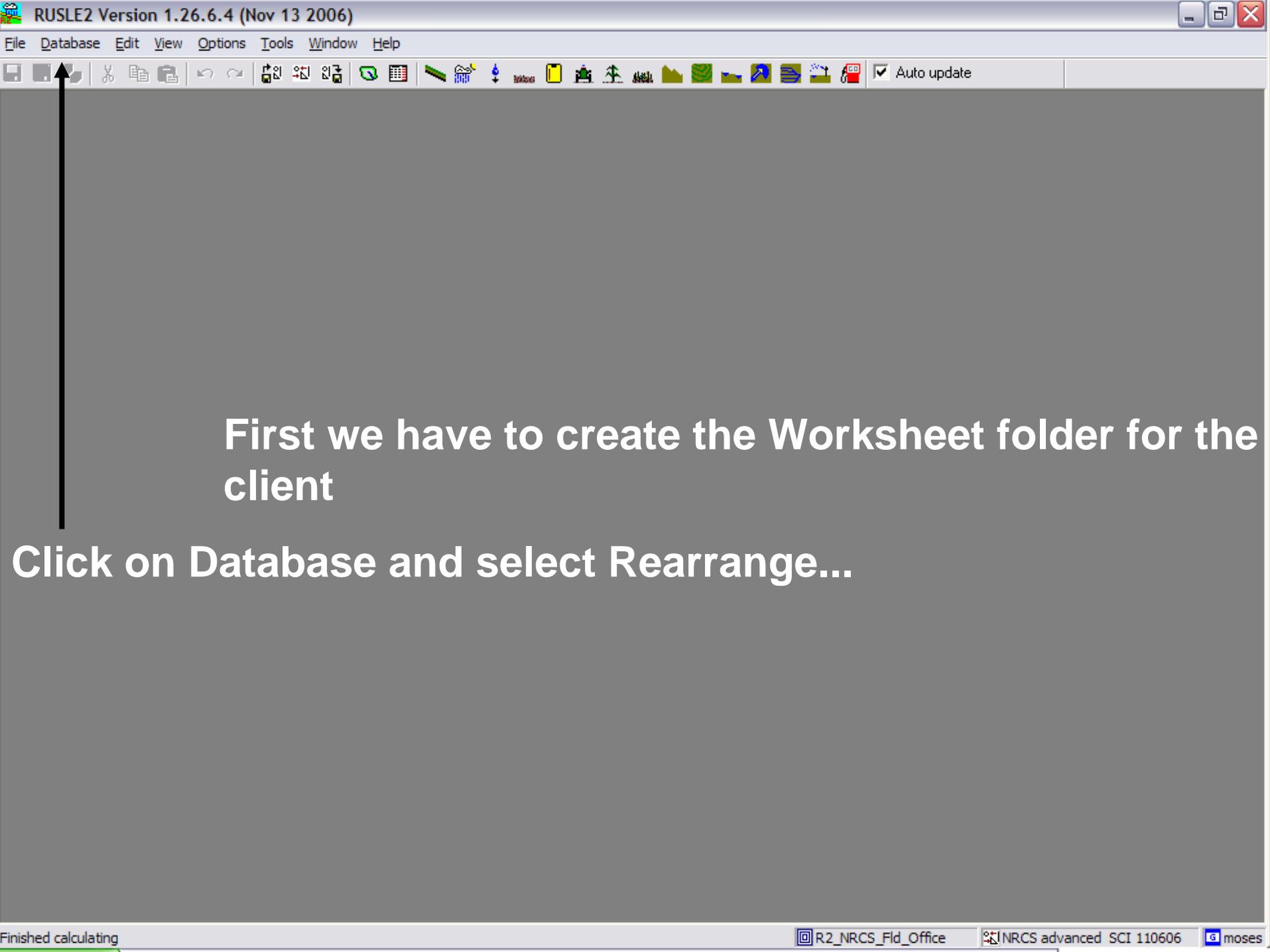


User's Manual
for the RUSLE2 Worksheet
(November, 2006 Version)

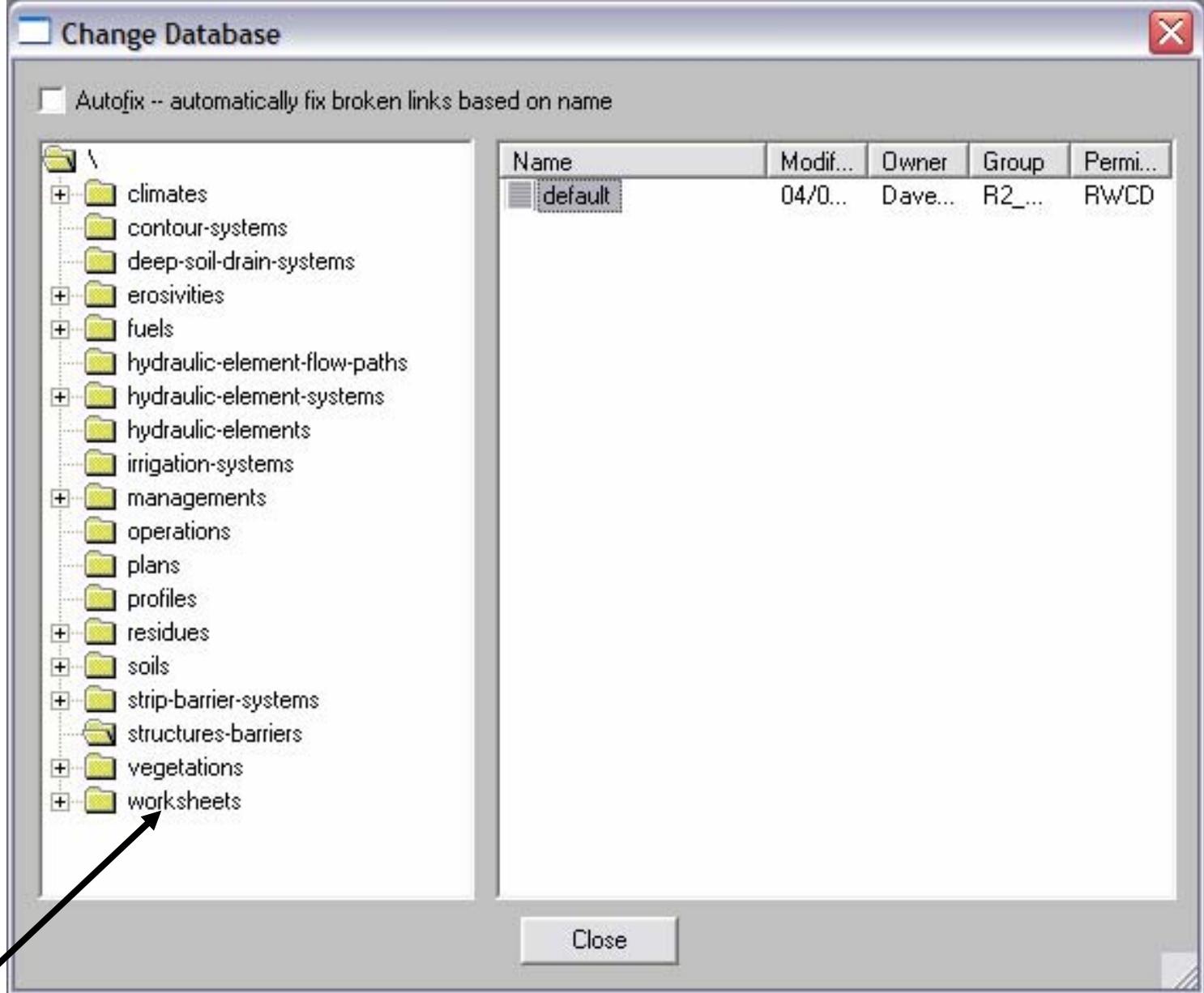
by: Tibor Horvath

NY NRCS Conservation Agronomist (315)477-6530 Tibor.Horvath@ny.usda.gov

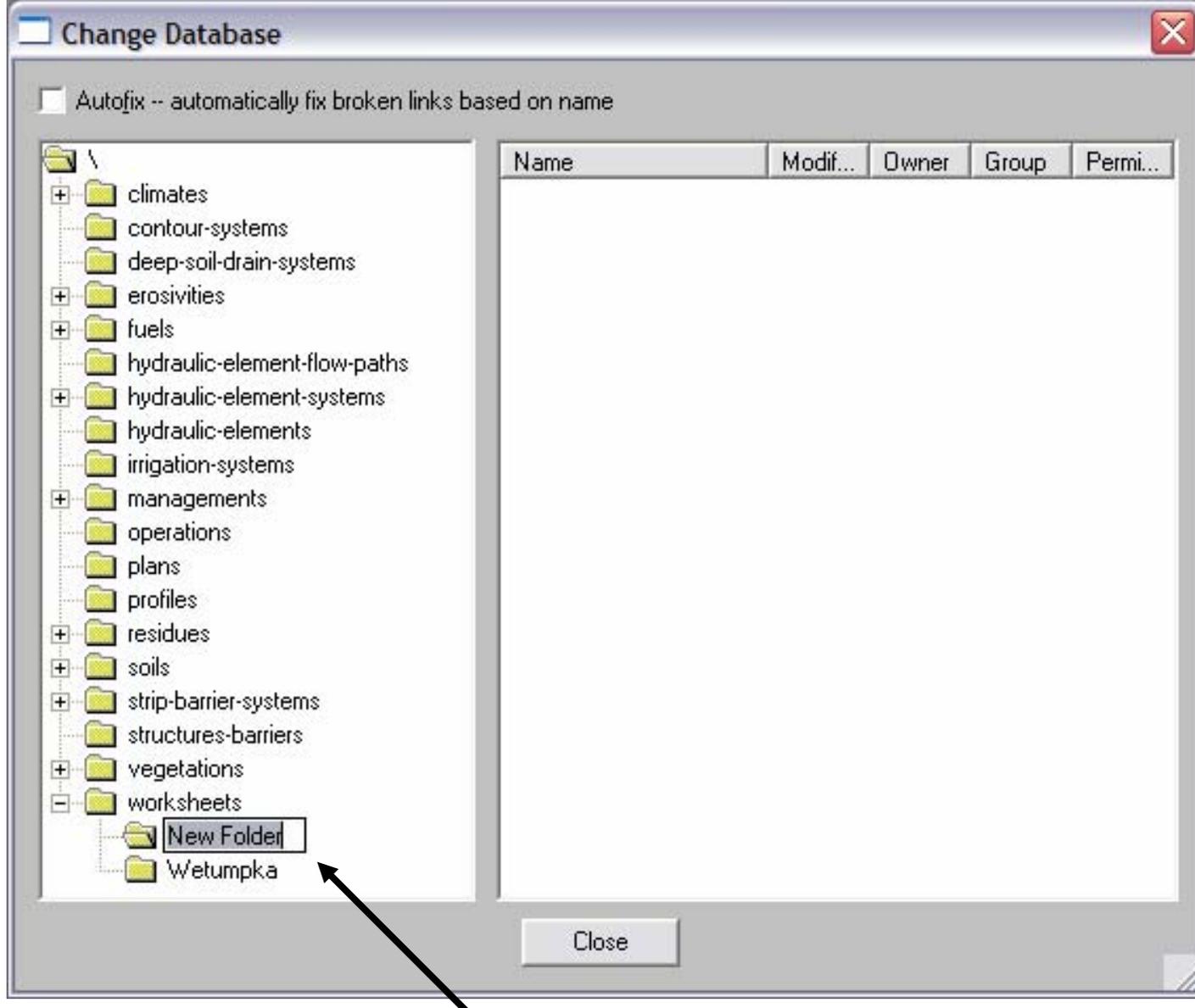


First we have to create the Worksheet folder for the client

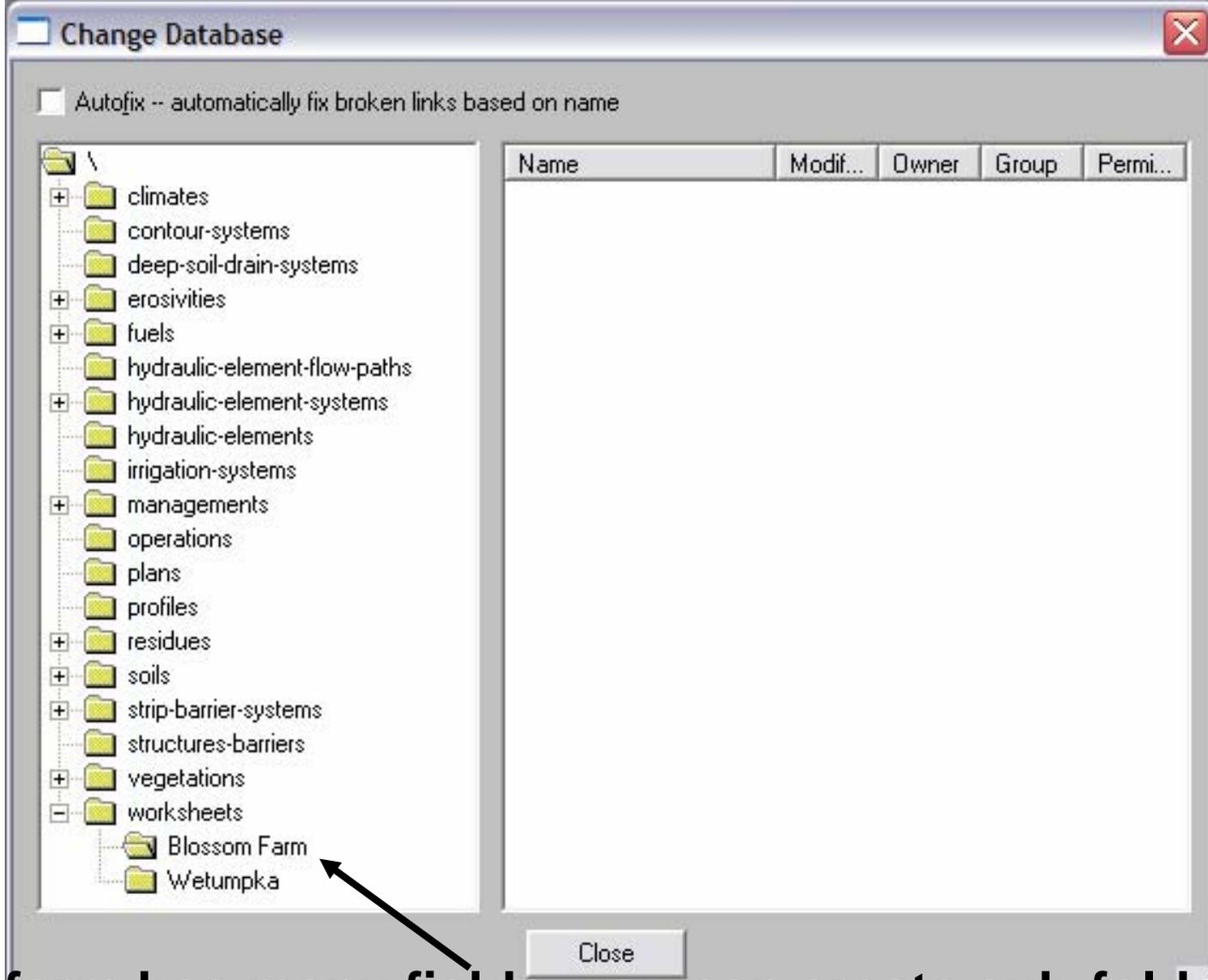
Click on Database and select Rearrange...



