

How To Use Web Soil Survey 3.0

Contents

- I. About Web Soil Survey
- II. Soil Data for an Area of Interest
 - a. Define an Area of Interest (AOI)
 - b. View Soil Map
 - c. Explore Additional Soil Information
 - d. Shopping Cart for Selected Information
- III. Download Soil Data for GIS

Part I: About the Web Soil Survey (WSS)

- Purpose
- Products
- New Features
- Pathways
- Starting WSS
- Opening Screen
- The Interactive Map

Purpose

- The WSS is a Web application that provides customers (producers, agencies, technical service providers, and others) electronic access to relevant soil and related information needed to make wise land use and management decisions.
- WSS replaces the traditional hardcopy publication.
- WSS provides quicker delivery of new or updated information.

Purpose—cont.

- WSS provides interactive access to the most current official data.
- WSS allows you to select the information you want:
 - Map units for your geographic area of interest (AOI),
 - Information relevant to your land use concerns; e.g., rangeland or cropland.
 - Downloadable soil survey data for use in a local geographic information system (GIS).

Products

- WSS can produce a soil map for your AOI using color imagery or a topographic map as a backdrop.
- WSS can produce tables of soil property data and interpretations by AOI.

Products—cont.

- WSS allows you to download SSURGO data clipped to your AOI.
- WSS allows you to download SSURGO data sets for entire soil survey areas.
- WSS allows you to download STATSGO2 data sets for entire states or for the entire United States.

Products—cont.

- WSS allows you to generate a custom soil resource report (in PDF) by adding selections to the free shopping cart.
 - The report is customized for your AOI.
 - The soil map, map unit legend, and map unit descriptions are included by default.
 - The other content is specifically chosen by you:
 - Thematic maps (including summary tables and text),
 - Ecological site description map and information,
 - Tabular data tables, and
 - Introductory material.

New Features

USDA United States Department of Agriculture Natural Resources Conservation Service

Web Soil Survey

Home About Soils Help Contact Us

You are here: Web Soil Survey Home

Search
Enter Keywords
All NRCS Sites

Browse by Subject

- Soils Home
- National Cooperative Soil Survey (NCSS)
- Archived Soil Surveys
- Status Maps
- Official Soil Series Descriptions (OSD)
- Soil Series Extent Mapping Tool
- Soil Data Mart
- Geospatial Data Gateway
- eFOTG

The simple yet powerful way to access and use soil data.

START WSS

I Want To...

- Start Web Soil Survey (WSS)
- Know the requirements for running Web Soil Survey – will Web Soil Survey work in my web browser?
- Know the Web Soil Survey hours of operation
- Find what areas of the U.S. have soil data

Welcome to Web Soil Survey (WSS)

Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world. NRCS and data available online for more than 90 percent of the nation's counties and anticipates having 100 percent in the near future. The site is updated and maintained online as the single authoritative source of soil survey information.

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

Announcements/Events

- Web Soil Survey 3.0 has been released! [View description of new features.](#)
- Web Soil Survey Release History

- A link to a list of new features is available from the homepage of WSS.

New Features—cont.



USDA United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

Home About Soils Help Contact Us

You are here: [Web Soil Survey Home](#) / [Web Soil Survey 3.0 New Features](#)

Web Soil Survey 3.0 – New Features

Area of Interest (AOI) Size Limit Increased

The AOI size limit has been increased from 10,000 to 100,000 acres. Soil survey areas exceeding this limit can still be set as AOIs using Quick Navigation.

AOI Information ? ↕
Name
Map Unit Symbols
 Use Soil Survey Area Map Unit Symbols
 Use National Map Unit Symbols

- After clicking on the link, scroll down the screen to see all new features.

New Features—cont.

- The maximum size for an AOI has been increased from 10,000 to 100,000 acres.
- The map imagery and map appearance have been improved.
- The number of options for changing map properties has been expanded to include:
 - Soil boundary color,
 - Soil boundary thickness,
 - Soil label size, and
 - Background image opacity.

New Features—cont.

- The identify tool can now display information about multiple data layers at the same time.
- SSURGO and STATSGO2 data can now be downloaded directly from WSS. You no longer need to go to the Soil Data Mart.
- Support has been added for data regarding the Pacific Island Area.
- Support has been added for map unit line and point data.

New Features—cont.

- The options for tiling printable maps have been improved.
- RSS notifications are now available regarding soil data updates.
- WSS is now online 24/7.

Pathways through WSS

- Two major pathways are available for using WSS:
 1. Define an area of interest, view the soil map, explore additional soil data, and check out with a report or data download that includes the selected information.
 2. Download SSURGO data for a whole soil survey area, or STATSGO2 data for a state or the entire U.S. directly from the "Download Soils Data" tab.

Pathway 1

- Define an area of interest (AOI). You must specifically set the AOI before you can view maps or reports in WSS.
 - In addition to maps and reports, a SSURGO GIS dataset may be downloaded that is clipped to the AOI boundary.
- View the soil map. The WSS generates a soil map for your AOI if the spatial data is available.

Pathway 1

- Explore additional soil data and related information.
 - Generate thematic maps.
 - Access tabular data and interpretive tables.
 - Print or download the selected maps and reports.
- Check out with the selected information by building a custom soil resource report in the shopping cart or by downloading SSURGO data clipped to the AOI.

Pathway 2

- WSS 3.0 allows you to download raw soil data for use in a local GIS.
- Select the "Download Soils Data" tab. You can download:
 - SSURGO data clipped to the AOI boundary,
 - SSURGO data for entire soil survey areas,
 - STATSGO2 data by state or for the entire U.S.

Starting Web Soil Survey

USDA United States Department of Agriculture Natural Resources Conservation Service

Web Soil Survey

Home About Soils Help Contact Us

You are here: Web Soil Survey Home

Search

Enter Keywords

All NRCS Sites

Browse by Subject

- Soils Home
- National Cooperative Soil Survey (NCSS)
- Archived Soil Surveys
- Status Maps
- Official Soil Series Descriptions (OSD)
- Soil Series Extent Mapping Tool
- Soil Data Mart

The simple yet powerful way to access and use soil data.

START WSS

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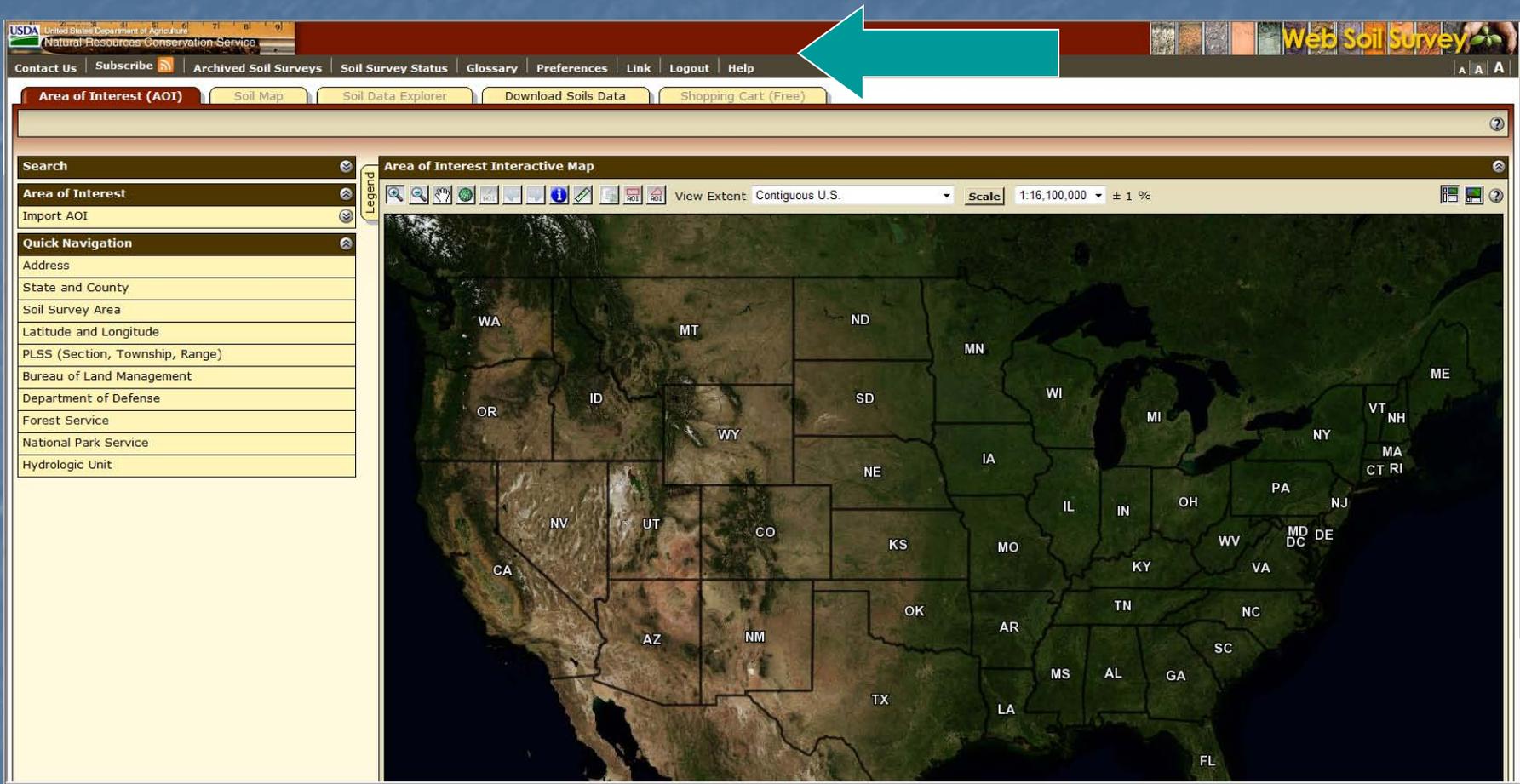
- Start Web Soil Survey (WSS)**
 - Know the requirements for running Web Soil Survey – will Web Soil Survey work in my web browser?
 - Know the Web Soil Survey hours of operation
 - Find what areas of the U.S. have soil data

Announcements/Events

- Web Soil Survey 3.0 has been released! View description of new features.**

- On the homepage (<http://websoilsurvey.nrcs.usda.gov/>), click on the big green button to start the Web Soil Survey.

The Opening Screen



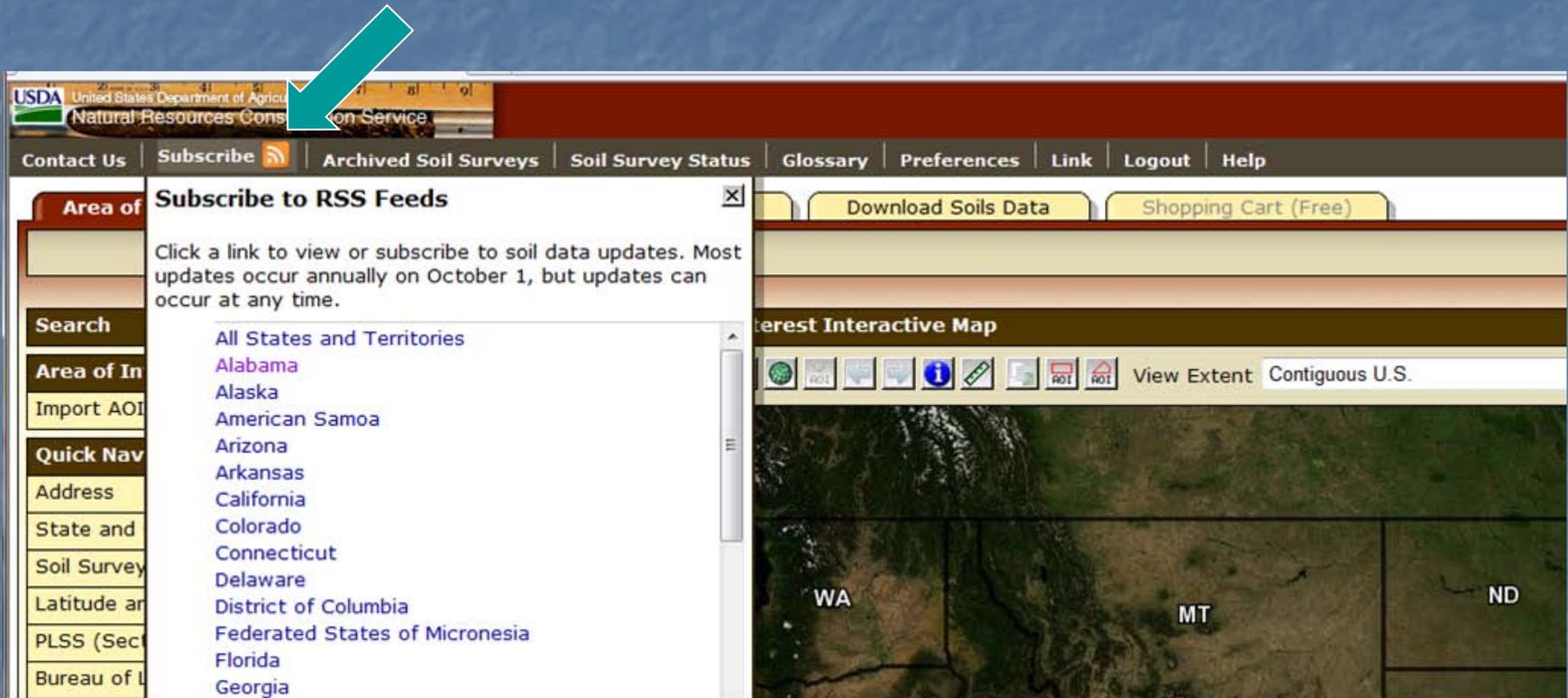
- This is the opening screen after starting WSS.
- The top navigation bar includes selections for Contact Us, Subscribe, Archived Soil Surveys, Soil Survey Status, Glossary, Preferences, Link, Logout, and Help.

Contact US

The screenshot shows the USDA Natural Resources Conservation Service website. The top navigation bar includes links for 'Contact Us', 'Subscribe', 'Archived Soil Surveys', 'Soil Survey Status', 'Glossary', 'Preferences', and 'Lin'. A teal arrow points to the 'Contact Us' link. Below the navigation bar, there are several sections: 'Area of Interest', 'Search', 'Area of Interest', 'Import AC', 'Quick Name', 'Address', 'State and County', 'Soil Survey Area', 'Latitude and Longitude', 'PLSS (Section, Township, Range)', and 'Bureau of Land Management'. Two pop-up windows are overlaid on the page. The first pop-up window is titled 'Having Problems Running Web Soil Survey?' and contains the text: 'If you have problems running Web Soil Survey, send email to: soilshotline@lin.usda.gov'. A teal arrow points to this email link. The second pop-up window is titled 'Have Questions About the Soil Data?' and contains the text: 'If you have questions about the soil data displayed in Web Soil Survey, contact one of the following:' followed by a bulleted list: '- The appropriate State office.' and '- The local office of the Natural Resources Conservation Service.' A teal arrow points to the second bullet point. In the background, there is a 'Download Soils Data' button and an 'Interest Interactive Map' section with a map showing a satellite view of a landscape with the label 'WA'.

- You can get help via email by clicking on "Contact Us" and then clicking on one of the links.

RSS Subscriptions



The screenshot shows the USDA website's opening screen. A red arrow points to the 'Subscribe' button in the top navigation bar. A dialog box titled 'Subscribe to RSS Feeds' is open, providing instructions and a list of states and territories to choose from. The list includes: All States and Territories, Alabama, Alaska, American Samoa, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Federated States of Micronesia, Florida, and Georgia. Below the dialog box, an 'Interest Interactive Map' is visible, showing a satellite view of the contiguous United States with state abbreviations WA, MT, and ND.

- You can click "Subscribe" to begin the RSS subscription process.

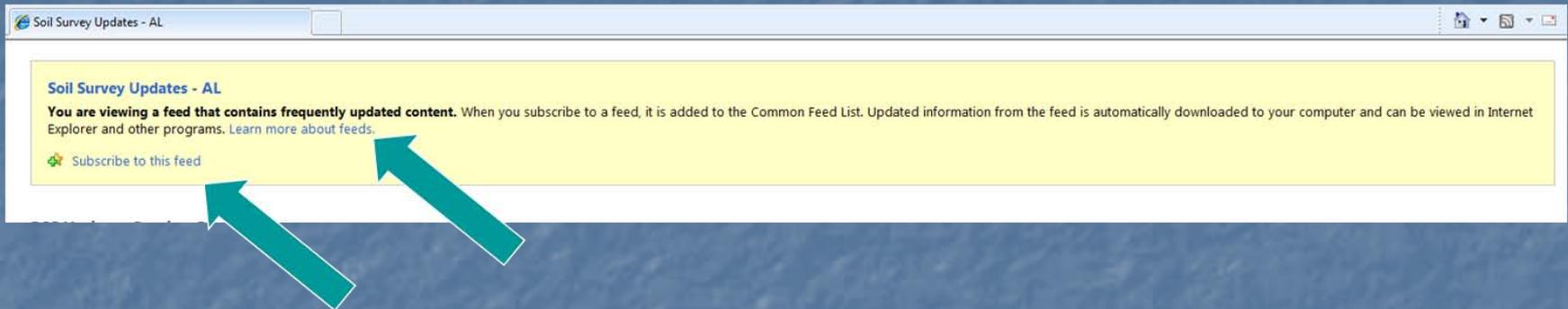
RSS Subscriptions—cont.

- WSS 3.0 allows you to subscribe to RSS notifications regarding the updating of data for soil survey areas.
- Updates to official soil survey data are generally only made on October 1 of each year. Exceptions are made for newly completed datasets. Exceptions are also made to resolve critical issues on a case-by-case basis.

RSS Subscriptions—cont.

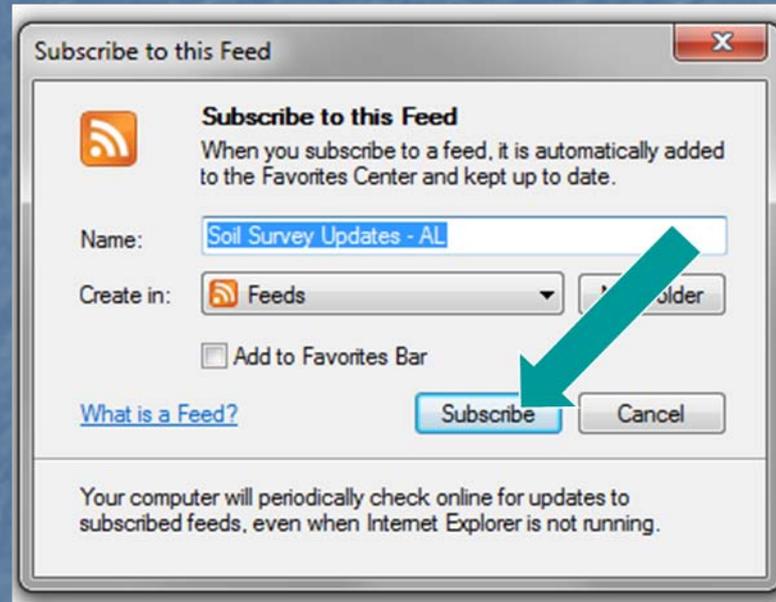
- Clicking on one of the State links opens a Web page that provides instructions for subscribing to the RSS feed.
- A listing of soil survey areas that have been updated in the selected state will be shown.

RSS Subscriptions—cont.



- Click on the "Subscribe to this feed" link to initiate your subscription.
- A second link is provided to "Learn more about feeds."

RSS Subscriptions—cont.



- The following dialog box is displayed. Click the "Subscribe" button to complete the process.

Archived Soil Survey Publications

The screenshot shows the USDA Natural Resources Conservation Service website. The navigation bar includes links for 'Contact Us', 'Subscribe', 'Archived Soil Surveys', 'Soil Survey Status', 'Glossary', 'Preferences', 'Link', 'Logout', and 'Help'. The 'Archived Soil Surveys' section is highlighted, and a text box explains that users can view a list of archived soil survey versions available for a specified Area of Interest (AOI) by clicking on the link 'Published Soil Surveys for Nebraska'. A 'Soil Map' section is also visible, showing a map of a field with a scale of 1:7,580 and various navigation tools.

- Listings of published soil surveys are stored on an external Web site. For a listing of the state(s) included in the AOI, click the link.

Archived Soil Survey Publications—cont.

United States Department of Agriculture
NRCS Natural Resources
Conservation Service
Soils

[Soils Home](#) | [About Us](#) | [Soil Survey](#) | [Soil Use](#) | [Soil Education](#) | [Photo Gallery](#) | [Technical References](#) | [Partnerships](#) | [Contact Us](#)

Search

Soils

Enter Keywords **GO**

Soil Survey

- ▶ Web Soil Survey
- ▶ Soil Data Mart
- ▶ Listing Of Soil Surveys by State
- ▶ Job Aids
- ▶ National Cooperative Soil Survey Soil Characterization Data
- ▶ Soil Climate Research Stations
- ▶ Soil Geochemistry Spatial Database
- ▶ Soil Geography
- ▶ eFOTG (county technical guides)
- ▶ Million-Acre Mappers

▶ Find a Service Center

▶ States and Regions

▶ Centers and Institutes

Published Soil Surveys for Nebraska

Soil surveys are being completed and published on a continuing schedule. As time passes, the data in published surveys become dated. The official information about the soils in a given area is available from the [Soil Data Mart](#), which provides the most current data about the soils. If spatial data are available, the [Web Soil Survey](#) also provides access to the most current information. In the "Date" column, the word "current" is used for those surveys having both tabular and spatial data in the Soil Data Mart. "Archived PDF online" refers to any surveys published as PDF files on the Web, including new surveys as well as old ones dating back to 1899.

