

**Revised  
Universal Soil Loss  
Equation**

# Objectives

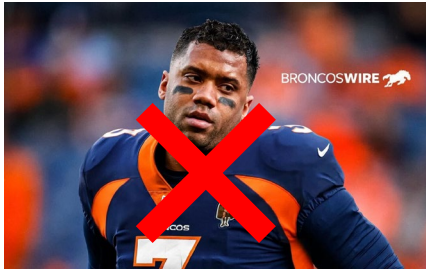
Provide an overview  
of the RUSLE  
equation and its  
significance in soil  
conservation

Show how to put this  
information in the  
PFC1-1b

# What is RUSLE?

Per USDA: "The Revised Universal Soil Loss Equation (RUSLE) predicts long-term, average-annual erosion by water for a broad range of farming, conservation, mining, construction, and forestry uses."

$$R \times K \times LS \times C \times P = A$$



**For the purposes  
of PFC, use  
RUSLE, not  
RUSLE2 (or any other  
Russell)**

---





**R-Rainfall**

**K-Soil erodibility**

**LS-Length and steepness of slope**

**C-Crop management**

**P-Conservation practices**

An aerial photograph of a vast agricultural field, likely a cornfield, with a prominent winding canal or drainage ditch in the foreground. The field is divided into long, straight rows of crops. The sky is overcast and grey. The text is overlaid in the center of the image.

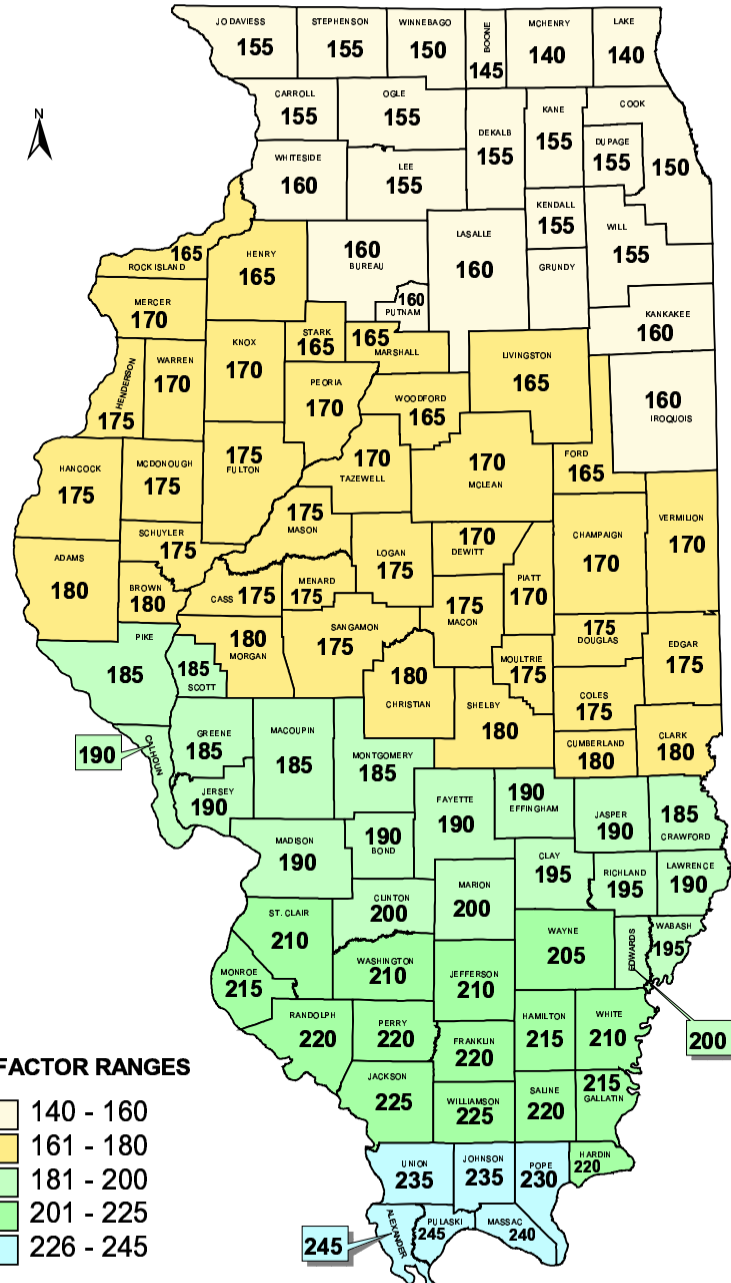
**A = the average annual  
soil loss in tons per  
acre per year.**

R

Rainfall







**RAINFALL  
"R" FACTOR  
ILLINOIS**

K

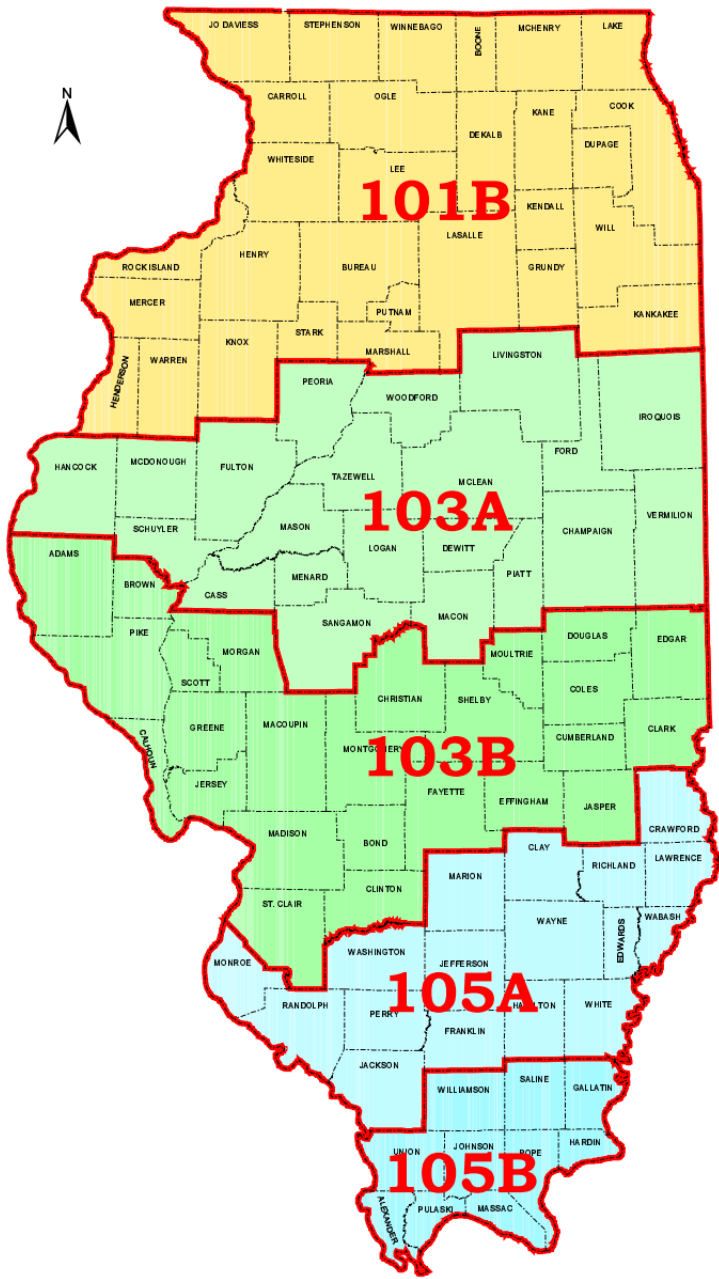
Soil Erodibility



**The K factor represents how easily a particular soil can be eroded by water. It's determined by physical properties of the soil (particle size, organic matter content, structure, permeability).**

**Use the Web Soil Survey to  
determine your K factor.**





**CROP MANAGEMENT  
"C" & "K" FACTORS  
EI CURVE AREAS  
ILLINOIS**

## Average Annual k Factors

RUSLE Version 1.04

Climatic Zone

101B

(Moline, IL)

Current Kf

RUSLE Adjusted Kf

0.02	0.02
0.05	0.05
0.1	0.08
0.15	0.12
0.17	0.15
0.2	0.17
0.24	0.2
0.28	0.24
0.32	0.26
0.37	0.3
0.43	0.35
0.49	0.4
0.55	0.46
0.64	0.52

The RUSLE Adjusted k factors from this table are to be used only for hand calculations and the PFC ESC-1b prior to the use of other computerized version of RUSLE.

