

Frequently Asked Questions (FAQs)

Additional Help content can be found on the [DNR GeoCortex Help page](#). If you cannot find an answer to your question at either location, please send an email to [Lake Viewer Help](#).

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1. How do I access the map services and bring them into ArcMap (GIS)?

Downloading Map Services to GIS

Open ArcMap

Click the Plus sign to add data

Dbl-click on GIS Servers

Dbl-click on Add ArcGIS Server → Use GIS Services → Next

Enter: <http://dnrm.wi.gov/arcgis/rest/services> --> click Finish

Dbl-click on arcgis on dnrm.wi.gov (user) → dbl-click on folder WT_SWDV

Click on map service of interest and → Add

Adding Map Services to GIS via ArcSDE (Internal DNR Staff only)

Open ArcCatalog

Dbl-click on Database Connections

Dbl-click on Add Database Connection

Database Platform: Oracle (it should be the default)

Instance: sde:oracle11g:dnr_sde

Authentication Type: Database authentication (it should be the default)

User name: READ

Password: ONLY

Click OK

Rename the connection → READ_Prod.sde

Close ArcCatalog

Open ArcMap

Click on the plus sign (add data)

Dbl-click on database connections

Dbl-click on READ_Prod.sde

Dbl-click on file of choice (ex. W07510.WT_SWIMS_MONIT_STATION_PT_SV)

2. Will there be more base maps available in the future?

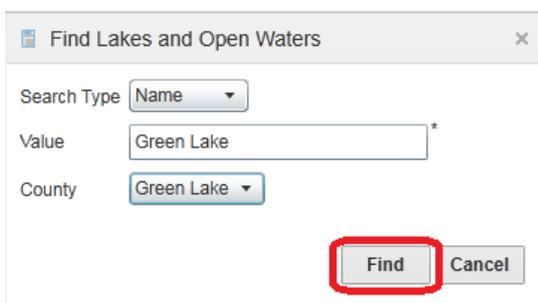
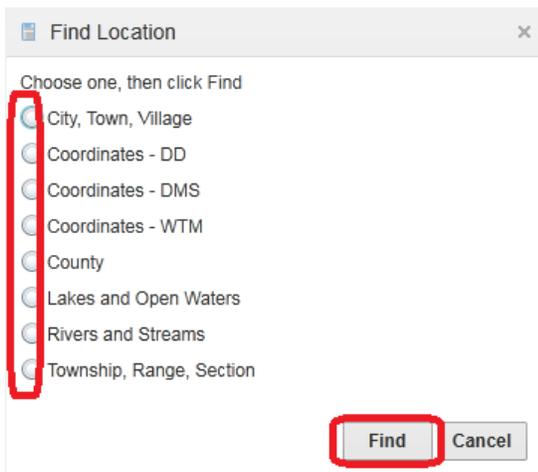
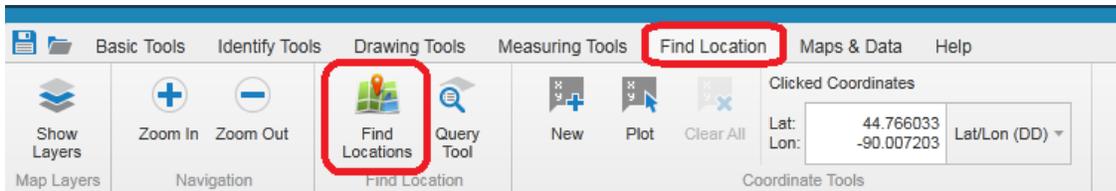
More base maps will be added as we get them. We currently have NAIP 2008 and NAIP 2013 satellite photos as well as 2010 WROC leaf-off satellite photos. We plan to add WROC 2015 when it is ready. The caching process for the whole state at all the different map scales takes a long time.

3. How do you search for features (e.g., County, Lake, City, etc.)?

There are two methods for searching for features in the viewer. The first is to simply type in the name of the feature you are looking for in the Search Box.

Search...

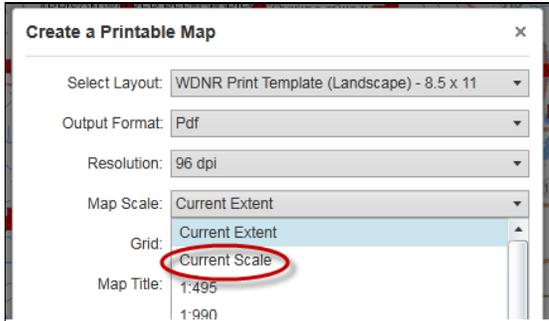
The second is to use the Find Location search tool. To use this tool, click the Find Location tab and then the Find Location button. Simply click next to the option you want to use and then click Find. You will be presented with a list of selectable or fillable choices (dependent on what option you chose). Fill the information in and click Find. The map should zoom to the selected feature and present relevant information in the table of contents (left-hand side of viewer).