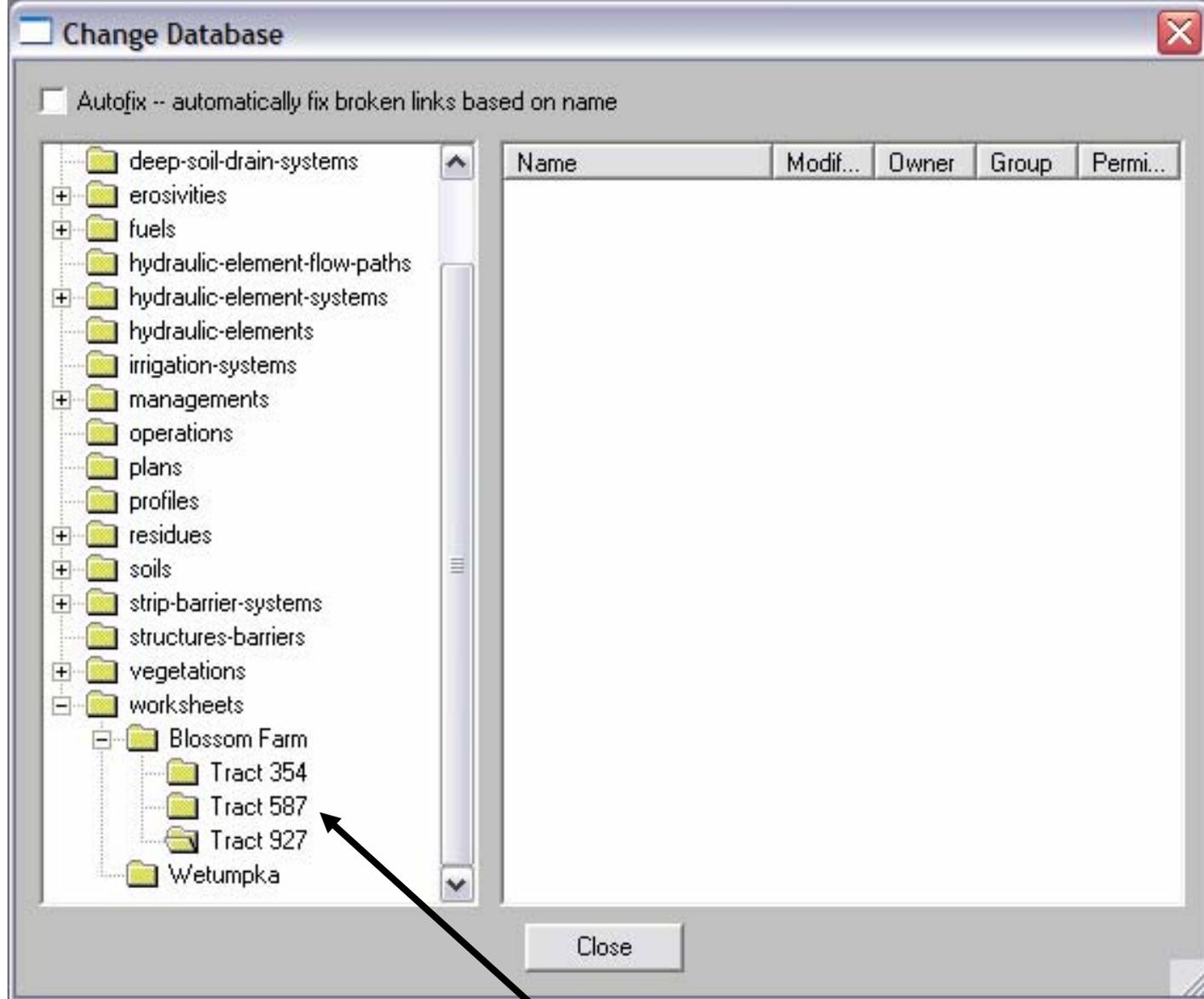
Right mouse click on worksheets and select New Folder



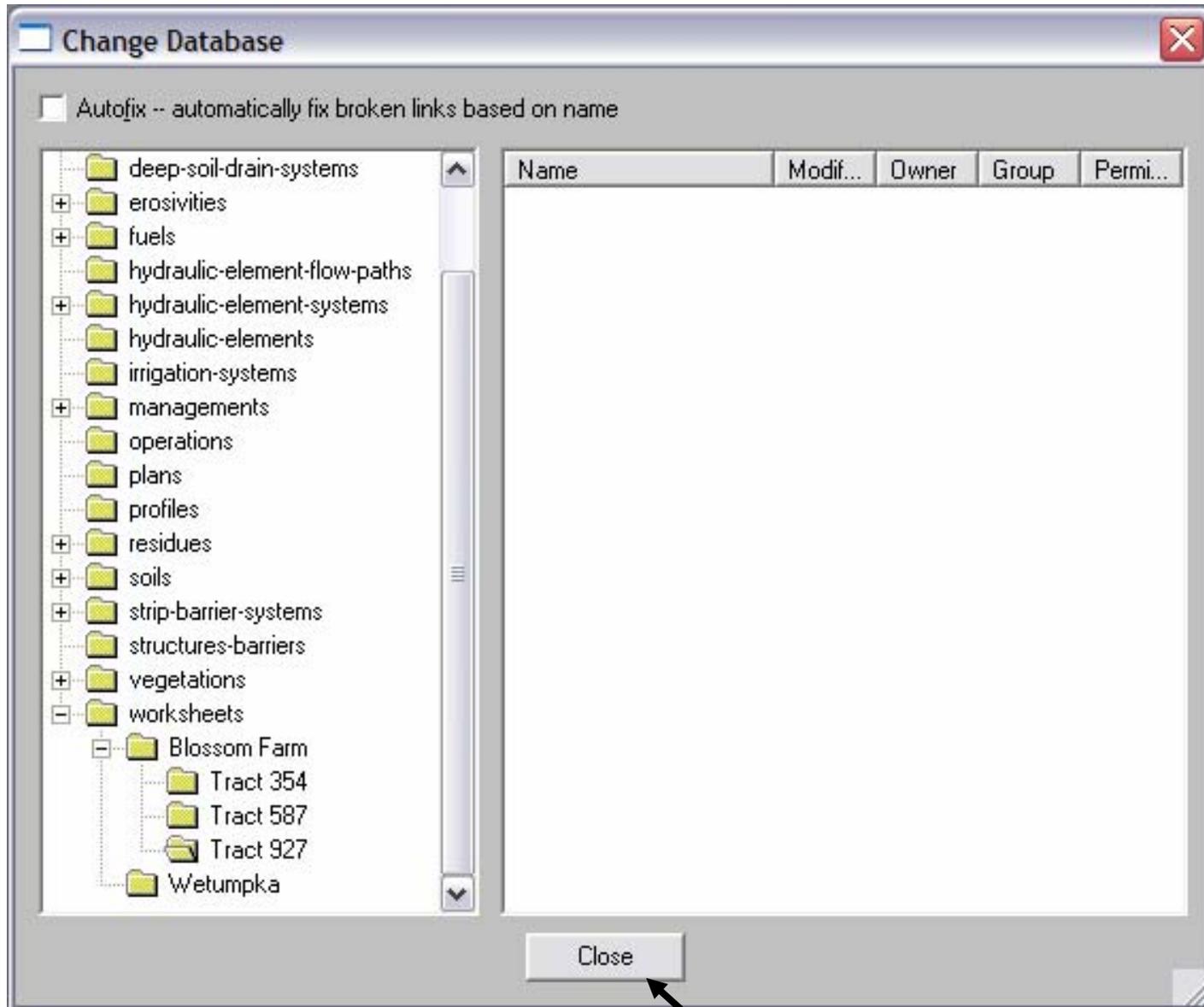
Type in the farm's name or the client's name to overtype the highlighted New Folder



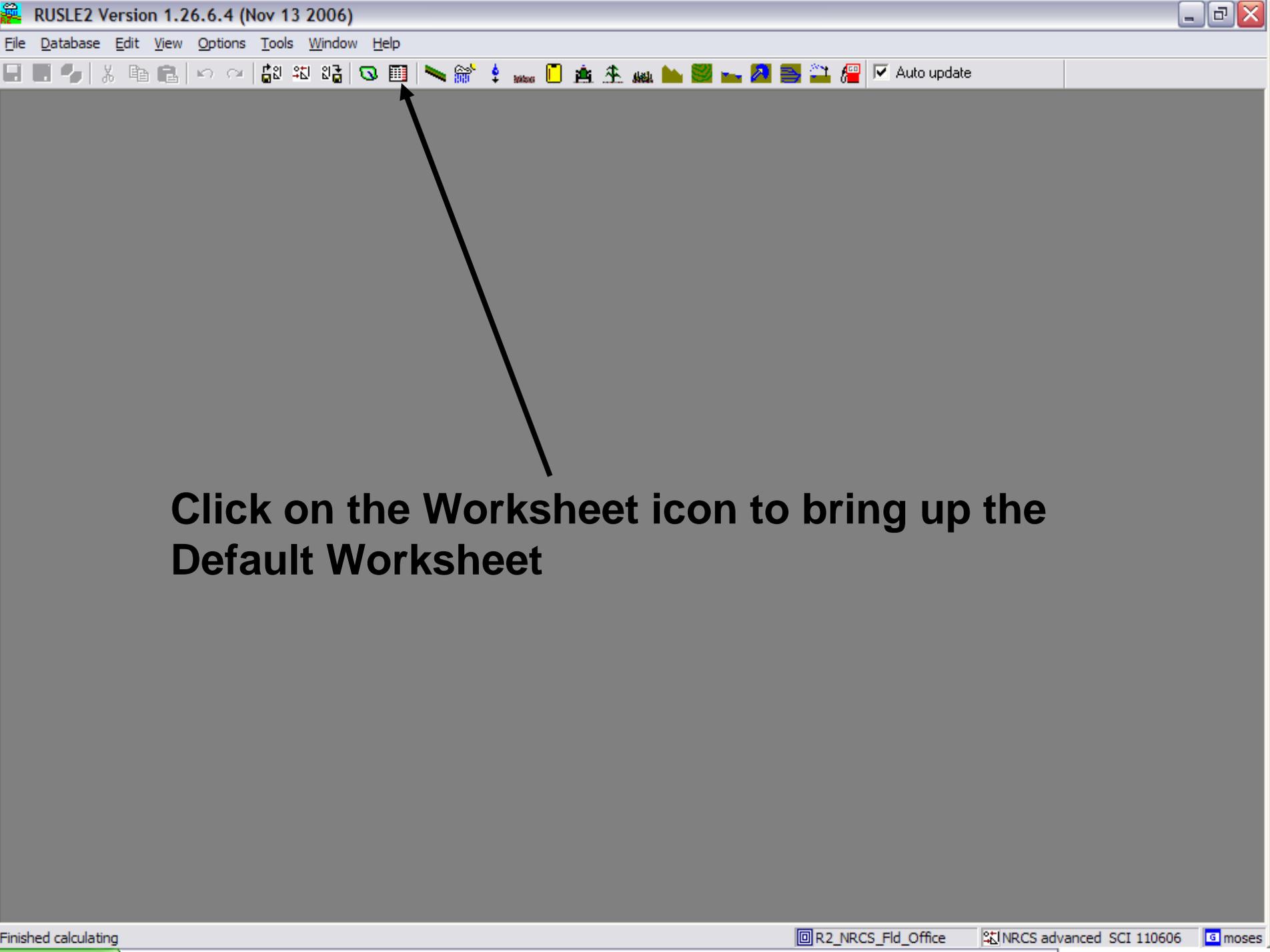
If the farm has many fields, you can create sub-folders for Tracts. Right mouse click on the farm's folder and select New Folder – and rename the new folder for the Tract's number.



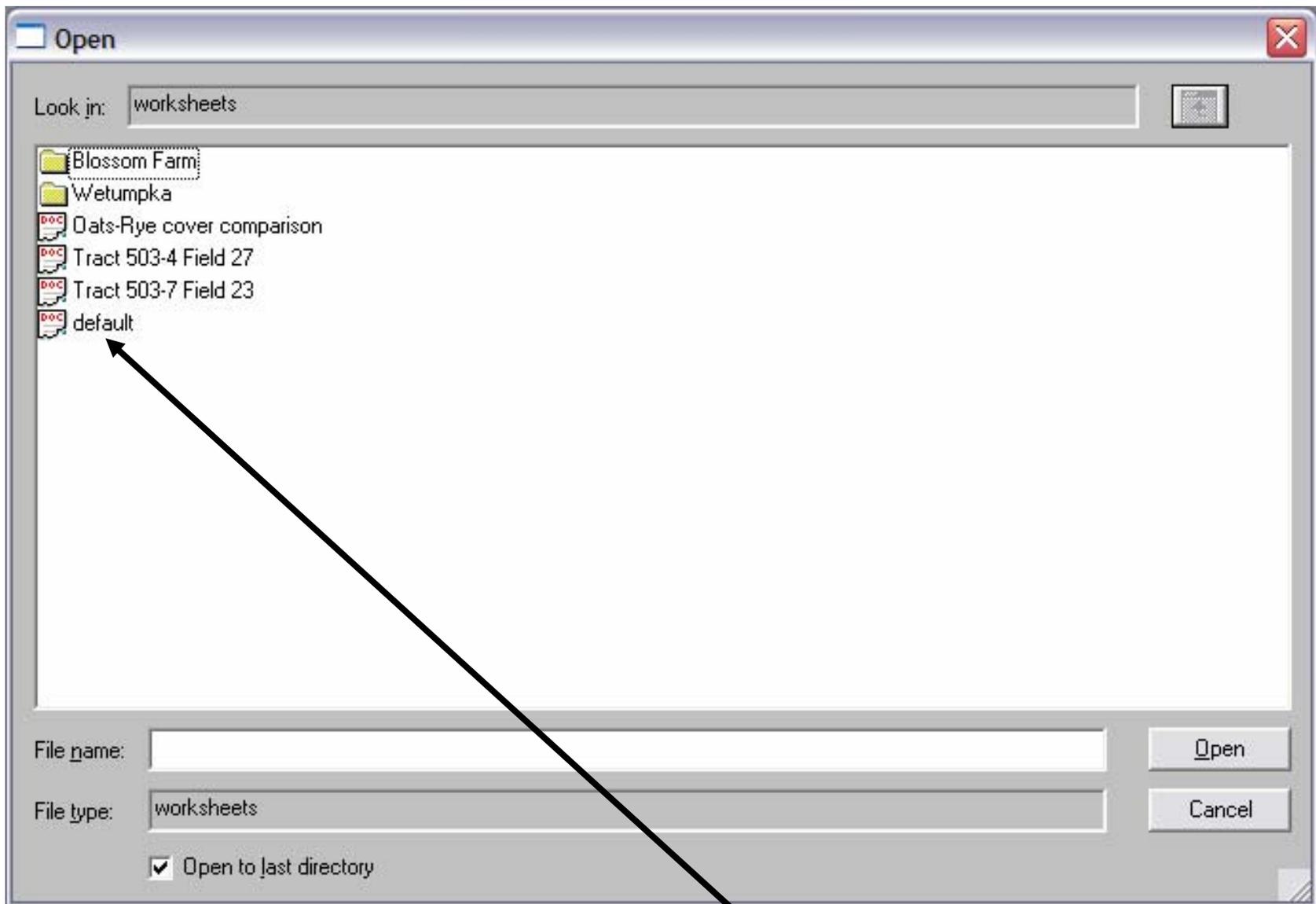
I created three subfolders – one for each Tract on the farm



