



## Download, Installation, and Set Up Instructions for RUSLE 2

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### Introduction


RUSLE 2 is the tool you will be using to estimate annual soil loss for use in the University of Maryland Phosphorus Management Tool (UM-PMT). Each field having a Fertility Index Value for phosphorus of 150 or higher must be evaluated individually taking into consideration soil type, tillage practices, any supporting practices and the intended crop(s). This document demonstrates the process of downloading RUSLE 2 onto your computer and setting up the program to use the appropriate template. The process involves first downloading the program, then downloading the climate, crop management and soils data specific to your county.

These instructions will guide you through the various steps of:

1. Downloading and Installing RUSLE2 (14 steps)
  2. Downloading Databases (5 steps)
  3. Downloading Climate Data (4 steps)
  4. Downloading Crop Management Zone (CMZ) Data (3 steps)
  5. Downloading Soils Data (3 steps)
  6. Extracting data (.GDB) files from compressed downloads, copying .GDB files to the Rusle2 import folder (9 steps)
  7. Setting Up RUSLE 2 (19 steps)
-

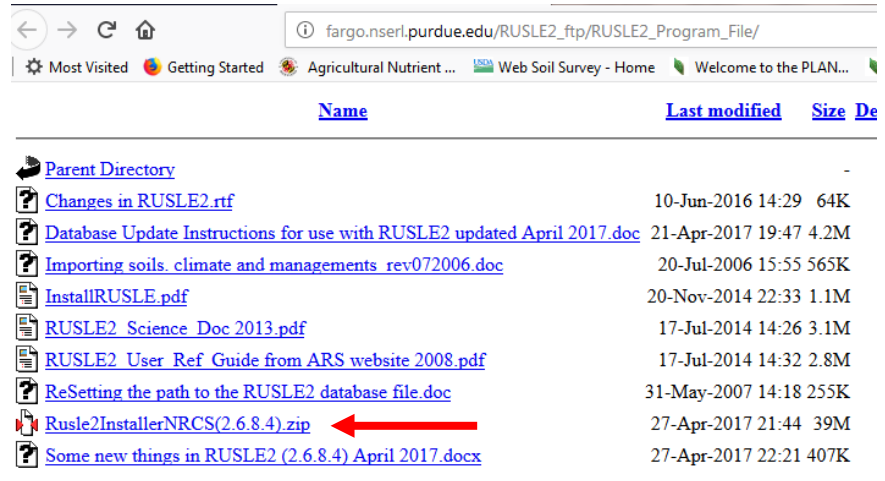
**Downloading  
and installing  
RUSLE 2**

RUSLE 2 can be downloaded from  
[http://fargo.nserl.purdue.edu/rusle2\\_dataweb/RUSLE2\\_Index.htm](http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm)

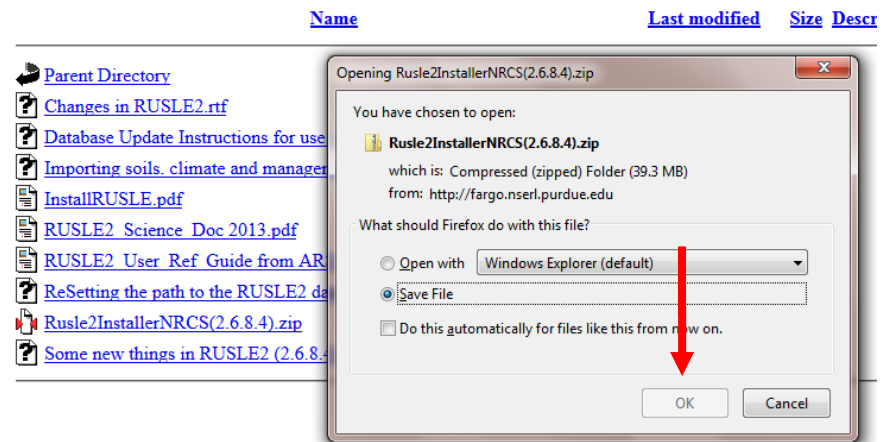
Step	Action
1	<p data-bbox="557 415 1317 485">After opening the website, click on “Download File” under “RUSLE2 Program File” on the left side of the screen.</p>  <p>The screenshot shows a website interface with a left-hand navigation menu and a main content area. The navigation menu includes links for Home, About RUSLE2 Technology, RUSLE2 Program File (with sub-links for Installation Instructions and Download File), and Base Database &amp; Misc Files (with sub-links for Instructions and Download File). A red arrow points to the 'Download File' link under 'RUSLE2 Program File'. The main content area features the USDA and NRCS logos, along with text for 'Revised Universal Soil Loss Equation' and 'Official International Version'.</p>

2

Select [Rusle2InstallerNRCS\(2.6.8.4\).zip](#).



You will be asked if you would like to save the file or open it, choose “Save File”, then click “OK”. The file should download.



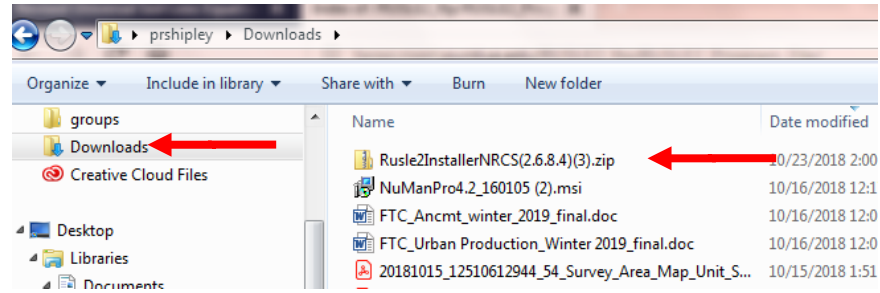
3

Open Windows Explorer (The folder icon on the task bar, on the lower left corner of your screen).

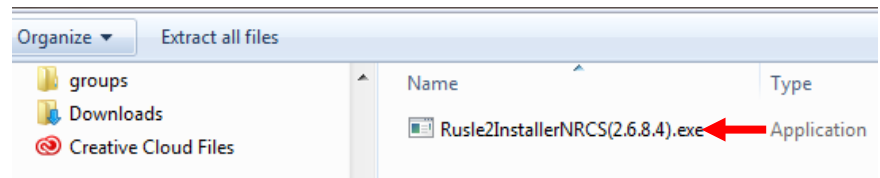


4 Click on the Downloads folder (generally at the top of the left pane of the Windows Explorer screen). The Downloads folder should become highlighted.

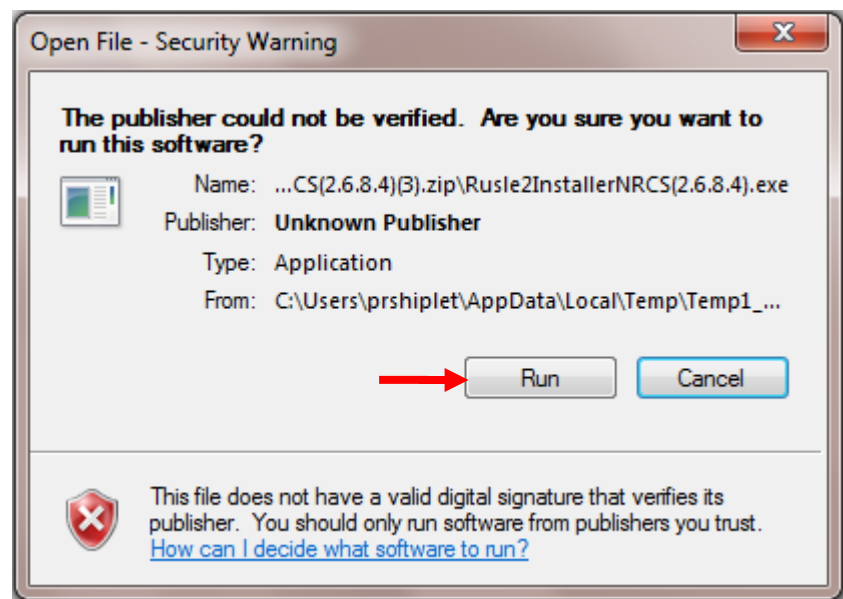
In the right pane you should now see the Rusle2InstallerNRCS(2.6.8.4).zip file you downloaded from the NRCS website. Double-click on this file in the right pane.



In the window that opens, double click on the Rusle2InstallerNRCS(2.6.8.4).exe file to run the installation program.



5 If you receive the following message, Click on “Run”:



6 If you receive the following message, select “Yes”.



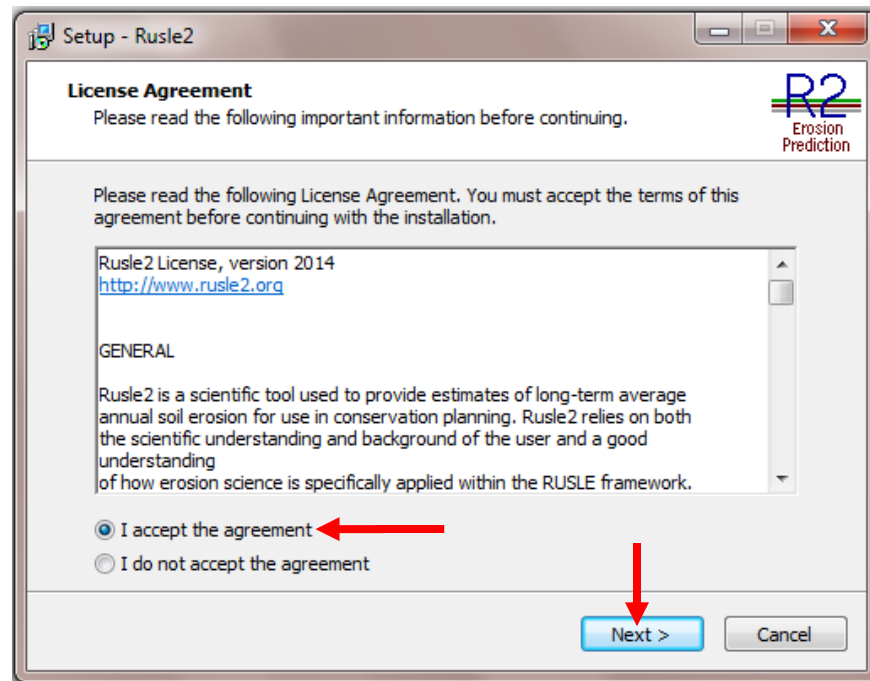
If a “User account control” window appears with the message:

“Do you want to allow the following program:  
(Rusle2InstallerNRCS(2.6.8.4).exe)

From an unknown publisher to make changes to your computer?”

