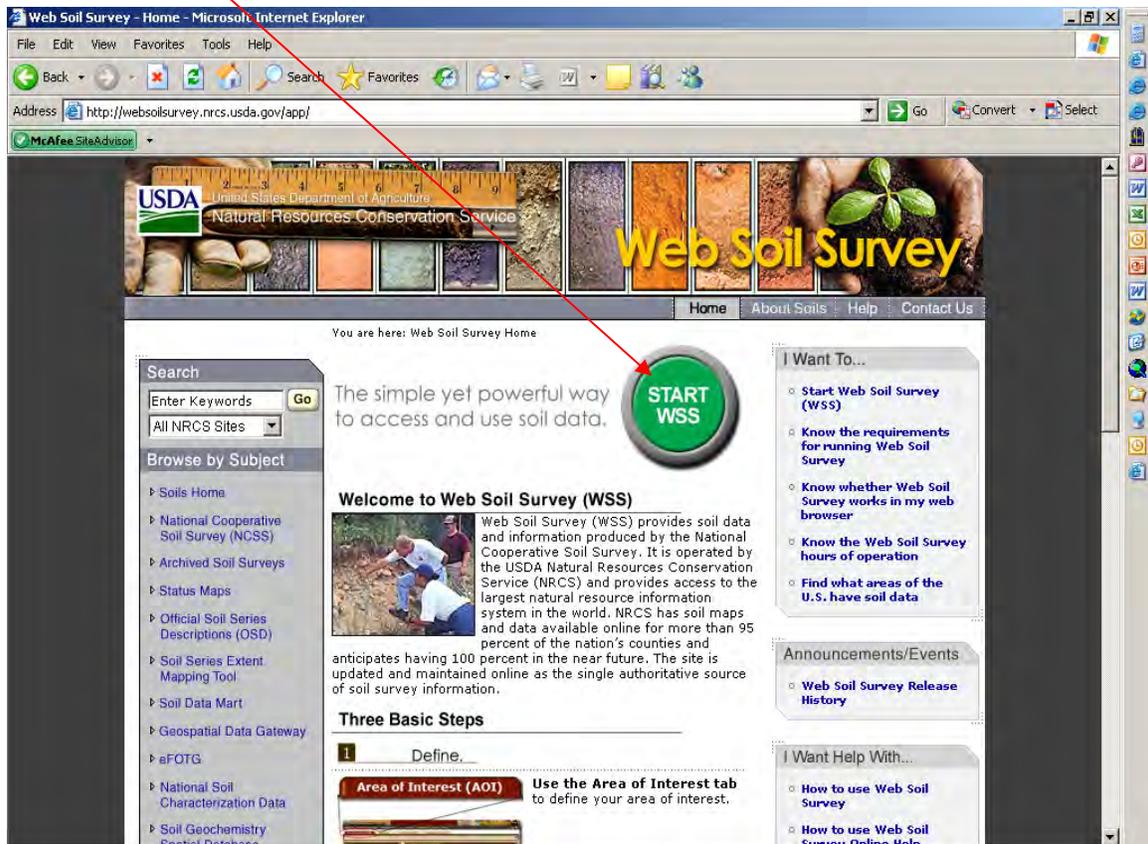


Online Resources USDA-NRCS Web Soil Survey

The Web Soil Survey is replacing the familiar, traditional paper copies of soil survey reports. As new and updated soil surveys are completed, NRCS is distributing the results of these surveys by means of the Web Soil Survey instead of as books. The Web Soil Survey allows NRCS to update the information more rapidly and ensures a single source for official data. People without computer access can acquire soil survey information from an NRCS field office or local library.

URL: <http://websoilsurvey.nrcs.usda.gov/app/>

Click on **“Start WSS”** button



The screenshot shows the Web Soil Survey homepage in Internet Explorer. The browser address bar displays <http://websoilsurvey.nrcs.usda.gov/app/>. The page header includes the USDA logo and the text "United States Department of Agriculture - Natural Resources Conservation Service". The main heading is "Web Soil Survey". Below the heading is a navigation menu with "Home", "About Soils", "Help", and "Contact Us". The main content area features a search box, a "START WSS" button, and a "Welcome to Web Soil Survey (WSS)" section. The "Welcome" section includes a photo of people in a field and text describing the WSS system. Below this is a "Three Basic Steps" section, with the first step being "1. Define..." and a sub-section for "Area of Interest (AOI)". On the right side, there are sections for "I Want To..." and "I Want Help With...".

There are 3 Basic Steps in using Web Soil Survey (WSS): Define, View/Explore, and Check Out.

- ▶ Geospatial Data Gateway
- ▶ eFOTG
- ▶ National Soil Characterization Data
- ▶ Soil Geochemistry Spatial Database
- ▶ Soil Quality
- ▶ Soil Geography
- ▶ Geospatial One Stop

Three Basic Steps

- #### 1 Define

Area of Interest (AOI) Use the **Area of Interest** tab to define your area of interest.



Click to view larger image.
- #### 2 View/Explore

Soil Map Click the **Soil Map** tab to view or print a soil map, or click the **Soil Data Explorer** tab to access soil data for your area and determine the suitability of the soils for a particular use. The items you want saved in a report can be added to your shopping cart.



Click to view larger image.

Soil Data Explorer



Click to view larger image.
- #### 3 Check Out

Shopping Cart (Free) Use the **Shopping Cart** tab to get your custom printable report immediately, or download it later.



Click to view larger image.

I Want Help With...

- [How to use Web Soil Survey](#)
- [How to use Web Soil Survey Online Help](#)
- [Known Problems and Workarounds](#)
- [Frequently Asked Questions](#)
- [Citing Web Soil Survey as a source of soils data](#)



Soil surveys can be used for general farm, local, and wider area planning. Onsite investigation is needed in some cases, such as [soil quality assessments](#) and certain conservation and engineering applications. For more detailed information, contact your local [USDA Service Center](#) or your [NRCS State Soil Scientist](#).

Last Modified: 11/11/2009

[NRCS Home](#) | [USDA](#) | [My USDA](#) | [FOIA](#) | [Accessibility Statement](#) | [Privacy Policy](#) | [Non-Discrimination Statement](#) | [Information Quality](#) | [USA.gov](#) | [White House](#)

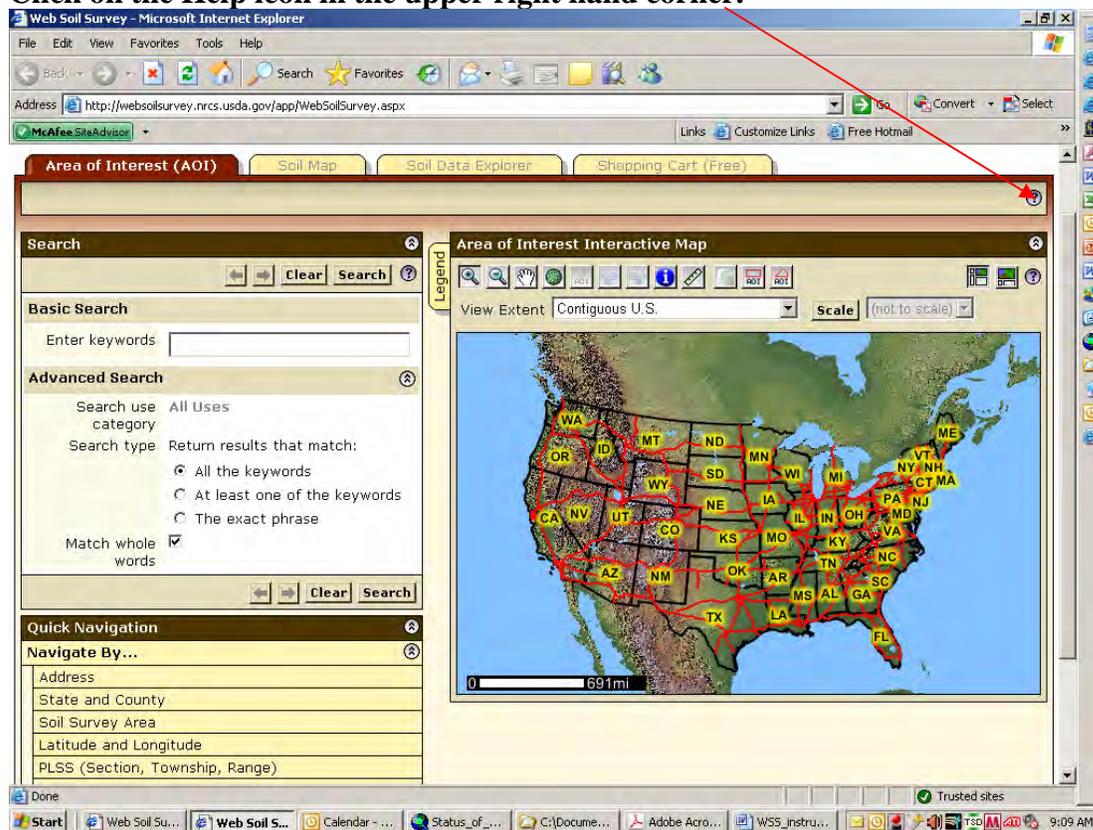
DEFINE:

The first step in using Web Soil Survey is to define your area of interest.

