

Web Soil Survey (WSS) 2.3

How to Use It

Web Soil Survey -- purpose

- 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 & management decisions

Web Soil Survey -- purpose

- Provides alternative to traditional hardcopy publication
- Provides means for quicker delivery of information
- Provides interactive access to most current data

Web Soil Survey -- purpose

- Allows customer to get just information they want/select
 - Map units for their geographic area of interest (AOI)
 - Information relevant to their land use concerns – e.g. rangeland or cropland

WSS Products

- Soil Map on color imagery or topographic map backdrop for the AOI from SSURGO data (where available)
- Soil Data Mart tables by AOI
- Custom Soil Resource Report
- Download of SSURGO data clipped to the limit of the defined AOI

WSS Products

- Custom Soil Resource Report (PDF) via the free Shopping Cart
 - By AOI
 - Soil map, map unit legend, map unit descriptions
 - Content specifically chosen by user
 - Thematic Maps (with tables and text)
 - Tabular data tables
 - Introductory material

Pathway through WSS

- Define area of interest – you must specifically set the AOI before you can view any maps or reports
- View Soil Map – if available for AOI
- Browse/Explore soil data and related information
 - Generate thematic maps
 - Access Soil Data Mart data tables
- Build custom soil resource report in Shopping Cart
- Print/download the selected map or report

WSS 2.3 Homepage

The screenshot shows the homepage of the Web Soil Survey (WSS) version 2.3. At the top, there's a banner featuring the USDA Natural Resources Conservation Service logo and a ruler scale. Below the banner, the title "Web Soil Survey" is displayed in large yellow letters next to a collage of soil samples.

The main content area includes:

- A search bar with a "Go" button and a dropdown menu for "All NRCS Sites".
- A sidebar titled "Browse by Subject" listing various links such as Soils Home, NCSS, Status Maps, OSD, Mapping Tool, Soil Data Mart, Geospatial Data Gateway, eFOTG, Characterization Data, Soil Geochemistry Spatial Database, Soil Quality, and Soil Geography.
- A large green button labeled "START WSS" with a teal arrow pointing to it from the left.
- A text block: "The simple yet powerful way to access and use soil data."
- A section titled "Welcome to Web Soil Survey (WSS)" featuring a photo of three people in a field and a detailed description of the service's purpose and coverage.
- A section titled "Four Basic Steps" with the first step "Define." and a screenshot of the "Area of Interest (AOI)" tool.
- A sidebar titled "Announcements/Events" with a list of items:
 - 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
- A sidebar titled "I Want Help With..." with a list of items:
 - How to use Web Soil Survey
 - How to use Web Soil Survey Online Help
 - Known Problems and

View List of New Features



You are here: Web Soil Survey Home / Web Soil Survey 2.3 New Features

Web Soil Survey 2.3 – New Features

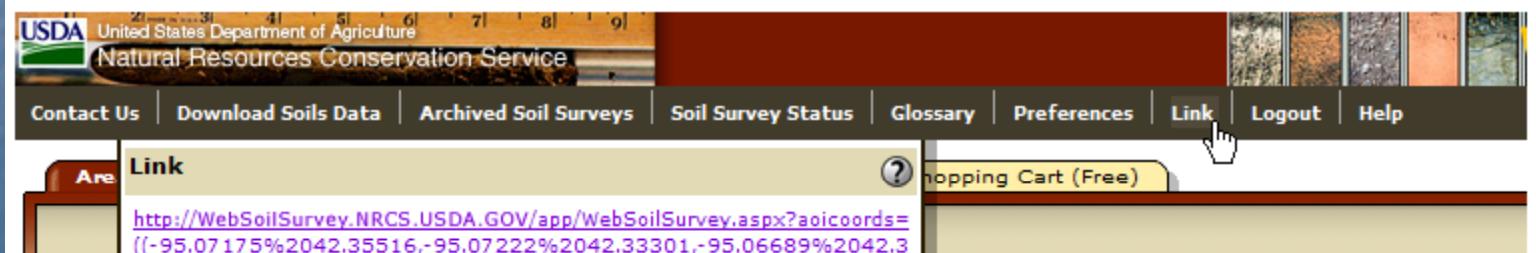
Web Soil Survey URLs

Web Soil Survey now allows you to save your AOI as a Web Soil Survey URL. This means you can create an AOI, and then bookmark it for later use.

Your URL also saves the particular view to which you've zoomed the map. You can even edit the URL to mark a particular location with a location marker.

- Create an AOI using one of the AOI map tools.
- Open the **Link** control by clicking **Link** in the Navigation Bar.
- The link records your AOI (if set) and the location and radius you've zoomed to.
- Copy and paste the link, or right-click it to *Add to Favorites...* or *Bookmark this Link*.

To add a location marker, see the Help in the **Link** control.



- Scroll down the screen to see all new features

New Features in WSS 2.3

- Export your AOI boundary to your local computer for reuse in a later WSS session.
- Import an AOI boundary file – either saved from an earlier WSS session, or created in some other application.
- Zoom to coordinates of a desired AOI by embedding them in the URL in your browser window.
- Set the AOI to coordinates embedded in the URL in your browser window.
- Save a link/bookmark to an AOI for use in a later WSS session.
- Navigate by street address and county/state for U.S. territories.
- Enter latitude and longitude coordinates all on one line, in various formats.

WSS Opening Screen

USDA United States Department of Agriculture 7 8 9
Natural Resources Conservation Service

Web Soil Survey

Contact Us | Download Soils Data | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help | A A A

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

Search | Area of Interest | Import AOI

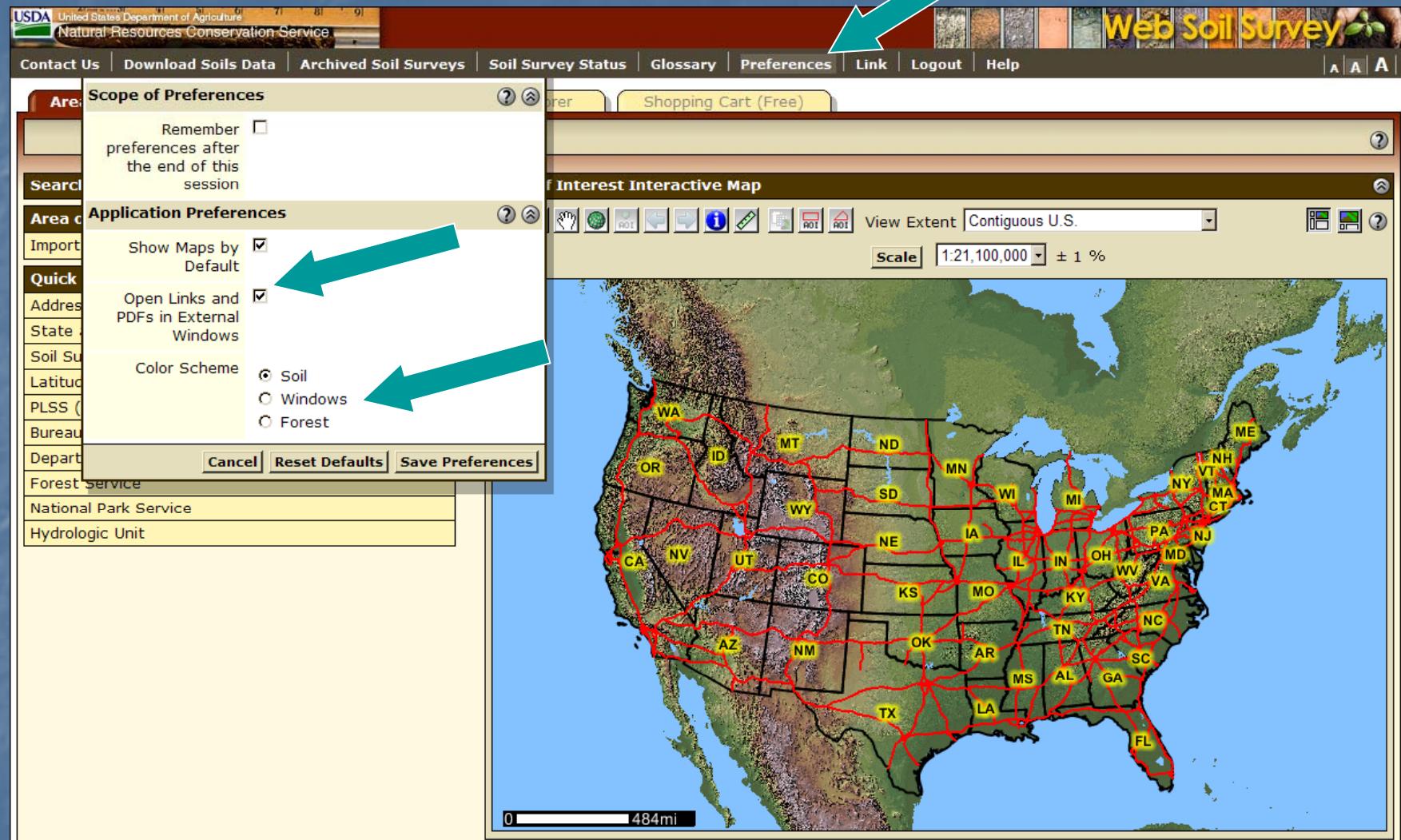
Quick Navigation | Address | State and County | Soil Survey Area | Latitude and Longitude | PLSS (Section, Township, Range) | Bureau of Land Management | Department of Defense | Forest Service | National Park Service | Hydrologic Unit

Area of Interest Interactive Map

Legend | View Extent Contiguous U.S. | Scale 1:21,100,000 ± 1 %

FOIA | Accessibility Statement | Privacy Policy | Non-Discrimination Statement | Information Quality | USA.gov | White House

Set User Preferences



- View PDFs and links in the same browser window as WSS, or in different window.
- Choose “Soils,” “Windows” or “Forest” color scheme.

View Other Geographic Areas

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Download Soils Data | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help | A A A

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

Area of Interest Interactive Map

Search Area of Interest Import AOI

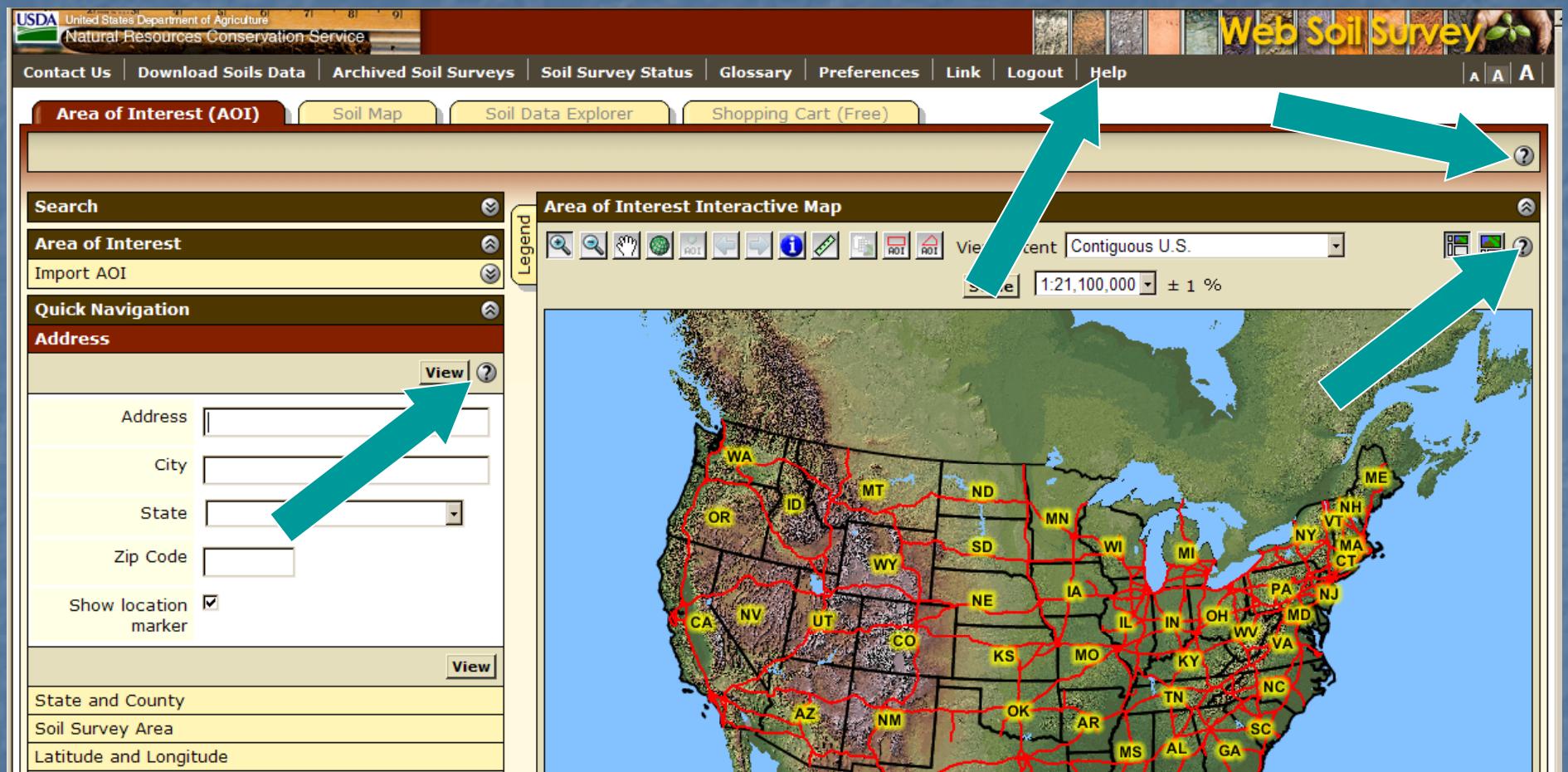
Quick Navigation: Address, State and County, Soil Survey Area, Latitude and Longitude, PLSS (Section, Township, Range), Bureau of Land Management, Department of Defense, Forest Service, National Park Service, Hydrologic Unit.

Legend: Search, Zoom In, Zoom Out, Refresh, Home, Print, AOI, View Extent, Scale (1:125,000).

View Extent: Contiguous U.S., Contiguous U.S., Alaska, Hawaii, Pacific Basin (American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Palau, Northern Mariana Islands, Puerto Rico, Virgin Islands).

Map of the contiguous United States showing state boundaries and abbreviations. An arrow points to the "Pacific Basin" dropdown menu, which lists various territories and island groups.

Get Online Help



- Click on Help or a "?" for online help.

More ways to get Help

The screenshot shows the USDA Natural Resources Conservation Service's Web Soil Survey website. A teal arrow points to the "Contact Us" link in the top navigation bar. A modal window titled "Having Problems Running Web Soil Survey?" contains instructions to email soilshotline@lin.usda.gov. Another modal window titled "Have Questions About the Soil Data?" provides contact information for state offices and local N.R.C.S. offices. The background shows a map of Washington state with a red outline indicating the area of interest.