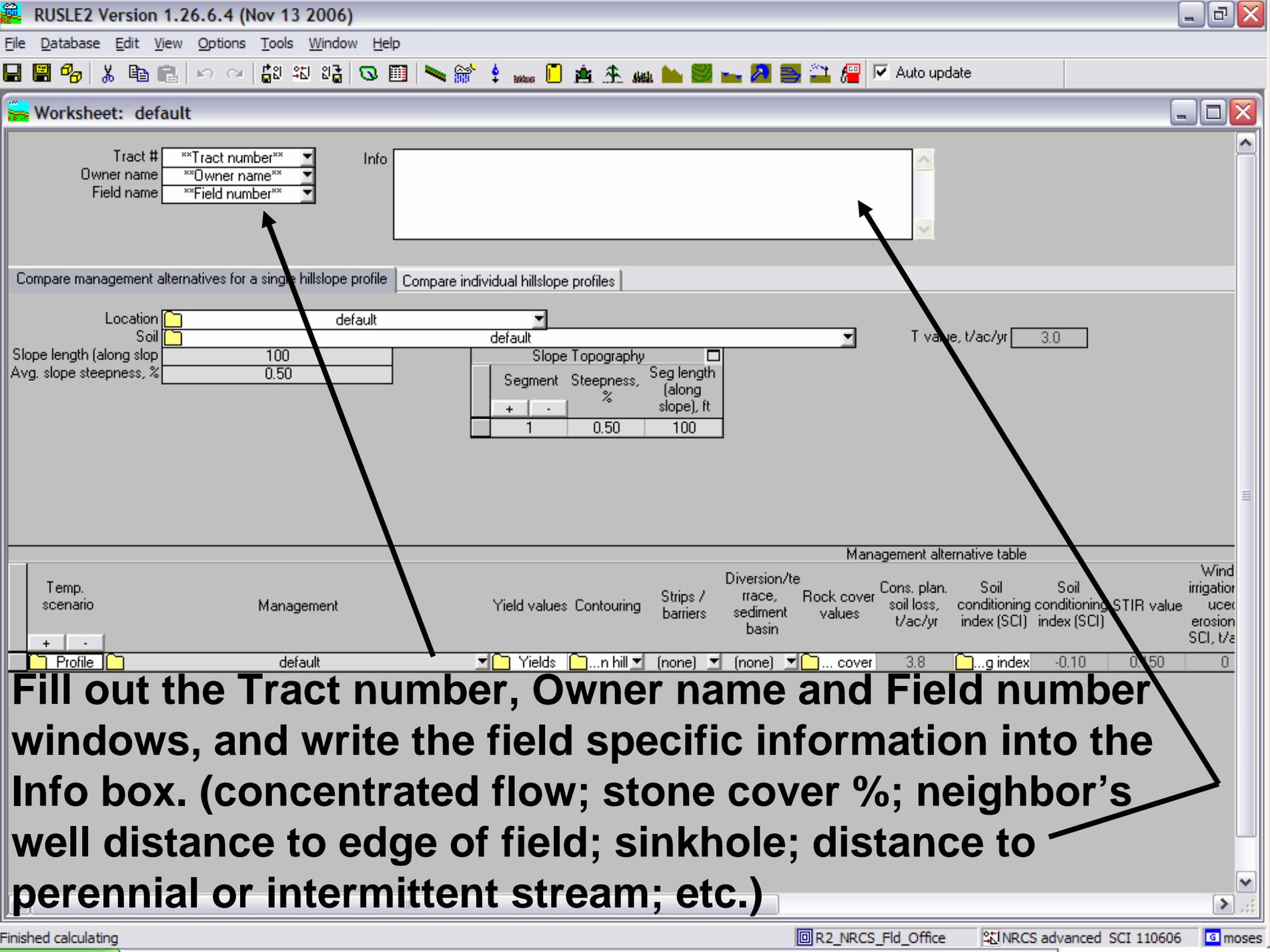
Click on Close



Click on the Worksheet icon to bring up the Default Worksheet



Double click on the default file



Tract # **Tract number**
Owner name **Owner name**
Field name **Field number**

Info

Compare management alternatives for a single hillslope profile | Compare individual hillslope profiles

Location default
Soil default

Slope length (along slope) 100
Avg. slope steepness, % 0.50

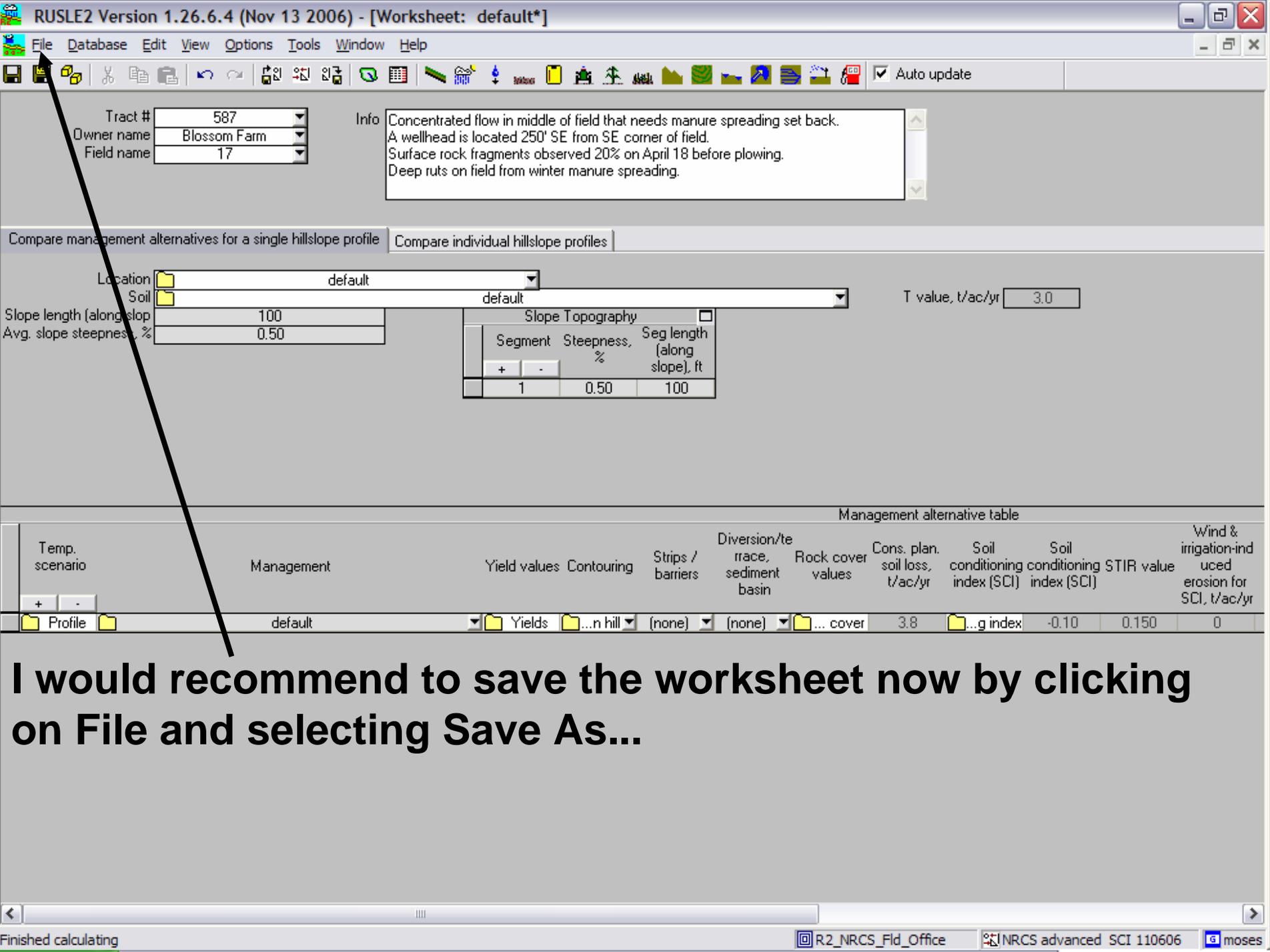
Slope Topography			<input type="checkbox"/>
Segment	Steepness, %	Seg length (along slope), ft	
+ -			
1	0.50	100	

T value, t/ac/yr 3.0

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind irrigation user erosion SCI, t/a
Profile	default	Yields	...n hill	(none)	(none)	... cover	3.8	...g index	-0.10	0.50	0

Fill out the Tract number, Owner name and Field number windows, and write the field specific information into the Info box. (concentrated flow; stone cover %; neighbor's well distance to edge of field; sinkhole; distance to perennial or intermittent stream; etc.)



Tract # 587
Owner name Blossom Farm
Field name 17

Info
Concentrated flow in middle of field that needs manure spreading set back.
A wellhead is located 250' SE from SE corner of field.
Surface rock fragments observed 20% on April 18 before plowing.
Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile | Compare individual hillslope profiles

Location default
Soil default

Slope length (along slope) 100
Avg. slope steepness, % 0.50

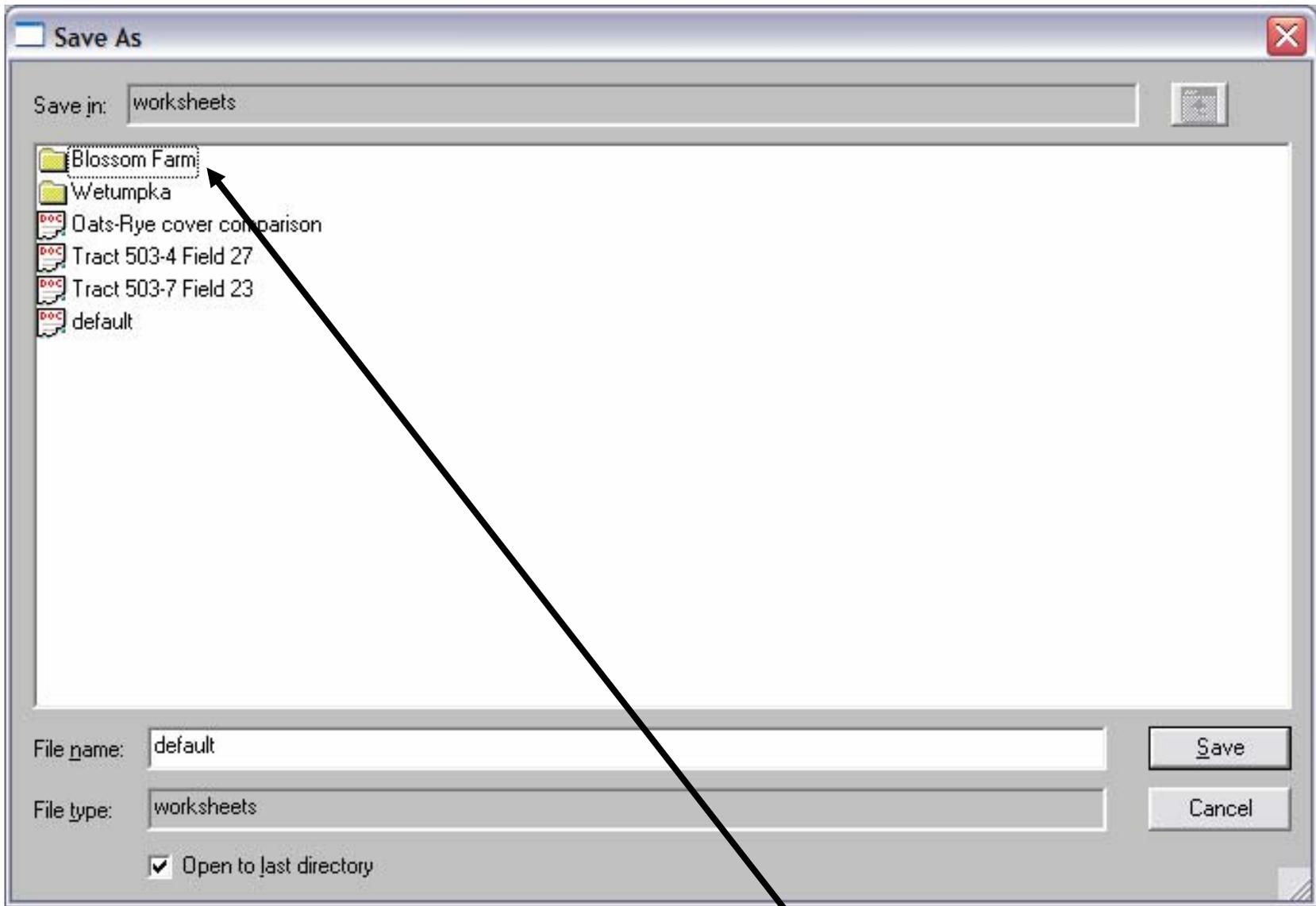
T value, t/ac/yr 3.0

Slope Topography			<input type="checkbox"/>
Segment	Steepness, %	Seg length (along slope), ft	
+	-		
1	0.50	100	