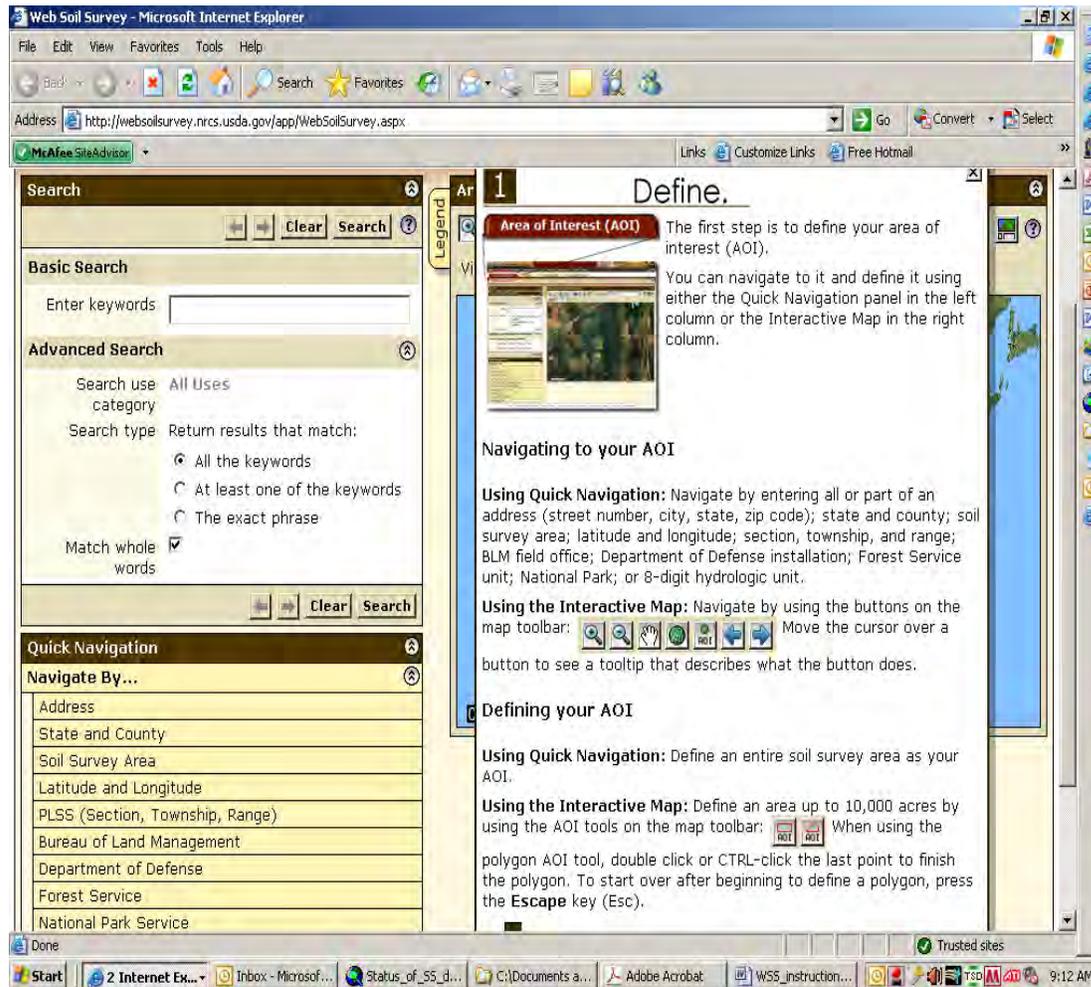
You can select an area in the continental United States, Alaska, Hawaii, the Pacific Basin, Puerto Rico, or the U.S. Virgin Islands. You select an area by zooming in on a locator map or by specifying street address, county, survey area, coordinates, PLSS, or Hydrologic Unit.

You can navigate to your area of interest (AOI) and define it using either the Selection Criteria in the left column or the Interactive Map in the right column.

There are 3 methods to define and navigate to an Area of Interest (AOI) depending on your familiarity with your AOI. Search (Basic/Advanced), Quick Navigation, or by using the Zoom tool. They are located on the left side panel of the web page. Click on the Help icon in the upper right hand corner.

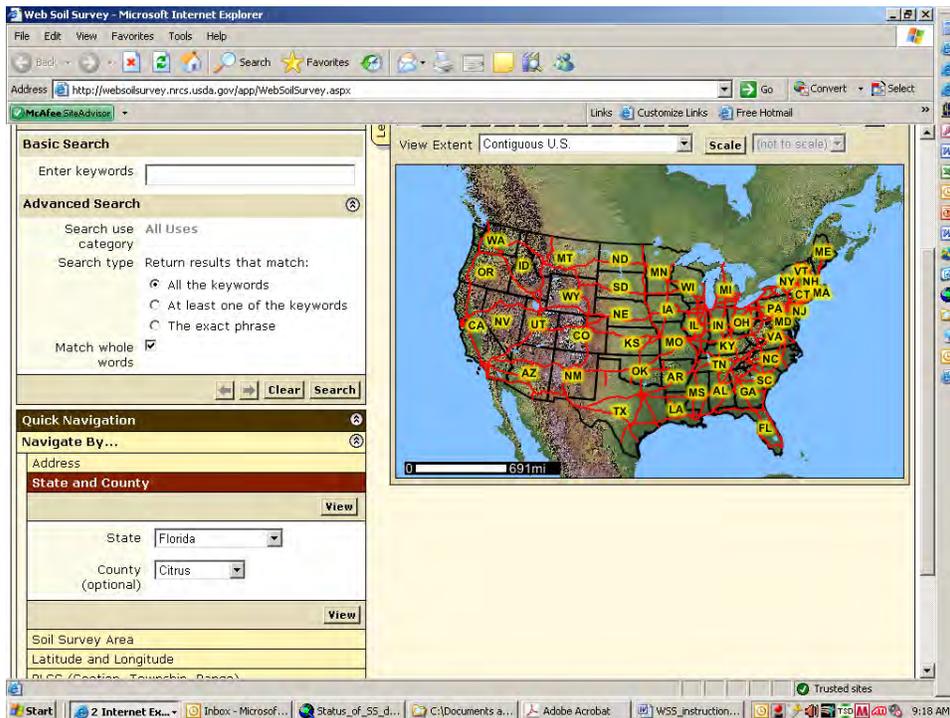


The Help button reveals additional information about performing your search and defining your Area of Interest.