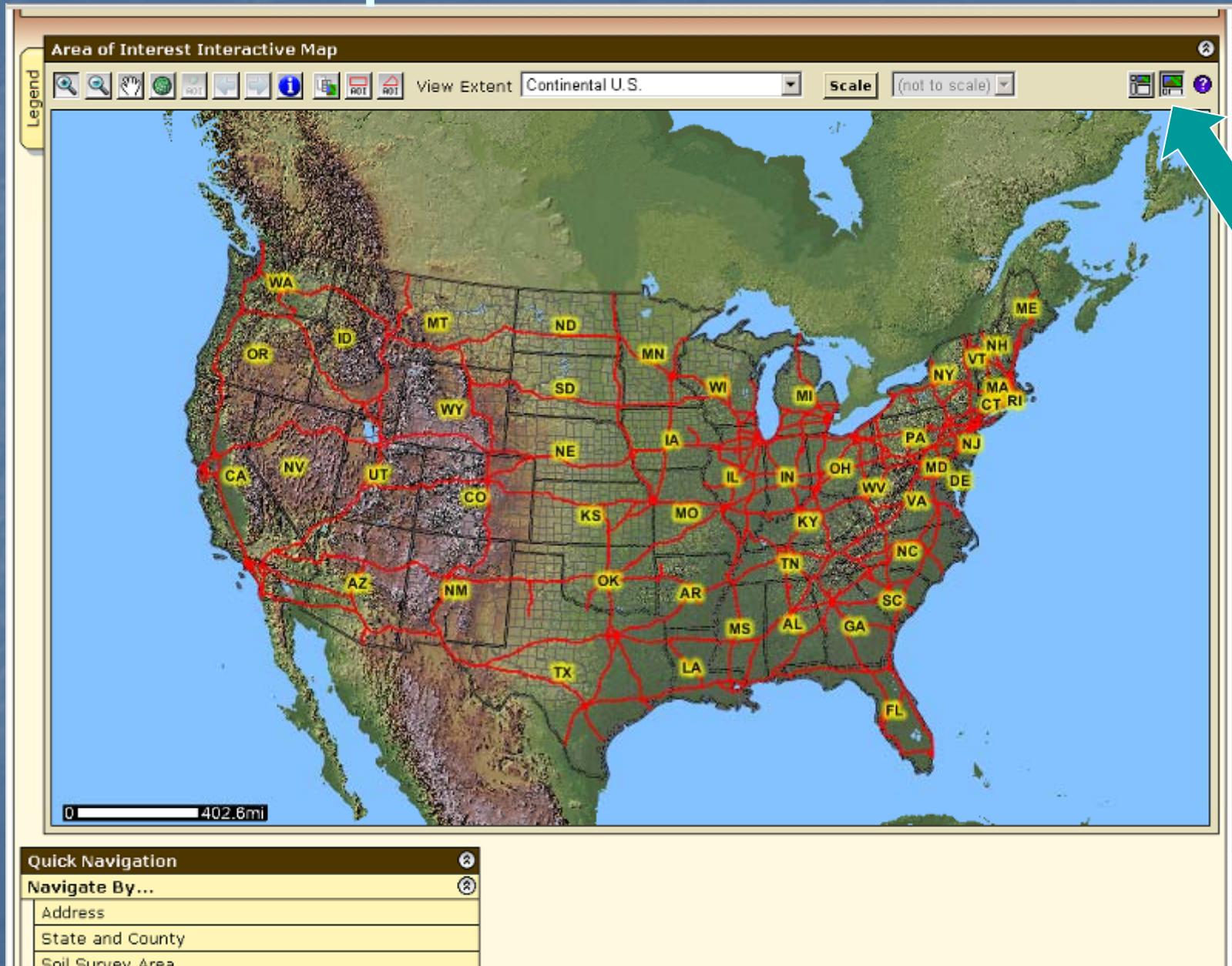
If you have problems running Web Soil Survey, send email to: soilshotline@lin.usda.gov

If you have questions about the soil data displayed in Web Soil Survey, contact one of the following:

- The appropriate State office.
- The local office of the Natural Resources Conservation Service.

- Click on “Contact Us”.

View Map at Full Screen Width

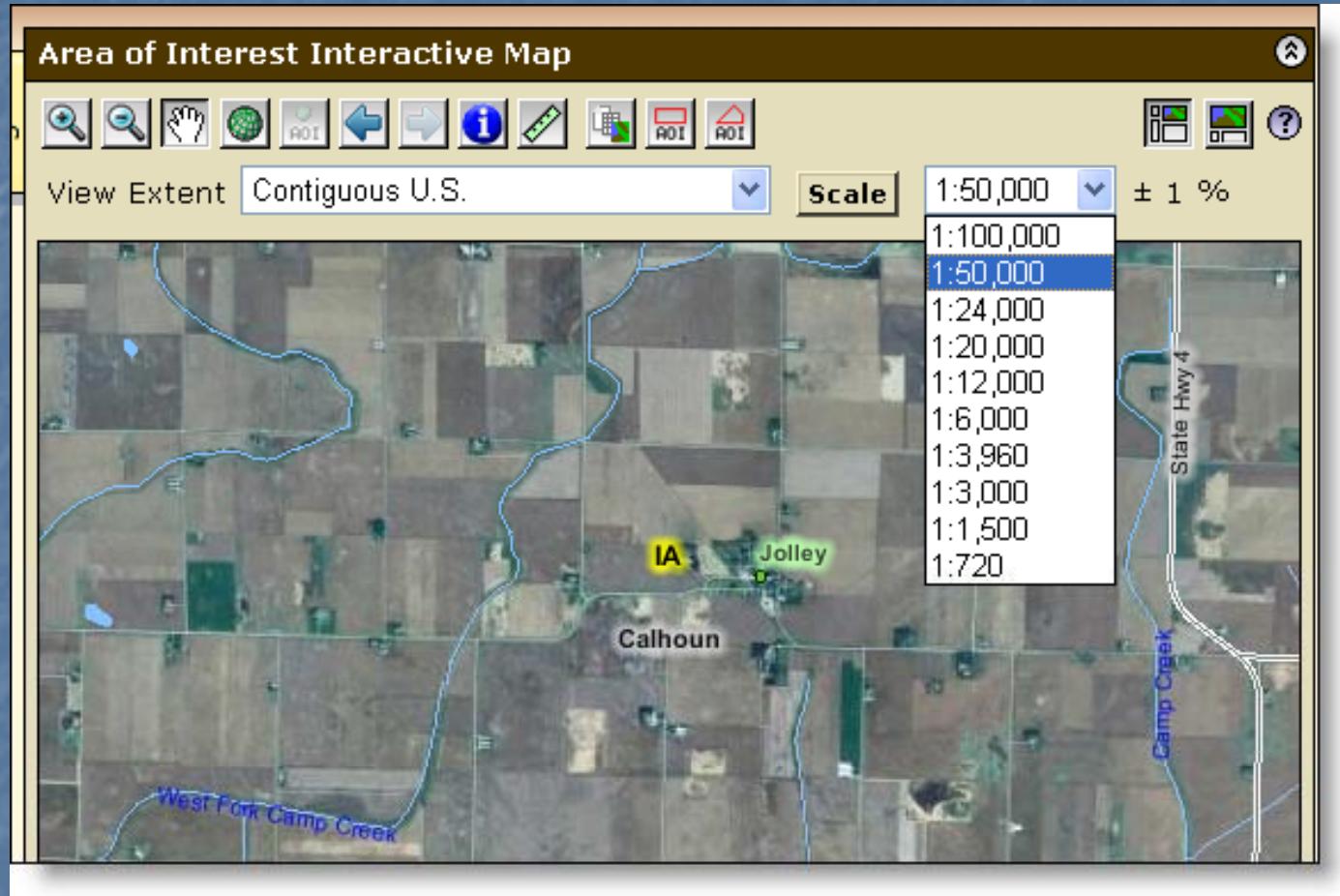


Floating Windows

The screenshot shows a web-based soil survey application interface. At the top, there's a header bar with the USDA logo, "United States Department of Agriculture", "Natural Resources Conservation Service", and various navigation links: Contact Us, Download Soils Data, Archived Soil Surveys, Soil Survey Status, Glossary, Preferences, Link, Logout, and Help. Below the header is a menu bar with tabs: Area of Interest (AOI), Soil Map, Soil Data Explorer, and Shopping Cart (Free). A large map of the contiguous United States is displayed, showing state boundaries and soil survey areas. A floating "Map Legend" window is overlaid on the map. This legend window has a title "Map Legend" and contains several sections: "Area of Interest (AOI)" (with a checked checkbox), "Soils" (with several sub-options like Soil Survey Areas, Soil Map Units, etc.), and "Political Features" (with options for States, Counties, Urban Areas, and Cities). A large blue arrow points from the bottom left towards the floating legend window.

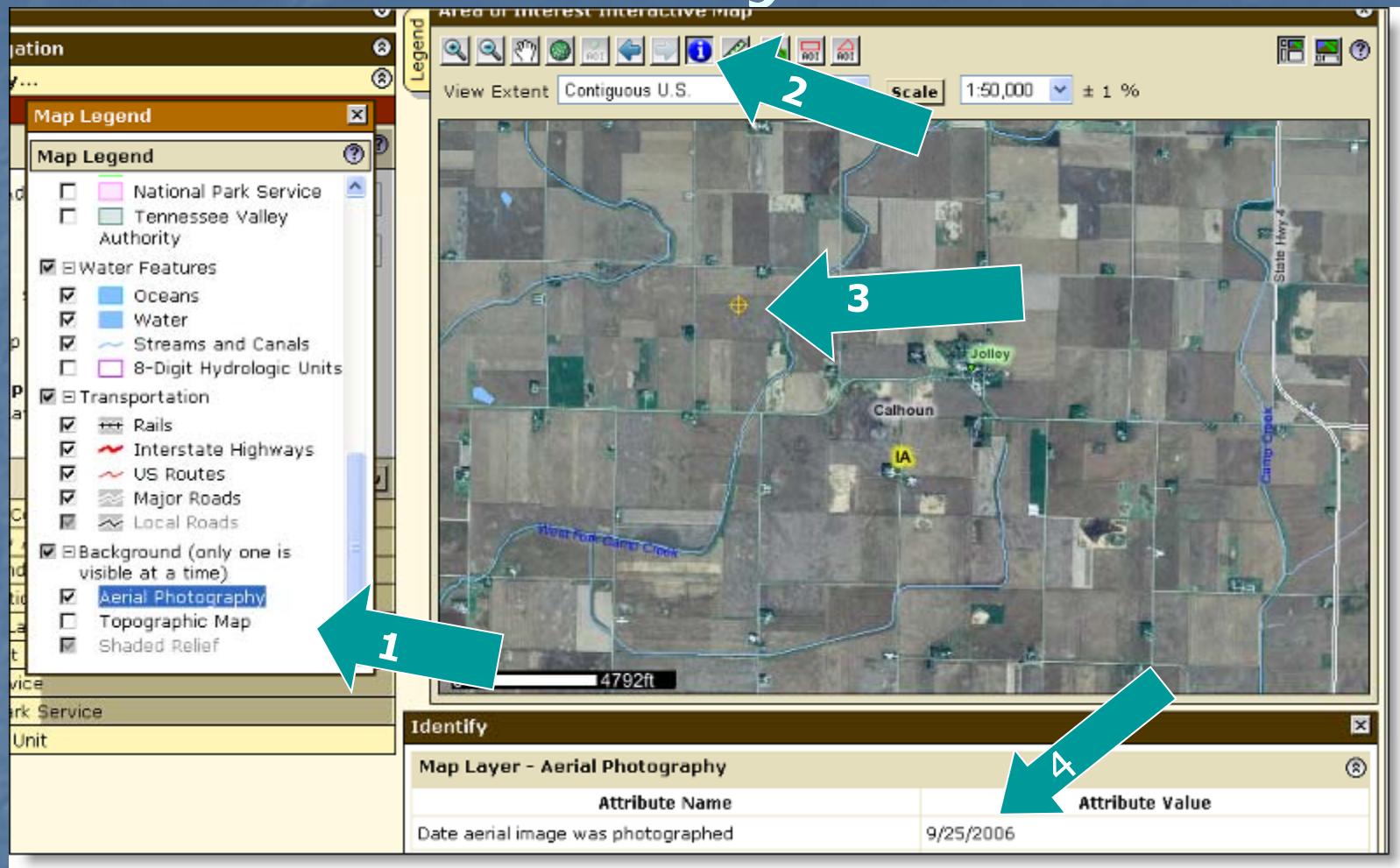
- You can click and drag the Map Legend window around wherever you want.

Set Viewable Map Scale



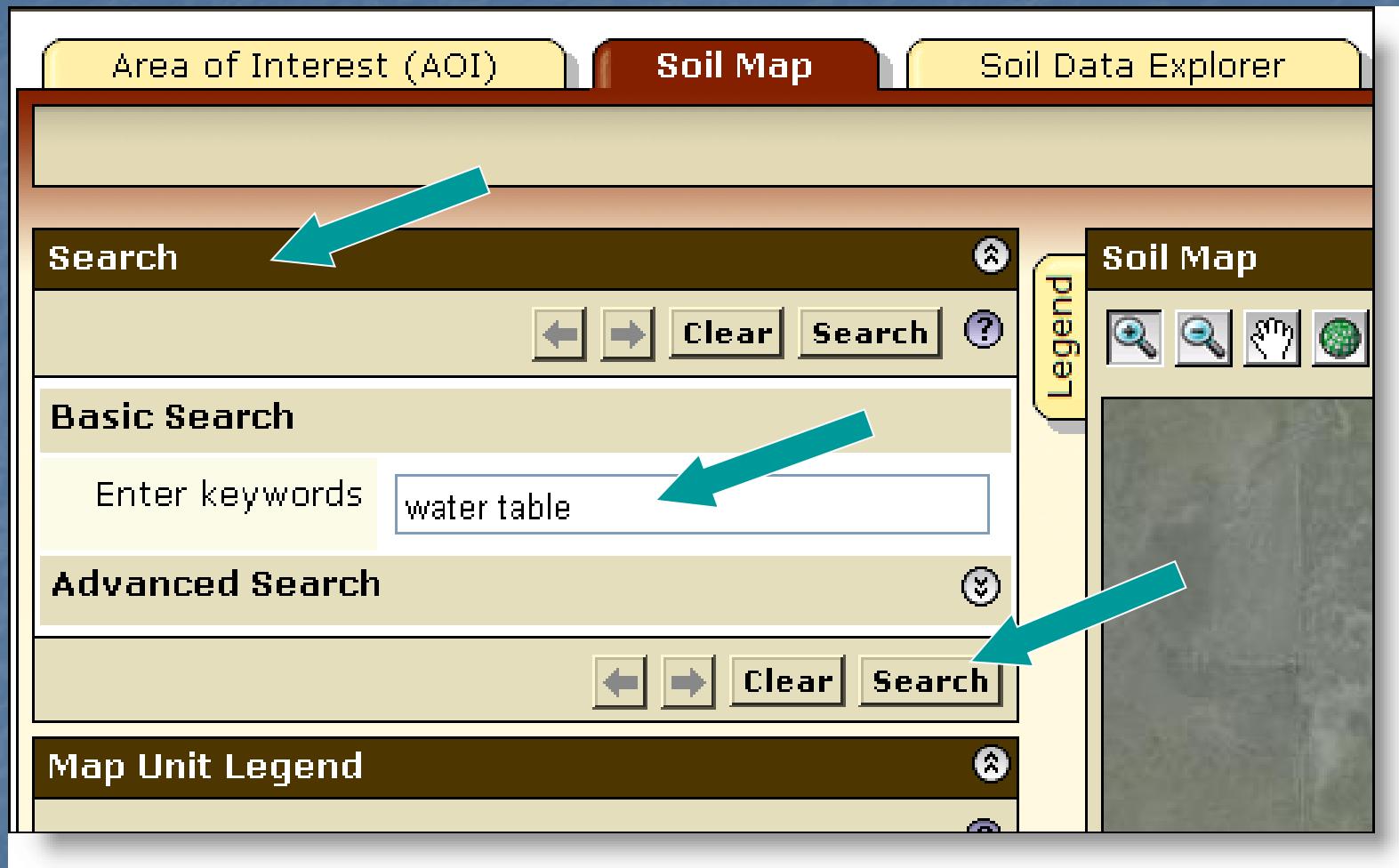
- First calibrate your monitor by clicking Scale button
- Use the map scale feature to see the scale you've zoomed to and to change to a different map scale.

