



How to Gather Site Data

From Google Earth Pro and Other
Sources





Downloading Google Earth Pro





Download

Home Explore Learn Connect

Download the latest version of Google Earth for PC, Mac, or Linux

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As a condition of downloading, accessing...

Customize your installation of Google Earth

Agree and Download

For the free download version that we use, go to: <https://www.google.com/earth/download/gep/agree.html>
Click Agree and Download to download google earth

System requirements

- PC - Windows XP, Vista, or Windows 7
- Mac - Mac OS X 10.5 or later
- Linux - LSB 4.0 (Linux Base) libraries

New in this version

- Take flight over new...
- Discover famous sig...



Install Google Earth Pro

- Find GoogleEarthProSetup.exe where you downloaded it. The default location is your Downloads folder.
- Double click the file to open, and work through the dialogues to install the program.





Downloading the water features to use in Google Earth Pro



Related Topics: [Water Data and Tools](#)[CONTACT US](#)[SHARE](#)

Viewing WATERS Data using Google Earth

- [Description](#)
- [Download](#)
- [Interface Overview](#)
- [Available Data](#)
- [Metadata](#)
- [Usage Notes](#)
- [Terms of Use and Disclaimer](#)
- [Changelog](#)

Desc

The WATE
services.

To get sta

Go to:

<https://www.epa.gov/waterdata/viewing-waters-data-usi>

Click the link to download the Watershed Maps.

Data is continually updated, as of the creation of this document now 2.0. Whatever .kmz file is in this download box should

Download

Download

[WATERSKMZ Tool v1.9.kmz](#) (350 KB, 12/15/2017)



Adding the Water features application to Google Earth Pro

- Find WATERSKMZ v2.0.kmz (as it is continually updated the name may be similar but slightly different) where you downloaded it. The default location is your Downloads folder.
- Double click the file, and it will open in Google Earth Pro



Google Earth Pro

File Edit View Tools Add Help

Search

ex: 15213

Get Directions History

Places

- SchoolDistricts
- AA LandUse
- Schools
- Parks
- Lakes
- Streams
- Temporary Places
- Earth Point Topo Map
- USGS Quadrangles
- WATERS Feature Layers**
- Surfacewater Features
- Streams
- Canals
- Pipelines
- Waterbodies
- Coastlines
- Catchments
- Hydrologic Unit
- Legend
- EPA Linked Data
- 303(d) Listed Im

Layers

- Primary Database
- The new Google Earth
- Borders and Labels
- Places
- Photos
- Roads
- 3D Buildings
- Ocean
- Weather
- Gallery
- Global Awareness
- More
- Terrain

Pipelines
 Waterbodies
 Coastlines
 Catchments
 Hydrologic Units

EPA Linked Data
 303(d) Listed Impaired Waters
 305(b) Assessed Waters
 Beaches
 Clean Watersheds Needs Survey
 Facilities that Discharge to Water
 Fish Consumption Advisories
 Fish Tissue Data
 TMDLs on Impaired Waters
 Monitoring Locations
 Nonpoint Source Projects

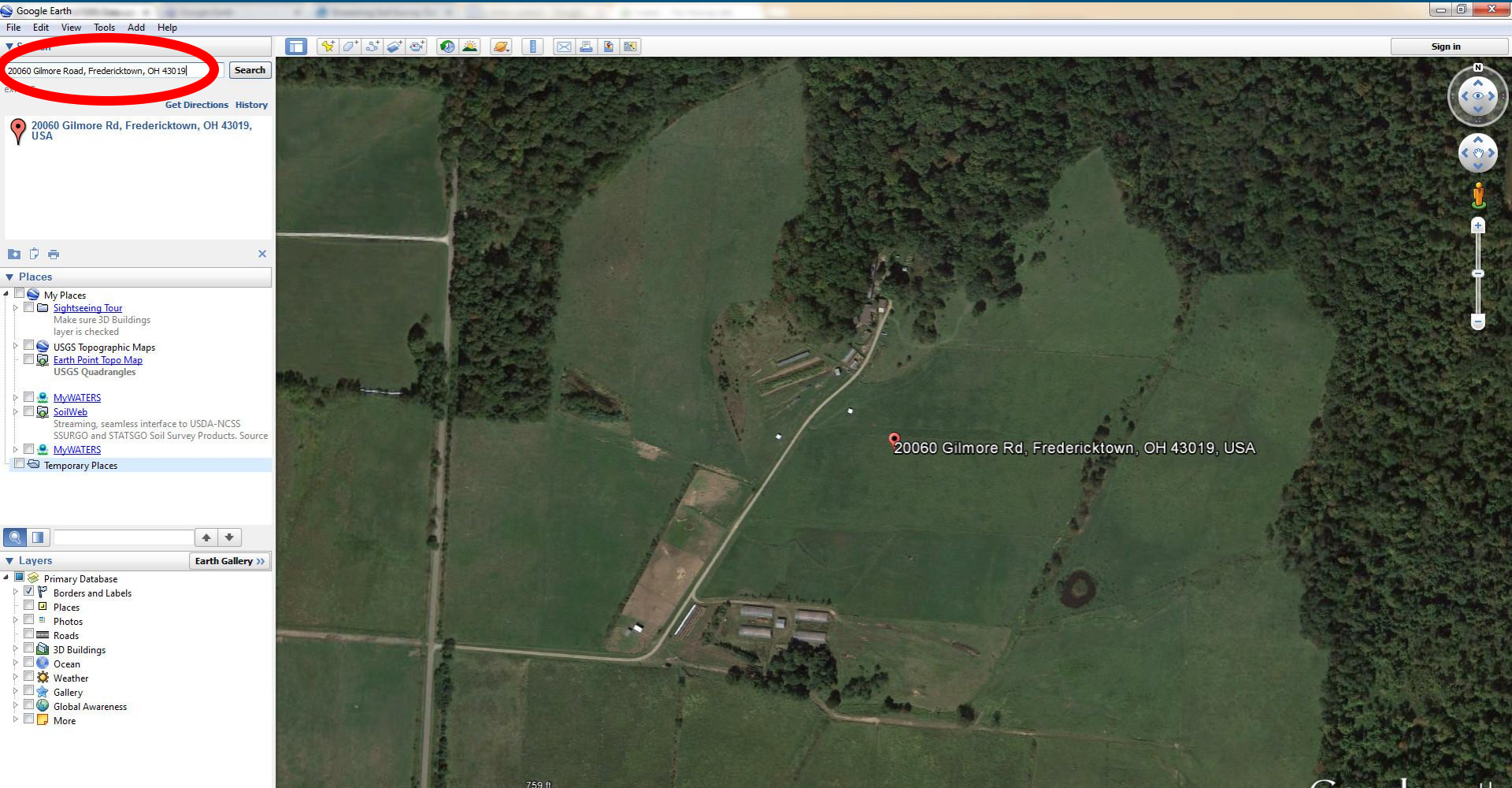
Right Click here and select from the dropdown menu "Save to My Places"