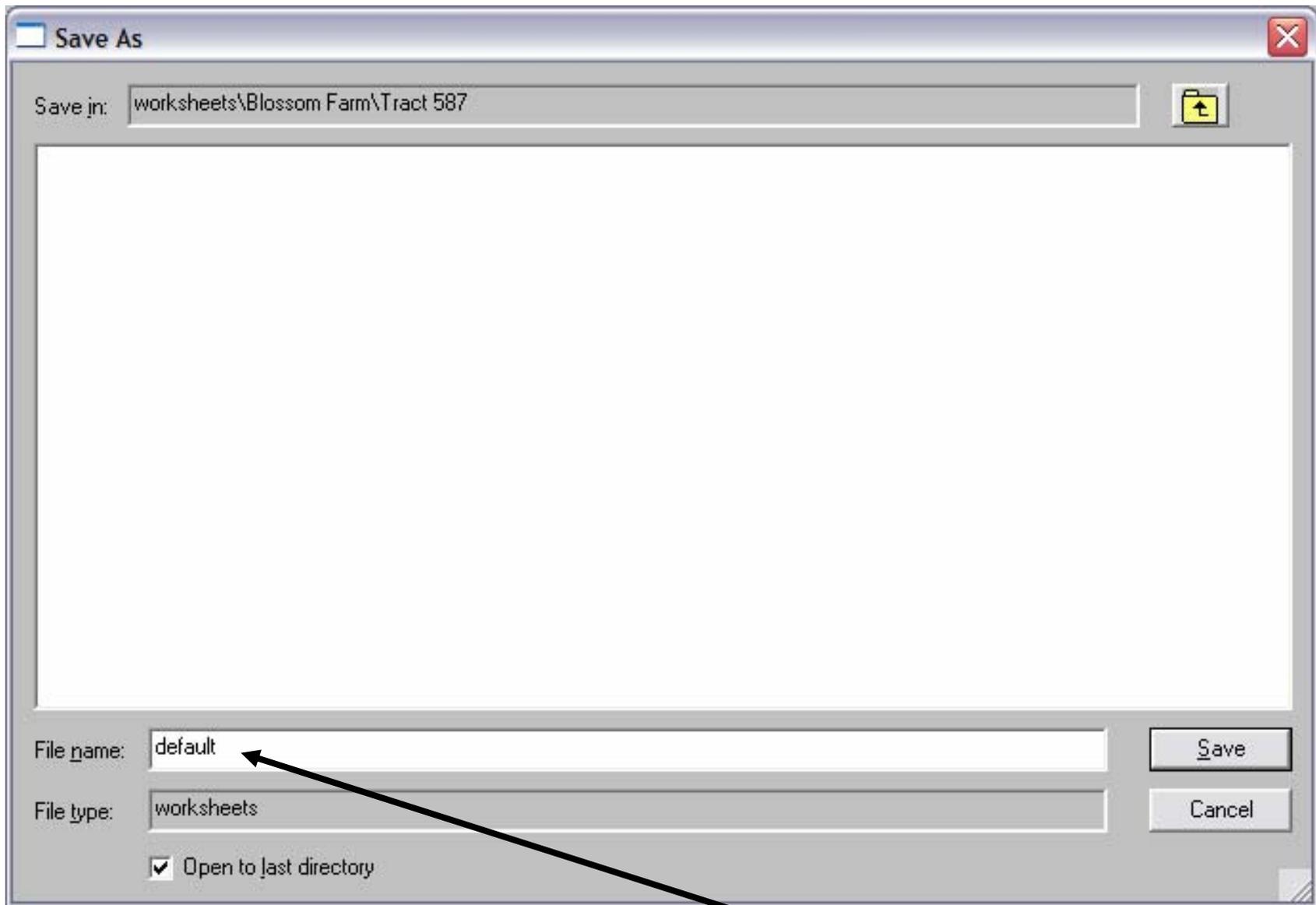
Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
+ -	default	Yields	...n hill	(none)	(none)	... cover	3.8	...g index	-0.10	0.150	0

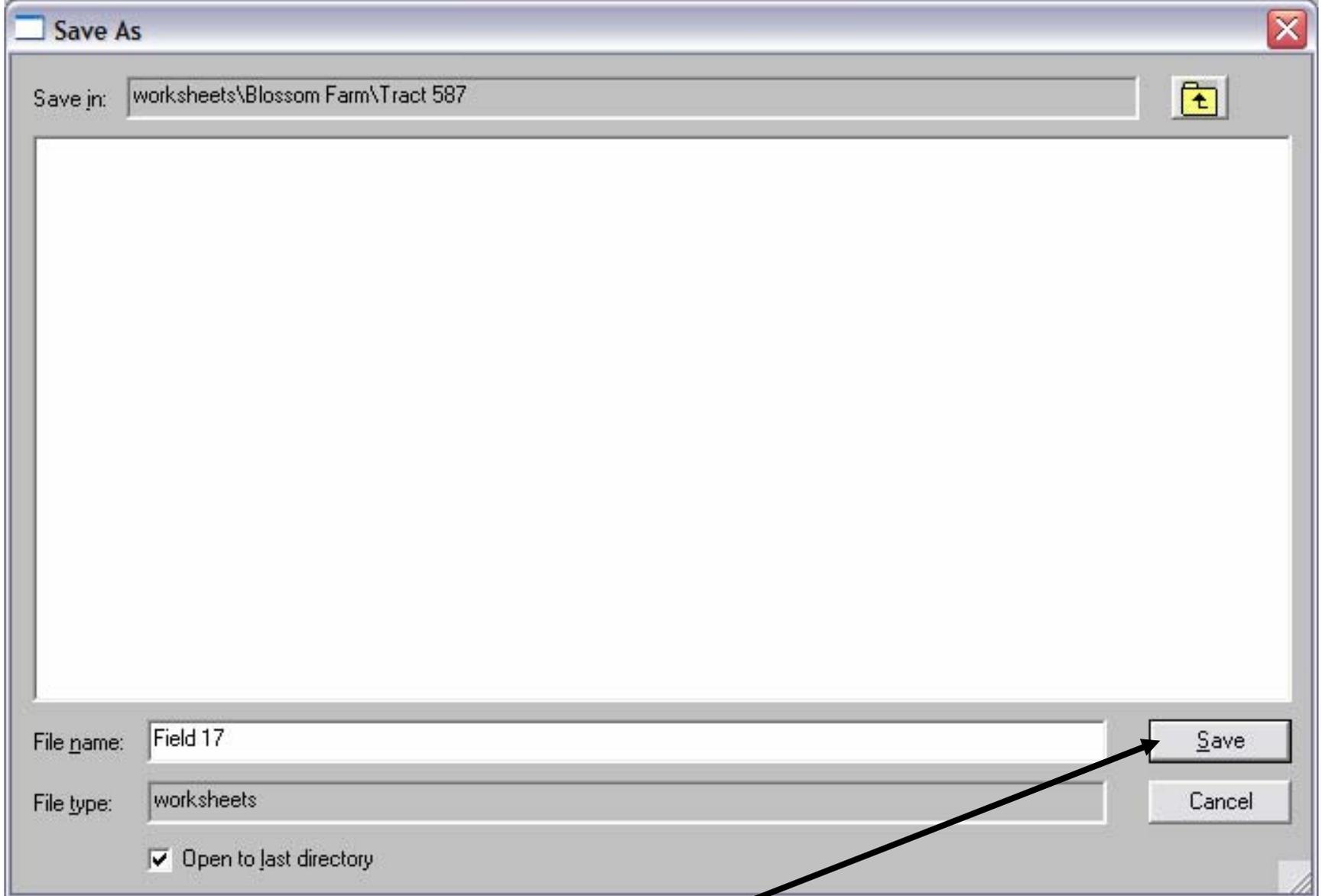
I would recommend to save the worksheet now by clicking on File and selecting Save As...



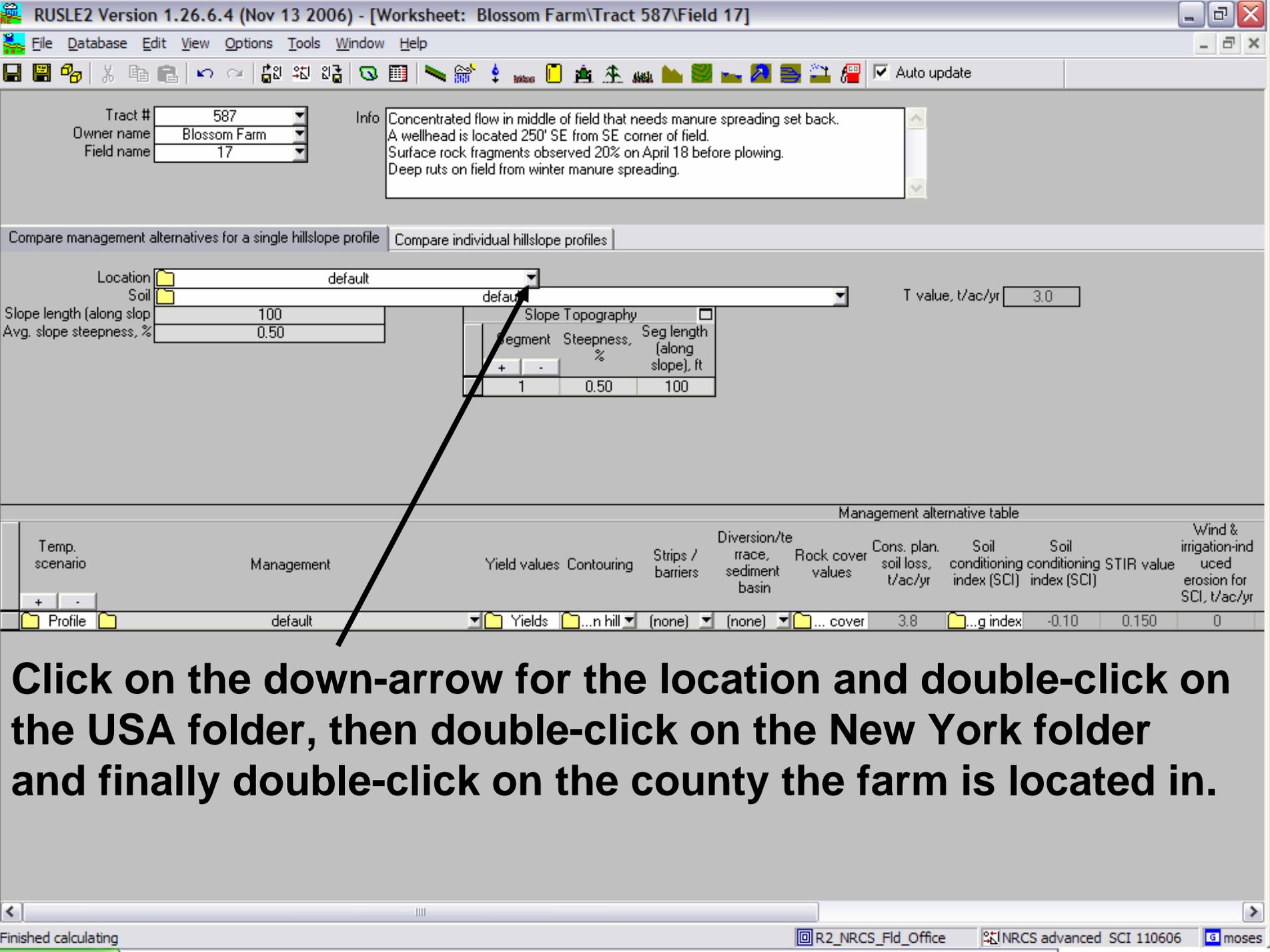
This window will appear. Double click on the Blossom Farm folder, then double click on the Tract 587 folder.



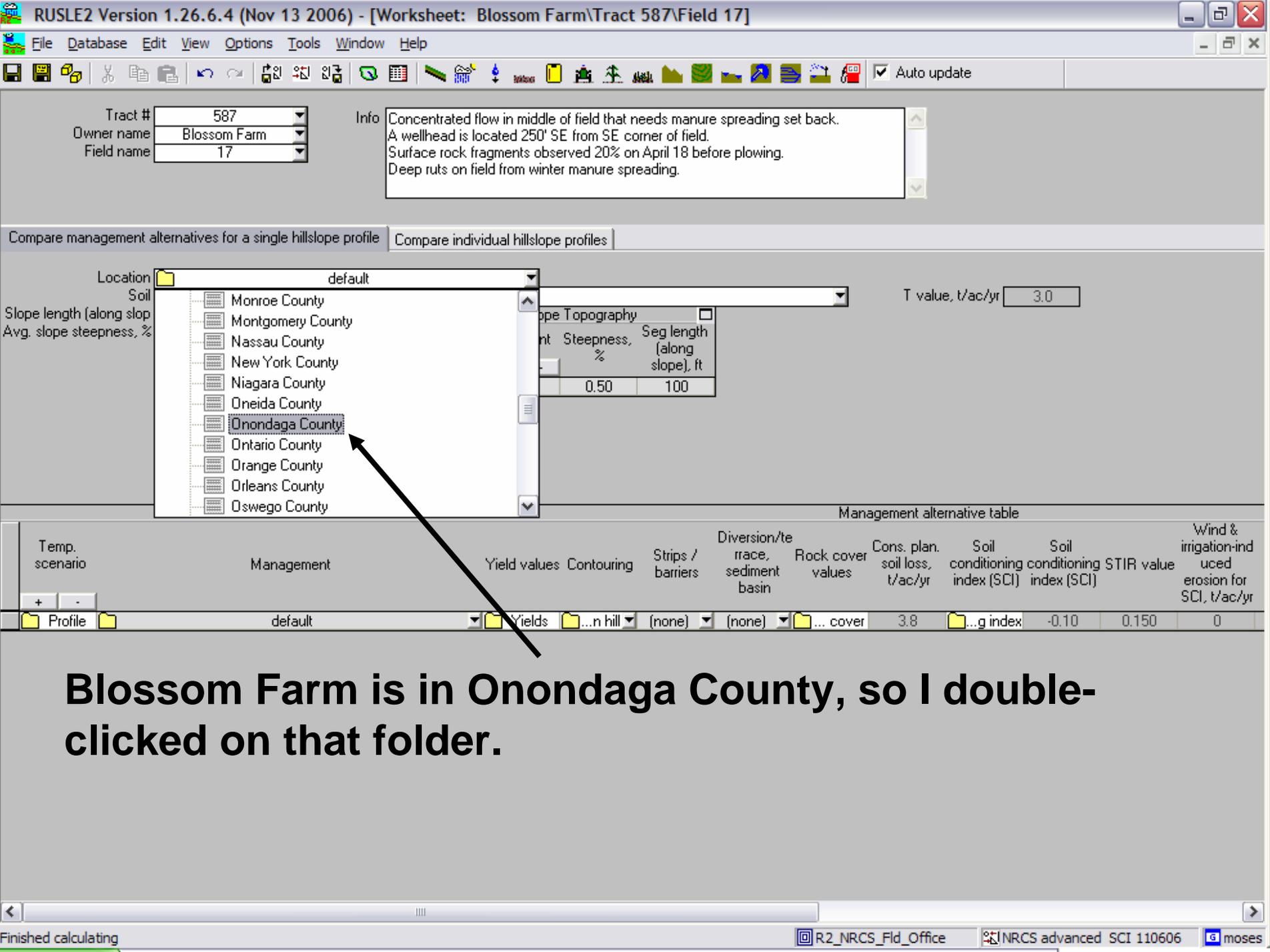
Click into the “File name:” window and give a name for your worksheet by overtyping the default name.



