

# FAQ for New SWDV

## Contents

1. How do I access the map services and bring them into ArcMap (GIS)?.....	1
2. Will there be more base maps available in the future? .....	2
3. Can the water layer (hydrology) be turned off separately from the Cities, Roads, & Waterways base map? .....	2
4. Why does the layer I want to see turn off when I print my map? .....	2
5. Trying to print map but using another browser other than Internet Explorer (IE)? .....	3
6. How do I enter coordinates in the coordinate fields? .....	3
7. What datum and projection should I use for shape files and data collection?.....	4
8. Is there a way to see feature labels? .....	5
9. Can I change the symbology shape or color of the layer?.....	5
10. The SWDV doesn't have the map layer I need. Are there additional layers I can pull into the SWDV? .....	6
11. How to save a Project.....	7
12. How do I make Selections? What is a Selection? .....	8

## 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://dnrmmaps.wi.gov/arcgis/rest/services> --> click Finish

Dbl-click on arcgis on dnrmmaps.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

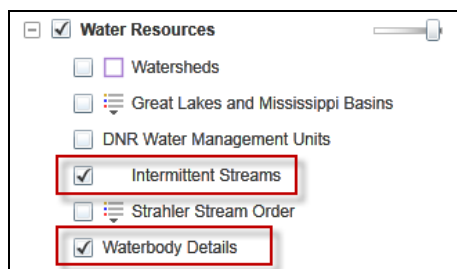
Open ArcMap  
Click on the plus sign (add data)  
Dbl-click on database connections  
Dbl-click on READ\_Prod.sde  
Dbl-click on file of choice (ex. W07510.WT\_SWIMS\_MONIT\_STATION\_PT\_SV)

## **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 satellite photos and 2010 WROC leaf-off satellite photos. We plan to add NAIP 2005 when it is ready. The caching process for the whole state at all the different map scales takes a long time.

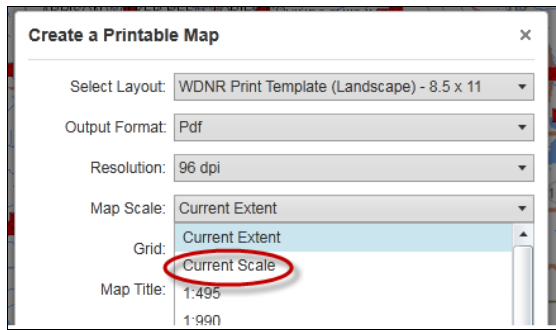
## **3. Can the water layer (hydrology) be turned off separately from the Cities, Roads, & Waterways base map?**

The water layer is incorporated into the Cities, Roads & Waterways base map so it is an all or nothing view because they are cached together. It may be an option in the future to have the water separated from the Cities and Roads but right now it is not. There are additional separate water layers in the Water Resources Folder that can be used in combination with base maps if needed. These layers are Intermittent Streams and Waterbody Details located in the Water Resources folder.



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

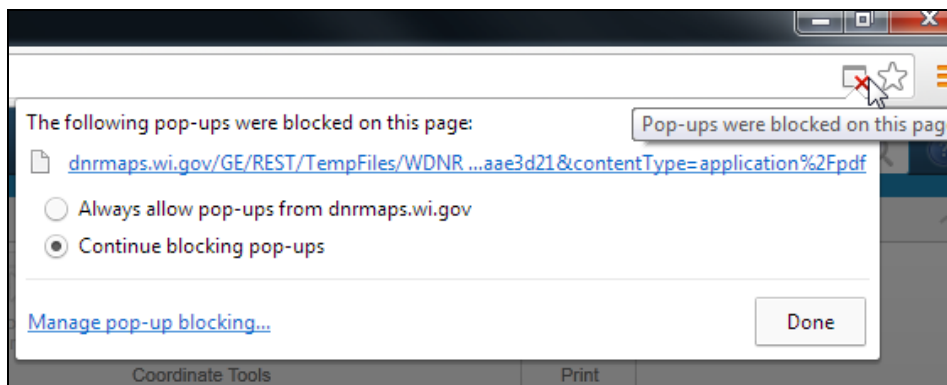
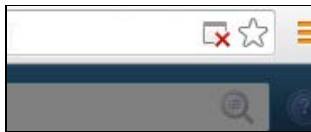
There is an issue with printing a map and using the default printing settings. When you zoom to the maximum scale of given layer (i.e. Dams), followed by printing the map, if you use the default setting of "Current Extent" (see image below), that layer does not draw in the resultant image. This is because 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

