
Installation / Setup of RUSLE2 & View Descriptions

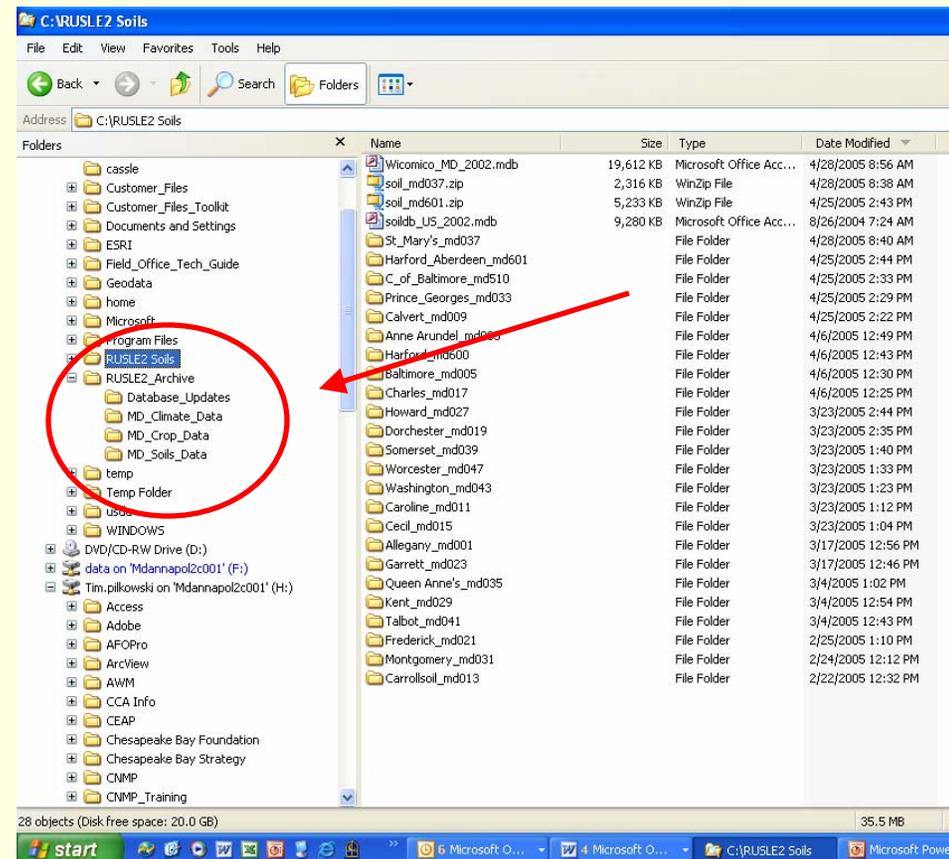
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NRCS Maryland



RUSLE2 Installation

RUSLE2
Predicting erosion by water

- Create RUSLE2 Archive folder on local disk (C:)
- Within RUSLE2 Archive folder create four sub-folders
 - MD_Climate_Data
 - MD_Crop_Data
 - MD_Soils_Data
 - Database_Updates



http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm



RUSLE2 Installation



- Visit RUSLE2 Website and download:
 - RUSLE2 Program File
 - R2NRCS_20061114 exe.renamed (or exe file)
 - MD Climate Data (entire State)
 - Crop Management Templates - CMZ 59, 65, 66 or 4.1 (See Map)
 - Soils Data (specific counties)
 - Save these files in the RUSLE2 archive folders

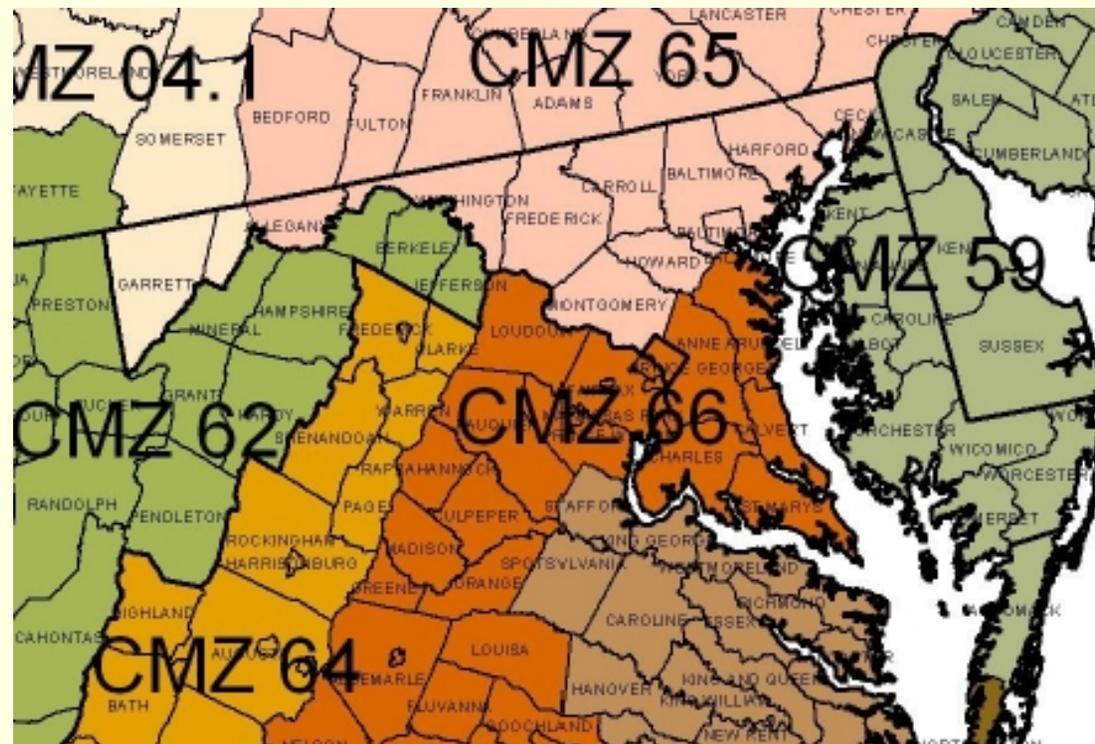
http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm



RUSLE2 Installation

RUSLE2
Predicting erosion by water

- Crop Management Templates - CMZ 59, 65, 66 or 4.1
(See Map)



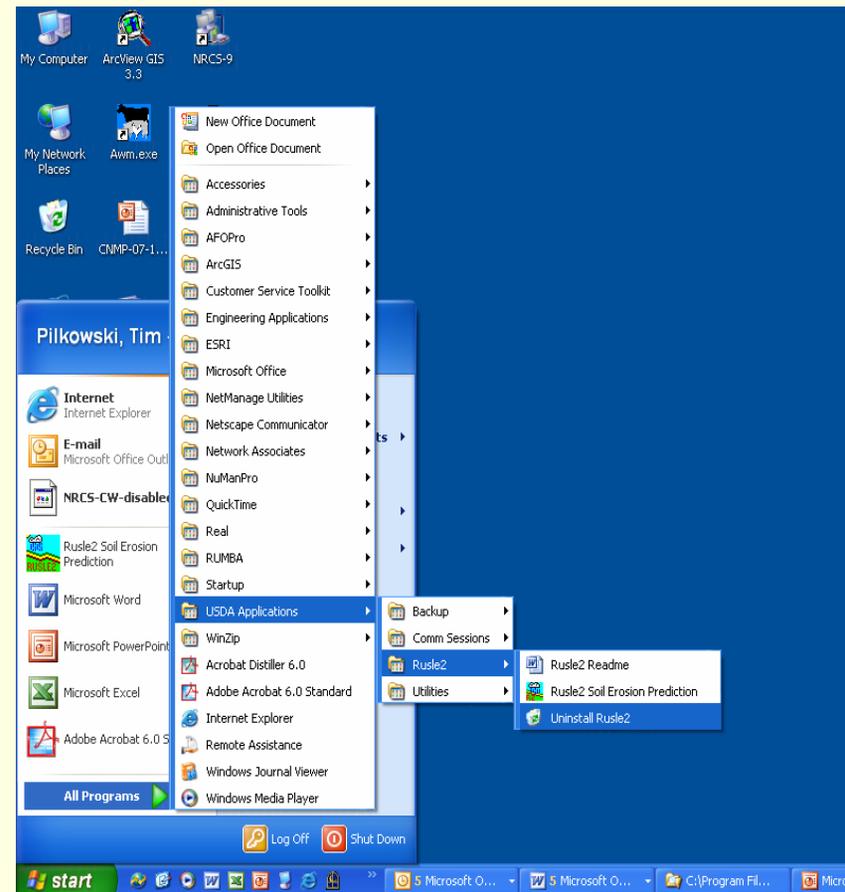
http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm



RUSLE2 Installation

RUSLE2
Predicting erosion by water

- If applicable: Uninstall any previous versions of RUSLE2 loaded on computer:
 - Start - All Programs - USDA Applications - RUSLE2 - Uninstall RUSLE2
- Go to C:\Program Files\USDA\Rusle2 and delete any folders or files.

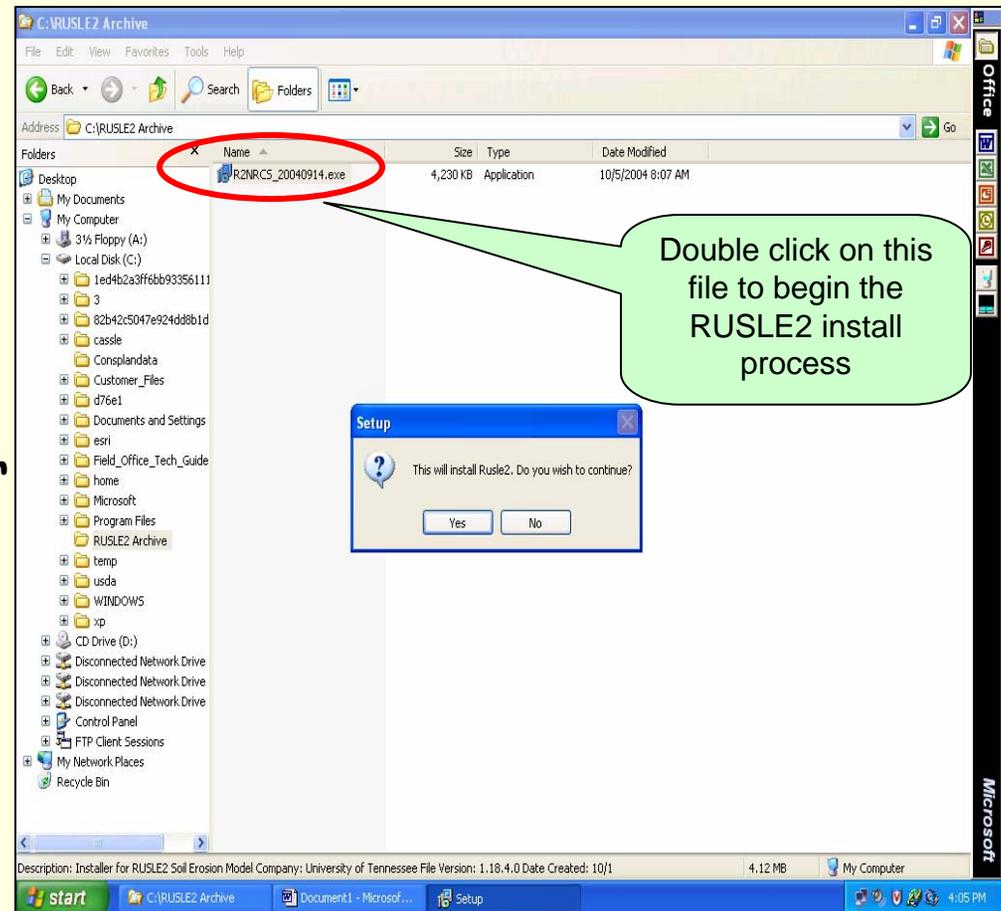




RUSLE2 Installation

RUSLE2
Predicting erosion by water

- Locate installer file in C:\RUSLE2 Archive:
- Rename file and change .renamed to .exe - File now becomes executable or open .exe file
- Open Installer