## Average Annual k Factors

RUSLE Version 1.04

Climatic Zone

105A

(Evansville, IN)

Current Kf

RUSLE Adjusted Kf

0.02

0.02

0.05

0.05

0.1

0.1

0.15

0.15

0.17

0.17

0.2

0.2

0.24

0.24

0.28

0.28

0.32

0.32

0.37

0.37

0.43

0.43

0.49

0.49

0.55

0.55

0.64

0.64

The RUSLE Adjusted k factors from this table are to be used only for hand calculations and the PFC ESC-1b prior to the use of other computerized version of RUSLE.

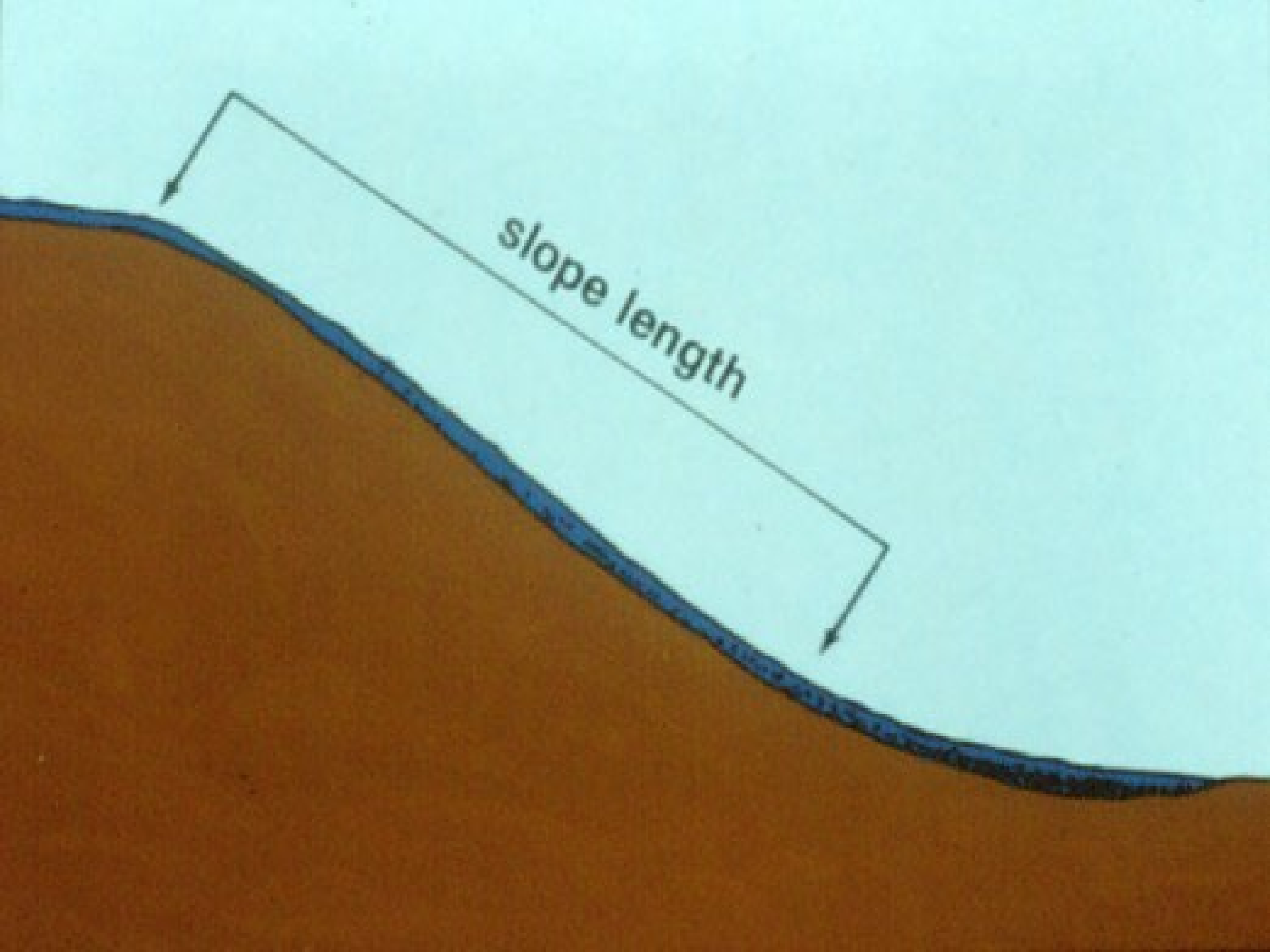
# LS

Slope length and steepness

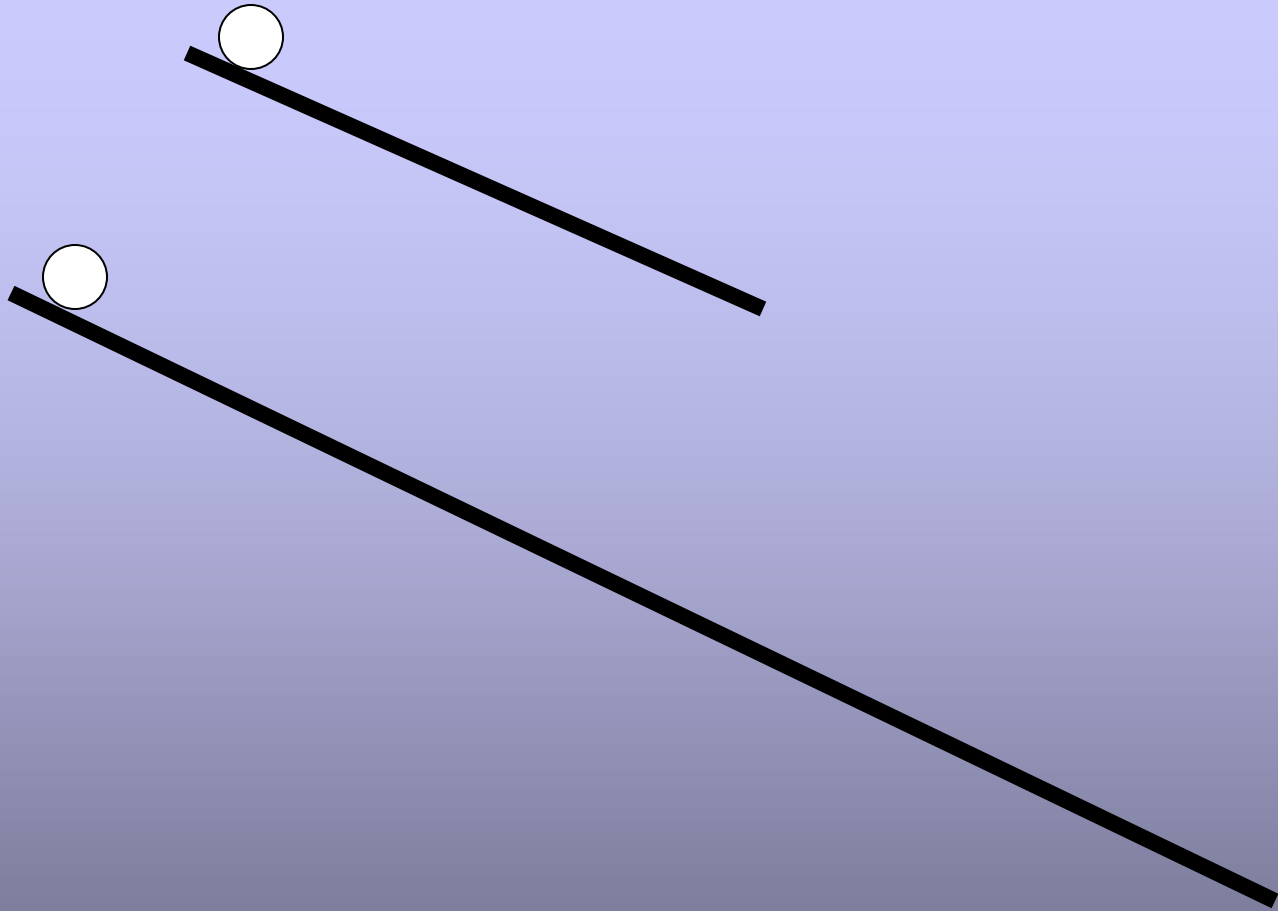


**LS is accounting for the  
effect of topography on  
erosion.**

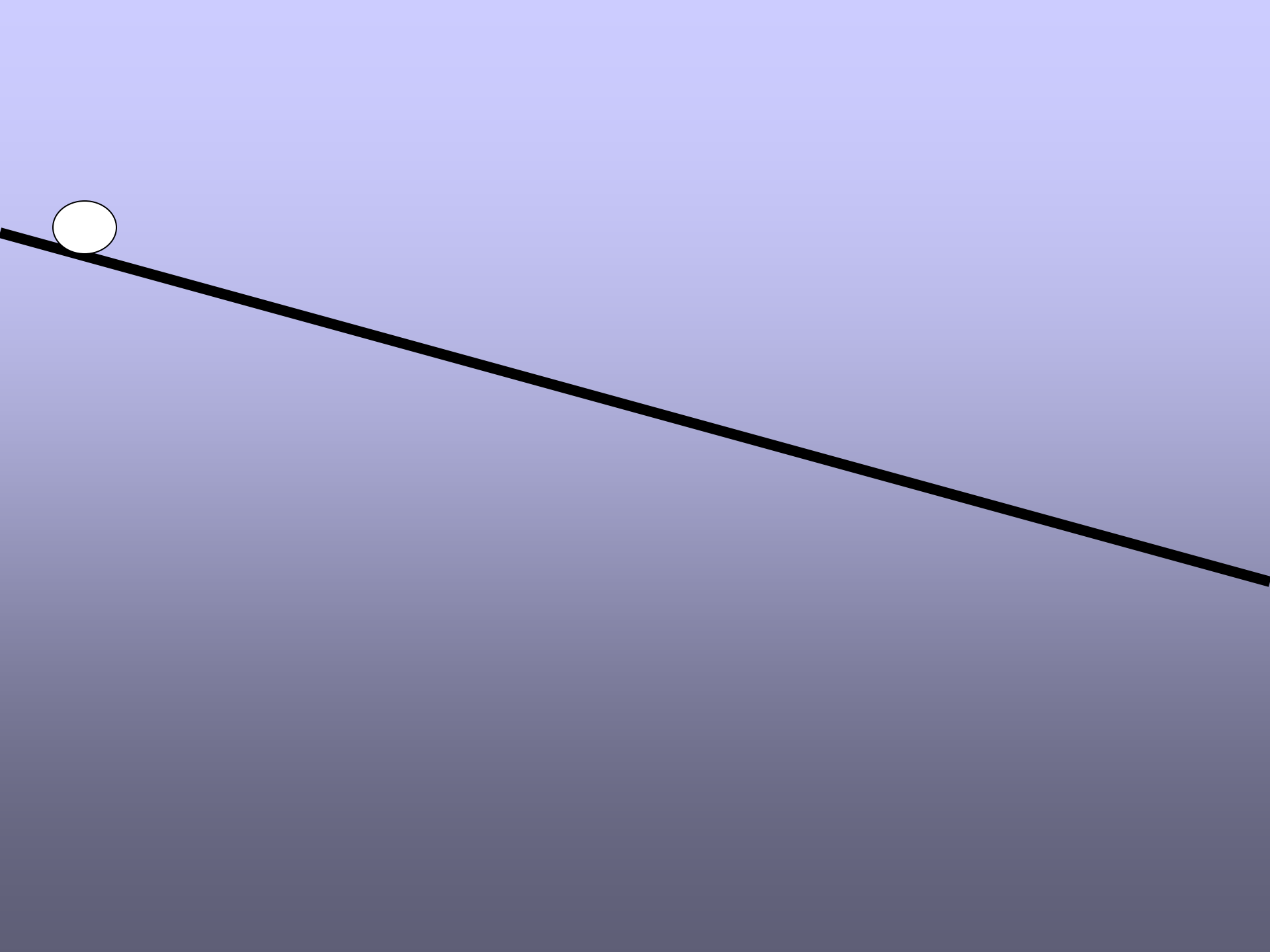


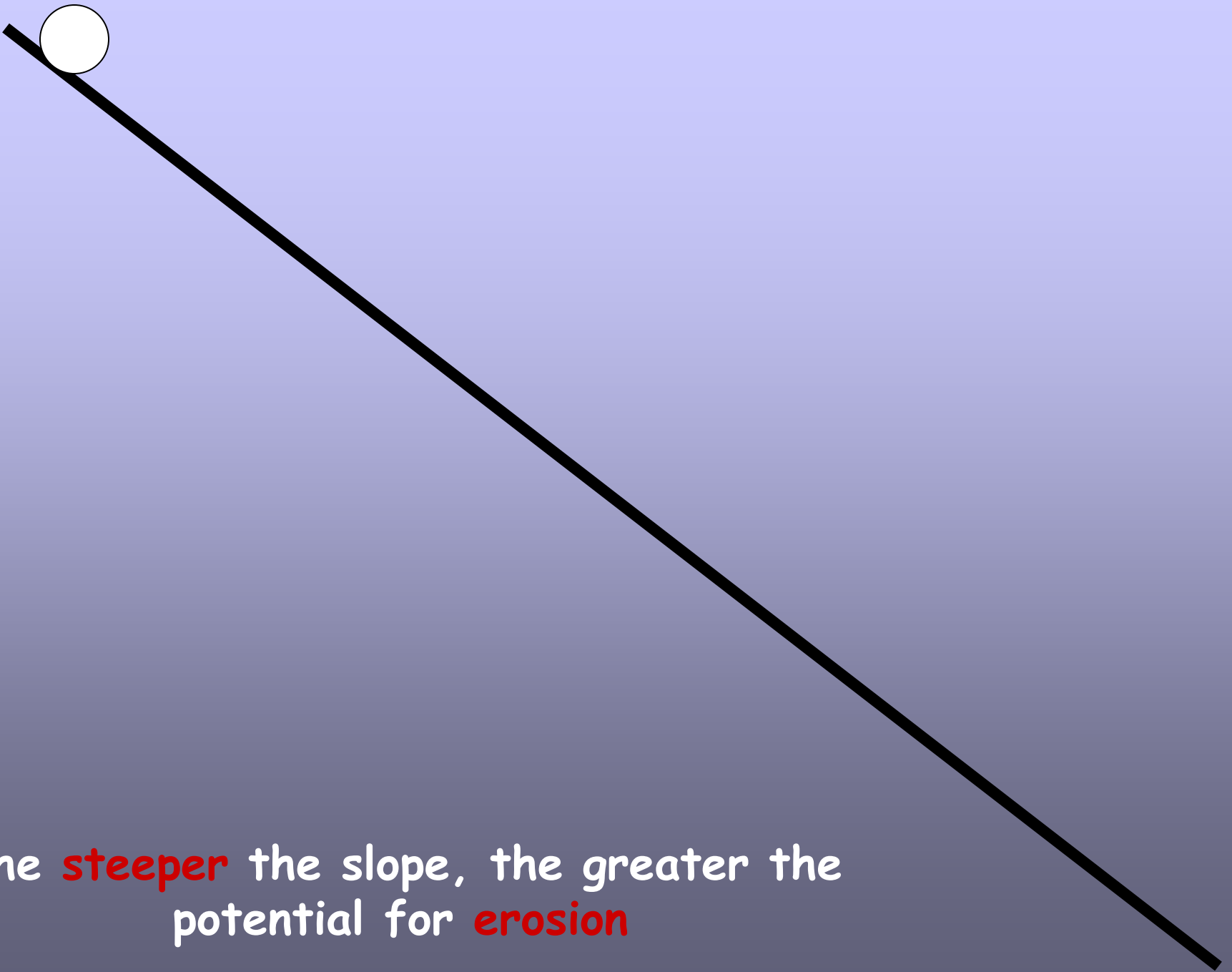


slope length



The **longer** the slope the greater the potential for **erosion**.