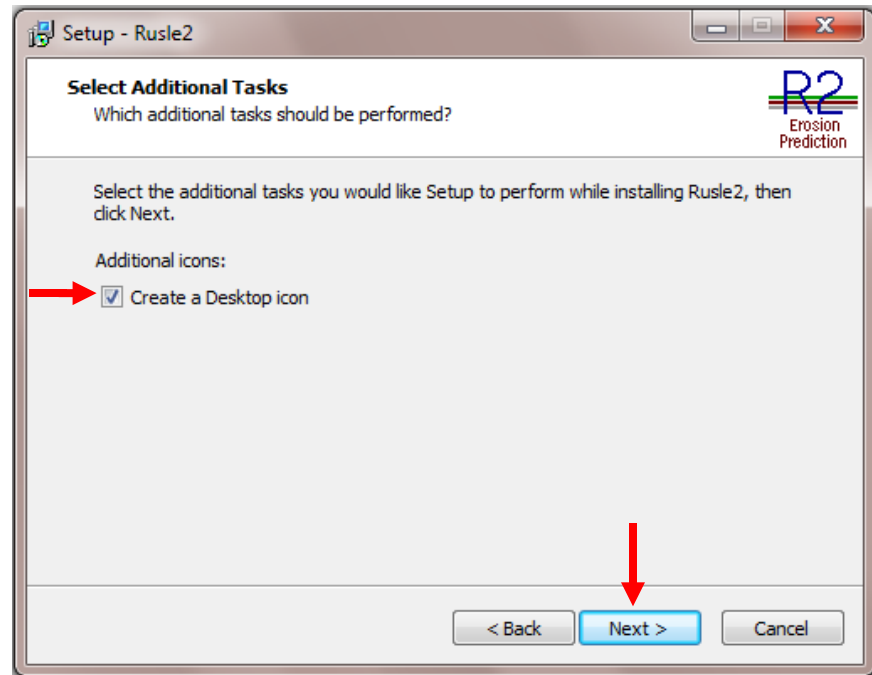
Click “Yes”.

7 Accept the License Agreement, then click next.



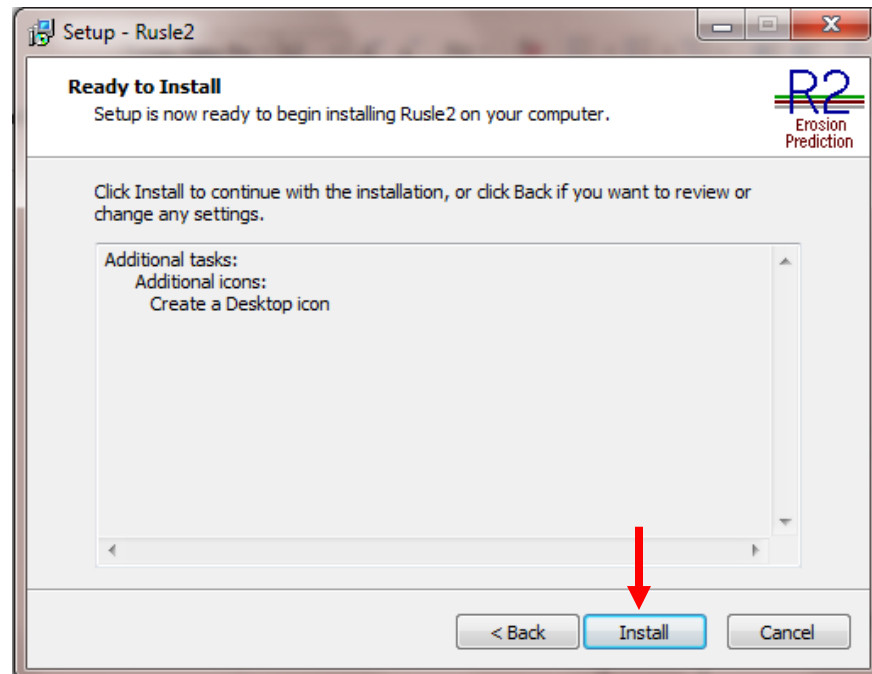
8

For ease in accessing the program at a later time, allow install wizard to create a desktop icon and a start menu icon.



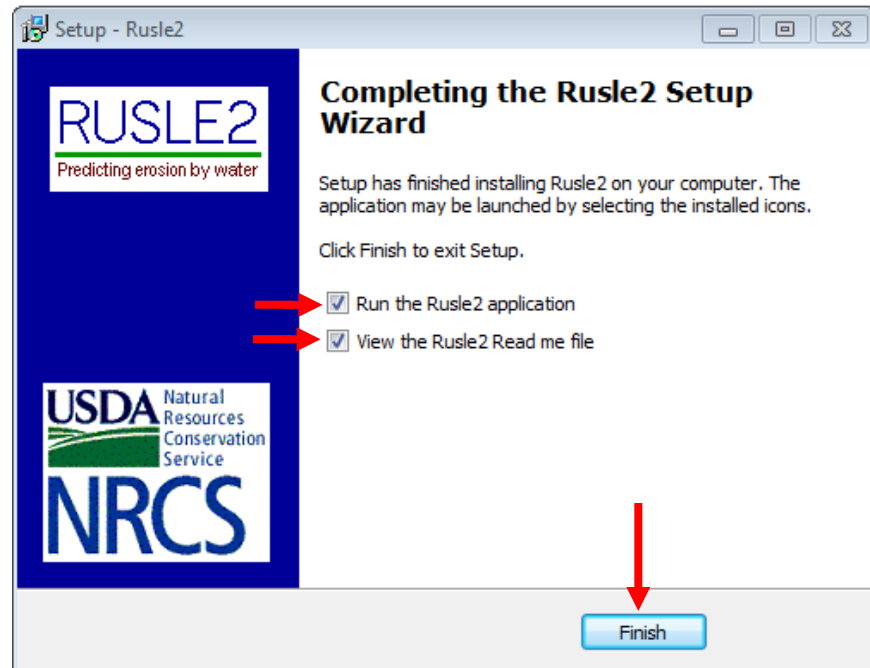
9

Click "Install".