Gathering the Data for Your Desired Location



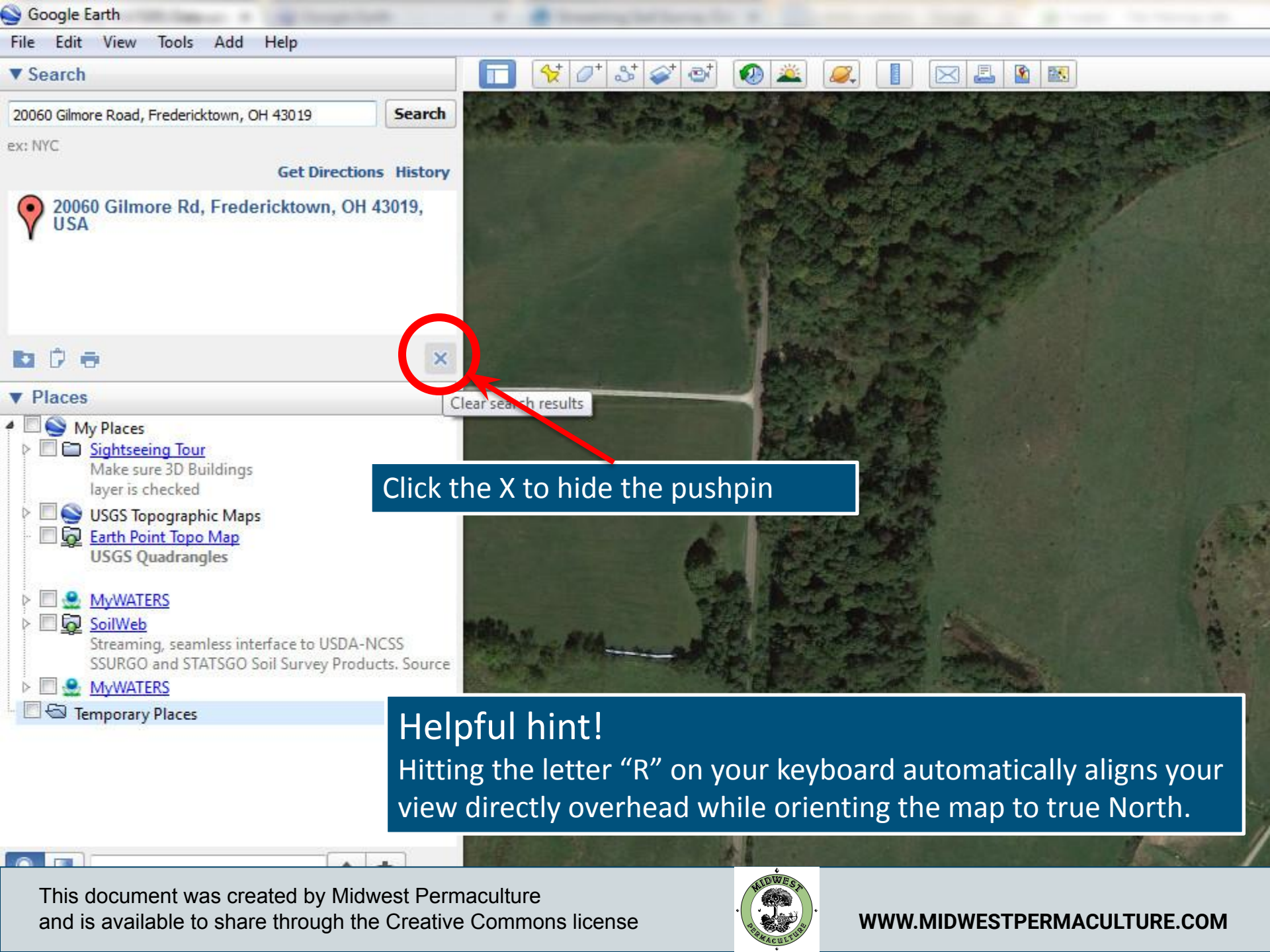
Enter your address



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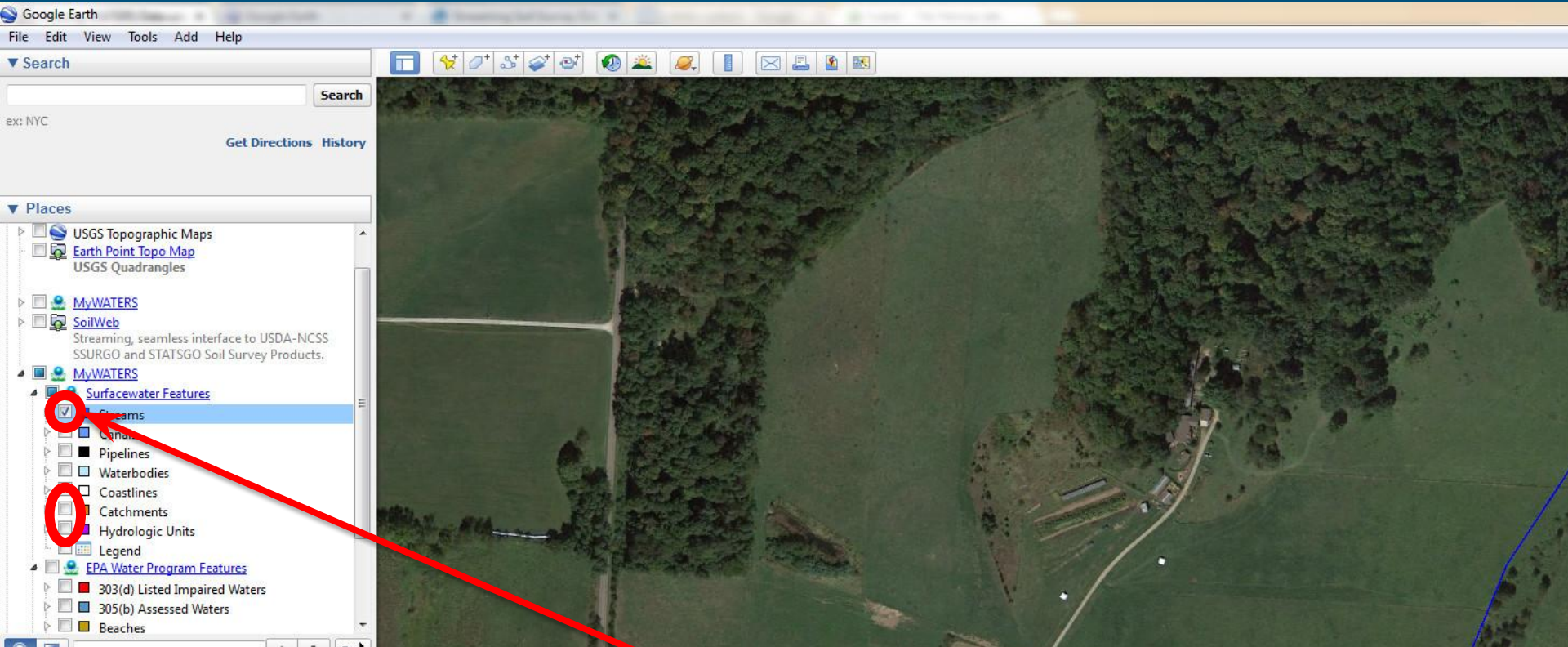
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Click the X to hide the pushpin

Helpful hint!
Hitting the letter "R" on your keyboard automatically aligns your view directly overhead while orienting the map to true North.



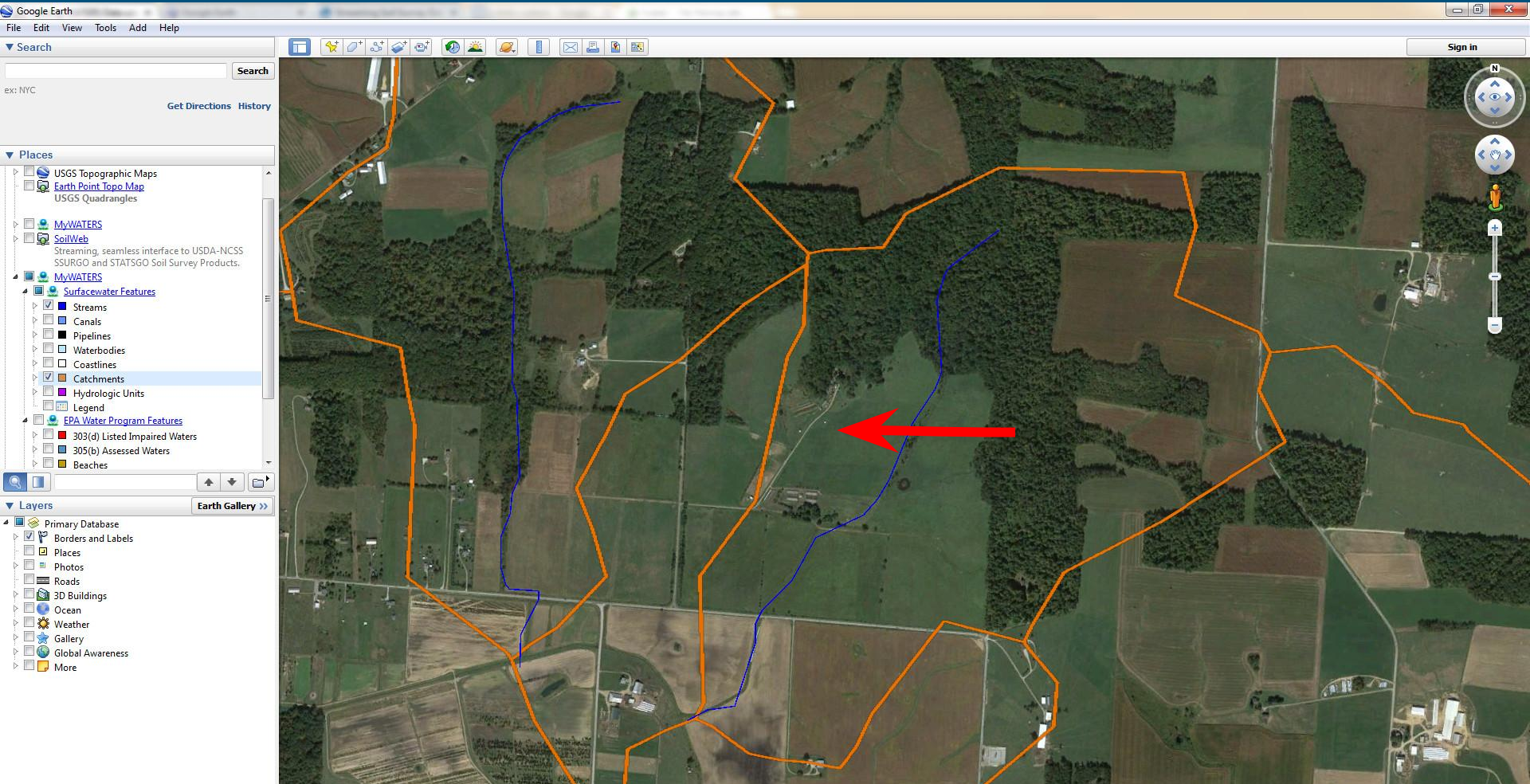


Engage the checkmarks to see the different layers of water data.

- Streams -Blue (Includes major ditches)
- Catchments- Orange (Mini watersheds)
- Hydrological units -Purple (Larger watersheds)

If you are zoomed to closely it's possible that there will be no data in your current view.