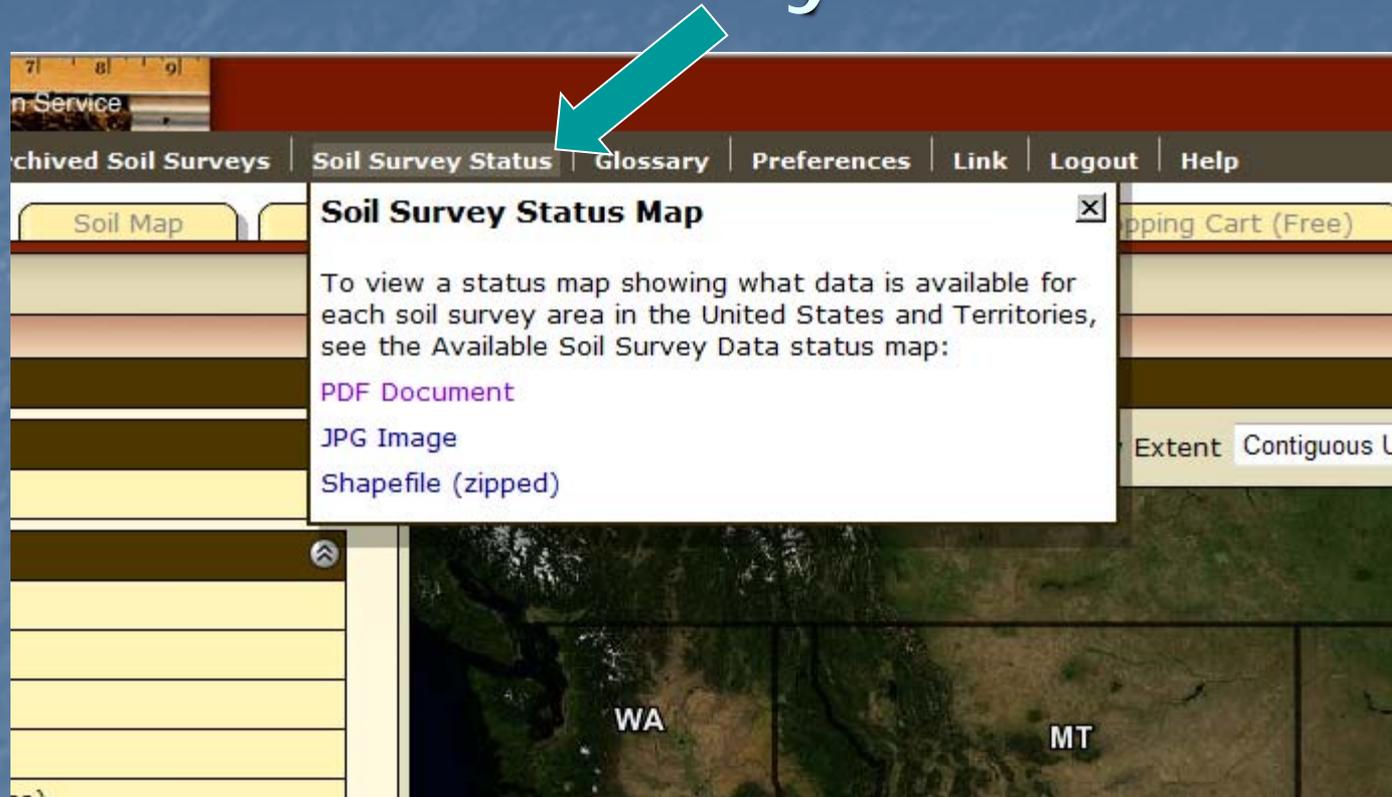
PDF files require Acrobat Reader.
Follow these instructions to download both text and maps.
[How to Save an Archived Soil Survey Publication to Your Local Machine](#) (PDF; 2.8 MB)

For information about areas not included on the following list of soil survey publications or for ordering or obtaining information about reference copies (CD-ROM or paper copy), contact:

State Conservationist
 Federal Building, Room 152
 100 Centennial Mall North
 Lincoln, NE 68508-3866
 Phone: 402-437-5300
 FAX: 402-437-5327

Soil survey name (Follow links for online surveys.)	Date	Paper copy available	CD-ROM	Archived PDF online	Web Soil Survey (generated from official soil data)
Adams County	1923	No	No	No	No
Adams County	1974	Yes	Yes	Yes	No
Adams County	Current	No	No	No	Yes
Antelope County	1924	No	No	No	No
Antelope County	1978	Yes	No	Yes	No
Antelope County	Current	No	No	No	Yes
Arthur and Grant Counties	1977	Yes	No	Yes	No
Arthur County	Current	No	No	No	Yes
Banner County	1921	No	No	No	No
Banner County	1994	Yes	No	Yes	No
Banner County	Current	No	No	No	Yes
Blaine County	1954	No	No	No	No
Blaine County	1993	Yes	No	Yes	No

Soil Survey Status



- This menu item includes a link to a map showing what types of data (tabular, spatial, or both) are available for each soil survey area.

Glossary of Soil Terms



USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Subscribe | Archived Soil Surveys | Soil Survey Status | **Glossary** | Preferences | Link | Logout | Help

Area of Interest (AOI) | Soil Map | Soil Data Explorer

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit

Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook."

ABC soil

A soil having an A, a B, and a C horizon.

Ablation till

Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.

AC soil

A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil

The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil

Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alkali (sodic) soil

A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Alluvial cone

A semiconical type of alluvial fan having very steep slopes. It is higher, narrower, and steeper than a fan and is composed of coarser and thicker layers of material deposited by a combination of alluvial episodes and (to a much lesser degree) landslides (debris flow). The coarsest materials tend to be concentrated at the apex of the cone.

Preferences

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Subscribe | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Download

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit

Area of Interest Interactive

Legend

Scale 1:16,7

Scope of Preferences

Remember preferences after the end of this session

Application Preferences

Show Maps by Default

Open Links and PDFs in External Windows

Color Scheme

Soil

Windows

Forest

Cancel | Reset Defaults | Save Preferences

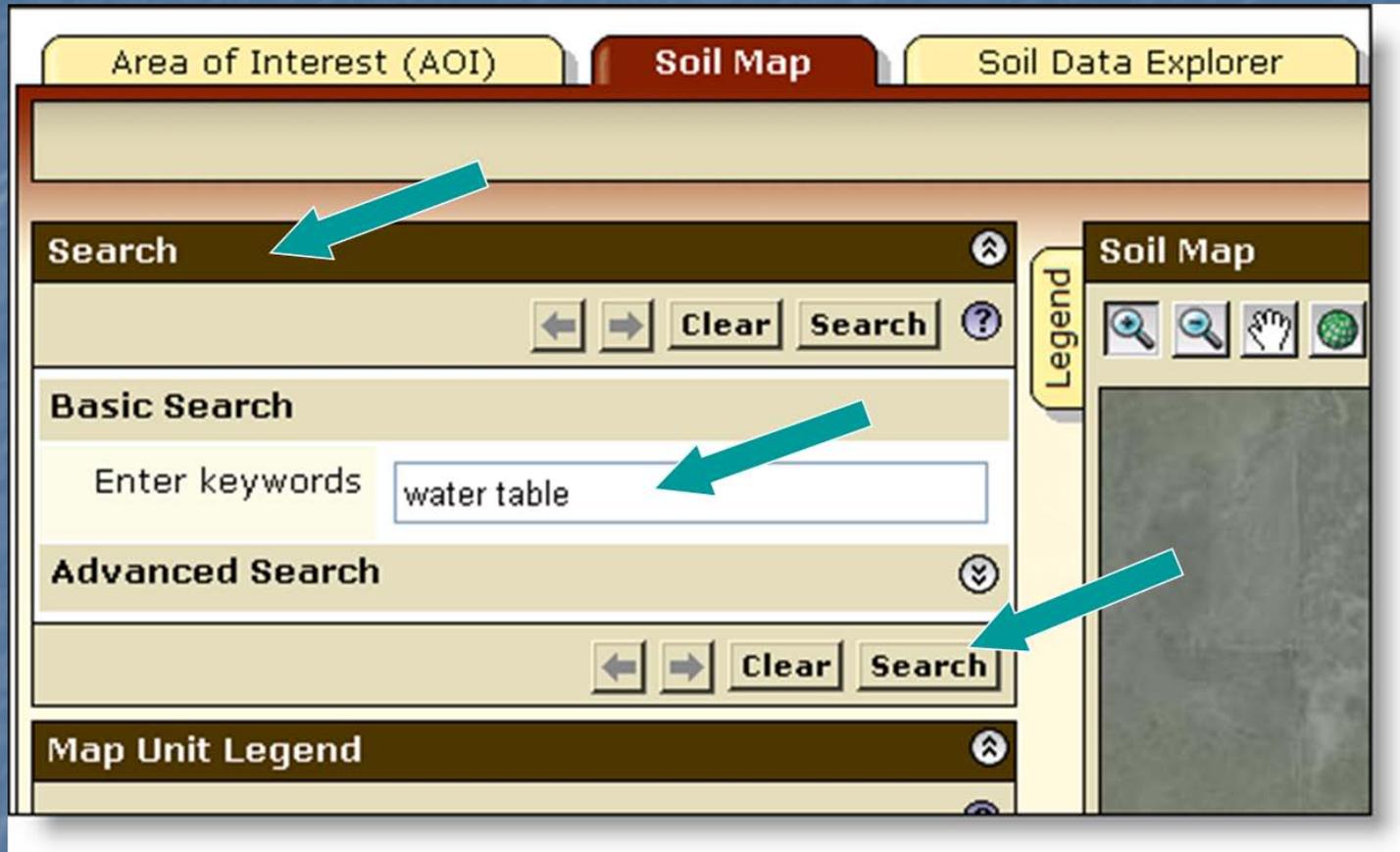
- You can set certain user preferences. For example:
 - You can choose to view PDF files and links in the same browser window as WSS or in different window,
 - You can choose not to view maps by default, and
 - You can choose between three color schemes.

Help

The screenshot shows the USDA Web Soil Survey opening screen. At the top, the navigation bar includes links for 'Contact Us', 'Archived Soil Surveys', 'Soil Survey Status', 'Glossary', 'Preferences', 'Link', 'Logout', and 'Help'. A teal arrow points to the 'Help' link. On the right side of the navigation bar, there is a 'Web Soil Survey' logo and a help icon (a question mark in a circle). Another teal arrow points to this icon. Below the navigation bar, there are tabs for 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', 'Download Soils Data', and 'Shopping Cart (Free)'. On the left side, there is a 'Search' section with an 'Address' input field and a 'View' button. A teal arrow points to the 'View' button. The main content area is titled 'Area of Interest Interactive Map' and features a map of the United States with state boundaries and abbreviations. A teal arrow points to a help icon (a question mark in a circle) located in the top right corner of the map area. The map also includes a legend, a scale of 1:15,900,000, and a view extent of 'Contiguous U.S.'.

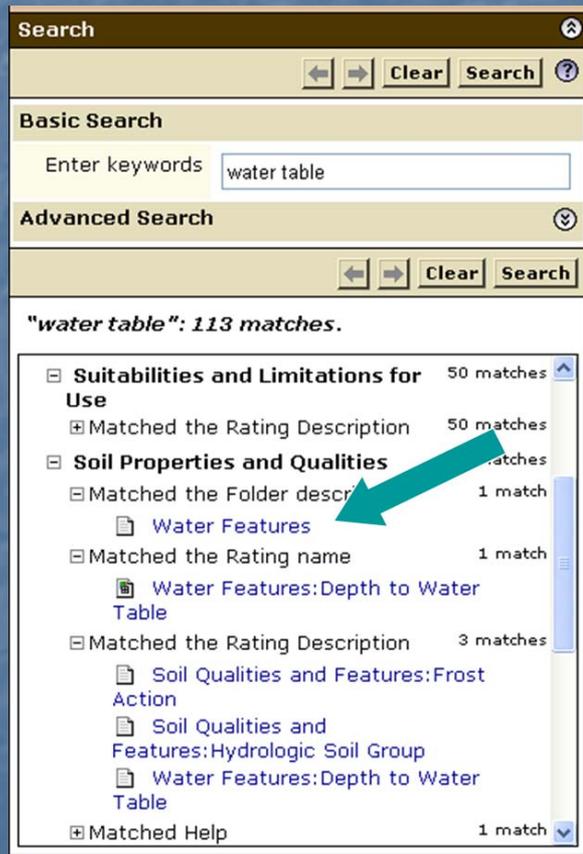
- You can get general help from the top navigation bar or context-specific help from the "?" symbols.

Search



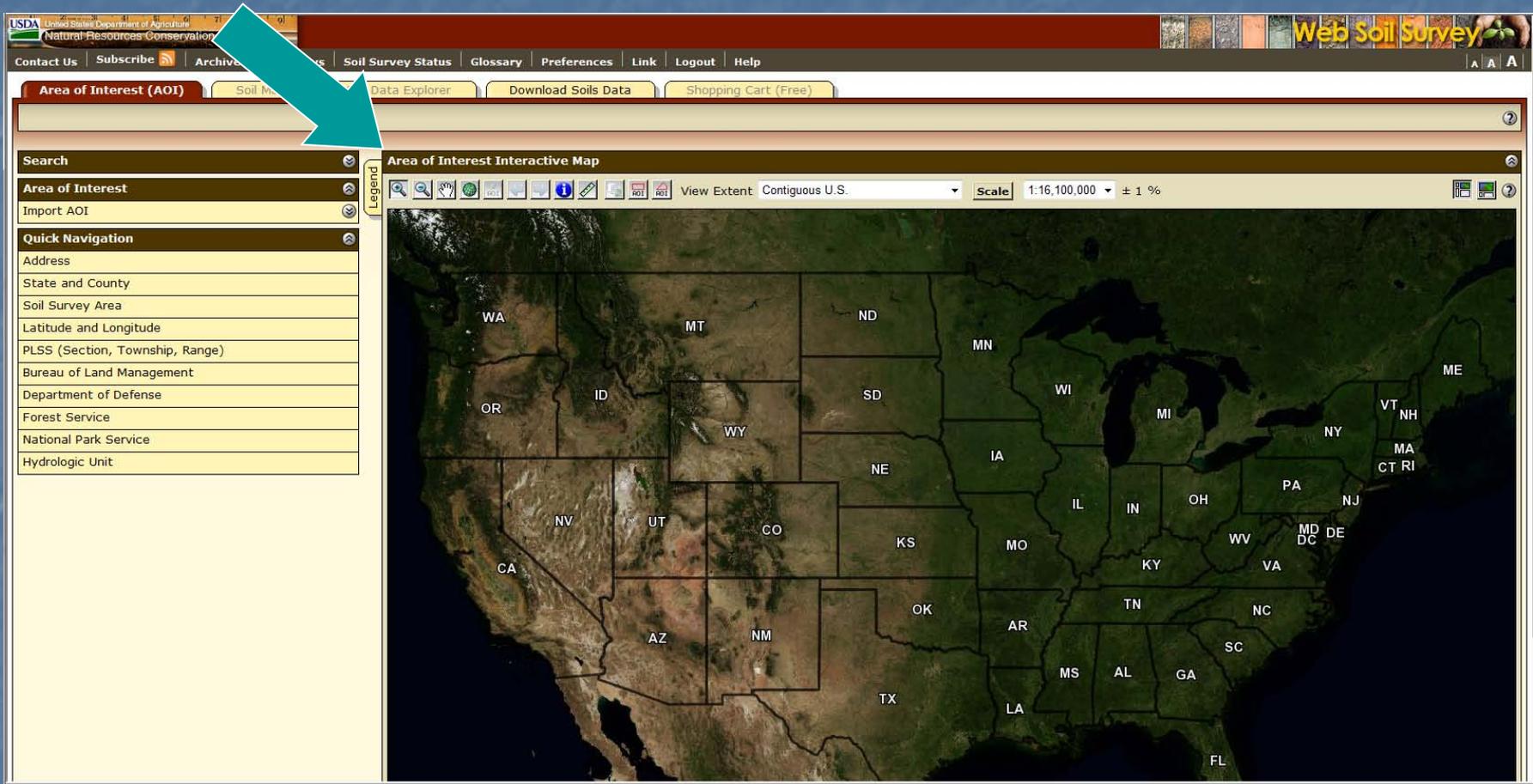
- The WSS has a search function.
- Click Search title bar. Enter key word(s). Click "Search" button.

Search-cont.



- Search results are displayed with links to parts of Web Soil Survey where the key word(s) can be found.
- Click on a link to go to the relevant section.

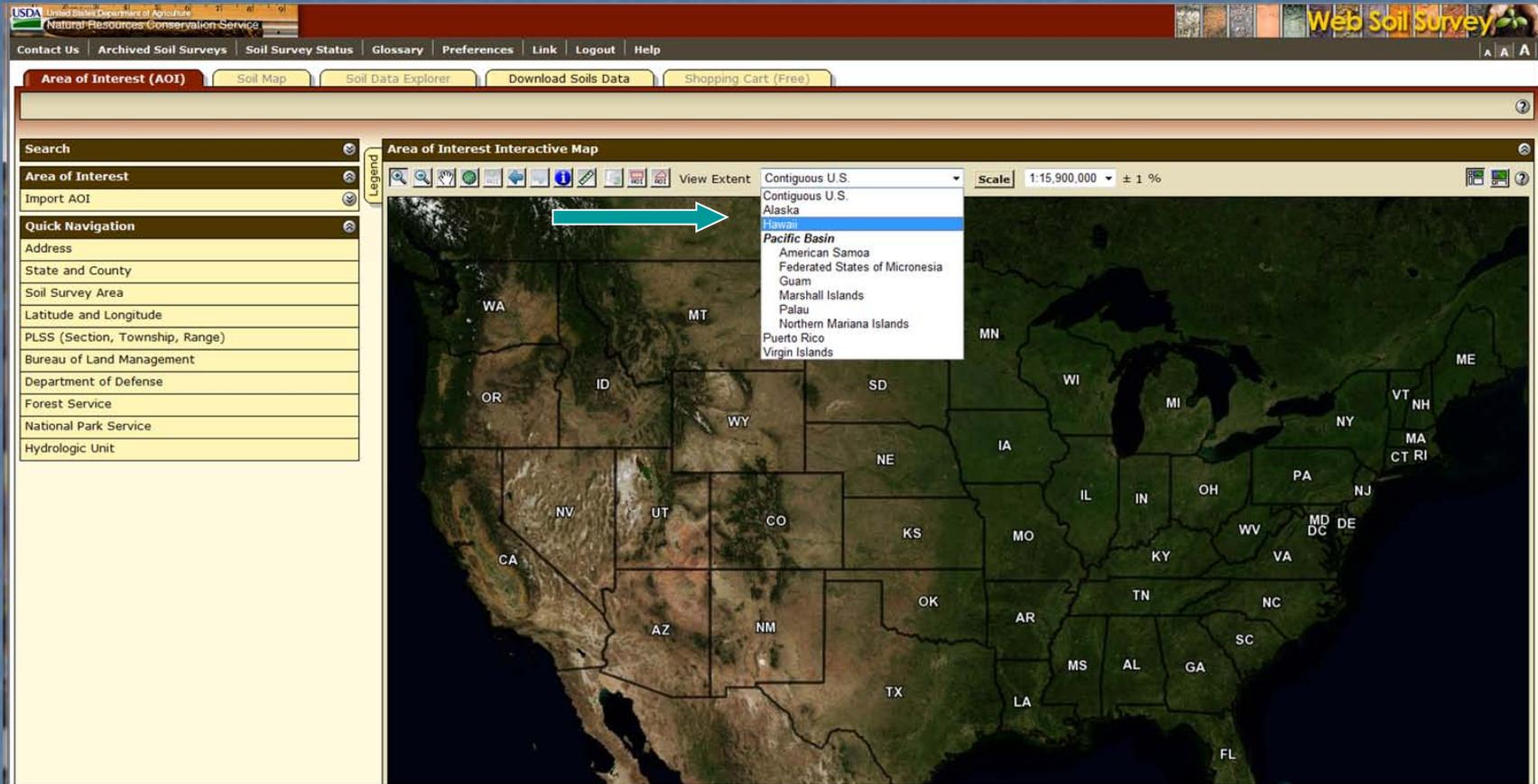
The Interactive AOI Map



The screenshot displays the USDA Web Soil Survey interface. At the top, the USDA logo and navigation links are visible. Below the navigation bar, there are tabs for 'Area of Interest (AOI)', 'Soil Map', 'Data Explorer', 'Download Soils Data', and 'Shopping Cart (Free)'. A large teal arrow points to the 'Area of Interest (AOI)' tab. The main content area is titled 'Area of Interest Interactive Map' and features a map of the United States with state boundaries and abbreviations. The map is overlaid on a satellite-style background. To the left of the map is a sidebar with a search bar and a 'Quick Navigation' section containing various search criteria like 'Address', 'State and County', and 'Soil Survey Area'. The map interface includes a legend, a scale bar (1:16,100,000), and a view extent dropdown set to 'Contiguous U.S.'.

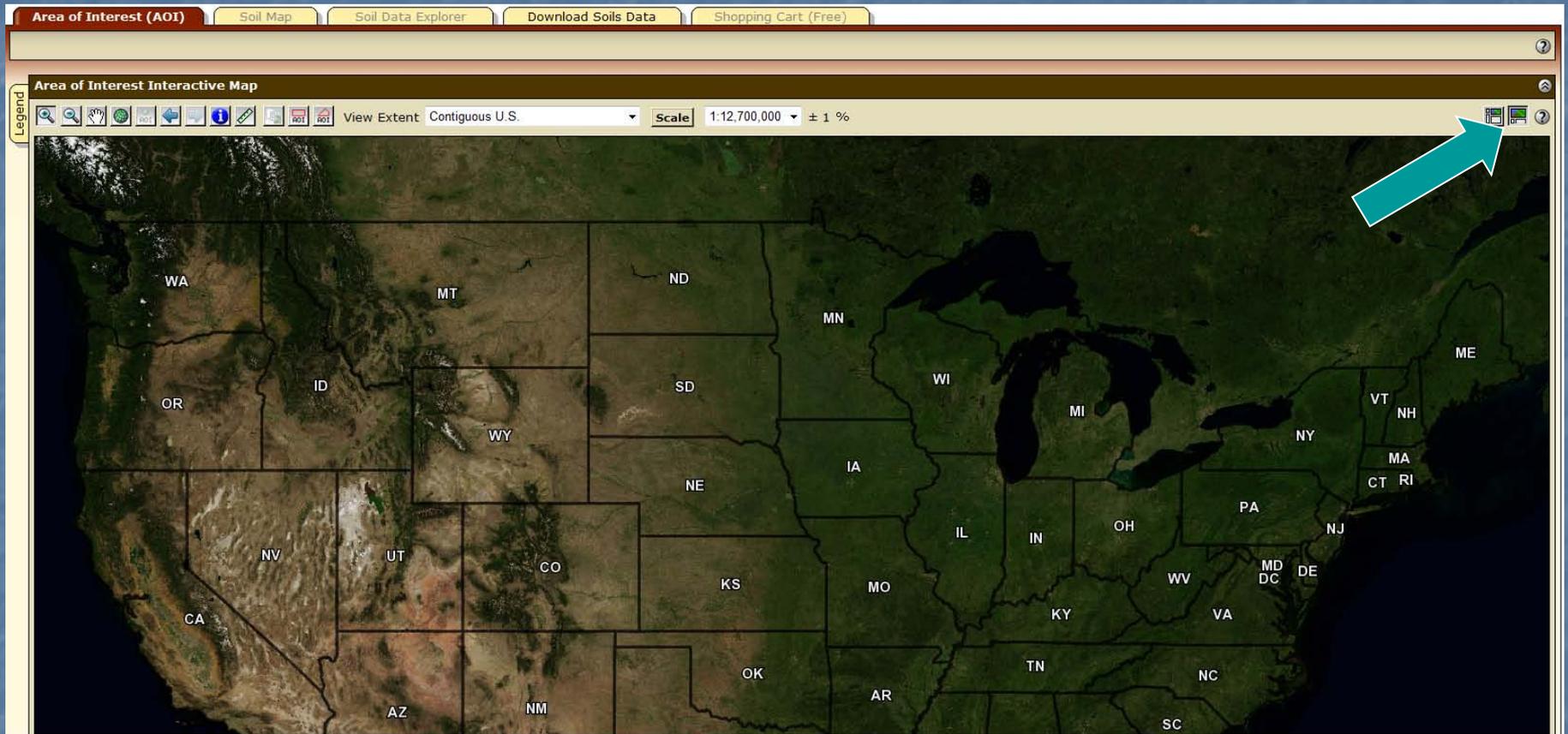
- Several tools are available to zoom to your area of interest on the interactive map.