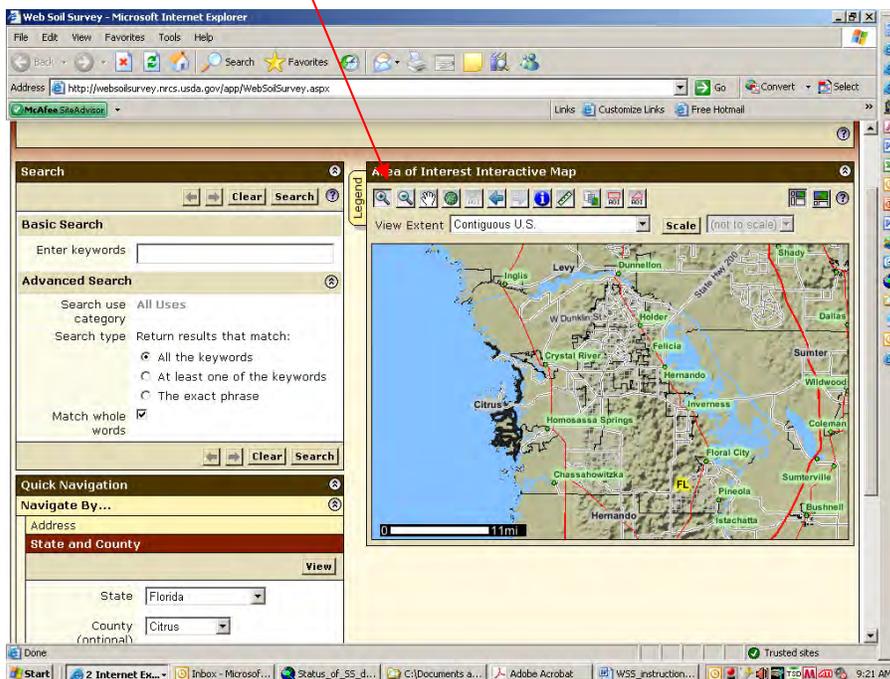


Note: The specified AOI must be smaller than 10,000 acres.

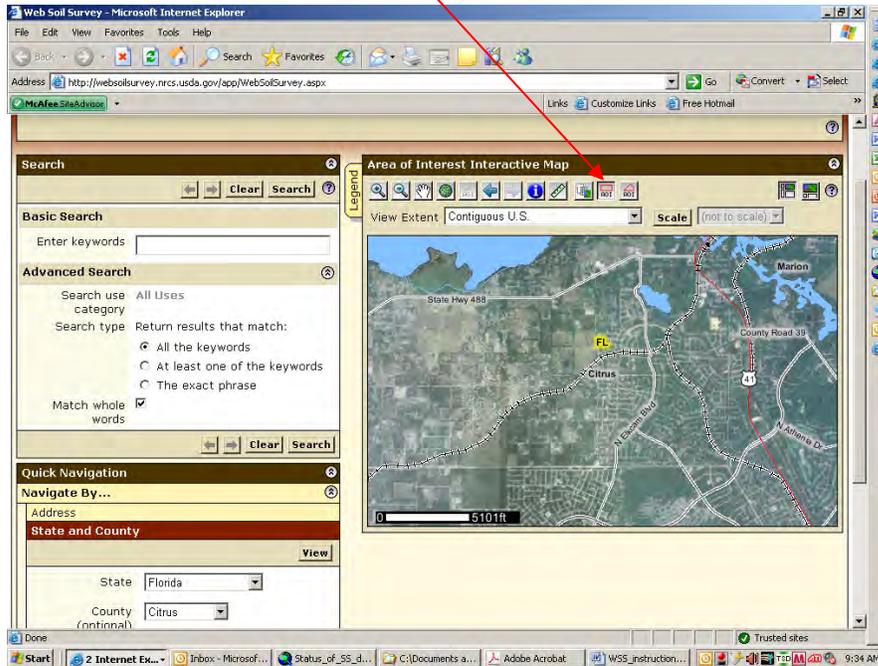
For this example, using Quick Navigation (Navigate by) on the left side of the screen, **SELECT** Citrus County, Florida and click the View button.



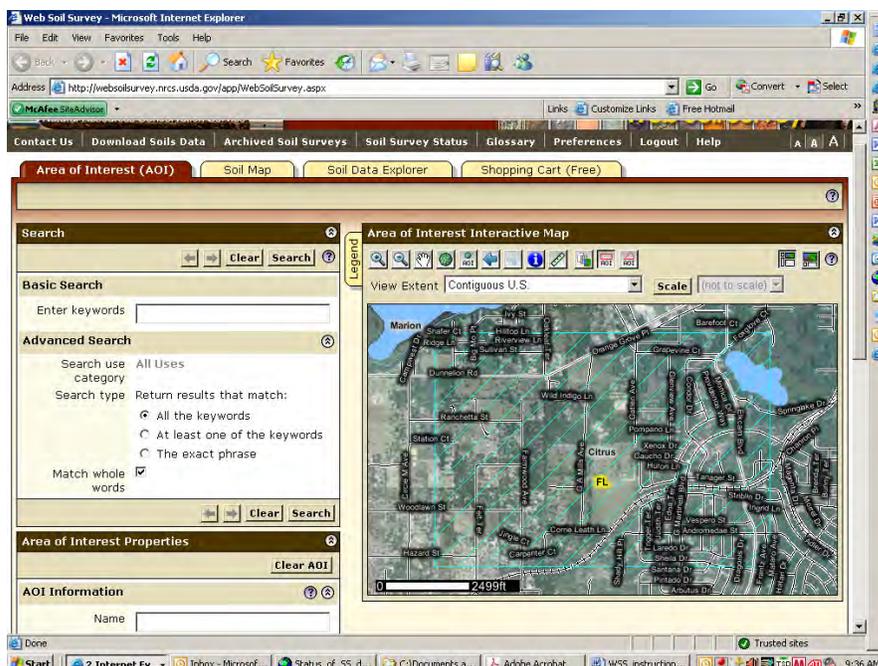
Using the **Magnify tool** (left side of tool bar), choose the exact area for viewing. In this case, the gray shaded area in northern Citrus County, near the Withalacoochee River.



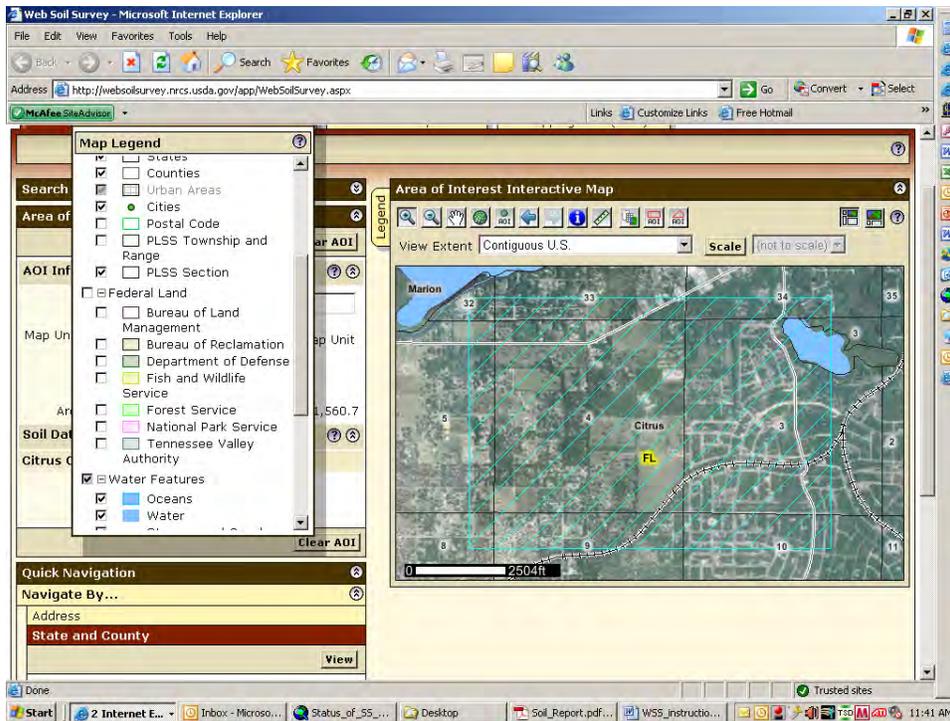
To define the AOI, use the Interactive Map, and select the button at the top of the page with the **red rectangular AOI label**. This selection will show a crosshair that will allow you to select the preferred area in rectangular shape. The AOI button to the right, allows for irregular AOI delineations.