Identify Tool



- 1) Highlight the desired data layer, 2) click the identify tool. 3) Marker identifies the point you clicked on. 4) See the Attribute Value for information on the layer – e.g. date of photography.

Search Function



- Click **Search** title bar to open it; enter key word(s); click **Search** button

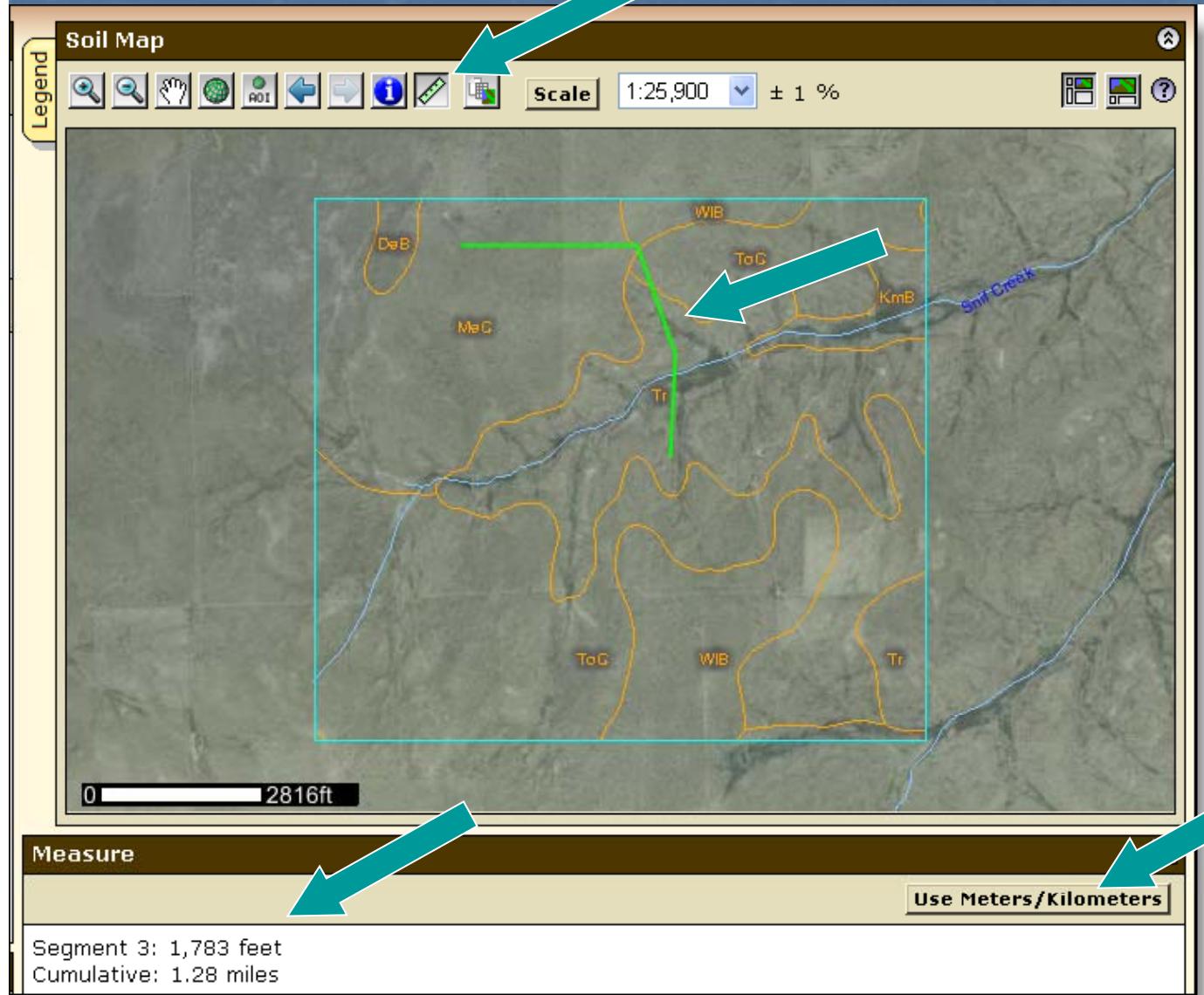
Search Results

The screenshot shows a search interface with two main sections: 'Basic Search' and 'Advanced Search'. In the 'Basic Search' section, the keyword 'water table' is entered. Below these sections, a message states "'water table': 113 matches.''. A large list of matches is displayed, categorized into sections like 'Suitabilities and Limitations for Use' and 'Soil Properties and Qualities'. Each category has a plus sign icon to expand it. To the right of each category, the number of matches is listed. A teal arrow points from the text 'Click on a link to go to that section.' to the list of matches.

Category	Number of matches
Suitabilities and Limitations for Use	50 matches
Soil Properties and Qualities	6 matches
Matched the Rating Description	1 match
Matched the Folder description	1 match
Matched the Rating name	1 match
Matched Help	1 match

- 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 that section.

Linear Measuring Tool



- Click ruler tool button
- Click to begin and end linear segments
- Segment length and cumulative length displayed
- Choose metric or English

Area of Interest (AOI) Features

- Navigate to an AOI using basic map navigation themes
 - Transportation
 - Ortho photo
 - Hydrography
 - Political features
- Use available zoom in/out tools

Area of Interest Features, cont.

- Navigate to an AOI using selection criteria:
 - Street address
 - State and County
 - Soil Survey Area
 - Latitude and Longitude
 - PLSS (Township, Range and Section)
 - Federal Land Boundaries
 - Hydrologic Unit
 - Embed coordinate(s) in URL

Area of Interest Features, cont.

- Define an AOI by
 - Drawing a polygon on a map
 - expanding rectangle, or
 - digitize multi-sided polygon
 - Selecting a soil survey area
 - Importing an AOI boundary file
 - Embedding bounding coordinates in URL
- Clear AOI

Area of Interest Features, cont.

- Display data available for defined AOI
 - Soil data – from Soil Data Mart
 - Soil maps – from Soil Data Mart
- Name your AOI (optional)
- Save your AOI for later use either by exporting the boundary file, or by saving a link/bookmark to it in your browser.
- Choose either standard or national map unit symbols

Locate Area of Interest (AOI)

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Download Soils Data | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help | A A A

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

Search

Area of Interest

Import AOI

Quick Navigation

Select

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 Map

Zoom Draw

View Extent Contiguous U.S.

Scale 1:21,100,000 ± 1 %

Navigate to AOI by Street Address

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Download Soils Data | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout

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

Search | Area of Interest | Import AOI

Quick Navigation | Address

Address: 11000 rocky ridge rd | View | ?

City: | State: | Zip Code: 68526 | Show location marker:

State and County | Soil Survey Area | Latitude and Longitude | PLSS (Section, Township, Range)

Area of Interest Interactive Map

Legend: View Extent | Scale: 1:2

A large teal arrow points from the address input field "11000 rocky ridge rd" towards the map, indicating the search results.

View by Street Address

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Download Soils Data | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help | A A A

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

Search | Area of Interest | Import AOI | Quick Navigation | Address | View | ?

Address: 11000 rocky ridge rd | City: | State: | Zip Code: 68526 | Show location marker: View | ?

Area of Interest Interactive Map

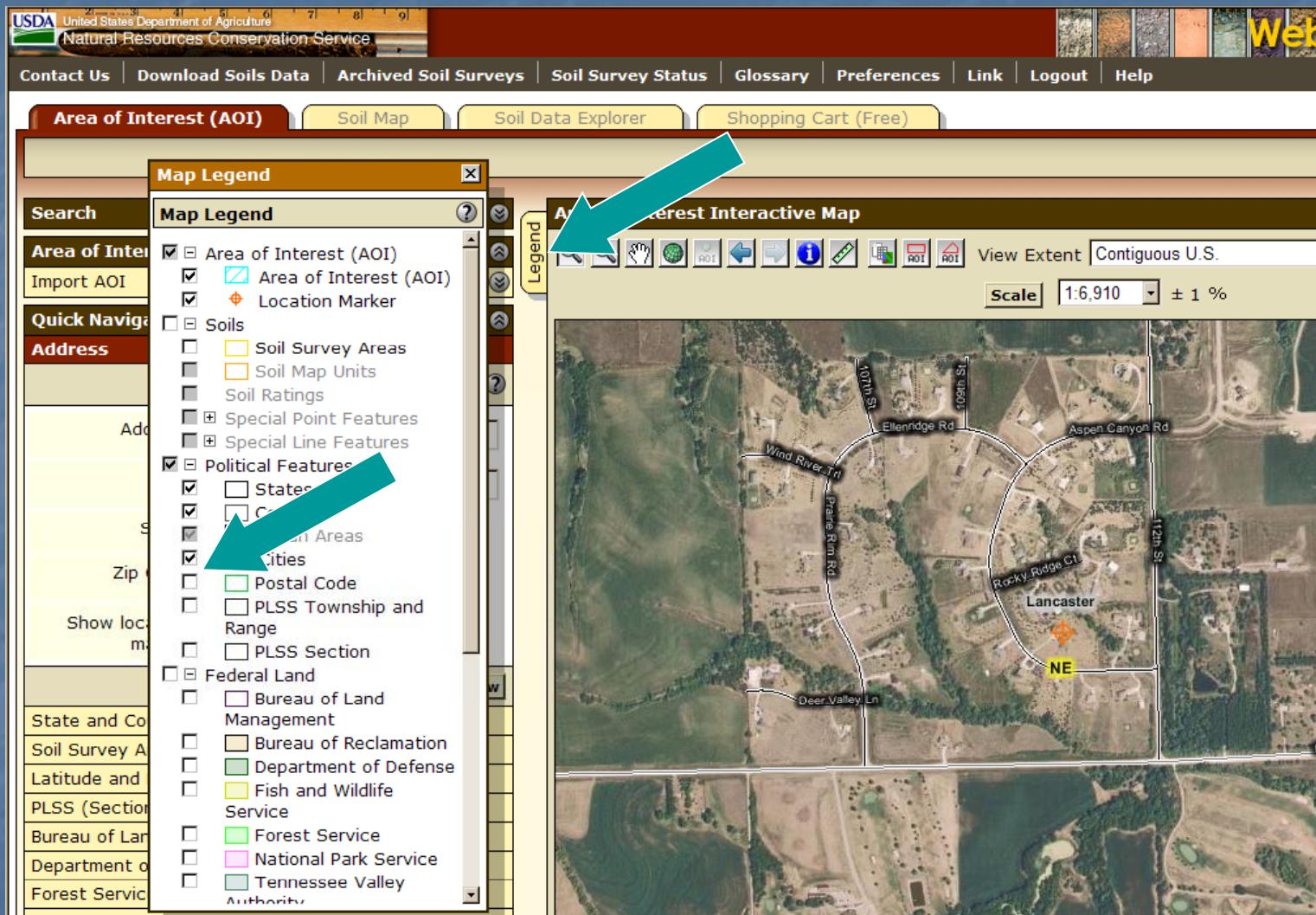
Legend | View Extent: Contiguous U.S. | Scale: 1:6,910 ± 1 % | ?

Map showing a satellite view of a rural area with roads and fields. A circular area of interest is centered on a location labeled "Lancaster". A location marker (orange dot) is placed on the map near the center of the circle. Two teal arrows point from the text "Location marker" to this orange dot.

0 897ft

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 | ?

Manage Displayed Data Layers



- Open Legend tab
- Turn layers on or off by checking or unchecking box at left

Navigate to AOI by County

USDA United States Department of Agriculture
Natural Resources Conservation Service

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

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

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

View

State Alabama

County (optional) Autauga

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 | Contig

Scale 1:21,100,000

A large teal arrow points from the 'State and County' input fields on the left towards the interactive map on the right, indicating the process of navigating to an area of interest by selecting a state and county.

Navigate by Soil Survey Area

20 Years in 30 41 51 6 7 8 9

USDA United States Department of Agriculture
Natural Resources Conservation Service

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

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

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

State: Alabama

County (optional):

Soil Survey Area: Autauga County, Alabama

Show Soil Survey Areas Layer in Map

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Area of Interest Interactive Map

Legend

View Extent Contiguous U.S.

Scale: 1:21,100,000

The map displays the 48 contiguous states of the United States. State boundaries are shown in black, and county boundaries are in white. Soil survey areas are delineated by red lines and labeled with two-letter state abbreviations: WA, ID, MT, ND, MN, WI, IA, IL, IN, NE, CO, KS, MO, OK, AR, MS, LA, TX, NM, UT, AZ, NV, CA, OR, and WA. A large teal arrow originates from the 'Soil Survey Area' input field on the left side of the interface and points directly at the map area.

Navigate by Latitude and Longitude

(see next slide for allowable formats)

The screenshot shows the USDA Web Soil Survey homepage. At the top, there's a navigation bar with links for Contact Us, Download Soils Data, Archived Soil Surveys, Soil Survey Status, Glossary, Preferences, Link, Logout, and Help. On the right side of the header, there are icons for zooming in and out, and a magnifying glass. Below the header is a toolbar with buttons for Area of Interest (AOI), Soil Map, Soil Data Explorer, and Shopping Cart (Free). A dropdown menu for "Area of Interest (AOI)" is open, showing options like Search, Area of Interest, Import AOI, Quick Navigation, Address, State and County, Soil Survey Area, and Latitude and Longitude. The "Latitude and Longitude" section is highlighted with a red box and contains fields for "Latitude, Longitude" (set to 40.8247, -96.7777) and a checked "Display location marker" checkbox with a "View" button. To the right of this is the "Area of Interest Interactive Map". The map displays a satellite view of a rural area with fields, roads, and a town labeled "Lancaster". A yellow location marker is placed near the town. A large teal callout box with white text is overlaid on the map, stating: "For a point between 0 and 180 degrees west longitude, enter a negative longitude number." Two teal arrows point from the text in this box towards the "Location marker" on the map and the "Display location marker" checkbox in the sidebar.