4. Why does the layer I want to see turn off when I print my map?

There is an issue with printing a map and using the default printing settings. When you zoom to the maximum scale of given layer (i.e. Dams), followed by printing the map, if you use the default setting of

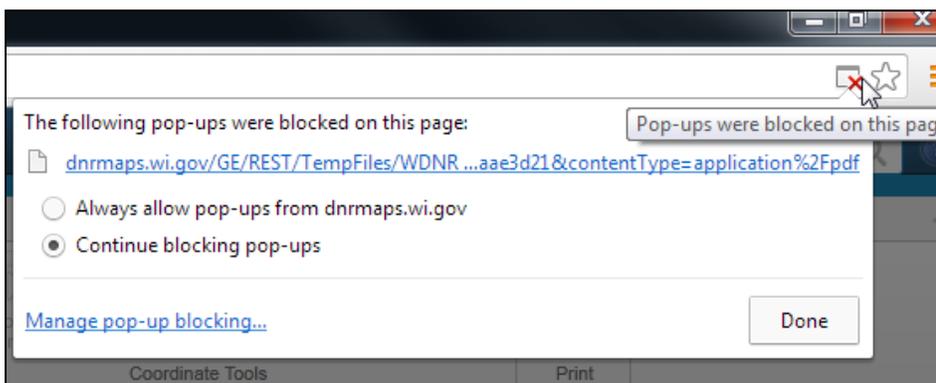
“Current Extent” (see image below), that layer does not draw in the resultant image. This is because Geocortex will zoom the map out a little bit, enough to turn the layer off. Instead, users need to change the setting to “Current Scale”.



The ultimate solution is to change the default setting from “Current Extent” to “Current Scale”; however that capability is not available until we install the next release of the Geocortex software.

5. Trying to print map but using another browser other than Internet Explorer (IE)?

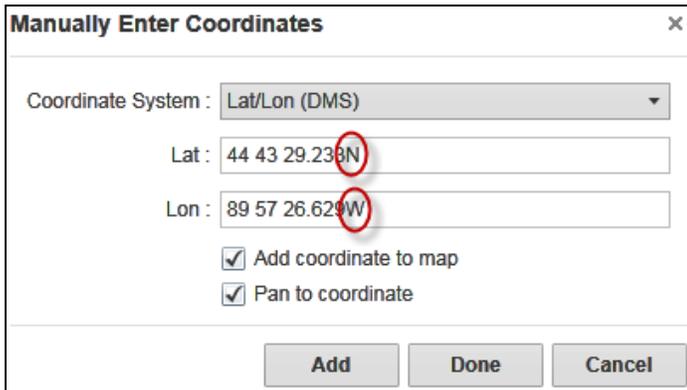
Chrome blocks the map pop-up. You can tell this by the square icon with an X in the address bar. If you select ‘Always allow pop-ups from dnrmaps.wi.gov’, you should now be able to see the PDFs. Be aware this could be a similar problem for other browsers.



6. How do I enter coordinates in the coordinate fields?

DMS – Degrees, Minutes, Seconds

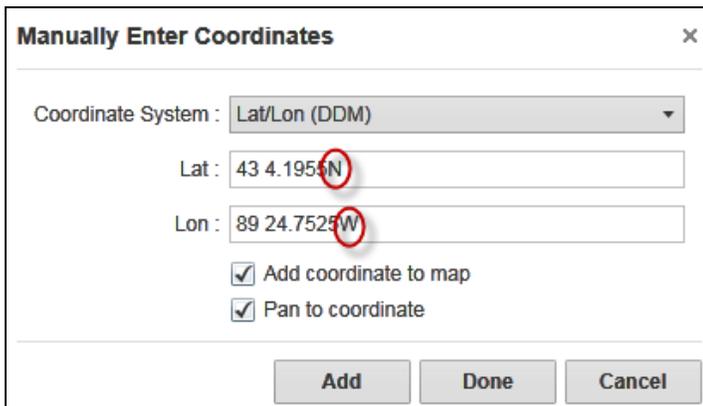
Use a space between numbers and add **N** to end of Latitude and **W** to end of Longitude



The screenshot shows a dialog box titled "Manually Enter Coordinates" with a close button (X) in the top right corner. The "Coordinate System" dropdown menu is set to "Lat/Lon (DMS)". The "Lat" input field contains "44 43 29.238N" and the "Lon" input field contains "89 57 26.629W". Both the "N" and "W" characters are circled in red. Below the input fields are two checked checkboxes: "Add coordinate to map" and "Pan to coordinate". At the bottom are three buttons: "Add", "Done", and "Cancel".

DDM – Decimal Degree Minutes

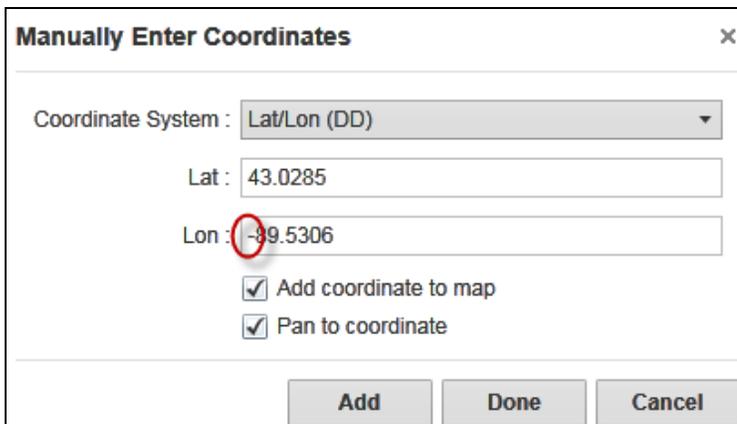
Use a space between numbers and add **N** to end of Latitude and **W** to end of Longitude



The screenshot shows a dialog box titled "Manually Enter Coordinates" with a close button (X) in the top right corner. The "Coordinate System" dropdown menu is set to "Lat/Lon (DDM)". The "Lat" input field contains "43 4.1956N" and the "Lon" input field contains "89 24.7525W". Both the "N" and "W" characters are circled in red. Below the input fields are two checked checkboxes: "Add coordinate to map" and "Pan to coordinate". At the bottom are three buttons: "Add", "Done", and "Cancel".