**Manually Enter Coordinates** [X]

Coordinate System : Lat/Lon (DMS) [v]

Lat : 44 43 29.238N

Lon : 89 57 26.629W

Add coordinate to map

Pan to coordinate

Add Done Cancel

### DDM – Decimal Degree Minutes

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

**Manually Enter Coordinates** [X]

Coordinate System : Lat/Lon (DDM) [v]

Lat : 43 4.195N

Lon : 89 24.7525W

Add coordinate to map

Pan to coordinate

Add Done Cancel

### DD - Decimal Degrees

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

**Manually Enter Coordinates** [X]

Coordinate System : Lat/Lon (DD) [v]

Lat : 43.0285

Lon : -89.5306

Add coordinate to map

Pan to coordinate

Add Done Cancel

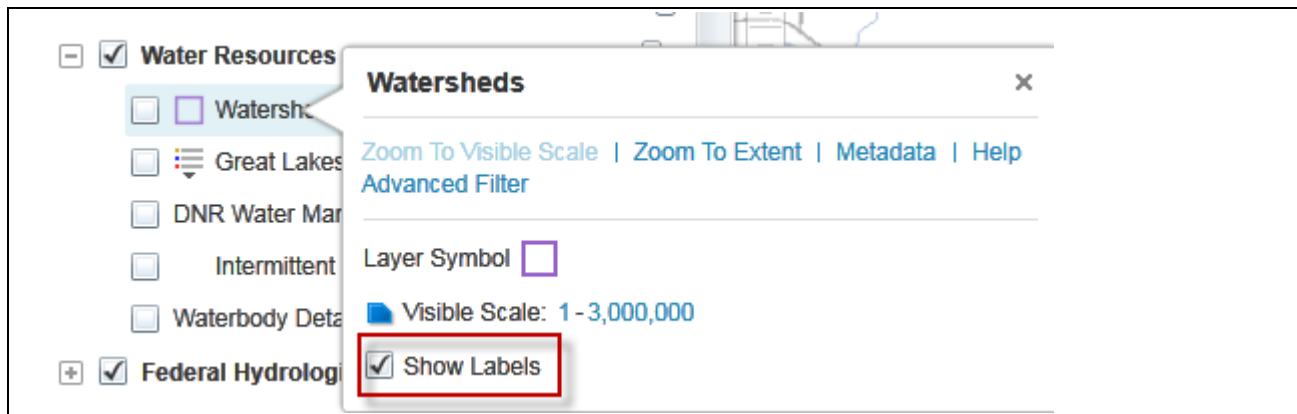
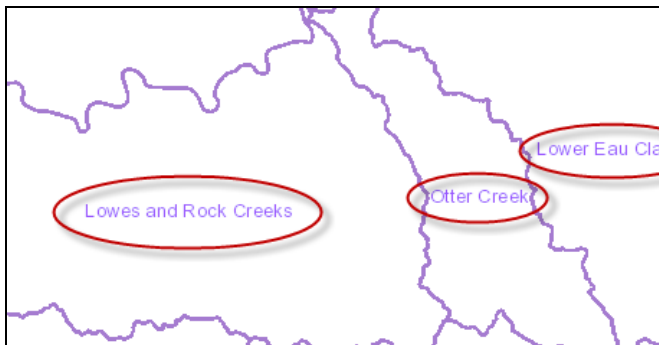
## 7. What datum and projection should I use for shape files and data collection?

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 Surface Water Data 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.