Click on Save



Click on the down-arrow for the location and double-click on the USA folder, then double-click on the New York folder and finally double-click on the county the farm is located in.



Blossom Farm is in Onondaga County, so I double-clicked on that folder.

Tract # 587
Owner name Blossom Farm
Field name 17

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A wellhead is located 250' SE from SE corner of field.
Surface rock fragments observed 20% on April 18 before plowing.
Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
Soil default
Slope length (along slope) 100
Avg. slope steepness, % 0.50
Slope Topography
Segment Steepness, % Seg length (along slope), ft
+ -
1 0.50 100

T value, t/ac/yr 3.0

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
+ - Profile	default	Yields	...n hill	(none)	(none)	... cover	1.0	...g index	0.12	0.150	0

Click on the down-arrow in the Soil window and double click on the Onondaga Co folder

Tract # 587
Owner name Blossom Farm
Field name 17

Info
Concentrated flow in middle of field that needs manure spreading set back.
A wellhead is located 250' SE from SE corner of field.
Surface rock fragments observed 20% on April 18 before plowing.
Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
Soil default
Slope length (along slope) Avg. slope steepness, %

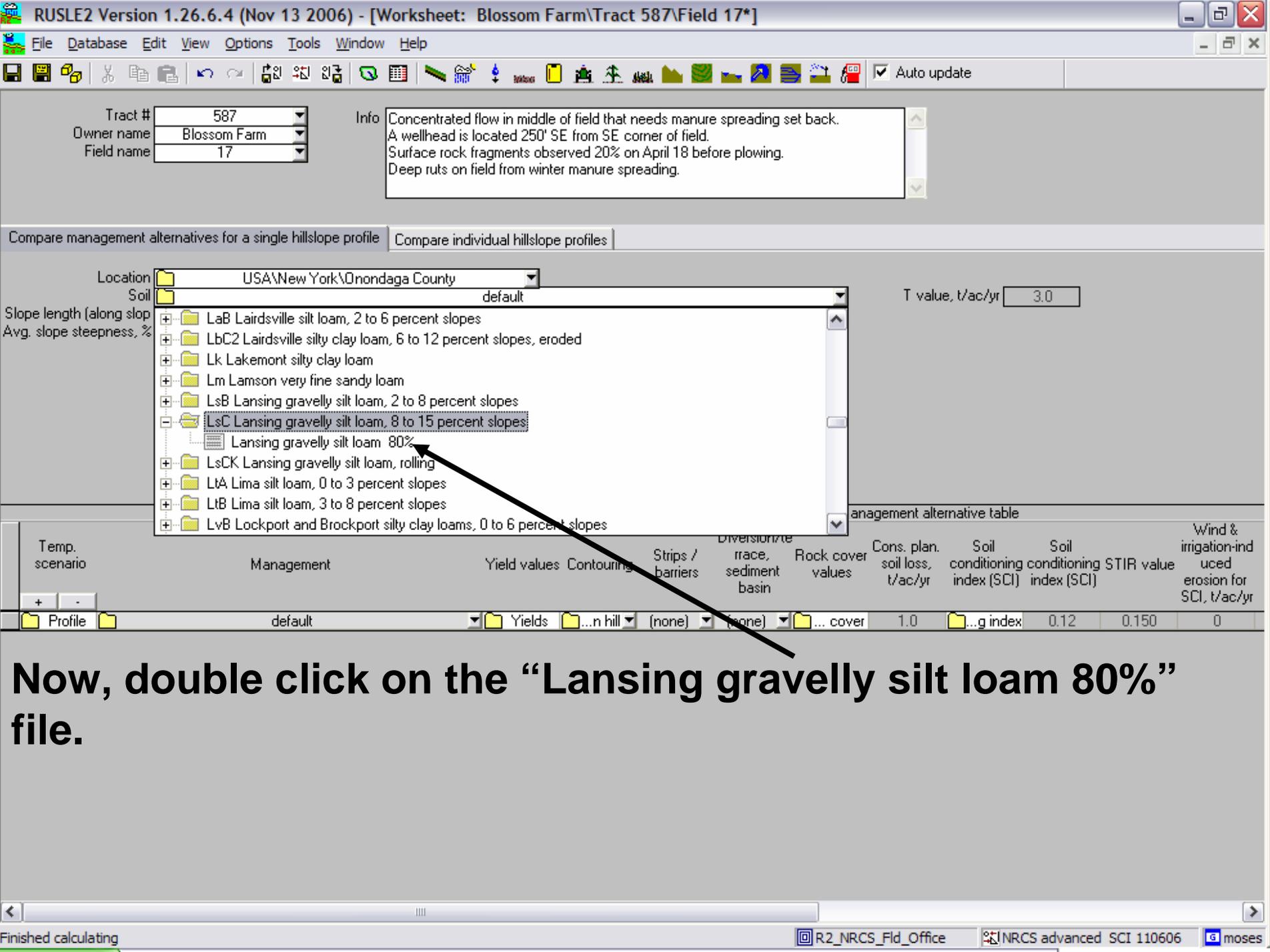
- Onondaga Co
- AIA Alton gravelly fine sandy loam, 0 to 3 percent slopes
- AIB Alton gravelly fine sandy loam, 3 to 8 percent slopes
- AIC Alton gravelly fine sandy loam, rolling
- AnB Angola-Darien silt loams, 0 to 6 percent slopes
- AnC Angola-Darien silt loams, 6 to 12 percent slopes
- AoA Appleton loam, 0 to 3 percent slopes
- ApA Appleton channery silt loam, 0 to 3 percent slopes
- ApB Appleton channery silt loam, 3 to 8 percent slopes
- ArB Arkport very fine sandy loam, 2 to 6 percent slopes
- ArC Arkport very fine sandy loam, rolling

T value, t/ac/yr 3.0

management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/face, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
Profile	default	Yields	...n hill	(none)	(none)	... cover	1.0	...g index	0.12	0.150	0

Scroll down and find LsC Lansing soil, and double click on it.



Tract # 587
Owner name Blossom Farm
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Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile | Compare individual hillslope profiles

Location USA\New York\Onondaga County

T value, t/ac/yr 3.0

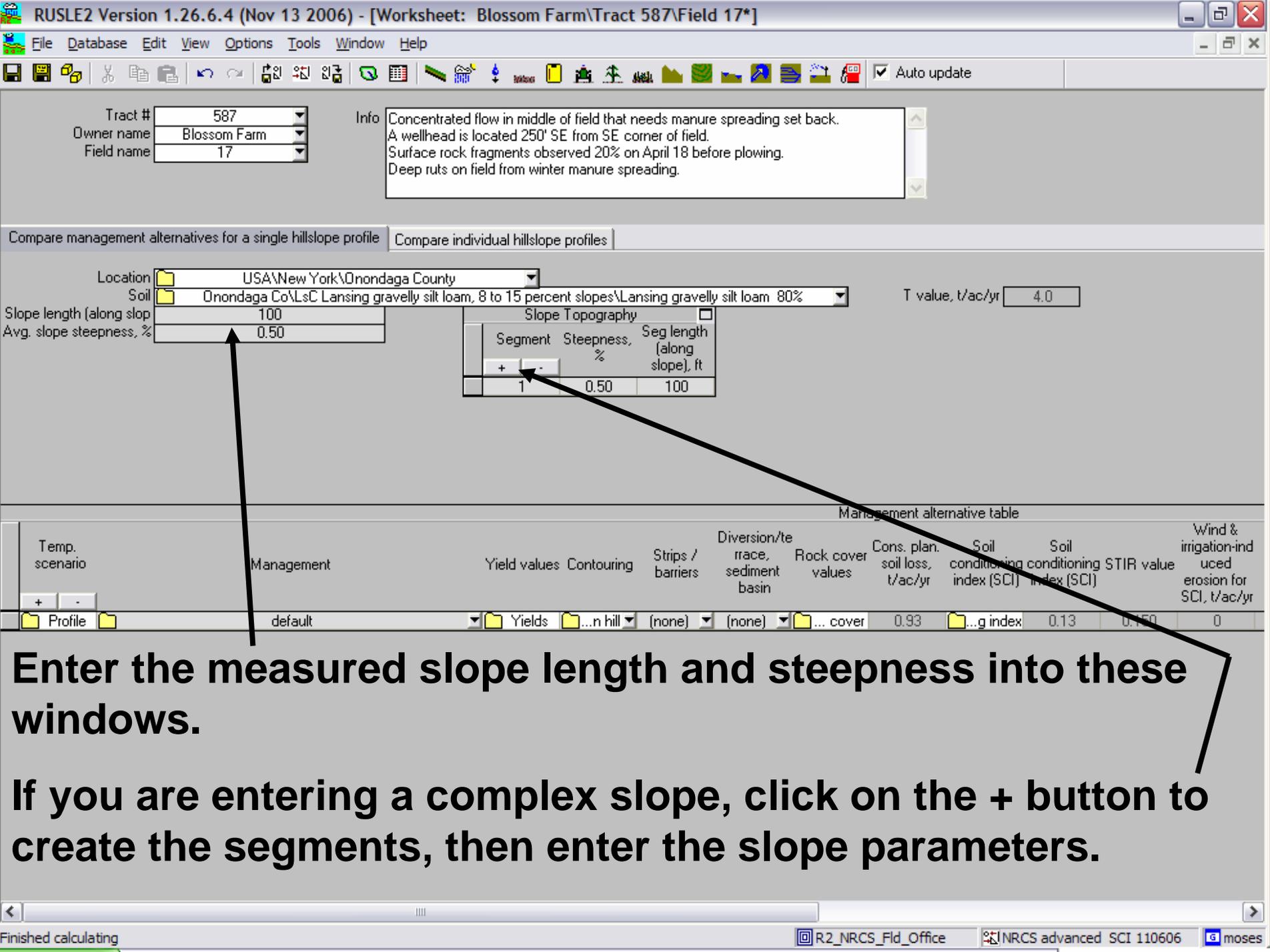
Slope length (along slope)
Avg. slope steepness, %

- default
- LaB Lairdsville silt loam, 2 to 6 percent slopes
- LbC2 Lairdsville silty clay loam, 6 to 12 percent slopes, eroded
- Lk Lakemont silty clay loam
- Lm Lamson very fine sandy loam
- LsB Lansing gravelly silt loam, 2 to 8 percent slopes
- LsC Lansing gravelly silt loam, 8 to 15 percent slopes**
- Lansing gravelly silt loam 80%
- LsCK Lansing gravelly silt loam, rolling
- LtA Lima silt loam, 0 to 3 percent slopes
- LtB Lima silt loam, 3 to 8 percent slopes
- LvB Lockport and Brockport silty clay loams, 0 to 6 percent slopes

management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/trace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
Profile	default	Yields	...n hill	(none)	(none)	... cover	1.0	...g index	0.12	0.150	0

Now, double click on the "Lansing gravelly silt loam 80%" file.



Tract # 587
Owner name Blossom Farm
Field name 17

Info
Concentrated flow in middle of field that needs manure spreading set back.
A wellhead is located 250' SE from SE corner of field.
Surface rock fragments observed 20% on April 18 before plowing.
Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
Soil Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%

T value, t/ac/yr 4.0

Slope length (along slope) 100
Avg. slope steepness, % 0.50

Slope Topography		
Segment	Steepness, %	Seg length (along slope), ft
+ -		
1	0.50	100

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr	
+ -	Profile	default	Yields	...n hill	(none)	(none)	... cover	0.93	...g index	0.13	0.150	0

Enter the measured slope length and steepness into these windows.

If you are entering a complex slope, click on the + button to create the segments, then enter the slope parameters.

Tract #
 Owner name
 Field name

Info
 Concentrated flow in middle of field that needs manure spreading set back.
 A wellhead is located 250' SE from SE corner of field.
 Surface rock fragments observed 20% on April 18 before plowing.
 Deep ruts on field from winter manure spreading.

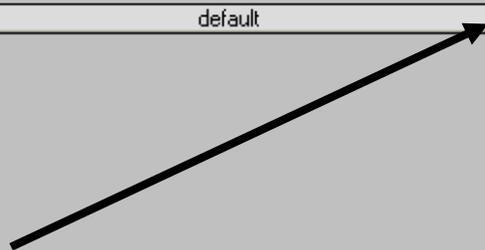
Compare management alternatives for a single hillslope profile

Location
 Soil
 Slope length (along slope)
 Avg. slope steepness, %
 T value, t/ac/yr

Slope Topography		
Segment	Steepness, %	Seg length (along slope), ft
<input type="button" value="+"/>	<input type="button" value="-"/>	
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
<input type="button" value="+"/> Profile <input type="button" value="-"/>	default	<input type="button" value="+"/> Yields <input type="button" value="-"/>	<input type="button" value="+"/> ...n hill <input type="button" value="-"/>	(none)	(none)	<input type="button" value="+"/> ... cover <input type="button" value="-"/>	23	<input type="button" value="+"/> ...g index <input type="button" value="-"/>	-1.6	0.150	0



Click on the down-arrow to find the previously built crop rotation.

Tract # 587
 Owner name Blossom Farm
 Field name 17

Info
 Concentrated flow in middle of field that needs manure spreading set back.
 A wellhead is located 250' SE from SE corner of field.
 Surface rock fragments observed 20% on April 18 before plowing.
 Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
 Soil Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
 Slope length (along slop) 150
 Avg. slope steepness, % 11
 T value, t/ac/yr 4.0

Slope Topography		
Segment	Steepness, %	Seg length (along slope), ft
+	-	
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
Profile	default	Yields	...n hill	(none)	(none)	... cover	23	...g index	-1.6	0.150	0

- CMZ 04.1
- CMZ 59
- CMZ 65
- Strip/Barrier Managements
- default

Double click on CMZ 04.1 folder, then double click on the c. Other Local Mgt. Records folder, and finally on the Blossom Farm folder.