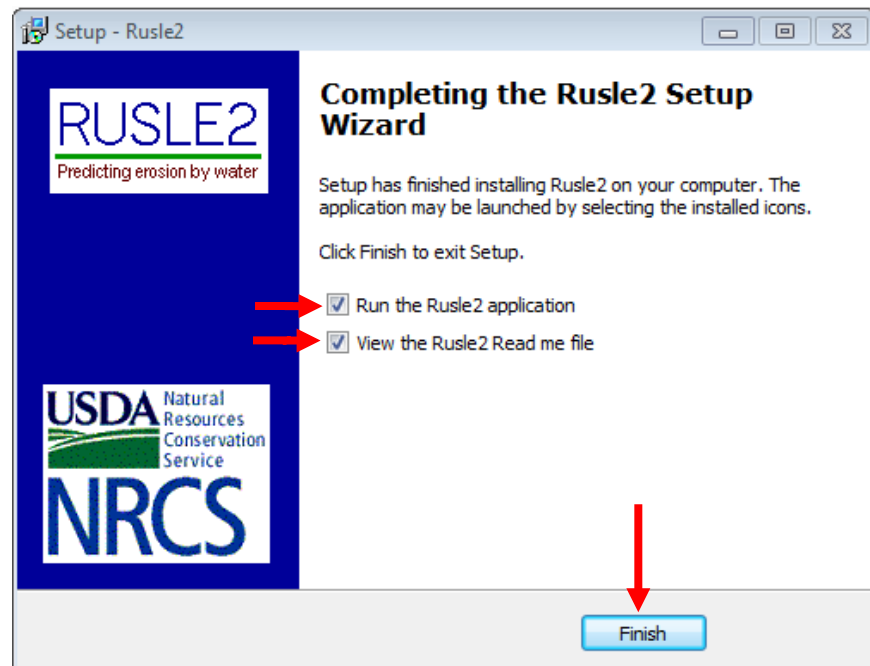
10

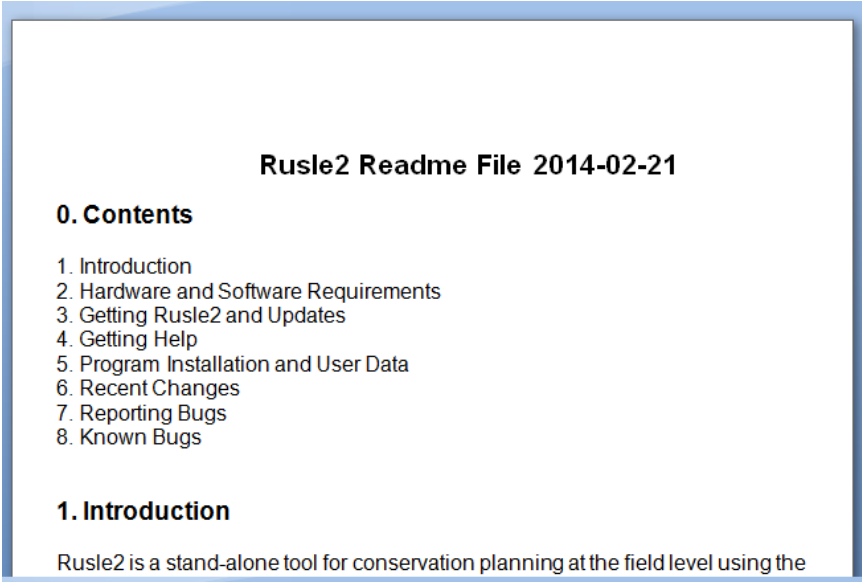
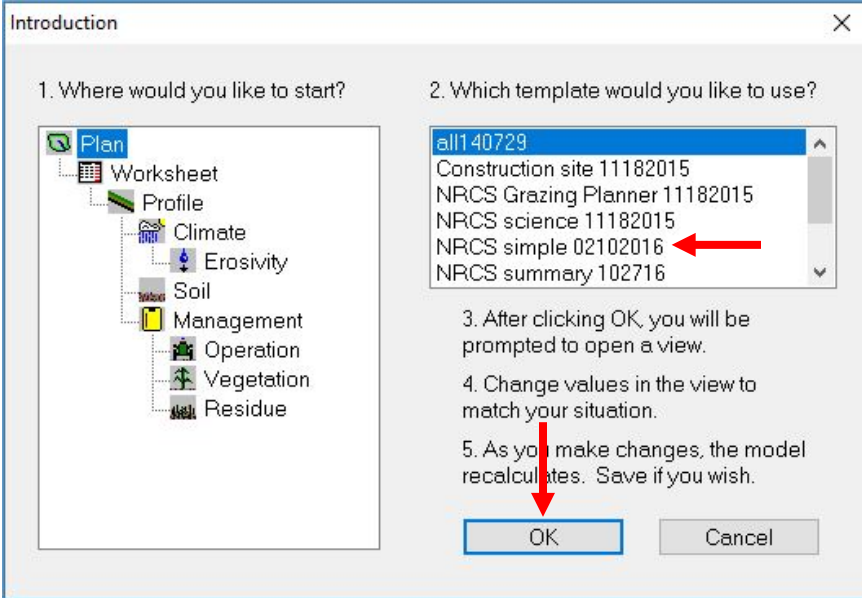
Check the boxes for “Run the Rusle2 application” and “View the Rusle 2 Read me file”, to view information on the Rusle 2 program, and to launch Rusle 2 upon exiting the setup program, then Click the “Finish” button to complete the installation.



11

Check the boxes for “Run the Rusle2 application” and “View the Rusle 2 Read me file”, to view information on the Rusle 2 program, and to launch Rusle 2 upon exiting the setup program, then Click the “Finish” button to complete the installation.




12	<p>The Readme file will open, after viewing you may close it:</p> 
13	<p>The RUSLE2 program will launch, you will be asked default template you would like to use with the program. Choose the template “NRCS simple 02102016” and then click “OK”.</p> 
14	<p>RUSLE 2 will launch. But it’s not ready yet. You need to download the database updates, climate data, crop management templates and soils data. Please continue through this document for procedures on how to do this. You can close RUSLE2 until you are ready to download the databases.</p>



**Downloading Databases**

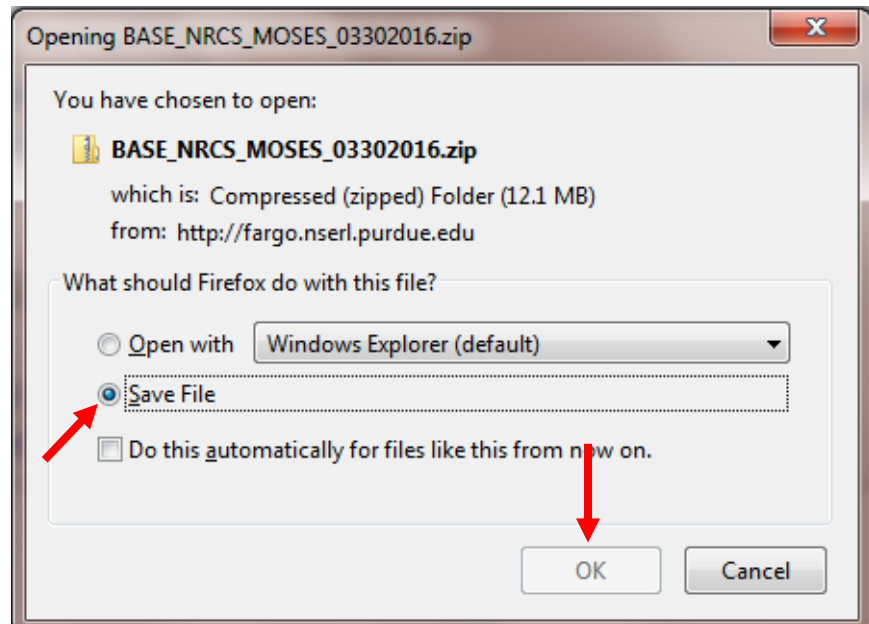
You will need to download the main database and several updates. Follow the steps below to accomplish this.

Step	Action																																																
1	Go to: <a href="http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm">http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm</a>																																																
2	<p>After opening the website, click on “Download File” under “Base Database &amp; Misc Files” on the left side of the screen.</p>  <p>From the next screen that opens, select “Latest Base database and updates”.</p>																																																
3	<p>Select “Latest Base Database Updates/”. Depending on the browser you use and the configuration of your computer, things might look a little different than the screen grabs shown here.</p> <table border="1" data-bbox="561 1255 1409 1734"> <thead> <tr> <th data-bbox="808 1255 867 1283">Name</th> <th data-bbox="1101 1255 1235 1283">Last modified</th> <th data-bbox="1256 1255 1300 1283">Size</th> <th data-bbox="1321 1255 1409 1283">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="561 1325 743 1352">Parent Directory</td> <td data-bbox="1101 1325 1235 1352"></td> <td data-bbox="1256 1325 1300 1352"></td> <td data-bbox="1321 1325 1409 1352">-</td> </tr> <tr> <td data-bbox="561 1360 760 1388">CSP presentation/</td> <td data-bbox="1101 1360 1235 1388">05-Apr-2006 18:55</td> <td data-bbox="1256 1360 1300 1388"></td> <td data-bbox="1321 1360 1409 1388">-</td> </tr> <tr> <td data-bbox="561 1396 873 1423">Farm Equipment presentations/</td> <td data-bbox="1101 1396 1235 1423">10-Jun-2016 15:39</td> <td data-bbox="1256 1396 1300 1423"></td> <td data-bbox="1321 1396 1409 1423">-</td> </tr> <tr> <td data-bbox="561 1432 911 1459">Latest Base Database and Updates/</td> <td data-bbox="1101 1432 1235 1459">03-Oct-2016 15:42</td> <td data-bbox="1256 1432 1300 1459"></td> <td data-bbox="1321 1432 1409 1459">-</td> </tr> <tr> <td data-bbox="561 1467 867 1495">Manure drymatter calclations/</td> <td data-bbox="1101 1467 1235 1495">24-Oct-2010 17:27</td> <td data-bbox="1256 1467 1300 1495"></td> <td data-bbox="1321 1467 1409 1495">-</td> </tr> <tr> <td data-bbox="561 1503 776 1530">Printing templates/</td> <td data-bbox="1101 1503 1235 1530">10-Jun-2016 14:05</td> <td data-bbox="1256 1503 1300 1530"></td> <td data-bbox="1321 1503 1409 1530">-</td> </tr> <tr> <td data-bbox="561 1539 883 1566">RUSLE2 Instructional Material/</td> <td data-bbox="1101 1539 1235 1566">21-Apr-2017 20:50</td> <td data-bbox="1256 1539 1300 1566"></td> <td data-bbox="1321 1539 1409 1566">-</td> </tr> <tr> <td data-bbox="561 1575 1073 1602">Soil Removal tables for B&amp;B Nursery and Sod farms/</td> <td data-bbox="1101 1575 1235 1602">22-Apr-2005 16:53</td> <td data-bbox="1256 1575 1300 1602"></td> <td data-bbox="1321 1575 1409 1602">-</td> </tr> <tr> <td data-bbox="561 1610 1062 1638">Soil removal procedure for subsidence on Histosols/</td> <td data-bbox="1101 1610 1235 1638">10-Feb-2006 17:16</td> <td data-bbox="1256 1610 1300 1638"></td> <td data-bbox="1321 1610 1409 1638">-</td> </tr> <tr> <td data-bbox="561 1646 841 1673">Soils Database Procedures/</td> <td data-bbox="1101 1646 1235 1673">10-Jun-2016 15:51</td> <td data-bbox="1256 1646 1300 1673"></td> <td data-bbox="1321 1646 1409 1673">-</td> </tr> <tr> <td data-bbox="561 1682 824 1709">User Screen templates/</td> <td data-bbox="1101 1682 1235 1709">10-Jun-2016 14:19</td> <td data-bbox="1256 1682 1300 1709"></td> <td data-bbox="1321 1682 1409 1709">-</td> </tr> </tbody> </table>	Name	Last modified	Size	Description	Parent Directory			-	CSP presentation/	05-Apr-2006 18:55		-	Farm Equipment presentations/	10-Jun-2016 15:39		-	Latest Base Database and Updates/	03-Oct-2016 15:42		-	Manure drymatter calclations/	24-Oct-2010 17:27		-	Printing templates/	10-Jun-2016 14:05		-	RUSLE2 Instructional Material/	21-Apr-2017 20:50		-	Soil Removal tables for B&B Nursery and Sod farms/	22-Apr-2005 16:53		-	Soil removal procedure for subsidence on Histosols/	10-Feb-2006 17:16		-	Soils Database Procedures/	10-Jun-2016 15:51		-	User Screen templates/	10-Jun-2016 14:19		-
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4 Download the “BASE\_NRCS\_MOSES\_03302016.zip” file. After you do this, download the “NRCS\_Moses\_updates\_030104\_to\_03302016.zip”.