The **steeper** the slope, the greater the potential for **erosion**

Table 1 Values for topographic factor, LS, for RANGELAND, PASTURELAND, FORRESTLAND, LONG TERM NO-TILL CROPLAND\* and other consolidated soil conditions with cover (low rill to interrill erosion ratio)

Percent Slope	Slope Length (feet)																
	<3	6	9	12	15	25	50	75	100	150	200	250	300	400	600	800	1000
0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.5	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
1.0	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.17	0.17
2.0	0.2	0.2	0.2	0.2	0.2	0.21	0.23	0.25	0.26	0.27	0.28	0.29	0.3	0.31	0.33	0.34	0.35
3.0	0.26	0.26	0.26	0.26	0.26	0.29	0.33	0.36	0.38	0.4	0.43	0.44	0.46	0.48	0.52	0.55	0.57
4.0	0.33	0.33	0.33	0.33	0.33	0.36	0.43	0.46	0.5	0.54	0.58	0.51	0.63	0.67	0.74	0.78	0.82
5.0	0.38	0.38	0.38	0.38	0.38	0.44	0.52	0.57	0.62	0.68	0.73	0.78	0.81	0.87	0.97	1.04	1.1
6.0	0.44	0.44	0.44	0.44	0.44	0.5	0.61	0.68	0.74	0.83	0.9	0.95	1	1.08	1.21	1.31	1.4
8.0	0.54	0.54	0.54	0.54	0.54	0.64	0.79	0.9	0.99	1.12	1.23	1.32	1.4	1.53	1.74	1.91	2.05
10.0	0.6	0.63	0.65	0.66	0.68	0.81	1.03	1.19	1.31	1.51	1.67	1.8	1.92	2.13	2.45	2.71	2.93
12.0	0.61	0.7	0.75	0.8	0.83	1.01	1.31	1.52	1.69	1.97	2.2	2.39	2.56	2.85	3.32	3.7	4.02
14.0	0.63	0.76	0.85	0.92	0.98	1.2	1.58	1.85	2.08	2.44	2.73	2.99	3.21	3.6	4.23	4.74	5.18
16.0	0.65	0.82	0.94	1.04	1.12	1.38	1.85	2.18	2.46	2.91	3.28	3.6	3.88	4.37	5.17	5.82	6.39
20.0	0.68	0.93	1.11	1.26	1.39	1.74	2.37	2.84	3.22	3.85	4.38	4.83	5.24	5.95	7.13	8.1	8.94
25.0	0.73	1.05	1.3	1.51	1.7	2.17	3	3.63	4.16	5.03	5.76	6.39	6.96	7.97	9.65	11.04	12.26
30.0	0.77	1.16	1.48	1.75	2	2.57	3.6	4.4	5.06	6.18	7.11	7.94	8.68	9.99	12.19	14.04	15.66
40.0	0.85	1.36	1.79	2.17	2.53	3.3	4.73	5.84	6.78	8.37	9.71	10.91	11.99	13.92	17.19	19.96	22.41
50.0	0.91	1.52	2.06	2.54	3	3.95	5.74	7.14	8.33	10.37	12.11	13.65	15.06	17.59	21.88	25.55	28.82
60.0	0.97	1.67	2.29	2.86	3.41	4.52	6.63	8.29	9.72	12.16	14.26	16.13	17.84	20.92	26.17	30.68	34.71

\* Long Term No-Till Cropland= cropland where continuous no-till has been used five (5) or more years

Table 2; Values for topographic factor, LS, for ROW-CROPPED agricultural and other moderately consolidated soil conditions with little to moderate cover (moderate rill to interrill erosion ratio)

Percent Slope	Slope Length (feet)																
	<3	6	9	12	15	25	50	75	100	150	200	250	300	400	600	800	1000
0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06
0.5	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.1	0.1	0.1	0.1
1.0	0.11	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.2	0.2
2.0	0.17	0.17	0.17	0.17	0.17	0.19	0.22	0.25	0.27	0.29	0.31	0.33	0.35	0.37	0.41	0.44	0.47
3.0	0.22	0.22	0.22	0.22	0.22	0.25	0.32	0.36	0.39	0.44	0.48	0.52	0.55	0.6	0.68	0.75	0.8
4.0	0.26	0.26	0.26	0.26	0.26	0.31	0.4	0.47	0.52	0.6	0.67	0.72	0.77	0.86	0.99	1.1	1.19
5.0	0.3	0.3	0.3	0.3	0.3	0.37	0.49	0.58	0.65	0.76	0.85	0.93	1.01	1.13	1.33	1.49	1.63
6.0	0.34	0.34	0.34	0.34	0.34	0.43	0.58	0.69	0.78	0.93	1.05	1.16	1.25	1.42	1.69	1.91	2.11
8.0	0.42	0.42	0.42	0.42	0.42	0.53	0.74	0.91	1.04	1.26	1.45	1.62	1.77	2.03	2.47	2.83	3.15
10.0	0.46	0.48	0.5	0.51	0.52	0.67	0.97	1.19	1.38	1.71	1.98	2.22	2.44	2.84	3.5	4.06	4.56
12.0	0.47	0.53	0.58	0.61	0.64	0.84	1.23	1.53	1.79	2.23	2.61	2.95	3.26	3.81	4.75	5.56	6.28
14.0	0.48	0.58	0.65	0.7	0.75	1	1.48	1.86	2.19	2.76	3.25	3.69	4.09	4.82	6.07	7.15	8.11
16.0	0.49	0.63	0.72	0.79	0.85	1.15	1.73	2.2	2.6	3.3	3.9	4.45	4.95	5.86	7.43	8.79	10.02
20.0	0.52	0.71	0.85	0.96	1.06	1.45	2.22	2.85	3.4	4.36	5.21	5.97	6.68	7.97	10.23	12.2	13.99
25.0	0.56	0.8	1	1.16	1.3	1.81	2.82	3.65	4.39	5.69	6.83	7.88	8.86	10.65	13.8	16.58	19.13
30.0	0.59	0.89	1.13	1.34	1.53	2.15	3.39	4.42	5.34	6.98	8.43	9.76	11.01	13.3	17.37	20.99	24.31
40.0	0.65	1.05	1.38	1.68	1.95	2.77	4.45	5.87	7.14	9.43	11.47	13.37	15.14	18.43	24.32	29.6	34.48
50.0	0.71	1.18	1.59	1.97	2.32	3.32	5.4	7.17	8.78	11.66	14.26	16.67	18.94	23.17	30.78	37.65	44.02
60.0	0.76	1.3	1.78	2.23	2.65	3.81	6.24	8.33	10.23	13.65	16.76	19.64	22.36	27.45	36.63	44.96	52.7



