

General Issues

Question	Answer
How do I start Web Soil Survey?	https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
When will Web Soil Survey have soil information for my particular county?	All data available in Web Soil Survey is stored in the Soils database. Each state is responsible for populating the Soils database for all counties in that state. For information about when data will be available for your county, contact your State Soil Scientist at the following link: State Soil Scientists . This link is also available from Web Soil Survey's Contact Us link.
When was Web Soil Survey first released?	On August 16, 2005, Secretary of Agriculture Mike Johanns announced the launch of the USDA Web Soil Survey site.
How can I get help using Web Soil Survey?	<p> You can access context-specific online help throughout Web Soil Survey, by clicking the question-mark icon. This opens up help for the particular feature or group of features where the icon is located.</p> <p> When you open a help item, the question-mark icon turns upside-down. To close the help item, you can click the upside-down question-mark icon.</p> <p> Or click the Close button at the upper right of the open help item.</p> <p> Many help items are divided into sections, which can be opened and closed. To open a closed section, click the plus-sign icon.</p> <p> To close an open section, click the minus-sign icon.</p> <p>If you need additional assistance, click the Contact Us link in the navigation bar, click the email link soilshotline@usda.gov, and we'll be glad to help you.</p>
How can I find the information I'm looking for in Web Soil Survey?	<p>Use the Search panel, in the upper left corner of each tab in Web Soil Survey. Enter keywords or phrases, and use the Advanced Search options if needed, and click Search.</p> <p>The search results are links that navigate to the places in Web Soil Survey that match your search items.</p> <p> For more information, click the question-mark icon in the Search panel.</p>
How can I get notifications of soil data updates?	Web Soil Survey provides data update notifications via RSS. To use the RSS Feed, click on the Subscribe link located beneath the USDA logo in the upper-left corner of Web Soil Survey.

Click on a link in the **Subscribe to RSS Feeds** window to choose either **All States and Territories** or a particular state. What you see next depends on the browser you're using.

In Internet Explorer, this displays a new page which shows information about the updates for the state you chose and links **Subscribe to this feed** and **Learn more about feeds**. At this point you are only viewing feeds and you may sort them by date or title, but you have not yet subscribed to the feed.

To subscribe, click **Subscribe to this feed** and get a pop-up window where you can choose options, then click **Subscribe**. You should see a message "You've successfully subscribed to this feed!". You may wish to adjust the RSS Feed Properties and may do so by clicking on **View feed properties** located on the right-side of the page. The Feed Properties allow you to control the update schedule or how often your computer checks the feed for new updates.

Repeat the RSS Feeds Subscription process for each state/territory you are interested in (unless you subscribed to **All States and Territories**).

You may review your RSS Feeds any time by opening Internet Explorer and going to Favorites and Feeds.

How can I receive updates about Web Soil Survey?

You may subscribe to Web Soil Survey in GovDelivery by clicking the following link: [GovDelivery](#). The updates are specific to the application and/or web page and are not to be confused with RSS Feeds. RSS Feeds are explained in the FAQ "How can I get notifications of soil data updates?".

How frequently is the soil data updated?

A yearly refresh of the official soil survey database (spatial and tabular) will take place on July 1 of each year. The adoption of a regular refresh rate is to allow internal and external users to better coordinate updates of official soils data in support of their activities. Official soil survey information may be updated on a more frequent than annual basis under the following exceptions: 1) Completion of an initial survey or an update survey; 2) Completion of a survey under a reimbursable agreement; 3) Updated information for a particular survey or set of surveys may be posted if necessary to correct a severe error discovered in the database where this error is adversely impacting either internal or external customers; 4) Other extenuating circumstances. The annual refresh will refresh all surveys which were updated during the year. See also FAQs "[How can I get notifications of soil data updates?](#)" and "[How can I find out when soil data was last updated?](#)"

How can I find out when soil data was last updated?

Click on "Download Soils Data" tab. Select a State. Select a County (optional). Enter a date (optional) in "Only show Soil Survey Areas updated since...". In the list of surveys, look at the dates in the Version column and look at the date in the "Download Link".

How can I find the Soil Survey Geographic Database (SSURGO) documentation?

Soil Survey Geographic Database (SSURGO) documentation including table names, columns, user guides and other documentation are available at: [SSURGO Documentation](#).

My Internet Explorer browser does not seem to work properly with Web Soil Survey. I am seeing errors. What can I do?	If the Microsoft Internet Explorer browser is used, it must be version 11. To see which IE version you are using, navigate to the Help menu and then choose About Internet Explorer. If you are using an older version, please upgrade to version 11. A download is available on Microsoft's Internet Explorer website.
Can I use Web Soil Survey on a mobile device?	Yes. Attach a mouse (e.g. wireless mouse) to the smart device.

Area of Interest and Quick Navigation

Question	Answer
How do I select the area for which I want to get soil information?	<p>Here are some basic instructions to get started using Web Soil Survey:</p> <ol style="list-style-type: none"> 1. On the left side of the screen in the Quick Navigation panel, click on one of the selection methods. For example, open State/County, select your state and county, and click View. 2.  After the map image is updated, click the <i>Zoom In</i> tool. Then click and drag a rectangle on the map to zoom to an area. Zoom in as close as you need to so you can see streets and landmarks you recognize. 3.  After the map image is updated, click the <i>AOI Rectangle tool</i>. 4. Click and drag a rectangle around the area of the map you wish to set as your Area of Interest. 5. The application will create the AOI you have specified. Now you can navigate to the Soil Map or Soil Data Explorer tabs and start getting soil information. <p> If the area you are interested in is not rectangular, you can use the <i>AOI Polygon tool</i>. Click points on the map to define your AOI. For the final point, Double-click or while holding down the Control key on the keyboard, click the left mouse button.</p>
Why am I limited to an area of interest of 100,000 or fewer acres?	For performance reasons. Large AOIs take longer to create. Because they also contain many soil map units, it takes longer to generate reports, ratings, maps, etc.
How do I use Google Earth to create multiple AOIs for WSS?	Using Google Earth Pro (GEP), and an online converter tool, the non-GIS user can create a shapefile for import into WSS. Click here for complete instructions.
I want to get an exact definition of a subject property to match the Assessor's Parcel Map for a soil survey. Is there a way that I can pinpoint an exact parcel number or property for a soil survey?	This feature is not supported in the current release.

<p>Can I use nine one one addresses (physical address on county roads) in the address search feature?</p>	<p>This feature is not supported in the current release.</p>
<p>Can I import a shapefile into Web Soil Survey in order to define an area of interest?</p>	<p>Yes. On the Area of Interest (AOI) tab, navigate to Import AOI then either choose the option Create AOI from Shapefile or Create AOI from Zipped Shapefile. You can also import a shapefile that contains a multi-part AOI through this process. See New Features (version 3.2).</p>
<p>How can I bookmark or save my AOI so I can come back to it?</p>	<p>You can do this in two different ways. Once you've created your AOI:</p> <ol style="list-style-type: none"> 1. On the Area of Interest (AOI) tab, save your AOI using Export AOI and then choose the option Export AOI as Zipped Shapefile. After the zipped shapefile is saved to your local machine, go back into Web Soil Survey and choose Import AOI and then choose the option Create AOI from Zipped Shapefile. For the zipped shapefile input, use the zipped shapefile you just saved to your local machine. 2. Open the Link control, and save the Uniform Resource Locator (URL) displayed there or bookmark it for later use. 3. Note: Multi-part AOI information will not be shown in the link. <p>See New Features (version 2.3) for details.</p>
<p>My land contains more than one irregular-shaped field area of tillable land that is surrounded by non-tillable land. Is it possible to draw each area of tillable land as separate sub-parts of the AOI so the software can summarize each soil type from the total of field areas of tillable land that has been sketched?</p>	<p>Use the AOI multi-part feature, currently available on the Import AOI section in the Area of Interest (AOI) tab.</p> <p>You can do this in two different ways:</p> <ol style="list-style-type: none"> 1. On the Area of Interest (AOI) tab, use Import AOI and then choose the option Create AOI from Shapefile. 2. On the Area of Interest (AOI) tab, use Import AOI and then choose the option Create AOI from Zipped Shapefile. <p>See New Features (version 3.2) for details.</p>
<p>When I'm drawing an AOI, sometimes I make an error and want to stop in the middle of drawing it and start over, or after I've drawn it, I want to delete the AOI and start over. Is there a way to do this?</p>	<p>To stop in the middle of drawing an AOI and start over, when using the <i>AOI Rectangle</i> tool, press the Esc key <i>without releasing the mouse button</i>.</p> <p>To start over when using the <i>AOI Polygon</i> tool, just press the Esc key.</p> <p>To delete an AOI after drawing it, click the Clear AOI button in the Area of Interest Properties panel.</p>

To navigate by Public Land Survey System (PLSS), how do I specify township and range, including the direction?	Enter both number and direction into the “Township” or “Range” box. For example: “20 N” or “8 W”.
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Interactive Map

Question	Answer
Why are the water and road lines so far off the photo image?	The base map data layers used by Web Soil Survey come from multiple sources and were compiled at various scales, generally at a much coarser resolution than the soils data or the aerial photos, and they don’t always match perfectly.
Why can’t the Web Soil Survey development staff fix problems with these map data layers?	Web Soil Survey is only displaying these data layers to assist with navigation and as auxiliary information to the soils data. These layers are supplied by third parties, and NRCS does not have the authority to edit them. NRCS is only responsible for the soils data layers.
How can I find the source of the map data layers displayed in Web Soil Survey?	To see all available information on a map data layer: <ol style="list-style-type: none"> 1. Zoom the map to a scale where the layer you are interested in is visible. 2. Open the Legend tab. 3. Right click the name of the layer to pop-up the context menu. 4. Click View Layer Descriptions. 5. All available information about the source of the data layer is displayed. In some cases, the source of the data layer is not known, and <i>No descriptions available</i> is displayed.
How can I find the date of aerial photography used in Web Soil Survey?	To get the date of the aerial photography for a particular spot: <ol style="list-style-type: none"> 1. Click the <i>Identify</i> tool on the map tool bar. 2. Then click on the map. In the Identify panel below the map, for the “Aerial Photography” layer, you will see the dates that the imagery was made at the spot you clicked. <p>The aerial photography date(s) are also included on the Legend page of printable maps.</p>
Why do the “Measurement Tool” and scale bar not always agree?	The map is presented in the “Web Mercator” projection. The scale bar is based upon this projection, and represents approximate east-west map distances at the center of the image. The actual scale varies north and south of this center point in this projection. The measurement tool provides a more accurate distance

	measurement than possible using the “flat earth” Web Mercator projection: the Web Mercator coordinates at the measurement points are converted to “WGS 84” geographic coordinates and the geodesic distance between these points is then calculated.
When I “copy” the map image from my browser most of the map image is missing. How can I copy the map that I can see in the browser?	A side effect using Quick Maps is that you cannot directly “copy” the map image from your browser to paste it into a different application. Should you need to do this, disable “Quick Maps” (via the “Preferences” link at the top of the page). Then you will be able to “copy” the complete map image.
Why is the background “Topographic Map” missing?	Please try refreshing your browser window. The topographic map data may be temporarily unavailable due to network or service difficulties. In addition, there may be no data available where you are looking. Is the “Topographic Map” background layer turned on in the Legend?
Why is some (or all) of the background “Aerial Photography” missing?	You may occasionally see one or more missing regions in the background if network traffic is congested or if the photographic images are not immediately available from our provider (Microsoft Bing). Refreshing your browser window should improve the picture (it may be necessary to refresh several times, each time should increase the coverage). Is the “Aerial Photography” background layer turned on in the Legend?

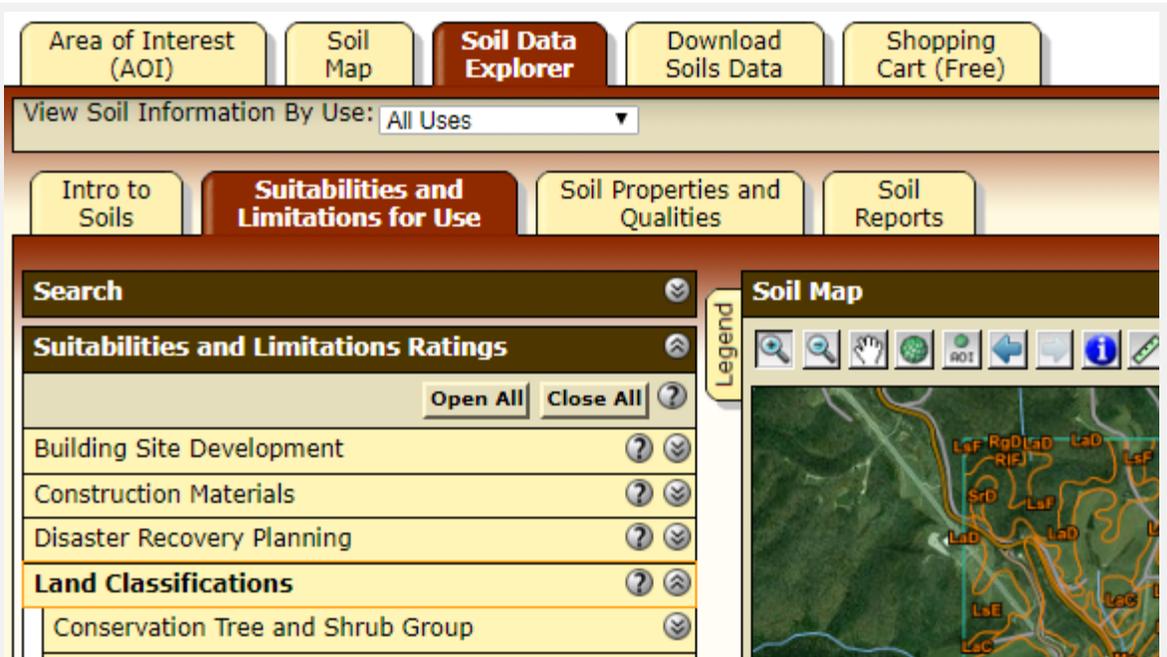
Soil Data Explorer

Question	Answer
How can I view Ecological Site data for my Area of Interest?	The Ecological Site data is now available in the Ecological Sites inner-tab within the Soil Data Explorer tab. For each map unit in the AOI a link to the appropriate “EDIT” data is provided (“EDIT” stands for “Ecosystem Dynamics Interpretive Tool”, not all map units have data available). <ol style="list-style-type: none"> 1. Define your Area of Interest. 2. Change to the Soil Data Explorer page. 3. On that page select the Ecological Sites tab. 4. Click on View All Ecological Sites Info button. 5. In the table beneath the thematic map click on Ecological Site Descriptions to open full ecological site descriptions in the USDA-NRCS Ecosystem Dynamics Interpretive Tool (EDIT). A new Web Browser page will be displayed with the ecological site's data associated with that component.
How do I print or download the soil data maps and tables?	Here are some basic instructions to get soil data from Web Soil Survey:

1. First, create an area of interest (AOI). (See [“How do I select the area for which I want to get soil information?”](#))
2. Then, click the **Soil Map** tab.
3. You will see the Soil Map for your AOI. Click the **Printable Version** button, and press **View** to create a Portable Document Format (PDF) file that you can download or print. For additional help, press the question-mark icon in the **Printable Version** form.
4. Then, click the **Soil Data Explorer** tab.
5. The **Soil Data Explorer** tab contains four inner tabs:
 - **Intro to Soils**
 - **Suitabilities and Limitations for Use**
 - **Soil Properties and Qualities**
 - **Soil Reports**

The default inner tab is **Suitabilities and Limitations for Use**. On the left side of this tab are a number of “Folders”, which you can click to open.

6. Open a folder, for example **Recreational Development**.
7. The folders contain one or more interpretive themes. Each has a form that you can fill out to get “Soil Ratings” (on the other inner tabs, other kinds of soil data are available). You can accept the defaults, or you can set the options as you wish. Click one of the interpretive themes, for example, **Playgrounds**, to open it.
8. You can click **View Description** to see a description of this rating.
9. Click **View Rating** to run the rating and view the data map and/or tables.
10. Click the **Printable Version** button, and press **View** to create a Portable Document Format (PDF) file of the soil rating map and/or tables that you can download or print.
11. Help for the **Suitabilities and Limitations for Use** tab, and for all the inner tabs, is available by clicking the question-mark icon at the upper right of the folder panel.



How do I get the description of a soil map unit without printing a soil map?

Define your area of interest, then navigate to the **Soil Map** tab. On the left side, find the desired soil map unit in the Map Unit Legend. Click on the map unit name to display the description for that map unit in a dialog. The Map Unit Description dialog also contains a **Printable Version** button.

You can also view and print a report containing all Map Unit Descriptions for your AOI. Navigate to the **Soil Data Explorer** tab, then the **Soil Reports** inner tab. On the left side, in the **AOI Inventory** folder, view the **Map Unit Description** report.

What is the source of the soil data presented in Web Soil Survey?

The data presented by Web Soil Survey comes from the Soil Data Mart database, which contains the official NRCS soil survey data for the U.S.

Printable Maps and Reports

Question	Answer
I cannot produce a printable version of the soil map. I have tried several times, and each time it says "Generating printable version...", but when it's done, no printable version appears.	You may have a popup blocker installed. See the Known Problem "Web Soil Survey doesn't work if you have popups blocked" at the following link: "Web Soil Survey doesn't work if you have popups blocked" .
I tried printing an on screen Portable Document Format (PDF) file via Printable Version and also via the Custom Soil Resource Report . The PDF looks fine on screen, but when I print	Since Web Soil Survey Portable Document Format (PDF) files alternate between portrait and landscape mode from page to page, you should select "Auto portrait/landscape" mode so that the pages are printed correctly. This is typically done in the "Printer Properties Layout Selection" or "Printer Properties Advanced Options". If needed, please check your particular printer's settings, help, or on-line guide.

using “Portrait” or “Landscape” mode, the printed pages get clipped, and information is not printed correctly. What can I do?

What is the difference between **Printable Version** and **Add to Shopping Cart**?

You can print or save soils data on a page-by-page basis using the **Printable Version** feature.

You can also add maps and data to a “Shopping Cart” for inclusion in a single Custom Soil Resource Report. It’s an easy way to get one polished report containing all relevant information for your area of interest. Any custom report you create on your Shopping Cart is free of charge — we just used the well-known internet shopping analogy for collecting and ordering your information.

To try out this feature, define your area of interest (AOI), and navigate to the **Shopping Cart** tab. In the **Table of Contents** panel, notice several report items available by default: *Cover, Preface, Contents, How Soil Surveys Are Made, Soil Map, Map Unit Legend, Map Unit Descriptions, and References*. You can preview items in your Shopping Cart by clicking the item’s title in the **Table of Contents**. To make the preview go away, click the title again.

You can add additional information to your report as desired. From the inner tabs of the **Soil Data Explorer** tab, view information and then click **Add to Shopping Cart**. In this way, you can assemble a report customized to your needs.

When you have collected all the data you want in your report, press the **Check Out** button and choose *Get Now* or *Download Later*. Larger reports are only available for *Download Later*.

I requested a report for **Download Later**, but I got an email message reporting an error, saying “This was attempt 1 of 3 total.” When will my report be run again?

The Order Processor normally runs a **Download Later** order once per day. If it gets an error, it does not run it again until the next day. The Order Processor is configured to run its queue all day long, so if the queue contains reports that had errors yesterday, it runs them again the next morning. It will run each order a maximum of three times, and once an order has failed three times, it gives up.

Why doesn’t my printable map look the same as the map I see on the screen?

In some cases the displayed layers and associated labels may differ due to differences in scale. See the Known Problem “The printable map doesn’t show what was in the interactive map” at the following link: [“The printable map doesn’t show what was in the interactive map”](#).

More subtle differences may be seen in width of linear features, size of symbols and size of text. These are associated with differences in scale and resolution. Differences in color, especially of linear features, may also be present. These are artifacts of creation of the printable maps inside of a Portable Document Format (PDF) document.

Why are soil map units missing labels?

Soil map units are labeled only for map scales 1:50,000 or larger. If some, but not all, labels are missing it's because the map software was unable to find enough space to fit all labels.

Printable Version Options provides a Map Scale selector. If no soil map unit labels appear, setting Map Scale to 1:50,000 or larger may solve the problem.

For very large AOIs, 1:50,000 may not be an option. A smaller AOI may solve the problem.

Data Downloads

Question	Answer																				
How can I get soil tabular and spatial data in a database format?	<p>This data is available in various forms, depending on your needs:</p> <table border="1"> <thead> <tr> <th>Scope</th> <th>Link</th> <th>Scale</th> <th>Data Format</th> </tr> </thead> <tbody> <tr> <td>User-specified AOI, up to 100,000 acres</td> <td>Web Soil Survey App — Download Soils Data tab</td> <td>SSURGO (1:24,000)</td> <td>Spatial: ESRI Shapefile Tabular: ASCII^{1a}</td> </tr> <tr> <td>Soil Survey Area^{2a}</td> <td>Web Soil Survey App — Download Soils Data tab Geospatial Data Gateway</td> <td>SSURGO (1:24,000)</td> <td>Spatial: ESRI Shapefile Tabular: ASCII^{1b}</td> </tr> <tr> <td>State, or entire U.S.</td> <td>Web Soil Survey App — Download Soils Data tab Geospatial Data Gateway</td> <td>STATSGO (1:250,000)</td> <td>Spatial: ESRI Shapefile Tabular: ASCII^{1c}</td> </tr> <tr> <td>User-specified AOI, up to 2,500,000 acres</td> <td>Soil Data Access^{3a}</td> <td>SSURGO (1:24,000)</td> <td>Spatial: ESRI Shapefile GML Tabular:^{4a} ASCII XML HTML</td> </tr> </tbody> </table>	Scope	Link	Scale	Data Format	User-specified AOI, up to 100,000 acres	Web Soil Survey App — Download Soils Data tab	SSURGO (1:24,000)	Spatial: ESRI Shapefile Tabular: ASCII ^{1a}	Soil Survey Area ^{2a}	Web Soil Survey App — Download Soils Data tab Geospatial Data Gateway	SSURGO (1:24,000)	Spatial: ESRI Shapefile Tabular: ASCII ^{1b}	State, or entire U.S.	Web Soil Survey App — Download Soils Data tab Geospatial Data Gateway	STATSGO (1:250,000)	Spatial: ESRI Shapefile Tabular: ASCII ^{1c}	User-specified AOI, up to 2,500,000 acres	Soil Data Access ^{3a}	SSURGO (1:24,000)	Spatial: ESRI Shapefile GML Tabular: ^{4a} ASCII XML HTML
Scope	Link	Scale	Data Format																		
User-specified AOI, up to 100,000 acres	Web Soil Survey App — Download Soils Data tab	SSURGO (1:24,000)	Spatial: ESRI Shapefile Tabular: ASCII ^{1a}																		
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State, or entire U.S.	Web Soil Survey App — Download Soils Data tab Geospatial Data Gateway	STATSGO (1:250,000)	Spatial: ESRI Shapefile Tabular: ASCII ^{1c}																		
User-specified AOI, up to 2,500,000 acres	Soil Data Access ^{3a}	SSURGO (1:24,000)	Spatial: ESRI Shapefile GML Tabular: ^{4a} ASCII XML HTML																		
	Notes:																				

^{1a 1b 1c} Soil tabular data in an ASCII format that can be imported into a Microsoft Access “SSURGO Template Database”. Note that there is a national SSURGO Template Database for general use, and a state-specific database for some states.

^{2a} You can determine data availability for soil survey areas using the [Available Soil Survey Data](#) status map.

^{3a} The Soil Data Access option requires considerably more technical expertise than the others.

^{4a} For details, refer to the Soil Data Access Query Guide at the following link: [Soil Data Access Query Guide](#).

To utilize this data, you will need:

- For the spatial data, ArcGIS or other software that can read shapefiles.
- For the tabular data, Microsoft Access.
- To use the spatial data in conjunction with the tabular data, use the Soil Data Viewer application at the following link: [Soil Data Viewer](#).

How can I download data for multiple soil survey areas at a time?

Download requests for more than one survey area at a time can be submitted through the Geospatial Data Gateway at the following link: [Geospatial Data Gateway](#). Going through the Geospatial Data Gateway also provides the option to obtain data on CD or DVD.

What is the Geospatial Data Gateway?

The Geospatial Data Gateway is the One Stop Source for environmental and natural resources data, at any time, from anywhere, to anyone. The Gateway allows you to choose your area of interest, browse and select data from our catalog, customize the format, and have it downloaded or shipped on CD or DVD.