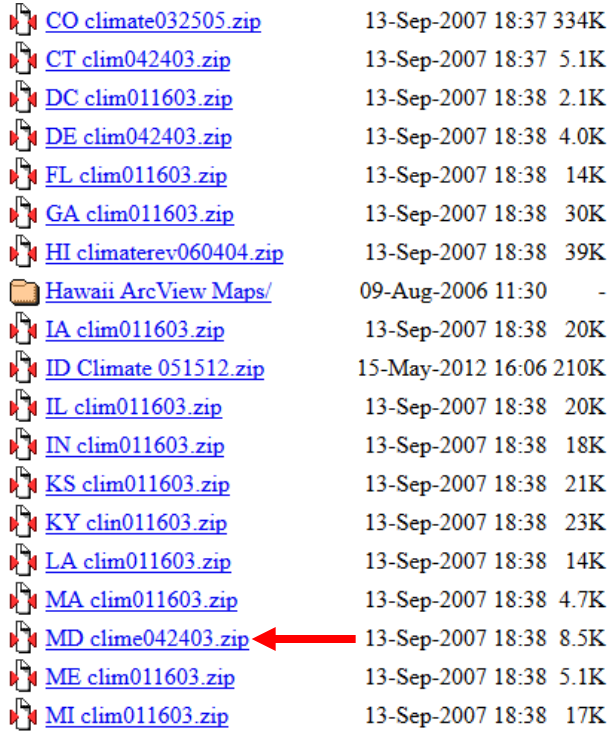
Name	Last modified	Size	Description
Parent Directory	-	-	-
<a href="#">Archiving an Existing MOSES Database and Building a New RUSLE2 MOSES Database for Field Office use.docx</a>	27-Nov-2012 17:20	72K	
<a href="#">BASE_NRCS_MOSES_03302016.zip</a>	07-Apr-2016 17:47	12M	
<a href="#">Database Update Instructions for use with RUSLE2 updated June 2016.doc</a>	07-Jun-2016 18:42	4.2M	
<a href="#">Database Updates 03302016.docx</a>	07-Apr-2016 17:42	20K	
<a href="#">NRCS_Moses_updates_030104_to_03302016.zip</a>	07-Apr-2016 17:47	12M	
<a href="#">ROCK COVER Guidelines.docx</a>	03-Oct-2016 14:46	15K	
<a href="#">RUSLE2 Database Management.pptx</a>	09-Feb-2015 17:44	5.3M	
<a href="#">RUSLE2 Glossary of Abbreviations.rtf</a>	19-Jul-2016 16:01	44K	

5 If you see the following screen when downloading the Base database or the database updates, select Save file, then click OK. The database files should then save to your Downloads folder.



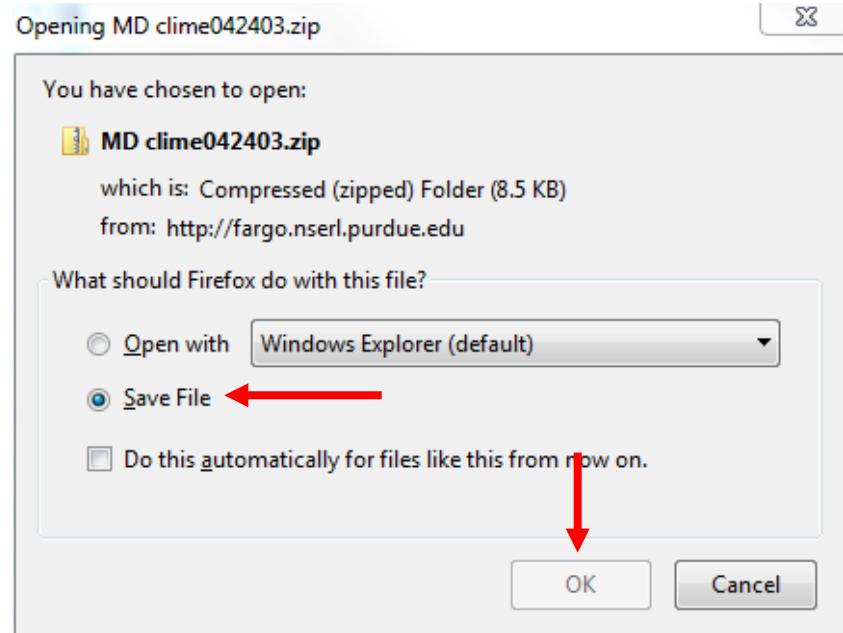
**Downloading  
Climate Data**

The next task is to download the climate data for the state in which you work.

Step	Action
1	Go to: <a href="http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm">http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm</a>
2	Select “Data Files” under “Climate Data”. 
3	Choose “MD clime042403.zip”. 

4

The file should be saved to your download folder. If you see the following screen, select Save file, then click OK.



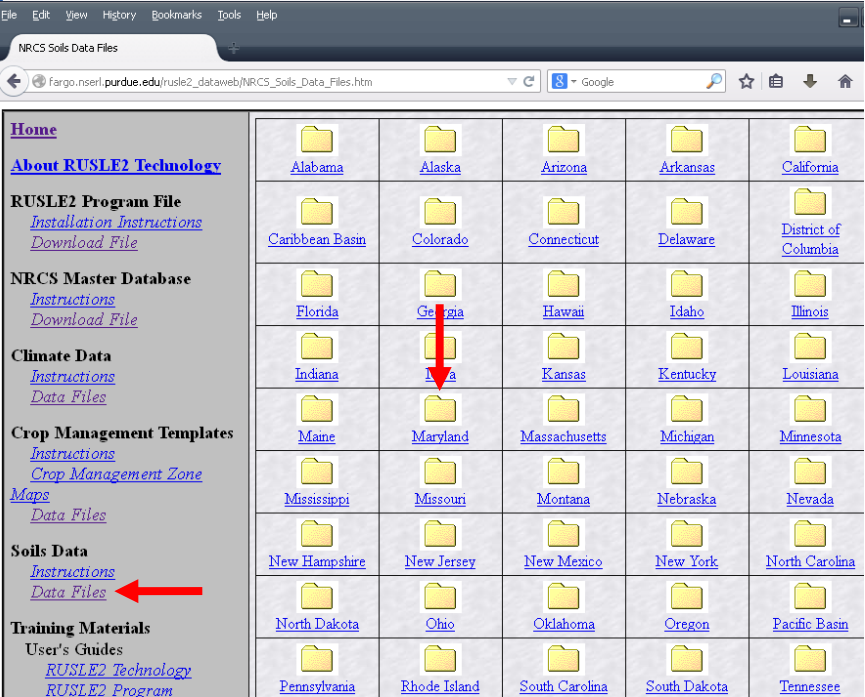
**Downloading  
Crop  
Management  
Zone (CMZ)  
Data**

Download the Crop Management Zone (CMZ) in which you work.

Step	Action
1	Go to: <a href="http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm">http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm</a>
2	Click on “Data Files” under “Crop Management Templates”. 
3	Choose the CMZ in which you work. The file should be saved to your downloads folder. If you see the following screen, select Save file, then click OK. 

**Downloading  
Soils Data**

The last database to download is the soils.

Step	Action
1	Go to: <a href="http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm">http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm</a>
2	<p>Select “Data Files” under “Soils Data”, then select the “Maryland” folder.</p>  <p>The screenshot shows a web browser window with the URL <a href="http://fargo.nserl.purdue.edu/rusle2_dataweb/NRC5_Soils_Data_Files.htm">http://fargo.nserl.purdue.edu/rusle2_dataweb/NRC5_Soils_Data_Files.htm</a>. The page content includes a sidebar with navigation links and a main grid of folders. The sidebar has sections for Home, About RUSLE2 Technology, RUSLE2 Program File, NRC5 Master Database, Climate Data, Crop Management Templates, Soils Data, and Training Materials. Under Soils Data, there are links for Instructions and Data Files. A red arrow points to the Data Files link. The main grid contains folders for Alabama, Alaska, Arizona, Arkansas, California, Caribbean Basin, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pacific Basin, Pennsylvania, Rhode Island, South Carolina, South Dakota, and Tennessee. A red arrow points to the Maryland folder.</p>

3

Choose only the counties in which you work. These are large files and can take up space on your hard drive. After you select a county file, it should be saved to your downloads folder. If you see the following screen, select Save file, then click OK.

The screenshot shows a web browser window with the address bar displaying `fargo.nserl.purdue.edu/RUSLE2_ftp/Soils_Data/Maryland/`. The page content is a directory listing with columns for **Name**, **Last modified**, **Size**, and **Description**. The files listed are:

Name	Last modified	Size	Description
<a href="#">Parent Directory</a>	-	-	-
<a href="#">Allegany County, Maryland.gdb</a>	22-Dec-2014 16:28	881K	
<a href="#">Anne Arundel County, Maryland.gdb</a>	22-Dec-2014 16:38	740K	
<a href="#">Baltimore County, Maryland.gdb</a>	22-Dec-2014 16:44	740K	
<a href="#">Calvert County, Maryland.gdb</a>			
<a href="#">Caroline County, Maryland.gdb</a>			
<a href="#">Carroll County, Maryland.gdb</a>			
<a href="#">Cecil County, Maryland.gdb</a>			
<a href="#">Charles County, Maryland.gdb</a>			
<a href="#">City of Baltimore, Maryland.gdb</a>			
<a href="#">District of Columbia.gdb</a>			
<a href="#">Dorchester County, Maryland.gdb</a>			
<a href="#">Frederick County, Maryland.gdb</a>			
<a href="#">Garrett County, Maryland.gdb</a>			
<a href="#">Harford County, Aberdeen Pr...</a>			
<a href="#">Harford County, Maryland.gdb</a>			
<a href="#">Howard County, Maryland.gdb</a>			
<a href="#">Kent County, Maryland.gdb</a>	22-Dec-2014 17:56	323K	
<a href="#">MD Soils Updated 12232014.zip</a>	23-Dec-2014 18:10	482K	
<a href="#">Montgomery County, Maryland.gdb</a>	22-Dec-2014 17:57	332K	

A dialog box titled "Opening Carroll County, Maryland.gdb" is overlaid on the page. It contains the following text: "You have chosen to open: Carroll County, Maryland.gdb which is: gdb File (458 KB) from: http://fargo.nserl.purdue.edu". Below this, it asks "What should Firefox do with this file?" and provides three options: "Open with Browse..." (unselected), "Save File" (selected), and "Do this automatically for files like this from now on." (unchecked). The "OK" and "Cancel" buttons are at the bottom. Red arrows point to the "Save File" option and the "OK" button.