R2NRCS_20061114exe.renamed or R2NRCS_20061114.exe

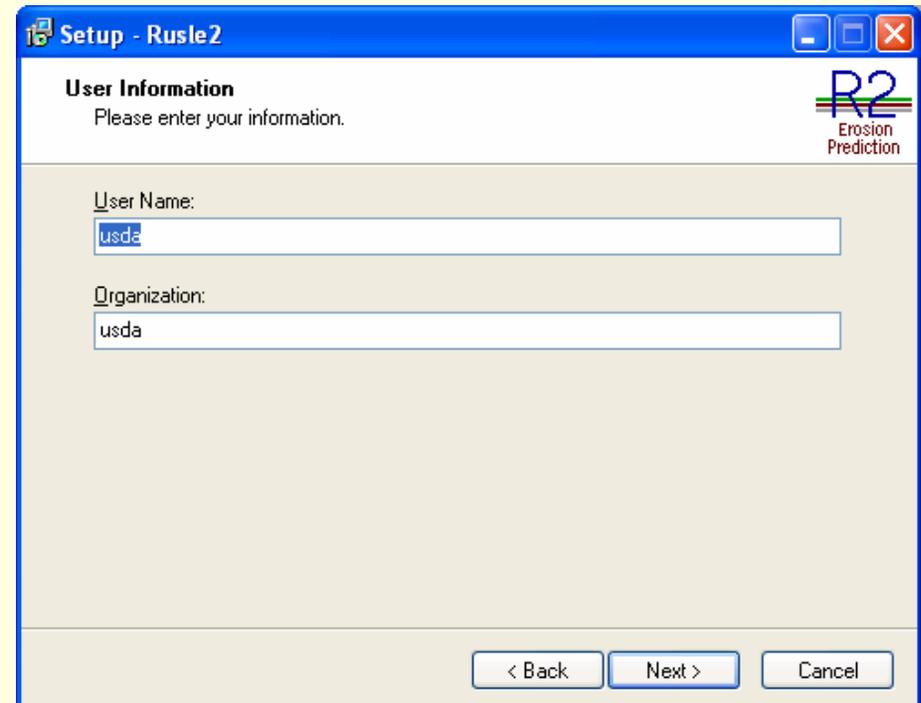


RUSLE2 Installation



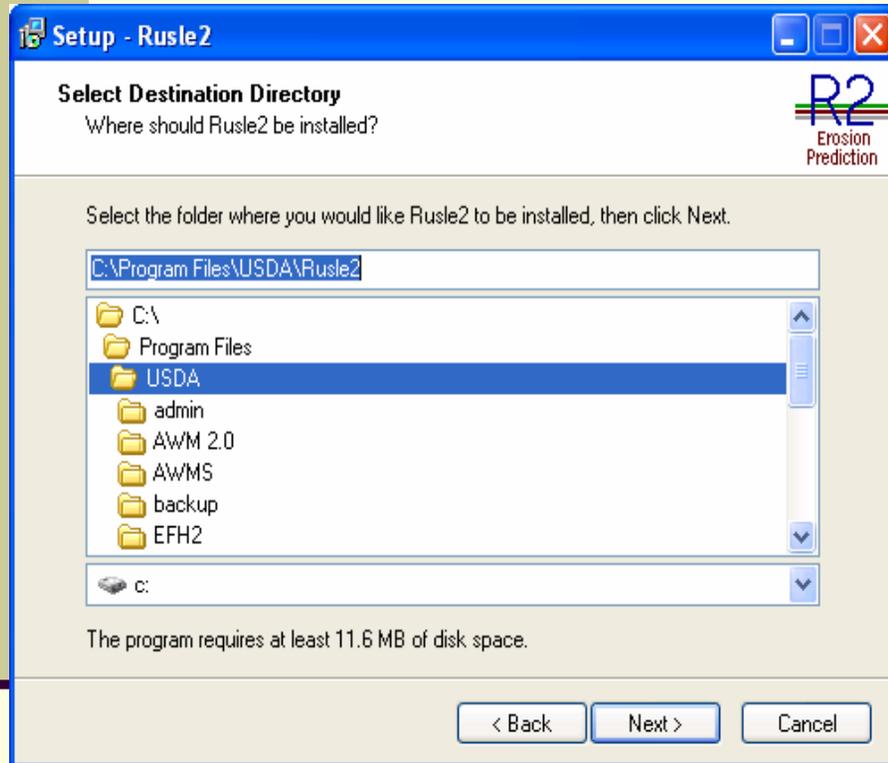
Click Next

Click Next