DD – Decimal Degrees

Remember to use a **negative sign (-)** in front of Longitude



The screenshot shows a dialog box titled "Manually Enter Coordinates" with a close button (X) in the top right corner. The "Coordinate System" dropdown menu is set to "Lat/Lon (DD)". The "Lat" input field contains "43.0285" and the "Lon" input field contains "-89.5306". The negative sign in the longitude is circled in red. Below the input fields are two checked checkboxes: "Add coordinate to map" and "Pan to coordinate". At the bottom are three buttons: "Add", "Done", and "Cancel".

7. What datum and projection should I use for shape files and data collection?

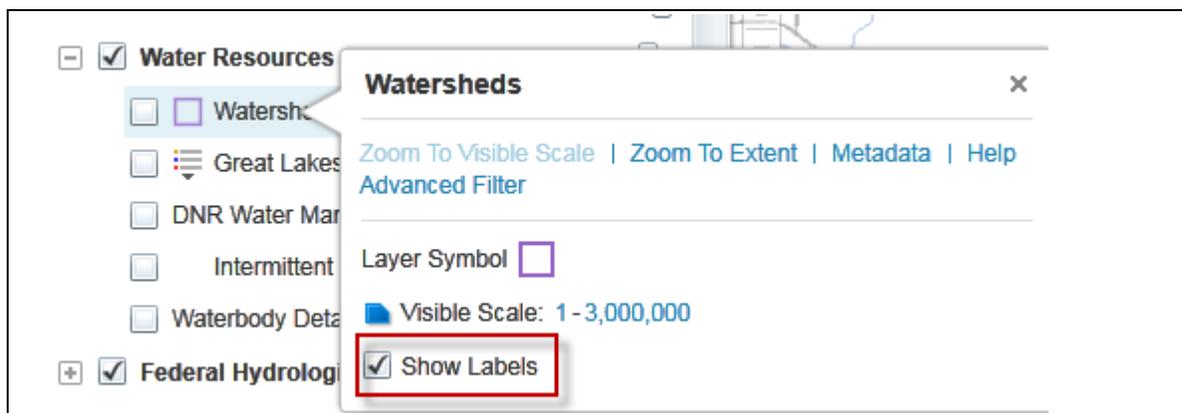
Projection: Wisconsin Transverse Mercator

Datum: NAD_1983_HARN

The projection is called Wisconsin Transverse Mercator. It's a similar projection to Universal Transverse Mercator (UTM), but is centered on 90 degrees west. The projection is based on the NAD 1983 HARN (North American Datum 1983, High Accuracy Reference Network adjustment of 1991) datum. The Viewer provides coordinates in WTM northings and eastings, as well as geographic latitude and longitude in degrees/minutes/seconds, degrees decimal minutes, and decimal degrees.

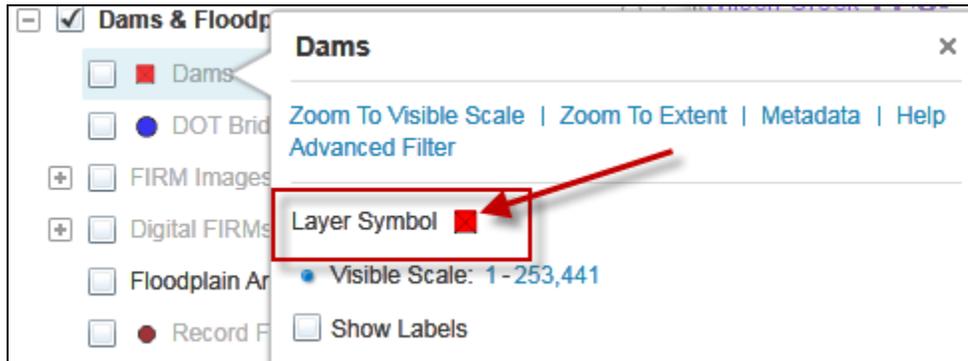
8. Is there a way to see feature labels?

Some layers have the ability to turn on the labeling for that whole layer. To do this, click on the Layer name and the box below will pop up. In that box there may be a Show Labels option. If there is, you will be able to turn this feature on/off. Note: Not all layers have this feature.

