
574B	GILEAD	LS	100	C	.20	3	10
575B	AILEY	LS	100	B	.15	4	5
575C	AILEY	LS	100	B	.15	4	5
576B	VAUCLUSE	LS	100	C	.15	3	5

RUSLE Soil Data

Survey Area ANSON COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cove %
576C	VAUCLUSE	LS	100	C	.15	3	5
576D	VAUCLUSE	LS	100	C	.15	3	5
600B	PINKSTON	SL	100	B	.20	2	10
600C	PINKSTON	SL	100	B	.20	2	10
600D	PINKSTON	SL	100	B	.20	2	10
716B	WAKULLA	S	100	A	.10	5	0
730B	BLANTON	S	100	A	.10	5	5
730C	BLANTON	S	100	A	.10	5	5
811A	JOHNSTON	SL	100	D	.20	5	0
830A	RAINS	FSL	100	B/D	.20	5	0
881A	PLUMMER	LS	100	B/D	.10	5	0
UR	URBAN LAND	VAR	100				NO DATA

RUSLE Soil Data

Survey Area ASHE COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
AHF	ASHE	GR-FSL	100	B	.24	2	15
BrB	BRADDOCK	GR-L	100	B	.32	4	20
BrD	BRADDOCK	GR-L	100	B	.32	4	20
BuC	BRADDOCK	GR-L	40	B	.32	4	20
CaF	CHANDLER	L	100	B	.32	3	5
CfB	CLIFTON	L	100	B	.17	4	5
CfD	CLIFTON	L	100	B	.17	4	5
CfE	CLIFTON	L	100	B	.17	4	5
Co	COLVARD	FSL	100	B	.24	5	5
EdE	EDNEYVILLE	L	100	B	.24	4	5
EdF	EDNEYVILLE	L	100	B	.24	4	5
EsF	EVARD	L	100	B	.28	5	5
EvE	EVARD	L	100	B	.28	5	5
EvF	EVARD	L	100	B	.28	5	5
FnD	FANNIN	L	100	B	.32	3	5
FnE	FANNIN	L	100	B	.32	3	5
PsE	PORTERS	ST-L	100	B	.24	3	20
PsF	PORTERS	ST-L	100	B	.24	3	20
TUE	TUSQUITEE	ST-L	50	B	.20	5	25
TUE	SPIVEY	CB-L	30	B	.28	5	40
TUF	TUSQUITEE	CB-L	50	B	.20	5	25
TUF	SPIVEY	CB-L	30	B	.28	5	40
To	TOXAWAY	L	100	B/D	.17	5	0
TsD	TUSQUITEE	L	100	B	.28	5	10
TsE	TUSQUITEE	L	100	B	.28	5	10
WaD	WATAUGA	L	100	B	.24	3	10
WaE	WATAUGA	L	100	B	.24	3	10
WaF	WATAUGA	L	100	B	.24	3	10

RUSLE Soil Data

Survey Area AVERY COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cove %
1	ROCK OUTCROP	UWB	100	D			NO DATA
3F	UNICOI	GR-FSL	60	C	.28	1	30
3F	ROCK OUTCROP		20	D			NO DATA
4A	NIKWASI	L	100	B/D	.20	3	5
6	URBAN LAND	VAR	100				NO DATA
7C	NORTHCOVE	CBV-L	55	B	.28	5	45
7C	MAYMEAD	CB-L	30	B	.24	5	25
7D	NORTHCOVE	CBV-L	60	B	.28	5	45
7D	MAYMEAD	CB-L	25	B	.24	5	25
7E	NORTHCOVE	CBV-L	100	B	.28	5	45
8B	KEENER	FSL	100	B	.24	5	5
8C	KEENER	FSL	100	B	.24	5	5
8D	KEENER	FSL	100	B	.24	5	5
9D	GREENLEE	CBV-SL	100	B	.20	5	45
9E	GREENLEE	CBV-SL	100	B	.20	5	45
10F	CRAGGEY	GR-L	40	D	.20	1	20
10F	RICKER VARIANT	MPT	35	A			0
10F	ROCK OUTCROP	UWB	25	D			NO DATA
11B	SAUNOOK	L	100	B	.20	5	5
11C	SAUNOOK	L	100	B	.20	5	5
11D	SAUNOOK	L	100	B	.20	5	5
13C	SAUNOOK	L	50	B	.20	5	5
13C	NIKWASI	L	40	B/D	.20	3	5
15A	ROSMAN	FSL	100	B	.24	5	5
16A	REDDIES	L	100	B	.20	3	5
17B	DELLWOOD	CB-SL	100	A	.20	2	30
19C	SPIVEY	CB-L	100	B	.32	5	25
19D	SPIVEY	CB-L	100	B	.32	5	25
19E	SPIVEY	CB-L	100	B	.32	5	25
20C	CULLASAJA	CBV-L	100	B	.24	5	40
20D	CULLASAJA	CBV-L	100	B	.24	5	40
20E	CULLASAJA	CBV-L	100	B	.24	5	40
22C	SHINBONE	CN-L	55	B	.24	3	40
22C	HARMILLER	CN-L	20	B	.24	2	35
22D	SHINBONE	CN-L	50	B	.24	3	40
22D	HARMILLER	CN-L	25	B	.24	2	35
23C	SOCO	CN-FSL	55	B	.24	2	45
23C	DITNEY	GR-FSL	30	C	.24	2	25
23D	SOCO	CN-FSL	55	B	.24	2	45
23D	DITNEY	GR-FSL	30	C	.24	2	25
23E	SOCO	CN-FSL	55	B	.24	2	45
23E	DITNEY	GR-FSL	30	C	.24	2	25
23F	SOCO	CN-FSL	55	B	.24	2	45
23F	DITNEY	GR-FSL	30	C	.24	2	25
25C	FANNIN	L	100	B	.32	3	5
25D	FANNIN	L	100	B	.32	3	5