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

Location marker

Latitude and longitude coordinates may be entered in the following formats

All coordinates are assumed to be specified with reference to the NAD83 spatial reference. Latitude always comes 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 (PLSS) (Section, Township and Range)

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Download Soils Data | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help | A A A

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

Search | Area of Interest | Import AOI | Quick Navigation | Address | State and County | Soil Survey Area | Latitude and Longitude | PLSS (Section, Township, Range)

View | Legend | Area of Interest Interactive Map | View Extent | Contiguous U.S. | Scale | 1:11,000 ± 1 %

State: Nebraska | Principal Meridian: Sixth Principal | View Meridian Map

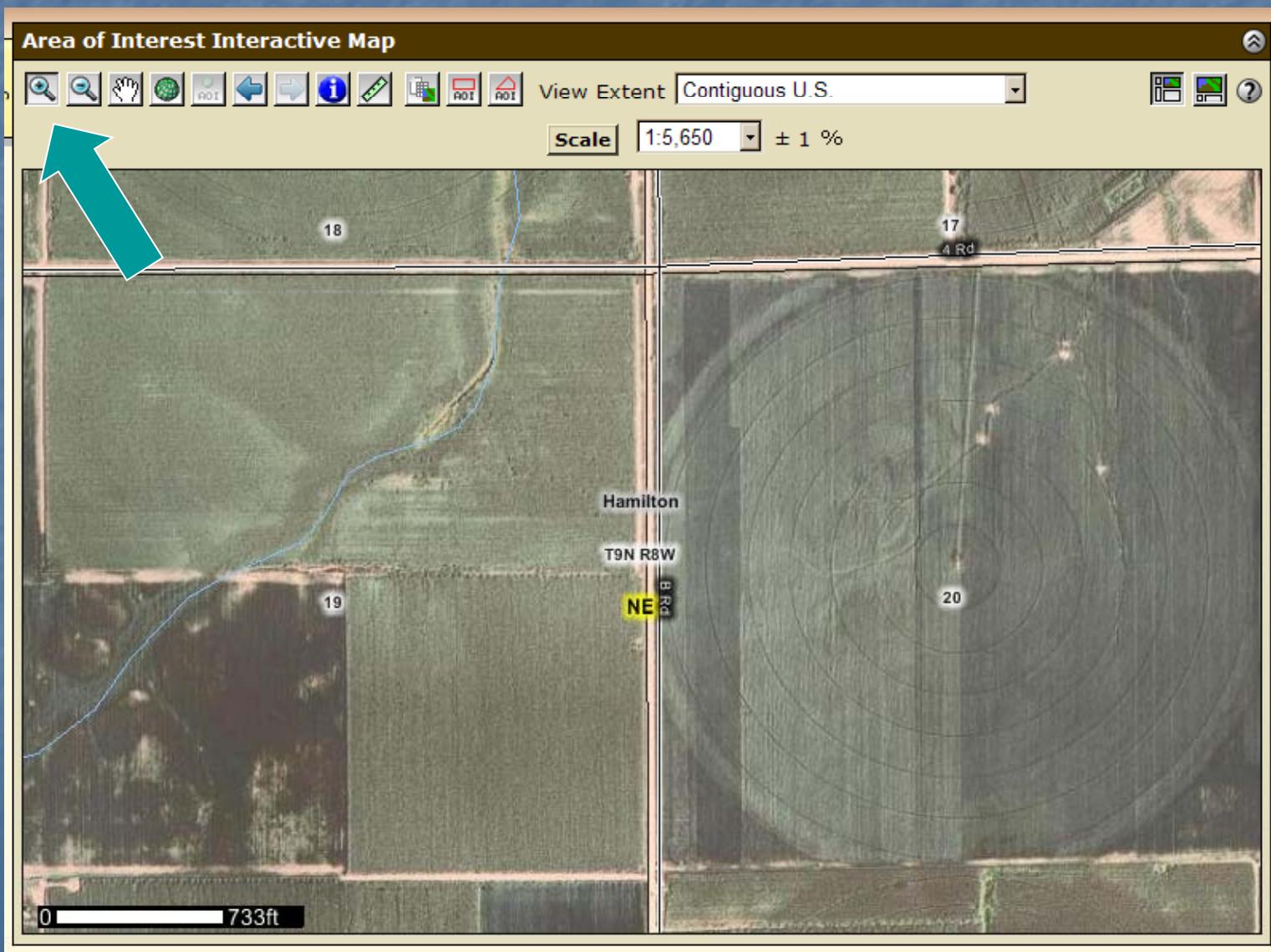
Section: 20 | Township: 9 | North South
Range: 8 | East West

Show PLSS Section and PLSS Township and Range Layers in Map

0 1336ft

The screenshot shows the USDA Web Soil Survey interface. On the left, there's a sidebar for 'Area of Interest (AOI)' with dropdowns for 'Area of Interest' and 'Quick Navigation' (Address, State and County, Soil Survey Area, Latitude and Longitude). Below that is a section for 'PLSS (Section, Township, Range)' with fields for 'State' (Nebraska), 'Principal Meridian' (Sixth Principal), 'Section' (20), 'Township' (9), 'Range' (8), and checkboxes for 'Show PLSS Section and PLSS Township and Range Layers in Map'. A teal arrow points from the 'Section' input field towards the main map area. The main area features a satellite map of a rural area divided into a 3x3 grid of PLSS sections. Section 20 is highlighted in yellow and labeled 'Hamilton'. Other sections are numbered 16, 17, 18, 19, 21, 28, 29, 30, and 31. Roads are labeled '4 Rd', '3 Rd', and 'C Rd'. The map includes a legend with various icons for search, zoom, and data layers. At the bottom, there's a scale bar from 0 to 1336ft.

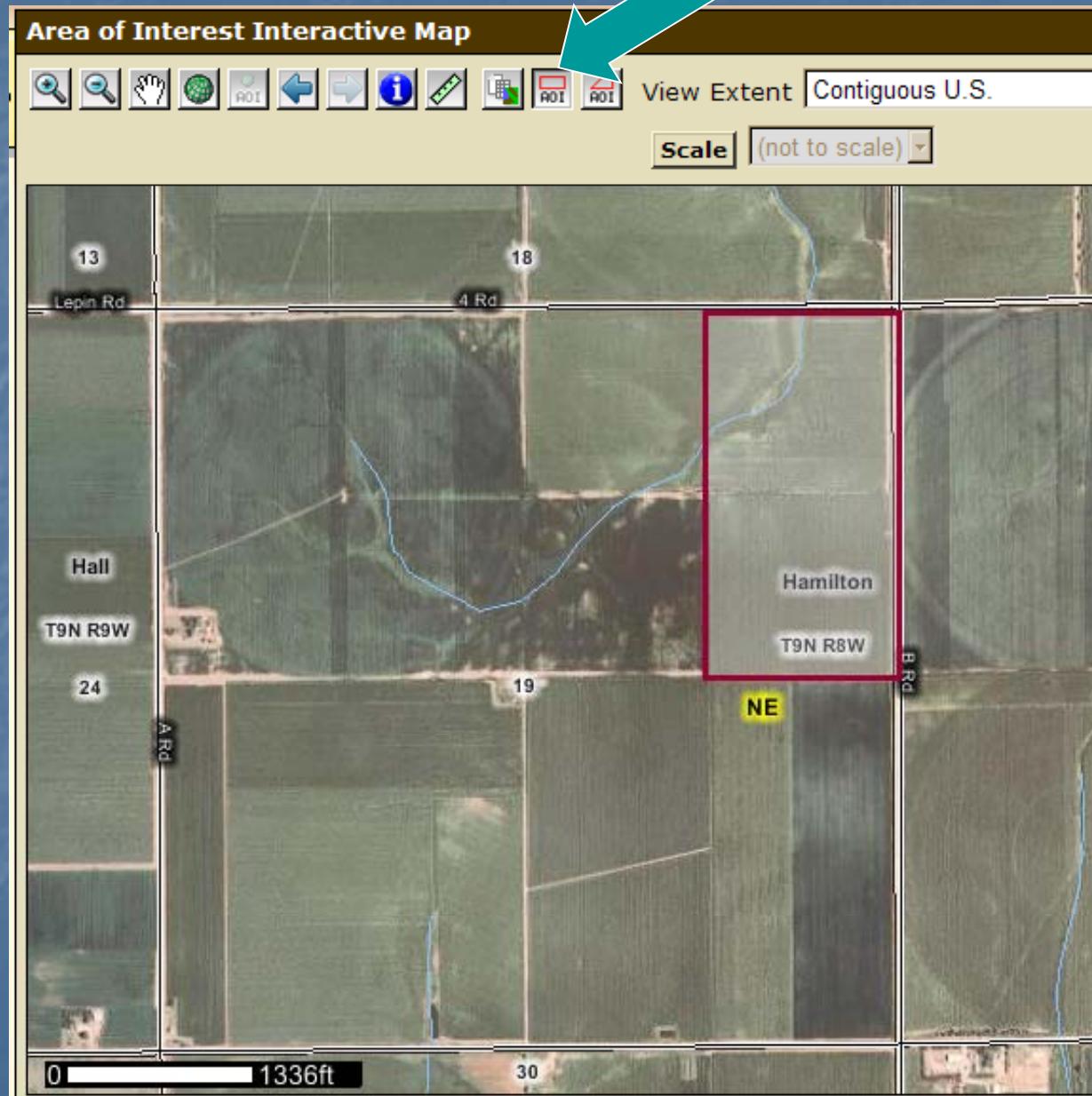
Zoom In Tool – expanding rectangle



Define AOI

- Remember - you must specifically set the AOI before you can view any maps or data.
 - Use one of the AOI buttons on toolbar
 - Expanding rectangle
 - Multi-sided polygon
 - Select the area by choosing a Soil Survey Area, then clicking the Set AOI button.
 - Import an AOI boundary file
 - Use previously bookmarked link

Define AOI – draw rectangle



Selected AOI

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

Search Area of Interest AOI Properties AOI Information Soil Data Available from Web Soil Survey Quick Navigation

Area of Interest Interactive Map

Legend

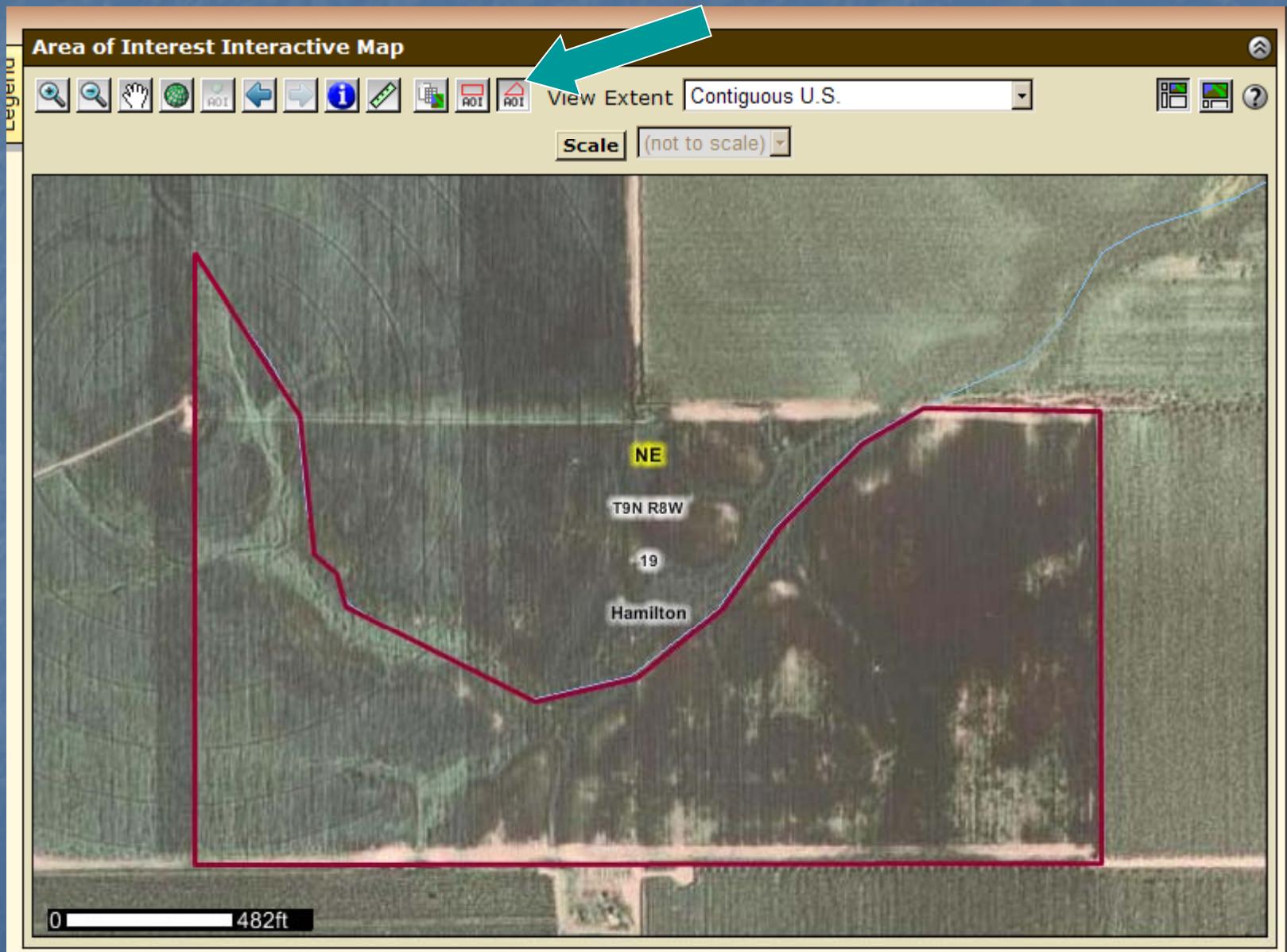
Scale: (not to scale)