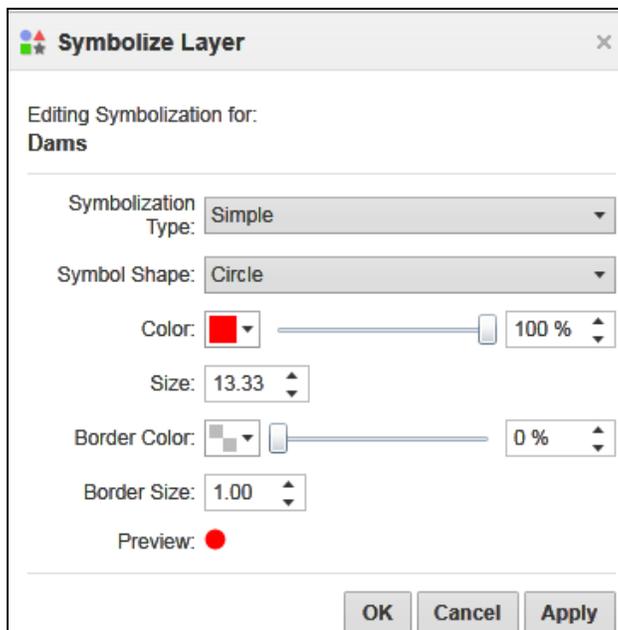


9. Can I change the symbology shape or color of the layer?

You can do this if the layer isn't a grouped layer. If there is just one symbol being represented in the layer, it will allow you to change the symbol and its color. Click on the layer name, a box will pop up, if you see a singular Layer Symbol, click on the symbol. If you can't see the Layer Symbol, then that symbol can't be edited.



A new screen will appear that will let you make changes.



Please note that the changes that are made to the symbology will not be saved **unless you save the session as a project** (see FAQ #12). At this time, when you re-open the project, the symbology change will not be displayed in the Map Layer list. The symbology change will be displayed in the map. In order for it to be shown in both locations, simply right-click on a layer you changed the symbology for, click on Symbolization, and then Ok. **ALL** of your symbolization changes should now appear in the Map Layer list as well as in the map. This is a bug in the current version of the mapping tool being used (as of 04/09/2014).

10. Can I change the order that the layers draw?

Yes.

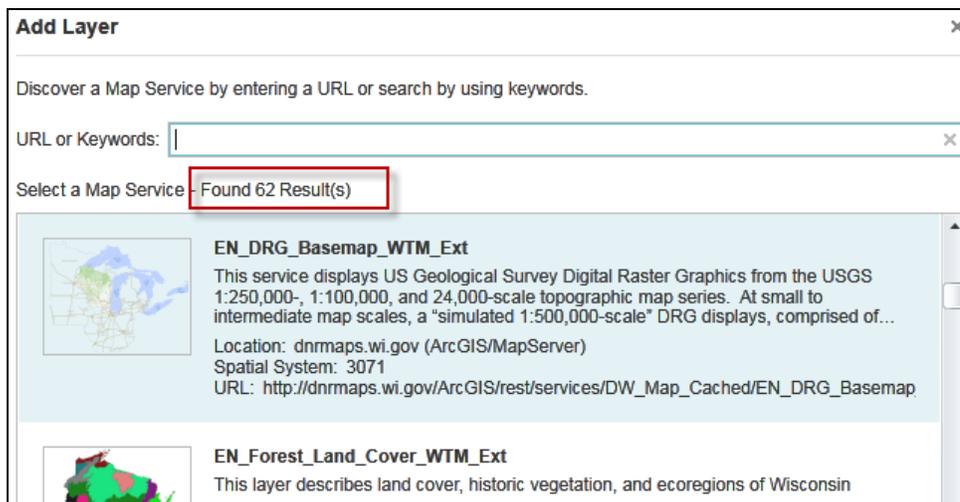
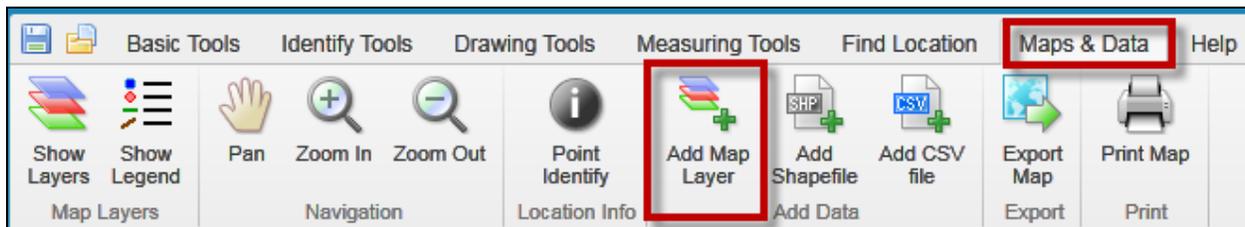
1. Click on the Maps & Data tab
2. Click on the Re-Order Layers button
3. Click and hold on a layer
4. Drag the layer to a new position

Please note that the changes that are made to the drawing order are not reflected in the Map Layers list. These changes will not be carried over to your next visit **unless you save the session as a project** (see FAQ #12).