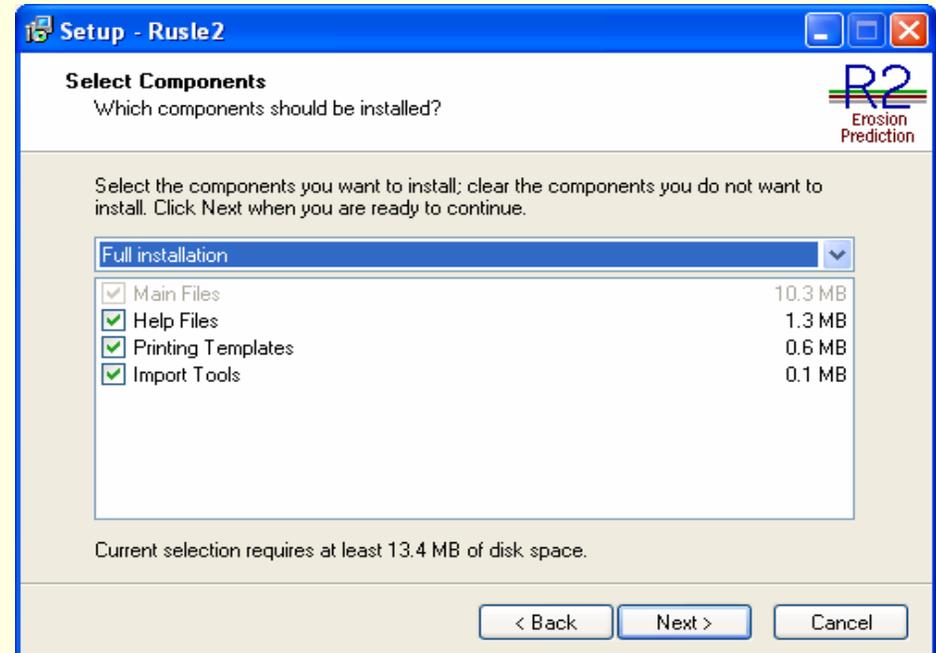


RUSLE2 Installation



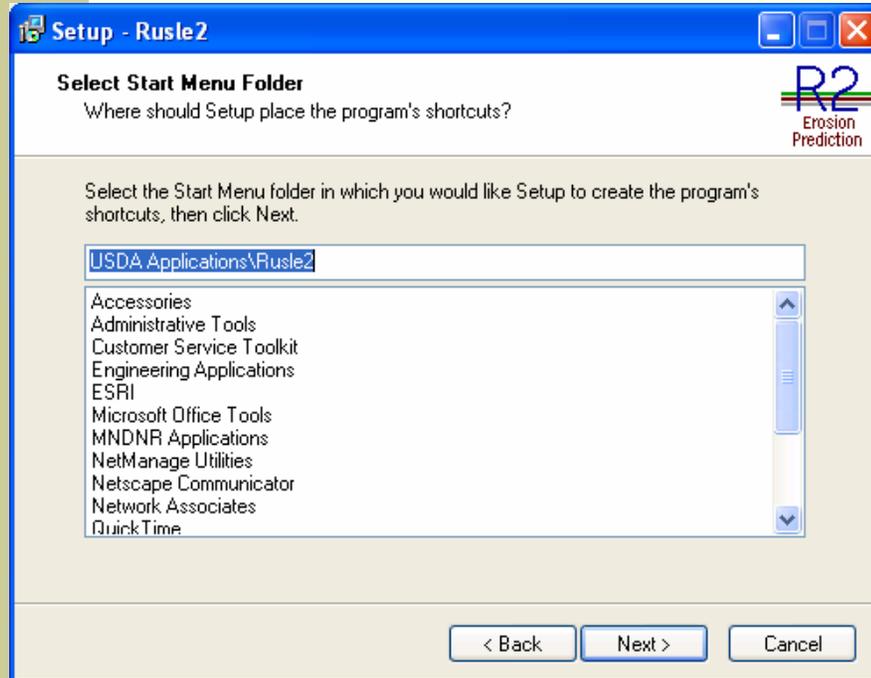
Click Next

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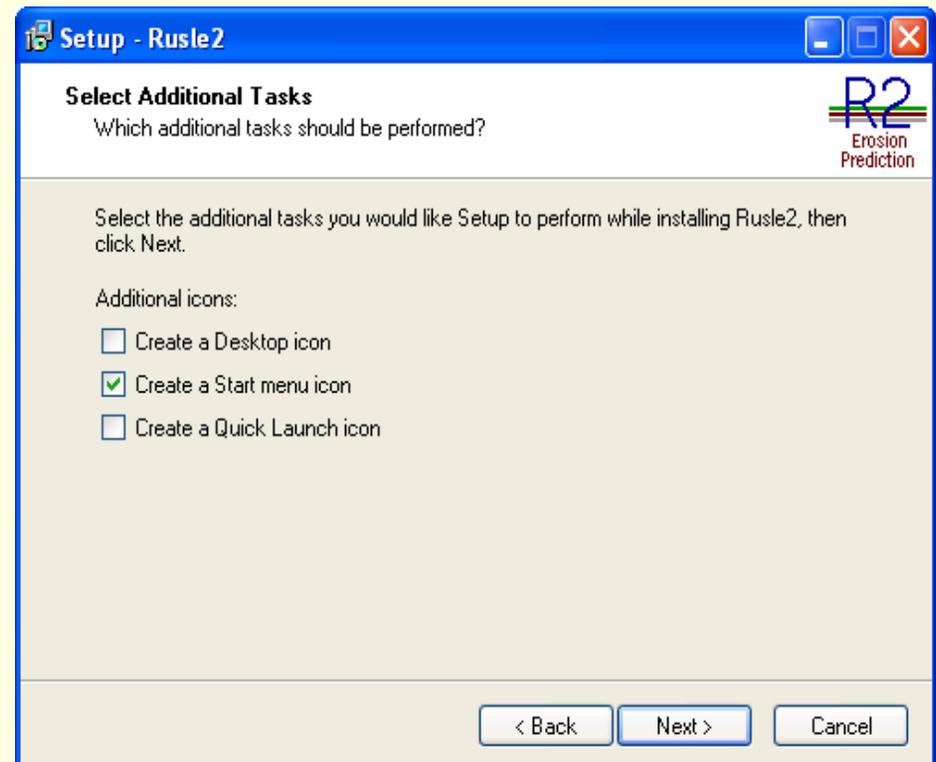


