



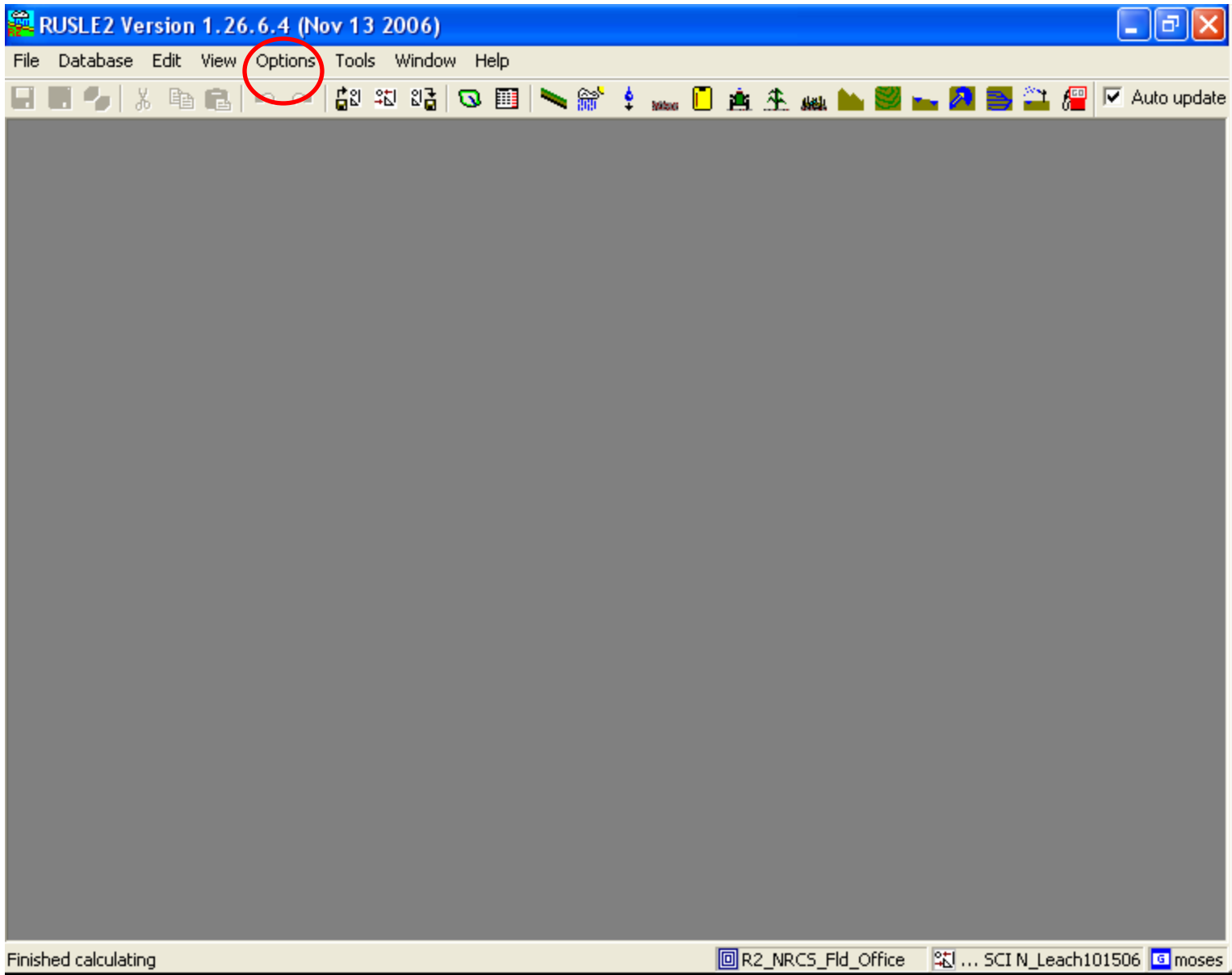
# N Leaching Index RUSLE2 instructions

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9/26/2012





### Load user template

Look in: Users

- NRCS simple SCI 110606.xml
- NRCS simple SCI and Fuel Use110206.xml
- NRCS simple SCI KY000385.xml
- NRCS simple SCI N\_Leach101506.xml
- NRCS summary SCI 110606.xml
- Soil Conditioning Index101506.xml
- VA Basic User Template
- WI basic uniform slope

File name:

Files of type:

User templates

Open

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# RUSLE2 Version 1.26.6.4 (Nov 13 2006)

File Database Edit View Options Tools Window Help



**Open** [Close]

Look in: profiles [Refresh]

default

File name: [ ] [Open]

File type: profiles [Cancel]

Open to last directory

STEP 1: Choose location to set climate:

Location  

STEP 2: Choose soil type:

Soil

STEP 3: Set slope topography:

Slope length (along slop)

Avg. slope steepness, %

STEP 4a: Select base management

Base management

STEP 4b: Modify/build man. sequence if desired:

Management sequence

Man.	Management	Starting date, m/d/y	Ending date, m/d/y	Correct dates by:
+ -				
1	default	1/1/1	1/1/1	===>

STEP 4c: adjust mana

Adjust yield  
General yield lev  
Adjust res. burial lev  
Adjust ext. res. addition  
Rock cover, %

Fuel typ  
Equiv. diesel use

Fuel cost

Apply rot. builder manage. sequence to erosion calc.

Save temp. management as permanent

STEP 5: Set supporting practices:

Contouring  Actual row grade, %

Crit. slope length,

Strips/barriers

Diversion/terrace, sediment basin

Subsurface drainage

Profile: default

STEP 1: Choose location to set climate: Location default

STEP 2: Choose soil type: Soil default

STEP 3: Set slope topography: Slope length (along slope) 6.0

STEP 4a: Select base management Base management default

STEP 4b: Modify/build man. sequence if desired: Management

Man. Management

1 default

STEP 4c: ad A

Genera

Adjust res.

Adjust ext. re: Roc

Equiv. d

F

Apply rot. builder manage. sequence to erosion calc. Apply Save temp. management as permanent Save

STEP 5: Set supporting practices:

Contouring a. rows up-and-down hill Actual row grade, % 6.0 Crit. slope


Strips/barriers (none)

Diversion/terrace, sediment basin (none)


Subsurface drainage (none)

Profile: default\*

STEP 1: Choose location to set climate:

Location  USA\Delaware\Kent County

STEP 2: Choose soil type:


Soil  Kent,DE\AbC Acquango-Beaches complex, 0 to 10 percent slopes\Acq

STEP 3: Set slope topography:

Slope length (along slop


Avg. slope steepness, %

STEP 4a: Select base management

Base management  default

STEP 4b: Modify/build man. sequence if desired:


Management sequence

Man.	Management	Starting date, m/d/y	Ending date, m/d/y	Correct dates by:
<input type="button" value="+"/> <input type="button" value="-"/>				
1 	default	1/1/1	1/1/1	===>

Apply rot. builder manage. sequence to erosion calc.

Save temp. management as permanent

STEP 5: Set supporting practices:

Contouring  a. rows up-and-down hill

Actual row grade, %

Strips/barriers

Diversion/terrace, sediment basin

Subsurface drainage  default



Profile: default\*

Location: USA\Delaware\Kent County

Soil: default

- Generic Soils
- Kent County, Delaware**
- New Castle County, Delaware
- Sussex County, Delaware
- default

Location:  if desired:

Management: default

Management:  Set by user

Management:  Normal res. burial

Management:  Fuel inputs

Management:  0

Fuel type for entire run:  (non

Equiv. diesel use for entire simulation, gal/ac:

Energy use for entire sim:

Fuel cost for entire simulation, US\$/a:

Sequence to erosion calc.:  Save temp. management as permanent:

Management:  a. rows up-and-down hill  Actual row grade, %:  Crit. slope length, ft:

Management:  (none)

Management:  (none)

Management:  (none)

Management:  Yrs offset from start year (

Segment	Yrs offset from start year, y
<input type="button" value="+"/>	<input type="button" value="-"/>
1	0



Profile: default\*

Location: USA\Delaware\Kent County

- Soil: default
- Kent County, Delaware
    - AbC Acquango-Beaches complex, 0 to 10 percent slopes
    - AsA Askecksy loamy sand, 0 to 2 percent slopes
    - Ba Broadkill-Appoquinimink complex, very frequently flooded, tidal
      - Appoquinimink mucky silt loam very frequently flooded, tidal 30%
      - Broadkill silty clay loam very frequently flooded, tidal 55%
      - Br Broadkill mucky peat, very frequently flooded, tidal
      - Broadkill silty clay loam very frequently flooded, tidal 70%**
    - CaA Carmichael loam, 0 to 2 percent slopes
    - CdB Cedartown loamy sand, 0 to 5 percent slopes
    - CoA Corsica mucky loam, 0 to 2 percent slopes