Hamilton
T9N R8W
NE

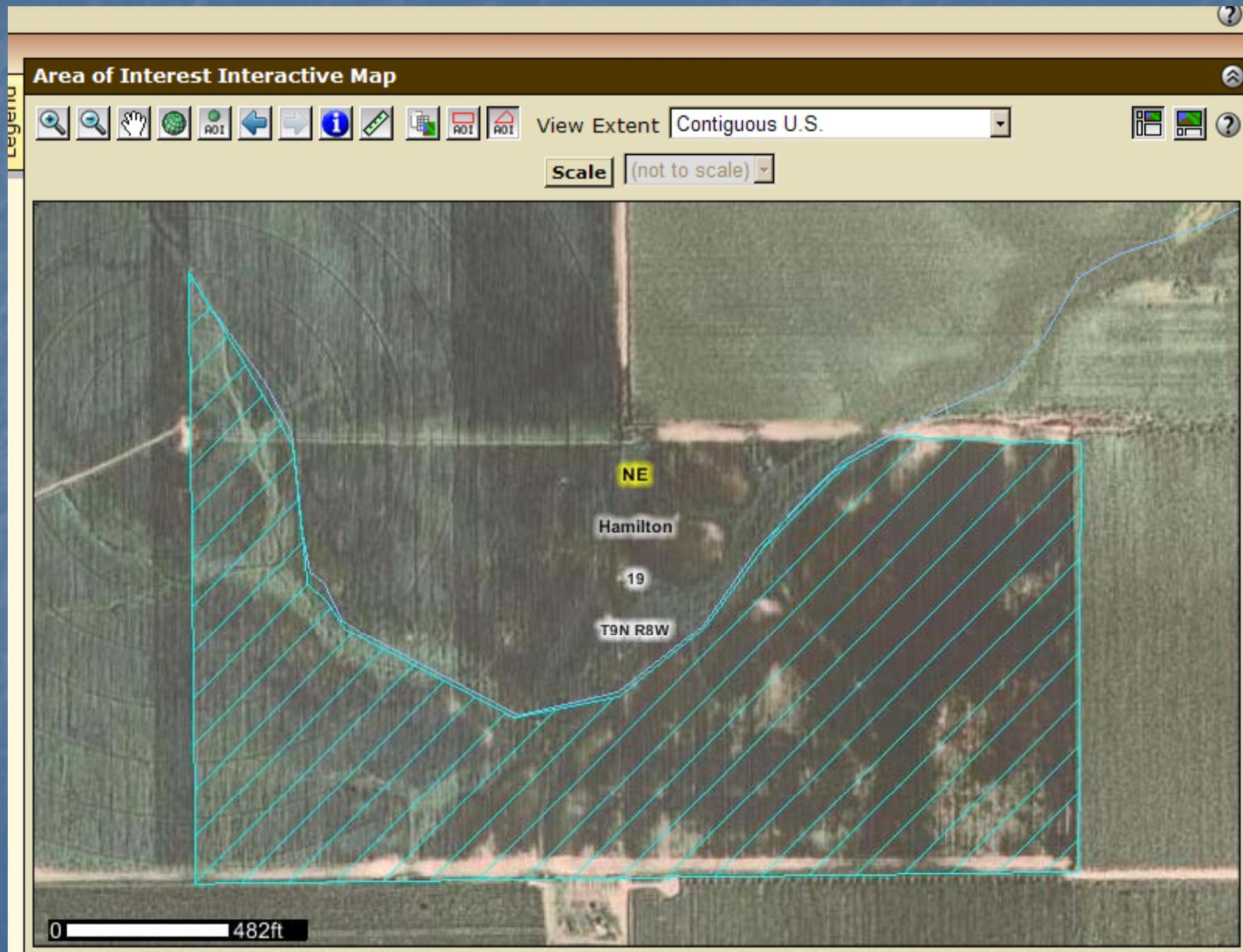
0 738ft

The screenshot shows the 'Area of Interest (AOI)' interface. On the left, there's a sidebar with sections for 'Search', 'Area of Interest' (with 'Open All' and 'Close All' buttons), 'AOI Properties' (with a 'Clear AOI' button), 'AOI Information' (showing 'Name' as an empty input field, 'Map Unit Symbols' set to 'Use Soil Survey Area Map Unit Symbols', and 'Area (acres)' as 87.1), 'Soil Data Available from Web Soil Survey' (listing 'Hamilton County, Nebraska (NE081)' with 'Spatial Data Version 2, Dec 11, 2007' and 'Tabular Data Version 8, Oct 30, 2009'), 'Import AOI' and 'Export AOI' buttons, and 'Quick Navigation' options for 'Address', 'State and County', 'Soil Survey Area', and 'Latitude and Longitude'. The main area is titled 'Area of Interest Interactive Map' and features a map of a rural area with fields and roads. A specific area is highlighted with a cyan diagonal hatched pattern. Labels on the map include '18', '4 Rd', '17', '19', 'B Rd', '20', 'Hamilton', 'T9N R8W', and 'NE'. A scale bar at the bottom indicates 0 to 738ft. A legend is located on the far left of the map area.

Define AOI – multi-sided polygon



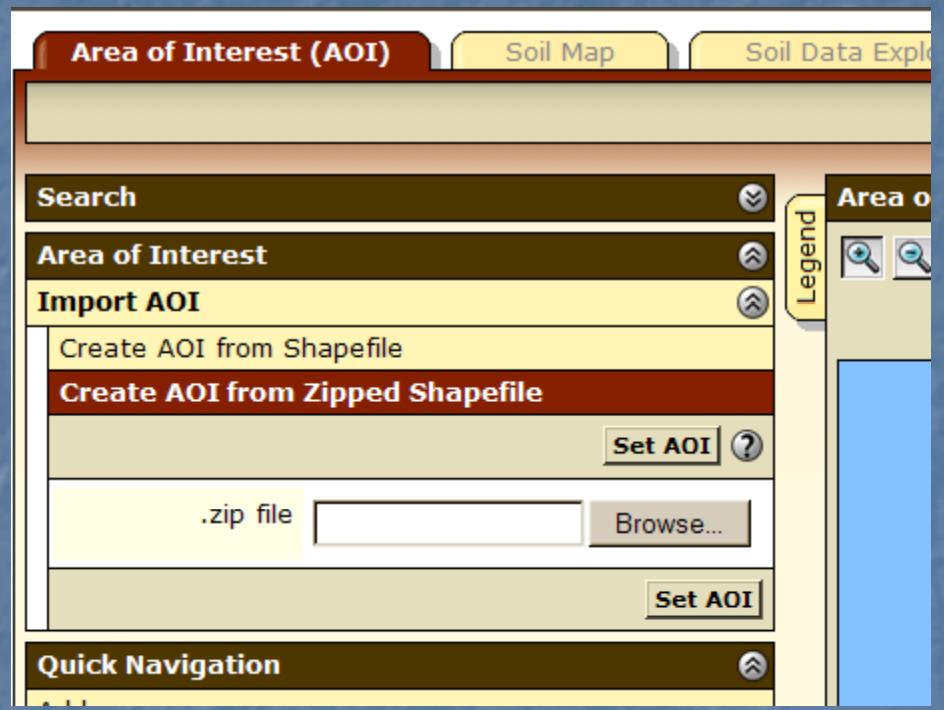
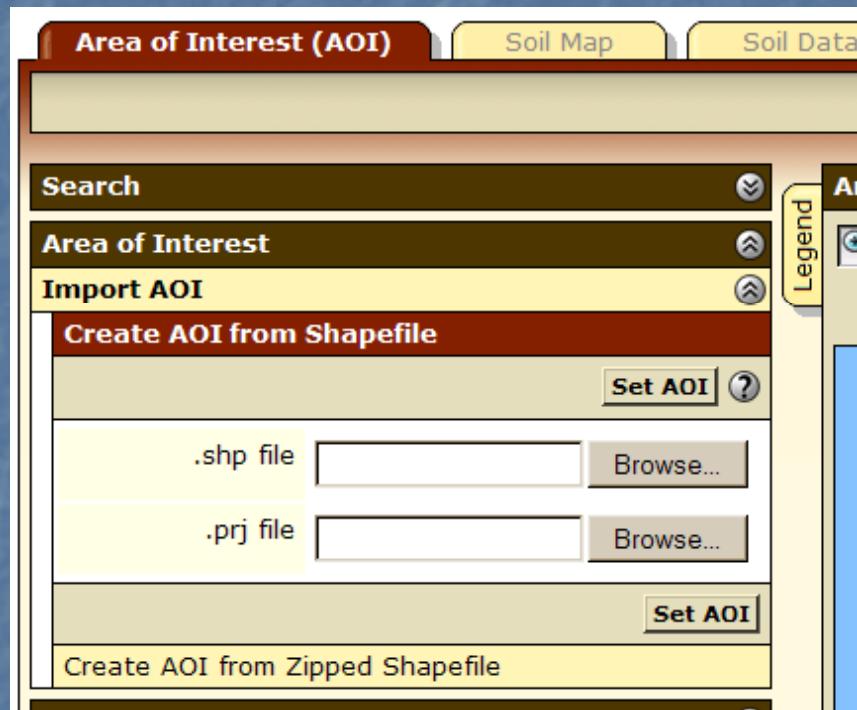
Selected AOI



Define AOI – import boundary

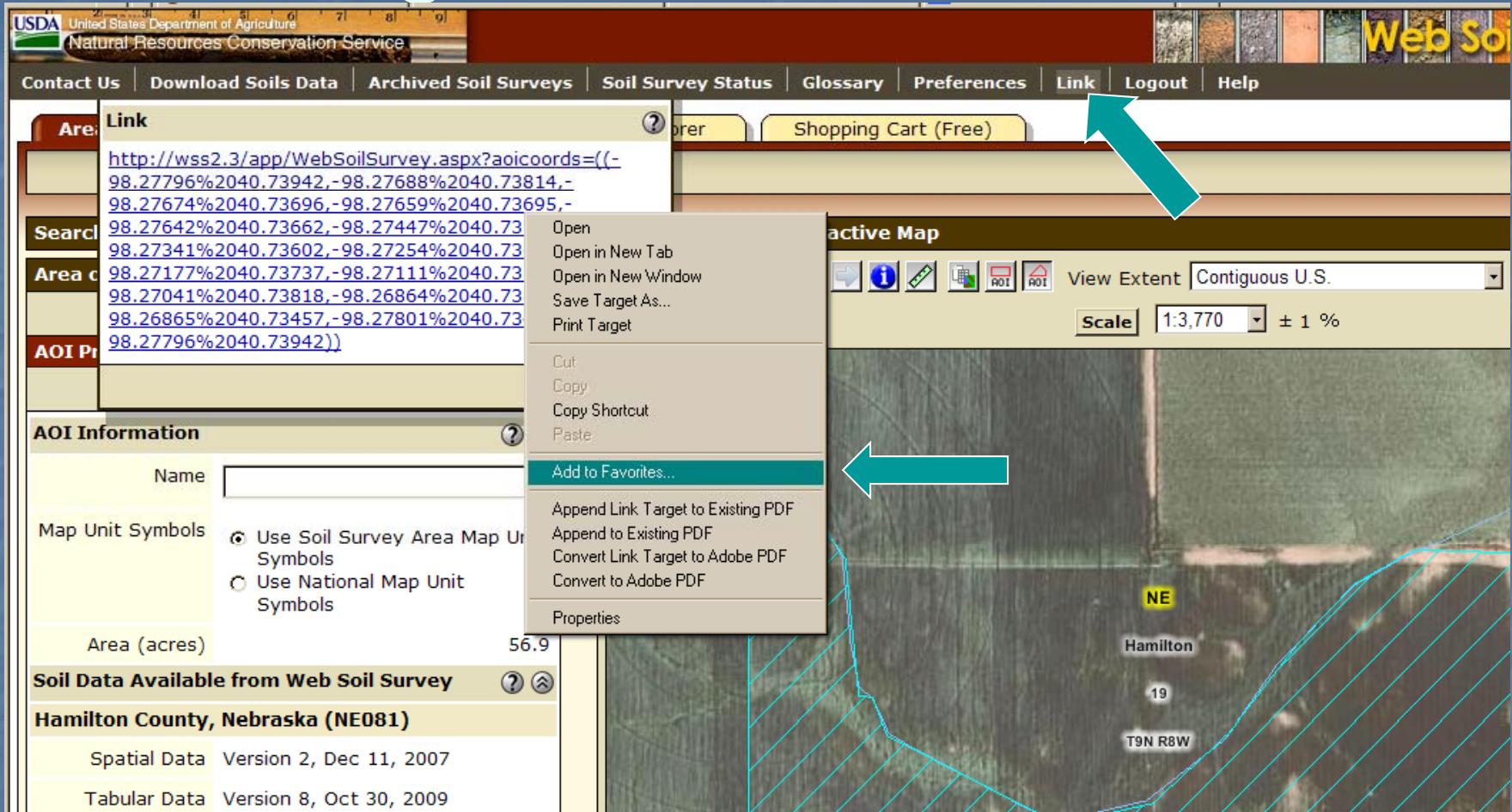
The screenshot shows the USDA Natural Resources Conservation Service Soil Survey Boundary Definition tool. The top navigation bar includes links for Contact Us, Download Soils Data, Archived Soil Surveys, Soil Survey Status, Glossary, Preferences, Link, and Log In. Below the navigation is a menu bar with tabs for Area of Interest (AOI), Soil Map, Soil Data Explorer, and Shopping Cart (Free). A large sidebar on the left contains sections for Search, Area of Interest, Import AOI (which is highlighted with a teal arrow), Create AOI from Shapefile, Create AOI from Zipped Shapefile, Quick Navigation (Address, State and County, Soil Survey Area), and a Legend section with various icons. To the right is the "Area of Interest Interactive Map" showing a satellite view of a coastal area with a red polygon representing the defined AOI. A scale bar is visible in the bottom right corner of the map.

Define AOI – import boundary



- Shapefiles can be imported from your local computer
- Shapefiles can be imported as zipped or unzipped files
- Use Browse button to find appropriate file(s)
- After file(s) have been identified, click Set AOI button