Example of streams and local catchment areas (Mini watershed)



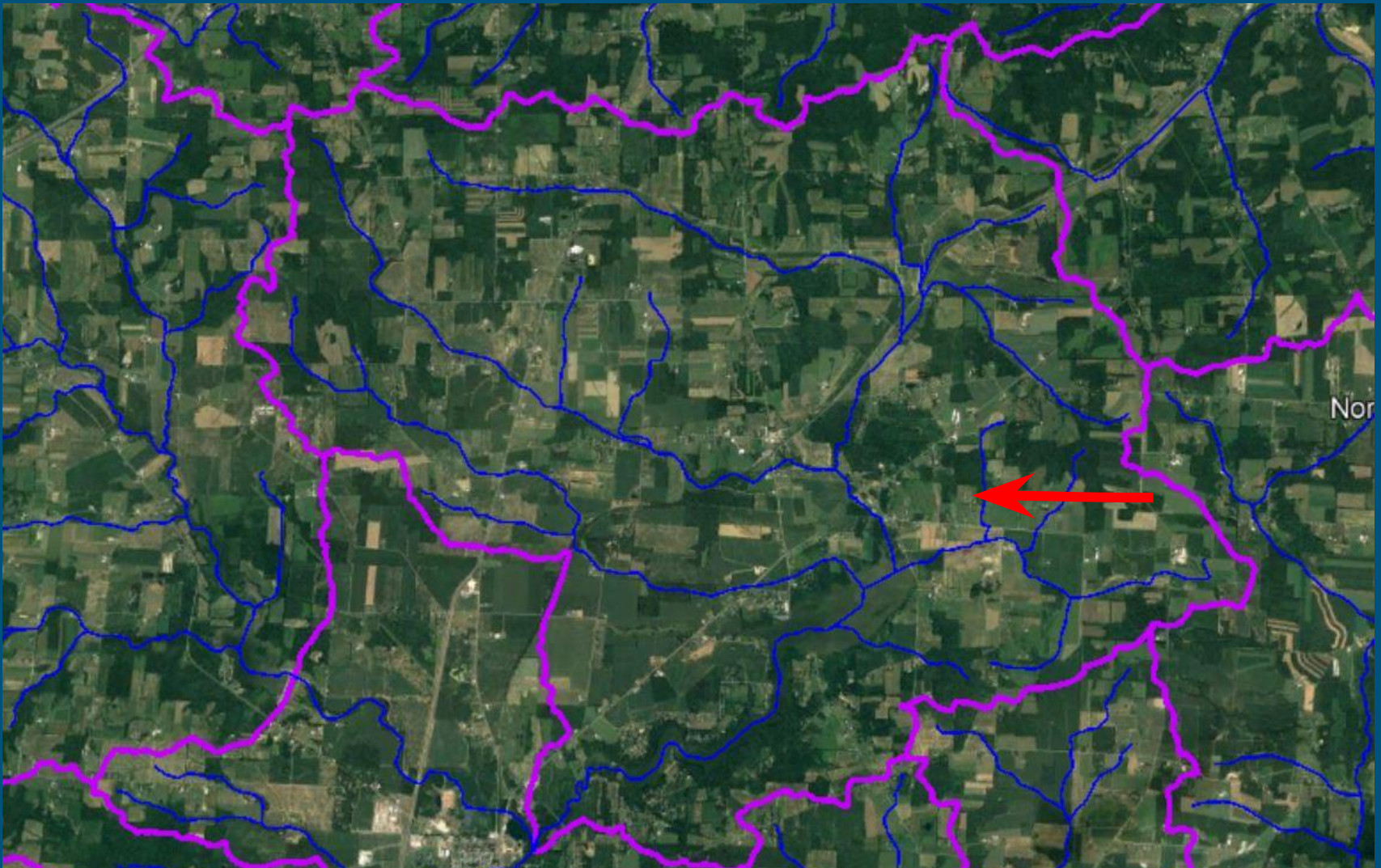
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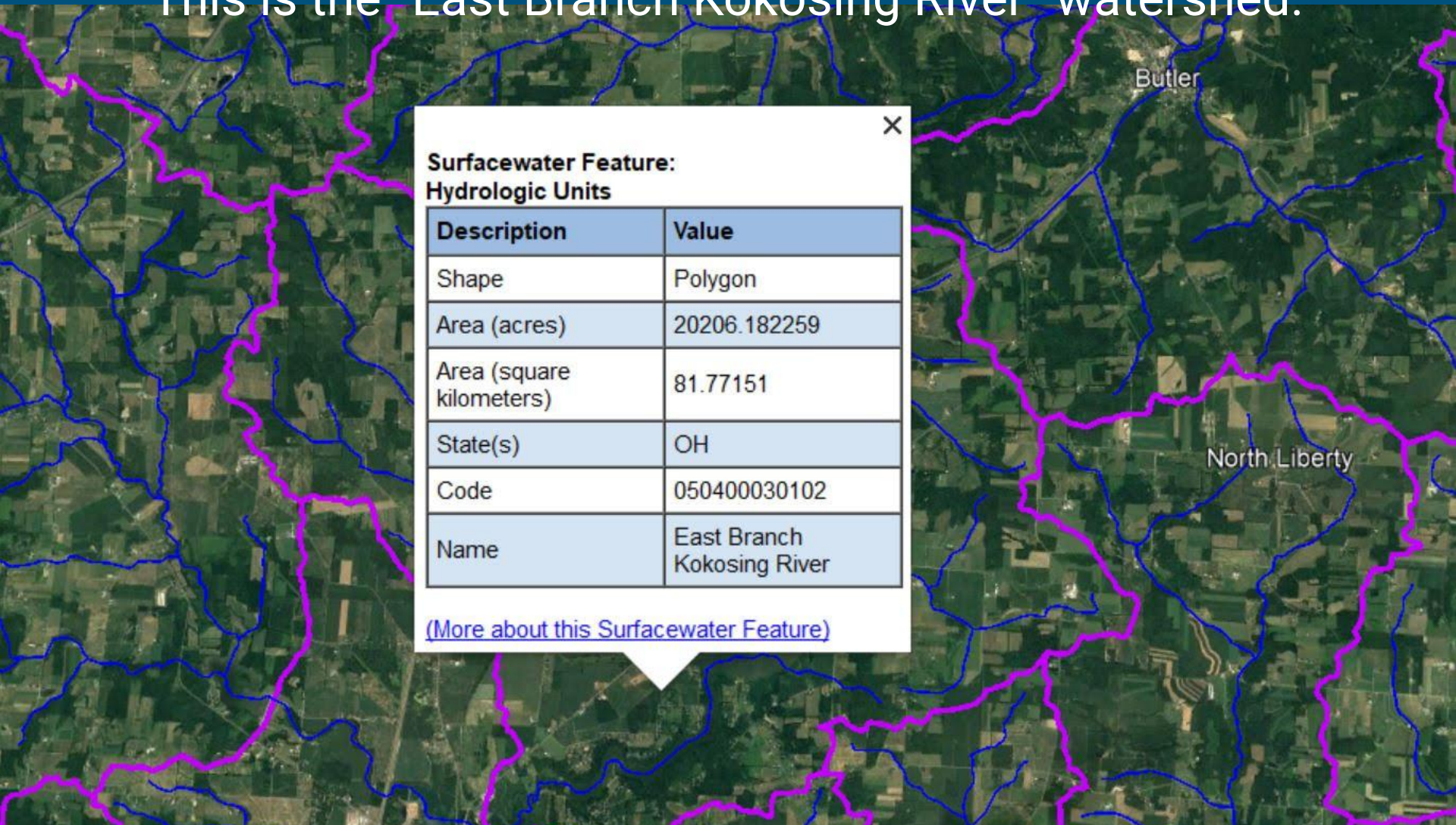
Zoom out to view the Hydrological Units (Larger watershed areas)

Can you find the point at which all these streams leave the watershed?



Left click within the purple watershed to view its data and name.

This is the “East Branch Kokosing River” watershed.



Surfacewater Feature:
Hydrologic Units

| Description | Value |
|--------------------------|----------------------------|
| Shape | Polygon |
| Area (acres) | 20206.182259 |
| Area (square kilometers) | 81.77151 |
| State(s) | OH |
| Code | 050400030102 |
| Name | East Branch Kokosing River |

[\(More about this Surfacewater Feature\)](#)