Fuel type for entire run: (none)  
 Equiv. diesel use for entire simulation, gal/ac: 0  
 Energy use for entire simulation, US\$/a: 0  
 Fuel cost for entire simulation, US\$/a: 0

sequence to erosion calc.  Save temp. management as permanent

Soil: a. rows up-and-down hill Actual row grade, %: 6.0 Crit. slope length, ft: 0

Yrs offset from start year (Segment Yrs offset from start year, y): 1 0

+ -

1



default

1/1/1

1/1/1

==>



Apply rot. builder manage. sequence to erosion calc.

Apply

Save temp. management as permanent

Save

STEP 5: Set supporting practices:

Contouring



a. rows up-and-down hill

Actual row grade, %

6.0

Strips/barriers

(none)

Diversion/terrace, sediment basin

(none)

Subsurface drainage



default

Results

Additional Results

Track Residue and Canopy

Soil loss for cons. plan, t/ac/yr

1.5

T value, t/ac/yr

5.0

Surf. res. cov. values

open

Soil conditioning index

Soil conditioning index

Nitrogen leaching index

open

Info

Info box



STEP 1: Choose location to set climate:

Location

STEP 2: Choose soil type:

Soil

STEP 3: Set slope topog

slope steepness, %

STEP 4a: Select base

STEP 4b: Modify/build

STEP 4c:

**Profile: Nitrogen leaching index (...)**

Temp. cutoff for fall/winter ppt, deg F	<input type="text" value="50"/>
Fall/winter precip., in.	<input type="text" value="17"/>
Percolation index	<input type="text" value="19"/>
Seasonal Index	<input type="text" value="0.92"/>
Nitrogen leaching index	<input type="text" value="17"/>

Starting date, m/d/y	Ending date, m/d/y	Correct dates by:
<input type="text" value="1/1/1"/>	<input type="text" value="1/1/1"/>	<input type="text" value="===&gt;"/>

Gen  
Adjust r  
Adjust ext

Equi

Apply rot. builder manage. sequence to erosion calc.

Save temp. management as permanent

STEP 5: Set supporting practices:

Contouring

Actual row grade, %

Crit.

Strips/barriers

Diversion/terrace, sediment basin

Subsurface drainage





Open

Look in: climates\USA\Delaware

- Kent County
- New Castle County
- Sussex County

File name:

Open

File type:

Cancel

Open to last directory

Climate: USA\Delaware\Kent County

R Factor, US 190  
 10-yr 24-hr rainfall, in. 5.4

In Req area? No  
 Use frozen/thawing soil routines? No

R Equiv, US 190  
 El dist. for Req conditio  req  
 What Req area? Normal Req (Pullman)

Annual precip, in. 43.3

Monthly **Daily** Info

Daily Climate

	Days in year, m/d	Daily Temp, deg F	Daily Precip, in.	Daily Decomp, fraction	Daily EI Used, %
	1/1	35	0.11	0.089	0.11
	1/2	35	0.11	0.089	0.11
	1/3	35	0.11	0.089	0.11
	1/4	34	0.11	0.089	0.11
	1/5	34	0.11	0.089	0.11
	1/6	33	0.11	0.089	0.11
	1/7	33	0.11	0.089	0.10
	1/8	32	0.11	0.089	0.10
	1/9	32	0.11	0.089	0.10
	1/10	32	0.11	0.089	0.10
	1/11	32	0.11	0.089	0.099
	1/12	32	0.11	0.089	0.099

Climate: USA Delaware Kent County

R Factor, US 190  
 10-yr 24-hr rainfall, in. 5.4

In Req area? No  
 Use frozen/thawing soil routines? No  
 R Equiv, US 190  
 EI dist. for Req conditio  req  
 What Req area? Normal Req (Pullman)