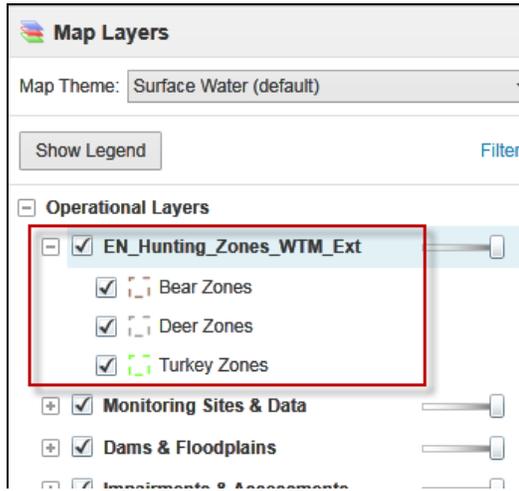
11. The viewer doesn't have the map layer I need. Are there additional layers I can pull into the viewer?

The viewer has the ability to pull in additional layers from DNR maps. There are currently 60+ various map services that you can use. These layers can be temporarily pulled in for a single viewer session or you can save your session as a project and return to the viewer with these layers already in there every time.

Navigate to the Maps & Data Tab. Click on Add Map Layer.



Highlight the layer of interest and click Next/Next/Finish/Close. The layer is now the top layer in the layer list.



This is the new layer that was pulled in. If you close the session now and reopen the viewer, this layer will not be there. See How to Save a Project to be able to open the viewer and see this layer every time.

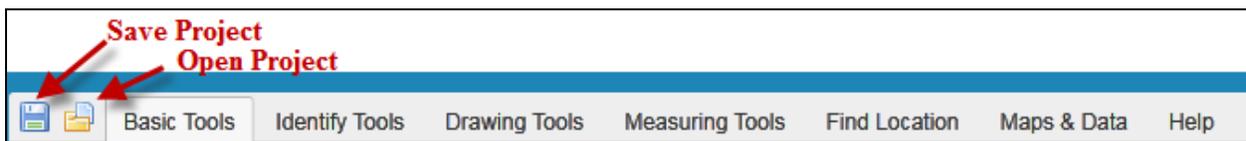
To remove the layer, click on the layer name and choose Remove Layer.

12. How to save a Project

If you always use the viewer with certain layers turned on or always in a certain part of the state and you wish the Viewer could just open to what you want to see without having to remember which layers to turn on all the time, well now you can!

Let's say I only work in Dane County, and I always want Monitoring Stations, Impaired Waters and Watersheds turned on and I prefer the 2010 WROC aerial maps as the default base map when the Viewer opens. I want the viewer to always open up with those features turned on. I'm going to save this as a project.

Setting up your project: Open viewer, turn on all wanted layers, zoom to a specific location if you have a preference, and pull in any additional layers (#10 above). Now click the Save Project button. Navigate to the location you want this project saved to (I usually choose my desktop) and name it (For example, Dane County Viewer). A .gvsp file will be saved. Give the project a name, (I usually use the same name as the previous screen) and you can add an additional description and author.



A saved Project retains:

1. Layers that were already turned on and layers that were additionally pulled in
2. The specific area on map that you were zoomed into
3. Any drawings on map

To open your project:

1. Open the viewer normally
2. Click the Open Project button and navigate to your saved project.

13. How do I make a Selection using an existing feature?

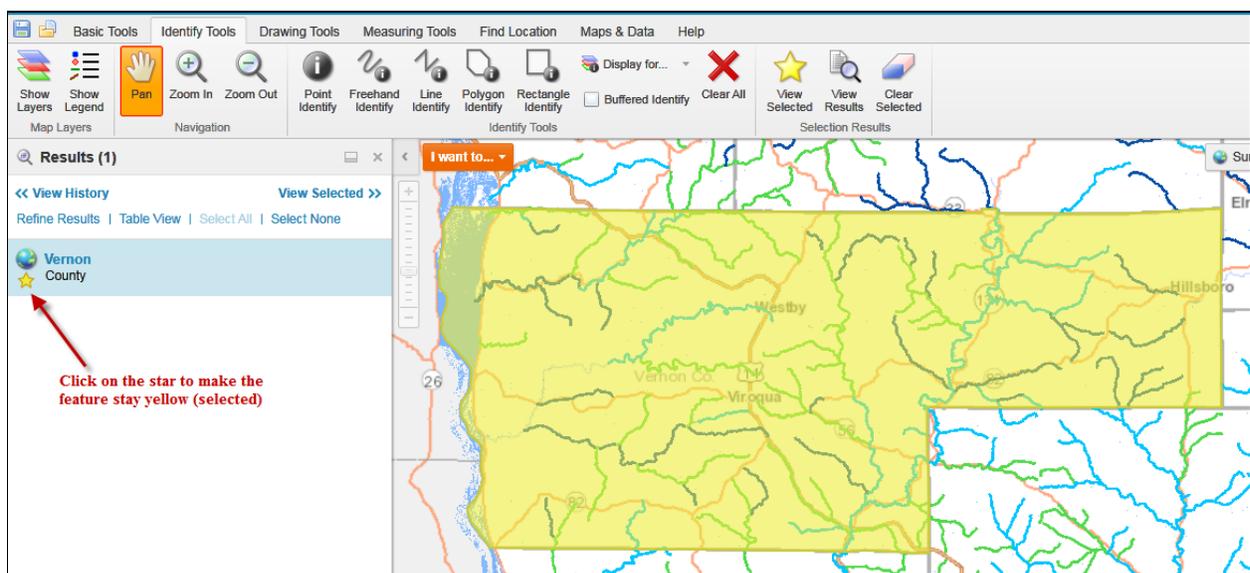
Selections enable you to define an area (For example: single waterbody, county or even multiple watersheds) and then within that area find and identify other features.