RUSLE Soil Data

Survey Area AVERY COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
26C	WATAUGA	L	100	B	.24	3	10
26D	WATAUGA	L	100	B	.24	3	10
29C	STECOAH	CN-L	65	B	.28	3	40
29C	SOCO	CN-L	25	B	.24	2	45
29D	STECOAH	CN-L	65	B	.28	3	40
29D	SOCO	CN-L	25	B	.24	2	45
29E	STECOAH	CN-L	65	B	.28	3	40
29E	SOCO	CN-L	25	B	.24	2	45
29F	STECOAH	CN-L	65	B	.28	3	40
29F	SOCO	CN-L	25	B	.24	2	45
33C	CHESTNUT	GR-L	60	B	.24	2	20
33C	ASHE	GR-SL	25	B	.24	2	15
33D	CHESTNUT	GR-SL	60	B	.24	2	20
33D	ASHE	GR-SL	25	B	.24	2	15
33E	CHESTNUT	GR-SL	55	B	.24	2	20
33E	ASHE	GR-SL	30	B	.24	2	15
33F	CHESTNUT	GR-SL	50	B	.24	2	20
33F	ASHE	GR-SL	35	B	.24	2	15
34E	EDNEYVILLE	FSL	50	B	.24	4	5
34E	CHESTNUT	GR-SL	30	B	.24	2	20
34F	EDNEYVILLE	FSL	50	B	.24	4	5
34F	CHESTNUT	GR-SL	30	B	.24	2	20
38C	PIGEONROOST	GR-L	100	B	.28	2	25
38D	PIGEONROOST	GR-L	100	B	.28	2	25
38E	PIGEONROOST	GR-L	100	B	.28	2	25
38F	PIGEONROOST	GR-L	100	B	.28	2	25
40A	CULLOWHEE	L	100	B/D	.20	3	5
43C	CHESTNUT	GR-SL	50	B	.24	2	20
43C	BULADEAN	GR-SL	30	B	.24	3	20
43D	CHESTNUT	GR-SL	50	B	.24	2	20
43D	BULADEAN	GR-SL	30	B	.24	3	20
43E	CHESTNUT	GR-SL	60	B	.24	2	20
43E	BULADEAN	GR-SL	25	B	.24	2	20
43F	CHESTNUT	GR-SL	60	B	.24	2	20
43F	BULADEAN	GR-SL	20	B	.24	3	20
50C	BURTON	GR-L	60	B	.24	2	25
50C	WAYAH	GR-L	20	B	.24	3	25
50D	BURTON	GR-L	60	B	.24	2	25
50D	WAYAH	GR-L	20	B	.24	3	25
50E	BURTON	GR-L	60	B	.24	2	25
50E	WAYAH	GR-L	20	B	.24	3	25
50F	BURTON	GR-L	65	B	.24	2	25
50F	WAYAH	GR-L	15	B	.24	3	25
51D	BURTON	GR-L	50	B	.24	2	25
51D	CRAGGEY	GR-L	25	D	.20	1	20
51D	ROCK OUTCROP	UWB	10	D			NO DATA