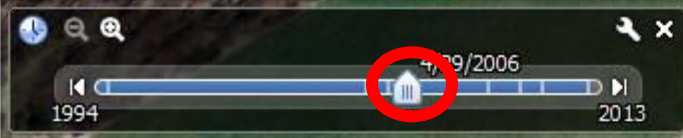




Other features in Google Earth Pro

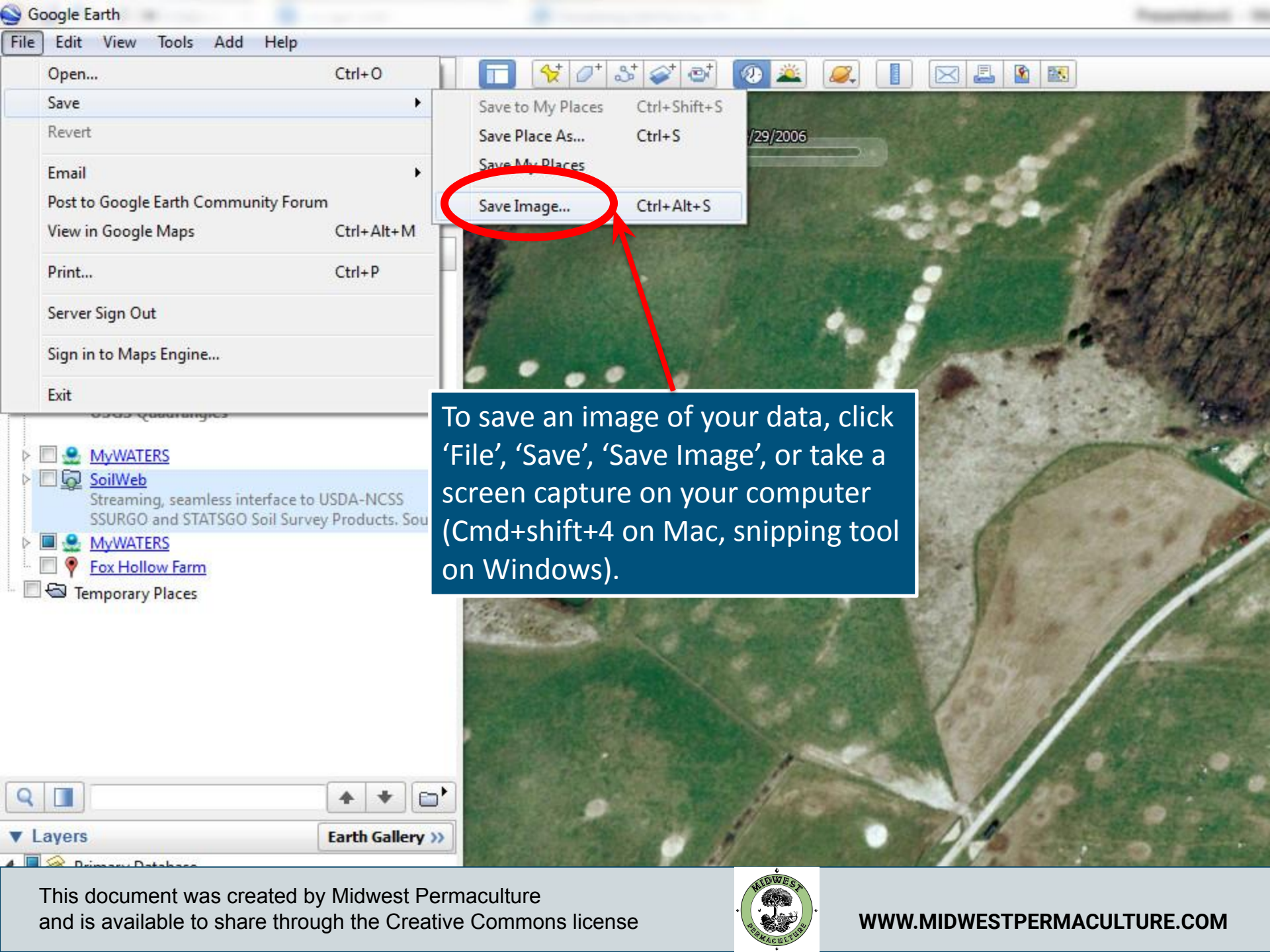


- My Places
 - Sightseeing Tour
 - Make sure 3D Buildings layer is checked
 - USGS Topographic Maps
 - Earth Point Topo Map
 - USGS Quadrangles
 - MyWATERS
 - SoilWeb
 - Streaming, seamless interface to USDA-NCSS SSURGO and STATSGO Soil Survey Products. Source
 - MyWATERS
 - Fox Hollow Farm
- Temporary Places



Use this date slider to view earlier satellite images of the same property/area.





To save an image of your data, click 'File', 'Save', 'Save Image', or take a screen capture on your computer (Cmd+shift+4 on Mac, snipping tool on Windows).





Soil Data



Welcome

This interactive map allows you to explore USDA-NCSS soil survey data for locations throughout most of the U.S. It is compatible with smartphones, tablets, and desktop computers.


Getting Started

- 1) Go to *Menu->Zoom To Location* to enter your area of interest or let your browser determine your current location.
- 2) Click on the map to identify "map units", which are delineated by the yellow lines. Then click on the expandable category headings to view the data of interest to you.

For help with soil survey terms and definitions, see the topics under *Menu->Help*.

About This App

This app was developed by the [California Soil Resource Lab](#) at UC Davis and UC-ANR in collaboration with the [USDA Natural Resources Conservation Service](#).

UC DAVIS  **NRCS**
 University of California
 Agricultural and Natural Resources

Don't show this message again

OK

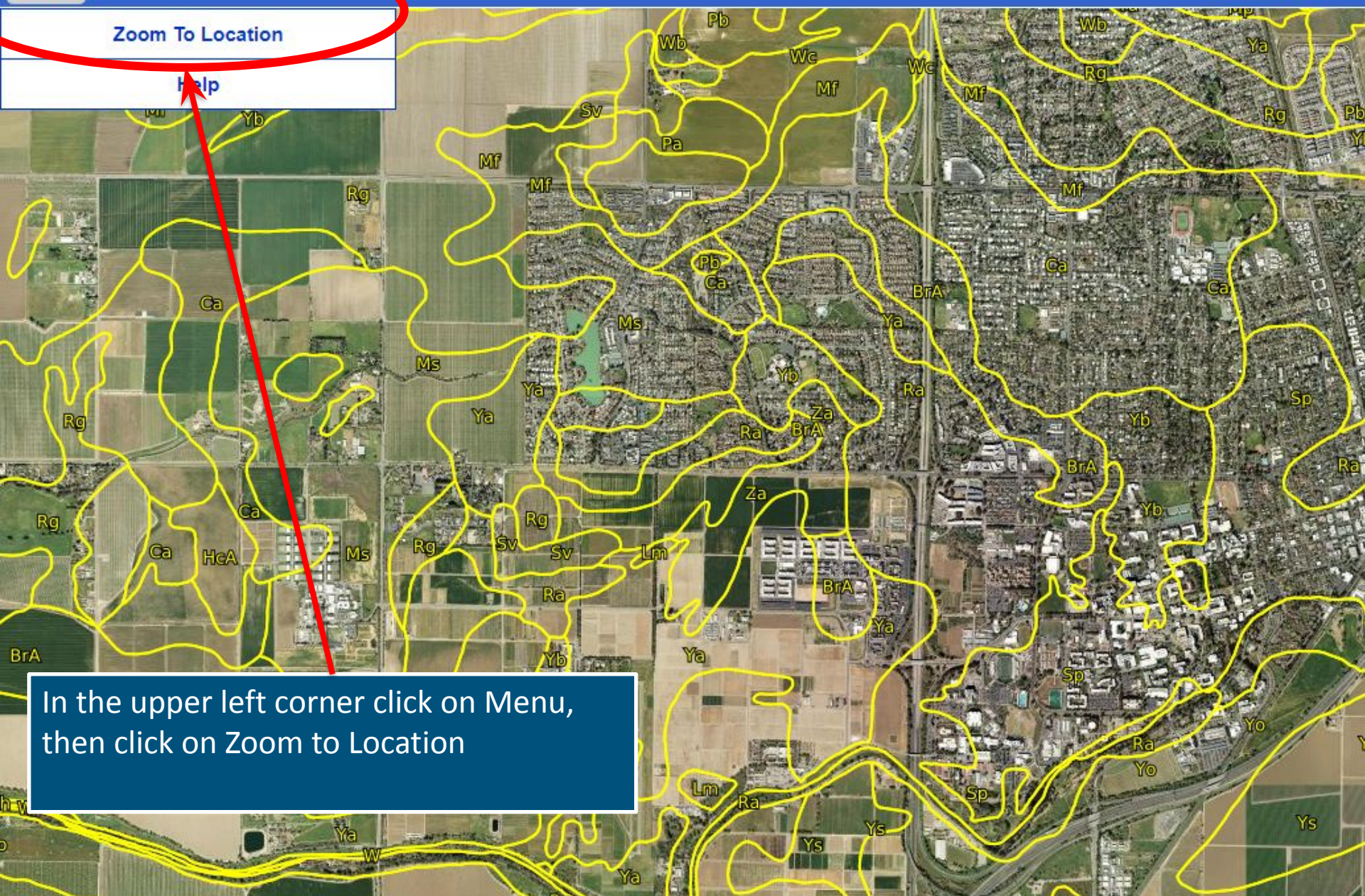
Check the box and click OK.



Zoom To Location

Help

In the upper left corner click on Menu, then click on Zoom to Location





You can use a mouse wheel or the + and - icons to zoom in and out.

Link to WSS

Outline Color

Stelle, Ford County, Illinois, United States

[Remove location marker](#)

Lat: 40.9687
Lon: -88.1091



If you are having trouble finding your site switching to the labeled Imagery Base Map might make things easier. Move your mouse over the layers icon to see what other Base Maps are available.



Steele, Ford County, Illinois, United States
[Remove location marker](#)

UCDAVIS NRCS University of California Agriculture and Natural Resources

[Link to WSS](#)

Base Map:

- ESRI Imagery
- ESRI Labeled Imagery
- ESRI Streets
- ESRI Topo
- USGS Topo
- OpenStreetMap
- Stamen Terrain

Outline Color



The Map is now zoomed in enough to recognise Stelle, IL.