Tract # 587
 Owner name Blossom Farm
 Field name 17

Info
 Concentrated flow in middle of field that needs manure spreading set back.
 A wellhead is located 250' SE from SE corner of field.
 Surface rock fragments observed 20% on April 18 before plowing.
 Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
 Soil Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
 Slope length (along slope) 150
 Avg. slope steepness, % 11
 T value, t/ac/yr 4.0
 Slope Topography

Segment	Steepness, %	Seg length (along slope), ft
+	-	
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind irrigator erosion SCI, t/a
Profile	default	Yields	...n hill	(none)	(none)	... cover	23	...g index	-1.6	0.150	0

- CMZ 04.1
 - a. Single Year/Single Crop Templates
 - b. Multi-year Rotation Templates
 - c. Other Local Mgt Records
 - Blossom Farm
 - Cornsilage3 Hay 4 moldboard w/manure
 - Cornsilage4 Hay 4 moldboard w/manure
 - Cornsilage4 Hay 5 moldboard w/manure
 - Wetumpka
 - COGSOYCOGSOYWHT nt
 - bla-bla



Double click on the rotation belongs to this field

Worksheet: Blossom Farm\Tract 587\Field 17*

Tract # 587
 Owner name Blossom Farm
 Field name 17

Info
 Concentrated flow in middle of field that needs manure spreading set back.
 A wellhead is located 250' SE from SE corner of field.
 Surface rock fragments observed 20% on April 18 before plowing.
 Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
 Soil Onondaga Co\LSL Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%

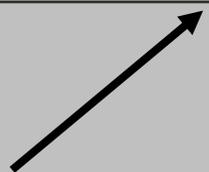
T value, t/ac/yr 4.0

Slope length (along slope) 150
 Avg. slope steepness, % 11

Slope Topography		
Segment	Steepness, %	Seg length (along slope), ft
+ -		
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind irrigation erosion SCI, t/a	
+ -	Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	...n hill	(none)	(none)	... cover	7.7	...g index	-0.19	71.9	0



Click on the down-arrow to enter the row gradient measured on the field.

Worksheet: Blossom Farm\Tract 587\Field 17*

Tract # 587
 Owner name Blossom Farm
 Field name 17

Info
 Concentrated flow in middle of field that needs manure spreading set back.
 A wellhead is located 250' SE from SE corner of field.
 Surface rock fragments observed 20% on April 18 before plowing.
 Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
 Soil Onondaga Co\LSL Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%

T value, t/ac/yr 4.0

Slope length (along slope) 150
 Avg. slope steepness, % 11

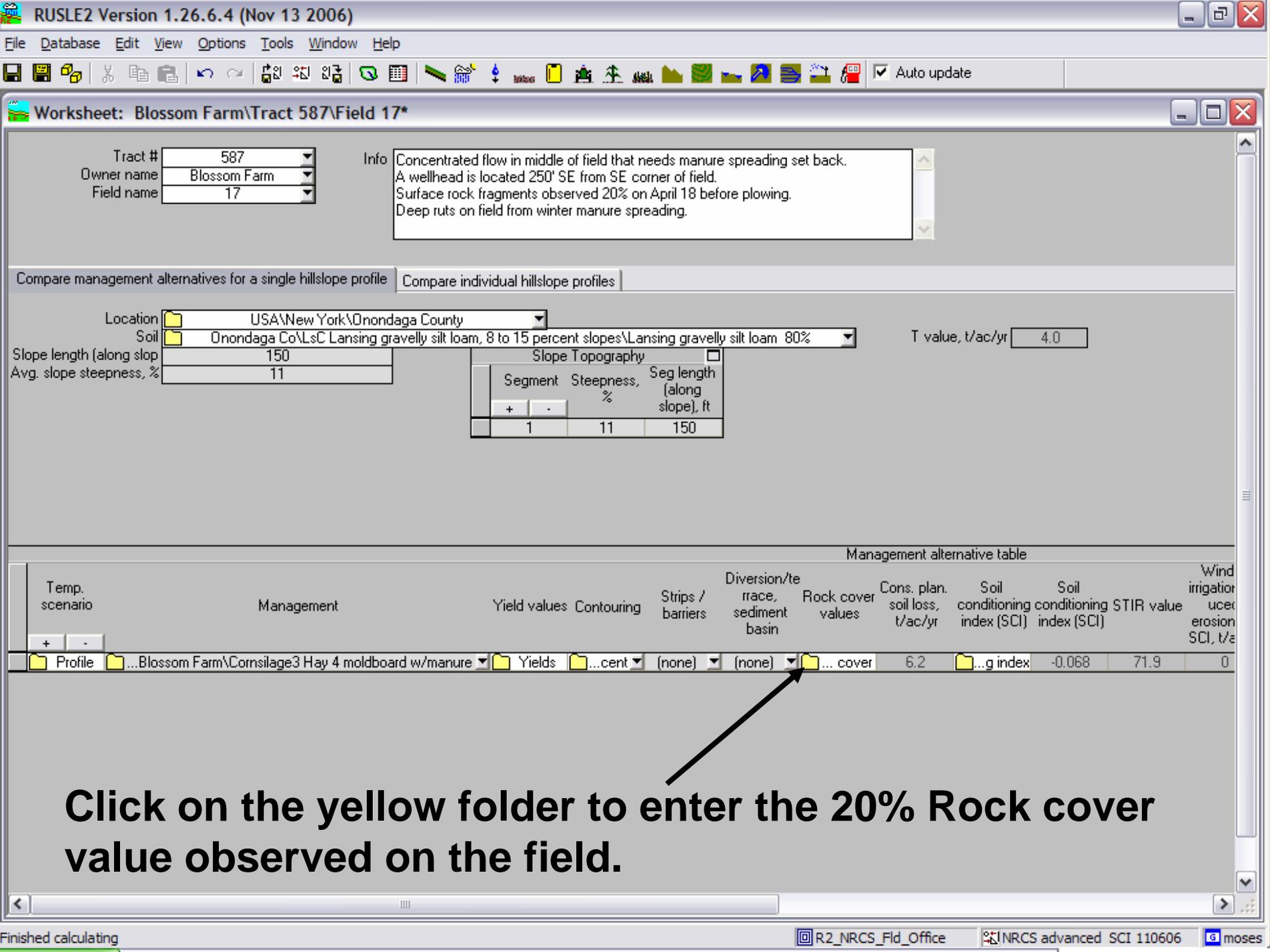
Slope Topography		
Segment	Steepness, %	Seg length (along slope), ft
+ -		
1	11	150

Management alternative table

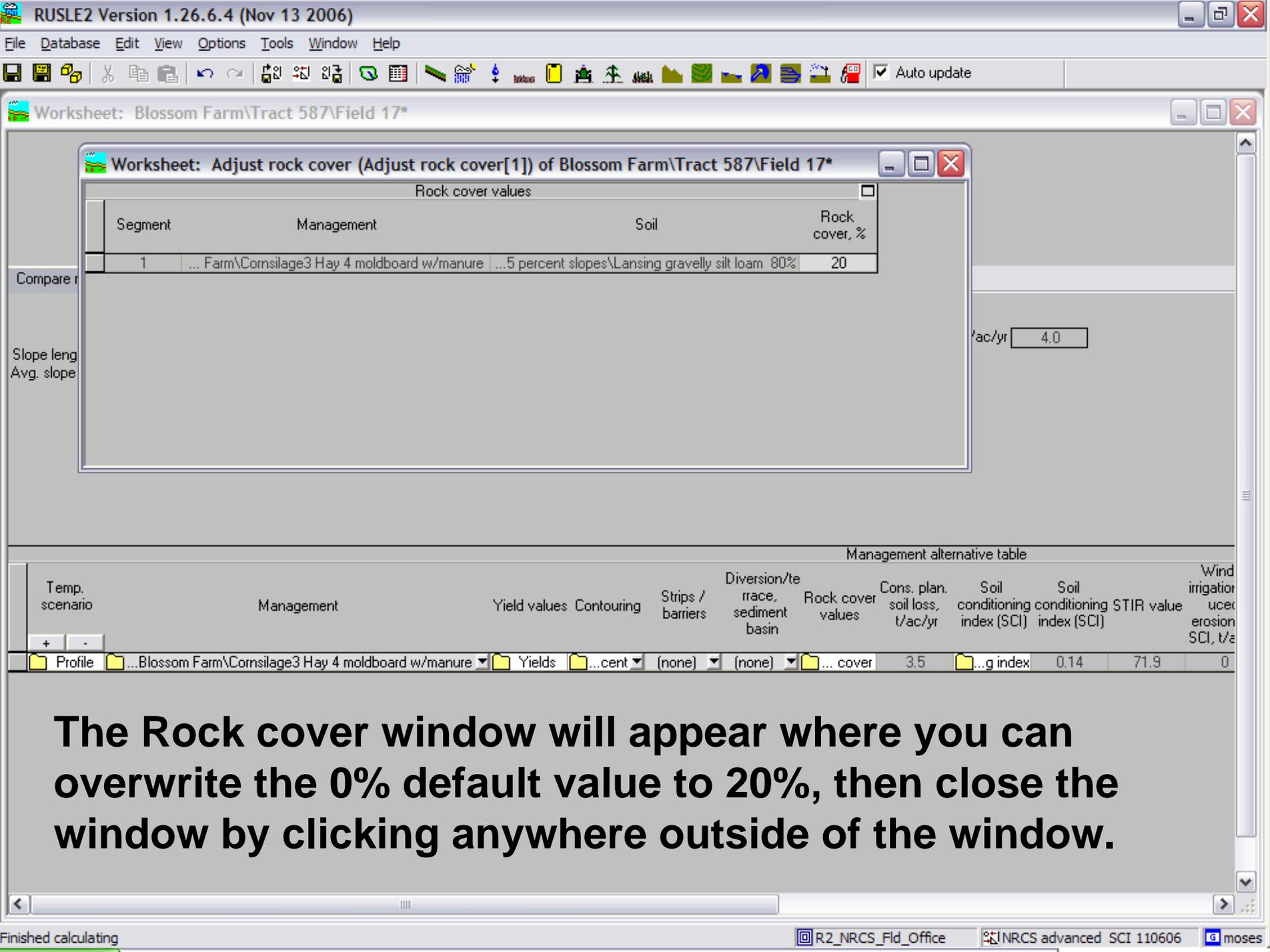
Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind irrigator user erosion SCI, t/a	
+ -	Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	...n hill	(none)	(none)	... cover	7.7	...g index	-0.19	71.9	0

- b. absolute row grade 0.2 percent
- b. absolute row grade 0.25 percent
- b. absolute row grade 0.3 percent
- b. absolute row grade 0.4 percent
- b. absolute row grade 0.5 percent
- b. absolute row grade 0.6 percent
- b. absolute row grade 0.75 percent
- b. absolute row grade 0.8 percent
- b. absolute row grade 1 percent**
- b. absolute row grade 2 percent

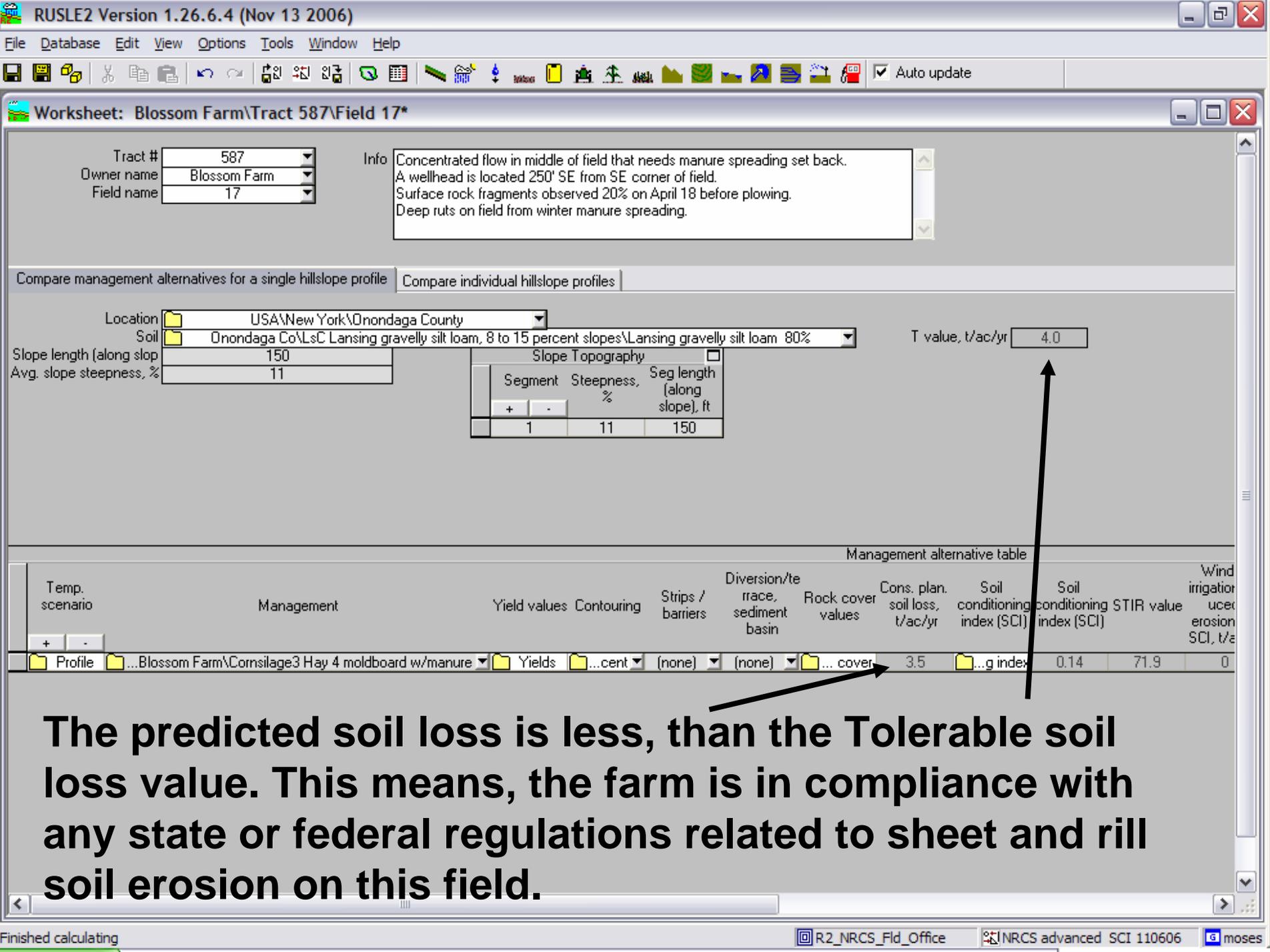
I measured 1% during my field walks, so I selected and double clicked on "absolute row grade 1 percent file".