Some simple examples of Selections you could do in the Viewer:

- How many outfalls are within 500 feet of the Fox River?
- How many/ impaired waters are in Waukesha County?
- Which streams are in the Somo River, New Wood River, and Spirit River Watersheds combined?
- How many Trout Waters are in Vernon County and what are their names?

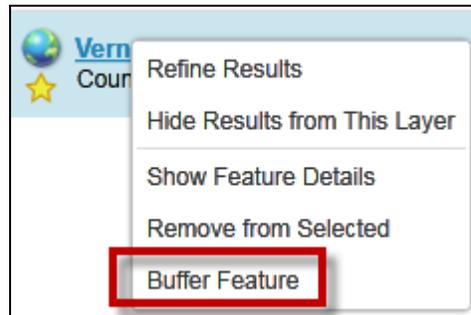
Selection steps:

1. Turn on all relevant layers. The layers you want to select on must be turned on.
2. Identify on the feature you want to use using one of the Identify tools (found on the Basic Tools or Identify Tools tabs).
3. After doing the Identify, select one of the returned features by clicking on the faded yellow star under the feature's name. The star will turn bright yellow and the feature will turn and stay yellow. That means it is selected. Select just one feature or as many as you wish to select by repeating the Identify step above.



- Once you have highlighted the area(s) you are interested in, now it is time to select the features of interest.

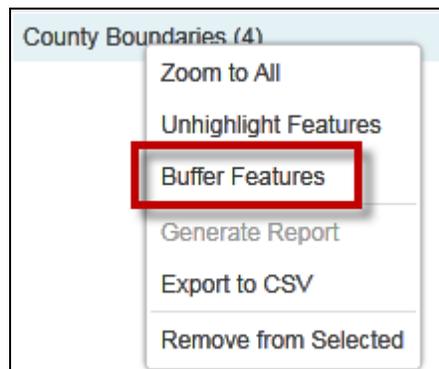
For single feature: If you have a single feature selected, right click on the feature name so that the following menu appears. Choose Buffer Feature.



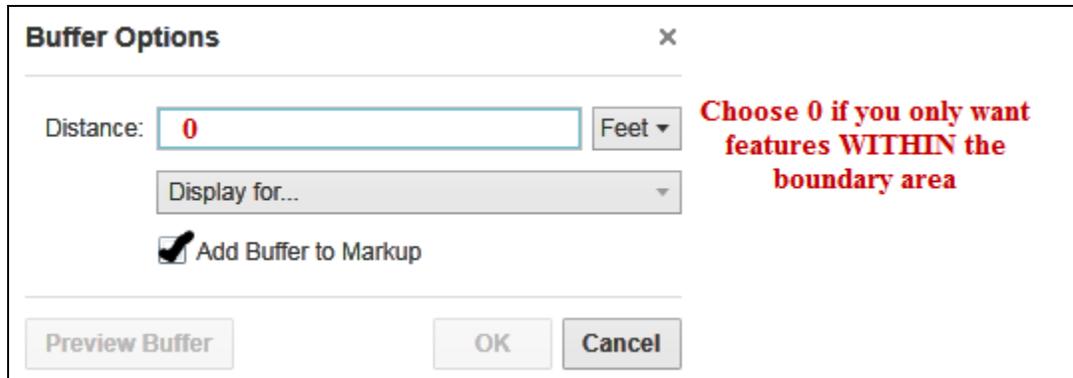
For multiple features: If you have multiple features selected, click View Selected