RUSLE Soil Data

Survey Area AVERY COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cove %
51E	BURTON	GR-L	50	B	.24	2	25
51E	CRAGGEY	GR-L	25	D	.20	1	20
51E	ROCK OUTCROP	UWB	10	D			NO DATA
51F	BURTON	GR-L	50	B	.24	2	25
51F	CRAGGEY	GR-L	25	D	.20	1	20
51F	ROCK OUTCROP	UWB	10	D			NO DATA
55B	DILLARD	L	100	C	.32	4	5
60B	OSTIN	CB-LS	100	A	.20	2	25
66B	BILTMORE	LS	100	A	.10	5	5
72E	CHANDLER	L	100	B	.32	3	5
72F	CHANDLER	L	100	B	.32	3	5
73C	EDNEYTOWN	FSL	70	B	.20	5	5
73C	PIGEONROOST	GR-L	15	B	.28	2	25
73D	EDNEYTOWN	FSL	70	B	.20	5	5
73D	PIGEONROOST	GR-L	15	B	.28	2	25
73E	EDNEYTOWN	FSL	65	B	.20	5	5
73E	PIGEONROOST	GR-L	20	B	.28	2	25
73F	EDNEYTOWN	FSL	40	B	.20	5	5
73F	PIGEONROOST	GR-L	30	B	.28	2	25
74C	CASHIERS	L	100	B	.32	4	5
74D	CASHIERS	L	100	B	.32	4	5
74E	CASHIERS	L	100	B	.32	4	5
74F	CASHIERS	L	100	B	.32	4	5
85D	BALSAM	BYV-L	100	B	.10	5	30
85E	BALSAM	BYV-L	100	B	.10	5	30
85F	BALSAM	BYV-L	100	B	.10	5	30
90F	ASHE	GR-SL	60	B	.24	2	15
90F	CLEVELAND	ST-FSL	20	C	.28	1	30
90F	ROCK OUTCROP	UWB	10	D			NO DATA
95C	TUSQUITEE	L	50	B	.28	5	10
95C	CULLASAJA	CB-FSL	35	B	.15	5	20
95D	TUSQUITEE	L	50	B	.28	5	10
95D	CULLASAJA	CB-FSL	35	B	.15	5	20
95E	TUSQUITEE	L	50	B	.28	5	10
95E	CULLASAJA	CB-FSL	35	B	.15	5	20
97D	UNAKA	L	100	B	.2	2	20
97E	UNAKA	L	100	B	.2	2	20
97F	UNAKA	L	100	B	.2	2	20
98C	PORTERS	L	100	B	.28	3	5
98D	PORTERS	L	100	B	.28	3	5
98E	PORTERS	L	100	B	.28	3	5
98F	PORTERS	L	100	B	.28	3	5

RUSLE Soil Data

Survey Area BEAUFORT COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
AaA	ALTAVISTA	FSL	100	C	.24	5	5
AbA	ALTAVISTA	FSL	50	C	.24	5	5
Ap	ARAPAHOE	FSL	100	B/D	.15	5	0
At	AUGUSTA	FSL	100	C	.20	4	5
Ba	BAYBORO	L	100	D	.17	5	0
Bb	BELHAVEN	MUCK	100	D			0
BoB	BONNEAU	LS	100	A	.10	5	0
Cf	CAPE FEAR	FSL	100	D	.17	5	0
CnB	CONETOE	LS	100	A	.15	5	0
CrA	CRAVEN	FSL	100	C	.32	5	0
CrB	CRAVEN	FSL	100	C	.32	5	0
CsC2	CRAVEN	CL	100	C	.37	5	0
Ct	CROATAN	MUCK	100	D			0
Cu	CURRITUCK	MUCK	100	D			0
Da	DARE MUCK	MUCK	100	D			0
DgB	DOGUE	FSL	100	C	.28	5	5
Do	DOROVAN	MPT	100	D			0
Ds	DRAGSTON	FSL	100	C	.20	4	0
GoA	GOLDSBORO	FSL	100	B	.20	5	0
Hy	HYDE	L	100	B/D	.17	5	0
La	LEAF	SIL	100	D	.32	4	0
Le	LENOIR	L	100	D	.37	5	0
Lo	LEON	S	100	B/D	.10	5	0
Ly	LYNCHBURG	FSL	100	C	.20	5	5
Me	MUCKALEE	L	100	D	.20	5	5
Pa	PANTEGO	L	100	B/D	.15	5	0
Pe	PERQUIMANS	SIL	100	D	.37	5	0
Po	PONZER	MUCK	100	D			0
Pt	PORTSMOUTH	L	100	B/D	.24	5	0
Ra	RAINS	FSL	100	B/D	.20	5	0
Ro	ROANOKE	FSL	100	D	.28	4	5
Sb	SEABROOK	LS	100	C	.10	5	5
Sc	URBAN LAND	LS	40	C	.10	5	5
StA	STATE	SL	100	B	.28	5	0
TaB	TARBORO	S	100	A	.10	5	0
To	TOMOTLEY	FSL	100	B/D	.20	5	0
Tr	TORHUNTA	FSL	100	C	.15	5	0
Wa	WAHEE	FSL	100	D	.24	5	0
Wd	WASDA	MUCK	100	B/D			0
WtD	WINTON	FSL	100	C	.20	5	5
YoA	YEOPIM	SIL	100	B	.37	5	0