[Link to WSS](#)



Outline Color

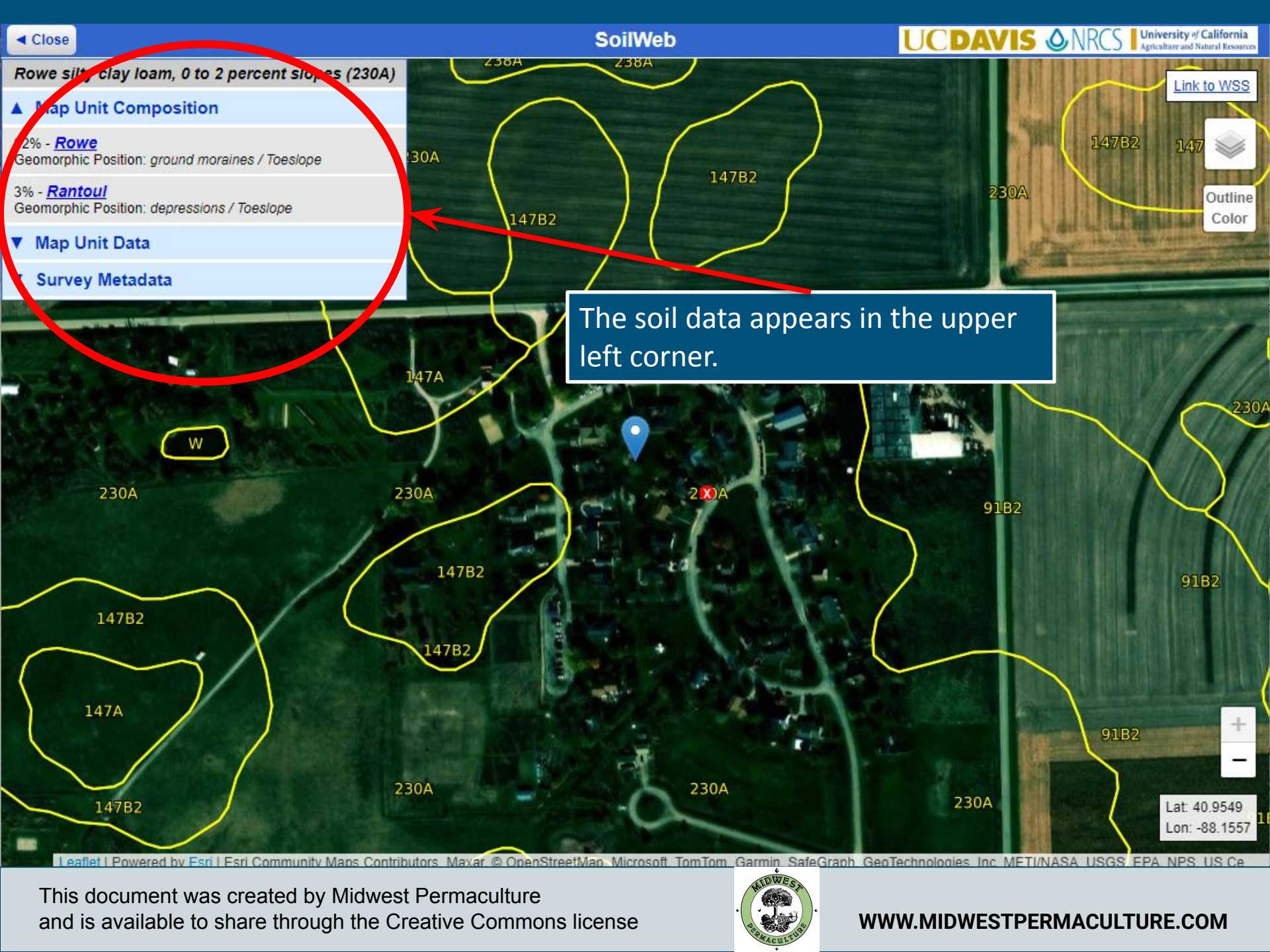


Click the abbreviation to see the soil type within the defined area.



9495
Lon: -88.1480





The soil data appears in the upper left corner.



Rowe silty clay loam, 0 to 2 percent slopes (230A)

Map Unit Composition

- 92% - **Rowe**
Geomorphic Position: ground moraines / Toeslope
- 3% - **Rantoul**
Geomorphic Position: depressions / Toeslope

Map Unit Data

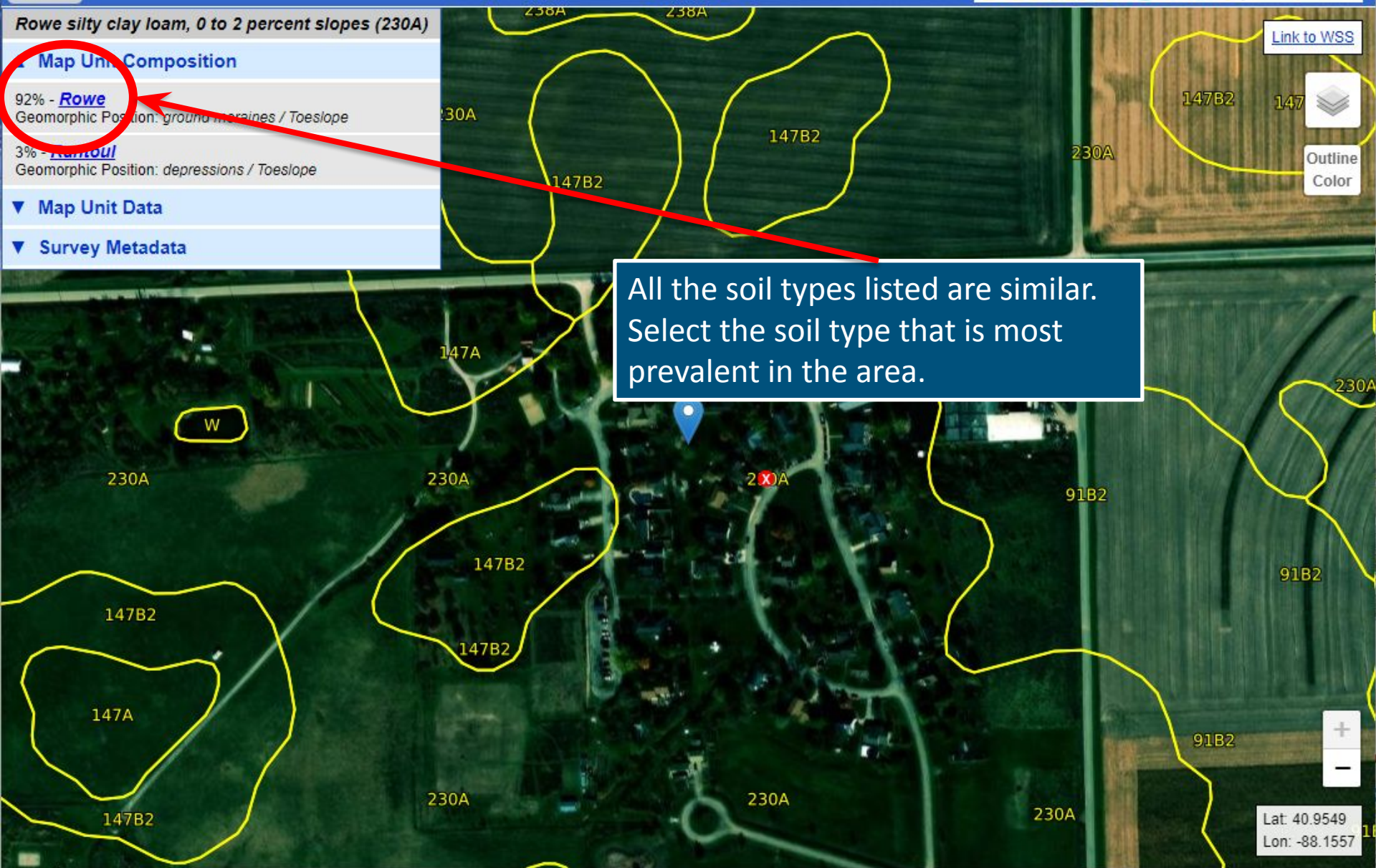
Survey Metadata

Link to WSS



Outline Color

All the soil types listed are similar. Select the soil type that is most prevalent in the area.



Close

SoilWeb

Rowe

Soil Data Explorer | Series Extent Explorer | Description

Soil Profiles

Soil Sketch ? >

Org. Matter Clay

Sand AWC

Ksat pH

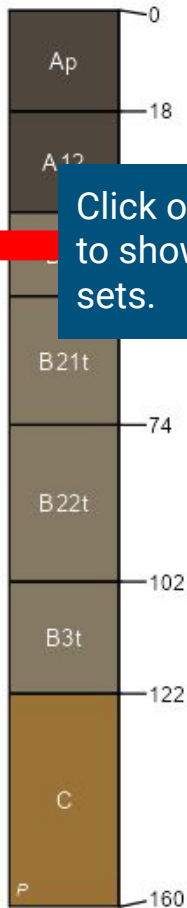
Kr Factor EC

SAR CaCO₃

Gypsum

CEC @ pH7

Linear Ext.