RUSLE2 Installation



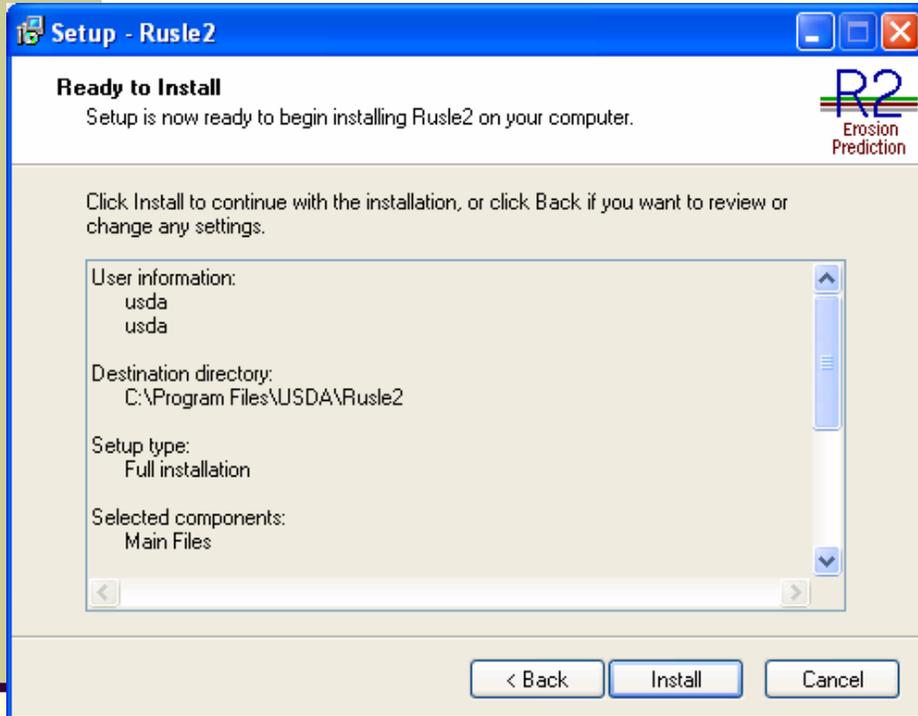
Click Next

Select Create a Start menu icon only and click next



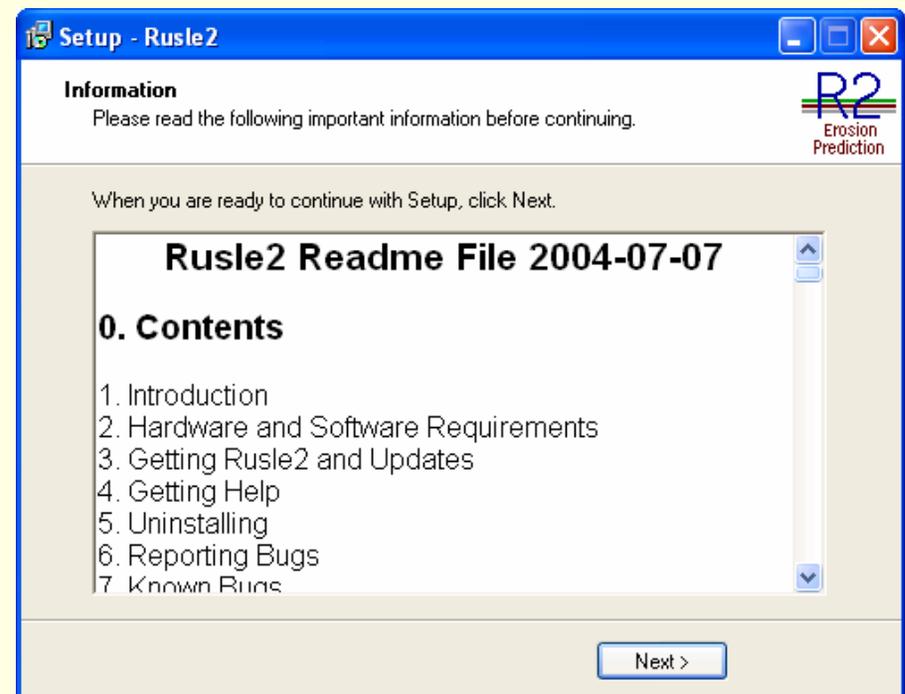


RUSLE2 Installation



Click Install

Click Next

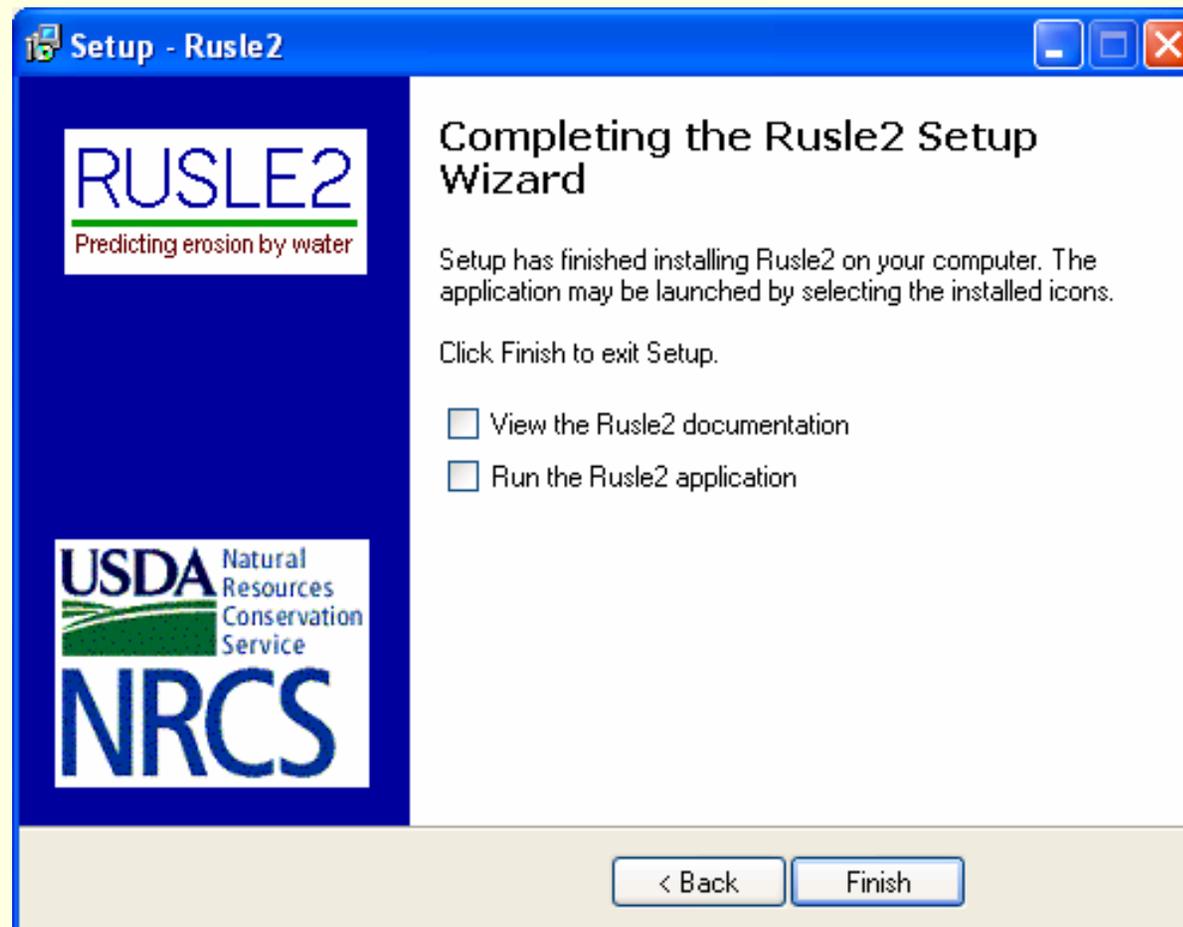




RUSLE2 Installation



Uncheck both and click Finish

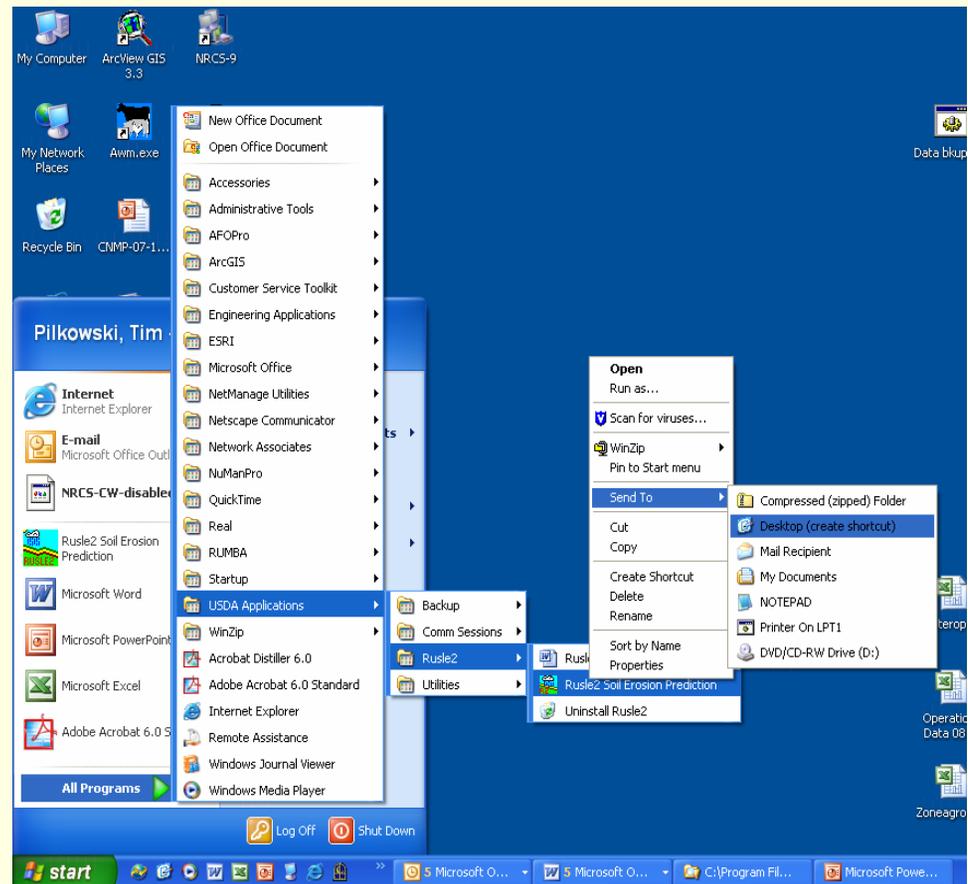




Program Setup

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- When installation is complete it is best to re-start your computer.