**Extracting  
.GDB files  
from  
compressed  
folders, and  
copying them  
to the Rusle2  
import folder**

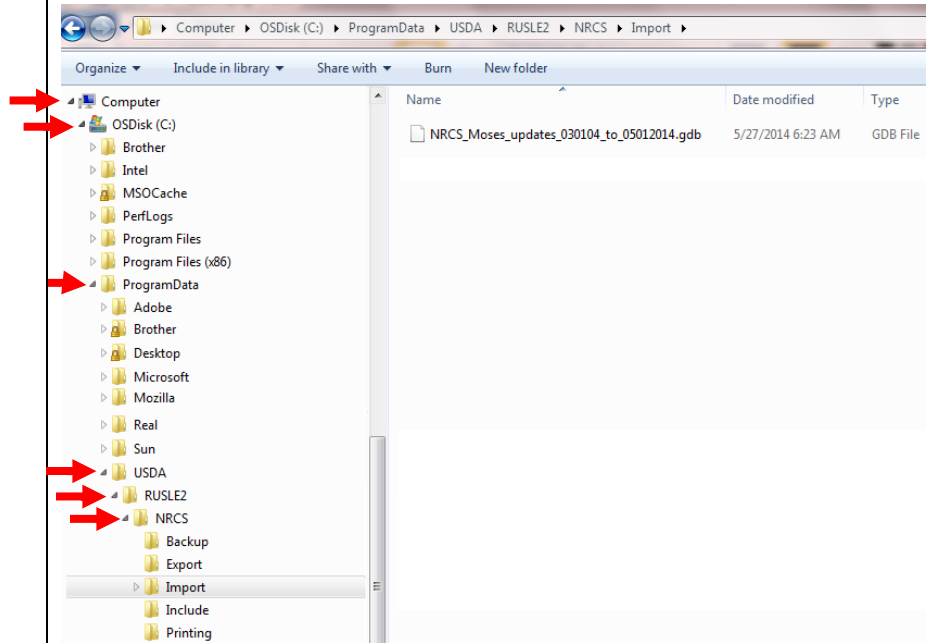
The files downloaded from the NRCS website must be copied from the downloads folder to Rusle2 > Import folder, so that they may be imported into the RUSLE2 program. The soil file is a GDB file and can be directly copied to the import folder, however the climate, crop management zone, and MOSES update files needed are contained in compressed (zipped) folders, and must first be un-compressed.

You will now extract the database (\*.gdb) files from the compressed (zipped) folders, and copy the \*.gdb files to the Rusle2 import folder on the C drive: (OSDisk (C:) > ProgramData > USDA > Rusle2 >NRCS > Import).

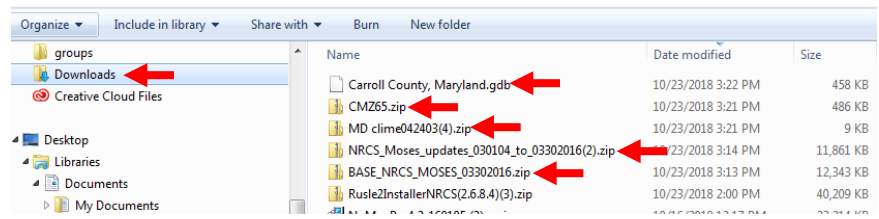
Step	Action
1	<p>Open Windows Explorer (The folder icon on the task bar, on the lower left corner of your screen).</p> 



- 2 Expand the folders under “Computer” in the left Windows Explorer pane, so that the RUSLE2>NRCS>Import folder is visible (by clicking on the triangles to the left of the Computer, OSDisk (C:), ProgramData, USDA, RUSLE2, and NRCS folders).

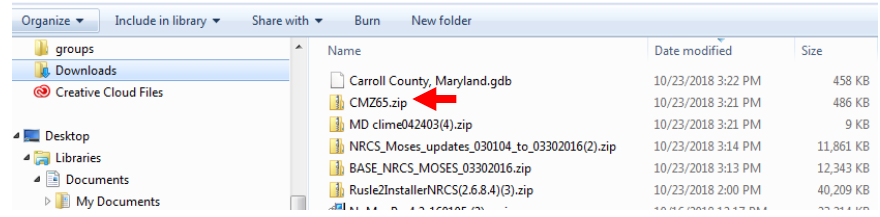


- 3 Click on the Downloads folder (generally at the top of the left pane of the Windows Explorer screen). The Downloads folder should become highlighted. In the right pane you should now see the files you downloaded from the NRCS website. The soil file will be a GDB file, however the climate, crop management zone, and MOSES update files you will need are contained in compressed (zipped) folders, and must first be un-compressed.

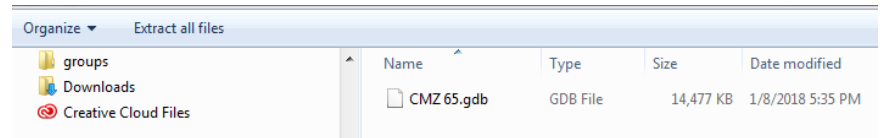


4

To un-compress the crop management zone data (e.g. CMZ 65): double-click with the left mouse button on the “CMZ 65.zip” compressed folder that appears in the right pane of the Windows explorer screen.

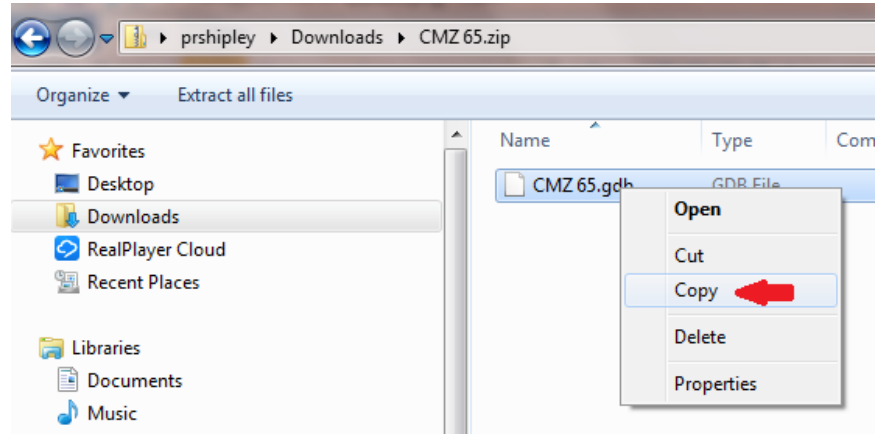


The extracted “CMZ 65.gdb” file will then appear:

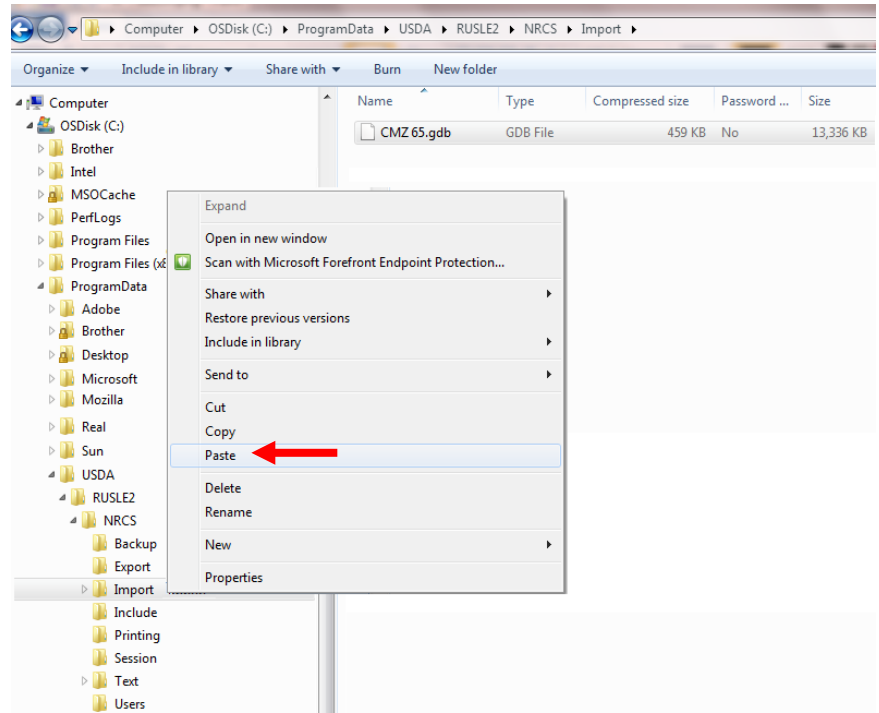


5

To copy the “CMZ 65.gdb” file to the Rusle2 Import folder: right click on the filename and select copy,

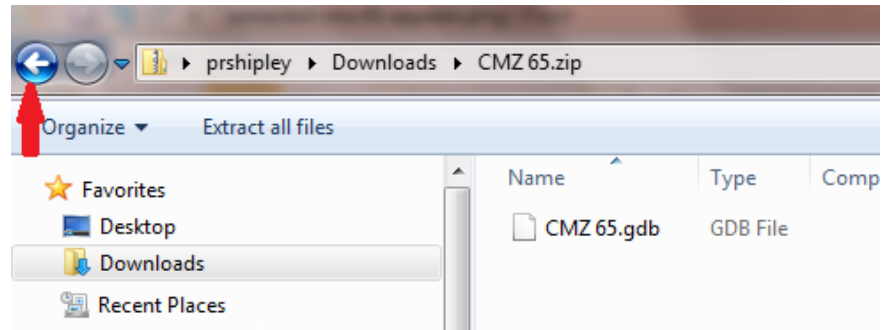


then in the left Windows Explorer pane, scroll down to the Rusle2 Import folder expanded earlier in step 2, right click on the import folder, and select paste:



6

Click the back arrow at the upper left corner of the Windows Explorer screen to return to the downloads folder.