RUSLE Soil Data

Survey Area BERTIE COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
AtA	ALTAVISTA	FSL	100	C	.24	5	5
Au	AUGUSTA	FSL	100	C	.20	4	5
BB	BIBB	L	50	D	.28	5	5
BB	JOHNSTON	L	35	D	.20	5	0
BoB	BONNEAU	LS	100	A	.10	5	0
BoC	BONNEAU	LS	100	A	.10	5	0
Ch	CHEWACLA	L	100	C	.28	5	0
CnB	CONETOE	LS	100	A	.15	5	0
CrA	CRAVEN	FSL	100	C	.32	5	0
CrB	CRAVEN	FSL	100	C	.32	5	0
CrC	CRAVEN	FSL	100	C	.32	5	0
DgA	DOGUE	SL	100	C	.28	5	5
DgB	DOGUE	SL	100	C	.28	5	5
DgC	DOGUE	SL	100	C	.28	5	5
Dk	DOROVAN	MPT	100	D			0
ExA	EXUM	VFSL	100	C	.37	5	0
ExB	EXUM	VFSL	100	C	.37	5	0
GoA	GOLDSBORO	SL	100	B	.20	5	0
Gt	GRANTHAM	SIL	100	D	.37	5	0
Lf	LEAF	L	100	D	.28	4	0
Ln	LENOIR	FSL	100	D	.28	5	0
Ly	LYNCHBURG	SL	100	C	.20	5	5
Na	NAHUNTA	VFSL	100	C	.43	5	0
NoA	NORFOLK	SL	100	B	.20	5	0
NoB	NORFOLK	SL	100	B	.20	5	0
Pa	PANTEGO	L	100	B/D	.15	5	0
Ra	RAINS	SL	100	B/D	.20	5	0
Ro	ROANOKE	FSL	100	D	.28	4	5
Se	SEABROOK	LS	100	C	.10	5	5
TaB	TARBORO	LS	100	A	.10	5	0
Tm	TOMOTLEY	SL	100	B/D	.20	5	0
WE	WEHADKEE	L	100	D	.24	5	0
Wa	WAHEE	SL	100	D	.24	5	0
WkA	WICKHAM	FSL	100	B	.24	5	5
WkB	WICKHAM	FSL	100	B	.24	5	5
WkC	WICKHAM	FSL	100	B	.24	5	5
WmB	WICKHAM	FSL	60	B	.24	5	5
WmB	URBAN LAND	VAR	30				NO DATA
WtD	WINTON	FSL	100	C	.20	5	5
WtE	WINTON	FSL	100	C	.20	5	5