- To Create desktop icon:
 1. Left click on Start
 2. Go to All Programs
 3. Go to USDA Applications/RUSLE2/RUSLE2 Soil Loss Prediction
 4. Right click and go to Send to
 5. Left click on Desktop (create shortcut)

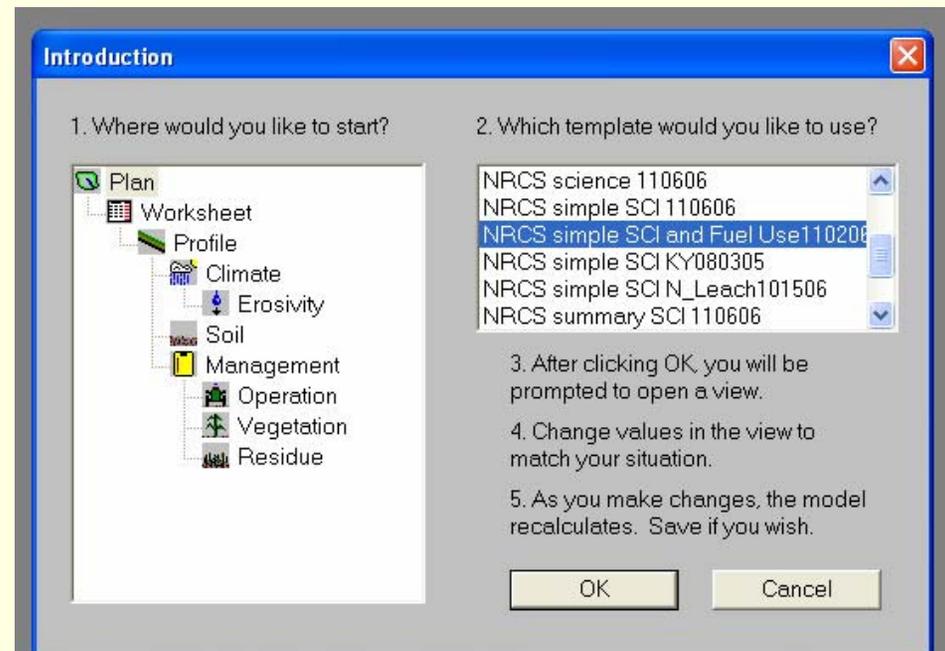




Program Setup

RUSLE2
Predicting erosion by water

- Open RUSLE2 Program and select template:
 - NRCS simple SCI and Fuel Use 110206