Annual precip, in. 43.3

management as permanent Save

Actual row grade, % 6.0

Monthly Daily Info

Daily Climate

Days in year, m/d	Daily Temp, deg F	Daily Precip, in.	Daily Decomp, fraction	Daily EI Used, %
3/28	48	0.12	0.30	0.18
3/29	49	0.12	0.30	0.18
3/30	49	0.12	0.30	0.18
3/31	49	0.12	0.30	0.18
4/1	49	0.12	0.39	0.18
4/2	50	0.12	0.39	0.18
4/3	50	0.12	0.39	0.19
4/4	50	0.12	0.39	0.19
4/5	51	0.12	0.39	0.19
4/6	51	0.12	0.39	0.19
4/7	51	0.12	0.39	0.19
4/8	51	0.12	0.39	0.19

Climate: USA Delaware Kent County

R Factor, US: 190  
 10-yr 24-hr rainfall, in.: 5.4

In Req area?: No  
 Use frozen/thawing soil routines?: No  
 R Equiv, US: 190  
 EI dist. for Req conditio: req  
 What Req area?: Normal Req (Pullman)

Annual precip, in.: 43.3

management as permanent: Save

Actual row grade, %: 6.0

Monthly Daily Info

Daily Climate

Days in year, m/d	Daily Temp, deg F	Daily Precip, in.	Daily Decomp, fraction	Daily EI Used, %
10/31	53	0.11	0.47	0.21
11/1	53	0.11	0.38	0.21
11/2	52	0.11	0.38	0.20
11/3	52	0.11	0.38	0.20
11/4	52	0.11	0.38	0.20
11/5	51	0.11	0.38	0.20
11/6	51	0.11	0.38	0.19
11/7	51	0.11	0.38	0.19
11/8	51	0.11	0.38	0.19
11/9	50	0.11	0.38	0.19
11/10	50	0.11	0.38	0.18
11/11	50	0.11	0.38	0.18

STEP 1: Choose location to set climate: Location

STEP 2: Choose soil type: Soil

STEP 3: Set slope topography: slope steepness, %

STEP 4a: Select base management:

STEP 4b: Modify/build management

Man.
<input type="button" value="+"/>
<input type="button" value="-"/>
1

**Profile: Nitrogen leaching index (...)**

Temp. cutoff for fall/winter ppt, deg F

Fall/winter precip., in.

Percolation index

Seasonal Index

**Nitrogen leaching index**

Starting date, m/d/y	Ending date, m/d/y	Correct dates by:
1/1/1	1/1/1	===>

STEP 4c: adjust management

Adjust yields

General yield level

Adjust res. burial level

Adjust ext. res. additions

Rock cover, %

Fuel type for

Equiv. diesel use for

Fuel cost for

Apply rot. builder manage. sequence to erosion calc.  Save temp. management as permanent

STEP 5: Set supporting practices:

Contouring  Actual row grade, %  Crit. slope length, ft

Strips/barriers

Diversion/terrace, sediment basin

Subsurface drainage



You will need to repeat the steps to get N leaching index for the major component(s) of each map unit.

Then make a table or spreadsheet to record the results of the calculations for each map unit component.

	A	B	C	D	E
1	Kent County, Delaware				
2	<b>Map symbol</b>	<b>Map unit name</b>	<b>component</b>	<b>N Leaching index</b>	<b>N Leaching rating</b>
3	AbC	Acquango-Beaches complex, 0 to 10 percent slopes	acquango	17.0	
4	AsA	Askecksy loamy sand, 0 to 2 percent slopes	askecksy, drained	11.0	
5			askecksy, undrained	5.1	
6	Ba	Broadkill-Appoquinimink complex, very frequently flooded, tidal	both	5.1	
7	Br	Broadkill mucky peat, very frequently flooded, tidal	broadkill	5.1	
8	CaA	Carmichael loam, 0 to 2 percent slopes	carmichael, drained	7.2	
9			carmichael, undrained	5.1	
10	CdB	Cedartown loamy sand, 0 to 5 percent slopes	cedartown	17.0	
11	CoA	Corsica mucky loam, 0 to 2 percent slopes	corsica, drained	7.2	
12			corsica, undrained	5.1	
13	CsA	Crosiadore silt loam, 0 to 2 percent slopes	crosiadore	7.2	
14	DnA	Downer loamy sand, 0 to 2 percent slopes	downer	11.0	
15	DnB	Downer loamy sand, 2 to 5 percent slopes	downer	11.0	
16	DnC	Downer loamy sand, 5 to 10 percent slopes	downer	11.0	
17	DoA	Downer sandy loam, 0 to 2 percent slopes	downer	11.0	
18	DoB	Downer sandy loam, 2 to 5 percent slopes	downer	11.0	
19	DoC	Downer sandy loam, 5 to 10 percent slopes	downer	11.0	
20	DuB	Downer-Urban land complex, 0 to 5 percent slopes	downer	11.0	
21	EmA	Elkton silt loam, 0 to 2 percent slopes	elkton, drained	7.2	
22			elkton, undrained	5.1	
23	EvB	Evesboro loamy sand, 0 to 5 percent slopes	evesboro	17.0	
24	EvD	Evesboro loamy sand, 5 to 15 percent slopes	evesboro	17.0	
25	FaA	Fallsington sandy loam, 0 to 2 percent slopes	fallsington, drained	7.2	
26			fallsington, undrained	5.1	
27	FgA	Fallsington loam, 0 to 2 percent slopes	fallsington, drained	7.2	
28			fallsington, undrained	5.1	