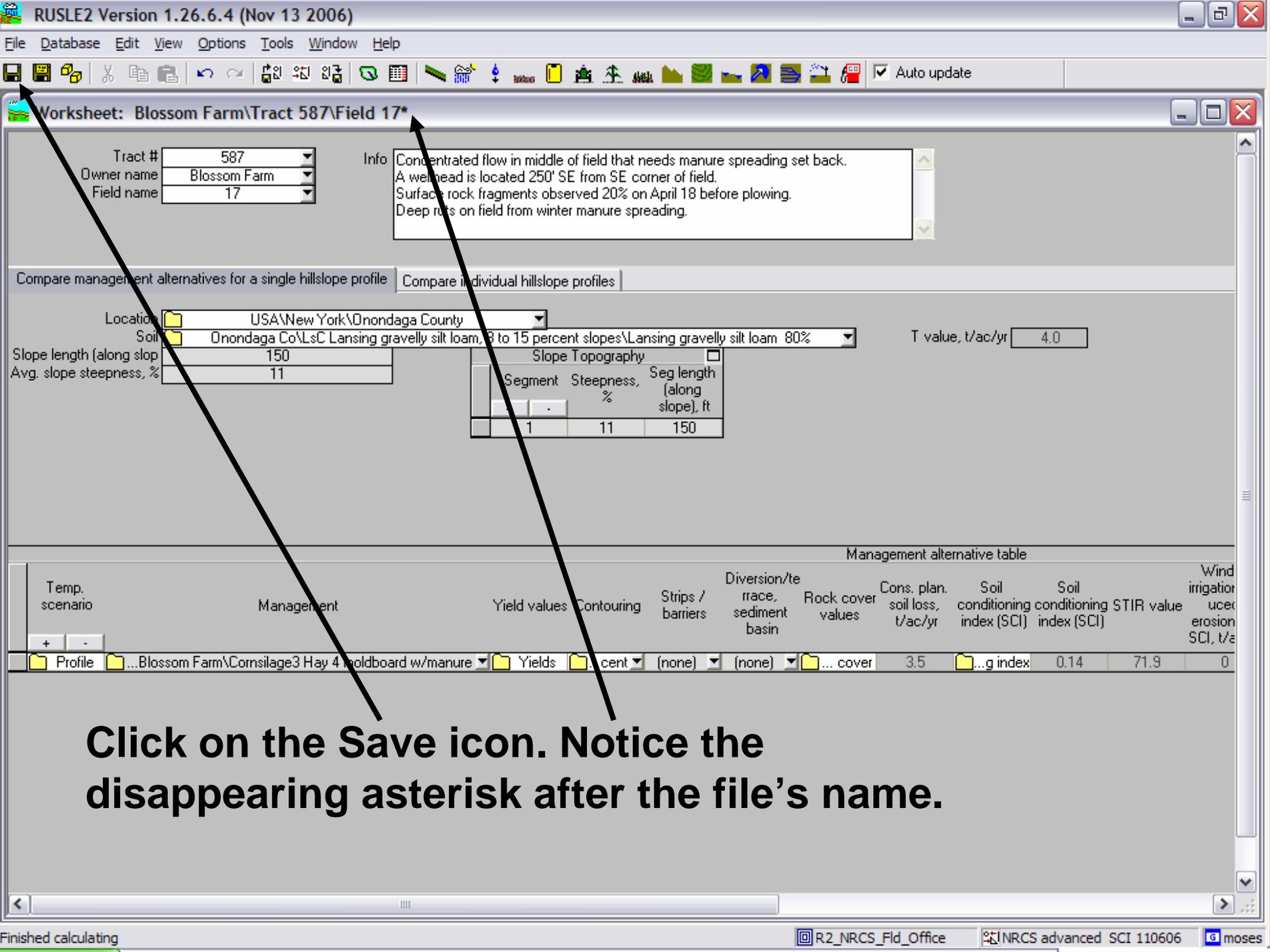


Click on the yellow folder to enter the 20% Rock cover value observed on the field.



The Rock cover window will appear where you can overwrite the 0% default value to 20%, then close the window by clicking anywhere outside of the window.





Worksheet: Blossom Farm\Tract 587\Field 17*

Tract # 587
Owner name Blossom Farm
Field name 17

Info
Concentrated flow in middle of field that needs manure spreading set back.
A wellhead is located 250' SE from SE corner of field.
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Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
Soil Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
T value, t/ac/yr 4.0
Slope length (along slope) 150
Avg. slope steepness, % 11
Slope Topography
Segment Steepness, % Seg length (along slope), ft
1 11 150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind irrigator user erosion SCI, t/a		
+	-	Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0

Click on the Save icon. Notice the disappearing asterisk after the file's name.

Worksheet: Blossom Farm\Tract 587\Field 17*

Tract # 587
 Owner name Blossom Farm
 Field name 17

Info
 Concentrated flow in middle of field that needs manure spreading set back.
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Location USA\New York\Onondaga County
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 Slope length (along slope) 150
 Avg. slope steepness, % 11
 T value, t/ac/yr 4.0
 Slope Topography

Segment	Steepness, %	Seg length (along slope), ft
+	-	
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind irrigation erosion SCI, t/a	
+ -	Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0

Click on the + button to create another scenario for this field.

Tract # 587
 Owner name Blossom Farm
 Field name 17

Info
 Concentrated flow in middle of field that needs manure spreading set back.
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Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
 Soil Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
 Slope length (along slope) 150
 Avg. slope steepness, % 11
 T value, t/ac/yr 4.0

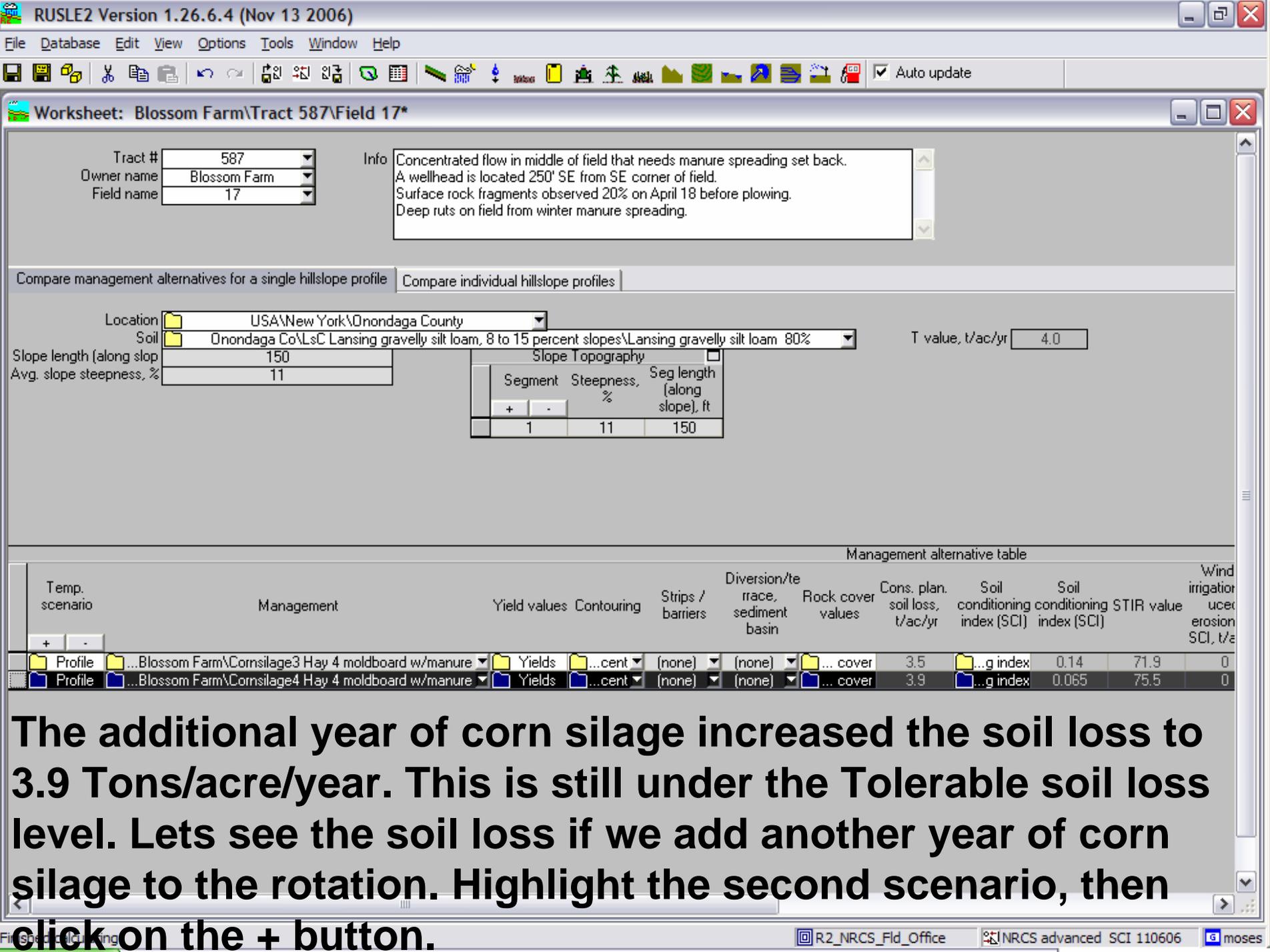
Slope Topography		
Segment	Steepness, %	Seg length (along slope), ft
+ -		
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind irrigation user erosion SCI, t/a
+ -											
Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0
Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0



The farmer would like to increase his corn acres. Choose a higher corn year rotation to see the predicted soil loss for this field. Click on the down-arrow next to the Management window.



Info
Concentrated flow in middle of field that needs manure spreading set back.
A wellhead is located 250' SE from SE corner of field.
Surface rock fragments observed 20% on April 18 before plowing.
Deep ruts on field from winter manure spreading.

Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location: USA\New York\Onondaga County
Soil: Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
Slope length (along slope): 150
Avg. slope steepness, %: 11
T value, t/ac/yr: 4.0

Slope Topography		
Segment	Steepness, %	Seg length (along slope), ft
+ -		
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind erosion SCI, t/a
Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0
Profile	...Blossom Farm\Cornsilage4 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.9	...g index	0.065	75.5	0

The additional year of corn silage increased the soil loss to 3.9 Tons/acre/year. This is still under the Tolerable soil loss level. Lets see the soil loss if we add another year of corn silage to the rotation. Highlight the second scenario, then

click on the + button.

Tract # 587
 Owner name Blossom Farm
 Field name 17

Info
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Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
 Soil Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
 Slope length (along slop) 150
 Avg. slope steepness, % 11
 T value, t/ac/yr 4.0
 Slope Topography

Segment	Steepness, %	Seg length (along slope), ft
+	-	
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind irrigation erosion SCI, t/a
Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0
Profile	...Blossom Farm\Cornsilage4 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.9	...g index	0.065	75.5	0
Profile	...Blossom Farm\Cornsilage4 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.9	...g index	0.065	75.5	0



Click on the down-arrow and select the Cornsilage5 Hay 4 moldboard w/manure file

Tract #
 Owner name
 Field name

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Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location
 Soil
 Slope length (along slope)
 Avg. slope steepness, %
 Slope Topography

Segment	Steepness, %	Seg length (along slope), ft
+	-	
1	11	150

 T value, t/ac/yr

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0
Profile	...Blossom Farm\Cornsilage4 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.9	...g index	0.065	75.5	0
Profile	...Blossom Farm\Cornsilage5 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	4.2	...g index	0.0053	78.2	0

- CMZ 04.1
 - a. Single Year/Single Crop Templates
 - b. Multi-year Rotation Templates
 - c. Other Local Mgt Records
 - Blossom Farm
 - Cornsilage3 Hay 4 moldboard w/manure
 - Cornsilage4 Hay 4 moldboard w/manure
 - Cornsilage4 Hay 5 moldboard w/manure
 - Cornsilage5 Hay 4 moldboard w/manure**
 - Wetumpka
 - COGSOYCOGSOYWHT nt

Click on the Cornsilage5 Hay 4 moldboard w/manure file

Tract # 587
 Owner name Blossom Farm
 Field name 17

Info
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Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
 Soil Onondaga Co\LSL Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
 Slope length (along slope) 150
 Avg. slope steepness, % 11
 T value, t/ac/yr 4.0
 Slope Topography

Segment	Steepness, %	Seg length (along slope), ft
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
Profile	...Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0
Profile	...Blossom Farm\Cornsilage4 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.9	...g index	0.065	75.5	0
Profile	...Blossom Farm\Cornsilage5 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	4.2	...g index	0.0053	78.2	0

The soil loss now exceeds the Tolerable level. Lets try installing contour stripcropping to see if the soil loss will go under the tolerable level with the 5 years of corn silage in the rotation.

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Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
 Soil Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
 Slope length (along slope) 150
 Avg. slope steepness, % 11
 Slope Topography
 T value, t/ac/yr 4.0

Segment	Steepness, %	Seg length (along slope), ft
+	-	
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
Profile	...Blossom Farm\Cornilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0
Profile	...Blossom Farm\Cornilage4 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.9	...g index	0.065	75.5	0
Profile	...Blossom Farm\Cornilage5 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	4.2	...g index	0.0053	78.2	0

Click on the Strips/barriers down-arrow

Tract # 587
 Owner name Blossom Farm
 Field name 17

Info
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Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location USA\New York\Onondaga County
 Soil Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
 Slope length (along slope) 150
 Avg. slope steepness, % 11
 Slope Topography
 T value, t/ac/yr 4.0

Segment	Steepness, %	Seg length (along slope), ft
+	-	
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
Profile	...Blossom Farm\Cornilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0
Profile	...Blossom Farm\Cornilage4 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.9	...g index	0.065	75.5	0
Profile	...Blossom Farm\Cornilage5 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	4.2	...g index	0.0053	78.2	0

- (none)
- Contour Buffer Strips
- Filter strips
- Silt fences
- Straw bale barriers
- Strip cropping**
- Vegetative Barriers (grass hedges)
- default

Double click on the Strip cropping folder



Tract #
 Owner name
 Field name

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Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

Location
 Soil
 Slope length (along slope)
 Avg. slope steepness, %
 T value, t/ac/yr
 Slope Topography

Segment	Steepness, %	Seg length (along slope), ft
+	-	
1	11	150

Management alternative table

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr
Profile	...Blossom Farm\Cornilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0
Profile	...Blossom Farm\Cornilage4 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.9	...g index	0.065	75.5	0
Profile	...Blossom Farm\Cornilage5 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	4.2	...g index	0.0053	78.2	0

- Strip cropping
 - 2strip rotational 0-1
 - 2strip rotational 0-2
 - 2strip rotational 0-3
 - 2strip rotational 0-4**
 - 3-strip rotational 0-2-0
 - 3-strip rotational 0-3-0
 - 3-strip rotational 0-4-0
 - 4-strip rotational 0-2-0-2
 - 4-strip rotational 0-3-0-3

Select and click on the "2strip rotational 0-4 file"

Strip/barrier type	Rotational stripcropping
# strips/barriers crossing slope length	2
How specify strip/barrier width?	Absolute width
Absolute strip/barrier width, ft	30
Strip/barrier width rel. to slope length, %	10
Strip/barrier management	defined by user in profile
Strip/barrier at bottom of slope?	No
Used for water quality?	No

How specify offset? (STRIP_BARRIER_OFFSET_STRIP_NUM)

Strip #	How specify offset?	Yrs. offset
1	yrs. offset from start year	0
2	yrs. offset from start year	4

Explanation: the 2strip means the RUSLE slope was measured across two strips. The “rotational 0-4” refers to the offset years between the low residue crop and the high residue crop in the rotation. There is no option for a 5 year corn, just select the highest 4 year offset.