Saving AOI Link/bookmark

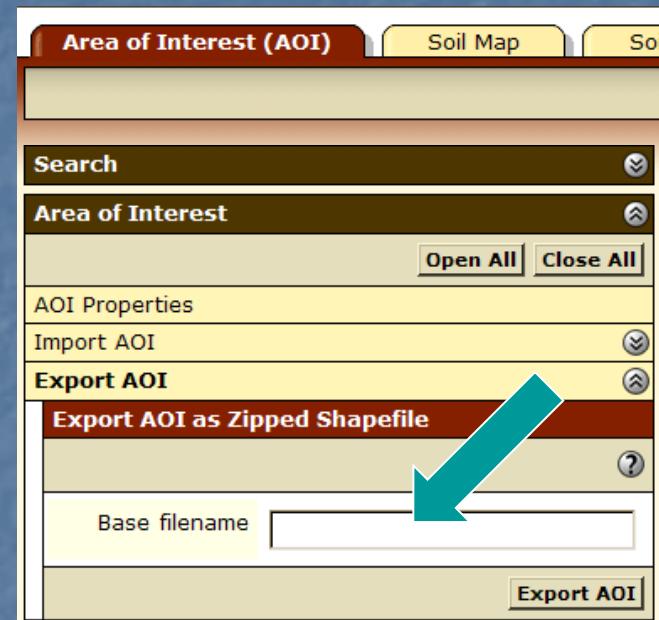
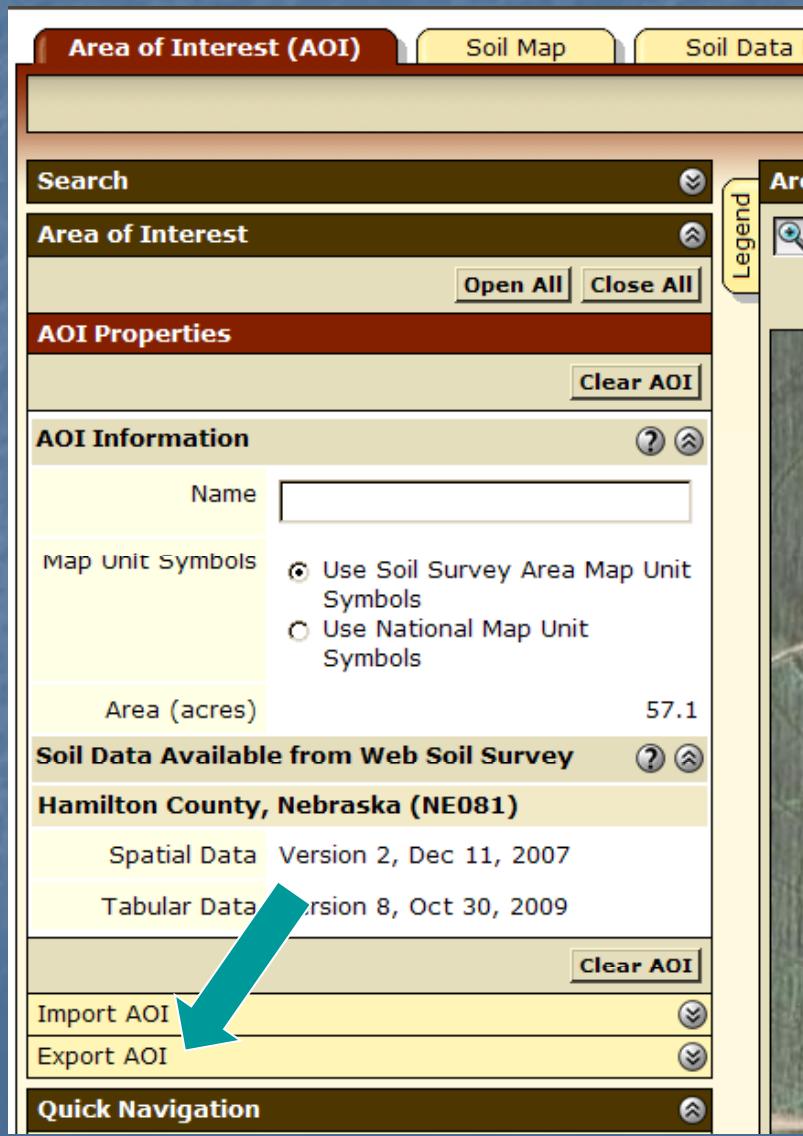


- Click **Link** option on Navigation bar. Dialog box opens showing URL of your WSS session with coordinates of the AOI boundary.
- Right click on the URL displayed and select **Add to Favorites**. Rename as appropriate.

Define AOI – use bookmarked link

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

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 filename; file is saved to your local computer.
- This file can later be imported into a future WSS session to return to this same AOI.

Explicitly clear the AOI

This screenshot shows the "Area of Interest (AOI)" interface for the Soil Data Explorer. The interface includes a toolbar at the top with tabs for "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer", and "Shopping Cart (Free)". Below the toolbar is a search bar and a legend. The main area is titled "Area of Interest Interactive Map". A large cyan arrow points from the "Clear AOI" button in the left sidebar to the "Clear AOI" button in the map toolbar.

Area of Interest (AOI)

Search

Area of Interest

Open All **Close All**

AOI Properties

Clear AOI

AOI Information

Name: []

Map Unit Symbols:

Use Soil Survey Area Map Unit Symbols
 Use National Map Unit Symbols

Area (acres): 57.6

Soil Data Available from Web Soil Survey

Hamilton County, Nebraska (NE081)

Spatial Data: Version 2, Dec 11, 2007
Tabular Data: Version 8, Oct 30, 2009

Clear AOI

Import AOI

Export AOI

Quick Navigation

Address

State and County

Area of Interest Interactive Map

Legend

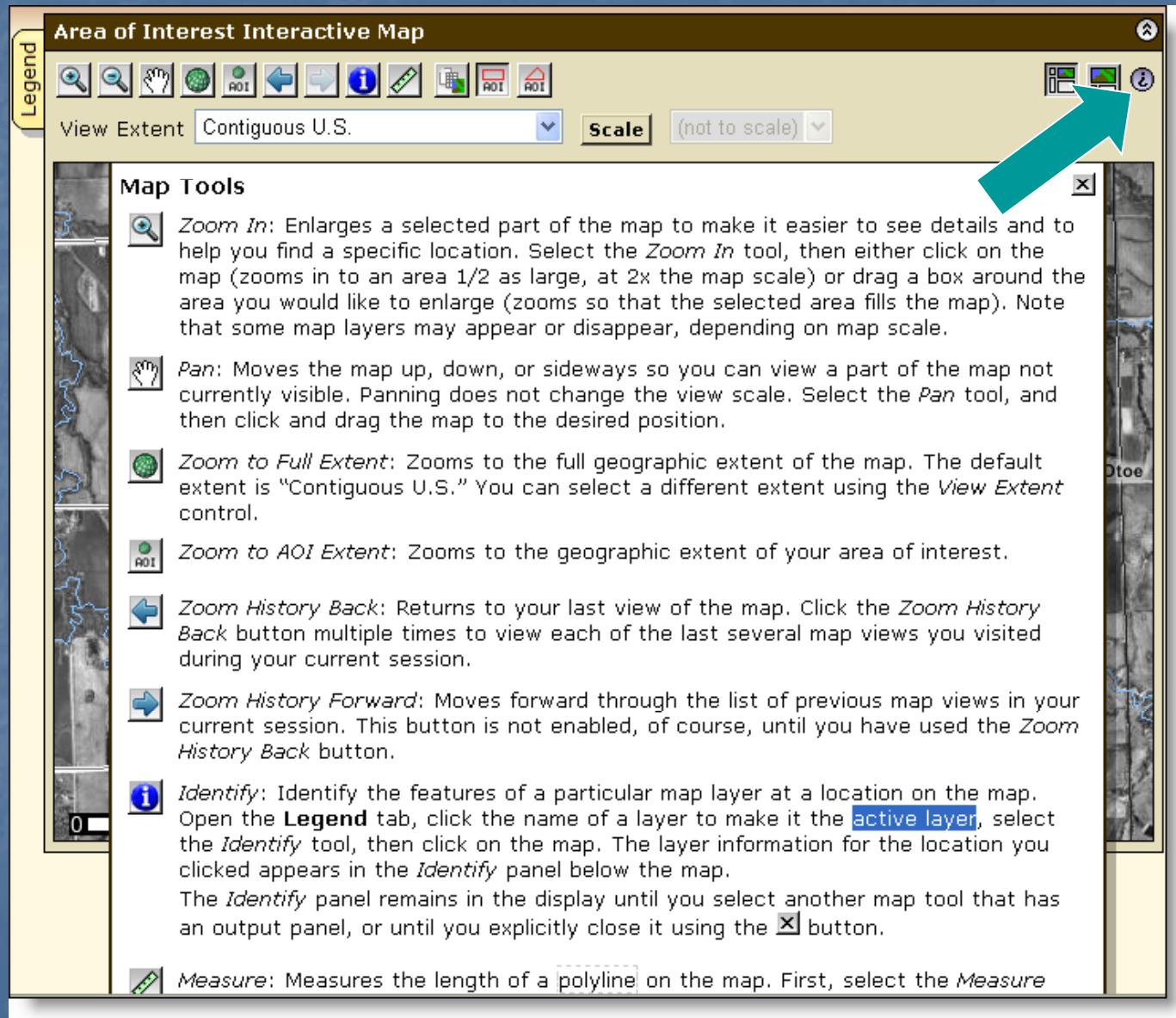
View Extent: Contiguous U.S.

Scale: 1:3,850 ± 1 %

Hamilton
19
T9N R8W
NE

0 485ft

AOI Interactive Map - Help



View Soil Map

The screenshot shows the Soil Data Explorer interface. A teal arrow points to the "Area of Interest (AOI)" tab in the top navigation bar. The main content area displays an "Area of Interest Interactive Map" for Hamilton County, Nebraska (NE081). The map shows a grid of agricultural fields with various soil survey symbols overlaid. Labels on the map include "Lepin Rd.", "Hall", "Hamilton", "A Rd.", "B Rd.", and "3 Rd.". Numbered labels 13, 18, 17, 24, 19, and 20 are placed near specific fields. A scale bar at the bottom left indicates 1471ft. The map also includes a legend with various icons and a "View Extent" dropdown set to "Contiguous U.S.". The left sidebar contains sections for "Search", "Area of Interest", "AOI Properties", "AOI Information" (with a "Name" field and "Map Unit Symbols" section), "Soil Data Available from Web Soil Survey" (listing "Hamilton County, Nebraska (NE081)" with "Spatial Data Version 2, Dec 11, 2007" and "Tabular Data Version 8, Oct 30, 2009"), "Import AOI", "Export AOI", "Quick Navigation" (with "Address", "State and County", and "Soil Survey Area" options), and "Soil Map" (which is currently active).

- Click Soil Map tab

Soil Map

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

Printable Version Add to Shopping Cart ?

Search

Map Unit Legend

Hamilton County, Nebraska (NE081)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3820	Butler silt loam, 0 to 1 percent slopes	2.2	0.2%
3824	Crete silt loam, 0 to 1 percent slopes	322.0	31.4%
3864	Hastings silt loam, 0 to 1 percent slopes	373.1	36.4%
3866	Hastings silt loam, 1 to 3 percent slopes	130.4	12.7%
3870	Hastings silty clay loam, 3 to 7 percent slopes, eroded	57.4	5.6%
3952	Fillmore silt loam, frequently ponded	19.2	1.9%
3953	Fillmore silt loam, drained, 0 to 1 percent slopes	10.8	1.1%
3962	Hastings silty clay loam, 7 to 10 percent slopes	106.4	10.4%

Soil Map

Legend

Scale: 1:12,500 ±1%

0 1471ft

View/Print Map Unit Description

The screenshot shows the USDA Natural Resources Conservation Service's Web Soil Survey interface. On the left, there's a sidebar with links like 'Contact Us', 'Download Soils Data', and 'Archived Soil Surveys'. Below that is a 'Map Unit Legend' and a table for 'Hamilton County, Nebraska (NE081)'. The table lists various map units with their names, descriptions, acres in AOI, and percent of AOI. A teal arrow points from the table to the 'Butler silt loam, 0 to 1 percent slopes' row. Another teal arrow points from the 'Printable Version' button in the top right of the main report window to the 'Printable Version' link in the top right of the sidebar.

Map Unit Legend

Hamilton County, Nebraska (NE081)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3820	Butler silt loam, 0 to 1 percent slopes		0.2%
3824	Crete silt loam, 0 to 1 percent slopes	322.0	31.4%
3864	Hastings silt loam, 0 to 1 percent slopes	373.1	36.4%
3866	Hastings silt loam, 1 to 3 percent slopes	130.4	12.7%
3870	Hastings silty clay loam, 3 to 7 percent slopes, eroded	57.4	5.6%
3952	Fillmore silt loam, frequently ponded	19.2	1.9%
3953	Fillmore silt loam, drained, 0 to 1 percent slopes	10.8	1.1%
3962	Hastings silty clay loam, 7 to 10 percent slopes	106.4	10.4%

Map Unit Description

Report – Map Unit Description

Hamilton County, Nebraska

3820—Butler silt loam, 0 to 1 percent slopes

Map Unit Setting

Elevation: 1,000 to 3,000 feet
Mean annual precipitation: 26 to 28 inches
Mean annual air temperature: 50 to 54 degrees F
Frost-free period: 155 to 175 days

Map Unit Composition

Butler and similar soils: 98 percent
Minor components: 2 percent

Description of Butler

Setting

Landform: Swales
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loess

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (*K_{sat}*): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water capacity: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 2w
Ecological site: Clayey (R075XY057NE)

- Click on map unit name at left to view map unit description report
- Click Printable Version to print – produces PDF file

Print Soil Map

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

Printable Version Add to Shopping Cart ?

Search

Map Unit Legend

Hamilton County, Nebraska (NE081)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3820	Butler silt loam, 0 to 1 percent slopes	2.2	0.2%
3824	Crete silt loam, 0 to 1 percent slopes	322.0	31.4%
3864	Hastings silt loam, 0 to 1 percent slopes	373.1	36.4%
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3953	Fillmore silt loam, drained, 0 to 1 percent slopes	10.8	1.1%
3962	Hastings silty clay loam, 7 to 10 percent slopes	106.4	10.4%

Legend

Soil Map Scale 1:12,500

13 18 3866
Lepin Rd 4 Rd 3866
3953 3864 3866
24 20
24 19 3824
3866 3864
0 1471ft 3 Rd

Print Options

Shopping Cart (Free)

Printable Version **Add to Shopping Cart**

Printable Version Options

Report Options

Title: Soil Map; Hamilton County, Nebraska

Subtitle (optional):

- Area of Interest Name: (none defined)
- Custom Subtitle:
- None

Map Options

Map Scale: **1:12,000** ← **Set map scale**

Printed Sheet Size: **A (8.5" × 11") — 4 sheets** ← **Select paper size**

Show UTM Coordinate Ticks:

Cancel **View**

19 2050

Explore Soil Information

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

Printable Version Add to Shopping Cart ?

Search

Map Unit Legend

Hamilton County, Nebraska (NE081)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3820	Butler silt loam, 0 to 1 percent slopes	2.2	0.2%
3824	Crete silt loam, 0 to 1 percent slopes	322.0	31.4%
3864	Hastings silt loam, 0 to 1 percent slopes	373.1	36.4%
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3952	Fillmore silt loam, frequently ponded	19.2	1.9%
3953	Fillmore silt loam, drained, 0 to 1 percent slopes	10.8	1.1%
3962	Hastings silty clay loam, 7 to 10 percent slopes	106.4	10.4%

Soil Map

Legend

Scale: 1:12,500 ±1%

The map displays soil polygons outlined in yellow, overlaid on a satellite image of the land. Roads are shown as black lines with labels like 'Lepin Rd', '4 Rd', '20', '3 Rd', and '1 Rd'. Specific soil units are labeled with codes such as 3820, 3824, 3864, 3866, 3870, 3952, 3953, and 3962. A cyan rectangular box highlights a specific area in the center-left of the map. A scale bar at the bottom left indicates 0 to 1471ft.

Soil Data Explorer Features

- Filter the soil information by land use category
- Learn the terminology and concepts of soils and specific land uses
- View interpretive soil data and soil properties in the form of thematic maps, tables, and text description
- Access ecological site information
- Print individual maps and reports
- Add content to free Shopping Cart

Soil Data Explorer - Help

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

Search

Suitabilities and Limitations Ratings

Open All Close All

- Building Site Development
- Construction Materials
- Disaster Recovery Planning
- Land Classifications
- Land Management
- Military Operations
- Recreational Development
- Sanitary Facilities
- Vegetative Productivity
- Waste Management
- Water Management

Legend

Soil Map

3

Explore.

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

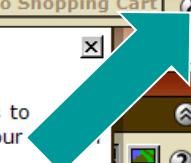
The Soil Data Explorer tab provides several ways of getting the information you need.