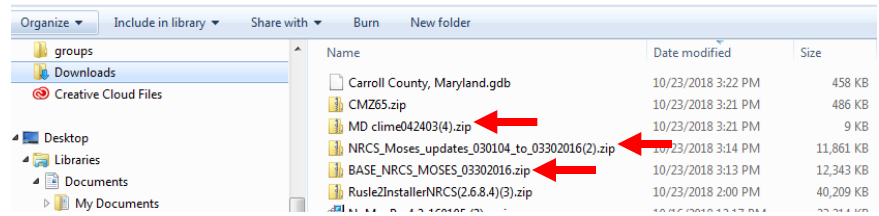
7

**Repeat steps 4-6 for each of the remaining compressed (zipped) folders:**

MD clime042403.zip;

BASE\_NRCS\_MOSES\_03302016.zip;

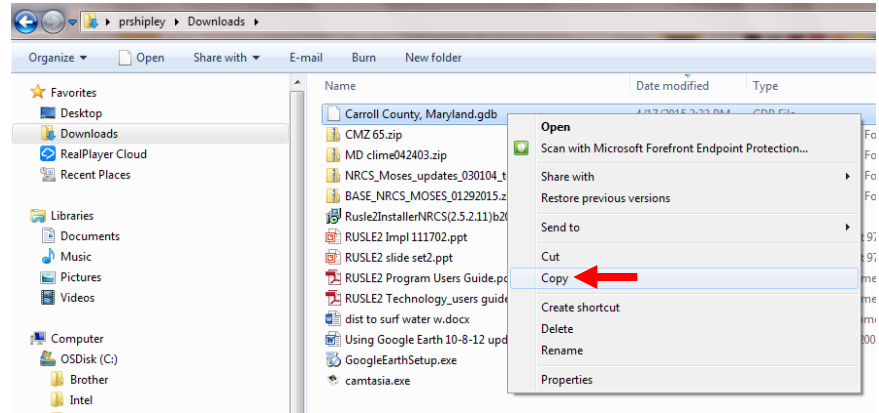
and NRCS\_Moses\_updates\_030104\_to\_03302016.zip.



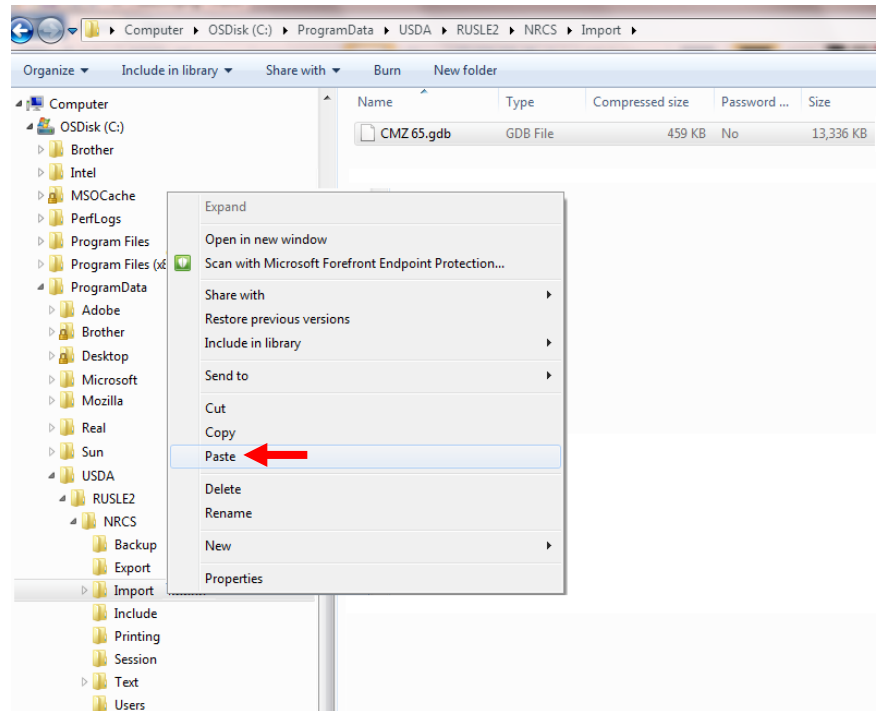
8

**The last file to be copied to the import folder is the soil file. Since it is already in GDB format, it does not need to be uncompressed.**

To copy the soils data file to the Rusle2>Import folder (e.g. Carroll County, Maryland.gdb): right click on this file and select copy.



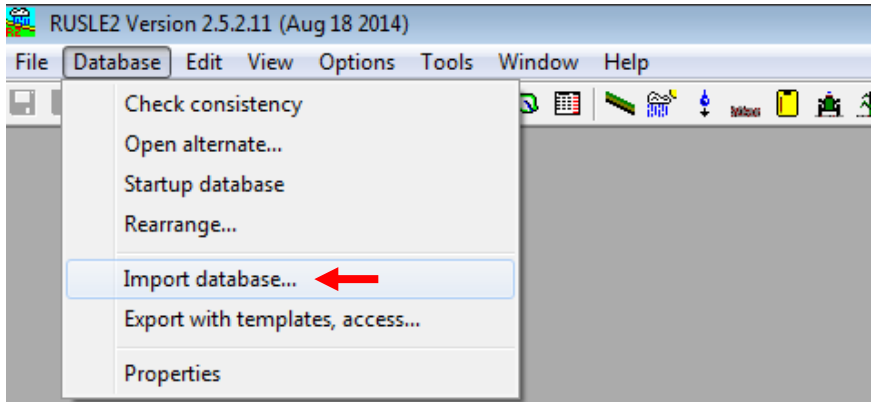
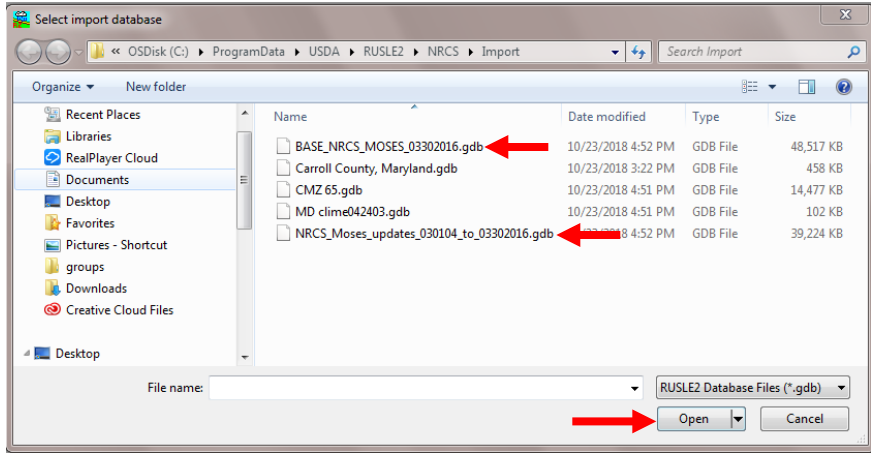
Then, in the left Windows Explorer pane, scroll down to the Rusle2>Import folder expanded earlier, right click on the import folder, and select paste.



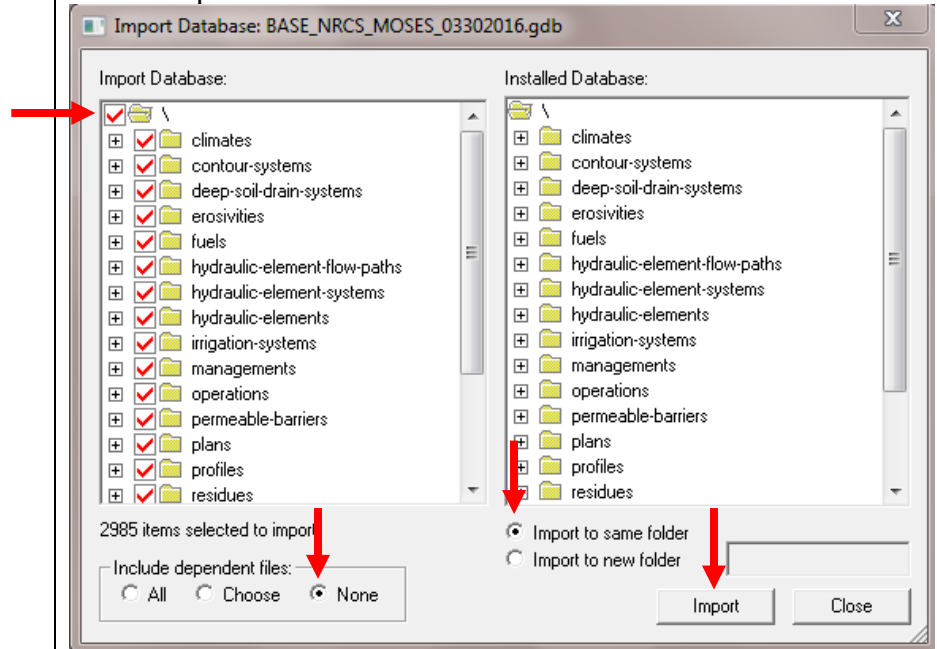
9	All the data files have now been uncompressed/copied to the Rusle2>Import folder. You may repeat these steps, if you wish to import additional soils or crop management zone files into RUSLE2.
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**Setting Up  
RUSLE 2**

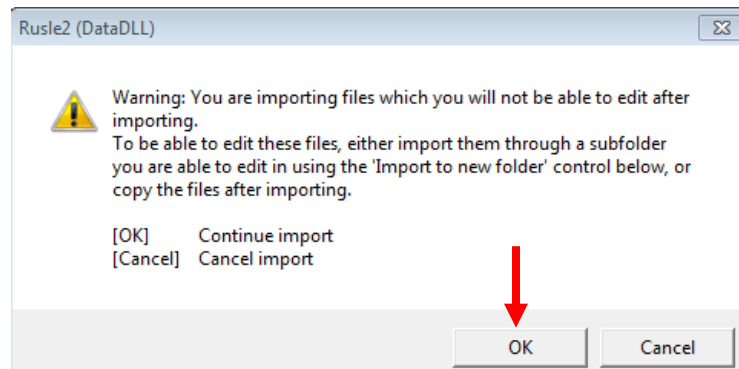
You are now ready to import these databases into RUSLE2.

Step	Action
1	<p>Open RUSLE 2, click on Database and then select “import RUSLE2 database:</p> 
2	<p>Select the NRCS Moses updates that you downloaded earlier, then click “Open”. (You will first import the BASE_NRCS_MOSES_03302016.gdb, and when finished, repeat the process for NRCS_Moses_updates_030104_to_03302016.gdb).</p> 

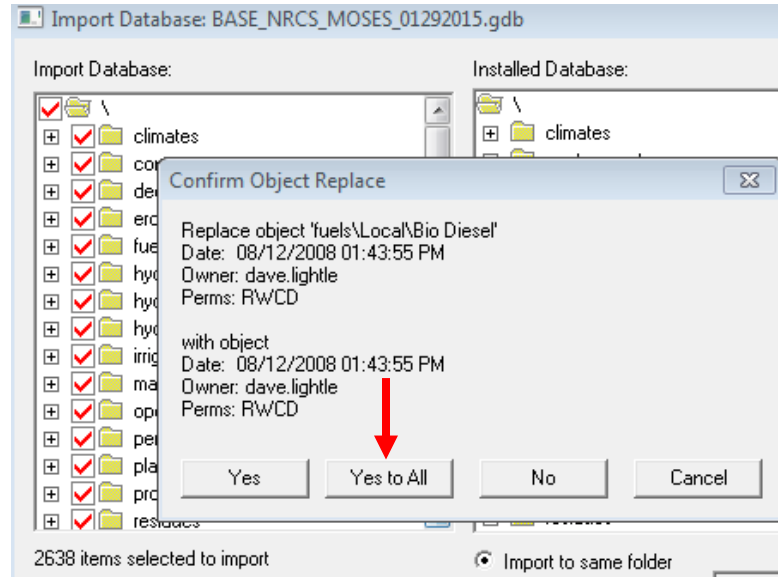
- 3 Check the box to the left of the folder at the top of the Import Database list. This will place a red check mark in each cell. Under “Include dependent files” choose “None”. Choose “Import to the same folder”. Click “Import”.



- 4 Click “OK” when you get the warning message.

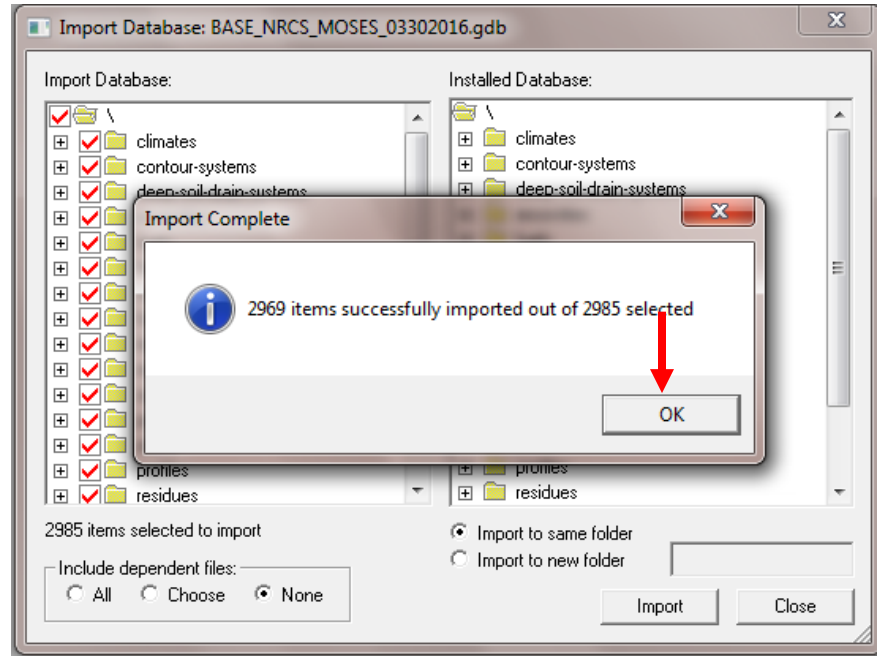


5 If asked to replace an object, click “Yes to All”.

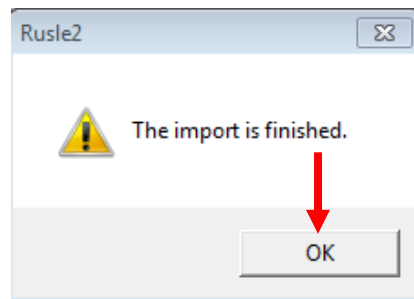




6 Click "OK":

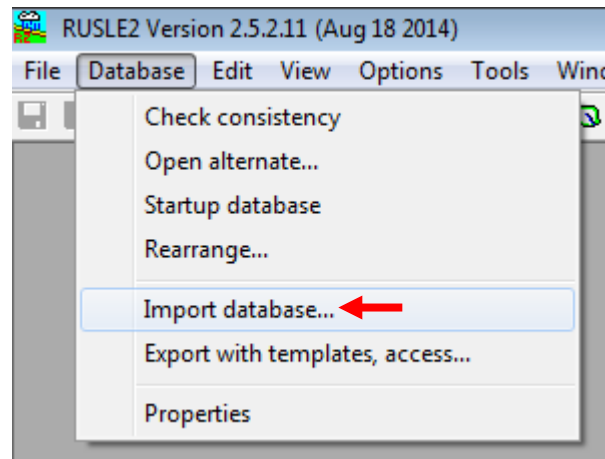


Click "OK" if you see the following screen:



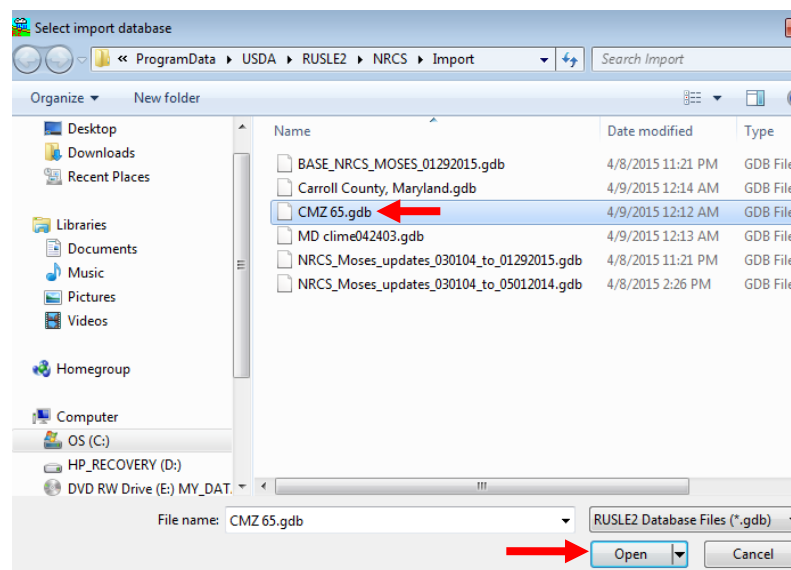
7

Next, import the Crop Management Zone database.  
Click on “Database” and select “Import RUSLE2 database”.



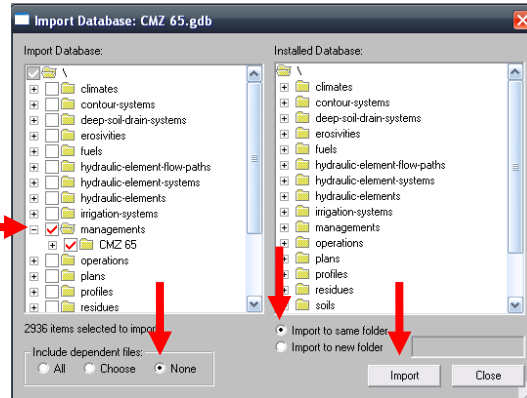
8

Select the CMZ you wish to import and click “Open”.



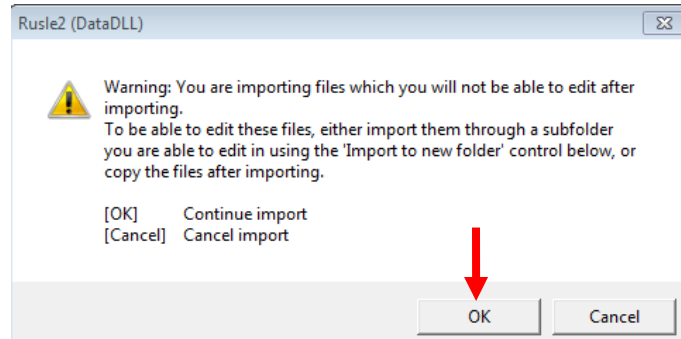
9

Click on the empty cell to the left of “managements”, click “none” and “import to same folder”. Then click “Import”.

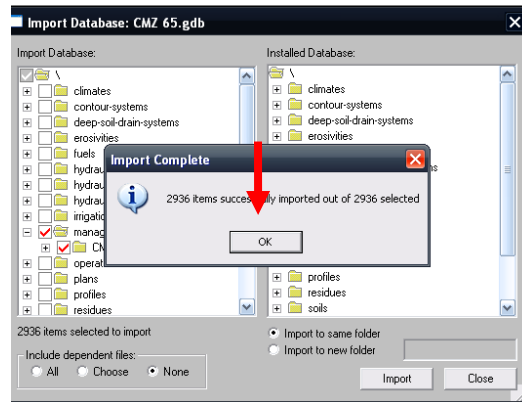


10

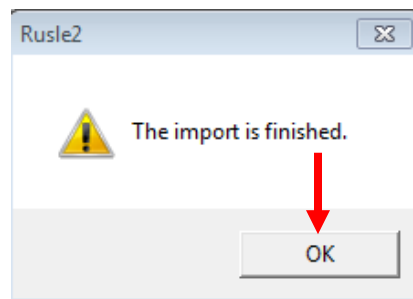
Click “OK” when you get the warning message:



Click “OK”:

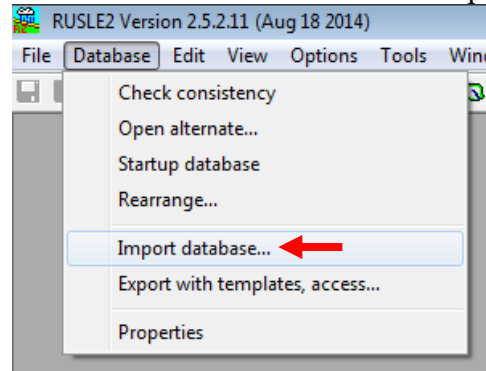


Click “OK” if you see the following screen:

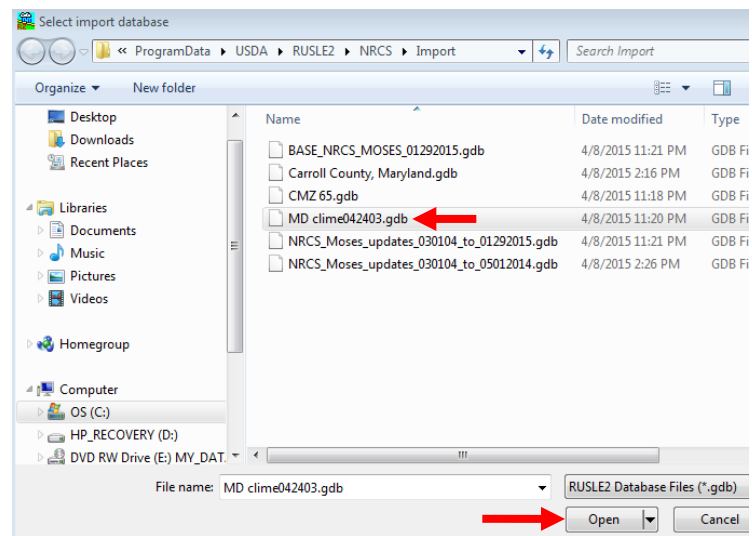


11

Next, import the Climate database:  
Click on “Database” and select “Import database”.

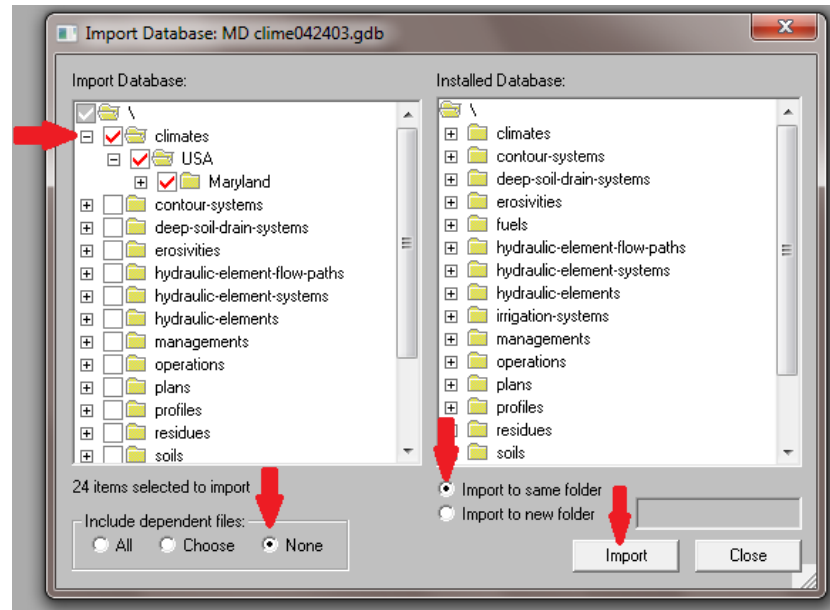


Select "MD clime042403.gdb", then click "Open":



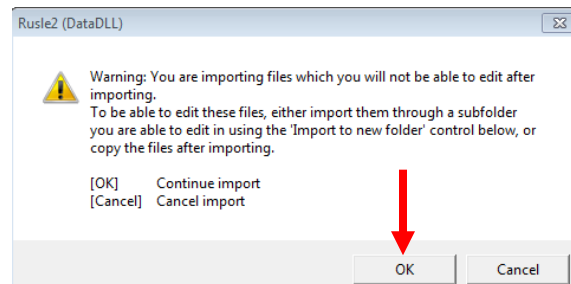
12

Click in the empty cell to the left of “climates”, select “None”, select “Import to same folder” and then click “Import”.

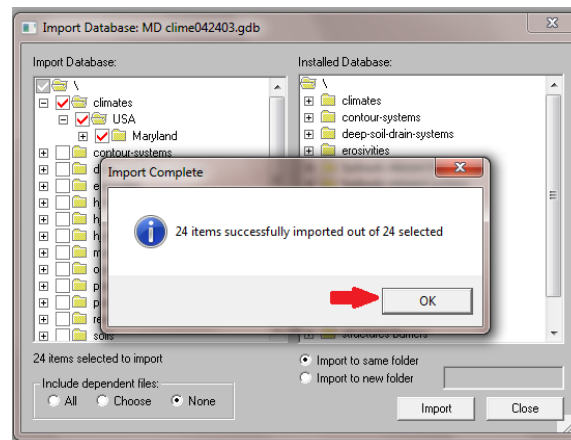


13

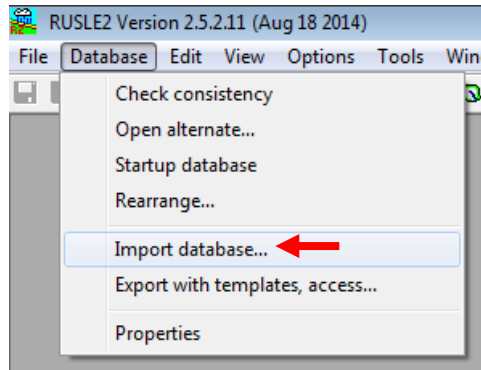
Click “OK” on the warning message.



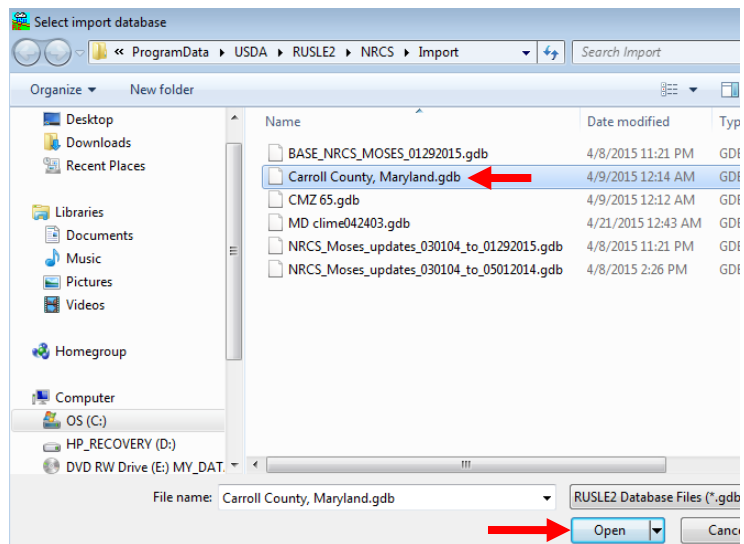
Click “OK”:



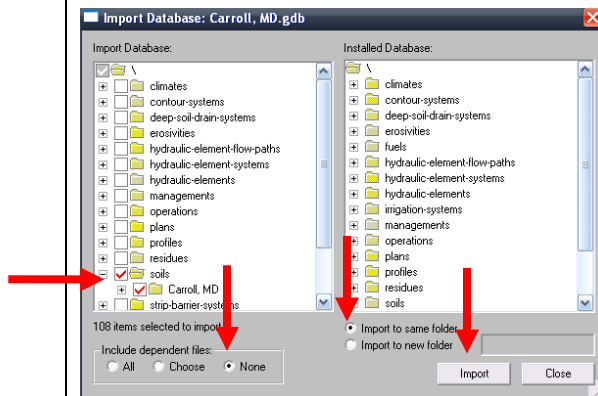
14 Import the soils database.  
Click on “Database” and select “Import database”.



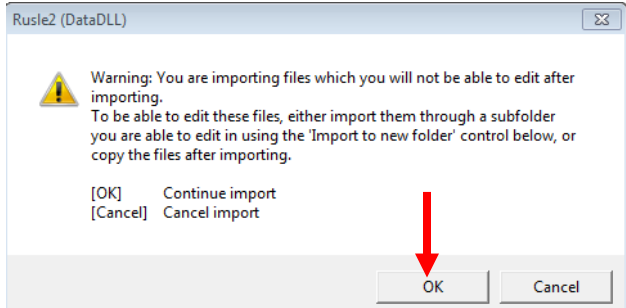
15 Choose the county soils database.



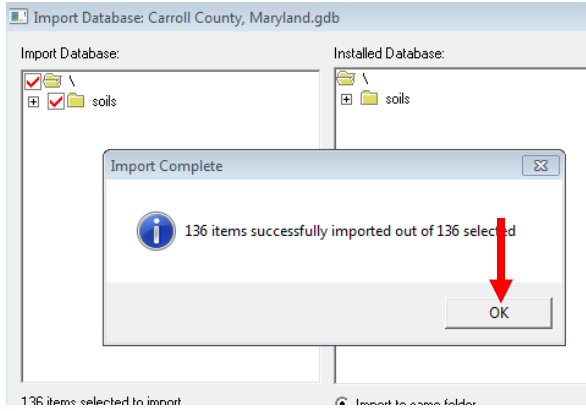
16 Click in the empty cell to the left of “soils”, select “None”, select “Import to same folder” and then click “Import”.



17 Click “OK” on the warning message.



18 Click “OK”.



19 The databases are now downloaded and RUSLE2 is ready for use. The last step is to click on Database > Startup database. This will ensure that you open to the correct template each time.