C

Crop Management Factor

**The C factor looks at the type of cover on the soil and how effective it is at keeping the soil in place.**

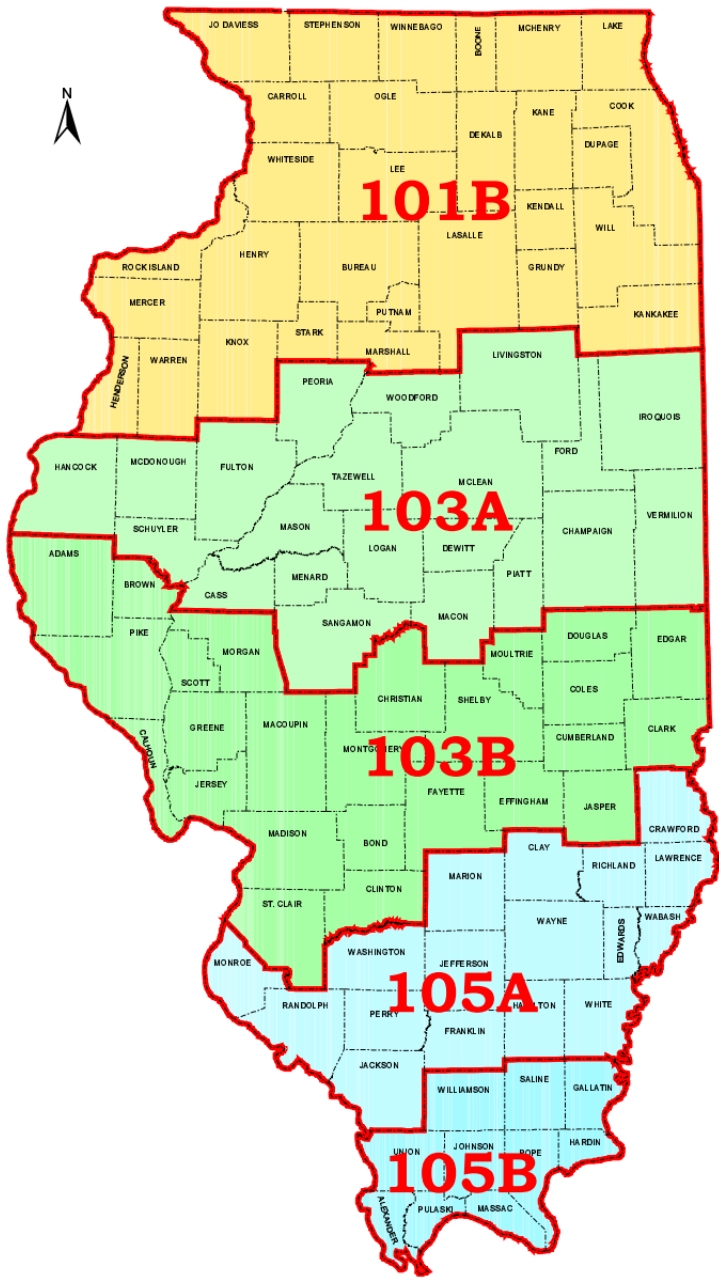


**Continuous fallow = 1**









**CROP MANAGEMENT  
"C" & "K" FACTORS  
EI CURVE AREAS  
ILLINOIS**



The C factor tables that follow, the six numeric values in each row are the RUSLE C factors for each present crop-previous crop combination for residue levels of 0-15, 16-30, 31-50, 51-75, 76-100 and N/A respectively.

### [RUSLE C Factors Zone 101B]

C= Corn, R= Row Soybeans, D= Drilled Soybeans, G=Small Grains, H= Hay, F= Fallow, X= Specialty Crops, Z= CRP, V= Cover Crop

	0-15	16-30	31-50	51-75	76-100	N/A	
CC	0.2	0.13	0.09	0.06	0.02	0	Corn after Corn
CR	0.29	0.19	0.14	0.05	0.02	0	Corn after Soybeans row
CD	0.29	0.18	0.1	0.05	0.02	0	Corn after Soybeans drill
CB	0.29	0.19	0.14	0.05	0.02	0	Corn after Soybeans unspecified
CG	0.22	0.13	0.08	0.03	0.02	0	Corn after Small grains
CH	0.15	0.12	0.1	0.02	0.02	0	Corn after Hay
CF	0.24	0.14	0.08	0.03	0.03	0	Corn after Fallow
CX	0.29	0.19	0.14	0.05	0.02	0	Corn after Specialty crop
CZ	0.1	0.06	0.04	0.03	0.01	0	Corn after CRP
C/	0	0	0	0	0	0	Corn after N/A
CV	0.22	0.13	0.08	0.03	0.02	0	Corn after Cover crop
	0-15	16-30	31-50	51-75	76-100	N/A	
RC	0.2	0.12	0.08	0.06	0.02	0	Soybeans row after Corn
RR	0.31	0.2	0.08	0.06	0.04	0	Soybeans row after Soybeans row
RD	0.31	0.2	0.08	0.06	0.04	0	Soybeans row after Soybeans drill
RB	0.31	0.2	0.08	0.06	0.04	0	Soybeans row after Soybeans unspecified
RG	0.23	0.14	0.09	0.04	0.03	0	Soybeans row after Small grains
RH	0.15	0.1	0.07	0.03	0.02	0	Soybeans row after Hay
RF	0.18	0.12	0.1	0.05	0.04	0	Soybeans row after Fallow
RX	0.31	0.2	0.08	0.06	0.04	0	Soybeans row after Specialty crop
RZ	0.15	0.14	0.09	0.05	0.01	0	Soybeans row after CRP
R/	0	0	0	0	0	0	Soybeans row after N/A
RV	0.23	0.14	0.09	0.04	0.03		Soybeans row after Cover crop

The C factor tables that follow, the six numeric values in each row are the RUSLE C factors for each present crop-previous crop combination for residue levels of 0-15, 16-30, 31-50, 51-75, 76-100 and N/A respectively.

### [RUSLE C Factors Zone 101B]

C= Corn, R= Row Soybeans, D= Drilled Soybeans, G=Small Grains, H= Hay, F= Fallow, X= Specialty Crops, Z= CRP, V= Cover Crop

	0-15	16-30	31-50	51-75	76-100	N/A	
DC	0.2	0.12	0.08	0.06	0.02	0	Soybeans drill after Corn
DR	0.31	0.2	0.08	0.06	0.04	0	Soybeans drill after Soybeans row
DD	0.31	0.2	0.08	0.06	0.04		Soybeans drill after Soybeans drill
DB	0.31	0.2	0.08	0.06	0.04	0	Soybeans drill after Soybeans unspecified
DG	0.23	0.14	0.09	0.04	0.03	0	Soybeans drill after Small grains
DH	0.15	0.1	0.07	0.03	0.02	0	Soybeans drill after Hay
DF	0.18	0.12	0.1	0.05	0.04	0	Soybeans drill after Fallow
DX	0.31	0.2	0.08	0.06	0.04	0	Soybeans drill after Specialty crop
DZ	0.15	0.14	0.09	0.05	0.01	0	Soybeans drill after CRP
D/	0	0	0	0	0	0	Soybeans drill after N/A
DV	0.23	0.14	0.09	0.04	0.03	0	Soybeans drill after Cover crop

	0-15	16-30	31-50	51-75	76-100	N/A	
GC	0.05	0.03	0.02	0.01	0.01	0.02	Small grains after Corn
GR	0.08	0.05	0.03	0.02	0.02	0.03	Small grains after Soybeans row
GD	0.08	0.05	0.03	0.02	0.02	0.03	Small grains after Soybeans drill
GB	0.08	0.05	0.03	0.02	0.02	0.03	Small grains after Soybeans unspecified
GG	0.08	0.05	0.04	0.02	0.02	0.04	Small grains after Small grains
GH	0.06	0.04	0.03	0.01	0.01	0.03	Small grains after Hay
GF	0.08	0.05	0.03	0.02	0.02	0.03	Small grains after Fallow
GX	0.08	0.05	0.03	0.02	0.02	0.03	Small grains after Specialty crop
GZ	0.05	0.03	0.02	0.01	0.01	0.02	Small grains after CRP
G/	0	0	0	0	0	0	Small grains after N/A
GV	0.06	0.04	0.03	0.01	0.01	0.03	Small grains after Cover crop

The C factor tables that follow, the six numeric values in each row are the RUSLE C factors for each present crop-previous crop combination for residue levels of 0-15, 16-30, 31-50, 51-75, 76-100 and N/A respectively.