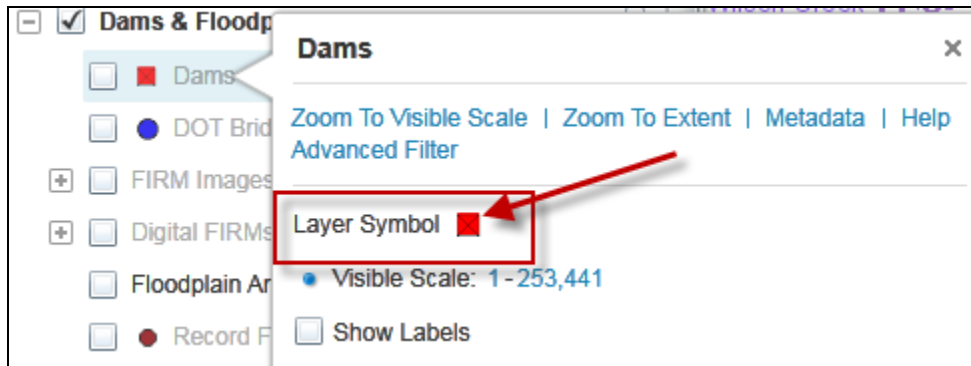
## 8. Is there a way to see feature labels?

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.

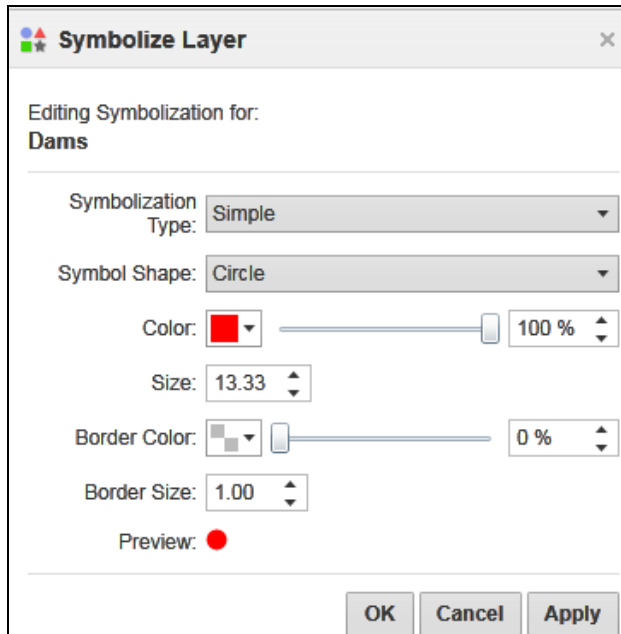


## 9. Can I change the symbology shape or color of the layer?

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.



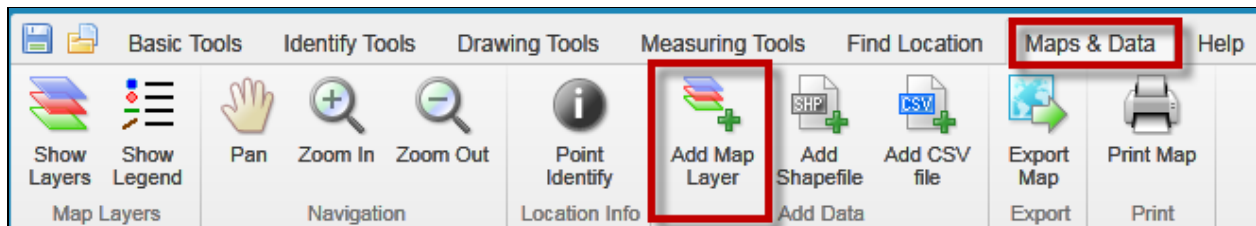
A new screen will appear that will let you make changes.

