Online MAP Tool: Missouri Stream Team Interactive Map

This online map tool provides the user an array of layers about the **Missouri Steam Teams**, their activities, and the **Volunteer Water Quality Monitoring locations**. Presently the site does not include the water quality monitoring data collected by the volunteers but it can be requested and it will be posted in the future.

The interactive map also includes layers showing Missouri's watershed boundaries, public lands, NPDES (National Pollution Discharge Elimination Permits) for waste water outfalls (waste water treatment plants), storm water outfalls (regulated run off drainage), and animal feeding operations (AFOs).

This map also identifies the classifications and uses of all Missouri rivers and streams and waters identified as impaired. It also shows the location of all snail monitoring, but it does not give the results of that monitoring. Snail species populations provide information about water quality. This information can be requested.

NOTE: Layers appear at different scales when you zoom in and out of map. Be aware that a layer may take a while to become visible. If layers do not ever become visible, try to zoom in or out. Keep in mind internet speeds affect loading times. You may need to refresh or clear map and start over.

Getting Loaded and Oriented:

- Search Missouri Stream Team Interactive map in a browser.
- Click on the link and let the map load.
- Go to the bottom of the map and see the blue circle icons.
- Click the blue circle, labeled "Map Layers," located on the lower portion of the map.
- A box will pop up that names each layer, with an eye icon shown at left. A cross through the eye means the layer is turned off.
- Read through the list of layers to become familiar with them. Note that **NPDPS** means **National Pollution Discharge Point Source.** These are locations that have a permit to discharge designated pollutants.
- · For now, make sure all the layers are turned off except for "County."

Finding your School's Location and Watershed:

- To find locations, click the next blue circle to pop up the "Search" box. Enter the address of your school. It will zoom to your location.
- Use the minus icon (-) on the bottom right to center the south-central Ozark counties on the map. Drag the map so the Missouri Arkansas border is towards the bottom of your screen. Orient yourself to the area.
- Go back to the layer icon and turn on the following layer: Missouri Watersheds. Watch as watersheds appear. Using your curser go to each watershed and left click. The watershed area will fill in with a blue color and a box with details about the watershed will pop up. You can click on the arrow on the top margin to minimize.

Adding Stream Classification and Use Layer:

- Identify the watershed where your school is located. Turn off the watershed layer and turn on the **Stream Classifications and Use Layer**.
- All streams and rivers will darken as you zoom in. Click on any one of them and an information box will appear. Below is the legend for the abbreviations in the box: Y means Yes and N means No next to descriptions.
 - AQL_USE: Aquatic Life use protection / CDF_USE: Cold Water Fisheries use / CLF_USE: Cool Water fisheries use / DWS_USE: Drinking Water Source / IND_USE: Industrial use / IRR_USE: Irrigation use / LWW_USE: Livestock and wildlife watering use / SCR_USE: Secondary Recreation use / WBCA_USE: Whole Body Contact A / WBCB_USE: Whole Body Contact B / HHP_USEL: Human Health Protection Use
- Add the Water Quality Assessment Stream Layer. Stream and rivers that have a known
 pollution problem are shown in a pinkish red. There are several in our Ozark region.
 You have to click exactly on this color for an information box to pop up. It may take
 several tries. Often times the Stream Classification and Use box pops up instead.

Adding Other Layers:

- Go back to the blue circle icon for layers. Add and subtract layers and get familiar with them.
- Add the NPDES to see where Waste Water Outfalls (treatment plants) are located near you. They show up as blue triangles.Click on them to find out specifics.
- Add NPDES to see Storm Water Outfalls. Light blue triangles with a dot in the center will appear in locations that have permit to release storm water that may have a pollutant in their run off. The permit has specifics to decrease or eliminate polluted runoff. Go to the Springfield, Missouri area to see the large number required in an urban area.
- Add the NPDES for Animal Feeding Operations and drag your map to southwest Missouri to see them.
- Note that not all layers can be seen at all scales. You will have to zoom in and out to get certain layers to appear. You will have to wait for loading.
- The LEGEND blue circle icon is helpful to know what layers you have ON or visible on the map.
- The water quality monitoring data is presently not available. It will be made available in the future. You can request the information if you want it sooner.
- Use the location blue icon to put in the address of your school or name of your town. Look for stream teams and volunteer water quality monitoring in your area. You may have to refresh the layer to load these two layers.

Attribute Table:

- The Attribute Table icon is a blue circle, that looks like a calculator, at the bottom of the map. This table can be used to select specific information about the location of Stream Teams and activities and Volunteer Water Quality Monitoring locations. There are multiple columns of information that can be accesses for both of these topics. However, only the topic that is clicked on will be accessed at one time.
- Below is a list of the descriptions for Stream Team Activities that will be used in the Attribute Table. See for more details: <u>activityreport.pdf (mostreamteam.org)</u>

Adopt-An-Access	Habitat	Other: Please	Stream Team
-AAA	Improvement- HAI	Describe- OTH	Mentoring- MEN
Advocacy on Stream Issue- ADV	Invasive Species Monitoring – ISM	Photo-Point Monitoring- PPM	Stream Team Workshop Attended- WKS
Agency Sponsored	Invasive Species	Pre-Activity	Tree Planting- PLT
Project- AGE	Removal- ISM	Planning- PLN	
Award Received - AWA	Letter or Article Written – LET	Rain Garden / Barrel, Green Roof- NPS	Water Quality Monitoring – WQM
Education Project- EDU	Litter Pickup- LPU	ST Association Activity- ASC	Watershed Inventory Assessment- WIA
Forest Keeper	Media Contact /	Storm Drain	
Monitoring- FOR	Interview- MED	Stenciling- SDS	
Grant Applied or	Monofilament	Stream Team	
Received- GRT	Recycling- MRP	Meeting - MTG	

- You can search with any key word in the attribute table. Using your county name will probably be the most helpful.
- There are many locations columns provided in this table. You eliminate those columns by clicking them off. However, when you do that, it does narrow your results.
- To take off columns in the attribute table find the outlined rounded square icon with dots in it. This icon provides a drop down naming the columns. Only keep the columns you want to see checked.
- You can set the table to either find locations for Stream Team Activities or Volunteer Water Quality Monitoring by clicking on them at the top of the box.
- Set the columns on ascending so letters will be alphabetical and numbers in numerical order as much as possible.
- If you can't locate the information you are looking for on the table you can also contact the program. See main website.