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



Soil Data Explorer - Intro

The screenshot shows the 'Soil Data Explorer' interface. At the top, there are four tabs: 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer' (which is the active tab), and 'Shopping Cart (Free)'. Below the tabs is a dropdown menu labeled 'View Soil Information By Use'. A teal arrow points to the 'Intro to Soils' link in the dropdown menu. The main content area has several tabs: 'Intro to Soils' (highlighted in red), 'Suitabilities and Limitations for Use', 'Soil Properties and Qualities', and 'Ecological Site'. On the left, there is a sidebar with 'Search' and 'Table of Contents' buttons, and a 'View Selected Topics' button with a question mark icon. The 'Table of Contents' sidebar lists various topics under 'All Uses': 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, Ground Covers for Steep Slopes, and Terracing.

Soil Data Explorer - Intro

The screenshot shows the 'Soil Data Explorer' interface. At the top, there are tabs for 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer' (which is selected), and 'Shopping Cart (Free)'. Below the tabs, a dropdown menu says 'View Soil Information By Use: All Uses'. To the right are buttons for 'Printable Version', 'Add to Shopping Cart', and a help icon.

The main content area has a brown header bar with tabs: 'Intro to Soils', 'Suitabilities and Limitations for Use', 'Soil Properties and Qualities', 'Ecological Site Assessment', and 'Soil Reports'. On the left, there's a sidebar with 'Search' and 'Table of Contents' sections. A large red arrow points from the 'Cropland' checkbox in the sidebar to the 'View Selected Topics' button. Another red arrow points from the 'View Selected Topics' button to the 'Content' area.

Content Area:

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 shows the 'Soil Data Explorer' tab selected in the top navigation bar. On the left, there's a sidebar with links like 'Intro to Soils', 'Suitabilities & Limitations', 'Search', and 'Table of Contents'. The main content area has a dropdown menu titled 'View Soil Information By Use' with options: All Uses, Cropland, Forestland, Hayland/Pastureland, Horticulture, Rangeland, Recreation, and Urban Uses. The 'Forestland' option is highlighted with a blue selection bar. A large green arrow points from the text below to this 'Forestland' option. The sidebar also contains a 'View Selected Topics' link.

View Soil Information By Use: All Uses

- 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

- Select a specific land use from drop down list to filter content on the Soil Data Explorer tab.

Forestland Information

The screenshot shows a software interface titled "Soil Data Explorer". At the top, there are tabs for "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer" (which is active), and "Search". Below the tabs, a dropdown menu says "View Soil Information By Use: Forestland". The main content area has tabs for "Intro to Forestland", "Suitabilities and Limitations for Use", and "Soil Properties". On the left, there's a sidebar with "Search" and "Table of Contents" buttons. The "Table of Contents" section contains a "View Selected Topics" button and a list of topics under "Forestland". A large teal arrow points from a callout box to this list.

View Soil Information By Use: Forestland

Intro to Forestland Suitabilities and Limitations for Use Soil Properties

Search Table of Contents View Selected Topics ?

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?

View Selected Topics

List of topics
narrowed to those
related to Forestland.

Shopping Cart

The screenshot shows the Soil Data Explorer interface with the following elements:

- Top Navigation Bar:** Includes tabs for "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer" (highlighted in red), "Shopping Cart (Free)", "Printable Version", and "Add to Shopping Cart".
- Search and Table of Contents:** On the left, there's a search bar and a "Table of Contents" section with a "View Selected Topics" link.
- Content Panel:** The main content area is titled "Content" and "All Uses".
 - Cropland:** Definition: 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

- Any material displayed in right-hand panel (intro text, maps, tables, etc) can be added to the free Shopping Cart for later retrieval. All added content is bundled into a single PDF file for download or printing.

Suitabilities and Limitations

The screenshot displays the Soil Data Explorer interface. At the top, there are tabs for "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer" (which is selected), and "Shopping Cart (Free)". Below the tabs, a dropdown menu shows "View Soil Information By Use: All Uses". On the right, there are buttons for "Printable Version", "Add to Shopping Cart", and a help icon.

The main content area has several sections:

- Intro to Soils**
- Suitabilities and Limitations for Use** (highlighted in red)
- Soil Properties and Qualities**
- Ecological Site Assessment**
- Soil Reports**

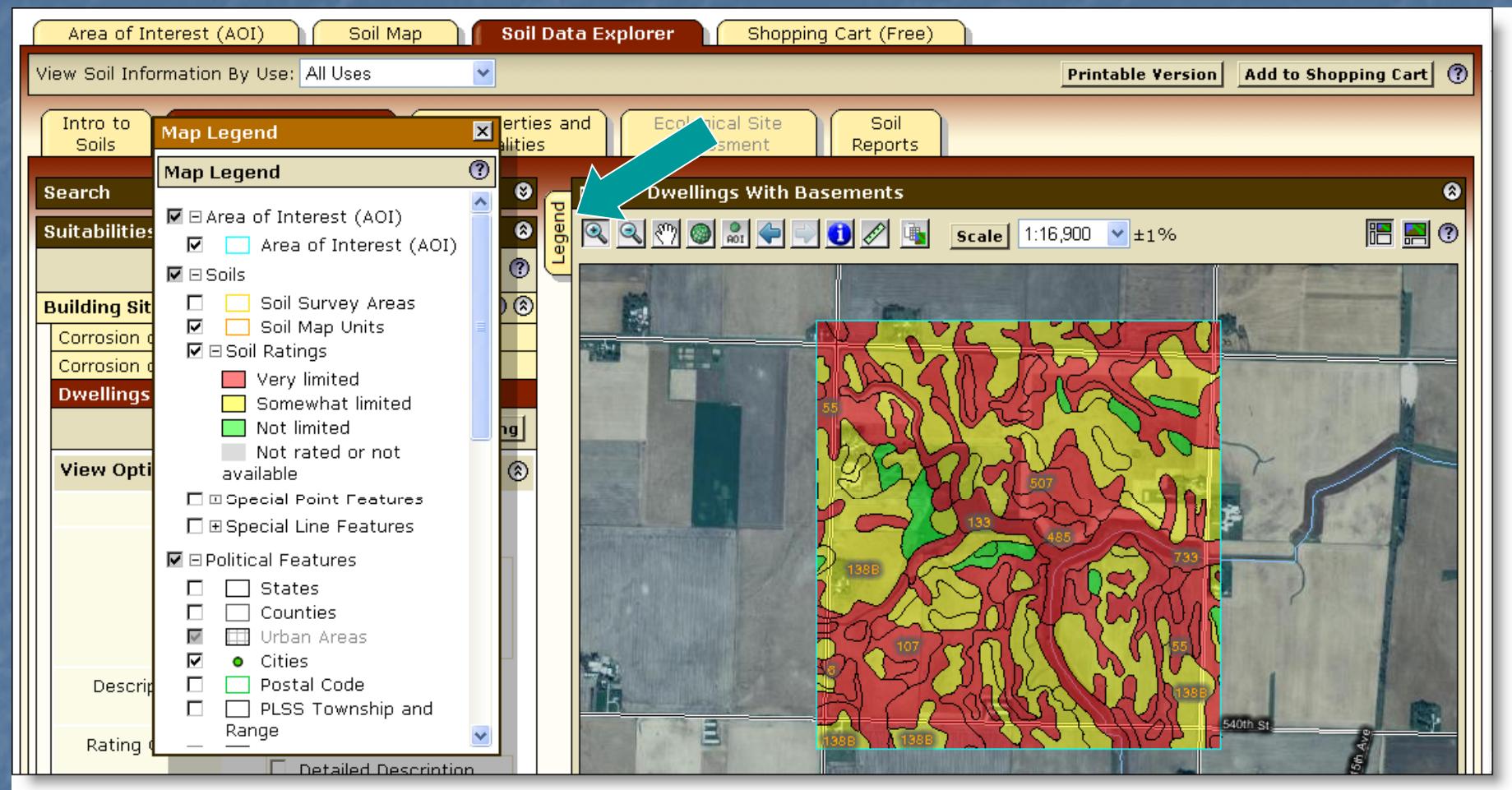
Suitabilities and Limitations Ratings section:
Building Site Development
Dwellings With Basements (highlighted in red)
Buttons: Open All, Close All, View Description, View Rating

View Options section:
Map
Table
Description of Rating
Rating Options
Checkboxes: Component Breakdown and Rating Reasons, Numeric Values
Buttons: Detailed Description

Soil Map section: A map showing soil interpretations. A cyan arrow points from the "Dwellings With Basements" category in the left sidebar to the map area. The map includes contour lines, roads, and a cyan-bordered rectangular area highlighting specific soil characteristics. A legend is located at the top left of the map area.

- Display a variety of interpretations as a thematic map.
- Open a category folder, then select desired interpretation. Click View Rating

Display Interpretive Map



- Click Legend tab to display map legend. Table below map shows rating and limiting features of each soil in Summary Report.

Summary Report

Tables — Dwellings With Basements — Summary By Map Unit						
Summary by Map Unit — Buena Vista County, Iowa						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
6	Okoboji silty clay loam, 0 to 1 percent slopes	Very limited	Okoboji, ponded (95%)	Depth to saturated zone (1.00)	2.7	0.3%
			Knoke, ponded (5%)	Shrink-swell (1.00)		
				Ponding (1.00)		
				Depth to saturated zone (1.00)	201.2	25.5%
				Shrink-swell (1.00)		
34B	Estherville sandy loam, 2 to 5 percent slopes	Not limited	Estherville (90%)		1.3	0.2%
55	Nicollet loam, 1 to 3 percent slopes	Very limited	Nicollet (90%)	Depth to saturated zone (1.00)		
62C	Storden loam, 5 to 9 percent slopes	Not limited	Storden (85%)		25.3	3.2%
62D	Storden loam, 9 to 14 percent slopes	Somewhat limited	Storden (85%)	Slope (0.63)	10.8	1.4%
62E	Storden loam, 14 to 18 percent slopes	Very limited	Storden (85%)	Slope (1.00)	2.2	0.3%
73C	Salida gravelly	Not limited	Salida (90%)		1.1	0.1%

Interpretation Description and Rating Options Used

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** 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

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

Legend

Scale: 1:16,900 ±1% [Printable Version](#) [Add to Shopping Cart](#) ?

Soil Map

Scale: 1:16,900 ±1%

Printable Version Add to Shopping Cart ?

55 507 133 485 733
138B 107 55
138B 138B 138B

540th St. 1st Ave.

Select Property or Quality

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

Properties and Qualities Ratings

Open All Close All ?

- Soil Chemical Properties
- Soil Erosion Factors
- Soil Physical Properties

Soil Qualities and Features

- AASHTO Group Classification (Surface)
- Depth to a Selected Soil Restrictive Layer
- Depth to Any Soil Restrictive Layer

Drainage Class

[View Description](#) [View Rating](#)

View Options

Map Table Description of Rating Rating Options
 Detailed Description

Advanced Options

Legend Soil Map Scale 1:16,900 ±1% ?



Display Results

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 Search Properties Ecological Site Assessment Soil Reports

Map Legend

Area of Interest (AOI) Area of Interest (AOI)

Soils

- Soil Survey Areas
- Soil Map Units
- Soil Ratings

Excessively drained Somewhat excessively drained Well drained Moderately well drained Somewhat poorly drained Poorly drained Very poorly drained Not rated or not available

Special Point Features Special Line Features

Political Features

- States
- ...

Rating Options Detailed Description

Advanced Options [?](#) [@](#)

Map — Drainage Class

Legend Scale: 1:16,900 ±1% [Printable Version](#) [Add to Shopping Cart](#) [?](#)

Tables — Drainage Class — Summary By Map Unit

Tables – Drainage Class – Summary By Map Unit

Summary by Map Unit – Buena Vista County, Iowa

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6	Okoboji silty clay loam, 0 to 1 percent slopes	Very poorly drained	2.7	0.3%
34B	Estherville sandy loam, 2 to 5 percent slopes	Somewhat excessively drained	1.3	0.2%
55	Nicollet loam, 1 to 3 percent slopes	Somewhat poorly drained	201.2	25.5%
62C	Storden loam, 5 to 9 percent slopes	Well drained	25.3	3.2%
62D	Storden loam, 9 to 14 percent slopes	Well drained	10.8	1.4%
62E	Storden loam, 14 to 18 percent slopes	Well drained	2.2	0.3%
73C	Salida gravelly sandy loam, 5 to 9 percent slopes	Excessively drained	1.1	0.1%
107	Webster silty clay loam, 0 to 2 percent slopes	Poorly drained	93.3	11.8%
133	Colo silty clay loam, 0 to 2 percent slopes	Poorly drained	14.2	1.8%
138B	Clarion loam, 2 to 5 percent slopes	Well drained	277.7	35.2%
138C2	Clarion loam, 5 to 9 percent slopes, moderately eroded	Well drained	54.5	6.9%
203	Cylinder loam, deep, 0 to 2 percent slopes	Somewhat poorly drained	3.2	0.4%

Change Land Uses

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

View Soil Information By Use: Cropland Printable Version Add to Shopping Cart

Intro to Cropland **Suitabilities and Limitations for Use** 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
- Vegetative Productivity
- Waste Management
- Water Management

Soil Map

Legend

Scale: 1:16,900 ±1%

List changes according to land use

Ecological Site Name Map

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

View Soil Information By Use: Rangeland [Printable Version](#) [Add to Shopping Cart](#) [?](#)

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

Search [Open All](#) [Close All](#) [?](#)

Suitabilities and Limitations Ratings [Open All](#) [Close All](#) [?](#)

Building Site Development [?](#) [?](#)

Disaster Recovery Planning [?](#) [?](#)

Land Classifications [?](#) [?](#)

Ecological Site ID

Ecological Site Name

[View Description](#) [View Rating](#)

View Options [?](#) [?](#)

Map

Table

Description of Rating

Rating Options Detailed Description

Basic Options [?](#)

Map — Ecological Site Name: NRCS Rangeland Site

Legend

Scale 1:21,300 ±1% [Printable Version](#) [Add to Shopping Cart](#) [?](#)

Antelope Creek

Ecological Site Assessment

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

View Soil Information By Use: Rangeland [Printable Version](#) [Add to Shopping Cart](#) [?](#)

Intro to Rangeland Suitabilities and Limitations for Use Soil Properties and Qualities **Ecological Site Assessment** [Soil Reports](#)

Search [Open All](#) [Close All](#)

Ecological Sites

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](#)

R067BY047CO — Alkaline Plains
R069XY006CO — Loamy Plains
R069XY026CO — Sandy Plains
R069XY053CO — Sandstone Breaks

Map — Dominant Ecological Site — Rangeland

Legend Scale: 1:21,300 ±1% [Printable Version](#) [Add to Shopping Cart](#) [?](#)

Map showing Dominant Ecological Site — Rangeland. The map displays a landscape with several ecological site components labeled: BaA, Tr, ToG, MaC, DaB, ToC, KmB, BaG, Du, and BaA. A scale bar indicates 0 to 2319ft. An arrow points to the 'Soil Reports' button in the top menu.