### [RUSLE C Factors Zone 101B]

C= Corn, R= Row Soybeans, D= Drilled Soybeans, G=Small Grains, H= Hay, F= Fallow, X= Specialty Crops, Z= CRP, V= Cover Crop

	0-15	16-30	31-50	51-75	76-100	N/A	
HC	0.1	0.06	0.04	0.03	0.02	0.002	Hay after Corn
HR	0.14	0.09	0.04	0.03	0.02	0.002	Hay after Soybeans row
HD	0.14	0.09	0.04	0.03	0.02	0.002	
HB	0.14	0.09	0.04	0.03	0.02	0.002	Hay after Soybeans unspecified
HG	0.14	0.09	0.04	0.03	0.02	0.002	Hay after Small grains
HH	0.05	0.01	0.01	0.01	0.01	0.002	Hay after Hay
HF	0.08	0.06	0.04	0.03	0.02	0.002	Hay after Fallow
HX	0.14	0.09	0.04	0.03	0.02	0.002	Hay after Specialty crop
HZ	0.05	0.05	0.05	0.05	0.01	0.002	Hay after CRP
H/	0	0	0	0	0	0.002	Hay after N/A
HV	0.06	0.04	0.03	0.01	0.01	0.002	Hay after Cover crop
	0-15	16-30	31-50	51-75	76-100	N/A	
FC	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after Corn
FR	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after Soybeans row
FD	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after Soybeans drill
FB	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after Soybeans unspecified
FG	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after Small grains
FH	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after Hay
FF	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after Fallow
FX	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after Specialty crop
FZ	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after CRP
F/	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after N/A
FV	0.03	0.03	0.03	0.03	0.03	0.002	Fallow after Cover crop

The C factor tables that follow, the six numeric values in each row are the RUSLE C factors for each present crop-previous crop combination for residue levels of 0-15, 16-30, 31-50, 51-75, 76-100 and N/A respectively.

### [RUSLE C Factors Zone 101B]

C= Corn, R= Row Soybeans, D= Drilled Soybeans, G=Small Grains, H= Hay, F= Fallow, X= Specialty Crops, Z= CRP, V= Cover Crop

	0-15	16-30	31-50	51-75	76-100	N/A	
XC	0.24	0.15	0.11	0.09	0.04	0	Specialty crop after Corn
XR	0.33	0.22	0.18	0.05	0.04	0	Specialty crop after Soybeans row
XD	0.33	0.22	0.18	0.05	0.04	0	Specialty crop after Soybeans drill
XB	0.33	0.22	0.18	0.05	0.04	0	Specialty crop after Soybeans unspecified
XG	0.25	0.15	0.09	0.03	0.02	0	Specialty crop after Small grains
XH	0.2	0.12	0.08	0.03	0.02	0	Specialty crop after Hay
XF	0.2	0.15	0.09	0.03	0.02	0	Specialty crop after Fallow
XX	0.31	0.2	0.15	0.1	0.08	0	Specialty crop after Specialty crop
XZ	0.15	0.14	0.09	0.05	0.01	0	Specialty crop after CRP
X/	0	0	0	0	0	0	Specialty crop after N/A
XV	0.23	0.14	0.09	0.04	0.03	0	Specialty crop after Cover crop
	0-15	16-30	31-50	51-75	76-100	N/A	
ZC	0.03	0.03	0.03	0.03	0.03	0.002	CRP after Corn
ZR	0.03	0.03	0.03	0.03	0.03	0.002	CRP after Soybeans row
ZD	0.03	0.03	0.03	0.03	0.03	0.002	CRP after Soybeans drill
ZB	0.03	0.03	0.03	0.03	0.03	0.002	CRP after Soybeans unspecified
ZG	0.03	0.03	0.03	0.03	0.03	0.002	CRP after Small grains
ZH	0.03	0.03	0.03	0.03	0.03	0.002	CRP after Hay
ZF	0.03	0.03	0.03	0.03	0.03	0.002	CRP after Fallow
ZX	0.03	0.03	0.03	0.03	0.03	0.002	CRP after Specialty crop
ZZ	0.03	0.03	0.03	0.03	0.03	0.002	CRP after CRP
Z/	0.03	0.03	0.03	0.03	0.03	0.002	CRP after N/A
ZV	0.03	0.03	0.03	0.03	0.03	0.002	CRP after Cover crop

P

Conservation practices

**The P factor is the ratio of soil loss associated with a specific conservation practice to the corresponding loss with up and down slope tillage, which has a value of 1.**

**For our purposes, the P-factor will only ever change if the operation is utilizing terracing or contouring.**

**P does not consider improved tillage practices. These are accounted for in the C-factor.**

P factor when no  
conservation practice  
has been applied = 1

---





# Why does any of this matter?

**We need proof that the conservation practice is helping to keep soil on the landscape!**



SWCD  
employee  
keeping soil  
on the  
landscape

**How do you show proof? The PFC1-1b of course!**

# T Value: Tolerable Soil Loss

For all Illinois land: 1 to 5 tons per acre per year

For cropland alone: Generally, 3 to 5 tons per acre per year

**"The maximum amount of soil loss in tons per acre per year, that can be tolerated and still permit a high level of crop productivity to be sustained economically and indefinitely"**

---

1

2

3

4

5

**Sandy soils, low organic matter, more susceptible to erosion, less forgiving if some soil washes away**



**Loamy soils high in organic matter, more forgiving if some soil washes away**



# The erosion rate must be less than the T-level!

Erosion rate  $>$  T: soil loss exceeds sustainable threshold :(  
Degradation of soil quality, reduced crop yields over time



Erosion rate  $<$  T: the amount of soil being lost is within the tolerance threshold. Yay! :) Soil erosion isn't causing significant harm to crop growth or yield potential