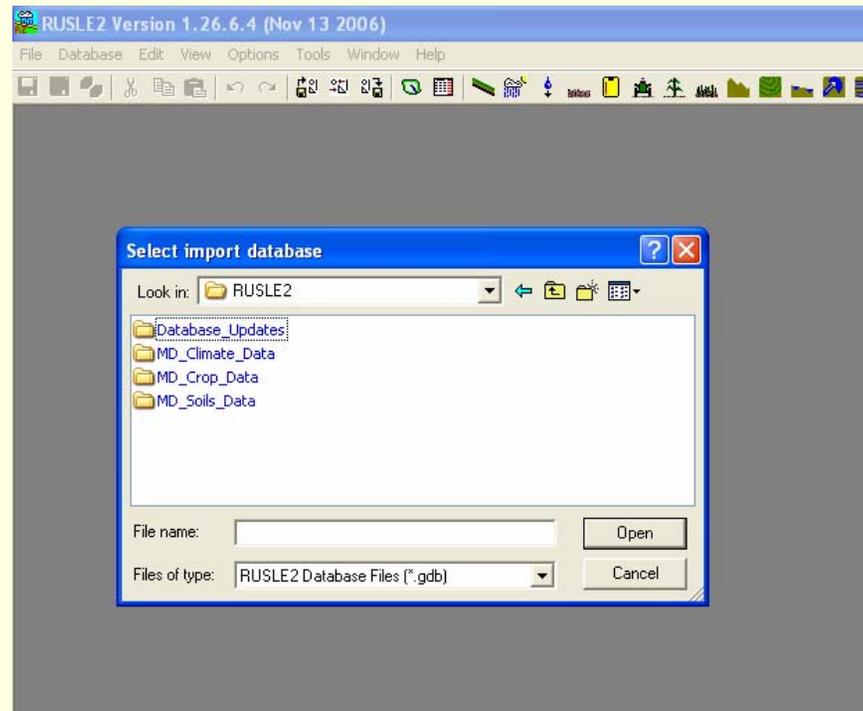




Program Setup

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- Import databases from RUSLE2 Archive folder as outlined in Maryland RUSLE2 Users Guide.
- Create county specific templates as outlined in Maryland Users Guide (optional)





Profile View:



- Field Specific with only 1 management record.
- User enters field info & supporting practices, program determines soil loss.
- User can modify or build rotations.

RUSLE2 Version May 30 2003

File Database Edit View Options Window Help

Auto update

Profile: Dauphin Default*

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:

Man.	Management	Starting date, m/d/y	Ending date, m/d/y	Correct dates by:
+	-			
1	... / Soybeans\Manure\com gr; fmanss, fcsTHR - soyb, nr; fcsTHR, z65	11/1/0	10/10/2	==>

STEP 4c: adjust management inputs if desired:

Adjust yields General yield level

Adjust res. burial level Adjust ext. res. additions

Rock cover, %

Apply rot. builder manag Save temp. management as perman

STEP 5: Set supporting practices:

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

Strips/barriers

Diversion/terrace, sediment basin

Subsurface drainage

Results Additional Results

Soil loss for cons. plan, T/ac/yr	2.8	Info	
T value, T/ac/yr	3.0		

Finished calculating

R2_NRCS_Sta_Agron NRCS simple 042203 mos



Worksheet View:



- Comparison of management options for single field or several with similar field characteristics.
- Contains multiple profile views
- User can drill back into profiles to modify rotations.

Temp. scenario	Management	Yield values	Contouring	Strips / barriers	Diversion/trace sediment	Cons. plan soil loss, t/ac/yr	Sed. delivery, t/ac/yr	Cover values	Show in summary?	Description
Profile	...ans\Com Grain\com gr; fctwLR - soyb, nr; fctwLR, 265	Yields	... grade 1 percent	(none)	(none)	3.9	3.9	... cover	Yes	...of 1%
Profile	...m / Soybeans\Com Grain\com gr; nt - soyb, nr; nt, 265	Yields	... grade 1 percent	(none)	(none)	0.58	0.58	... cover	Yes	...of 1%
Profile	...Manure\com gr; fmanss, fctwLR - soyb, nr; fctwLR, 265	Yields	... grade 1 percent	(none)	(none)	2.7	2.7	... cover	Yes	...of 1%
Profile	...m / Soybeans\Com Silage\com sil; nt - soyb, nr; nt, 265	Yields	... grade 1 percent	(none)	(none)	5.1	5.1	... cover	Yes	...of 1%
Profile	... Soybeans\Manure\com sil; fmanl, nt - soyb, nr; nt, 265	Yields	... grade 1 percent	(none)	(none)	2.3	2.3	... cover	Yes	...of 1%



Plan View:



- Comparison of management options for multiple fields or several with similar field characteristics.
- Used for whole farm erosion predicting
- Compilation of worksheets for all fields of a tract.
- Able to drill in each worksheet and profile to modify if desired.