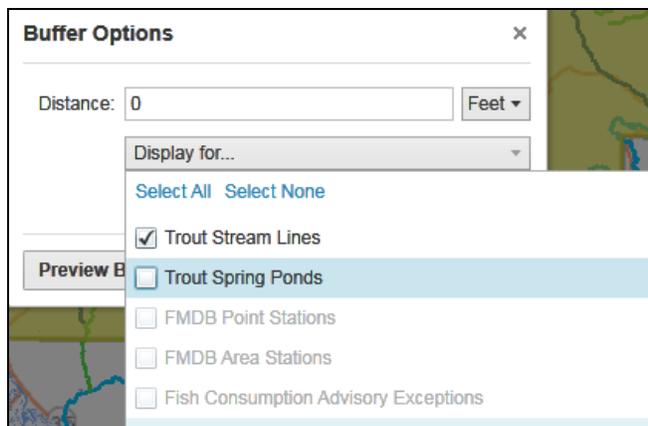
Right click and choose Buffer Features



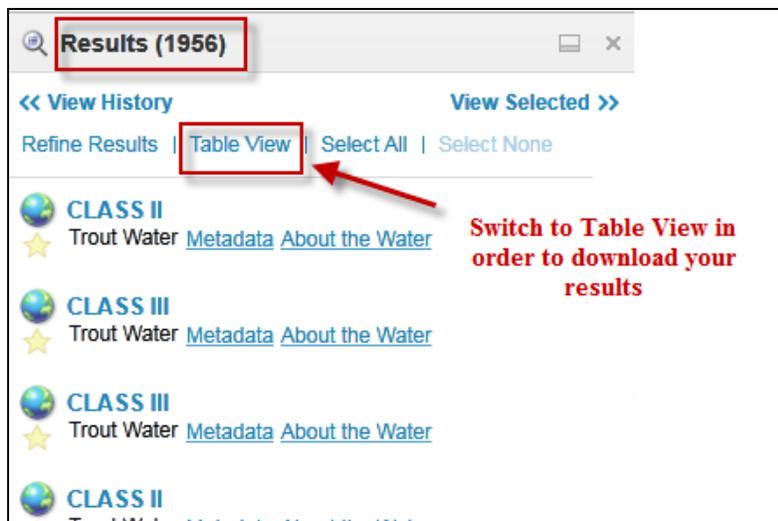
- Choose a buffer distance – pick zero if you are only interested features within the boundary of your selected feature.



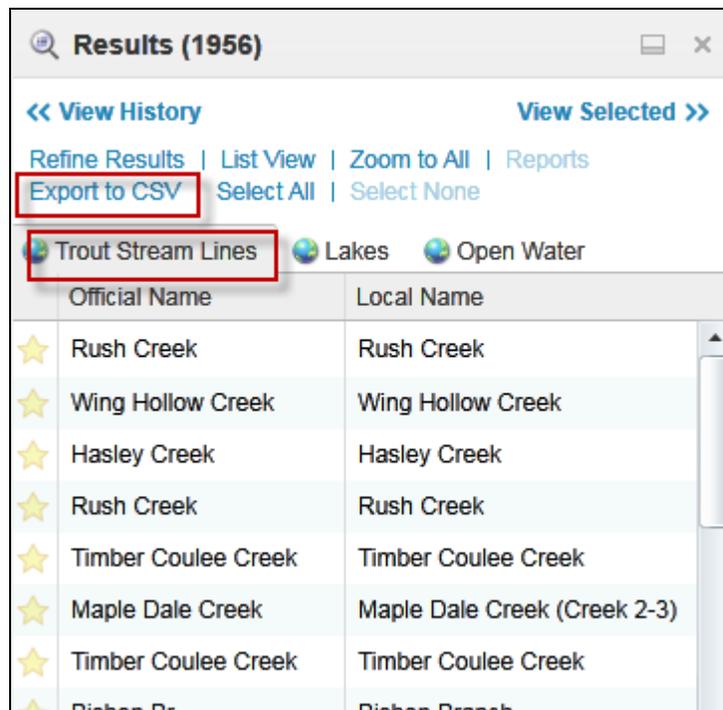
- Since the Trout Waters layer is the only layer turned on, all other layers are grayed out and cannot be selected. I can further narrow my results if I only pick trout streams. Click OK.



- Switch to Table View in order to download your results.



- In Table View, you can export the file to CSV (comma-separated values) which can then be opened up in Excel. In Table View, only the currently displayed tab will download (so any Lakes and Open Water on the additional tabs will not download in this example).



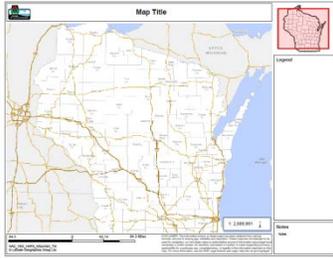
- Give the file a name and save it. The table contains all the fields that are found in the attributes of that feature.

Official Name	Local Name	Water Type	Segment Start Mile	Segment End	Trout Segment Leng	MEASURE	Trout Clas	WATERS II	WBIC	ERW/ORV II
Rush Creek	Rush Creek	RIVER	1.3	12.53	11.23	MILES	CLASS II	13963	1637000	N
Wing Hollow Creek	Wing Hollow Creek	RIVER	0	4.64	4.64	MILES	CLASS III	13977	1644600	N
Hasley Creek	Hasley Creek	RIVER	0	4.18	4.18	MILES	CLASS III	18586	1645200	N
Rush Creek	Rush Creek	RIVER	12.53	17.45	4.92	MILES	CLASS II	949534	1637000	N
Timber Coulee Creek	Timber Coulee Creek	RIVER	0	3.23	3.23	MILES	CLASS I	1515648	1646300	N
Maple Dale Creek	Maple Dale Creek (Cree	RIVER	0	3.49	3.49	MILES	CLASS I	13160	1188800	N
Timber Coulee Creek	Timber Coulee Creek	RIVER	6.28	10.94	4.66	MILES	CLASS I	1515680	1646300	ORW N
Bishop Br	Bishop Branch	RIVER	4.21	5.58	1.37	MILES	CLASS I	13159	1188500	ERW N
Knapp Creek	Knapp Creek	RIVER	0	7.47	7.47	MILES	CLASS III	13165	1191400	N
Unnamed	Creek 1-5	RIVER	0	2.06	2.06	MILES	CLASS I	1525849	1191800	N
Twentyfour Valley Cre	Twenty-Four Valley Cre	RIVER	0	3.44	3.44	MILES	CLASS III	13190	1195000	N
South Fork Bad Axe	South Fork Bad Axe Rive	RIVER	0	22.03	22.03	MILES	CLASS III	13967	1639900	N
Cox Creek	Cox Creek	RIVER	0	5.79	5.79	MILES	CLASS III	949133	1641800	ERW N
Lindahl Creek	Lindahl Creek	RIVER	0	6.02	6.02	MILES	CLASS I	13979	1645400	N
Unnamed	Poplar Creek	RIVER	0	0.59	0.59	MILES	CLASS I	949155	1646200	N
Reads Creek	Reads Creek (Black Bott	RIVER	0	8.87	8.87	MILES	CLASS I	13147	1187400	ERW N

14. How do I create a map?

There are several map templates to choose from.