Info

Example: 0-4 Offset

STRIP	Yrs offset	yr1	yr2	yr3	yr4	yr5	yr6	yr7	yr8
strip1	0	corn	corn	soys	wheat	Alf1	Alf2	Alf3	Alf4
strip2	4	Alf1	Alf2	Alf3	Alf4	corn	corn	soys	wht

This example uses the years of offset of 0-4 based on the "yrs. offset from start year" method. In Year one Corn is in the first strip. Counting forward 4 years from Corn in the cropping sequence, Corn would not be in strip two until year 5. Strip two is then to be in Alf1 in year 1. The rotation then advances normally in succeeding years. Deposition occurs in the hay in strip 2 the first four years of the rotation. Sediment yield is somewhat higher in years 5, through 8 than in other years because the erodible corn, soybean and wheat strips are at the bottom of the slope where no dense vegetation exists to deposit sediment.

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Compare management alternatives for a single hillslope profile Compare individual hillslope profiles

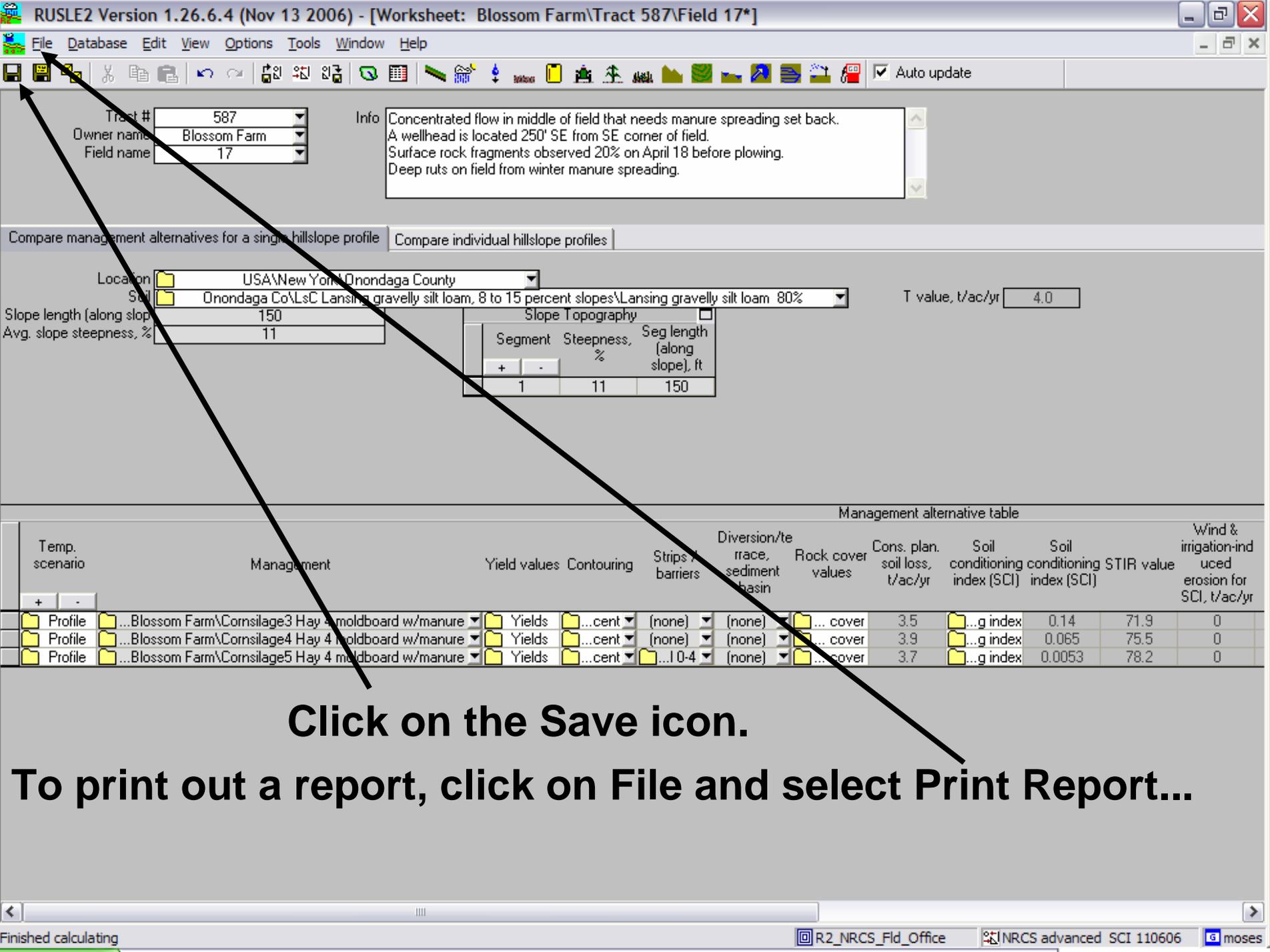
Location USA\New York\Onondaga County
 Soil Onondaga Co\LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam 80%
 Slope length (along slope) 150
 Avg. slope steepness, % 11

Slope Topography		
Segment	Steepness, %	Seg length (along slope), ft
+	-	
1	11	150

T value, t/ac/yr 4.0

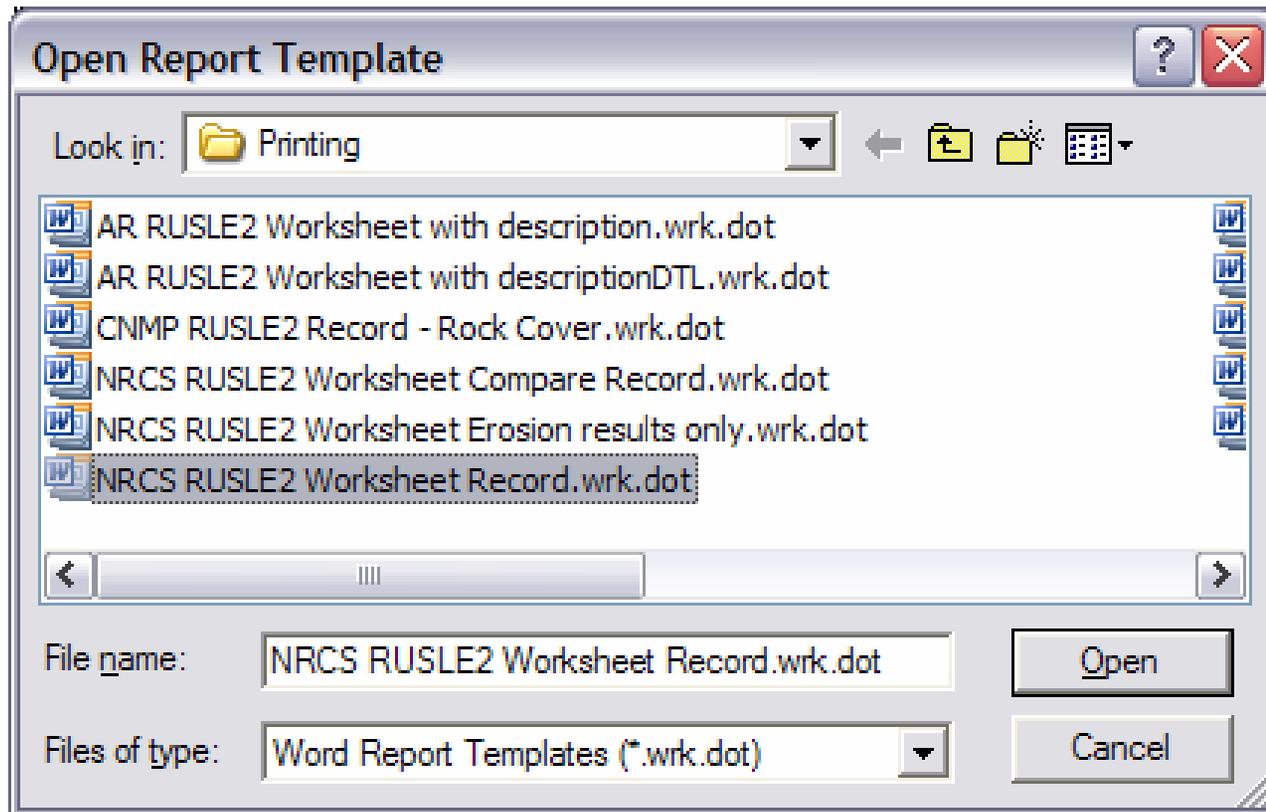
Management alternative table												
Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Rock cover values	Cons. plan. soil loss, t/ac/yr	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr	
Profile	...Blossom Farm\Cornilage3 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.5	...g index	0.14	71.9	0	
Profile	...Blossom Farm\Cornilage4 Hay 4 moldboard w/manure	Yields	...cent	(none)	(none)	... cover	3.9	...g index	0.065	75.5	0	
Profile	...Blossom Farm\Cornilage5 Hay 4 moldboard w/manure	Yields	...cent	...10-4	(none)	... cover	3.7	...g index	0.0053	78.2	0	

The predicted soil loss is back under the Tolerable value, so we can present this alternative to the landowner/producer.

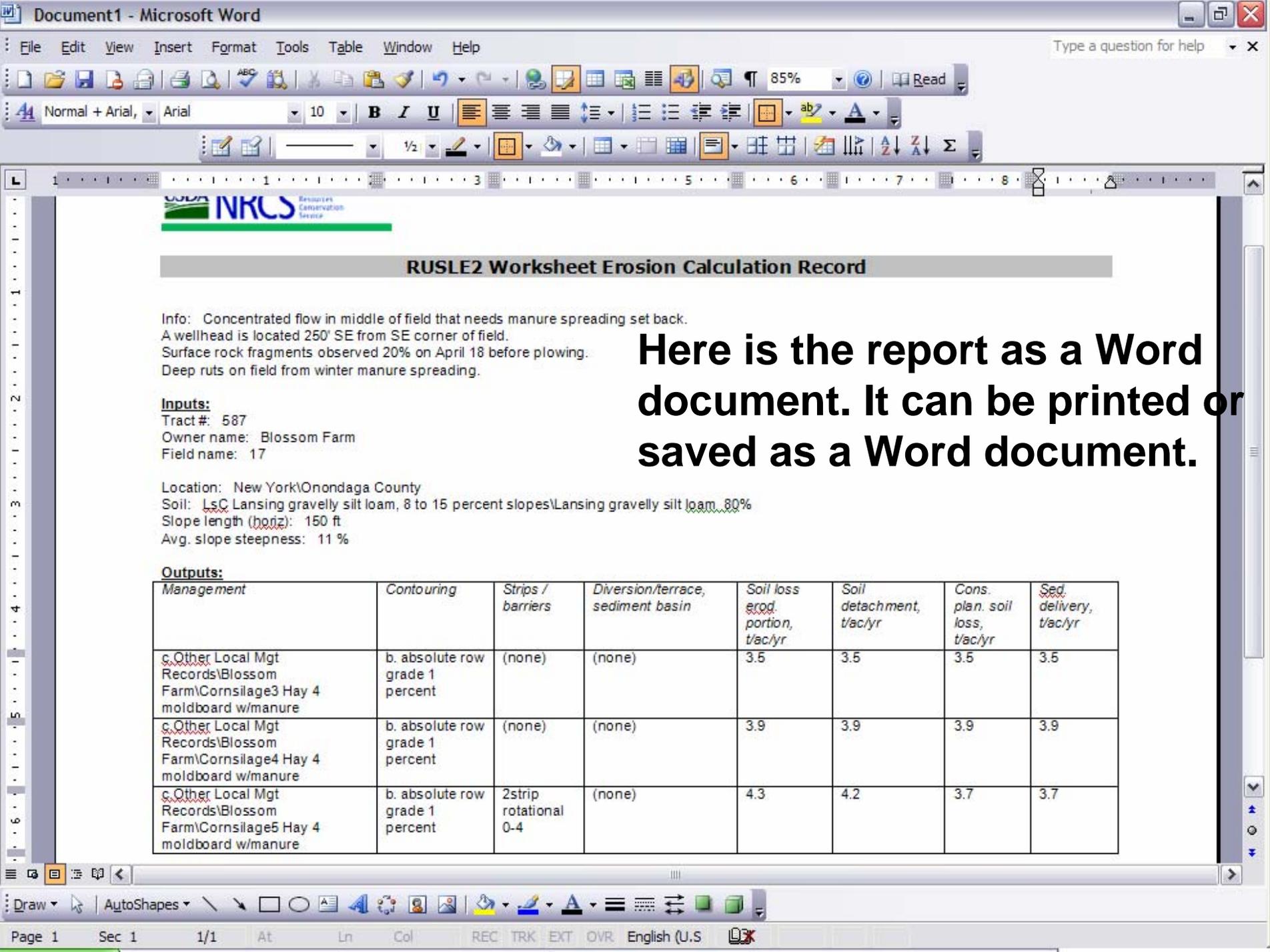


Click on the Save icon.

To print out a report, click on File and select Print Report...



Select the “NRCS RUSLE2 Worksheet Record.wrk.dot” file and click open.



RUSLE2 Worksheet Erosion Calculation Record

Info: Concentrated flow in middle of field that needs manure spreading set back.
A wellhead is located 250' SE from SE corner of field.
Surface rock fragments observed 20% on April 18 before plowing.
Deep ruts on field from winter manure spreading.

Inputs:

Tract #: 587
Owner name: Blossom Farm
Field name: 17

Location: New York\Onondaga County

Soil: LsC Lansing gravelly silt loam, 8 to 15 percent slopes\Lansing gravelly silt loam, 80%
Slope length (horiz): 150 ft
Avg. slope steepness: 11 %

Outputs:

Management	Contouring	Strips / barriers	Diversion/terrace, sediment basin	Soil loss erod. portion, t/ac/yr	Soil detachment, t/ac/yr	Cons. plan. soil loss, t/ac/yr	Sed. delivery, t/ac/yr
c.Other Local Mgt Records\Blossom Farm\Cornsilage3 Hay 4 moldboard w/manure	b. absolute row grade 1 percent	(none)	(none)	3.5	3.5	3.5	3.5
c.Other Local Mgt Records\Blossom Farm\Cornsilage4 Hay 4 moldboard w/manure	b. absolute row grade 1 percent	(none)	(none)	3.9	3.9	3.9	3.9
c.Other Local Mgt Records\Blossom Farm\Cornsilage5 Hay 4 moldboard w/manure	b. absolute row grade 1 percent	2strip rotational 0-4	(none)	4.3	4.2	3.7	3.7

Here is the report as a Word document. It can be printed or saved as a Word document.

For assistance in the RUSLE2 software please call or email to:

Tibor Horvath	315-477-6530	<u>tibor.horvath@ny.usda.gov</u>
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James Calhoun	518-431-4110	<u>james.calhoun@ny.usda.gov</u>