View Other Geographic Areas

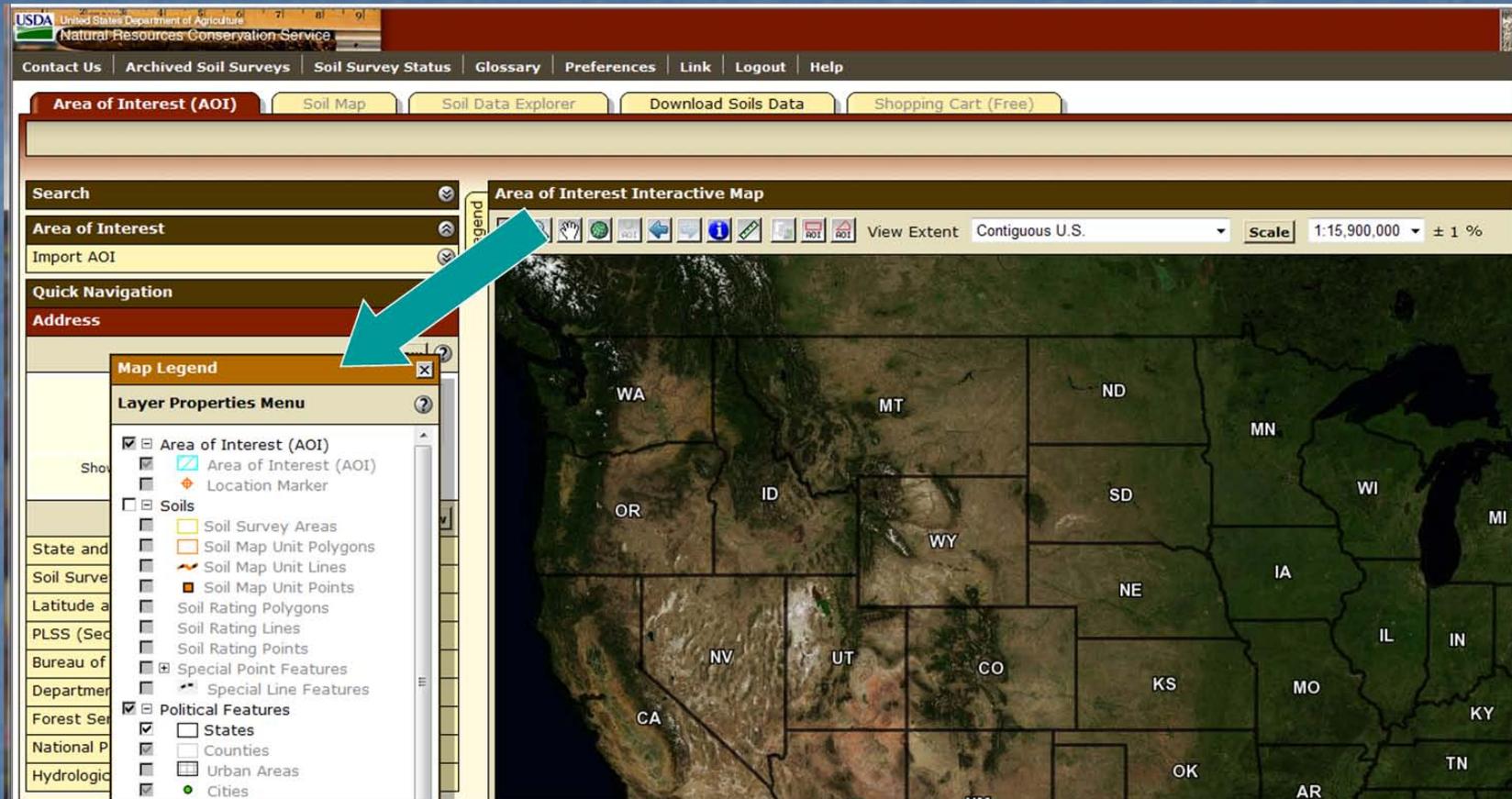


- You can view other geographic areas by selecting from the "View Extent" drop-down menu.

View Map at Full Screen Width

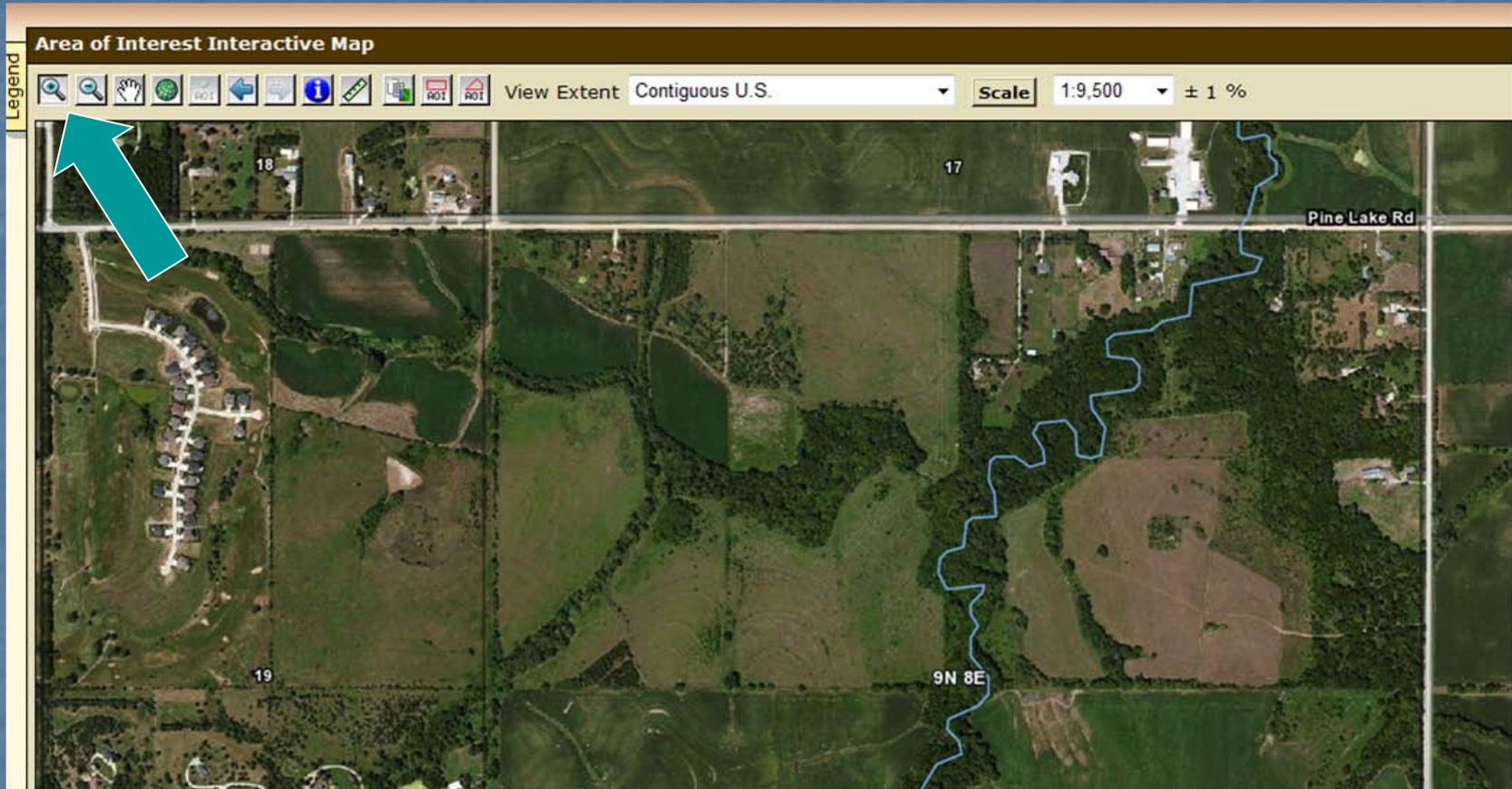


Floating Map Legend



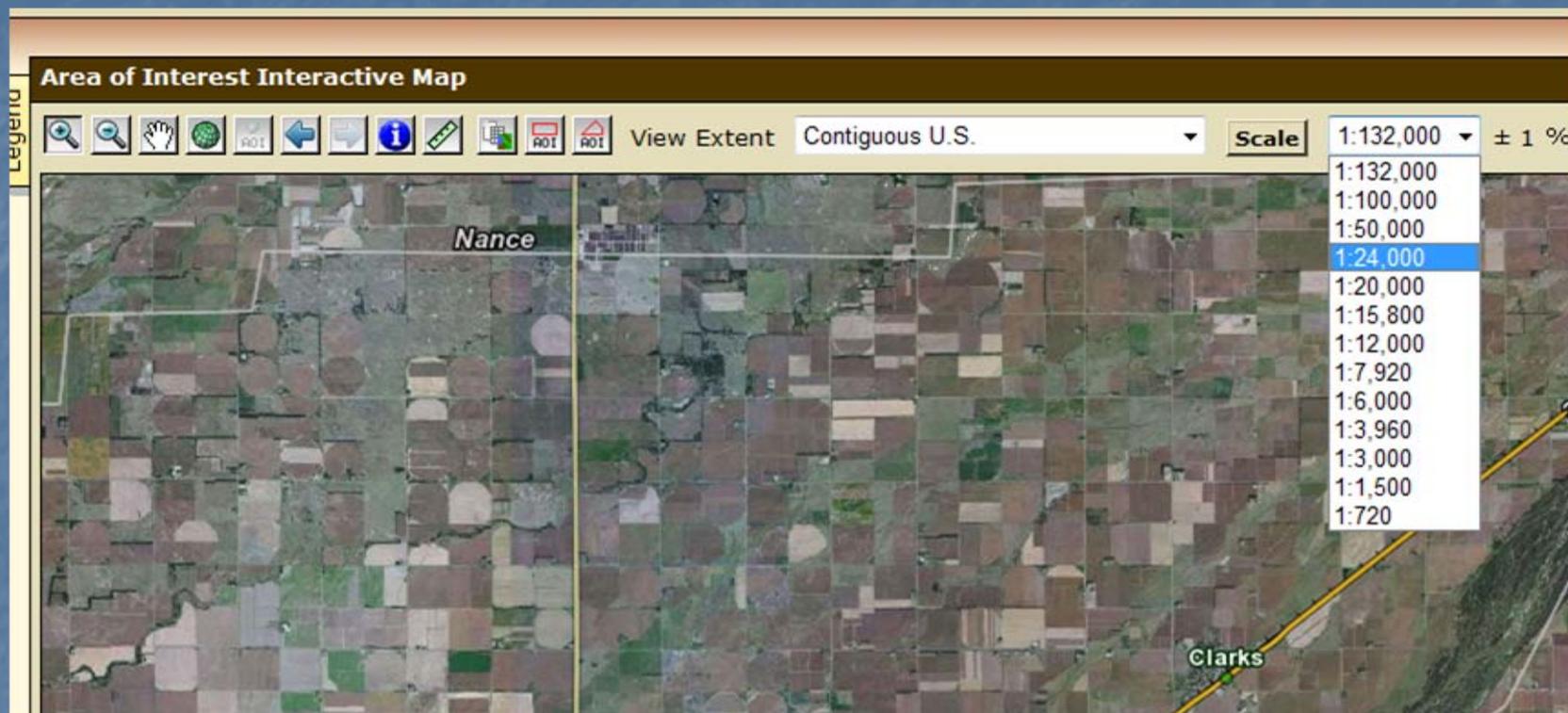
- You can view the map legend, which has a floating window. Click the "Legend" tab to drag the map legend.

Zoom Tools



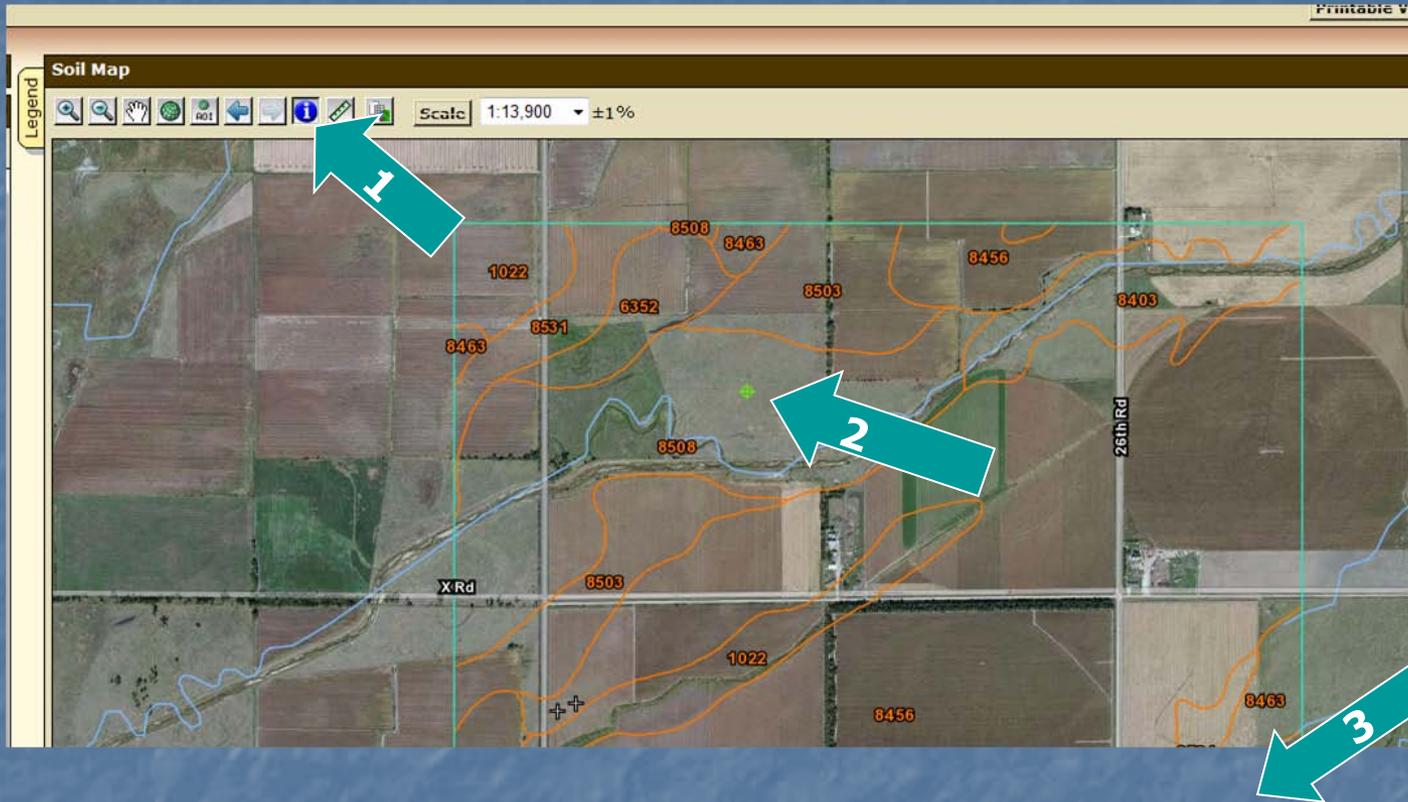
- The map has zoom-in and zoom-out tools. Click on the symbol of the magnifying glass with a plus sign, then click and drag on the map to zoom in to a selected rectangle.

Onscreen Map Scale



- You can view or specify the onscreen map scale.
- First, calibrate your monitor by clicking the "Scale" button and following the directions.
- The current scale of the map is then displayed.
- Use the drop-down menu to change to a specific map scale.

Identify Tool



- The identify tool provides information about visible data layers.
- 1) Click the identify tool and then a point on the map.
- 2) A marker identifies the point you clicked on.
- 3) The attribute values for information on the layers are listed in a table below the map.

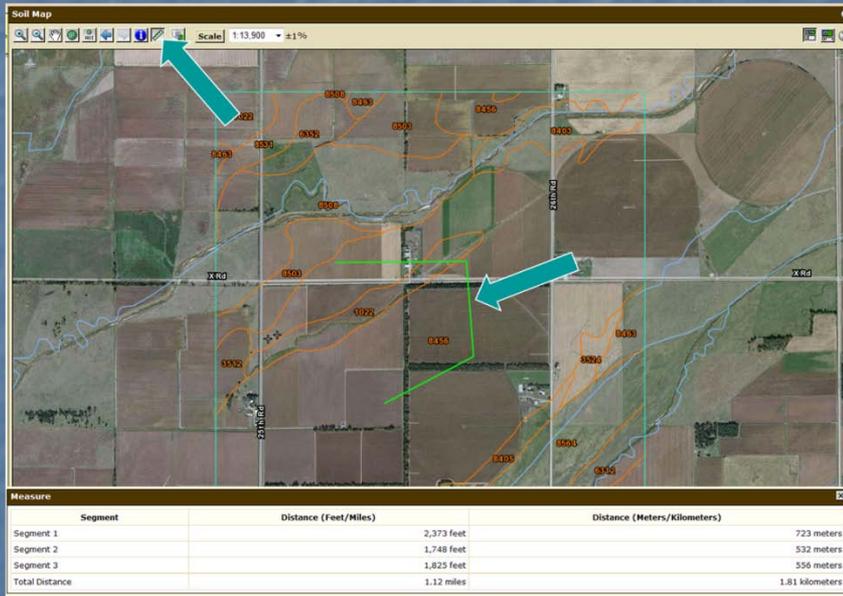
Identify Tool—cont.

Identify		
Layer	Attribute Name	Attribute Value
Location	Latitude, Longitude	41.26916°, -97.82226°
Area of Interest (AOI)	Area (acres)	1,384
Soil Map Unit Polygons	Map Unit Name	Lex variant loam, occasionally flooded
	Map Unit Symbol	8508
	Map Unit Key	1709662
	Soil Survey Area Symbol	NE121
	National Map Unit Symbol	1vd1d
Aerial Photography	Date(s) Photographed	Aug 11, 2010—Sep 30, 2010

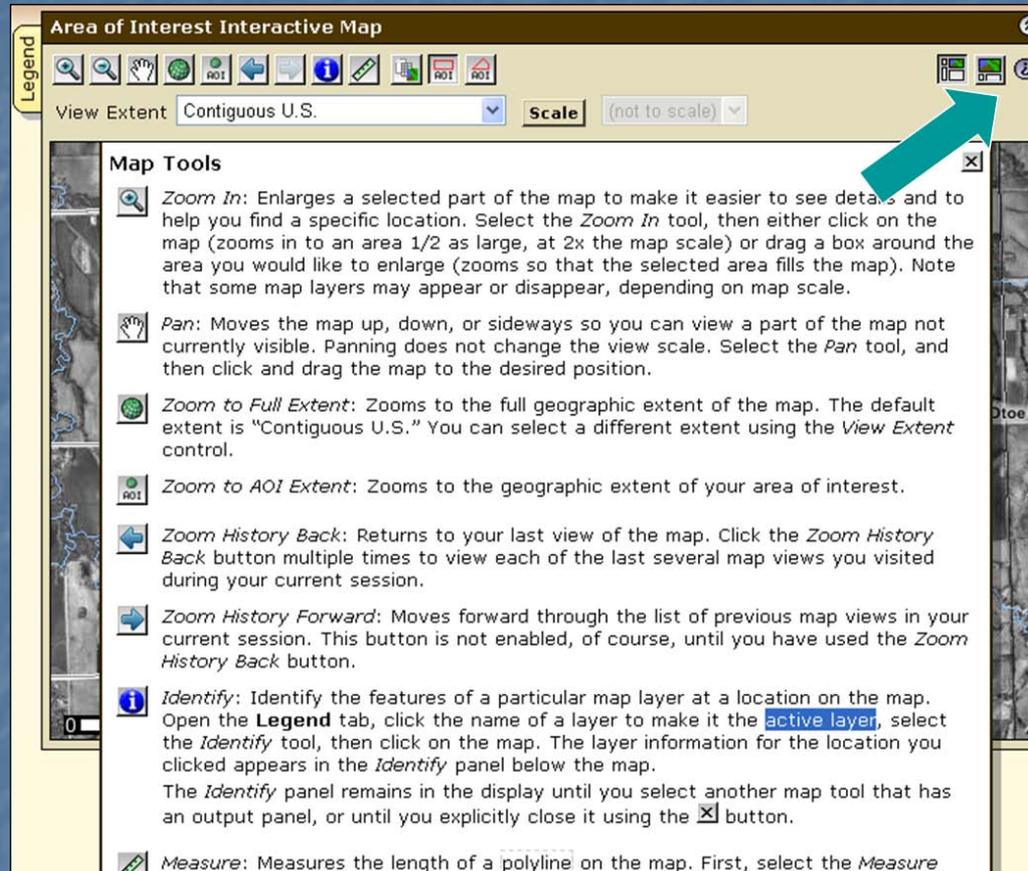
- The "Identify" table provides information about the selected data layers at the point identified. The table appears below the interactive map after a point is selected with the identify tool.

Linear Measuring Tool

- Click the ruler button.
- Click on the map to begin and end linear segments.
- Segment length and cumulative length are displayed in metric and English units in the table.