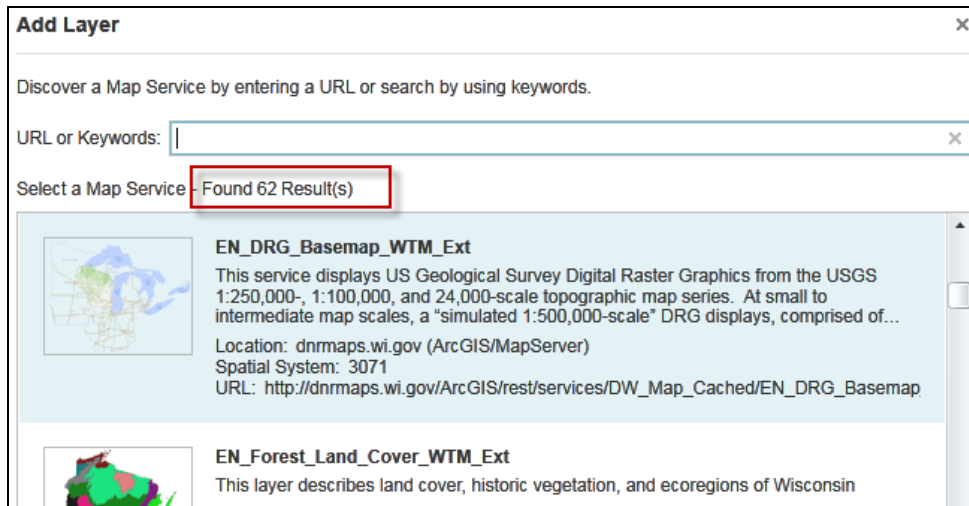


## 10. The SWDV doesn't have the map layer I need. Are there additional layers I can pull into the SWDV?

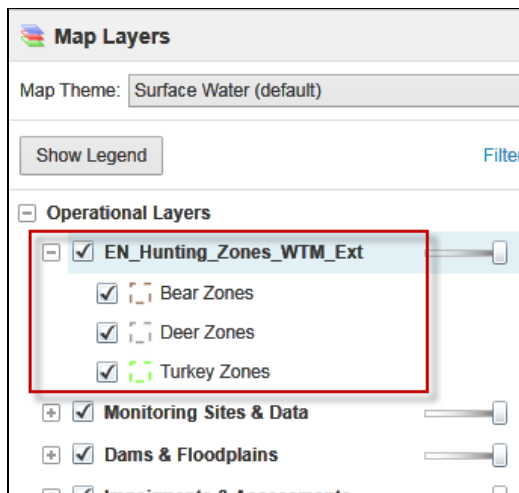
The SWDV has the ability to pull in additional layers from DNR maps. There are currently 60+ various map services that you can use. These layers can be temporarily pulled in for a single SWDV session or you can save your session as a project and return to the SWDV with these layers already in there every 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 SWDV, this layer will not be there. See [How to Save a Project](#) to be able to open the SWDV and see this layer every time.

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

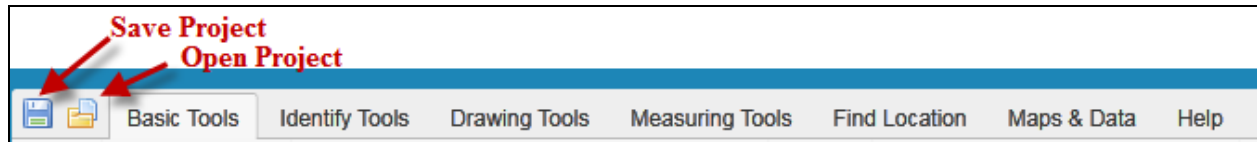
## 11. How to save a Project

If you always use the SWDV 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 SWDV to always open up with those features turned on. I'm going to save this as a project.

Setting up your project: Open SWDV, 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 SWDV normally
2. Click the Open Project button and navigate to your saved project.