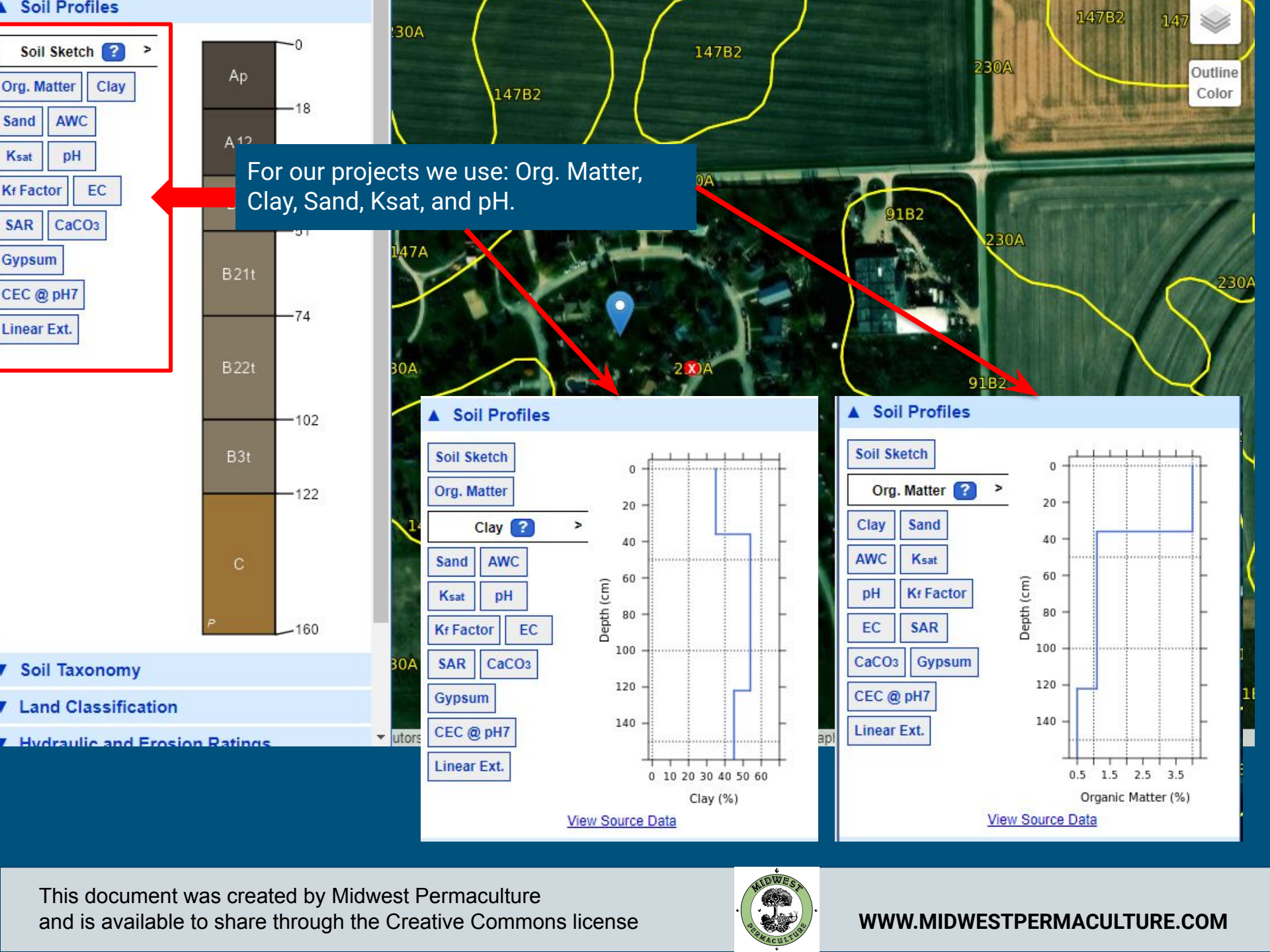
Click on the different buttons to show the different data sets.



Soil Taxonomy

Land Classification





For our projects we use: Org. Matter, Clay, Sand, Ksat, and pH.

Soil Sketch ? >

Org. Matter Clay

Sand AWC

Ksat pH

Kr Factor EC

SAR CaCO₃

Gypsum

CEC @ pH7

Linear Ext.

Soil Profiles

Soil Sketch

Org. Matter

Clay ? >

Sand AWC

Ksat pH

Kr Factor EC

SAR CaCO₃

Gypsum

CEC @ pH7

Linear Ext.

Depth (cm)

Clay (%)

[View Source Data](#)

Soil Profiles

Soil Sketch

Org. Matter ? >

Clay Sand

AWC Ksat

pH Kr Factor

EC SAR

CaCO₃ Gypsum

CEC @ pH7

Linear Ext.

Depth (cm)

Organic Matter (%)

[View Source Data](#)

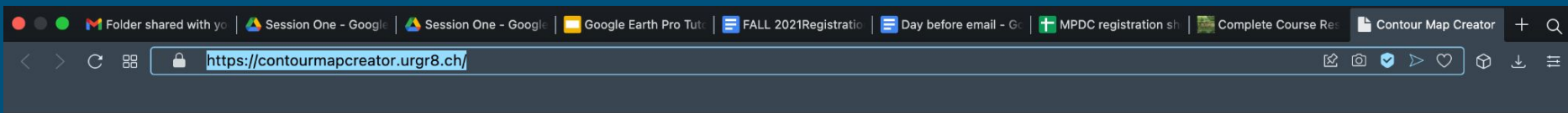




Topographical Info



Contour Map Creator



Contour Map Creator [0.314](#) [improvement ideas](#)

Map **Satellite**

Google Keyboard shortcuts Map data ©2021 Imagery ©2021 NASA, TerraMetrics Terms of Use

| Sampling | Plot Options | Save/Load Cookie | Other Options |
|---|---|--|--|
| North West corner Latitude: <input type="text"/> Longitude: <input type="text"/> | <input checked="" type="radio"/> Number of levels: <input type="text" value="7"/> | <input type="button" value="save data in cookie"/> | <input type="button" value="clear map"/> |
| South East corner | <input type="radio"/> Custom levels [m]: <input type="text" value="380,400,420"/> | <input type="button" value="load data from cookie"/> | <input type="button" value="change resolution"/> |

Go to <https://contourmapcreator.urgr8.ch/>



Contour Map Creator [0.314](#) [improvement ideas](#)

Enter your address and click search



| Sampling | Plot Options | Save/Load Cookie | Other Options |
|--|---|---|---|
| <input type="button" value="get data"/> | <input type="button" value="redraw contours"/> | <input type="button" value="save data in cookie"/> | <input type="button" value="clear map"/> <input type="button" value="v"/> |
| North West corner Latitude: <input type="text"/> Longitude: <input type="text"/> | <input checked="" type="radio"/> Number of levels: <input type="text" value="7"/> | <input type="button" value="load data from cookie"/> <input type="button" value="v"/> | <input type="button" value="change resolution"/> <input type="button" value="v"/> |
| South East corner Latitude: <input type="text"/> Longitude: <input type="text"/> | <input type="radio"/> Custom levels [m]: <input type="text" value="380,400,420"/> | <input type="button" value="remove cookie"/> <input type="button" value="v"/> | |
| Sampling Point: N-S axis: <input type="text" value="20"/> W-E axis: <input type="text" value="20"/> | <input type="radio"/> Level Interval [m]: <input type="text" value="5"/> | | |
| | <input type="checkbox"/> Plot sampling points | | |

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| Sampling | Plot Options | Save/Load Cookie | Other Options |
|---|--|--|--|
| <input type="button" value="get data"/> | <input type="radio"/> Number of levels: 7 | <input type="button" value="save data in cookie"/> | <input type="button" value="clear map"/> |
| North West corner Latitude: <input type="text"/> Longitude: <input type="text"/> | <input type="radio"/> Custom levels [ft]: 380,400,420 | <input type="button" value="load data from cookie"/> | <input type="button" value="change resolution"/> |
| South East corner Latitude: <input type="text"/> Longitude: <input type="text"/> | <input checked="" type="radio"/> Level Interval [ft]: 1 | <input type="button" value="remove cookie"/> | |
| Sampling Pointst: N-S axis: <input type="text"/> W-E axis: <input type="text"/> | <input type="checkbox"/> Plot sampling points | | |
| | Units: <input type="radio"/> m <input checked="" type="radio"/> ft | | |
| | Rounding for legend (decimal places): <input type="text"/> | | |

- Click on 'Level Interval', and type in the desired number of feet between contour lines
- In Units, select 'ft' for elevations calculated by foot, not meters
- To select the area you wish to obtain contour lines for, left click the upper left and lower right corners which will automatically create a box
- Then, click 'Get Data' and prepare to be amazed!



Contour Map Creator [0.314](#) [improvement ideas](#)



This is a 1 ft contour map for this property.

The red line in the lower right hand corner is the highest ground, and the blue line at the top is the lowest ground.

This means there is a ten foot difference in elevation on this property.

| Sampling | Plot Options | Save/Load Cookie | Other Options |
|---|---|--|--|
| <input type="button" value="get data"/> North West corner Latitude: <input type="text" value="43.0882"/> Longitude: <input type="text" value="-71.4607"/> South East corner Latitude: <input type="text" value="43.0878"/> Longitude: <input type="text" value="-71.4602"/> Sampling Point: N-S axis: <input type="text" value="20"/> W-E axis: <input type="text" value="20"/> | <input type="button" value="redraw contours"/> <input type="radio"/> Number of levels: <input type="text" value="7"/> <input type="radio"/> Custom levels [ft]: <input type="text" value="380,400,420"/> <input checked="" type="radio"/> Level Interval [ft]: <input type="text" value="1"/> <input type="checkbox"/> Plot sampling points Units: <input type="radio"/> m <input checked="" type="radio"/> ft | <input type="button" value="save data in cookie"/> <input type="button" value="load data from cookie"/> <input type="button" value="remove cookie"/> | <input type="button" value="clear map"/> <input type="button" value="change resolution"/> |





Wind, Climate, and Sun Data



Gathering Wind Data-Wind Roses

The screenshot shows a web browser window with the URL https://mesonet.agron.iastate.edu/sites/locate.php?network=IL_ASOS. The page header includes the Iowa State University logo and the text "Iowa Environmental Mesonet". Navigation links for "CONTACT US", "DISCLAIMER", and "APPS" are visible. The main content area is titled "IEM Site Information" and contains a red-bordered box with the text "Go to" and the URL https://mesonet.agron.iastate.edu/sites/locate.php?network=IL_ASOS. Below this, there are two selection forms: "Select By Network:" with a dropdown menu set to "Illinois ASOS" and a "Switch Network" button; and "Select By Station:" with a dropdown menu set to "[ALN] ALTON/ST LOUIS R [1972-]" and a "Select Station" button. A map of the Midwest region is displayed, showing numerous yellow dots representing mesonet sites. The map includes labels for major cities like Chicago, St. Louis, and Kansas City, and state boundaries for Iowa, Illinois, Indiana, and Ohio.