RUSLE Soil Data

Survey Area BLADEN COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
AaA	ALTAVISTA	FSL	100	C	.24	5	5
At	AUGUSTA	SL	100	C	.20	4	5
AuA	AUTRYVILLE	LS	100	A	.10	5	0
AyB	AYCOCK	VFSL	100	B	.37	5	0
BnB	BLANTON	S	100	A	.10	5	5
BuA	BUTTERS	FS	100	B	.10	5	0
By	BYARS	L	100	D	.28	5	0
CT	CROATAN	MUCK	100	D			0
Ca	CAPE FEAR	L	100	D	.15	5	0
Ce	CENTENARY	S	100	A	.10	5	0
Ch	CHEWACLA	L	45	C	.28	5	0
Ch	CHASTAIN	SICL	35	D	.32	5	0
Cn	CONGAREE	SIL	100	B	.37	5	0
Co	COXVILLE	L	100	D	.24	5	0
Cr	CROATAN	MUCK	100	D			0
DgA	DOGUE	SL	100	C	.28	5	5
Do	DOROVAN	MUCK	100	D			0
Dr	DUNBAR	FSL	100	D	.32	5	0
DuA	DUPLIN	SL	100	C	.24	5	0
ExA	EXUM	VFSL	100	C	.37	5	0
Fo	FORESTON	LS	100	C	.15	5	0
GbA	GOLDSBORO	SL	100	B	.20	5	0
GdA	GOLDSBORO	SL	40	B	.20	5	0
Gh	GRANTHAM	VFSL	100	D	.37	5	0
Gm	GRIFTON	FSL	40	D	.20	5	0
Gm	MEGGETT	FSL	30	D	.24	5	0
GrB	GRITNEY	FSL	100	C	.20	3	5
GrD	GRITNEY	FSL	100	C	.20	3	5
Jh	JOHNS	FSL	100	C	.20	5	0
Jo	JOHNSTON	MK-L	100	D	.17	5	0
KaA	KALMIA	LFS	100	B	.15	5	0
KeA	KENANSVILLE	S	100	A	.15	5	0
KuB	KUREB	S	100	A	.10	5	0
LaB	LAKELAND	S	100	A	.10	5	5
LeA	LEON	S	100	B/D	.10	5	0
Ln	LYNCHBURG	FSL	100	C	.20	5	5
Ly	LYNN HAVEN	S	60	B/D	.10	5	0
Ly	TORHUNTA	MK-SL	20	C	.10	5	0
Na	NAHUNTA	VFSL	100	C	.43	5	0
NoA	NORFOLK	LFS	100	B	.17	5	0
NoB	NORFOLK	LFS	100	B	.17	5	0
NuB	NORFOLK	LFS	40	B	.17	5	0
Oc	OCILLA	LFS	100	C	.10	5	0
Pa	PAMLICO	MUCK	100	D			0
Pc	PAMLICO	MUCK	100	D			0
Pe	PANTEGO	L	100	B/D	.15	5	0

RUSLE Soil Data

Survey Area BLADEN COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
Pp	PAXVILLE	SL	100	B/D	.20	5	0
Pt	PORTSMOUTH	MK-SL	100	B/D	.24	5	0
Ra	RAINS	FSL	100	B/D	.20	5	0
Rn	RAINS	FSL	40	B/D	.20	5	0
Ro	ROANOKE	L	100	D	.37	4	5
St	STALLINGS	LS	100	C	.10	5	0
To	TOISNOT	L	100	B/D	.28	3	0
Tr	TORHUNTA	MK-SL	100	C	.10	5	0
WaB	WAGRAM	FS	100	A	.10	5	5
WbB	WAGRAM	FS	40	A	.10	5	5
We	WAHEE	L	100	D	.28	5	0
WgB	WAKULLA	S	100	A	.10	5	0
Wh	WASDA	MUCK	100	B/D			0
WmB	WICKHAM	FSL	100	B	.24	5	5
Wn	WILBANKS	L	100	D	.20	5	0
Wo	WOODINGTON	LS	100	B/D	.10	5	0