## 12. How do I make Selections? What is a Selection?

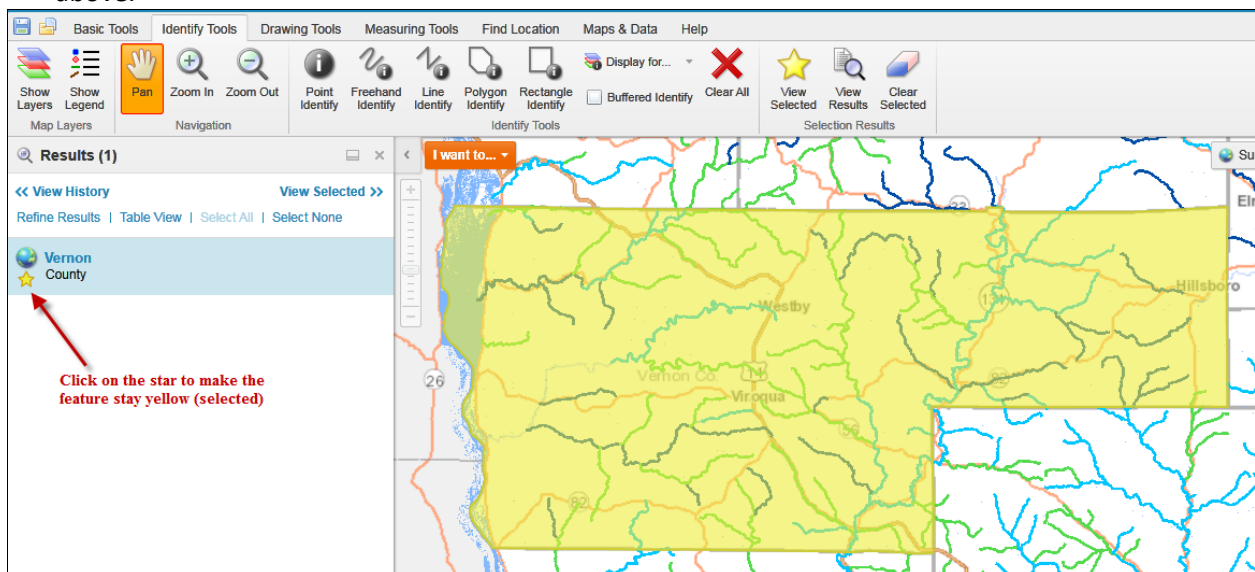
Selections enable you to define an area (For example: single waterbody, county or even multiple watersheds) and then within that area find and identify other features.

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:

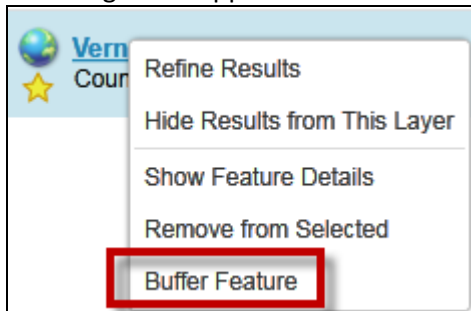
1. Turn on all relevant layers. The layers you want to select on must be turned on.
2. Identify on your area feature(s) and select it by clicking on the faded yellow star under the feature's name. The star will turn bright yellow and the feature will turn and stay yellow. That means it is selected. Select just one feature or as many as you wish to select by repeating the Identify step above.



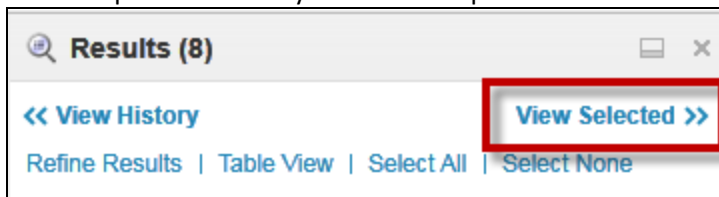


- Once you have highlighted the area(s) you are interested in, now it is time to select the features of interest.

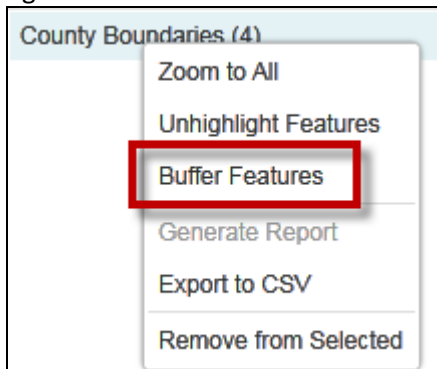
For single feature: If you have a single feature selected, right click on the feature name so that the following menu appears. Choose Buffer Feature.



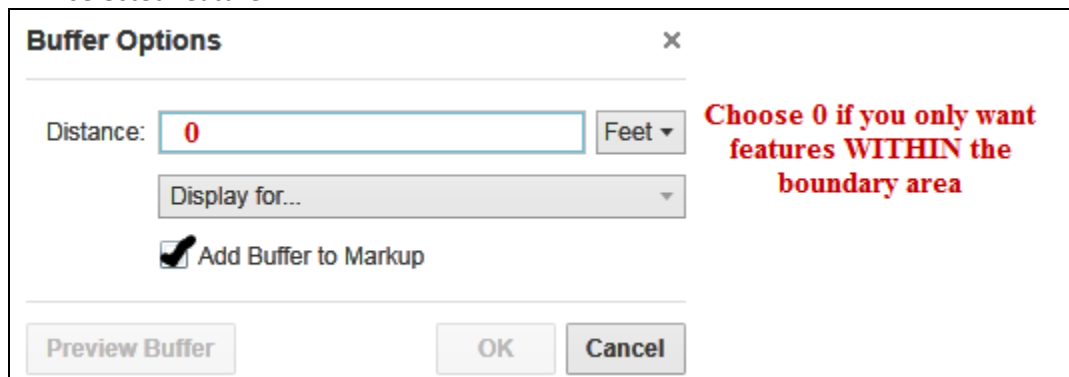
For multiple features: If you have multiple features selected, click View Selected



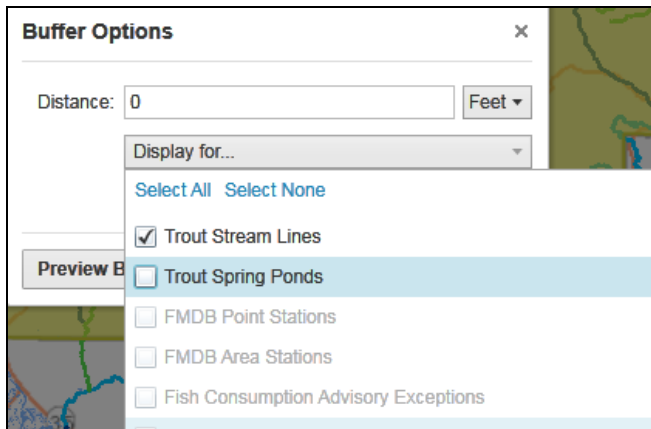
Right click and choose Buffer Features



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



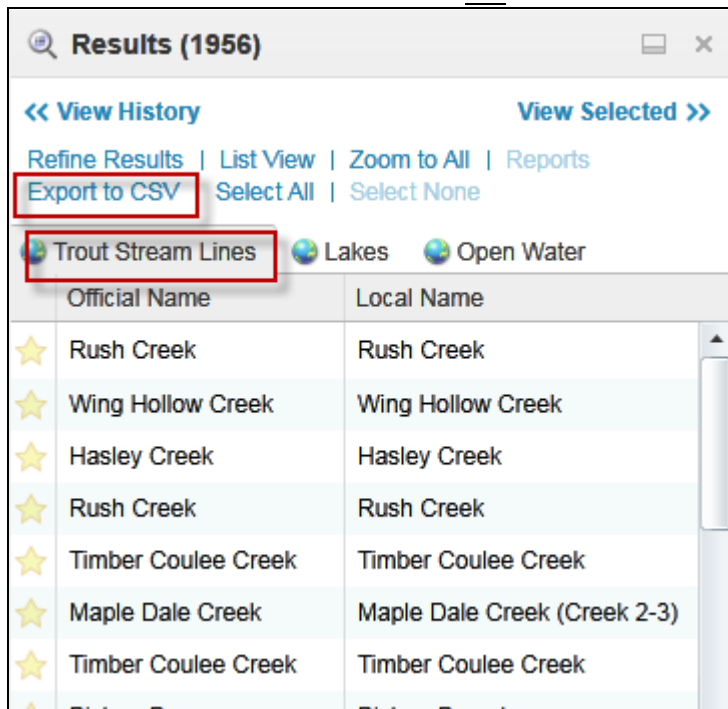
- Since I only have the Trout Waters layer turned on, every other layer is grayed out and unselectable. I can further narrow my results if I only pick trout streams. Click OK.



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



7. 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).



8. 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 Length	MEASURE	Trout Class	WATERS ID	WBIC	ERW/ORV ID
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	FRW N