Table — Ecological Sites by Map Unit Component — Rangeland

View Soil Data Reports

The screenshot shows the 'Soil Reports' tab selected in a top navigation bar. On the left, a vertical sidebar lists various soil-related categories with 'View Description' and 'View Soil Report' buttons. A large central area displays a soil map with contour lines and soil sample locations marked by triangles. A cyan arrow points from the 'Chemical Soil Properties' section of the sidebar to the map. The map includes labels for roads like 'Lepin Rd', 'A Rd', 'B Rd', and '4 Rd', and soil profiles labeled with numbers such as 3866, 3953, 18, 3866, 3864, 3862, 3866, 3864, 19, 3824, 3866, 3864, 3864, 3870, 20, 3952, and 3862. A scale bar at the bottom indicates 1494ft.

Chemical Soil Properties Report

Report – Chemical Soil Properties								
Hamilton County, Nebraska								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100g	meq/100g	pH	Pct	Pct	mmhos/cm	
3820—Butler silt loam, 0 to 1 percent slopes								
Butler	0-11	18-27	—	5.1-6.5	0	0	0	0
	11-32	30-40	—	5.6-7.8	0	0	0	0
	32-80	20-35	—	6.6-8.4	0-5	0	0	0
3824—Crete silt loam, 0 to 1 percent slopes								
Crete	0-11	16-23	—	5.1-6.5	0	0	0	0
	11-14	20-31	—	5.6-6.0	0	0	0	0
	14-27	29-41	—	5.6-7.8	0	0	0	0
	27-30	19-33	—	7.4-8.4	1-5	0	0	0
	30-80	10-20	—	6.6-8.4	0-10	0	0	0-1
3864—Hastings silt loam, 0 to 1 percent slopes								
Hastings	0-12	22-31	—	5.1-6.5	0	0	0	0
	12-32	27-33	—	6.1-7.8	0	0	0	0
	32-40	25-30	—	6.1-8.4	0-5	0	0	0
	40-80	24-27	—	6.6-8.4	0-5	0	0	0
3866—Hastings silt loam, 1 to 3 percent slopes								
Hastings	0-12	22-31	—	5.1-6.5	0	0	0	0

- Report is displayed below the soil map.

Access Archived Soil Survey Publications



- A listing of previous soil survey report publications for the Area of Interest is stored on an external web site. Click the highlighted link to go there.



Search

Soils

Enter Keywords

Soil Survey

- ▶ Web Soil Survey
- ▶ Soil Data Mart
- ▶ Listing Of Soil Surveys by State
- ▶ Status Maps
- ▶ Soil Survey Schedule
- ▶ Global Climate Change
- ▶ National Soil Characterization Data
- ▶ Soil Climate Research Stations
- ▶ Soil Geochemistry Spatial Database
- ▶ Soil Research Results
- ▶ Soil Geography
- ▶ eFOTG (county technical guides)

Published Soil Surveys for Colorado

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
655 Parfet Street
Room E200C
Lakewood, CO 80215-5521
Phone: 720-544-2810
FAX: 720-544-2965

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 Area, Parts of Adams and Denver Counties	Current	No	No	No	Yes
Adams County	1974	No	Yes	Yes	No

Access Glossary of Terms

The screenshot shows the USDA Natural Resources Conservation Service's Web Soil Survey website. A large teal arrow points from the top right towards the 'Glossary' link in the top navigation bar.

Top Navigation Bar:

- Contact Us
- Download Soils Data
- Archived Soil Surveys
- Soil Survey Status
- Glossary
- Preferences
- Link
- Logout
- Help

Left Sidebar:

- Area of Interest (AOI)
- Soil Map
- View Soil Information By Use: All Uses
- Intro to Soils
- Suitabilities and Limitations
- Search**
- Soil Reports**
 - Open All
 - Close
- 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](#)
- Options**
 - Include Minor Soils
- [View Description](#)
- [View Soil](#)

Middle Content Area:

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.

Alluvial fan

Right Sidebar:

- Table Version
- Add to Shopping Cart
- Soil Reports**
-

Access the Free Shopping Cart

The screenshot shows the 'Soil Data Explorer' software interface. At the top, there is a navigation bar with tabs: 'Area of Interest (AOI)', 'Soil Map', 'Soil Data Explorer', and 'Shopping Cart (Free)'. The 'Shopping Cart (Free)' tab is highlighted with a red background and white text. In the top right corner, there are buttons for 'Check Out' and a question mark icon.

Title

Title: Custom Soil Resource Report for Bent County, Colorado

Subtitle:

- Area of Interest Name: (none defined)
- Custom Subtitle:
[Text input field]
- None

Size

Total Size: 984 KB (1.0 MB)

Map Options

Map Scale: Automatic

Printed Sheet Size: A (8.5" x 11") — 1 sheet

Show UTM Coordinate Ticks:

Table of Contents

Custom Soil Resource Report for Bent 984 KB

Enter Subtitle if desired.

Choose map scale and paper size.

Table of Contents shows content of Shopping Cart

Table of Contents

Table of Contents	
<input checked="" type="checkbox"/>	Custom Soil Resource Report for Lancaster County, Nebraska: Knox Place
<input checked="" type="checkbox"/>	Cover 518 KB
<input checked="" type="checkbox"/>	Preface 3 KB
<input checked="" type="checkbox"/>	Contents 1 KB
<input checked="" type="checkbox"/>	How Soil Surveys Are Made 5 KB
<input checked="" type="checkbox"/>	Soil Map 411 KB
<input checked="" type="checkbox"/>	Soil Map 381 KB
<input checked="" type="checkbox"/>	Map Unit Legend 4 KB
<input checked="" type="checkbox"/>	Map Unit Description 27 KB
<input checked="" type="checkbox"/>	Soil Data Explorer 1,140 KB
<input type="checkbox"/>	All Uses
<input type="checkbox"/>	Cropland
<input type="checkbox"/>	Forestland
<input type="checkbox"/>	Hayland/Pastureland
<input type="checkbox"/>	Horticulture
<input checked="" type="checkbox"/>	Rangeland 1,140 KB
<input type="checkbox"/>	Intro to Rangeland
<input checked="" type="checkbox"/>	Suitabilities and Limitations for Use 762 KB
<input checked="" type="checkbox"/>	Building Site Development 383 KB
<input checked="" type="checkbox"/>	Dwellings without Basements 383 KB
<input checked="" type="checkbox"/>	Land Classifications 379 KB
<input checked="" type="checkbox"/>	Ecological Site Name: NRCS Rangeland Site 379 KB
<input checked="" type="checkbox"/>	Ecological Site Assessment 378 KB
<input checked="" type="checkbox"/>	All Ecological Sites 378 KB
<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Urban Uses
<input checked="" type="checkbox"/>	References 3 KB
<input type="checkbox"/>	Glossary 113 KB

Soil map, map unit legend, and map unit descriptions are automatically added.

Items can be deselected by unchecking them on the list if you decide you do not want to get them. Additional items must be added in previous screens.

Preview an Item

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

Check Out ?

Search

Report Properties

Table of Contents

Custom Soil Resource Report for Bent County, Colorado 971 KB

- Cover 518 KB
- Preface 3 KB
- Contents 0 KB
- How Soil Surveys Are Made 5 KB
- Soil Map 416 KB
- Soil Map 379 KB
- Map Unit Legend 3 KB
- Map Unit Description 33 KB

Soil Data Explorer 24 KB

All Uses 24 KB

Soil Properties and Qualities 24 KB

Soil Qualities and Features 24 KB

- Map Unit Name 12 KB
- Hydrologic Soil Group 13 KB

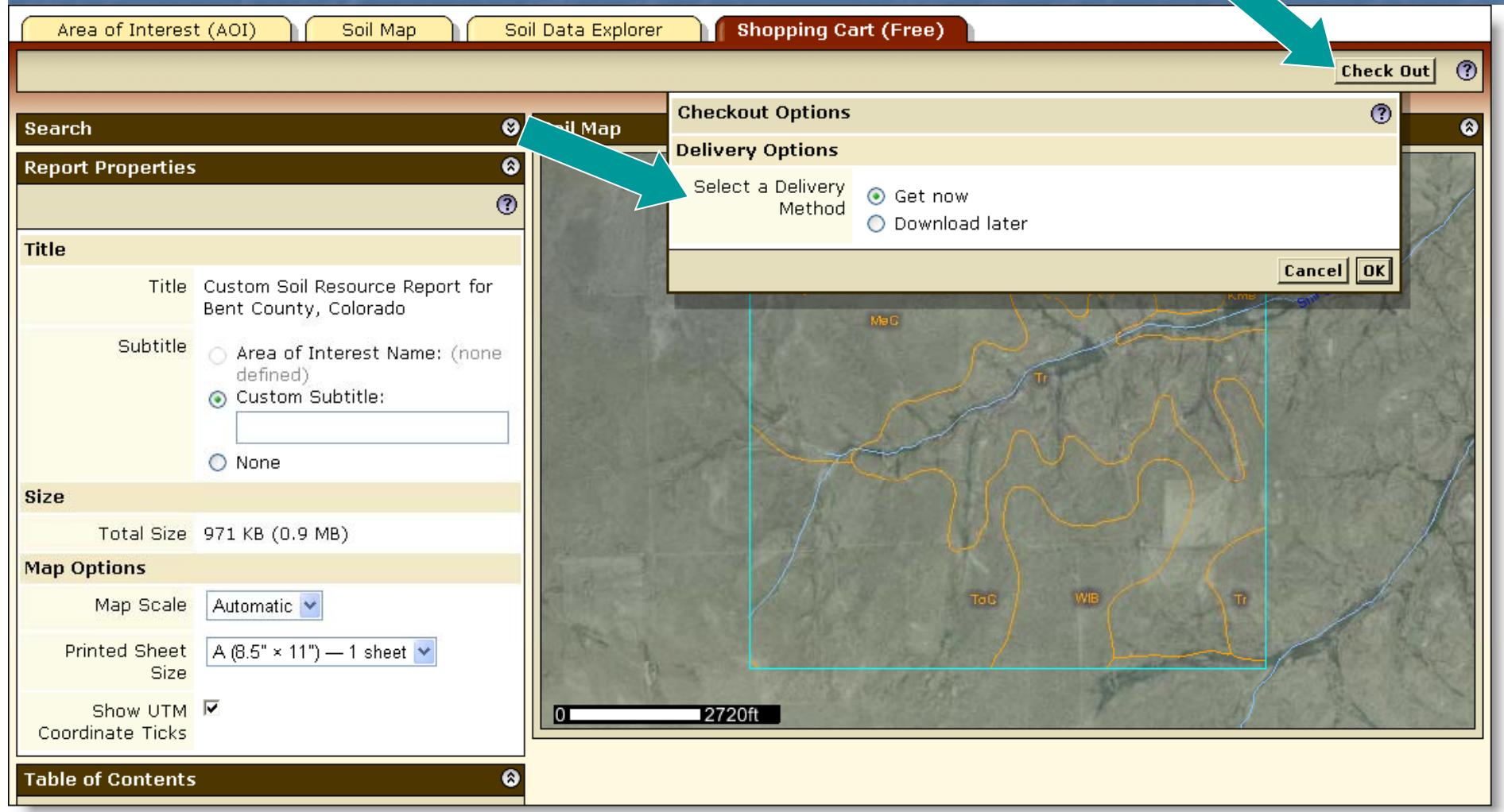
References 3 KB

Glossary 113 KB

Soil Map

Click on an item to preview it.

Check Out



- During Check Out you can elect to get the file now or later.
- Then click OK.

Custom Soil Resource Report being generated

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

Check Out ?

Search

Report Properties

Title

Title: Custom Soil Resource Report for Bent County, Colorado

Subtitle:

- Area of Interest Name: (none defined)
- Custom Subtitle:
- None

Size

Total Size 971 KB (0.9 MB)

Map Options

Map Scale

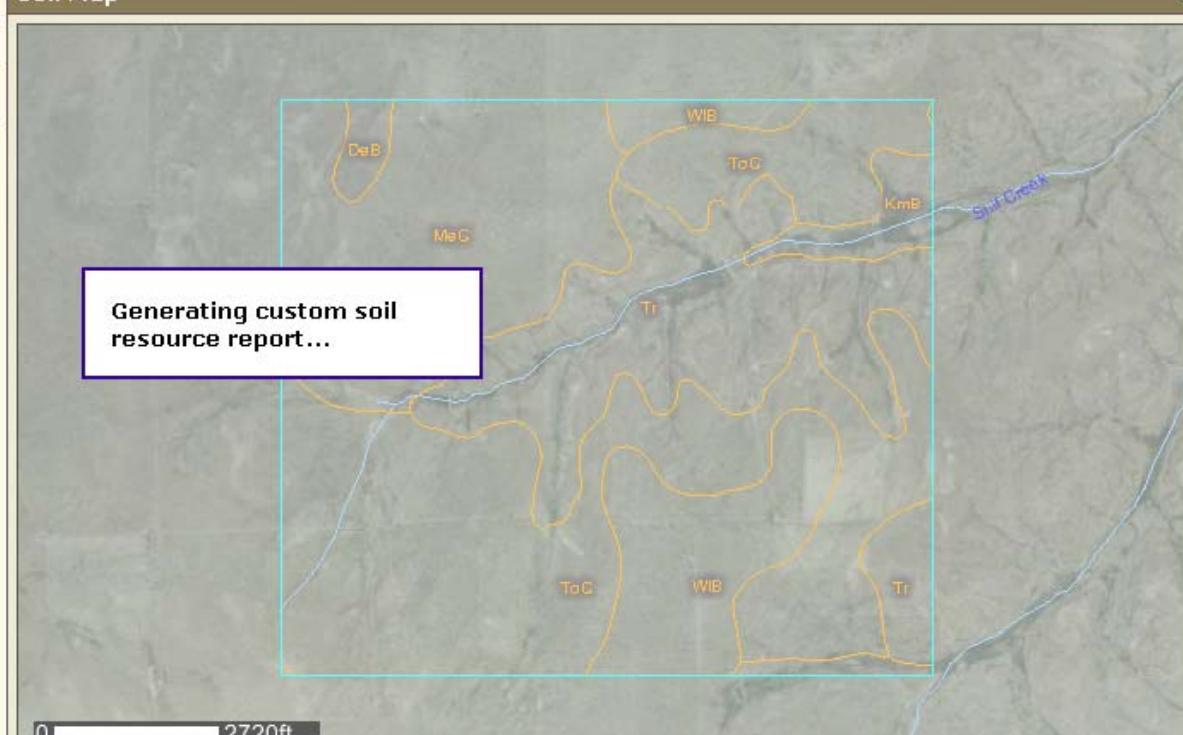
Printed Sheet Size

Show UTM Coordinate Ticks

Table of Contents

Soil Map

Generating custom soil resource report...



0 2720ft

Custom Soil Resource Report

1 / 28 | 47.5% | Find

Bookmarks

- Cover
- Preface
- Contents
- How Soil Surveys Are Made
- Soil Map
 - Soil Map
 - Legend
 - Map Unit Legend
- Map Unit Descriptions
 - Bent County, Colorado

Version date: 1/17/2008
2:11:34 PM

- DeB—Deer trail clay loam, 0 to 5 percent slopes
- KmB—Kim loam, 0 to 5 percent slopes
- MoC—Minne

Custom Soil Resource Report for Bent County, Colorado

USDA United States Department of Agriculture NRCS Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants