

These instructions will help you navigate the map layers from the Healthy Watersheds (HW) Assessment. You can use these online mapping tools to zoom into watersheds of interest to you and see various map layers and ranking scores.

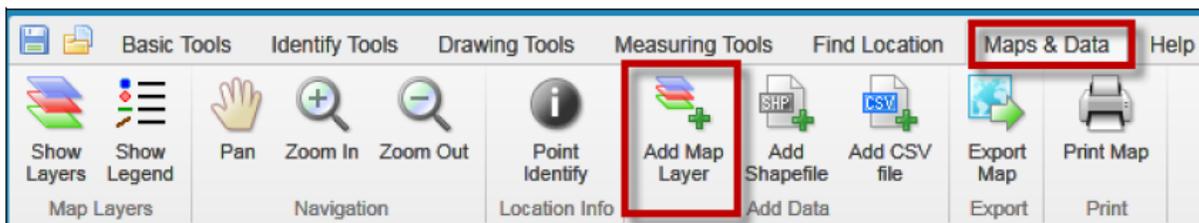
Opening Healthy Watershed layers in the Restoration Viewer:

1. The easiest way to see the Healthy Watershed layers is to view them within the WDNR's Restoration Viewer. Simply open the Viewer here:
<http://dnrmmaps.wi.gov/SL/?Viewer=Watershed%20Restoration%20Viewer&layerTheme=Healthy%20Watersheds%20Assessment>

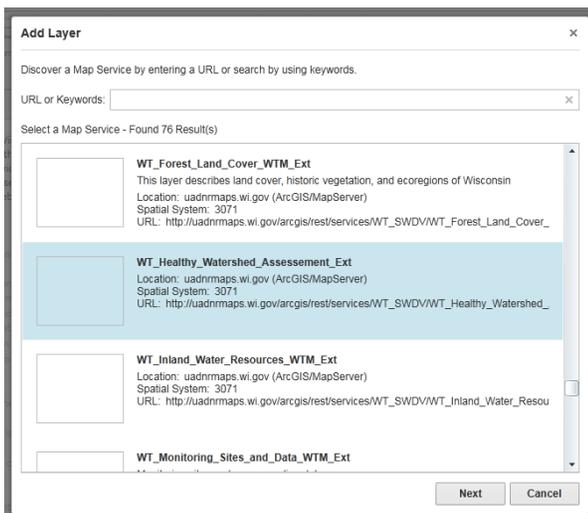
However, if you wish to be able to overlay additional types of map layers with the Healthy Watersheds layers, you may wish to import the HW layers into the Surface Water Data Viewer, which houses the majority of WDNR's maps (such as permitted facilities, dams, waterbody classifications, etc.). If you wish to do this, use steps 2-5. If not, skip to step 6.

ALTERNATIVE: Importing Healthy Watershed layers to the Surface Water Data Viewer:

2. Open WDNR's Surface Water Data Viewer, at <http://dnr.wi.gov/topic/surfacewater/swdv/>. This website is the launch page for the SWDV, and contains help materials to assist you in navigating the SWDV.
3. Under the "Overview" tab, click on "**Launch application: Surface Water Data Viewer Web Mapping Application**"
4. Navigate to the Maps & Data Tab. Click on Add Map Layer.



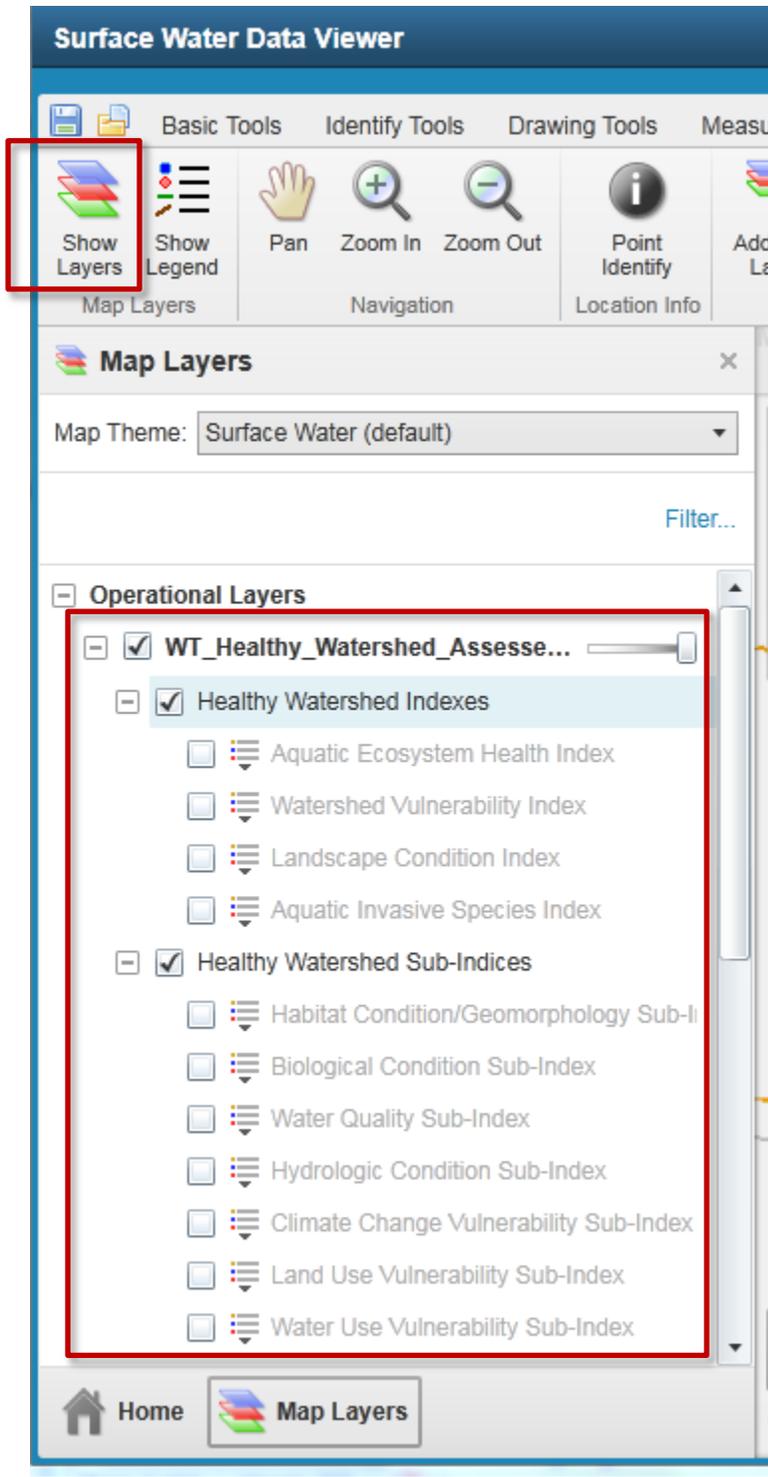
5. Scroll down and highlight the layer of interest (shown in blue), which in this case is **WT_Healthy_Watershed_Assessment_Ext**, and click Next/Next/Finish/Close.



Note: The graphics shown below are from the SWDV, but are very similar to the Restoration Viewer.

Finding the HW layers

6. From within either Viewer, when you click on the “Show Layers” icon, the set of Healthy Watershed layers will show up in the layers list along the left.



This is the set of Healthy Watershed Assessment layers.

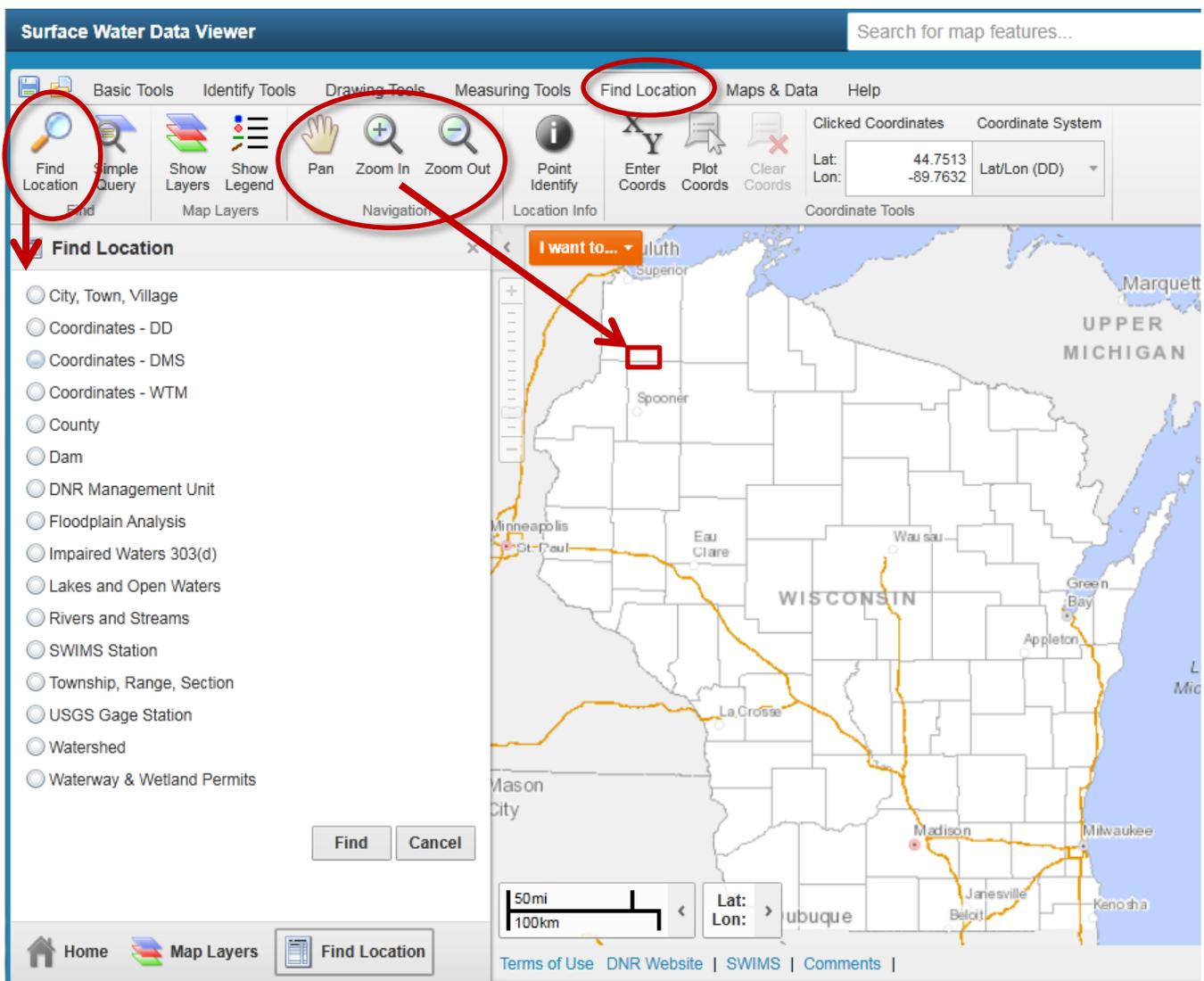
Note that they are grouped under headers for Indexes and, beneath that, Sub-Indices.

The headers (“Healthy Watershed Indexes” and “Healthy Watershed Sub-Indices”) will automatically have a check mark by them. You will need to keep these headers checked, as shown, in order to open any of the layers shown beneath them. You can leave the header boxes checked all the time. Use the + box to view more layers beneath each header, and the - box to hide them.

PLEASE NOTE: The individual metrics scores that make up the Sub-Indices are not yet available on the SWDV (as of April 2014). WDNR hopes to make these available in the future. If you wish to see the metrics scores, download the Excel data file “Ranked Score Results” from the Healthy Watersheds website: <http://dnr.wi.gov/topic/watersheds/hwa.html>.

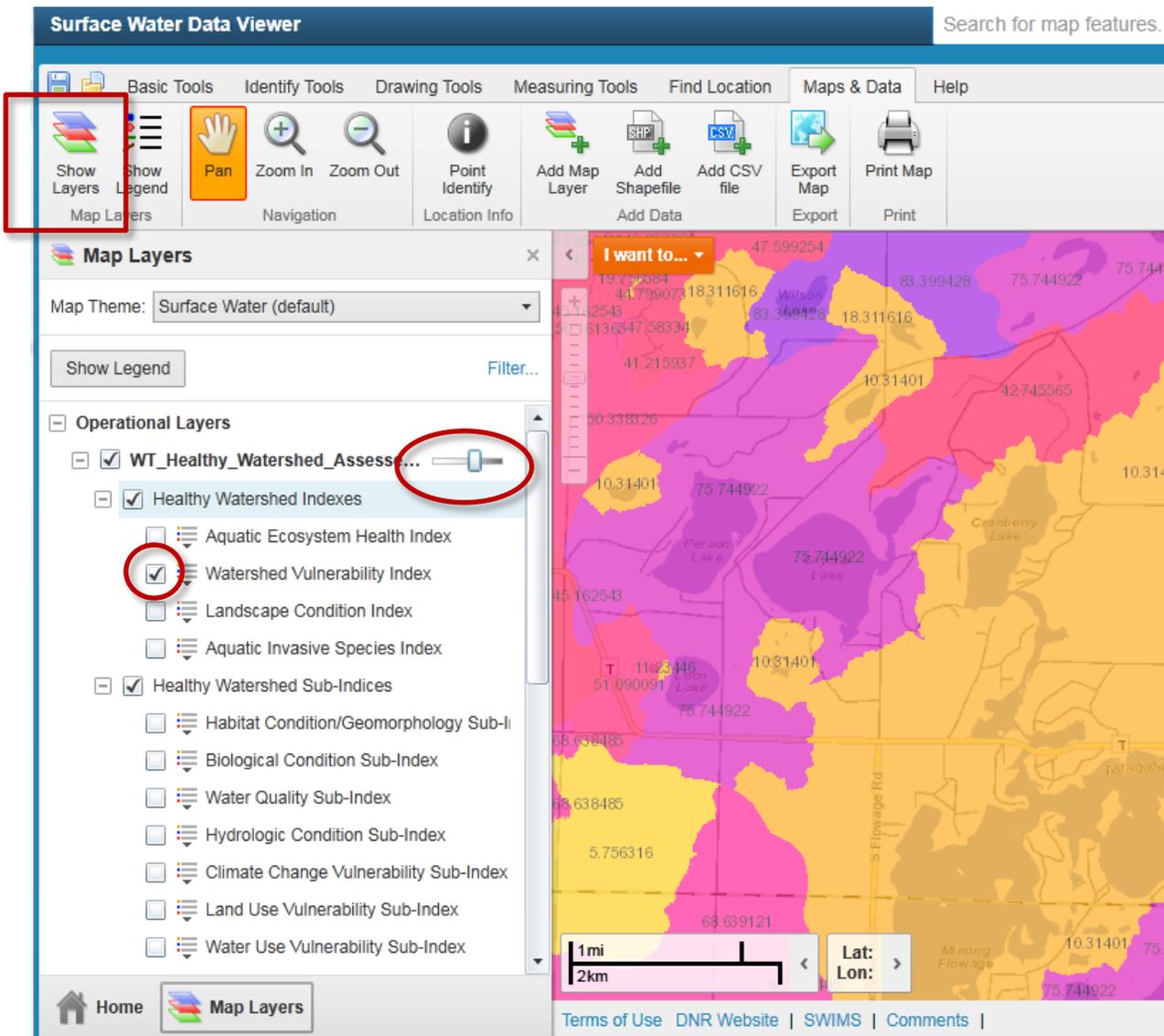
Zooming in to find your location:

7. Before selecting any layers, you will need to zoom in on the statewide map to the location you are interested in. This is because the Healthy Watersheds layers only show up after you have zoomed in to approximately county scale or smaller.
 - First, click on the “Find Location” tab. Then you have two options for finding your location:
 - i. You can use the “Zoom In”, “Zoom Out”, and “Pan” tools. For instance, clicking on “Zoom In”, then click on the location you want to zoom in on, or click and drag to draw a box around a general location.
 - ii. Or, you can use the “Find Location” magnifying glass icon to enter the specific waterbody name, county, or other locational information to find your waterbody.
 - If you need general assistance zooming or navigating in the SWDV, refer to the SWDV instructions located on the SWDV website at http://dnrm.wi.gov/GE/DNR_Geocortex_Help/.
 - The amount of time it takes for the map to zoom or show layers may vary depending on your computer.



Selecting/viewing the map layers for the Healthy Watershed Assessment:

- Once you are zoomed in to your location, return to the map layers using the “Show Layers” icon. Select a map layer you are interested in by clicking on the checkbox for that layer. When you turn it on, the watersheds will appear colored in. If you are zoomed in far enough, a numeric score will appear in each watershed, which is its ranking score for the layer you have selected. In the example below, since the Watershed Vulnerability Index is selected, the number in each watershed is its Watershed Vulnerability score.
 - You can use the “transparency bar” to make the layers more transparent (the transparency bar is circled below, to the right of the bold header). This will enable you to see the underlying roads layer for a reference point to help you navigate. Just click the bar and slide it left/right.
 - It is best not to select more than one layer at a time, since if your layers are partially transparent the colors will become ‘muddled’.



Looking up the Catchment ID and ranking scores for different metrics:

You will want to find your watershed's Catchment ID number to make it easier to look up the nested metric scores used in the ranking.

9. Select the Point Identify tool, and then click on the watershed you are interested in. The watershed's information will show up on the left (shown in blue below). The Catchment ID is the nine-digit number shown next to the map layer name (circled below). In the Restoration Viewer, only the nine-digit number appears.

(NOTE: If you see a number that shows up next to a waterbody name (for example, "Cranberry Lake (WBIC XXXXXXX)", that is not the correct number to use for the Catchment ID.)

10. When you click on the catchment ID, it will bring up a pop-up box showing not only the ranking scores for that layer, but also for the other layers under that header. For instance, in the example below, since the Watershed Vulnerability Index is under the group of four Index layers, all four index scores also appear in this popup box. If you want to see the Subindex scores, close the popup box, go back to Show Layers, select a layer that is in the Subindex grouping, and then do steps 7 and 8 again.

You can also use your Catchment ID to look up the metric scores using the Excel file available on the Healthy Watersheds website, or using the geospatial tools you can download there.

The screenshot shows the 'Surface Water Data Viewer' interface. The 'Point Identify' tool is highlighted with a red box. A red arrow points from this tool to a specific watershed on the map. A pop-up box titled 'Watershed Vulnerability Index: 600004306' is open, displaying a table of metrics and their values.

Field Name	Field Value
AQUATICECOSYS	66.678973
WATERSHEDVULNERABILITY	75.744922
LANDSCAPE	69.006297
INVASIVES	

If you close the session now and reopen the Viewer, the Healthy Watersheds layers will not be there. If you would like to save the layers so you can see them every time you open the SWDV, see **How to Save a Project**, below.

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

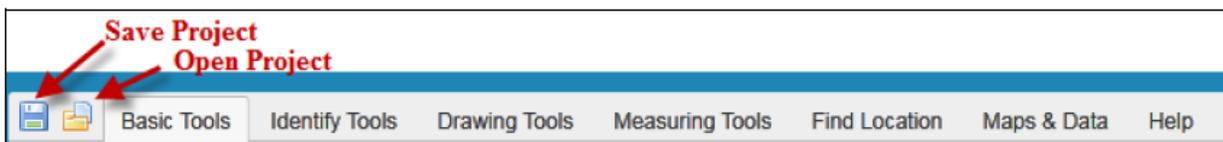
How to save a Project

If you want either the Restoration Viewer or SWDV to always open with certain layers available or turned on, or always show a certain part of the state, so you can just open to what you want to see without having to remember which layers to turn on all the time, you can do that!

Let's say you only work in Vilas County, and you always want the Healthy Watersheds layers to be available. You could select other layers to show up as well if you wish. To set the Viewer to always open up with those features turned on, save this as a project.

Setting up your project:

1. Open the Viewer you wish to use, zoom to a specific location if you have a preference, and turn on all layers that you want to open up automatically (In the SWDV, because you have pulled in your Healthy Watersheds layers earlier, they will be available on your layers list regardless of whether you select any before you save it as a Project).
2. Now click the Save Project button.
3. Navigate to the location you want this project saved to (you may want to choose your desktop) and name it (For example, "Vilas Co HW 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 the map

To open your project:

1. Open the Viewer normally
2. Click the Open Project icon (shown above) and navigate to your saved project.