RUSLE2 Version May 30 2003

File Database Edit View Options Window Help

Auto update

Plan: Dauphin Default*

Owner name: John Deere
Location: USA\Pennsylvania\Dauphin County
Info: Home Farm

Compare field alternatives | Compute avg. soil loss for a field/watershed

Field	Field name
+	
-	
Worksheet	1
Worksheet	2
Worksheet	3, 4 and 5

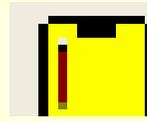
Field name	Description	Cons. plan. soil loss,	Sed. delivery,
1	...(fall chiseled - twisted shanks) followed by soybeans (fall chiseled - twisted shanks). Absolute row grade of 1%.	3.9	3.9
1	Grain corn (no-till) followed by soybeans (no-till drilled). Absolute row grade of 1%.	0.58	0.58
1	...iseled - twisted shanks). Solid/slurry manure applied fall prior to corn establishment. Absolute row grade of 1%.	2.7	2.7
1	Grain silage (no-till) followed by soybeans (no-till drilled). Absolute row grade of 1%.	5.1	5.1
1	...d by soybeans (no-till drilled). Liquid manure fall applied prior to corn establishment. Absolute row grade of 1%.	2.3	2.3
2	...(fall chiseled - twisted shanks) followed by soybeans (fall chiseled - twisted shanks). Absolute row grade of 1%.	7.1	7.1
2	Grain corn (no-till) followed by soybeans (no-till drilled). Absolute row grade of 1%.	0.78	0.78
2	...iseled - twisted shanks). Solid/slurry manure applied fall prior to corn establishment. Absolute row grade of 1%.	4.9	4.9
2	Grain silage (no-till) followed by soybeans (no-till drilled). Absolute row grade of 1%.	10.0	10.0
2	...d by soybeans (no-till drilled). Liquid manure fall applied prior to corn establishment. Absolute row grade of 1%.	4.4	4.4
3, 4 and 5	...(fall chiseled - twisted shanks) followed by soybeans (fall chiseled - twisted shanks). Absolute row grade of 1%.	6.1	6.1
3, 4 and 5	Grain corn (no-till) followed by soybeans (no-till drilled). Absolute row grade of 1%.	0.74	0.74
3, 4 and 5	...iseled - twisted shanks). Solid/slurry manure applied fall prior to corn establishment. Absolute row grade of 1%.	3.9	3.9
3, 4 and 5	Grain silage (no-till) followed by soybeans (no-till drilled). Absolute row grade of 1%.	7.4	7.4
3, 4 and 5	...d by soybeans (no-till drilled). Liquid manure fall applied prior to corn establishment. Absolute row grade of 1%.	3.3	3.3

Finished calculating

R2_NRCS_Sta_Agron | NRCS simple 042203 | moses



Management View:



RUSLE2
Predicting erosion by water

- Presents management data, such as dates, residue levels and yields, for either a single crop or multi-year rotation.
- User can produce crop rotation to be used for any customer.
- General - not field or tract specific.

RUSLE2 Version May 30 2003

File Database Edit View Options Window Help

Management: CMZ_65\6.Multi-year Rotation Templates\Corn / Soybeans\Manure\corn gr; fmanss, fcstHR - soyb, nr; fcstHR, z65

Graphic: [Green bar] Long-term natural rough, in: 0.24
Rel. row grade, %: 100 Normally used as a rotation?: Yes
Duration, yr: 1

Build new rotation using this management: Open
Rotation builder for this management: open

Date, m/d/y	Operation	Vegetation	Yield (# harv. units)	External residue	Res. add. / remove, lb/ac	Cover from addition, %
11/1/0	Manure spreader, solid and semi-solid			Manure, slurry	3000	98
11/1/0	Chisel, st. pt.					
4/25/1	Disk, tandem secondary op.					
5/1/1	Disk, tandem light finishing					
5/5/1	Planter, double disk opni w/fluted coulters	Corn, grain	110			
10/10/1	Harvest, killing crop 50pct standing stubble				330	12
11/1/1	Chisel, st. pt.					
5/15/2	Disk, tandem secondary op.					
5/20/2	Disk, tandem light finishing					
5/20/2	Drill or air seeder single disk openers 7-10 in spac.	Soybean, mw 7m rows	20			
10/10/2	Harvest, killing crop 50pct standing stubble				680	33

Finished calculating

R2_NRCS_Sta_Agron NRCS simple 042203 moses



Printing:

RUSLE2
Predicting erosion by water

- Users can create a word document reporting soil loss and sedimentation for farm by field/tract.
- Allows you to print a record of the producers decisions

RUSLE2 CSP Record

Info:
Date: December 6, 2005

Name:

Tract and Field #'s:

Inputs:
Location: Maryland Dept of Ag, Cecil County
Soil: M13, M13a, silt loam, 0 to 2 percent slopes, M13a, silt loam 80%
Slope length factor: 150 ft
Avg. slope steepness: 2.0 %

Year	Management
1	COTLEJ Local Mgt Records CSP Training

Vegetation	Microtunnels	Microtunnels (or other)
Corn, grain	66.666	150.000
Wheat, winter, in rows	66.666	70.000
Soybean, in rows	66.666	35.000

Adjusted burial level: Normal res. burial
General yield level: Set by user

Outputs:
T value: 5.0 tons/yr
Soil loss for cons. plan: 2.2 tons/yr

Soil conditioning index (SCI): 0.25
Avg. annual slope STIR: 88.4
Wind & irrigation-induced erosion for SCI: 0.0000

The SCI is the Soil Conditioning Index rating.

- > If the calculated index is a negative value, soil organic matter levels are predicted to decline under that production system.
- > If the index is a positive value, soil organic matter levels are predicted to increase under that system.
- > A positive SCI meets the soil criteria for the Conservation Security Program.

The STIR value is the Soil Tillage Intensity Rating.

- > It utilizes the speed, depth, surface disturbance percent and tillage type parameters to calculate a tillage intensity rating for the system used in growing a crop or a rotation.
- > STIR ratings tend to show the differences in the degree of soil disturbance between systems. The kind, severity and number of ground disturbing passes are evaluated for the entire cropping rotation as shown in the management description.



Questions / Contacts



Any questions on installation or use of
RUSLE2 feel free to contact:

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