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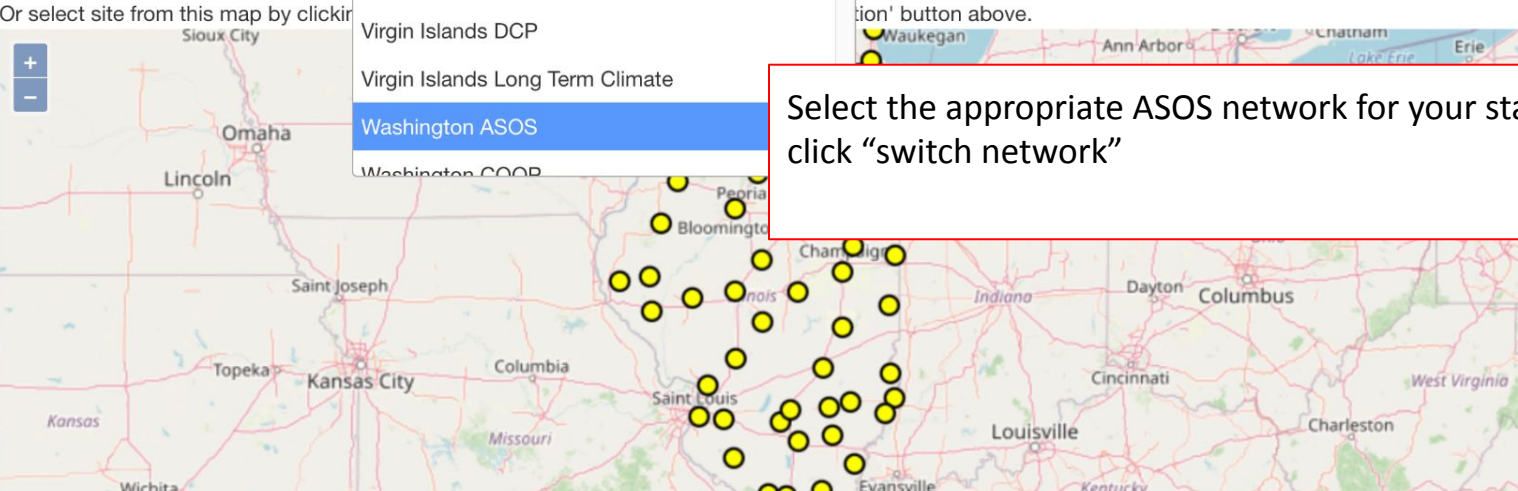
IEM Site Information

The IEM collects information from many sites. These sites are organized into networks based on their geography and/or the organization who administers the network. This application provides some metadata and site specific applications you may find useful.

Select By Network:

Select By Station:

Or select site from this map by clicking on the location' button above.



Select the appropriate ASOS network for your state, and click "switch network"



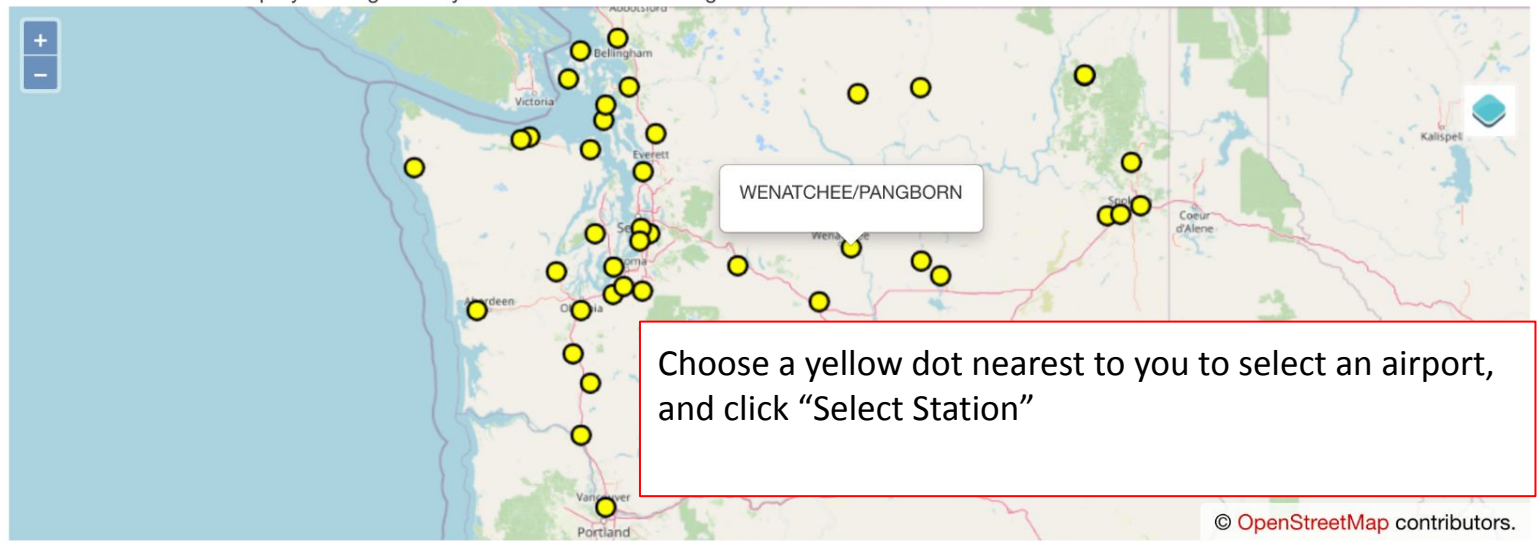
IEM Site Information

The IEM collects information from many sites. These sites are organized into networks based on their geography and/or the organization who administers the network. This application provides some metadata and site specific applications you may find useful.

Select By Network:

Select By Station:

Or select site from this map by clicking on the yellow dot and then clicking the 'Select Station' button above.





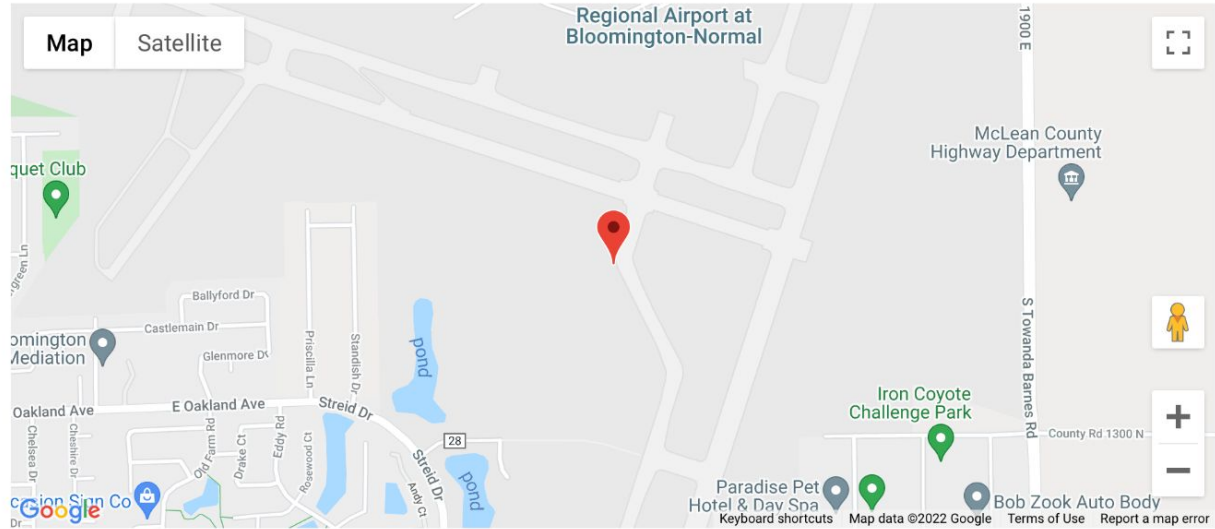
Station Data & Metadata / IL_ASOS / [BMI] BLOOMINGTON/NORM... or select from map

- Information
 - Last Ob
 - Photographs
 - Meteogram
 - Network Table
 - Neighbors
 - Monthly Summaries
 - Observation History
 - Wind Roses**
 - ...
- Data Calendar Satellite Cloud Product Download

Select wind roses

| | |
|---------------------|------------------|
| Station Identifier: | BMI |
| Station Name: | BLOOMINGTON/NORM |
| Network: | IL_ASOS |
| County: | Mclean |
| State: | IL |
| Latitude: | 40.47711 |
| Longitude: | -88.91592 |
| Elevation [m]: | 267 |
| Time Zone: | America/Chicago |

[View IL_ASOS Network Table](#)



Is the location shown for this station wrong?

If so, please consider submitting a location submission by moving the marker on the map and completing this form below.