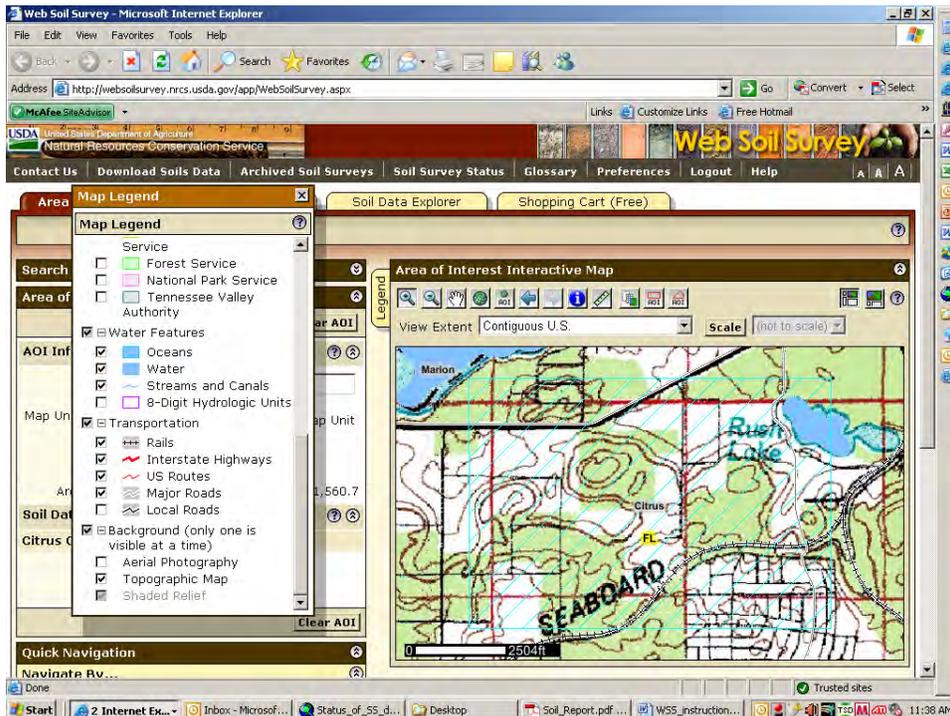
The Defined Area of Interest will show up in a crosshatched pattern and the soil data within your AOI is ready for viewing.



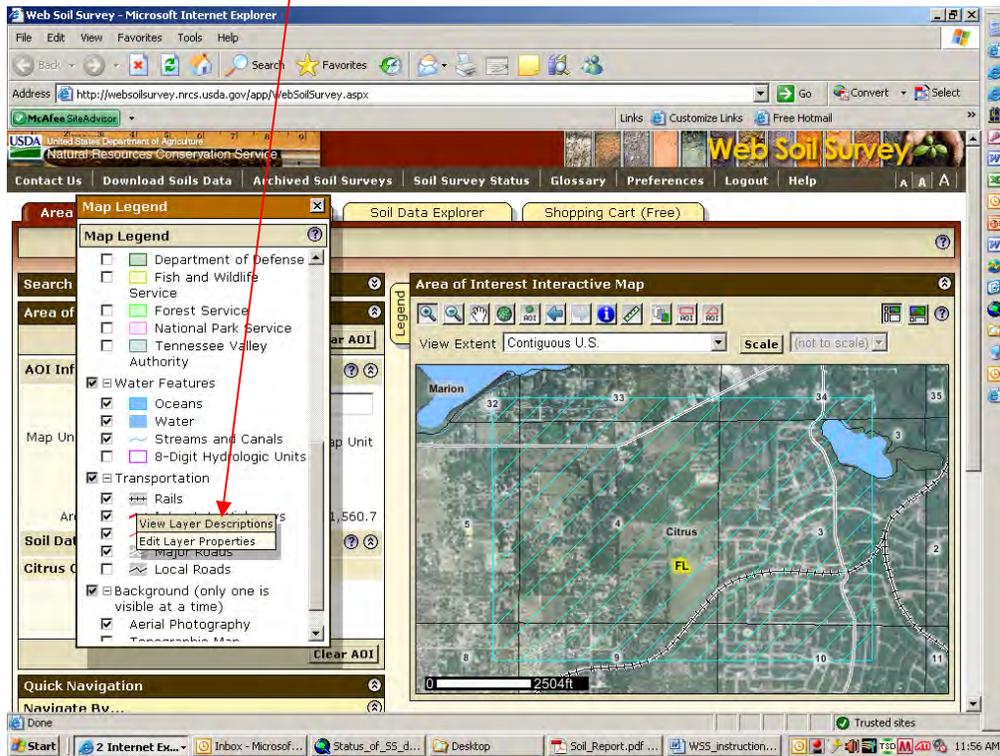
You can customize your map layout by clicking on the Legend tab on the left side of the Interactive Map pane. In this case, the Local Roads were removed to better observe the aerial imagery and PLSS information was added.



You may also observe your AOI with a topographic map background.

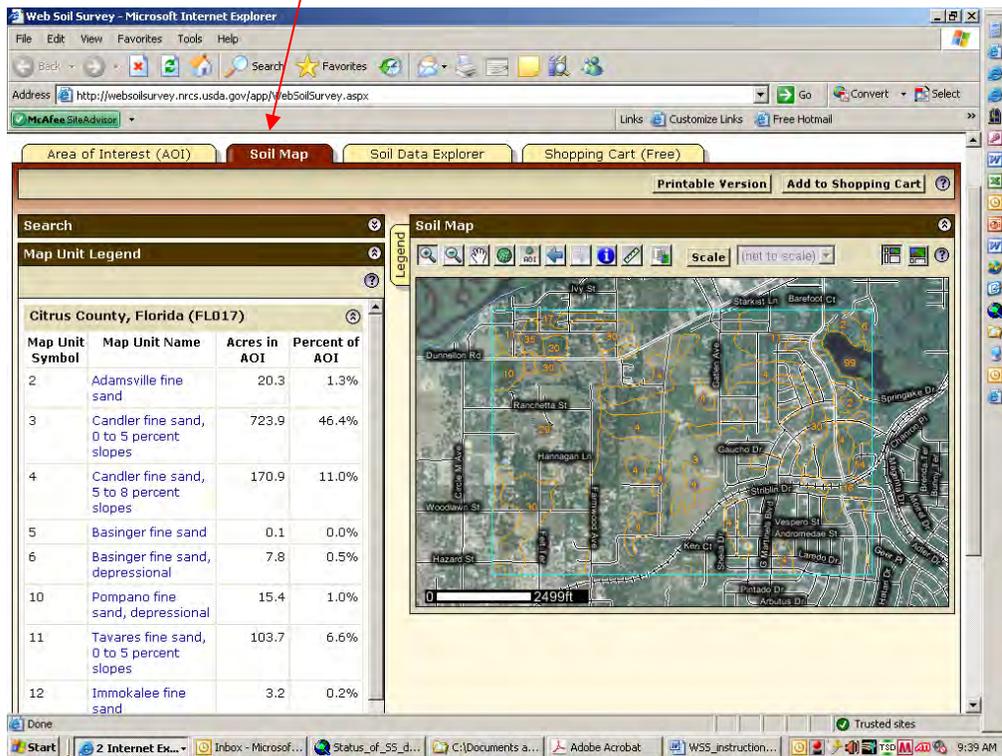


By right-clicking on an item in Map Legend, you can further customize the look and feel of the map you are creating.



VIEW: The second step in using Web Soil Survey is to look at the Soil Map for your area of interest. Click on the Soil Map tab near the top of the WSS window. The soil map shows the map unit symbols in your AOI.

Soil maps are not yet available for all areas. The maps that are available consist of aerial photography overlain by lines that indicate the boundaries of the various types of soil.

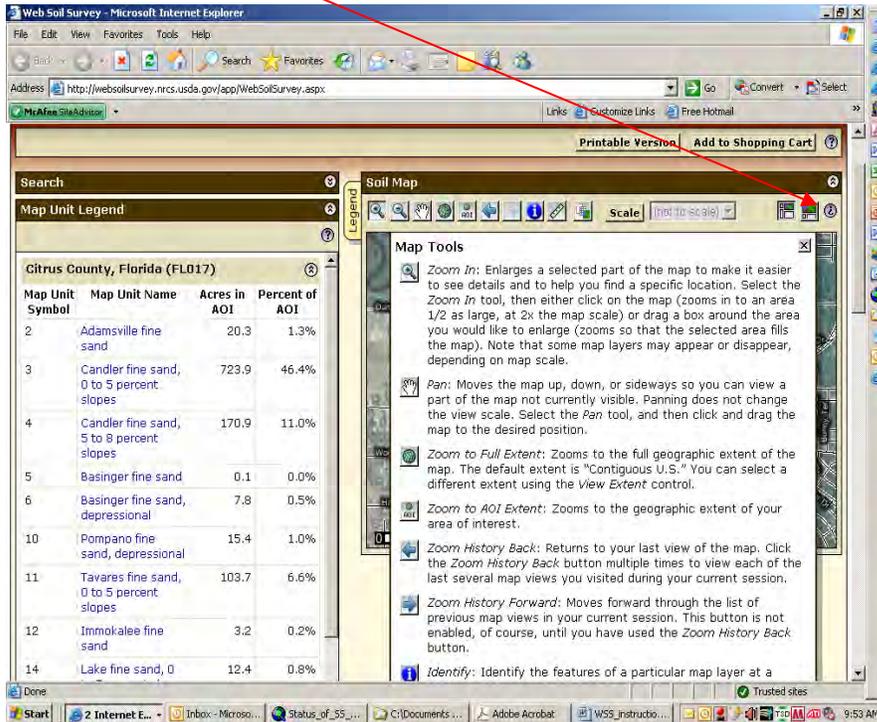


The screenshot shows the Web Soil Survey interface in Microsoft Internet Explorer. The 'Soil Map' tab is selected. On the left, the 'Map Unit Legend' table is displayed for Citrus County, Florida (FL017). The table lists 12 map units with their names, symbols, acres in the AOI, and percent of the AOI. The 'Soil Map' window on the right shows an aerial photograph with colored lines indicating soil boundaries.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Adamsville fine sand	20.3	1.3%
3	Candler fine sand, 0 to 5 percent slopes	723.9	46.4%
4	Candler fine sand, 5 to 8 percent slopes	170.9	11.0%
5	Basinger fine sand	0.1	0.0%
6	Basinger fine sand, depressional	7.8	0.5%
10	Pompano fine sand, depressional	15.4	1.0%
11	Tavares fine sand, 0 to 5 percent slopes	103.7	6.6%
12	Immokalee fine sand	3.2	0.2%

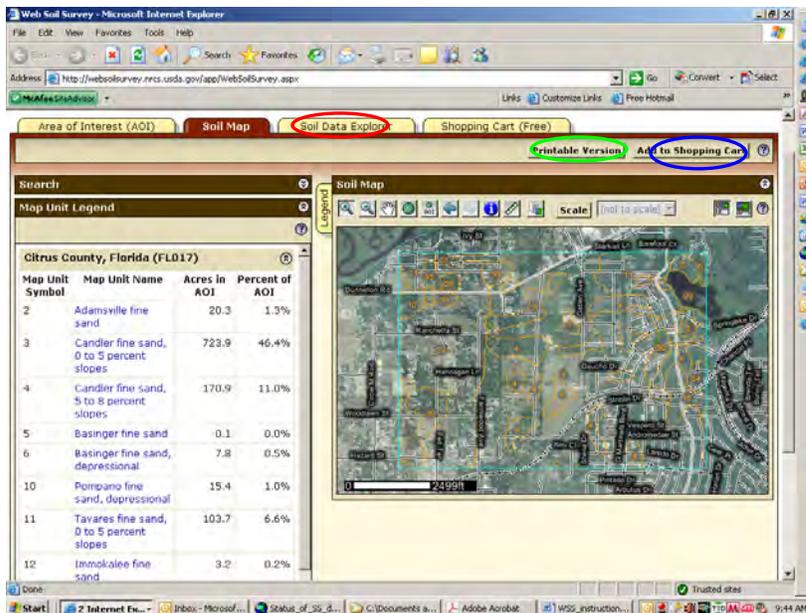
The Map Unit Legend Summary table in the left column shows you the name and map symbol of each map unit, the percent of each map unit in the AOI, and the total acreage of each map unit in the AOI.

For additional information on the functionality of the Soil Map tools, click on the Help icon on the Soil Map screen.



Viewing and printing the soil map

At this point in the process, you have 3 options, you may create a **Printable Soil Map**, **Explore additional Soil Data**, or **Add the Soil Map to your Shopping Cart**.



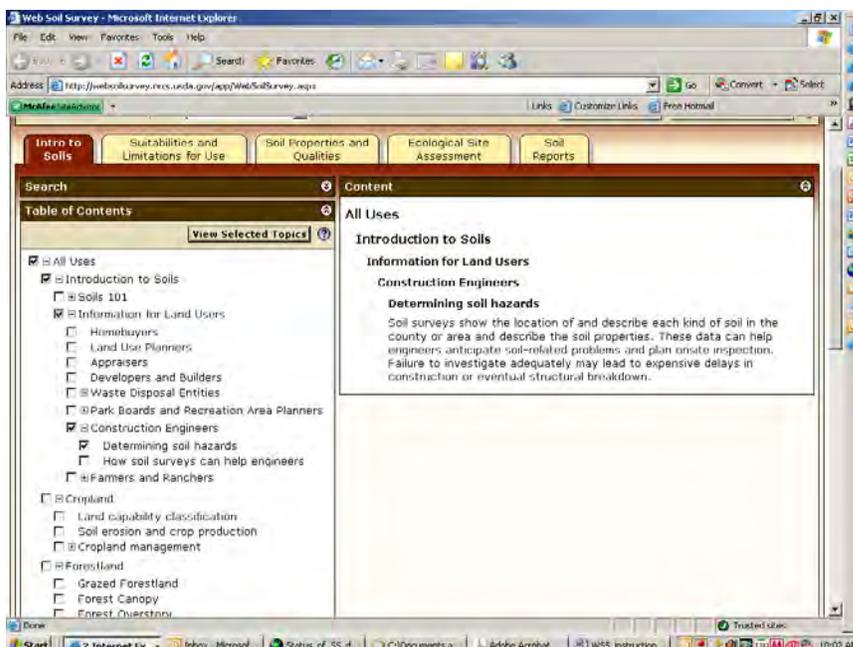
While using Web Soil Survey, you may want to refer back to your soil map. You can do so on the screen by clicking the Soil Map tab, or you can print the soil map by clicking the Save or Print button. Click on the Help icon (?) for more information on Printing or Shopping Cart functionality.



EXPLORE:

The third step in using Web Soil Survey is to explore all of the available information associated with the soils in your area of interest. The Soil Data Explorer tab provides several ways of getting the information relevant to you.

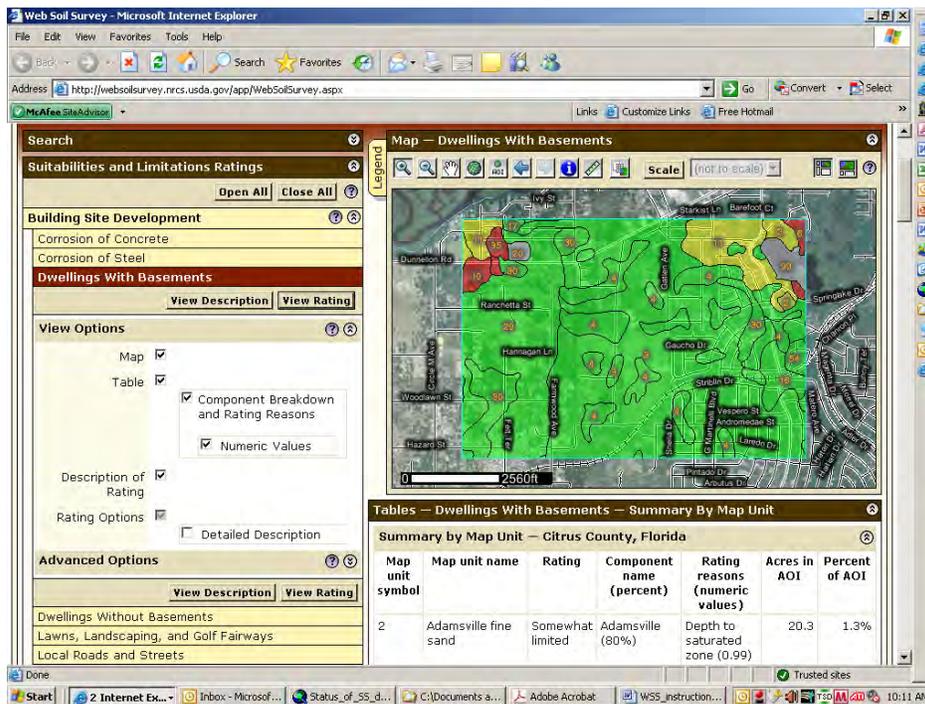
First, you can review information about uses, management, soil properties, or interpretations by clicking on the Intro to Soils Tab and selecting a Topic.



Additional functionality of the Soil Data Explorer includes viewing Suitabilities and Limitations for Land Uses, Soil Properties and Qualities, or Ecological Site Information for your AOI.

Examples of properties and qualities include representative slope, available water capacity, and pH. Examples of suitabilities and limitations include interpretations about how productive the soils are for various crops, and about how well the soils would function as a site for buildings. The information can be displayed in tables and, in most cases, on maps.

An example of Dwelling with basements with ratings and limitations. Actually rating and values are displayed in a table below the thematic map. An important feature to consider: After you have determined your AOI is correct, and have generated a thematic map that you want to keep, make a decision to either Print the thematic map or Save the thematic map to your shopping cart.



The screenshot shows the Web Soil Survey interface in Microsoft Internet Explorer. The main map area is titled 'Map - Dwellings With Basements' and displays a thematic map of a residential area in Citrus County, Florida. The map shows various soil units with different colors and patterns, overlaid on a street grid. A scale bar indicates 2560 feet.

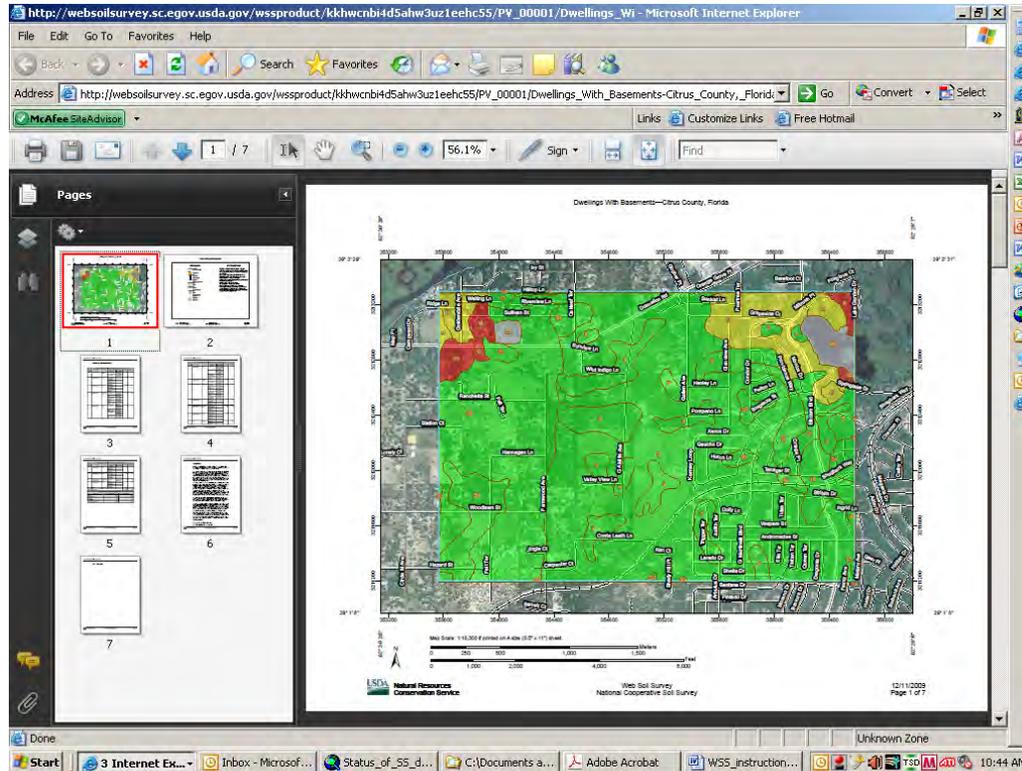
Below the map is a table titled 'Tables - Dwellings With Basements - Summary By Map Unit'. The table provides a summary of the soil units in the area, including their names, ratings, component names, rating reasons, and acreage.

Summary by Map Unit - Citrus County, Florida						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
2	Adamsville fine sand	Somewhat limited	Adamsville (80%)	Depth to saturated zone (0.99)	20.3	1.3%

The interface also includes a search bar, a legend, and various view options for the map and table. The table is currently set to show 'Component Breakdown and Rating Reasons' and 'Numeric Values'.

Note: After creating a map and table, you have 2 choices to print or save the information into the Shopping Cart. Upon printing or saving your map and related table, you will be prompted to Create an Subtitle for the map. For example, Title: Dwellings with basement; Subtitle: Northwest Citrus County.

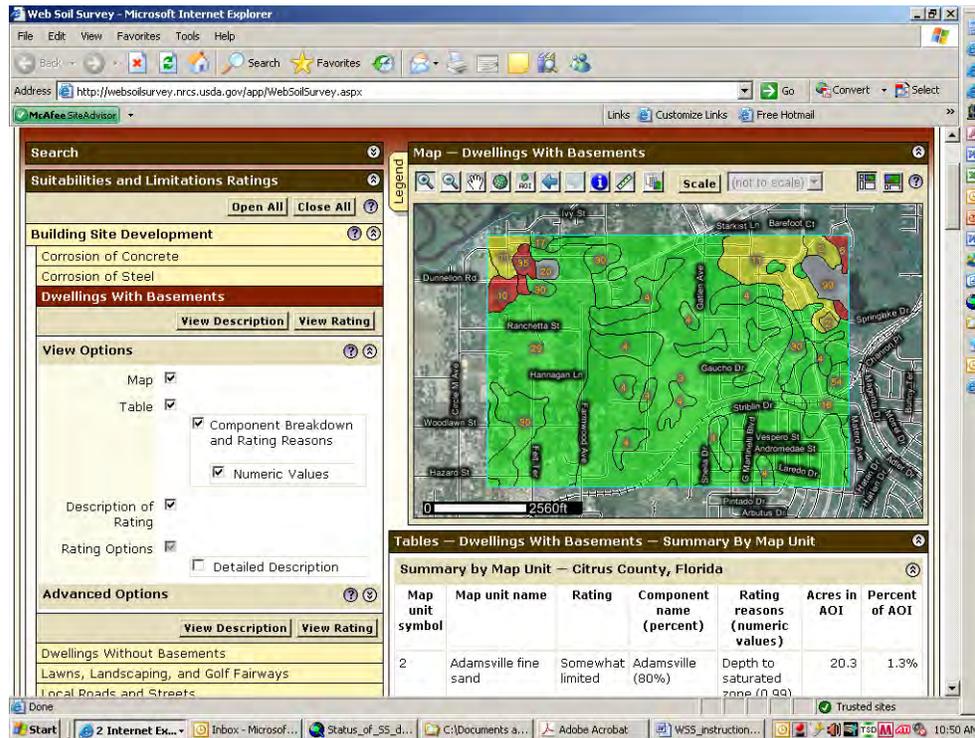
If all the information you desire is a single map and table, you may create and print the map by clicking the “Printable Version” button at the upper right of the map layout. This will print all of the data and tables for the select property or use.



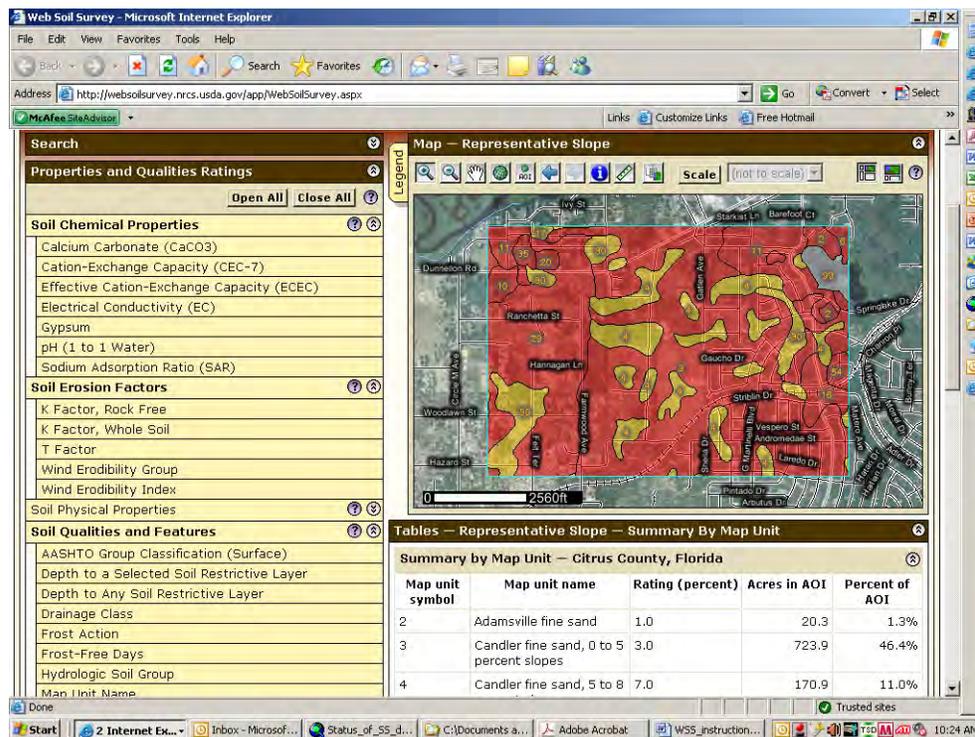
However, if you want to build a detailed Soil Report of multiple maps and tables, and publish into a Soil Survey manuscript, you need to check the map/table into the Shopping Cart. So, you would need to add each specific map and table to the Shopping Cart.

After adding all of the maps and tables to the Shopping Cart, click on the Shopping Cart tab. This prompts you for selecting your report options. For example, let's add the maps and ratings table for Dwellings with basements, the maps and tables for Representative Slope, and the maps and ratings tables for Ecological Site Assessments for the Area of Interest.

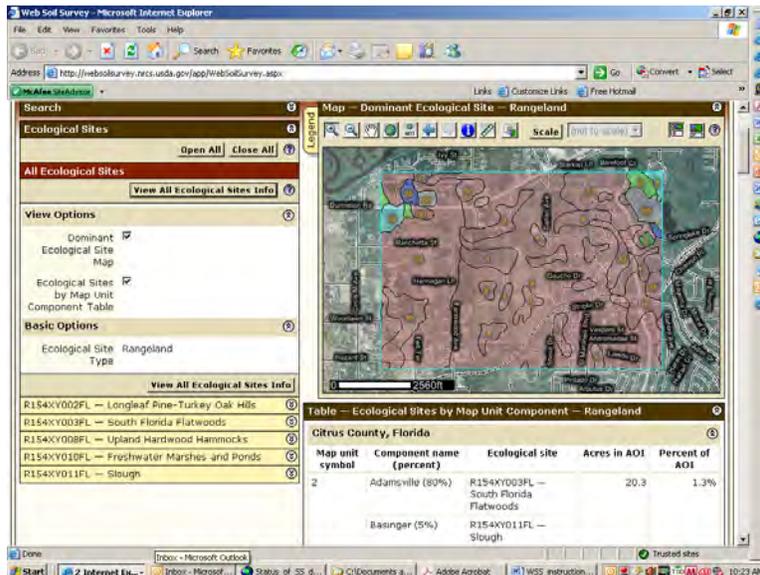
An example of Suitability and Limitations. In this case, Dwellings with basements.



An example of Soil Properties and Qualities. In this case, representative slope of each map unit.



An example of Ecological Site Assessment ratings and related Site information.

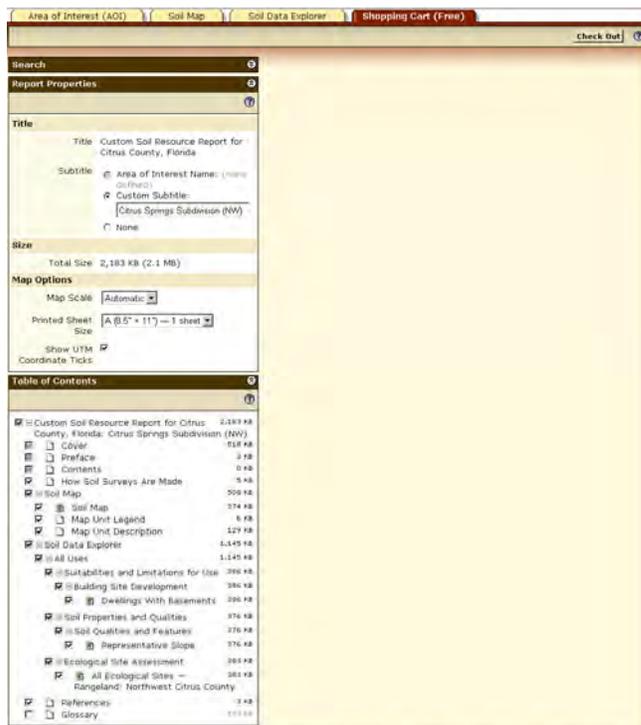


The screenshot shows the Web Soil Survey interface in Microsoft Internet Explorer. The main window displays a map titled "Map - Dominant Ecological Site - Rangeland" with a scale of 1:2500. Below the map is a table titled "Table - Ecological Sites by Map Unit Component - Rangeland" for Citrus County, Florida.

Map unit symbol	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
2	Adamsville (80%)	R154XY003FL - South Florida Flatwoods	20.3	1.3%
	Basinger (5%)	R154XY011FL - Slough		

GENERATING A CUSTOM SOIL REPORT:

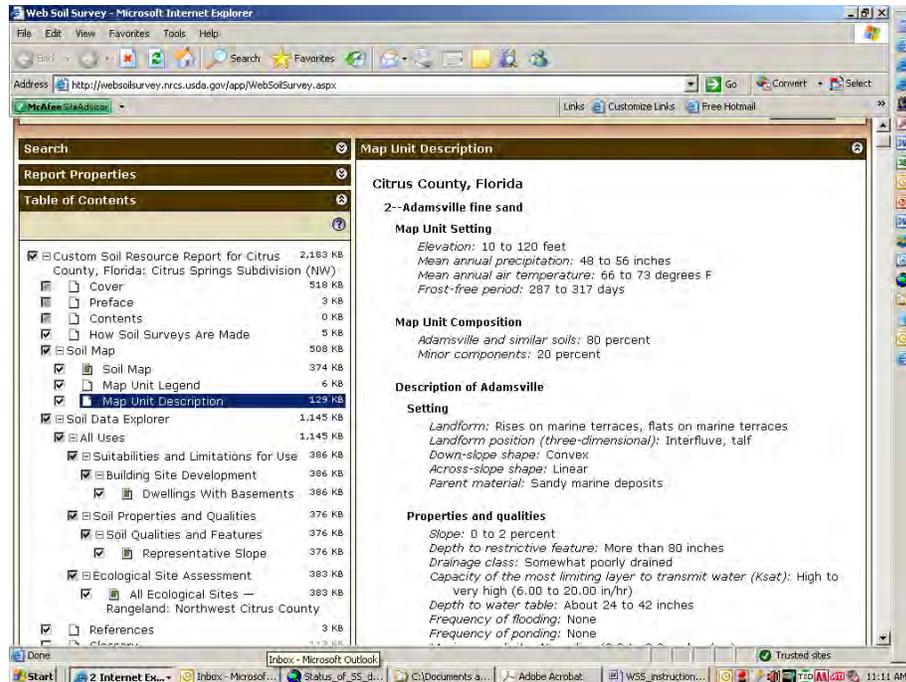
After creating and placing your maps and tables into the Shopping Cart, click on the Shopping Cart tab. This tab allows you to customize the soil survey for your Area of Interest. You may add Custom Subtitle, modify your map options (size, scale), and to select the desired components for your Soil Report. In this example, we will go with the Reports Default values with the exception of adding a Custom Subtitle.