Help



- Additional help with the interactive map is available by clicking on the "?" icon.

Part II. Soil Data for an Area of Interest

- a. Define an Area of Interest (AOI)
 - 1. AOI Features
 - 2. Navigate to the area
 - 3. Define a specific area
- b. View Soil Map
- c. Explore Additional Soil Information
- d. Shopping Cart for Selected Information

IIa. Define an Area of Interest

The Web Soil Survey is backed by a database that contains soil information for the entire country. You can use the interactive map to select the area for which you want information.

- a. Define an Area of Interest (AOI)
 1. AOI Features
 2. Navigate to the area
 3. Define a specific area

II(a1). Area of Interest Features

- You can navigate to the area where you wish to specify an area of interest using basic map navigation data layers:
 - Transportation,
 - Aerial photography,
 - Hydrography, and
 - Political features.

Area of Interest Features—cont.

- You can navigate using selection criteria:
 - Street address,
 - State and county,
 - Soil survey area,
 - Latitude and longitude,
 - PLSS (township, range, and section),
 - Federal land boundaries,
 - Hydrologic unit, and
 - Coordinates in a URL.

Area of Interest Features—cont.

- You can use the zoom in/out tools.
- You can define an AOI by:
 - Drawing a polygon on a map
 - Using the rectangle tool, or
 - Using the multi-sided polygon tool;
 - Selecting a soil survey area;
 - Importing an AOI boundary file; or
 - Embedding bounding coordinates in a URL.
- You can clear a previously selected AOI.

Area of Interest Features—cont.

- You can determine what types of data are available for a defined AOI:
 - Tabular soil data and/or
 - Spatial soil data (maps).
- You can name your AOI.
- You can save your AOI for later use by exporting the boundary file to a GIS or by saving a bookmark to it in your browser.
- You can choose to use either standard or national map unit symbols.

II(a2). Navigate to the Area

The screenshot displays the USDA Web Soil Survey interface. At the top, the header includes the USDA logo, the text "United States Department of Agriculture Natural Resources Conservation Service", and the "Web Soil Survey" logo. Below the header is a navigation menu with links: "Contact Us", "Archived Soil Surveys", "Soil Survey Status", "Glossary", "Preferences", "Link", "Logout", and "Help". The main content area is titled "Area of Interest (AOI)" and contains several tabs: "Soil Map", "Soil Data Explorer", "Download Soil Data", and "Shopping Cart". On the left side, there is a "Search" section with a "Quick Navigation" list. This list includes: "Address", "State and County", "Soil Survey Area", "Latitude and Longitude", "PLSS (Section, Township, Range)", "Bureau of Land Management", "Department of Defense", "Forest Service", "National Park Service", and "Hydrologic Unit". A teal arrow labeled "Navigate" points to the "Quick Navigation" section. In the center, there is a "Area of Interest Interactive Map" section. It features a toolbar with various navigation tools (pan, zoom, home, etc.) and a "View Extent" dropdown menu set to "Contiguous U.S.". A teal arrow labeled "Zoom" points to the zoom tool, and another teal arrow labeled "Select" points to the polygon selection tool. The map itself shows a satellite-style view of the United States with state boundaries and two-letter state abbreviations (e.g., WA, MT, ND, MN, ME, etc.) overlaid on the map.

- Use Quick Navigation and the zoom tool to go to the area. Use a polygon tool to select your specific AOI.

Navigate by Street Address

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us Archived Soil Surveys Soil Survey Status Glossary Preferences Link Logout Help

Area of Interest (AOI) Soil Map Soil Data Explorer Download Soils Data Shopping Cart (Free)

Search
Area of Interest
Import AOI
Quick Navigation
Address

View ?

Address 11400 pine lake rd, 68526

Show location marker

View

State and County
Soil Survey Area
Latitude and Longitude
PLSS (Section, Township, Range)
Bureau of Land Management
Department of Defense
Forest Service
National Park Service
Hydrologic Unit

Area of Interest Interactive Map

Legend

View Extent: Contiguous U.S. Scale: 1:5,040 ± 1 %

Aspen Canyon Rd
Rocky Ridge Rd
S112th St
Pine Lake Rd

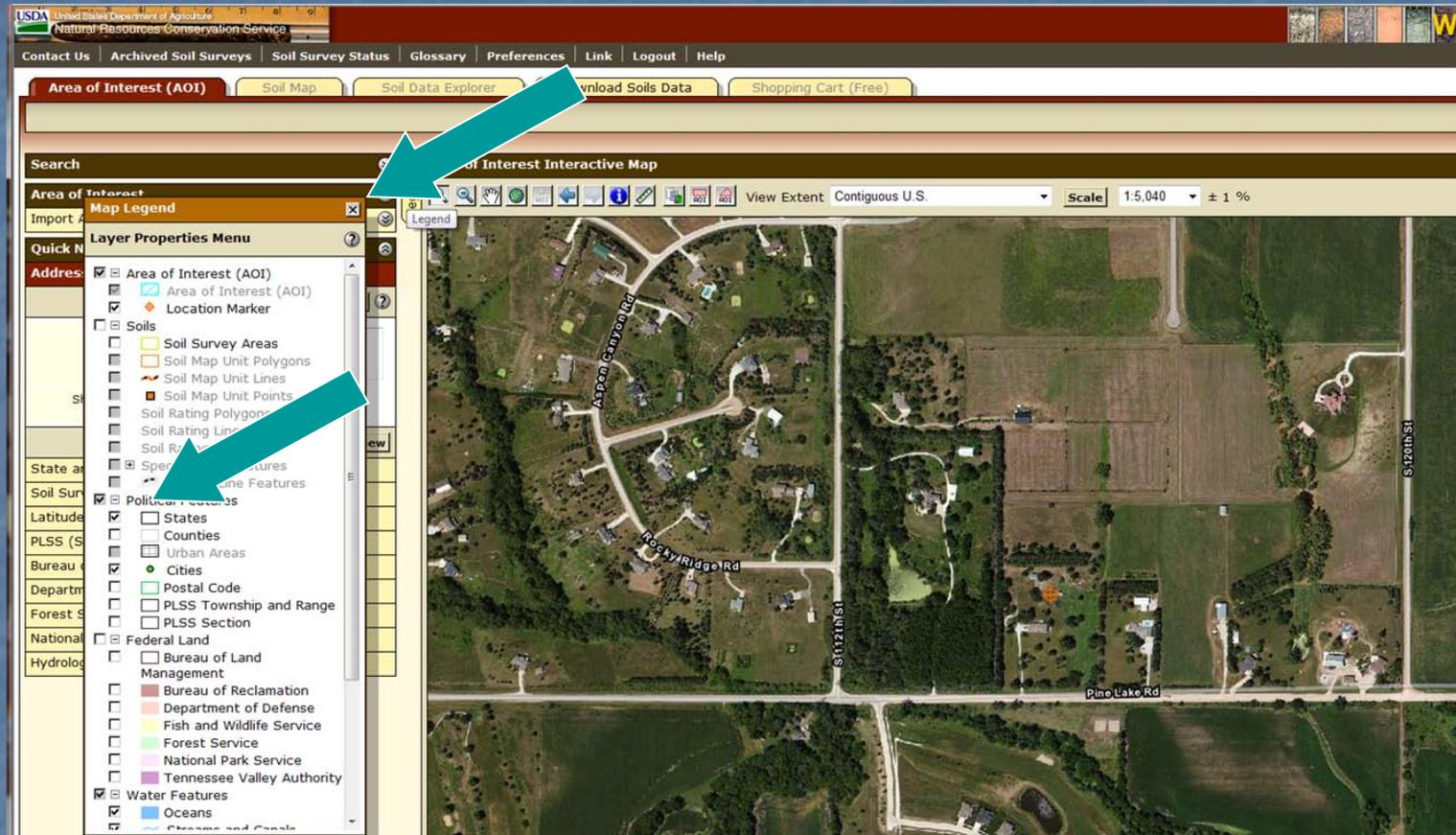
View by Street Address

The screenshot displays the USDA Natural Resources Conservation Service web application interface. At the top, the USDA logo and navigation menu are visible. Below the menu, there are tabs for "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer", "Download Soils Data", and "Shopping Cart (Free)".

The main interface is divided into two main sections:

- Left Panel (Search and Navigation):**
 - Search:** Includes a "Search" button and a "View" button.
 - Area of Interest:** Includes an "Import AOI" button.
 - Quick Navigation:** Includes a "View" button.
 - Address:** A text input field contains "11400 pine lake rd, 68526". Below it is a "View" button and a "Show location marker" checkbox which is checked.
 - State and County:** A dropdown menu.
 - Soil Survey Area:** A dropdown menu.
 - Latitude and Longitude:** A dropdown menu.
 - PLSS (Section, Township, Range):** A dropdown menu.
 - Bureau of Land Management:** A dropdown menu.
 - Department of Defense:** A dropdown menu.
 - Forest Service:** A dropdown menu.
 - National Park Service:** A dropdown menu.
 - Hydrologic Unit:** A dropdown menu.
- Right Panel (Area of Interest Interactive Map):**
 - Map Tools:** Includes a legend, search, pan, zoom, and other navigation tools.
 - View Extent:** A dropdown menu set to "Contiguous U.S.". A "View" button is next to it.
 - Scale:** A dropdown menu set to "1:5,040" with a "± 1 %" indicator.
 - Map:** An aerial satellite-style map showing a residential area. A red location marker is placed on the map, corresponding to the address entered in the left panel. Labels on the map include "Aspen Canyon Rd", "Rocky Ridge Rd", "S 112th St", and "Pine Lake Rd".

Manage Display of Data Layers



- Click on the "Legend" tab.
- Turn layers on or off by checking or unchecking boxes on the legend.

Navigate by County

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Download Soils Data | Shopping Cart (Free)

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

View

State Nebraska

County (optional) Lancaster

View

Soil Survey Area

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit

Area of Interest Interactive Map

Legend

View Extent Contiguous U.S. Scale 1:5,000

Aspen Canyon Rd

Rocky Ridge Rd

S 112th St

Pine Lake Rd

Navigate by Soil Survey Area

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Download Soils Data | Shopping Cart (Free)

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Set AOI View ?

State: Alabama

County (optional):

Soil Survey Area

Name	Area Symbol	Data Availability	Version
<input checked="" type="radio"/> Autauga County, Alabama	AL001	Tabular and Spatial, complete	Survey Area: Version 6, Nov 2, 2009 Tabular: Version 5, Aug 15, 2006 Spatial: Version 2, Mar 21, 2006
<input type="radio"/> Baldwin County, Alabama	AL003	Tabular and Spatial, complete	Survey Area: Version 3, Jul 18, 2006 Tabular: Version 3, Jul 18, 2006 Spatial: Version 1, Jun 23, 2004
<input type="radio"/> Barbour County, Alabama	AL005	Tabular and Spatial,	Survey Area: Version 7,

Show Soil Survey Areas Layer in Map

Area of Interest Interactive Map

Legend

View Extent: Contiguous U.S. Scale



Navigate by Latitude and Longitude

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us Archived Soil Surveys Soil Survey Status Glossary Preferences Link Logout Help

Area of Interest (AOI) Soil Map Soil Data Explorer Download Soils Data Shopping Cart (Free)

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Latitude and Longitude

View ?

Latitude, Longitude 40.5678 -100.2569

Display location marker

View

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit

Area of Interest Interactive Map

View Extent Contiguous U.S.

Scale 1:7,420 ± 1 %

For a point between 0 and 180 degrees west longitude, enter a negative longitude number.

Location marker

- See next slide for allowable formats.

Allowable Coordinates for Latitude and Longitude

- All coordinates are assumed to be specified with reference to the WGS 84 spatial reference. Latitude is specified first, except in the Well-Known Text (WKT) format.
- Decimal Degrees
 - 46.8075,-100.78306
 - 46.80750 N 100.78306 W
 - 46.8075~-100.78306
 - 46.8075° -100.78306°
- Degrees/Minutes/Decimal Seconds
 - 46° 48' 27" N, 100° 46' 59.016" W
 - 46d 48' 27" N 100d 46' 59.016" W
 - 46°48'27"N,100°46'59.016"W
 - 46:48:27N 100:46:59.016W
- Degrees/Decimal Minutes
 - 46° 48.45', -100° 46.9836'
- GPS
 - N 46 48.45 W 100 46.9836
- GNIS
 - 464827N 1004659W
- WKT
 - (-100.78305 46.80749)
 - (-100.78305%2046.80749)

Navigate by Public Land Survey System (Section, Township, and Range)

The screenshot displays the USDA Natural Resources Conservation Service website. The top navigation bar includes links for Contact Us, Archived Soil Surveys, Soil Survey Status, Glossary, Preferences, Link, Logout, and Help. Below this is a secondary navigation bar with buttons for Area of Interest (AOI), Soil Map, Soil Data Explorer, Download Soils Data, and Shopping Cart (Free).

The main content area is divided into two panels. On the left is the 'Area of Interest Interactive Map' control panel, and on the right is the map itself.

Area of Interest Interactive Map Control Panel:

- Search:** Includes an 'Import AOI' button.
- Quick Navigation:** Includes fields for Address, State and County, Soil Survey Area, and Latitude and Longitude.
- PLSS (Section, Township, Range):** This section is highlighted in red. It includes:
 - State: Nebraska (dropdown)
 - Principal Meridian: Sixth Principal Meridian (dropdown) with a 'View' button.
 - Section: 20 (input field)
 - Township: 9 N (input field)
 - Range: 8 E (input field)
 - Duplicate Township: (dropdown)
 - Checkboxes: 'Show PLSS Township and Range Layer in Map' and 'Show PLSS Section Layer in Map' are both checked.
- A 'View' button is located at the bottom of the control panel.

Area of Interest Interactive Map:

- Includes a legend on the left side.
- Map tools: View Extent, Contiguous U.S. (dropdown), and Scale: 1:9,500.
- Map content: Aerial imagery showing a grid of sections. Section 20 is highlighted in green. Township 9 N and Range 8 E are labeled on the map.

A red arrow points from the 'Section' input field (20) in the control panel to the highlighted section 20 on the map.

Navigate by Federal Land Management Agencies

The screenshot displays the USDA Natural Resources Conservation Service website interface. At the top, the USDA logo and "United States Department of Agriculture Natural Resources Conservation Service" are visible. Below the header, there are navigation links: "Contact Us", "Subscribe", "Archived Soil Surveys", "Soil Survey Status", "Glossary", "Preferences", "Link", "Logout", and "Help".

The main navigation bar includes tabs for "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer", "Download Soils Data", and "Shopping Cart (Free)".

On the left side, there is a "Search" section and a "Quick Navigation" menu. The "Quick Navigation" menu lists several options, with a teal arrow pointing to "Forest Service":

- Address
- State and County
- Soil Survey Area
- Latitude and Longitude
- PLSS (Section, Township, Range)
- Bureau of Land Management
- Department of Defense
- Forest Service
- National Park Service
- Hydrologic Unit

The main content area is titled "Area of Interest Interactive Map". It features a toolbar with various map navigation tools (pan, zoom, home, etc.) and a "View Extent" dropdown menu set to "Contiguous U.S.". The map itself shows a satellite view of the western United States with state boundaries and abbreviations (WA, OR, NV, ID, UT, MT, WY, CO, ND, SD, NE) overlaid.

Example: Bureau of Land Management

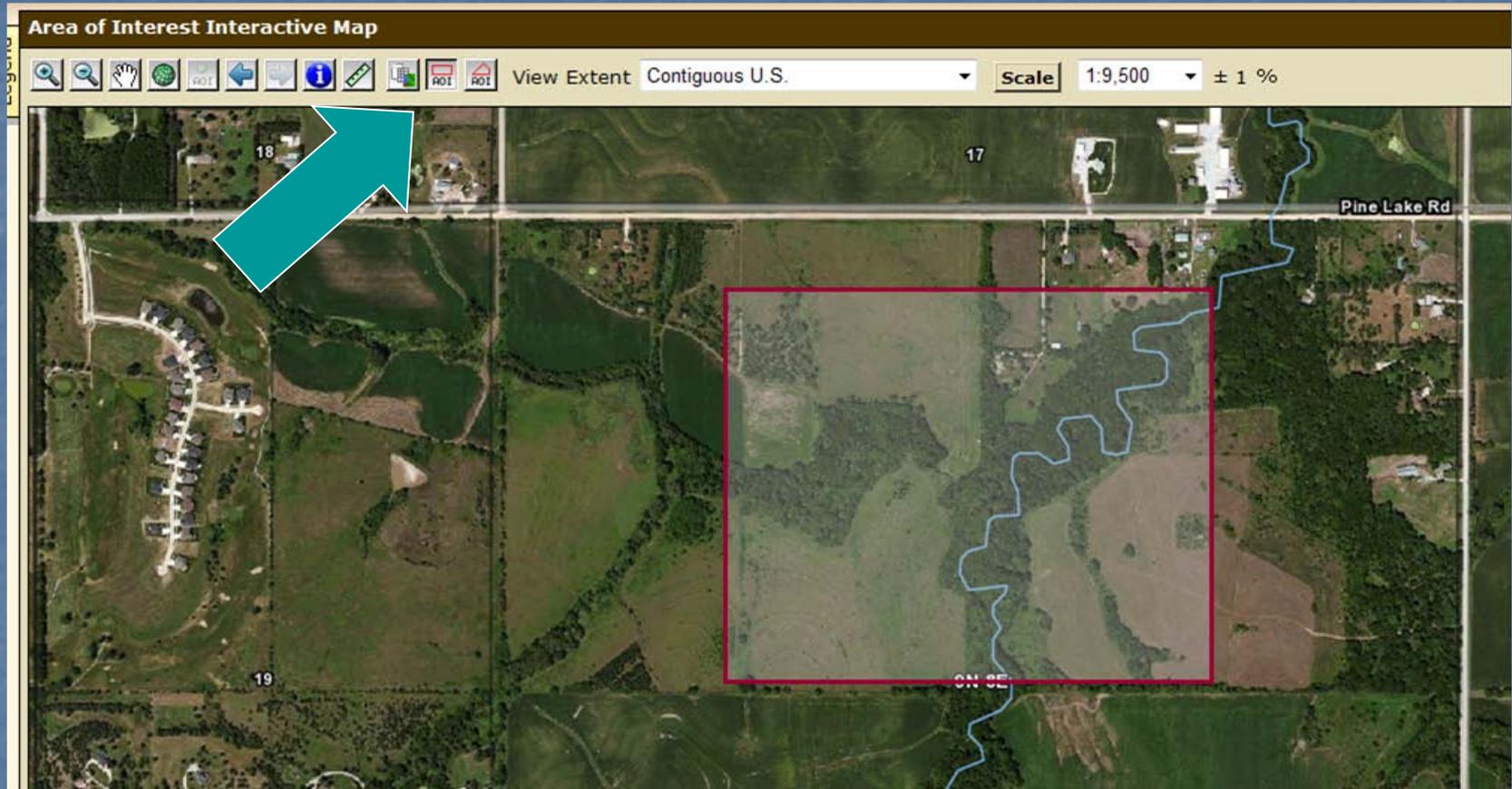
The screenshot shows a web interface for the Bureau of Land Management. At the top, there is a "Quick Navigation" section with fields for Address, State and County, Soil Survey Area, Latitude and Longitude, and PLSS (Section, Township, Range). Below this is a "Bureau of Land Management" section with a "View" button. The "State Office" dropdown is set to "Colorado". The "Field Office" dropdown is open, showing a list of field offices: Columbine (highlighted), Del Norte, Dolores, Glenwood Springs, Grand Junction, Gunnison, Kremmling, LA Jara, Little Snake, Pagosa Springs, Royal Gorge, Saguache, Uncompahgre, and White River. A "View" button is visible to the right of the field office list. Two teal arrows point to the "View" button next to the field office list and the "View" button below the "Bureau of Land Management" section.

- Select a State office.
- Select a field office.
- Click the "View" button.
- The outline of the selected area is then displayed on the map.
- A similar process is available for the other Federal agencies listed.

II(a3). Define the Specific AOI

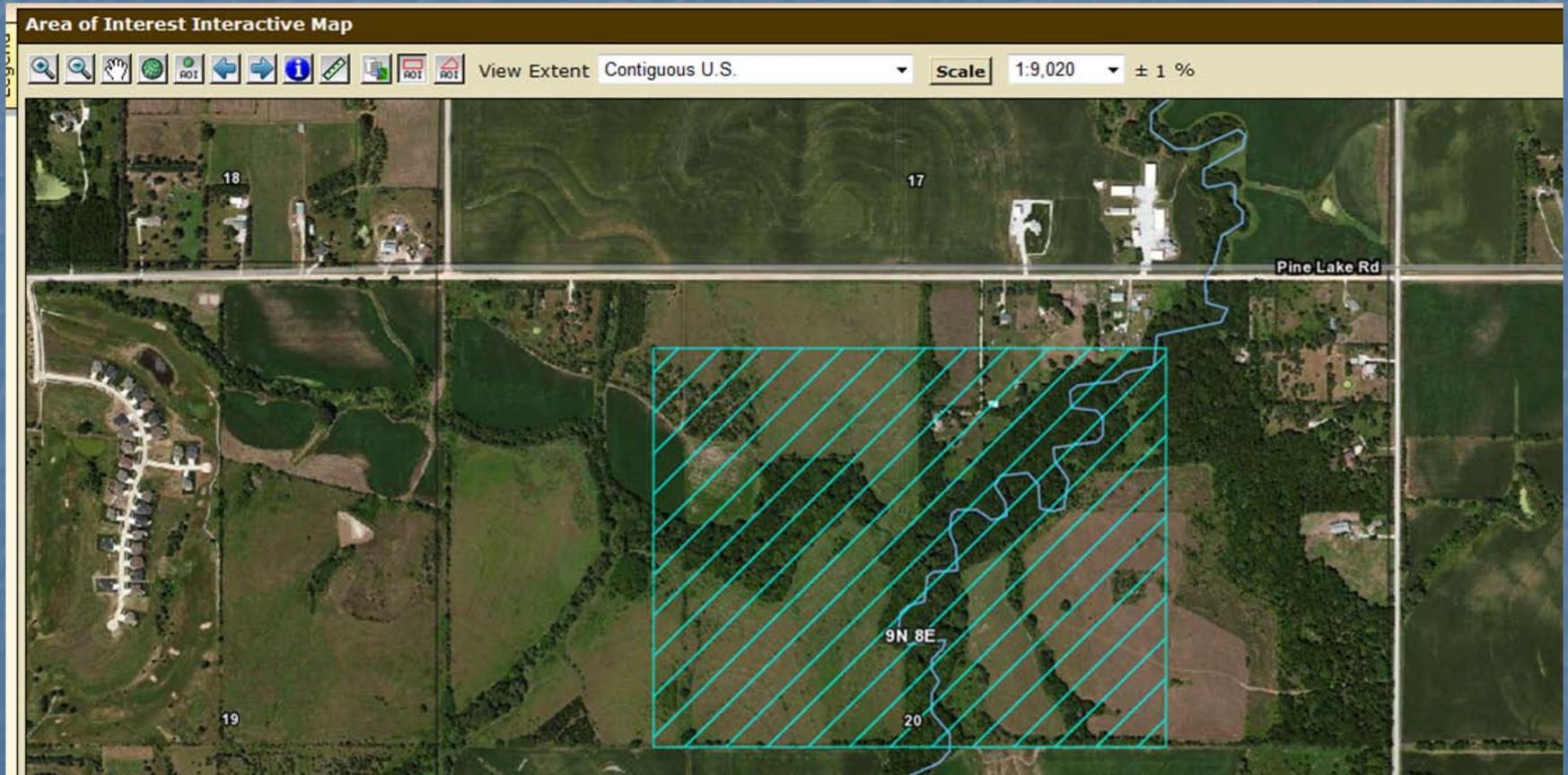
- Remember, you must specifically set the AOI before you can view soil maps or data.
- You can define an AOI by:
 - Drawing a polygon on a map
 - Using the rectangle tool, or
 - Using the multi-sided polygon tool;
 - Selecting a soil survey area;
 - Importing an AOI boundary file;
 - Embedding bounding coordinates in a URL; or
 - Using a previously bookmarked link.

Rectangle Tool

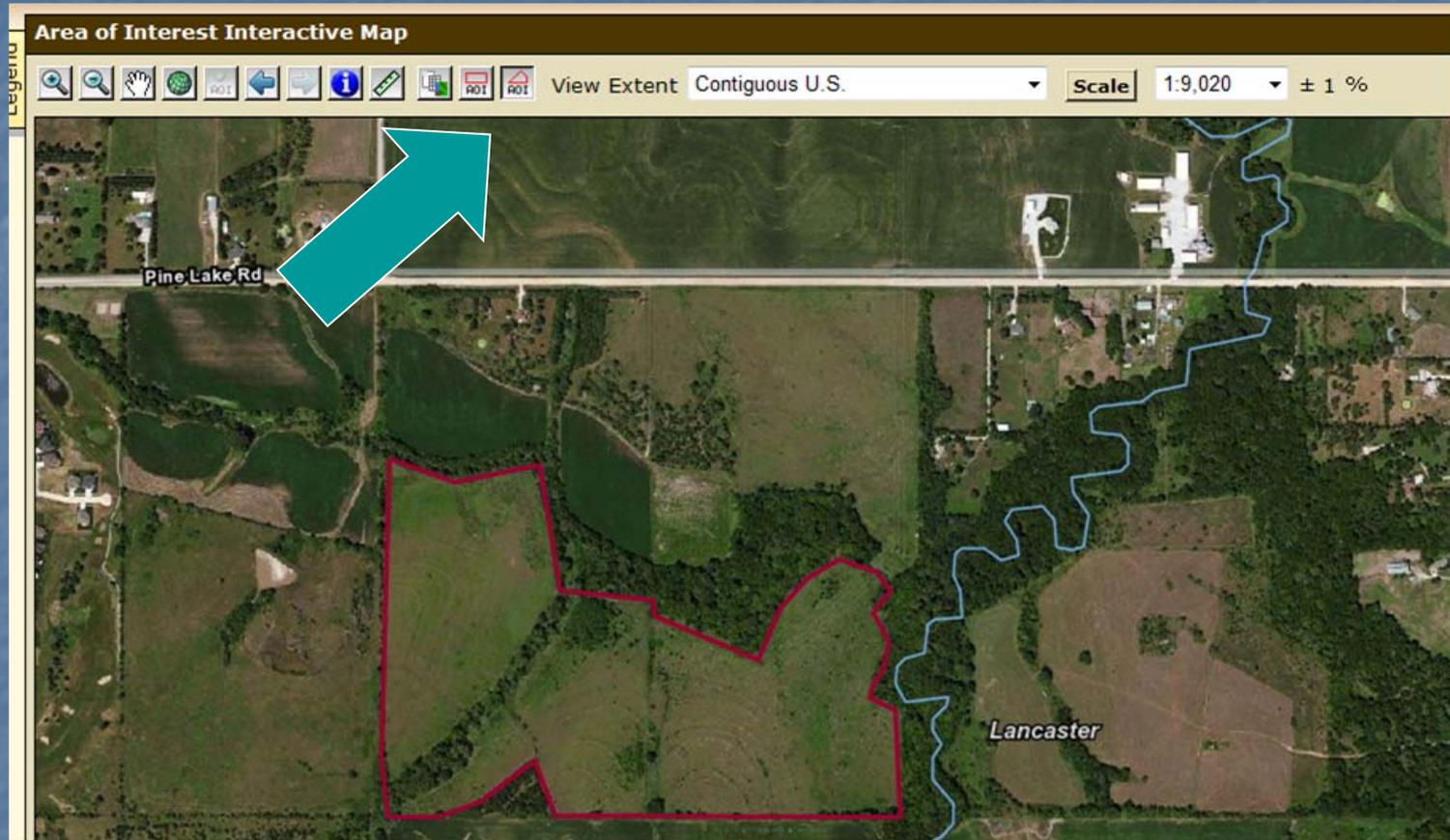


- You can define an AOI by drawing a polygon on a map using the rectangle tool.

View Selected AOI

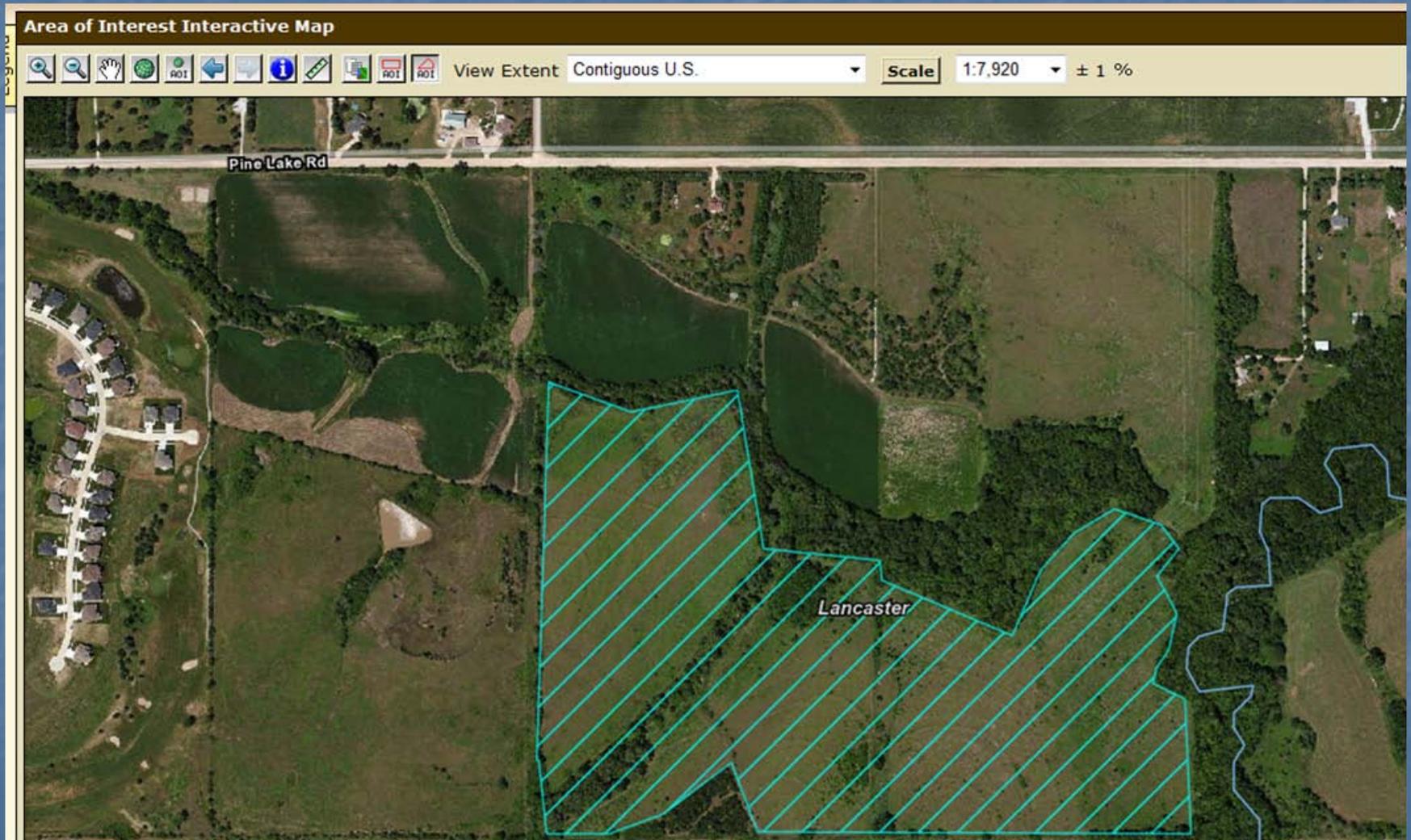


Multi-sided Polygon Tool

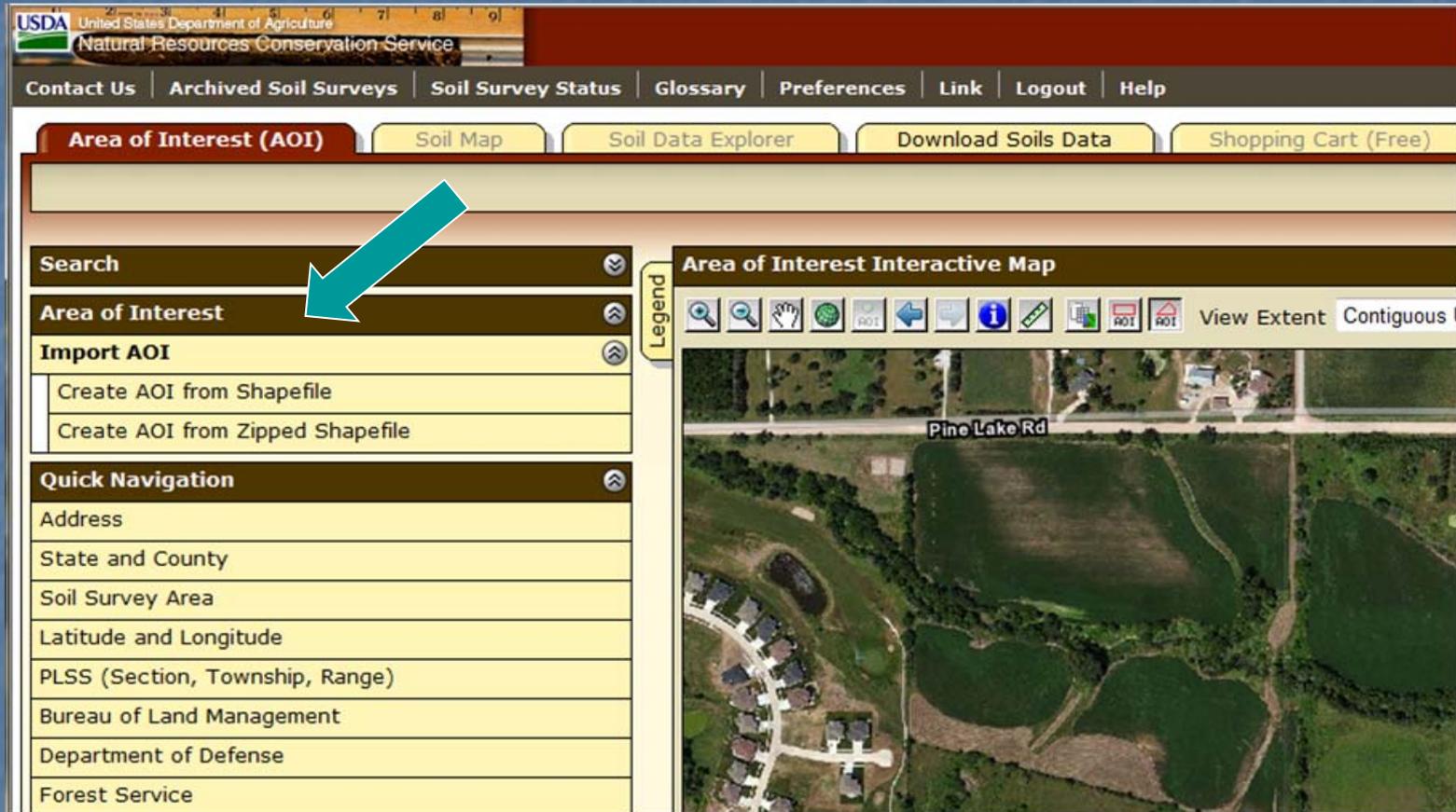


- You can define an AOI by drawing a polygon on a map using the multi-sided polygon tool.

View Selected AOI



Import Boundary



The screenshot displays the USDA Natural Resources Conservation Service website interface. At the top, there is a navigation bar with links for 'Contact Us', 'Archived Soil Surveys', 'Soil Survey Status', 'Glossary', 'Preferences', 'Link', 'Logout', and 'Help'. Below this is a secondary navigation bar with buttons for 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', 'Download Soils Data', and 'Shopping Cart (Free)'. The main content area is divided into two columns. The left column contains a search bar and several expandable sections: 'Area of Interest', 'Import AOI', and 'Quick Navigation'. The 'Import AOI' section is highlighted with a teal arrow and contains two options: 'Create AOI from Shapefile' and 'Create AOI from Zipped Shapefile'. The 'Quick Navigation' section lists various search criteria like 'Address', 'State and County', 'Soil Survey Area', etc. The right column features an 'Area of Interest Interactive Map' with a toolbar containing icons for search, zoom, pan, and other map functions. The map itself shows a satellite view of a rural area with a road labeled 'Pine Lake Rd'.

- You can define an AOI by importing a boundary that was previously created for a GIS.

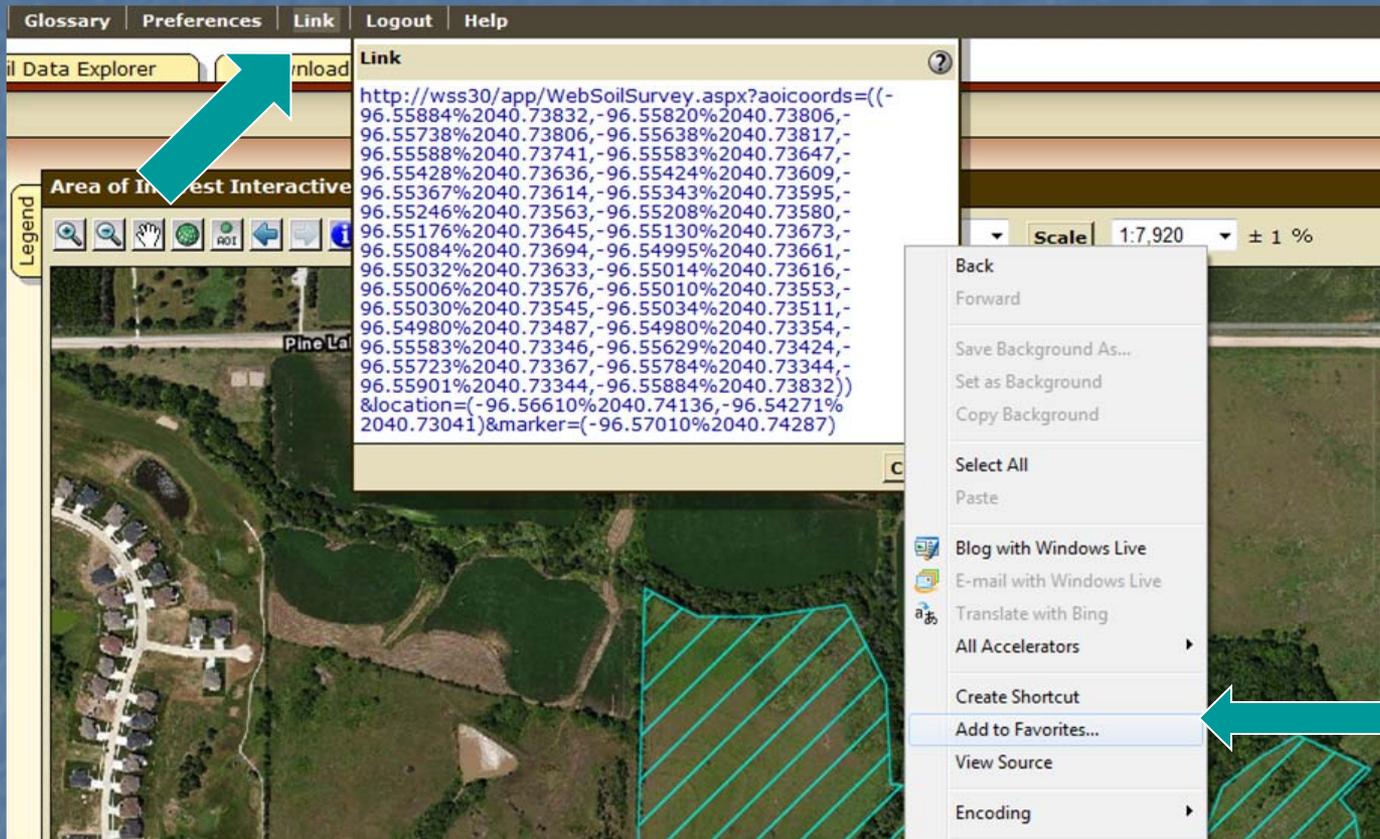
Import Boundary—cont.

The screenshot shows the 'Area of Interest (AOI)' software interface. The 'Import AOI' section is active, displaying the 'Create AOI from Shapefile' options. There are three rows of input fields, each with a 'Browse...' button: one for '.shp file', one for '.shx file', and one for '.prj file'. A 'Set AOI' button with a question mark icon is located to the right of the first row. Below these options, there is another 'Set AOI' button. The bottom of the panel shows the 'Create AOI from Zipped Shapefile' section.

The screenshot shows the 'Area of Interest (AOI)' software interface. The 'Import AOI' section is active, displaying the 'Create AOI from Zipped Shapefile' options. There is one row of input fields with a '.zip file' label and a 'Browse...' button. A 'Set AOI' button with a question mark icon is located to the right of the input field. Below this, there is another 'Set AOI' button. The bottom of the panel shows the 'Quick Navigation' section.

- Import the required .shp, .shx, and .prj files from your local computer.
- The files can be imported as zipped or unzipped files.
- Use the "Browse" buttons to find the files.
- After files have been identified, click "Set AOI" button.

Saving the AOI as a Link



- After you have defined an AOI, you can save the URL as a browser link.
- Click the "Link" tab on the top navigation bar. A dialog box opens showing the URL of your WSS session with coordinates of the AOI boundary.
- Right click on the URL displayed and select "Add to Favorites." Rename as appropriate.

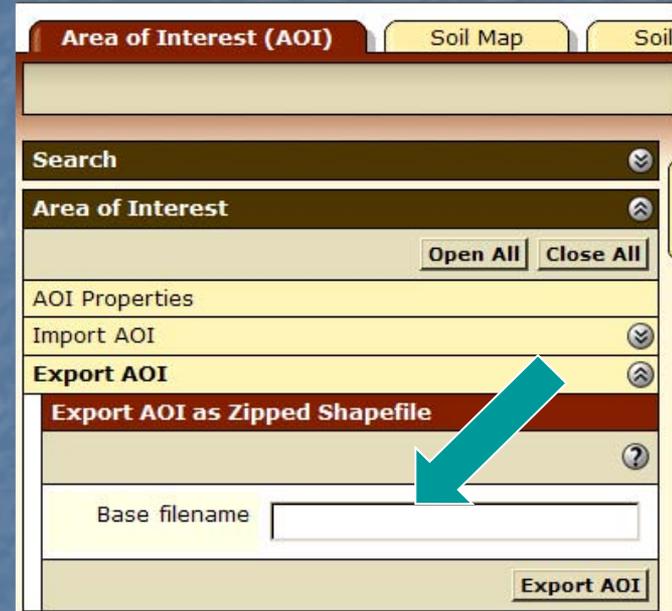
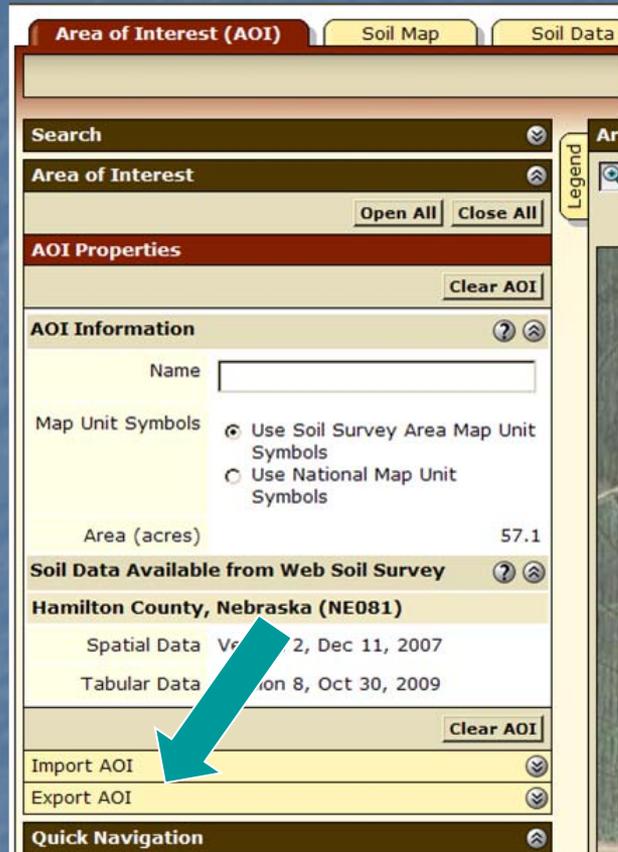
Use Bookmarked Link

- Find and select a bookmark that you saved from an earlier WSS session. See the previous slide.
- Web Soil Survey will open in your browser, and the previously defined AOI will be displayed.

Set AOI by URL

- The AOI can also be defined by embedding a set of coordinate points in a URL. See the following example.
 - [http://wss30/app/WebSoilSurvey.aspx?aoicoords=\(\(-96.97725%2041.28462,-96.97725%2041.29099,-96.96512%2041.29099,-96.96512%2041.28462,-96.97725%2041.28462\)\)](http://wss30/app/WebSoilSurvey.aspx?aoicoords=((-96.97725%2041.28462,-96.97725%2041.29099,-96.96512%2041.29099,-96.96512%2041.28462,-96.97725%2041.28462)))
- Each coordinate pair represents a vertex point along the AOI boundary.

Export AOI boundary



- Once an AOI has been established, you can export the AOI boundary as a shapefile.
- Click "Export AOI" option under the "AOI Properties" section.
- Assign a base filename. The file is saved to your local computer.
- The file can be imported into a future WSS session to return to this same AOI.

Explicitly Clear the AOI

The screenshot displays the USDA Natural Resources Conservation Service website interface. At the top, there is a navigation bar with links: Contact Us, Archived Soil Surveys, Soil Survey Status, Glossary, Preferences, Link, Logout, and Help. Below this is a secondary navigation bar with buttons: Area of Interest (AOI), Soil Map, Soil Data Explorer, Download Soils Data, and Shopping Cart (Free). The main content area is divided into several sections. On the left, there is a 'Search' section, an 'Area of Interest' section with 'Open All' and 'Close All' buttons, and an 'AOI Properties' section containing a 'Clear AOI' button. Below these are 'AOI Information' and 'Soil Data Available from Web Soil Survey' sections. The 'AOI Information' section includes a 'Name' field, 'Map Unit Symbols' options (Use Soil Survey Area Map Unit Symbols and Use National Map Unit Symbols), and 'Area (acres)' (69.2). The 'Soil Data Available from Web Soil Survey' section is for 'Lancaster County, Nebraska (NE109)' and shows 'Data Availability' as 'Tabular and Spatial, complete', with 'Tabular Data' version 12, Oct 30, 2009, and 'Spatial Data' version 4, Dec 11, 2007. On the right, the 'Area of Interest Interactive Map' section shows a map of an area with a teal hatched polygon representing the current AOI. A teal arrow points from the 'Clear AOI' button in the 'AOI Properties' section to the map area.

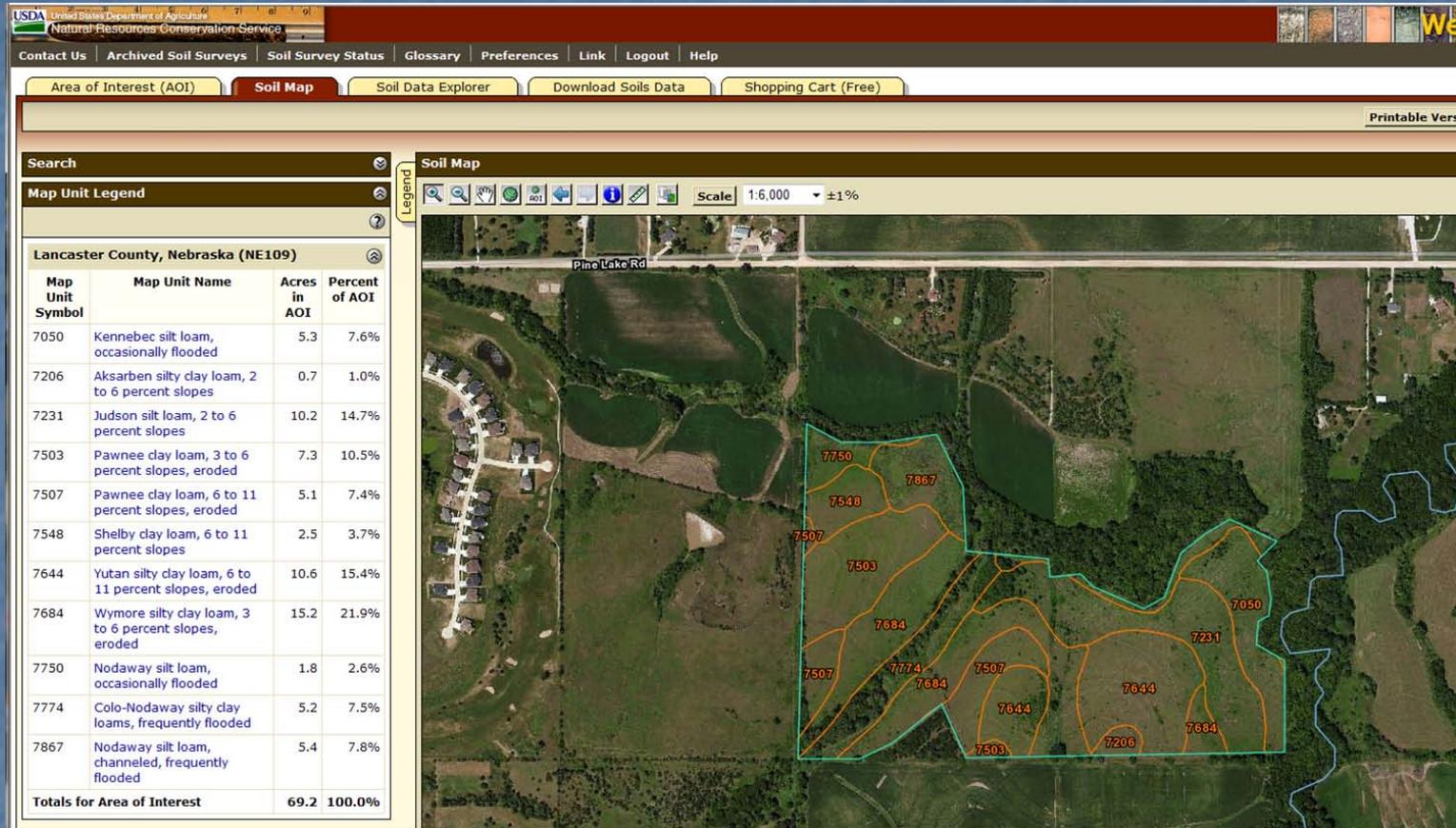
- You can clear the current AOI.

IIb. View Soil Map

The screenshot displays the USDA Web Soil Survey interface. At the top, the USDA logo and navigation links are visible. The 'Area of Interest (AOI)' tab is selected, and the 'Soil Map' sub-tab is active. A teal arrow points to the 'Soil Map' tab. The left sidebar contains a search area and an 'AOI Properties' section with fields for Name, Map Unit Symbols, and Area (69.2 acres). The main map area shows an aerial view of a rural landscape with a large area outlined in red and filled with diagonal hatching. The map includes a legend, scale (1:7,920), and view extent (Contiguous U.S.).

- After selecting an AOI, click the "Soil Map" tab.

Map Units Displayed



- A soil map for the AOI and a list of soil map units are displayed.

View Printable Map Unit Description

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us Archived Soil Surveys Soil Survey Status Glossary Preferences

Area of Interest (AOI) Soil Map Soil Data Explorer

Search

Map Unit Legend

Lancaster County, Nebraska (NE109)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7050	Kennebec silt loam, occasionally flooded	5.3	7.6%
7206	Aksarben silty clay loam, 2 to 6 percent slopes		
7231	Judson silt loam, 2 to 6 percent slopes		14.7%
7503	Pawnee clay loam, 3 to 6 percent slopes, eroded	7.3	10.5%
7507	Pawnee clay loam, 6 to 11 percent slopes, eroded	5.1	7.4%
7548	Shelby clay loam, 6 to 11 percent slopes	2.5	3.7%
7644	Yutan silty clay loam, 6 to 11 percent slopes, eroded	10.6	15.4%
7684	Wymore silty clay loam, 3 to 6 percent slopes, eroded	15.2	21.9%
7750	Nodaway silt loam, occasionally flooded	1.8	2.6%
7774	Colo-Nodaway silty clay loams, frequently flooded	5.2	7.5%
7867	Nodaway silt loam, channeled, frequently flooded	5.4	7.8%
Totals for Area of Interest		69.2	100.0%

Soil Map

Map Unit Description

Report — Map Unit Description

Lancaster County, Nebraska

7050—Kennebec silt loam, occasionally flooded

Map Unit Setting

Elevation: 1,000 to 1,500 feet
Mean annual precipitation: 30 to 32 inches
Mean annual air temperature: 52 to 55 degrees F
Frost-free period: 160 to 180 days

Map Unit Composition

Kennebec, occasionally flooded, and similar soils: 95 percent
Minor components: 5 percent

Description of Kennebec, Occasionally Flooded

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty alluvium

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Very high (about 12.7 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 2w
Ecological site: Loamy Overflow (R106XY068NE)

Typical profile

0 to 45 inches: Silt loam
45 to 60 inches: Silt loam

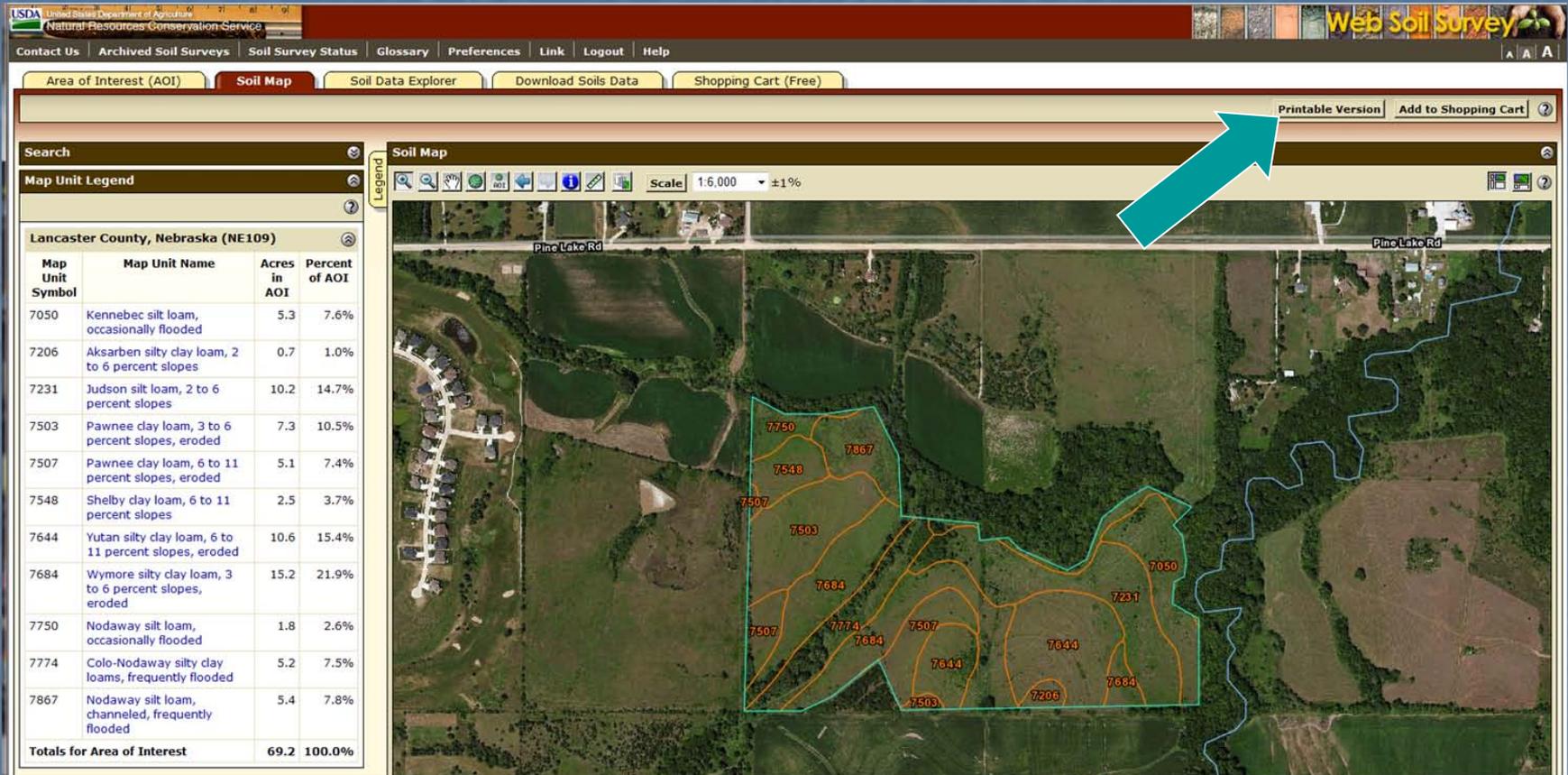
Printable Version

Printable Version Add to Shopping Cart

Web Soil Survey

- Click on a map unit name at left to view a map unit description.
- Clicking on the "Printable Version" button produces a PDF file.

Print Soil Map



The screenshot displays the USDA Web Soil Survey interface. The top navigation bar includes links for 'Contact Us', 'Archived Soil Surveys', 'Soil Survey Status', 'Glossary', 'Preferences', 'Link', 'Logout', and 'Help'. Below this, there are tabs for 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', 'Download Soils Data', and 'Shopping Cart (Free)'. The 'Soil Map' tab is active. On the right side of the map area, there are buttons for 'Printable Version' and 'Add to Shopping Cart'. A red arrow points to the 'Printable Version' button. The main map area shows an aerial view of a rural landscape with soil map overlays. The map is titled 'Lancaster County, Nebraska (NE109)' and has a scale of 1:6,000. The map shows various soil units outlined in orange and labeled with their respective numbers. A legend on the left side of the map area provides details for each soil unit.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7050	Kennebec silt loam, occasionally flooded	5.3	7.6%
7206	Aksarben silty clay loam, 2 to 6 percent slopes	0.7	1.0%
7231	Judson silt loam, 2 to 6 percent slopes	10.2	14.7%
7503	Pawnee clay loam, 3 to 6 percent slopes, eroded	7.3	10.5%
7507	Pawnee clay loam, 6 to 11 percent slopes, eroded	5.1	7.4%
7548	Shelby clay loam, 6 to 11 percent slopes	2.5	3.7%
7644	Yutan silty clay loam, 6 to 11 percent slopes, eroded	10.6	15.4%
7684	Wymore silty clay loam, 3 to 6 percent slopes, eroded	15.2	21.9%
7750	Nodaway silt loam, occasionally flooded	1.8	2.6%
7774	Colo-Nodaway silty clay loams, frequently flooded	5.2	7.5%
7867	Nodaway silt loam, channeled, frequently flooded	5.4	7.8%
Totals for Area of Interest		69.2	100.0%

- Clicking on the "Printable Version" button produces a PDF file of the soil map and legend.

Print Options

Printable Version Add to Shopping Cart ?

Printable Version Options ?

Report Options

Title Soil Map; Lancaster County, Nebraska

Subtitle (optional)

Area of Interest Name: (none defined)

Custom Subtitle:

None

Map Options

Map Scale 1:12,000 ▼

Printed Sheet Size A landscape (11" × 8.5") — 1 sheet ▼

Show UTM Coordinate Ticks

Cancel View

Set map scale

Select paper size

IIc. Explore Additional Soil Information

The screenshot displays the USDA Web Soil Survey interface. The top navigation bar includes 'Contact Us', 'Archived Soil Surveys', 'Soil Survey Status', 'Glossary', 'Preferences', 'Link', 'Logout', and 'Help'. The main navigation tabs are 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', 'Download Soils Data', and 'Shopping Cart (Free)'. A red arrow points to the 'Soil Data Explorer' tab. The 'Soil Map' section shows a map of Lancaster County, Nebraska (NE109) with various soil map units outlined in orange and labeled with their IDs. The map includes a scale of 1:6,000 and a legend. The 'Map Unit Legend' table is shown below the map.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7050	Kennebec silt loam, occasionally flooded	5.3	7.6%
7206	Aksarben silty clay loam, 2 to 6 percent slopes	0.7	1.0%
7231	Judson silt loam, 2 to 6 percent slopes	10.2	14.7%
7503	Pawnee clay loam, 3 to 6 percent slopes, eroded	7.3	10.5%
7507	Pawnee clay loam, 6 to 11 percent slopes, eroded	5.1	7.4%
7548	Shelby clay loam, 6 to 11 percent slopes	2.5	3.7%
7644	Yutan silty clay loam, 6 to 11 percent slopes, eroded	10.6	15.4%
7684	Wymore silty clay loam, 3 to 6 percent slopes, eroded	15.2	21.9%
7750	Nodaway silt loam, occasionally flooded	1.8	2.6%
7774	Colo-Nodaway silty clay loams, frequently flooded	5.2	7.5%
7867	Nodaway silt loam, channeled, frequently flooded	5.4	7.8%
Totals for Area of Interest		69.2	100.0%

- Click "Soil Data Explorer" tab to see further information about the map units in your AOI.

Soil Data Explorer Features

- You can filter the soil information by land use category.
- You can view an introduction to the terminology and concepts of soils and specific land uses.
- You can view interpretive soil data and soil properties in the form of thematic maps, tables, and text.
- You can access information regarding ecological sites.
- You can print maps and reports about individual soil properties and interpretations.
- You can add content to the free shopping cart for inclusion in a custom report.

Help

The screenshot displays the USDA Web Soil Survey interface. At the top, the USDA logo and navigation links are visible. The main navigation bar includes 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', 'Download Soils Data', and 'Shopping Cart (Free)'. The 'Soil Data Explorer' tab is active, showing a 'View Soil Information By Use: All Uses' dropdown menu. The left sidebar contains a 'Search' section and a 'Suitabilities and Limitations Ratings' table with various categories like 'Building Site Development' and 'Construction Materials'. The central 'Soil Map' shows a satellite view of a field with soil polygons labeled with numbers like 7507, 7548, and 7667. The right sidebar is titled 'Explore.' and contains a 'Soil Data Explorer' section with a small map thumbnail and a 'Finding relevant information' section with a dropdown menu set to 'Rangeland'. A teal arrow points to the 'Explore.' heading.

Explore.

Soil Data Explorer

The third step in using Web Soil Survey is to explore the available information about your area of interest.

The Soil Data Explorer tab provides several options for getting the information you need.

Finding relevant information

You can limit your view of soil information to a specific use, such as cropland, forestland, rangeland, or urban development, by selecting the use from the drop-down list on the button bar.

View Soil Information By Use:

- All Uses
- Cropland
- Forestland
- Hayland/Pastureland
- Horticulture
- Rangeland**
- Recreation
- Urban Uses

To get a particular type of soil information, use the inner tabs of the **Soil Data Explorer**:

Depending on the use category that you select from the drop-down list, the tabs and the contents of the tabs will change. Above, you see the inner tabs that are displayed when the *Rangeland* use category is selected.

Viewing and printing the information you want

In Web Soil Survey, you select information in the left column and view it in the right column. When you want to print or save the information in the right column, click the **Printable Version** button:

Introduction to Soils



The screenshot shows the 'Soil Data Explorer' website interface. At the top, there are tabs for 'Area of Interest (AOI)', 'Soil Data Explorer', and 'Shopping Cart (Free)'. Below these is a dropdown menu for 'View Soil Information By'. The main navigation bar includes tabs for 'Intro to Soils', 'Suitabilities and Limitations for Use', 'Soil Properties and Qualities', and 'Ecological Site'. A teal arrow points to the 'Intro to Soils' tab. On the left side, there is a 'Search' box and a 'Table of Contents' section with a 'View Selected Topics' button. The 'Table of Contents' lists various topics with expandable/collapsible icons:

- All Uses
 - Introduction to Soils
 - Soils 101
 - Information for Land Users
 - Cropland
 - Land capability classification
 - Soil erosion and crop production
 - Cropland management
 - Forestland
 - Grazed Forestland
 - Forest Canopy
 - Forest Overstory
 - Forest Understory
 - Forest Productivity
 - Forestland Ecological Sites
 - Forestland Management
 - Agroforestry
 - Pastureland and Hayland
 - Forage
 - Pastureland Condition
 - Horticulture
 - Nutrient Management
 - Pest Management
 - Native Plants
 - Selecting the Right Tree
 - Attracting Butterflies

Introduction to Soils—cont.

Area of Interest (AOI) | Soil Map | **Soil Data Explorer** | Shopping Cart (Free)

View Soil Information By Use: All Uses | Printable Version | Add to Shopping Cart

Intro to Soils | Suitabilities and Limitations for Use | Soil Properties and Qualities | Ecological Site Assessment | Soil Reports

Search | **Content**

Table of Contents

[View Selected Topics](#)

- All Uses
 - Introduction to Soils
 - Soils
 - Information for Land Users
 - Cropland
 - Land capability classification
 - Soil erosion and crop production
 - Cropland management
 - Forestland
 - Grazed Forestland
 - Forest Canopy
 - Forest Overstory
 - Forest Understory
 - Forest Productivity
 - Forestland Ecological Sites
 - Forestland Management
 - Agroforestry

Content

All Uses

Cropland

Cropland is defined as a land cover or land use category that includes areas used for the production of adapted crops for harvest. Two subcategories of cropland are recognized: cultivated and noncultivated. Cultivated cropland is land that is used for either row crops or close-grown crops. Hayland or pastureland that is in a rotation with row crops or close-grown crops also is considered cultivated cropland. Noncultivated cropland includes permanent hayland and horticultural cropland.