Microsoft Excel ribbon: Home, Insert, Page Layout, Formulas, Data, Review, View, Acrobat. Ribbon groups include Clipboard, Font (Calibri, 14), Alignment, Number, Styles, Cells (Insert, Delete, Format), and Editing (Sort & Filter, Find & Select).

Formula bar: A1, Kent County, DE

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Kent County, DE												
	<b>Map Symbol</b>	<b>Map unit name</b>	<b>Component</b>	<b>H Leaching Index</b>	<b>H Leaching Rating</b>		<b>Index Formul</b>			<b>Range</b>	<b>Rating</b>	<b>Code</b>	<b>Or C</b>
2	AbC	Acquanqa-Beacher complex, 0 to 10 percentzlapor	Acquanqa	17.0	VH		VH			0 to 6	Low	L	
3	Ba	Braadkill-Appaquimink complex, very frequently flooded, tidal	Appaquimink	5.1	L		L			6 to 10	Moderate	M	
4	ArA	Arkeckry laamy sand, 0 to 2 percentzlapor	Arkeckry, Drained	11.0	H		H			10 to 15	High	H	
5	ArA	Arkeckry laamy sand, 0 to 2 percentzlapor	Arkeckry, Undrained	5.1	L		L			> 15	Very High	VH	
6	Ba	Braadkill-Appaquimink complex, very frequently flooded, tidal	Braadkill	5.1	L		L						
7	Br	Braadkill mucky peat, very frequently flooded, tidal	Braadkill	5.1	L		L						
8	CaA	Carmichael laam, 0 to 2 percentzlapor	Carmichael, Drained	7.2	M		M						
9	CaA	Carmichael laam, 0 to 2 percentzlapor	Carmichael, Undrained	5.1	L		L						
10	CdB	Cedartoun laamy sand, 0 to 5 percentzlapor	Cedartoun	17.0	VH		VH						
11	CaA	Carrica mucky laam, 0 to 2 percentzlapor	Carrica, Drained	7.2	M		M						
12	CaA	Carrica mucky laam, 0 to 2 percentzlapor	Carrica, Undrained	5.1	L		L						
13	CrA	Crariadara zilt laam, 0 to 2 percentzlapor	Crariadara	7.2	M		M						
14	DnA	Dauner laamy sand, 0 to 2 percentzlapor	Dauner	11.0	H		H						
15	DnB	Dauner laamy sand, 2 to 5 percentzlapor	Dauner	11.0	H		H						
16	DnC	Dauner laamy sand, 5 to 10 percentzlapor	Dauner	11.0	H		H						
17	DaA	Daunerzandy laam, 0 to 2 percentzlapor	Dauner	11.0	H		H						
18	DaB	Daunerzandy laam, 2 to 5 percentzlapor	Dauner	11.0	H		H						
19	DaC	Daunerzandy laam, 5 to 10 percentzlapor	Dauner	11.0	H		H						
20	DuB	Dauner-Urban land complex, 0 to 5 percentzlapor	Dauner	11.0	H		H						
21	EmA	Elktan zilt laam, 0 to 2 percentzlapor	Elktan, Drained	7.2	M		M						
22	EmA	Elktan zilt laam, 0 to 2 percentzlapor	Elktan, Undrained	5.1	L		L						
23	EvB	Everbara laamy sand, 0 to 5 percentzlapor	Everbara	17.0	VH		VH						
24	EvD	Everbara laamy sand, 5 to 15 percentzlapor	Everbara	17.0	VH		VH						