<b>PFC-1</b>		<b>Fiscal Year</b>	0		<b>Approval</b>	Yes	No	
<b>Partners For Conservation</b>		<b>PFC</b>			<b>Date Approved:</b>			
<b>Application/Payment Form</b>		<b>SPECIAL</b>			<b>Start/End Date:</b>			
<b>VERSION 24.0</b>		<b>INTEREST</b>			<b>Amendment Date:</b>			
				<b>STAR Form</b>				
<b>SWCD</b>	0	<b>Application No.</b>	0		<b>Application Date:</b>			
<b>APPLICANT</b> <input type="checkbox"/>				<b>LANDOWNER</b> <input type="checkbox"/>				
<b>Name:</b>		<b>Name:</b>		<b>Address:</b>		<b>Address:</b>		
<b>Address:</b>		<b>Address:</b>		<b>City, State, Zip:</b>		<b>City, State, Zip:</b>		
<b>City, State, Zip:</b>		<b>City, State, Zip:</b>		<b>Phone:</b>		<b>Phone:</b>		
<b>Phone:</b>		<b>Phone:</b>						
<b>Project ID</b>	<b>GPS Coord. (dec/deg.)</b> Latitude / Longitude	<b>Farm, Tract, Field ID</b> ex. F123, T4, FID5	<b>12-digit HUC</b>	<b>1/4 Sec.</b>	<b>Sec.</b>	<b>TWP N or S</b>	<b>Range E or W</b>	<b>P.M.</b>
<b>Application/Section</b>				<b>Payment Section</b>				
(A) Project ID	(B) Practice Code	(C) Practice Components	(D) Estimated Units	(E) Average Cost/Unit	(F) Estimated Cost DxE:F	(G) Installed Units	(H) Total Avg. Cost ExG:H	(I) Actual Cost
		Maintain soil loss below T.		0.00	0.00			
				#N/A	#N/A		#N/A	
				#N/A	#N/A		#N/A	
				#N/A	#N/A		#N/A	
				#N/A	#N/A		#N/A	
				0	#N/A		#N/A	
				0	#N/A		#N/A	
				0	#N/A		#N/A	
				0	#N/A		#N/A	
				0	#N/A		#N/A	
				0	#N/A		#N/A	
<b>Totals</b>				#N/A	#N/A		#N/A	\$ -
Project ID 01	\$ -	75%	\$ -		\$ -	75%	\$ -	\$ -
	Estimated Cost	X Cost-Share %	Estimated Payment	Average Cost or	Actual Cost X	Cost-Share %	Payment Amount	
Project ID 02	\$ -	75%	\$ -		\$ -	75%	\$ -	\$ -
	Estimated Cost	X Cost-Share %	Estimated Payment	Average Cost or	Actual Cost X	Cost-Share %	Payment Amount	
Project ID 03	\$ -	75%	\$ -		\$ -	75%	\$ -	\$ -
	Estimated Cost	X Cost-Share %	Estimated Payment	Average Cost or	Actual Cost X	Cost-Share %	Payment Amount	
<b>Total Estimated Payment</b>			\$ -		<b>Total Payment</b>	\$ -		
<p>I hereby certify that the materials, labor and equipment listed above were used in installing the above-referenced conservation projects and no items or costs listed above have been included on another claim for payment under this agreement or as a claim under any other cost-share program. I understand the payment amount is based upon the actual cost not to exceed the average cost on a per project basis, and that I am entitled to no more than the stated percentage of the lesser amount.</p> <p><input type="checkbox"/> Check Here if Maximum Payment</p> <p>Check Payable to (Please Print)      <b>Cost-Share Payment</b>      <b>Landowner Contribution</b>      <b>Participants Completion Certification</b>      <b>Date</b></p> <p>\$ -      -      \$0.00</p>								
<b>SWCD CERTIFICATION</b>			<b>TECHNICAL CERTIFICATION</b>					
The Director of the 0 County SWCD,			I hereby certify that the claimant did apply all agreed upon projects and they are installed properly and adequately according to technical specifications required.					
certify that the receipts and costs incurred are correct and that all items listed were necessary and authorized.								
SWCD Board Chairman/Designee			(Date)		Technician's Signature/Title		(Date)	

Illinois Department of Agriculture  
Bureau of Land and Water Resources  
Inmate  
Version 24.0 (P24)

**BENEFITS REPORT**  
ESC-1B

**Step 1 Applicant Name:** \_\_\_\_\_  
**SWCD:** \_\_\_\_\_  
**Address:** (lat/lon) \_\_\_\_\_  
 8-digit code \_\_\_\_\_ 8-digit number \_\_\_\_\_  
**Application Number:** \_\_\_\_\_  
 001 \_\_\_\_\_ 0 \_\_\_\_\_  
**Project ID:** \_\_\_\_\_  
**NRCS Practice Code:** \_\_\_\_\_  
**Practice:** \_\_\_\_\_  
**# Practice Units:** \_\_\_\_\_  
**# Acres Maintained < T** \_\_\_\_\_

**Step 2 Watershed Information**  
 01180010401 \_\_\_\_\_ 11-digit HUC \_\_\_\_\_ Total HUC areas \_\_\_\_\_  
 15570 \_\_\_\_\_

**Step 3 Soil Textural Class**  
 Sand, Silt, Clay % \_\_\_\_\_  
 1 Layer \_\_\_\_\_  
 Soil series (e.g., 152) \_\_\_\_\_

**Step 4 Project Parameters**

**RESULTS**

Benefit	ID #01	ID #02	ID #03
Acres reduced below T			
Acres reduced sediment			
T Level (t/acyr)			
Gully loss before (t/yr)			
Gully loss after (t/yr)			
Sheet & rill before (t/acyr)			
Sheet & rill after (t/acyr)			
Soil saved (t/yr)			
Practice units			
N load reduction (t/yr)			
P load reduction (t/yr)			
P load reduction (t/acyr)			
P load reduction (t/yr)			

# The PFC1-1b

# The PFC-1

Enter your county information into the red outlined boxes below.

**COUNTY**  
Sangamon

**1/4 SECTION**  
NE  
NW  
SE  
SW

TOWNSHIP	RANGE
2S	3W
5N	9E
6N	1W
3S	5W

**FISCAL YEAR**  
FY23

**COST SHARE RATE**  
75%

**COUNTY CODE**  
167

PFC-1 Partners For Conservation Application/Payment Form VERSION 24.0				Fiscal Year	0	Approval Yes	No	
SWCD: 0		Application No: 0		Application Date:				
<input type="checkbox"/> APPLICANT <input type="checkbox"/> Check box of person to be paid Name: _____ Address: _____ City, State, Zip: _____ Phone: _____				<input type="checkbox"/> LANDOWNER Name: _____ Address: _____ City, State, Zip: _____ Phone: _____				
PFC: _____		SPECIAL: _____		INTEREST: _____		STAR Form: _____		
Project ID	GPS Coord (dec deg) Latitude Longitude	Farm, Tract, Field ID ex: F03, T4, F05	12-digit HUC	1/4 Sec.	Sec.	TWP N or S	Range E or W	
Application/Section				Payment Section				
(A) Project ID	(B) Practice Code	(C) Practice Components	(D) Estimated Units	(E) Average Cost/Unit	(F) Estimated Cost D+E*F	(G) Installed Units	(H) Total Avg Cost Ex:G*H	(I) Actual Cost
		Maintain soil less below 1.		0.00	0.00			
				BNA	BNA		BNA	
				BNA	BNA		BNA	
				BNA	BNA		BNA	
				BNA	BNA		BNA	
				0	BNA		BNA	
				0	BNA		BNA	
				0	BNA		BNA	
				0	BNA		BNA	
				0	BNA		BNA	
				0	BNA		BNA	
				0	BNA		BNA	
<b>Totals</b>					BNA		BNA	\$ -
Project ID 01	\$ -	75%	\$ -			\$ -	75%	\$ -
Project ID 02	\$ -	75%	\$ -			\$ -	75%	\$ -
Project ID 03	\$ -	75%	\$ -			\$ -	75%	\$ -
<b>Total Estimated Payment</b>				<b>Total Payment</b>				
\$ -				\$ -				
I hereby certify that the materials, labor and equipment listed above were used in installing the above-referenced conservation projects and no items or costs listed above have been included on another claim for payment under this agreement or as a claim under any other cost-share program. I understand the payment amount is based upon the actual cost not to exceed the average cost on a per project basis, and that I am entitled to no more than the stated percentage.								
<input type="checkbox"/> Check Here if Maximum Payment								
Check Payable to (Please Print)	Cost-Share Payment	Landowner Contribution	Participants Completion Certification	Date				
	\$ -	\$ 0.00						
<b>SWCD CERTIFICATION</b> The Directors of the 0 County SWCD, certify that the receipts and costs incurred are correct and that all items listed were necessary and authorized.				<b>TECHNICAL CERTIFICATION</b> I hereby certify that the claimant did apply all agreed upon projects and they are installed properly and adequately according to technical specifications required.				
SWCD Board Chairman/Designee (Date)				Technician's Signature/Title (Date)				

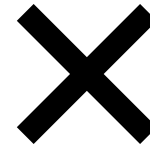
Scroll to the right in the excel workbook!