New Latitude: move marker New Longitude: move marker

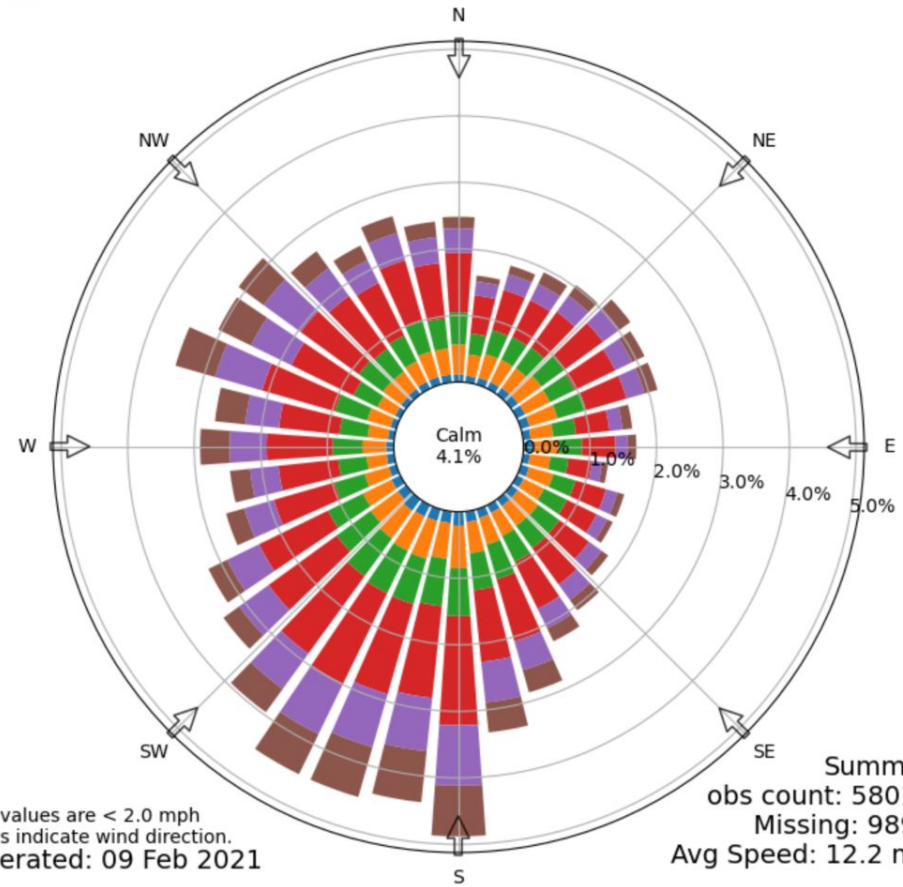
Enter Your Email Address [1]: optional

Better Location Name?: BLOOMINGTON/NORM





[BMI] BLOOMINGTON/NORM
Windrose Plot
Time Bounds: 02 Apr 1976 09:00 AM - 09 Feb 2021 12:56 AM America/Chicago



This is an annual windrose. Scroll down to see windroses by month.

Calm values are < 2.0 mph
Arrows indicate wind direction.
Generated: 09 Feb 2021

Summary
obs count: 580127
Missing: 98915
Avg Speed: 12.2 mph



US Climate Data

U.S. Climate Data

Enter a location

Home United States Pennsylvania You are here: Home

Climate Doylestown - Pennsylvania

| | Jan | Feb | Mar | Apr | May | Jun |
|---------------------------|------|------|------|------|------|------|
| Average high in °F | 38 | 41 | 50 | 62 | 71 | 79 |
| Average low in °F | 22 | 24 | 31 | 41 | 49 | 57 |
| Av. precipitation in inch | 3.33 | 2.80 | 3.84 | 4.11 | 4.13 | 4.50 |

Monthly averages Doylestown
Longitude: -75.1299, Latitude: 40.3101
Average weather Doylestown, - 18901

Monthly: 1981-2010 normals

| | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------------------|------|------|------|------|------|------|
| Average high in °F | 85 | 83 | 75 | 64 | 54 | 42 |
| Average low in °F | 64 | 62 | 55 | 44 | 36 | 27 |
| Av. precipitation in inch | 6.36 | 4.07 | 4.39 | 4.11 | 3.68 | 4.01 |

Doylestown Climate Graph - Pennsylvania Climate Chart

- go to <https://www.usclimatedata.com/>
- Type in the closest city near you. If the prompt window does not appear, you will need to type in a larger city.
- Scroll down to see average temps and rainfall, and access the climate data chart.

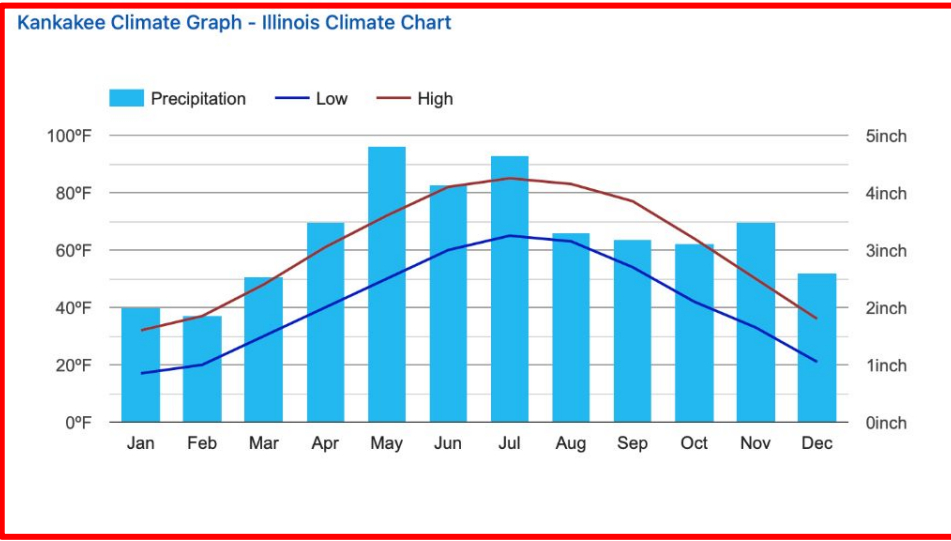




| | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------------------|-----|-----|-----|-----|-----|-----|
| Average high in °F | 85 | 83 | 77 | 64 | 50 | 36 |
| Average low in °F | | | | | | |
| Av. precipitation in inch | | | | | | |
| Av. snowfall in inch | 0 | 0 | 0 | 0 | 1 | 6 |

Here is the annual rainfall. Also note the annual snowfall, as it could be pertinent to designing in this location.

| | |
|-------------------------|------------|
| Annual high temperature | 60°F |
| Annual low temperature | 41°F |
| Average annual precip. | 39.16 inch |
| Av. annual snowfall | 24 inch |



This is the chart we often use.



Sun Position Calculator

- go to <https://www.suncalc.org/#/41.2876,-88.3341,18/2019.12.21/11:45/1/1>
- Type in the address and hit 'Enter' on your keyboard.
- Zoom in and out ('ctrl' roll your mouse) and click/drag the image to get exactly what you want.
- Set the red circle on top of the exact location you desire. We typically choose the house door most often used by the owner.

The screenshot displays the Sun Position Calculator interface. On the left, a sidebar contains several sections: 'Computation path of the sun for:' with the address 'First Baptist Church, 4470 E Route 113, Maz' circled in red; 'Solar data for the selected location' listing times for Dawn (06:44:14), Sunrise (07:15:12), Culmination (11:51:23), Sunset (16:27:33), and Dusk (16:58:32); and 'Geodata for the selected location' providing coordinates (Lat: N 41°17'15.35", Lng: W 88°20'2.75") and other details. The main area shows a satellite view of a house with a red circle marking a location on the roof. A yellow line and a semi-circular arc represent the sun's path. On the right, a navigation menu lists options like 'FREE LIVE STREAMING PLATFORMS', 'GPS SATELLITE VIEW', and 'SATELLITE VIEW OF MY HOUSE'. At the bottom right, there are social media icons and a logo for 'suncalc.org'.



sunCalc.org

00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00

Computation path of the sun for:
 2 Beechgrove Dr, Hooksett, New Hampshire
 21.Dec.2019 07:45 UTC-5

Solar data for the selected location

| | |
|-------------------------|-------------|
| Dawn: | 06:41:32 |
| Sunrise: | 07:13:39 |
| Culmination: | 11:57:52 |
| Sunset: | 16:14:11 |
| Dusk: | 16:46:11 |
| Daylight duration: | 9h0m25s |
| Distance [km]: | 147.170.754 |
| Altitude: | 4.00° |
| Azimuth: | 127.45° |
| Shadow length [m]: | 14.29 |
| at an object level [m]: | 1 |

Geodata for the selected location

| | |
|---------|----------------|
| Height: | 91m |
| Lat: | N 43°5'16.94" |
| Lng: | W 71°27'37.4" |
| UTM: | 19T 299729 |
| TZ: | America/New... |

here Partial solar eclipse: 10.06.2021 | 74.2% more

Moving the slider changes the time of day and the related position of the sun.

Setting the date to Dec. 21st provides the clearest graphic showing the shortest and longest day of the year and the sun's relative height in the sky.

- FREE LIVE STREAMING PLATFORMS
- GPS SATELLITE VIEW
- LIVE SATELLITE MAPS
- VIEW OF MY HOUSE
- SATELLITE LIVE VIEW
- REAL TIME SATELLITE VIEW
- NEW SOLAR SYSTEM

Business Focus

suncalc.org

SunCalc.org ©Torsten Hoffmann 2015-2021





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