The screenshot shows the "Shopping Cart (Free)" interface. The "Report Properties" section is visible, showing the following details:

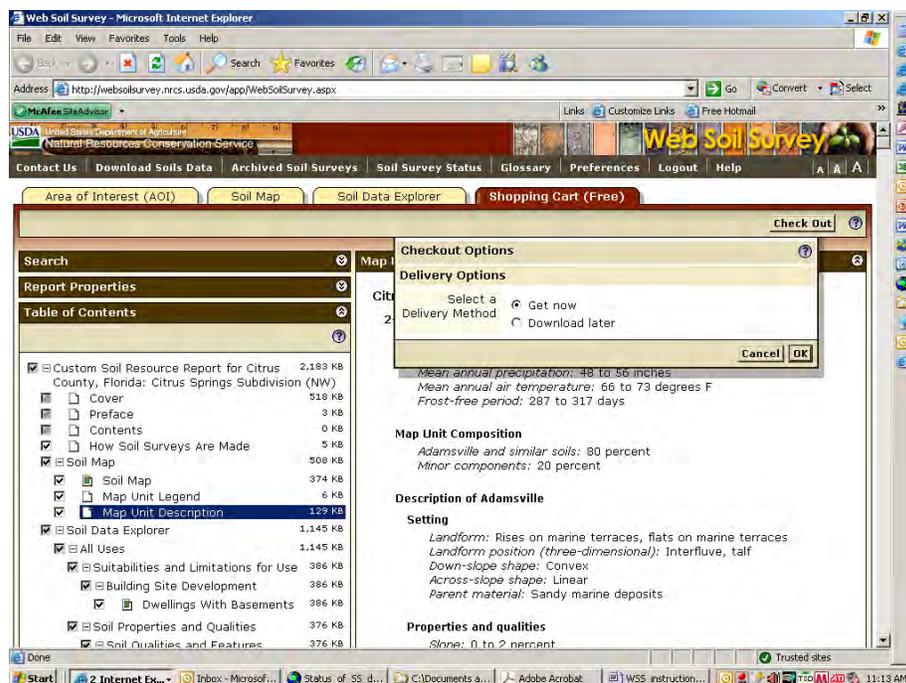
- Title:** Custom Soil Resource Report for Citrus County, Florida
- Subtitle:** Area of Interest Name: (None) (Default)
- Custom Subtitle:** Citrus Springs Subdivision (NW)
- Size:** Total Size: 2,183 KB (2.1 MB)
- Map Options:** Map Scale: Automatic; Printed Sheet Size: A (8.5" x 11") - 1 sheet; Show UTM Coordinate Ticks:
- Table of Contents:** A list of report sections with their respective sizes, including "Custom Soil Resource Report for Citrus County, Florida: Citrus Springs Subdivision (NW)" (2,183 KB), "Cover" (519 KB), "Interface" (3 KB), "Contents" (0 KB), "How Soil Surveys Are Made" (5 KB), "Soil Map" (509 KB), "Soil Map" (374 KB), "Map Unit Legend" (6 KB), "Map Unit Description" (129 KB), "Soil Data Explorer" (1,145 KB), "All Uses" (390 KB), "Suitability and Limitations for Use" (390 KB), "Building Site Development" (390 KB), "Dwellings With Basements" (390 KB), "Soil Properties and Qualities" (376 KB), "Soil Qualities and Features" (376 KB), "Representative Slope" (376 KB), "Ecological Site Assessment" (383 KB), "All Ecological Sites - Rangeland: Northwest Citrus County" (383 KB), "References" (3 KB), and "Glossary" (173 KB).

After selecting or deselecting the desired Report Features, you can click on each of the report components to determine how the report will display. For example, let's view the Map Unit Description format in the Report.



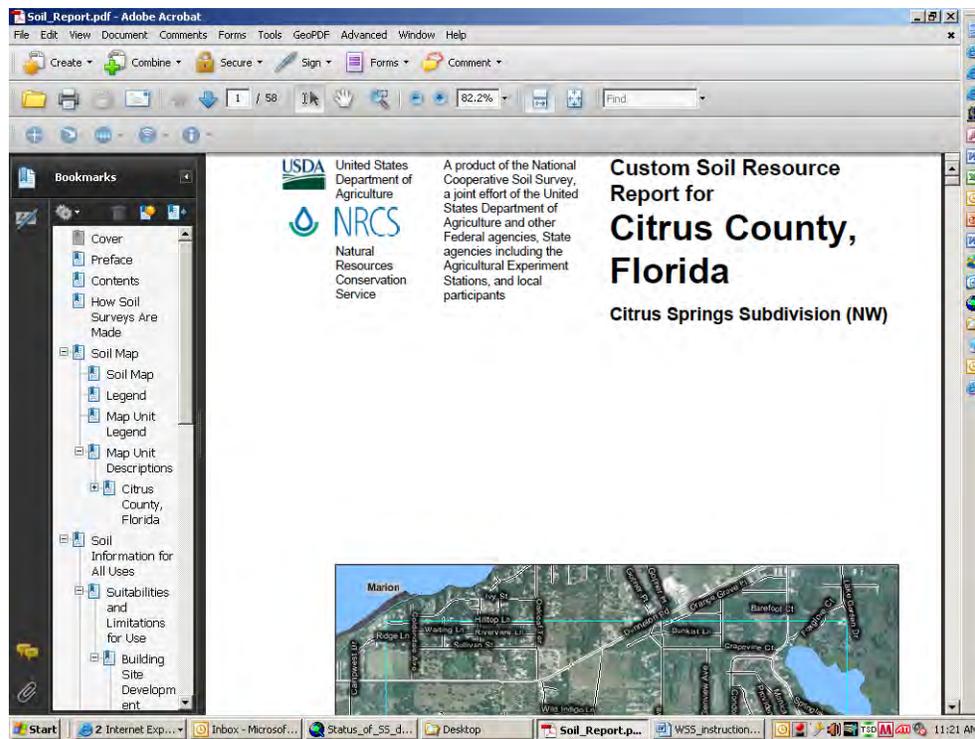
If there's a component of the report you do not wish to include, simply click the "radio button" to uncheck.

Upon final customization of your report, click the Checkout button at the top of the page. You have 2 options: Get the Report Now or Download later.





Upon generating your report, the final report can be saved in PDF format. It will have the content and features of an Official Soil Survey document. Note that the Custom Subtitle displays directly below the County name.



The Table of Contents on the left hand side will allow you to easily navigate the document by clicking on a specific portion of the report. In this case to the Map Unit Legend.

Soil_Report.pdf - Adobe Acrobat

File Edit View Document Comments Forms Tools GeoPDF Advanced Window Help

Create Combine Secure Sign Forms Comment

10 / 58 63.6% Find

Map Unit Legend

Citrus County, Florida (FL017)

Map Unit Symbol	Map Unit Name	Area in AOI	Percent of AOI
2	Adamsville fine sand	20.3	1.3%
3	Candler fine sand, 0 to 5 percent slopes	723.9	46.4%
4	Candler fine sand, 5 to 9 percent slopes	170.9	11.0%
5	Blaininger fine sand	0.1	0.0%
6	Blaininger fine sand, depressional	7.3	0.5%
10	Pompano fine sand, depressional	15.4	1.0%
11	Tavares fine sand, 0 to 5 percent slopes	103.7	6.6%
12	Immokalee fine sand	3.2	0.2%
14	Lake fine sand, 0 to 5 percent slopes	12.4	0.8%
16	Arredondo fine sand, 0 to 5 percent slopes	32.6	2.1%
17	Arredondo fine sand, 5 to 9 percent slopes	5.5	0.4%
20	Pits	7.5	0.5%
29	Atalusa fine sand, 0 to 5 percent slopes	293.6	18.8%
30	Atalusa fine sand, 5 to 9 percent slopes	113.3	7.3%
36	Sparr fine sand, 0 to 5 percent slopes	12.6	0.8%
54	Apopka fine sand, 0 to 5 percent slopes	11.9	0.8%
99	Water	26.1	1.7%
Totals for Area of Interest		1,569.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic

Start 2 Internet Exp... Inbox - Microsof... Status_of_SS_d... Desktop Soil_Report.p... WSS_instructio... 11:23 AM