<b>PFC-1</b> <b>Partners For Conservation</b> <b>Application/Payment Form</b> <i>VERSION 24.0</i>		<b>Fiscal Year</b>	<b>FY23</b>	Approval Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
		PFC	<b>X</b>	Date Approved:	1/23/2024
		SPECIAL		Start/End Date:	1/23/2024
				Amendment Date:	
		INTEREST		<b>STAR Form</b>	1/23/2024
SWCD: <b>Sangamon</b>		Application No. <b>167</b>	<b>00456</b>	Application Date: <b>2/21/2024</b>	
<b>APPLICANT</b> <input checked="" type="checkbox"/>		Check box of person to be paid		<b>LANDOWNER</b> <input type="checkbox"/>	
Name:	<b>Homer Simpson</b>	Name:	<b>Same</b>		
Address:	<b>742 Evergreen Terrace</b>	Address:	<b>Same</b>		
City, State, Zip:	<b>Springfield, IL 60606</b>	City, State, Zip:	<b>Same</b>		
Phone:	<b>215-000-0000</b>	Phone:	<b>Same</b>		

Project ID	GPS Coord. (dec./ deg.)	Farm, Tract, Field ID	12-digit HUC	1/4	Sec.	TWP	Range	P.M.
	Latitude / Longitude	ex. F123, T4, FID5		Sec.		N or S	E or W	
1	44.06312, -88.90784	F123, T4, FID3	71300060703	NW	5	4S	1W	3
2	44.90874, -88.74321	F432, T6, FID4	71300070401	SE	7	6N	9E	3

**Make sure your coordinates are in decimal degrees!**

25° 20' 6"



44.06312, -88.90784





Application/Section						Payment Section		
(A) Project ID	(B) Practice Code	(C) Practice Components	(D) Estimated Units	(E) Average Cost/Unit	(F) Estimated Cost DxE=F	(G) Installed Units	(H) Total Avg. Cost ExG=H	(I) Actual Cost
		Maintain soil loss below T.		0.00	0.00		-	
1	638	Water & Sediment Control Basin - Narrc	550	3.01	1,655.50	550	1,655.50	1,438.00
1		Water & Sediment Control Basin - Farm	275	6.94	1,908.50	275	1,908.50	1,728.00
1		Underground Outlet 6 in Diameter Pipe	100	5.54	554.00	110	609.40	410.00
1		Underground Outlet 8 in Diameter Pipe	200	8.70	1,740.00	225	1,957.50	1,475.00
1		Critical Area Planting- Scenario #1	0.1	321.74	32.17	0.1	32.17	25.00
1		Mulching Scenario #60 (Natural Materia	0.1	603.43	60.34	0.1	60.34	36.00
2	340	Cover Crops - Scenario #1 Basic	22.7	53.33	1,210.59	22.7	1,210.59	1,467.83
2		Mulch-till- Residue + Tillage Manageme	22.7	0.00	0.00	22.7	-	
			0	#N/A	#N/A		#N/A	
			0	#N/A	#N/A		#N/A	
<b>Totals</b>					#N/A		#N/A	\$ 6,579.83
Project ID 01	\$ 5,950.52	75%	\$ 4,462.89			\$ 5,112.00	75%	\$ 3,834.00
	Estimated Cost	X Cost-Share %	=	Estimated Payment	Average Cost or	Actual Cost	X Cost-Share%	Payment Amount
Project ID 02	\$ 1,210.59	75%	\$ 907.94		\$ 1,210.59	75%	\$ 907.94	
	Estimated Cost	X Cost-Share %	=	Estimated Payment	Average Cost or	Actual Cost	X Cost-Share %	Payment Amount
Project ID 03	\$ -	75%	\$ -		\$ -	75%	\$ -	
	Estimated Cost	X Cost-Share %	=	Estimated Payment	Average Cost or	Actual Cost	X Cost-Share %	Payment Amount
<b>Total Estimated Payment</b>			\$ 5,370.83	<b>Total Payment</b>		\$ 4,741.94		
<p>I hereby certify that the materials, labor and equipment listed above were used in installing the above-referenced conservation projects and no items or costs listed above have been included on another claim for payment under this agreement or as a claim under any other cost-share program. I understand the payment amount is based upon the actual cost not to exceed the average cost on a per project basis, and that I am entitled to no more than the stated percentage of the lesser amount.</p> <p><input type="checkbox"/> Check Here if Maximum Payment</p> <p>Check Payable to (Please Print) <b>Homer Simpson</b>      <b>Cost-Share Payment</b> \$ 4,741.94      Landowner Contribution \$ 1,837.89      Participants Completion Certification <i>Homer Simpson</i>      Date <i>2/21/24</i></p>								
<b>SWCD CERTIFICATION</b>					<b>TECHNICAL CERTIFICATION</b>			
The Directors of the <b>Somewhere Co.</b> County SWCD, certify that the receipts and costs incurred are correct and that all items listed were necessary and authorized.					I hereby certify that the claimant did apply all agreed upon projects and they are installed properly and adequately according to technical specifications required.			
<i>Ms. Chairperson</i> <i>2/21/24</i>					<i>Tammy Technician</i> <i>2/21/24</i>			
SWCD Board Chairman/Designee (Date)					Technician's Signature/Title (Date)			

# The PFC1b

Illinois Department of Agriculture  
Bureau of Land and Water Resources

7/19/2019

Version 24.0 (FY24)

## **BENEFITS REPORT**

ESC-1B

Step 1 Applicant Name:  
SWCD:

Homer Simpson	
Sangamon SWCD	▼

Application Number:

3-digit code	5-digit number
167.00	00456

Project ID#:  
NRCS Practice Code:  
Practice:  
# Practice Units:  
# Acres Maintained < T

ID #01	ID #02	ID #03
638	340	
WASCOB (#) ▼	Cover crops (ac) ▼	▼
3	22.7	
3	22.7	

Step 2 Watershed Information

12-digit HUC	Total HU acres
071300060703 ▼	22131

Step 3 Soil Textural Class  
T-Level  
Soil series (e.g., 152)

Sands, loamy sands ▼
5 t/ac/yr ▼
152

Step 4 Project Parameters

**ID #01: WASCOB (#)**

RUSLE Factors	Area 1	Area 2	Area 3	Gully Dimensions	Area 1	Area 2	Area 3
Rainfall-Runoff (R)	185	185	185	Avg. width (ft)	2	2	2
Soil Erodibility (K)	0.37	0.37	0.37	Depth (ft)	1.5	1.5	1.5
Length-Slope (LS)	0.765	0.765	0.765	Length (ft)	75	100	125
Cover Mngmt (C)	0.08	0.08	0.08	No. of Years (>0)	5	5	5
Support Practice (P)	1	1	1	Soil N Conc (lb/lb soil)*	0.001	0.001	0.001
<b>Other</b>				Soil P Conc (lb/lb soil)*	0.0005	0.0005	0.0005
Drainage area (ac)	1.3	1.5	2.8	* indicates default value			

**ID #02: Cover crops (ac)**

RUSLE Factors	Constant	Before	After
Rainfall-Runoff (R)	185		
Soil Erodibility (K)	0.37		
Length-Slope (LS)	0.765		
Cover Mngmt (C)		0.11	0.088
Support Practice (P)	1		

## RESULTS

<b>Benefit</b>	<b>ID #01</b>	<b>ID #02</b>	<b>ID #03</b>
	WASCOB (#)	Cover crops (ac)	
Acres reduced below T	22.7	22.7	
Acres w/reduced sediment	1.3	0.0	
T-Level (t/ac/yr)	5.0	5.0	
Gully loss before (t/yr)	9.9	0.0	
Gully loss after (t/yr)	0.0	0.0	
Sheet & rill before (t/ac/yr)	4.2	5.8	
Sheet & rill after (t/ac/yr)	4.2	4.6	
Soil saved (t/yr)	9.9	26.2	
Practice units	3.0	22.7	
Sed. load reduction (t/yr)	2.9	7.1	
N load reduction (lb/yr)	7	14	
P load reduction (lb/yr)	4	7	

**Questions?**