DNR Print Template (Landscape) – Basic map layout with legend, scale, disclaimer, and title.



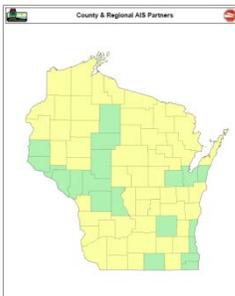
1. Zoom to area of interest
2. Turn on the layers that are of interest (different base maps as well)
3. Add graphics (text, measurements, shapes, etc.) (optional)
4. Click on the Print Map button (can be found on either the Basic Tools or Maps & Data Tab)
5. Select Layout (map name listed above)
6. Select Resolution – the larger the dpi the better the clarity (as well as larger file size)
7. Select your scale – the default value, Current Scale, is a reflection of the scale of the current map frame
8. Enter a Map Title (title for the map)
9. Enter any additional notes (optional)
10. Click on the Create File button
11. Click on the Open File button once the map has been created
12. Save or Print

DNR Print Template (Portrait) – Basic map layout with legend, scale, disclaimer, and title.



(Same steps as DNR Print Template (Landscape))

AIS Coordinators Map – Designed to replicate existing Statewide AIS Coordinators map.



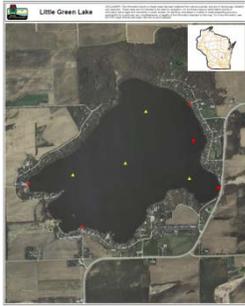
1. Turn off the Cities, Roads, & Waterways layer (under Base Maps)
2. Turn on the Political layer (under Geographic & Political Boundaries category)
3. Turn on the AIS Partners layer (under Education & Outreach category)
4. Turn on other layers that are of interest (optional)
5. Add graphics (text, measurements, shapes, etc.) (optional)
6. Click on the Print Map button (can be found on either the Basic Tools or Maps & Data Tab)
7. Select Layout (map name listed above)
8. Click on the Create File button
9. Click on the Open File button once the map has been created
10. Save or Print

Lake Map Print Template (Landscape) – Designed to replicate the existing Lake Maps used for DNR lake monitoring projects.



1. Zoom to a lake
2. Turn on the layers that are of interest
3. Turn off the Cities, Roads, & Waterways (optional)
4. Turn on different Base Map (e.g., Air Photos) (optional)
5. Add graphics (text, measurements, shapes, etc.) (optional)
6. Click on the Print Map button (can be found on either the Basic Tools or Maps & Data Tab)
7. Select Layout (map name listed above)
8. Select your scale – the default value, Current Scale, is a reflection of the scale of the current map frame
9. Enter a Map Title (title for the map)
10. Click on the Create File button
11. Click on the Open File button once the map has been created
12. Save or Print

Lake Map Print Template (Portrait) – Designed to replicate the existing Lake Maps used for DNR lake monitoring projects.



(Same as Lake Map Print Template (Landscape))

AIS Statewide Map – Designed specifically for statewide AIS mapping.



1. Turn off the Cities, Roads, & Waterways layer (under Base Maps)
2. Turn on the Political layer (under Geographic & Political Boundaries category)
3. Turn on the appropriate AIS layer (under one of the “invasive” categories)
4. Turn on other layers that are of interest (optional)
5. Add graphics (text, measurements, shapes, etc.) (optional)
6. Click on the Print Map button (can be found on either the Basic Tools or Maps & Data Tab)
7. Select Layout (map name listed above)
8. Enter a Map Title (species name)
9. Enter Notes – there are two areas where notes can be added: upper right and / or lower left
10. Click on the Create File button
11. Click on the Open File button once the map has been created
12. Save or Print

15. Can I view my data in the viewer?

Yes, currently there are three different methods to do this. Also see FAQ #11.

Add Map Layer (web map service)

1. Under the Maps & Data tab, click the Add Map Layer button
2. Enter an Endpoint (e.g., <http://services.nationalmap.gov/arcgis/rest/services>)
3. Select the desired layer, click Next, Next, and Finish

4. Click Add Layer
5. Close dialogue box (click the X or Cancel)
6. The layer will be added to the top of the Map Layer list

Add a Shapefile

1. Under the Maps & Data tab, click the Add Shapefile button
2. Navigate to the location of the shapefile
3. Select the .DBF, .PRJ, and .SHP files and click Open
4. The layer will be added to the bottom of the Map Layer list (as a graphic)

Add a CSV Table

1. Under the Maps & Data tab, click the Add CSV file button
2. Navigate to the location of the CSV table
3. Select the CSV file and click Open
4. The CSV is added as a layer to the bottom of the Map Layer list (as a graphic)

Please note that any additional layers added to the viewer will not be carried over to your next visit **unless you save the session as a project** (see FAQ #12).