RUSLE Soil Data

Survey Area BRUNSWICK COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
BDC	BAYMEADE	FS	50	A	.10	5	0
BDC	MARVYN	LS	30	B	.15	5	5
BO	BOHICKET	SICL	100	D	.28	5	0
BaB	BAYMEADE	FS	100	A	.10	5	0
BnB	BLANTON	FS	100	A	.10	5	5
BrB	BRAGG	SL	100	C	.20	5	0
CA	CARTERET	LFS	100	D	.15	5	5
CH	CHOWAN	SIL	100	D	.32	4	0
CT	CROATAN	MUCK	100	D			0
Co	COROLLA	FS	100	D	.10	5	10
DO	DOROVAN	MUCK	100	D			0
Du	DUCKSTON	FS	100	A/D	.10	5	0
Fo	FORESTON	LFS	100	C	.15	5	0
GoA	GOLDSBORO	FSL	100	B	.20	5	0
Gt	GRIFTON	FSL	100	D	.20	5	0
Jo	JOHNS	FSL	100	C	.20	5	0
KrB	KUREB	FS	100	A	.10	5	0
LA	LAFITTE	MUCK	100	D			0
Lo	LEON	FS	100	B/D	.10	5	0
Lu	LUMBEE	FSL	100	B/D	.24	5	5
Ly	LYNCHBURG	FSL	100	C	.20	5	5
Ma	MANDARIN	FS	100	C	.10	5	0
Mk	MUCKALEE	L	100	D	.20	5	5
Mu	MURVILLE	MK-LFS	100	A/D	.10	5	0
NeE	NEWHAN	FS	100	A	.10	5	0
NhE	NEWHAN	FS	100	A	.10	5	0
NoB	NORFOLK	LFS	100	B	.17	5	0
On	ONSLOW	FSL	100	B	.20	5	0
PaA	PACTOLUS	LFS	100	A	.10	5	0
Pn	PANTEGO	MK-L	100	B/D	.10	5	0
Ra	RAINS	FSL	100	B/D	.20	5	0
Tm	TOMAHAWK	LFS	100	A	.10	5	0
To	TORHUNTA	MK-FSL	100	C	.10	5	0
WaB	WANDO	FS	100	A	.10	5	0
WdB	WANDO	FS	50	A	.10	5	0
Wo	WOODINGTON	FSL	100	B/D	.20	5	0
YaB	YAUPON	SICL	100	D	.28	2	5

RUSLE Soil Data

Survey Area BUNCOMBE COUNTY, NORTH CAROLINA
Component Table Date: Sep 24 Layer Table Date: Sep 24

Map Unit Symbol	Component Name	Surface Texture	Percent of Map Unit	Hyd. Grp.	Kf	T	Rock Cover %
7D	ROCK OUTCROP	UWB	40	D			NO DATA
7D	CLEVELAND	GR-SL	30	C	.28	1	25
7F	ROCK OUTCROP	UWB	40	D			NO DATA
7F	CLEVELAND	GR-SL	30	C	.28	1	25
21B	TATE	L	60	B	.24	5	5
21B	URBAN LAND	VAR	30				NO DATA
21C	TATE	L	60	B	.24	5	5
21C	URBAN LAND	VAR	30				NO DATA
31B	HAYESVILLE	L	45	B	.20	5	5
31C	HAYESVILLE	L	45	B	.20	5	5
33A	IOTLA	L	100	B	.20	5	10
43A	NIKWASI	L	100	B/D	.20	3	5
53B	DELLWOOD	GR-FSL	100	A	.20	2	25
65A	BILTMORE	FSL	100	A	.20	5	5
72A	TOXAWAY	L	100	B/D	.17	5	0
78B	EVARD	SL	40	B	.24	5	10
78C	EVARD	SL	40	B	.24	5	10
80A	REDDIES	FSL	100	B	.20	3	5
82A	ROSMAN	L	100	B	.28	5	0
100A	SYLVA	L	40	B/D	.24	5	5
100A	WHITESIDE	L	30	B	.24	5	5
101B	WHITESIDE	L	100	B	.24	5	5
101C	WHITESIDE	L	100	B	.24	5	5
121B	TATE	L	100	B	.24	5	5
121C	TATE	L	100	B	.24	5	5
121D	TATE	L	100	B	.24	5	5
124B	TATE VARIANT	GR-L	100	B	.28	5	30
124C	TATE VARIANT	L	100	C	.32	4	5
124D	TATE VARIANT	L	100	B	.24	5	5
181C	TUCKASEGEE	ST-SL	40	B	.28	5	20
181C	CULLASAJA	CB-FSL	30	B	.15	5	20
181D	TUCKASEGEE	ST-SL	40	B	.28	5	20
181D	CULLASAJA	CB-FSL	30	B	.15	5	20
181E	TUCKASEGEE	ST-SL	40	B	.28	5	20
181E	CULLASAJA	CB-FSL	30	B	.15	5	20
181F	TUCKASEGEE	ST-SL	40	B	.28	5	20
181F	CULLASAJA	CB-FSL	30	B	.15	5	20
201B	STATLER	L	100	B	.32	5	5
211A	HEMPHILL	L	100	D	.32	5	0
233B	DILLARD	L	100	C	.32	4	5
240B	UNISON VARIANT	L	100	D	.32	5	0
240C	UNISON VARIANT	L	100	C	.32	4	5
242B	UNISON	L	100	B	.32	5	15
242C	UNISON	L	100	B	.32	5	15
244B	BRADDOCK	CL	100	B	.32	3	10
244C	BRADDOCK	CL	100	B	.32	3	10