Reference:
"2001 Annual NRI Glossary of Key Terms," National Resources Inventory, USDA, NRCS

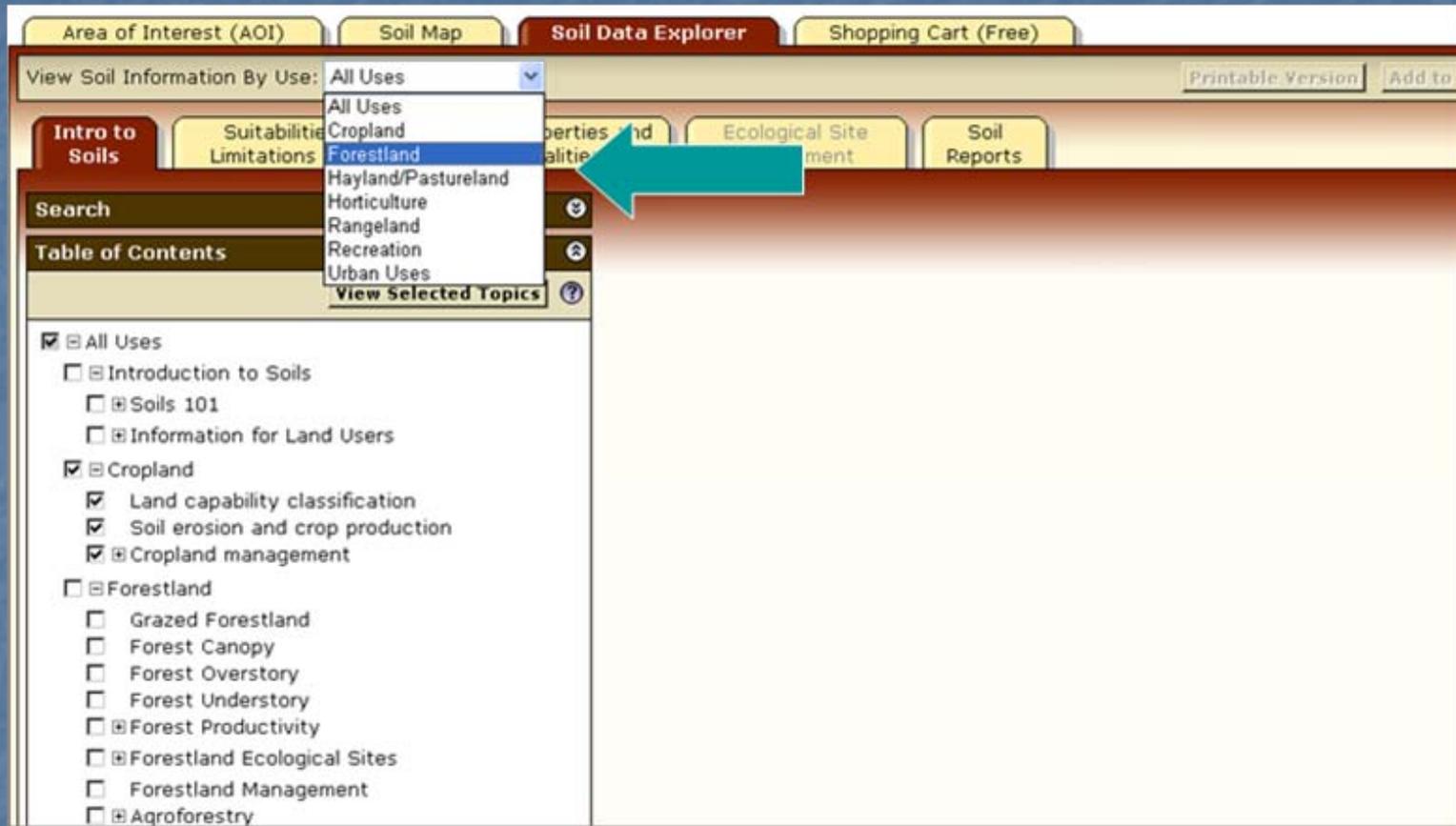
Land capability classification

Determinations of land capability involve consideration of the risks of land damage from erosion and other causes and the difficulties in land use resulting from physical land characteristics and from climate. Land capability, as used in the USA, is an expression of the effect of physical land characteristics and climate on the suitability of soils for crops that require regular tillage, for grazing, for woodland, and for wildlife habitat.

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other

- Check item(s) in list, then click "View Selected Topics" to display text.

Filter Information by Land Use



The screenshot displays the 'Soil Data Explorer' tab in a web application. At the top, there are navigation tabs: 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer' (active), and 'Shopping Cart (Free)'. Below the tabs, a 'View Soil Information By Use:' drop-down menu is open, showing a list of land use categories: 'All Uses', 'Cropland', 'Forestland', 'Hayland/Pastureland', 'Horticulture', 'Rangeland', 'Recreation', and 'Urban Uses'. A teal arrow points to the 'Forestland' option. Below the menu, there is a search bar and a 'Table of Contents' section. The 'Table of Contents' is expanded to show a tree view of content items, with checkboxes next to each item. The 'All Uses' category is checked, and its sub-items are also checked. The 'Cropland' category is checked, and its sub-items are also checked. The 'Forestland' category is unchecked, and its sub-items are also unchecked. The 'Hayland/Pastureland' category is unchecked, and its sub-items are also unchecked. The 'Horticulture' category is unchecked, and its sub-items are also unchecked. The 'Rangeland' category is unchecked, and its sub-items are also unchecked. The 'Recreation' category is unchecked, and its sub-items are also unchecked. The 'Urban Uses' category is unchecked, and its sub-items are also unchecked. The 'View Selected Topics' link is visible at the bottom of the menu.

- Selecting a specific land use from the drop-down list filters the content on the "Soil Data Explorer" tab.

Example: Forestland Information

The screenshot shows the 'Soil Data Explorer' interface. At the top, there are tabs for 'Area of Interest (AOI)', 'Soil Map', and 'Soil Data Explorer'. Below the tabs, a dropdown menu is set to 'Forestland'. The main content area is titled 'Intro to Forestland' and contains a 'Table of Contents' section. This section lists various topics related to forestland, each with a checkbox. A 'View Selected Topics' button is located at the bottom of the list.

View Soil Information By Use:

Intro to Forestland | Suitabilities and Limitations for Use

Search [icon]

Table of Contents [icon]

- Forestland
 - Grazed Forestland
 - Forest Canopy
 - Forest Overstory
 - Forest Understory
 - Forest Productivity
 - Site Index
 - Forestland Ecological Sites
 - Succession and Retrogression
 - Historic Climax Plant Community
 - Naturalized Plant Community
 - Forestland Management
 - Agroforestry
 - Alley Cropping
 - Forest Farming
 - Riparian Forest Buffers
 - Silvopasture
 - Windbreaks
 - Special Applications
 - Where Does Agroforestry Apply?

List of topics narrowed to those related to Forestland.

Adding to Shopping Cart

The screenshot displays the 'Soil Data Explorer' web application. At the top, there are navigation tabs: 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', and 'Shopping Cart (Free)'. Below these, a dropdown menu shows 'View Soil Information By Use: All Uses'. To the right of this menu are two buttons: 'Printable Version' and 'Add to Shopping Cart', with a red arrow pointing to the latter. Below the navigation bar, there are several content tabs: 'Intro to Soils', 'Suitabilities and Limitations for Use', 'Soil Properties and Qualities', 'Ecological Site Assessment', and 'Soil Reports'. The main content area is split into two panels. The left panel, titled 'Search', contains a 'Table of Contents' with a 'View Selected Topics' button and a list of topics with checkboxes. The right panel, titled 'Content', displays the text for the selected topic, 'All Uses', which includes a section on 'Cropland' with a definition, a reference, and a section on 'Land capability classification' with a detailed description.

- Material displayed in right-hand panel (text, maps, tables, etc.) can be added to the shopping cart. The content is bundled in the shopping cart as a single PDF file for download or printing.

Suitabilities and Limitations

The screenshot displays the USDA Natural Resources Conservation Service website interface. The top navigation bar includes links for 'Contact Us', 'Archived Soil Surveys', 'Soil Survey Status', 'Glossary', 'Link', 'Logout', and 'Help'. Below this, there are tabs for 'Area of Interest (AOI)', 'Soil Map', and 'Soil Data', with 'Soil Data' being the active tab. A dropdown menu shows 'View Soil Information By Use: All Uses'. The main content area features a 'Soil Map' section with a scale of 1:6,000 and a map showing various soil types labeled with numbers (7750, 7867, 7548, 7507, 7503, 7684). On the left, there is a 'Suitabilities and Limitations Ratings' section with a search bar and a list of categories: 'Building Site Development' and 'Dwellings With Basements'. The 'Dwellings With Basements' category is selected, and the 'View Rating' button is visible. Two teal arrows point to the 'Soil Data' tab and the 'Dwellings With Basements' category.

- You can display a variety of interpretations as thematic maps.
- Open a category folder, then select an interpretation. Click "View Rating" button to display interpretive map.
- For further information regarding the options for an interpretation, click the "View Description" button.

Filter Choices by Land Use

Area of Interest (AOI) | Soil Map | Soil Data | Add Soils Data | Shopping Cart (Free)

View Soil Information By Use: Cropland

Intro to Cropland | Suitabilities and Limitations Ratings | Soil Properties and Qualities | Ecological Site Assessment | Soil Reports

Search

Suitabilities and Limitations Ratings

Open All | Close All

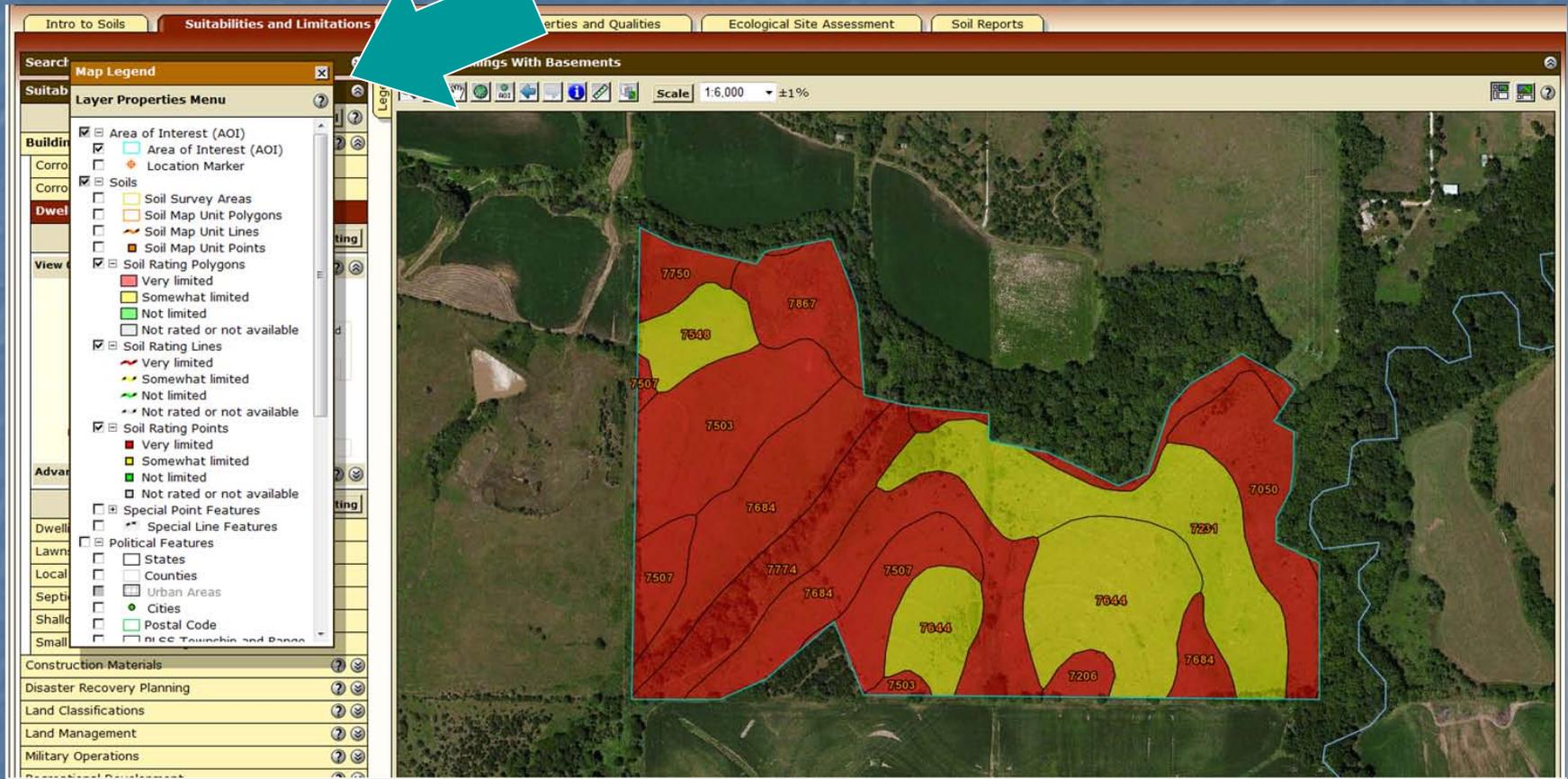
- Building Site Development
- Disaster Recovery Planning
- Land Classifications
- Land Management
- Military Operations
- Vegetative Productivity
- Waste Management
- Water Management

Scale: 1:6,000 ±1%

List changes according to land use.

- The list of suitabilities and limitations changes based on the land use selected.

Display an Interpretive Map



- After selecting an interpretation, click the "Legend" tab to display the map legend. A table is displayed below the map. The table shows ratings and limiting features of each soil in a summary report.

Sample Summary Report

Tables — Dwellings With Basements — Summary By Map Unit						
Summary by Map Unit — Lancaster County, Nebraska (NE109)						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
7050	Kennebec silt loam, occasionally flooded	Very limited	Kennebec, occasionally flooded (95%)	Flooding (1.00)	5.5	7.8%
				Depth to saturated zone (0.35)		
			Colo, occasionally flooded (5%)	Flooding (1.00)		
				Depth to saturated zone (1.00)		
7206	Aksarben silty clay loam, 2 to 6 percent slopes	Very limited	Aksarben (100%)	Shrink-swell (1.00)	0.8	1.2%
7231	Judson silt loam, 2 to 6 percent slopes	Somewhat limited	Judson (99%)	Shrink-swell (0.50)	10.3	14.6%
7503	Pawnee clay loam, 3 to 6 percent slopes, eroded	Very limited	Pawnee (100%)	Depth to saturated zone (1.00)	7.3	10.4%
				Shrink-swell (1.00)		
7507	Pawnee clay loam, 6 to 11 percent slopes, eroded	Very limited	Pawnee (100%)	Depth to saturated zone (1.00)	5.2	7.4%
				Shrink-swell (1.00)		
				Slope (0.04)		
7548	Shelby clay loam, 6 to 11 percent slopes	Somewhat limited	Shelby (100%)	Shrink-swell (0.50)	2.6	3.6%
				Slope (0.04)		
7644	Yutan silty clay loam, 6 to 11 percent slopes, eroded	Somewhat limited	Yutan, Eroded (100%)	Shrink-swell (0.50)	10.8	15.3%
7684	Wymore silty clay loam, 3 to 6 percent slopes, eroded	Very limited	Wymore (100%)	Depth to saturated zone (1.00)	15.6	22.1%
				Shrink-swell (1.00)		
7750	Nodaway silt loam, occasionally flooded	Very limited	Nodaway, occasionally flooded (95%)	Flooding (1.00)	1.7	2.5%
				Depth to saturated zone (0.35)		
			Colo, occasionally flooded (5%)	Flooding (1.00)		
				Depth to saturated zone (1.00)		
7774	Colo-Nodaway silty clay loams, frequently flooded	Very limited	Colo, occasionally flooded (60%)	Flooding (1.00)	5.2	7.4%
				Depth to saturated zone (1.00)		
			Nodaway, frequently flooded (40%)	Shrink-swell (0.50)		
				Flooding (1.00)		
			Depth to saturated zone (0.35)			
7957	Nodaway silt loam, channeled, frequently flooded	Very limited	Nodaway, channeled, frequently flooded	Flooding (1.00)	5.4	7.7%

Interpretation Description and Selected Rating Options

- Further information regarding the selected interpretation is listed below the "Summary Report" table.

Description — Dwellings with Basements

Dwellings are single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Rating Options — Dwellings with Basements

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

Soil Properties and Qualities



Area of Interest (AOI) | Soil Map | **Soil Data Explorer** | Download Soils Data | Print (Free)

View Soil Information By Use: All Uses | Printable Version | Add to Shopping Cart

Intro to Soils | Suitabilities and Limitations for Use | **Soil Properties and Qualities** | Ecological Site Assessment | Soil Reports

Search

Properties and Qualities Ratings

Open All | Close All

- Soil Chemical Properties
- Soil Erosion Factors
- Soil Physical Properties
- Soil Qualities and Features
- Water Features

Soil Map

Scale: 1:6,000 ±1%

Map labels: 7750, 7867, 7548, 7507, 7503, 7684, 7774, 7507, 7684, 7644, 7503, 7206, 7644, 7231, 7050, 7684

Select a Soil Property or Quality

The screenshot displays the 'Soil Data Explorer' web application. The interface is organized into several sections:

- Top Navigation:** Includes tabs for 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', 'Download Soils Data', and 'Shopping Cart (Free)'. There are also links for 'Printable Version' and 'Add to Shopping Cart'.
- Search and Filter:** A search bar and a 'View Soil Information By Use' dropdown menu are located at the top left.
- Properties and Qualities Ratings:** A section on the left sidebar with 'Open All' and 'Close All' buttons. It lists various soil properties and qualities.
- Soil Qualities and Features:** A section below the previous one, including 'AASHTO Group Classification', 'Depth to a Selected Profile Layer', and 'Depth to Any Soil Profile Layer'.
- Drainage Class:** A section highlighted in red, with 'View Description' and 'View Rating' buttons.
- View Options:** A section with checkboxes for 'Map', 'Table', 'Description of Rating', and 'Rating Options'. It also includes a 'Detailed Description' checkbox.
- Advanced Options:** A section with a dropdown for 'Aggregation Method' (set to 'Dominant Condition'), a 'Component Percent Cutoff' input field, and radio buttons for 'Tie-break Rule' (set to 'Higher').
- Map Area:** A large map on the right showing soil boundaries and labels. The scale is 1:6,000 with a ±1% error margin.

- Note: Additional help is available for view options and advanced options. Click the respective "?" symbol.

Display Results

The screenshot displays the Soil Data Explorer software interface. At the top, there are navigation tabs: "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer", "Download Soils Data", and "Shopping Cart (Free)". Below these, a dropdown menu shows "View Soil Information By Use: All Uses". On the right side of the top bar, there are buttons for "Printable Version" and "Add to Shopping Cart", with a red arrow pointing to the latter. The main interface is divided into several sections. On the left, there is a "Search" and "Map Legend" panel. Below it is a "Layer Properties Menu" with a list of layers and their properties. The central part of the interface is a map titled "Map - Drainage Class" showing a drainage class map overlaid on an aerial photograph. The map is divided into several polygons, each labeled with a number (e.g., 7150, 7307, 7348, 7508, 7604, 7774, 7507, 7344, 7201, 7508, 7206, 7304). The map is displayed at a scale of 1:3,960. On the right side of the map, there are navigation controls and a "Legend" panel.

- Individual thematic maps and summary reports can be printed and/or added to the shopping cart. Information added to the cart will be available for creating a custom report.

Sample Summary Results and Description

Tables — Drainage Class — Summary By Map Unit				
Summary by Map Unit — Lancaster County, Nebraska (NE109)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
7050	Kennebec silt loam, occasionally flooded	Moderately well drained	5.5	7.8%
7206	Aksarben silty clay loam, 2 to 6 percent slopes	Well drained	0.8	1.2%
7231	Judson silt loam, 2 to 6 percent slopes	Well drained	10.3	14.6%
7503	Pawnee clay loam, 3 to 6 percent slopes, eroded	Moderately well drained	7.3	10.4%
7507	Pawnee clay loam, 6 to 11 percent slopes, eroded	Moderately well drained	5.2	7.4%
7548	Shelby clay loam, 6 to 11 percent slopes	Moderately well drained	2.6	3.6%
7644	Yutan silty clay loam, 6 to 11 percent slopes, eroded	Well drained	10.8	15.3%
7684	Wymore silty clay loam, 3 to 6 percent slopes, eroded	Moderately well drained	15.6	22.1%
7750	Nodaway silt loam, occasionally flooded	Moderately well drained	1.7	2.5%
7774	Colo-Nodaway silty clay loams, frequently flooded	Poorly drained	5.2	7.4%
7867	Nodaway silt loam, channeled, frequently flooded	Moderately well drained	5.4	7.7%
Totals for Area of Interest			70.4	100.0%
Description — Drainage Class				
<p>"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."</p>				
Rating Options — Drainage Class				
<p>Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified Tie-break Rule: Higher</p>				

Ecological Site Assessment

Area of Interest (AOI) | Soil Map | **Soil Data Explorer** | Download Soils Data | Shopping Cart (Free)

View Soil Information By Use: All Uses | Printable Version | Add to Shopping Cart

Intro to Soils | Suitabilities and Limitations for Use | Soil Properties and Qualities | **Ecological Site Assessment**

Search

Ecological Sites

Open All | Close All

All Ecological Sites

View All Ecological Sites Info

View Options

Dominant Ecological Site Map

Ecological Sites by Map Unit Component Table

Basic Options

Ecological Site Type: Rangeland

View All Ecological Sites Info

R106XY068NE — Loamy Overflow

R106XY074NE — Clay Upland

R106XY075NE — Loamy Upland

R107XY066NE — Subirrigated - Veg. zone 4

Map - Dominant Ecological Site - Rangeland

Scale: 1:6,000 ±1%

Map units: 7550, 7543, 7507, 7684, 7503, 7774, 7684, 7507, 7644, 7503, 7206, 7684, 7231, 7050

- View information about ecological sites linked to soil map unit components.

Soil Reports

Area of Interest (AOI) | Soil Map | **Soil Data Explorer** | Download Soils Data | Shopping Cart (Free)

View Soil Information By Use: All Uses | Printable Version | Add to Shopping Cart

Intro to Soils | Suitabilities and Limitations for Use | Soil Properties and Qualities | Ecological Site Assessment | **Soil Reports**

Search

Soil Reports

Open All | Close All

AOI Inventory

Building Site Development

Construction Materials

Land Classifications

Land Management

Recreational Development

Sanitary Facilities

Soil Chemical Properties

Chemical Soil Properties

View Description | View Soil Report

Options

Include Minor Soils

View Description | View Soil Report

Soil Erosion

Soil Physical Properties

Soil Qualities and Features

Vegetative Productivity

Waste Management

Water Features

Water Management

Soil Map

Scale: 1:3,960 ±1%

- A broad selection of soil information relevant to specific topics is available in predetermined formats. Select a topic and click on the "View Soil Report" button to generate a report for your AOI.

Sample Soil Report: Chemical Soil Properties

Report — Chemical Soil Properties								
Lancaster County, Nebraska								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
7050—Kennebec silt loam, occasionally flooded								
Kennebec, occasionally flooded	0-45	30-36	—	5.6-7.3	0	0	0.0-2.0	0
	45-60	30-36	—	5.6-7.3	0	0	0.0-2.0	0
7206—Aksarben silty clay loam, 2 to 6 percent slopes								
Aksarben	0-7	25-35	—	5.1-6.5	0	0	0	0
	7-44	25-35	—	5.1-6.5	0	0	0	0
	44-60	25-35	—	5.6-6.5	0	0	0	0
7231—Judson silt loam, 2 to 6 percent slopes								
Judson	0-29	25-30	—	5.0-7.3	0	0	0	0
	29-60	25-30	—	5.6-7.3	0	0	0	0
7503—Pawnee clay loam, 3 to 6 percent slopes, eroded								
Pawnee	0-7	20-30	—	5.6-7.3	0	0	0	0
	7-38	30-40	—	6.1-7.8	0	0	0	0
	38-60	20-25	—	7.4-8.4	1-10	0	0	0
7507—Pawnee clay loam, 6 to 11 percent slopes, eroded								
Pawnee	0-7	20-30	—	5.6-7.3	0	0	0	0
	7-38	30-40	—	6.1-7.8	0	0	0	0

- The report is displayed below the soil map.

II(d). Shopping Cart for Selected Information

- WSS allows you to generate a custom soil resource report (in PDF) by adding selections to the free shopping cart.
 - The report is customized for your AOI.
 - The soil map, map unit legend, and map unit descriptions are included by default.
 - The other content is specifically chosen by you:
 - Thematic maps (including summary tables and text),
 - Ecological site description map and information,
 - Tabular data tables, and
 - Introductory material.

The Shopping Cart

The screenshot shows a web application interface with a top navigation bar containing tabs: 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', 'Download Soils Data', and 'Shopping Cart (Free)'. A teal arrow points to the 'Shopping Cart (Free)' tab. Below the navigation bar is a 'Check Out' button with a help icon. The main content area is divided into several sections:

- Search**: A search bar with a dropdown arrow.
- Report Properties**: A section with a help icon.
- Title**: A section with a title 'Custom Soil Resource Report for Lancaster County, Nebraska' and a subtitle section. The subtitle section has three radio buttons: 'Area of Interest Name: (none defined)', 'Custom Subtitle:' (selected), and 'None'. A text input field contains 'Joe's Weekend Hideaway'. A teal arrow points to this input field with the callout: 'Enter a subtitle if desired.'
- Size**: A section showing 'Total Size 959 KB (0.9 MB)'.
- Map Options**: A section with a 'Map Scale' dropdown set to 'Fit to page', a 'Printed Sheet Size' dropdown set to 'A landscape (11" x 8.5") — 1 sheet', and a 'Show UTM Coordinate Ticks' checkbox which is checked. A teal arrow points to the 'Map Scale' dropdown with the callout: 'Choose map scale and paper size.'
- Table of Contents**: A section with a help icon. A teal arrow points to this section with the callout: 'Table of Contents shows contents of Shopping Cart.'

- The shopping cart provides you with options for building a report based on your selections from the other tabs.

Table of Contents

Table of Contents		
<input checked="" type="checkbox"/>	Custom Soil Resource Report for Lancaster County, Nebraska: Joe's Weekend Hideaway	959 KB
<input checked="" type="checkbox"/>	Cover	518 KB
<input checked="" type="checkbox"/>	Preface	3 KB
<input checked="" type="checkbox"/>	Contents	0 KB
<input checked="" type="checkbox"/>	How Soil Surveys Are Made	5 KB
<input checked="" type="checkbox"/>	Soil Map	429 KB
<input checked="" type="checkbox"/>	Soil Map	380 KB
<input checked="" type="checkbox"/>	Map Unit Legend	4 KB
<input checked="" type="checkbox"/>	Map Unit Description	45 KB
<input checked="" type="checkbox"/>	Soil Data Explorer	
<input checked="" type="checkbox"/>	All Uses	
<input checked="" type="checkbox"/>	References	3 KB
<input type="checkbox"/>	Glossary	113 KB

- Soil map, map unit legend, and map unit descriptions are included by default.
- Items can be deselected by unchecking them on the list if you decide you do not want them in your report. Additional items must be added in previous screens.

Preview an Item

Area of Interest (AOI) Soil Map Soil Data Explorer Download Soils Data **Shopping Cart (Free)** Check Out ?

Search **Report Properties** **Table of Contents**

- Custom Soil Resource Report for Lancaster County, Nebraska: Joe's Weekend Hideaway 959 KB
 - Cover 518 KB
 - Preface
 - Contents
 - How Soil Surveys Are Made
 - Soil Map
 - Soil Map**
 - Map Unit Legend 4 KB
 - Map Unit Description 45 KB
 - Soil Data Explorer
 - All Uses
 - References 3 KB
 - Glossary 113 KB

Soil Map

Click on an item to preview it.

Check Out

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Download Soils Data | **Shopping Cart (Free)**

Check Out ?

Search

Report Properties

Table of Contents

Custom Soil Resource Report for Lancaster County, Nebraska: Joe's Weekend Hideaway 959 KB

- Cover 518 KB
- Preface 3 KB
- Contents 0 KB
- How Soil Surveys Are Made 5 KB
- Soil Map 429 KB
 - Soil Map 380 KB
 - Map Unit Legend 4 KB
 - Map Unit Description 45 KB
- Soil Data Explorer
 - All Uses 3 KB
- References 3 KB
- Glossary 113 KB

Soil Map

Checkout Options ?

Delivery Options

Select a Delivery Method

Get now

Download later

Cancel OK

- During check out, you can elect to get the file now or later. The "Download later" option can be beneficial if the file is large.
- Click the "OK" button to initiate checkout.

Generation of Custom Soil Resource Report

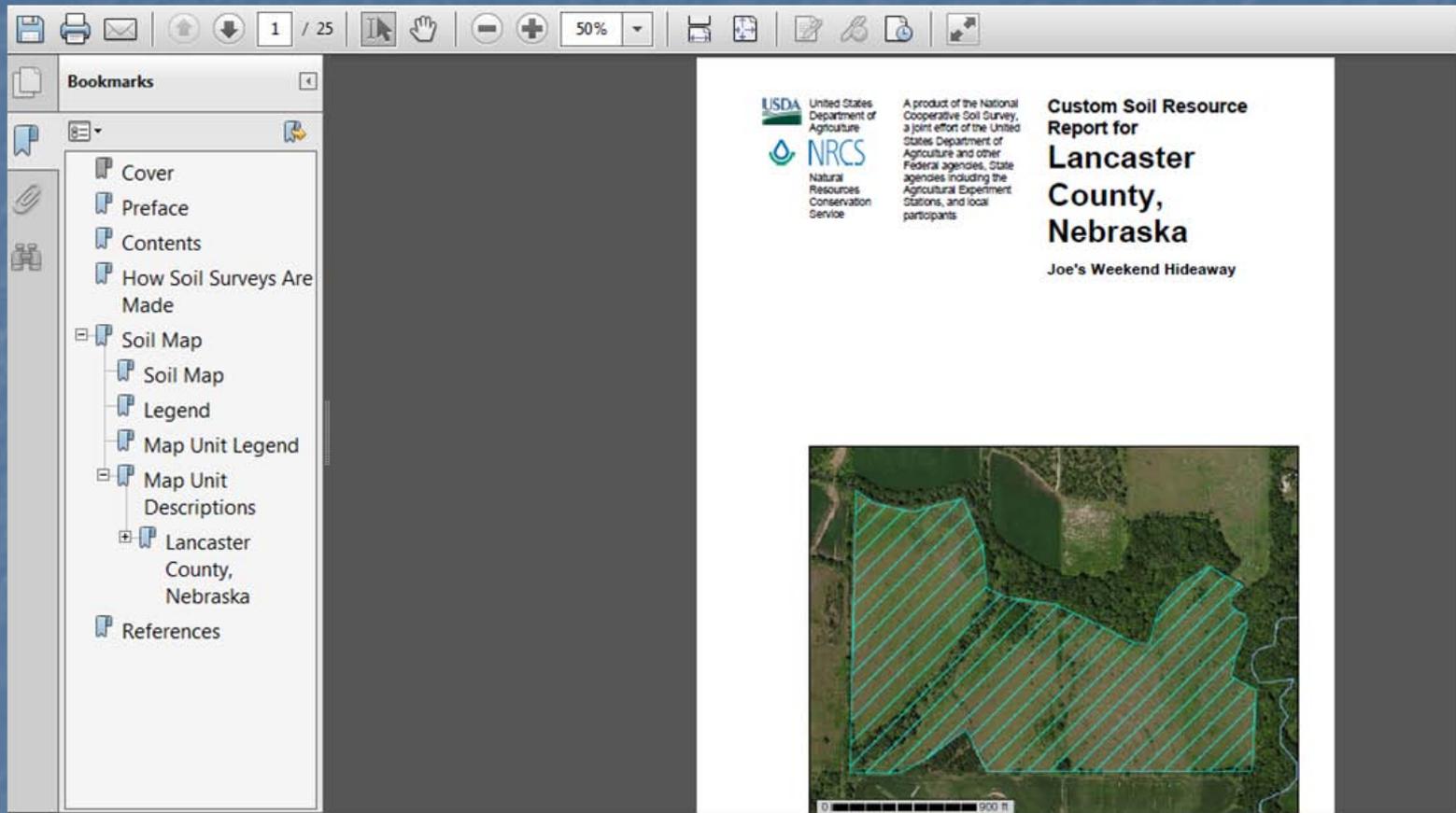
The screenshot shows a web application interface for generating a custom soil resource report. The interface is divided into several sections:

- Navigation Bar:** Located at the top, it includes tabs for "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer", "Download Soils Data", and "Shopping Cart (Free)". A "Check Out" button is visible in the top right corner.
- Left Sidebar:** Contains a "Search" field, "Report Properties", and a "Table of Contents" section. The "Table of Contents" lists various report components and their sizes:

Item	Size
Custom Soil Resource Report for Lancaster County, Nebraska: Joe's Weekend Hideaway	959 KB
Cover	518 KB
Preface	3 KB
Contents	0 KB
How Soil Surveys Are Made	5 KB
Soil Map	429 KB
Soil Map	380 KB
Map Unit Legend	4 KB
Map Unit Description	45 KB
Soil Data Explorer	
All Uses	
References	3 KB
Glossary	113 KB
- Main Content Area:** Displays a "Soil Map" showing a satellite-style map with overlaid soil unit boundaries and labels (e.g., 7750, 7507, 7503, 7684, 7774, 7507, 7684, 7644, 7050, 7231). A pop-up box over the map reads "Generating custom soil resource report...".

- The time required to generate the report depends on the size and complexity of the items included and on the current traffic on the system.

Custom Soil Resource Report



- The report is generated as a PDF file that can be opened directly or saved to your local computer.

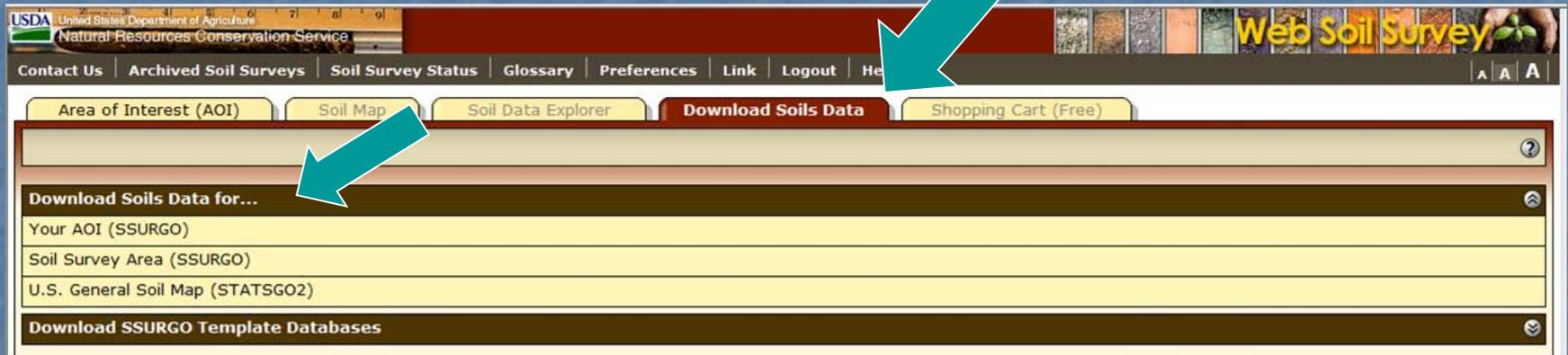
Part III: Download Data for GIS

- Overview
- Download
 - SSURGO Data for an Area of Interest (AOI)
 - SSURGO Data for a Survey Area
 - STATSGO2 data

Overview

- WSS 3.0 allows you to download raw soil data for use in a local GIS.
- This feature replaces the data download functionality formerly in the Soil Data Mart. You can download:
 - SSURGO data clipped to the AOI boundary,
 - SSURGO data for entire soil survey areas,
 - STATSGO2 data by state or for the entire U.S.
- Links to SSURGO metadata reports are available.

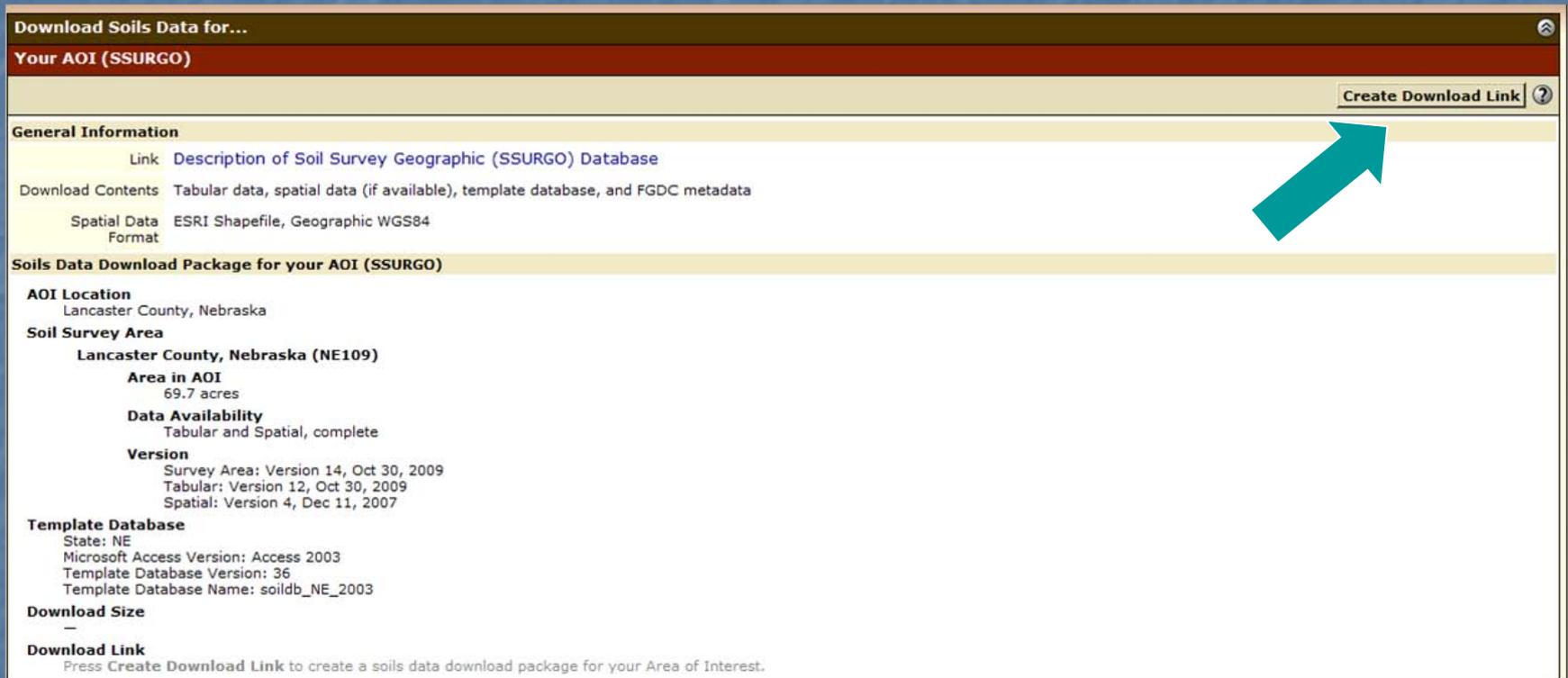
Download Soils Data



The screenshot shows the USDA Web Soil Survey interface. At the top, there is a navigation bar with the USDA logo and the text "United States Department of Agriculture" and "Natural Resources Conservation Service". To the right of the navigation bar is the "Web Soil Survey" logo. Below the navigation bar is a menu with the following items: "Contact Us", "Archived Soil Surveys", "Soil Survey Status", "Glossary", "Preferences", "Link", "Logout", and "Help". Below the menu is a row of buttons: "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer", "Download Soils Data", and "Shopping Cart (Free)". The "Download Soils Data" button is highlighted with a red arrow. Below the buttons is a dropdown menu with the following options: "Download Soils Data for...", "Your AOI (SSURGO)", "Soil Survey Area (SSURGO)", "U.S. General Soil Map (STATSGO2)", and "Download SSURGO Template Databases". The "Download Soils Data for..." option is highlighted with a red arrow.

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

SSURGO Data for Your AOI



Download Soils Data for...

Your AOI (SSURGO)

[Create Download Link](#) ?

General Information

Link [Description of Soil Survey Geographic \(SSURGO\) Database](#)

Download Contents Tabular data, spatial data (if available), template database, and FGDC metadata

Spatial Data Format ESRI Shapefile, Geographic WGS84

Soils Data Download Package for your AOI (SSURGO)

AOI Location
Lancaster County, Nebraska

Soil Survey Area
Lancaster County, Nebraska (NE109)

Area in AOI
69.7 acres

Data Availability
Tabular and Spatial, complete

Version
Survey Area: Version 14, Oct 30, 2009
Tabular: Version 12, Oct 30, 2009
Spatial: Version 4, Dec 11, 2007

Template Database
State: NE
Microsoft Access Version: Access 2003
Template Database Version: 36
Template Database Name: soildb_NE_2003

Download Size
-

Download Link
Press [Create Download Link](#) to create a soils data download package for your Area of Interest.

- If you have already designated a specific area of interest (see Part II above), you can download the GIS data for the area.

SSURGO Data for a Survey Area

Soil Survey Area (SSURGO)

General Information

Link: [Description of Soil Survey Geographic \(SSURGO\) Database](#)

Download Contents: Tabular data, spatial data (if available), template database (if selected), and FGDC metadata

Spatial Data Format: ESRI Shapefile, Geographic WGS84

Options

State:

County (optional):

Only show Soil Survey Areas updated since...

Sort by...:

Include Template Database:

Soil Survey Area (SSURGO) Download Links

Name	Area Symbol	Data Availability	Version	Template Database	Download Size	Download Link
Adams County, Nebraska	NE001	Tabular and Spatial, complete	Survey Area: Version 8, Oct 29, 2009 Tabular: Version 8, Oct 29, 2009 Spatial: Version 2, Jan 4, 2008	soildb_NE_2003 Access 2003 Version 36	12.7 MB	wss_SSA_NE001_soildb_NE_2003_[2009-10-29].zip
Antelope County, Nebraska	NE003	Tabular and Spatial, complete	Survey Area: Version 7, Oct 29, 2009 Tabular: Version 7, Oct 29, 2009 Spatial: Version 4	soildb_NE_2003 Access 2003 Version 36	18.2 MB	wss_SSA_NE003_soildb_NE_2003_[2009-10-29].zip

Set desired options

- You can download the GIS data for an entire soil survey area. Such areas are commonly entire counties. Scroll through the list of available soil survey areas by state, then click the Download Link.

STATSGO2 Data

Download Soils Data for...

Your AOI (SSURGO)

Soil Survey Area (SSURGO)

U.S. General Soil Map (STATSGO2)

General Information

Link [Description of U.S. General Soil Map \(STATSGO2\)](#)

Download Contents Tabular data, spatial data, template database, and FGDC metadata

Spatial Data Format ESRI Shapefile, Geographic WGS84

STATSGO2 Download Links

Spatial Extent	Download Size	Download Link
US: entire GSM data set	332.0 MB	wss_gsmsoil_US_[2006-07-06].zip
Alabama	8.0 MB	wss_gsmsoil_AL_[2006-07-06].zip
Alaska	9.9 MB	wss_gsmsoil_AK_[2006-07-06].zip
Arizona	8.2 MB	wss_gsmsoil_AZ_[2006-07-06].zip
Arkansas	6.1 MB	wss_gsmsoil_AR_[2006-07-06].zip
California	20.1 MB	wss_gsmsoil_CA_[2006-07-06].zip
Colorado	12.0 MB	wss_gsmsoil_CO_[2006-07-06].zip
Connecticut	2.8 MB	wss_gsmsoil_CT_[2006-07-06].zip
Delaware	2.1 MB	wss_gsmsoil_DE_[2006-07-06].zip

Click desired link to begin download process.

- You can download STATSGO2 data for the entire U.S. or for individual states.

Questions?

The screenshot shows the USDA Web Soil Survey interface. At the top, there is a navigation bar with links: Contact Us, Archived Soil Surveys, Soil Survey Status, Glossary, Preferences, Link, Logout, and Help. A red arrow points to the 'Help' link. Below the navigation bar, there are tabs for 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', 'Data', and 'Shopping Cart (Free)'. A red arrow points to the 'Data' tab. On the left side, there is a 'Search' panel with sections for 'Area of Interest', 'Quick Navigation', and 'Address'. A red arrow points to the 'Address' input field. The main content area is titled 'Area of Interest Interactive Map' and features a map of the United States with state abbreviations. A red arrow points to a question mark icon in the top right corner of the map area. Another red arrow points to a question mark icon in the top right corner of the entire page.

- You can get general help from the top navigation bar or context-specific help from the "?" symbols.

More Ways to Get Help

The screenshot displays the USDA Natural Resources Conservation Service website. At the top, the navigation menu includes: Contact Us, Archived Soil Surveys, Soil Survey Status, Glossary, Preferences, Link, Logout, and Help. A sidebar on the left contains sections for Area of Interest, Search, Area of Interest, Import AOI, Quick Navigation, and Address. A central pop-up window titled "Having Problems Running Web Soil Survey?" provides contact information: "If you have problems running Web Soil Survey, send email to: soilshotline@lin.usda.gov". Below this, another section titled "Have Questions About the Soil Data?" offers two options: "The appropriate State office." and "The local office of the Natural Resources Conservation Service." A "View" button is visible next to the second option. The background shows a map of the Pacific Northwest region with state abbreviations WA, MT, OR, and ID.

- You can get help via email by clicking on "Contact Us" and then clicking on one of the links.