WATERSHED LAB DIRECTIONS:

MAP 1: MISSISSIPPI WATERSHED: (Use the 'USGS Streamer' website & Watershed Google Slides!)

__ 1. On the lower right corner of your map place an arrow that indicates which direction is north on the map. Put an 'N' at the top arrow to show north. Clockwise, add the letters E, S, & W to indicate the directions east, south, and west.

__ 2. Using a green colored pencil, carefully outline the Mississippi Watershed on your map by following the dashed line. Write "watershed boundary" neatly along this line.

__ 3. Using a blue colored pencil, carefully highlight the Mississippi River; neatly label it. Use the 'Interactive Watershed Map' to help you!

__ **4.** Where does the Mississippi River start? Mark that place with a blue dot.

__ 5. 'Search' and find Los Angeles, California on your map. Mark that place with a red dot. Is this river route within the 'Mississippi Watershed'?

__ 6. Highlight the Minnesota River with a yellow colored pencil, highlight the Missouri River with a brown colored pencil, and the Ohio River in an orange colored pencil. Label each river.

__ 7. Using other colors, neatly highlight at least two other rivers on the map that are tributaries to the Mississippi; label each river.

__ 8. At what city does the Missouri River meet the Mississippi River? Mark this place with a pink dot on the map.

__ 9. Make a "key" on your map to indicate what each colored line and dot represents.

__ **10.** Lay a string along the river, following all the river's curves; mark the string to the length of the river. Use the scale of miles at the bottom of the map to find the approximate length of the Mississippi River.

a. _____ miles = length of Mississippi River
b. Look up the actual length of the Mississippi River. _____ miles
c. How close was your answer? _____ Why is it not exact? _____

__ **11.** Generally, which direction does the Mississippi flow?

__ 12. Label the body of water that the Mississippi River flows into on your map.

__ **13.** What tributary (stream or river) of the Mississippi River is your Highland Middle School closest to?

__ **14.** Name the states that have land along the Mississippi River. Write their two-letter postal code abbreviations (example: OH) on each of those states on your map.

__ 15. Use a pencil to darken the state boundary lines inside the Mississippi Watershed area. How many states do you count that contribute water into the Mississippi River?

__ **16.** Look at your map and notice that all rivers DO NOT flow down or south on the map! This is a common error people think. However, all rivers do flow downhill to areas of lower elevation. Areas of lower elevation could be heading north, south, east, or west. On your map find a river that flows in each of the directions. Write it on your lab sheet.

MAP 2: GREAT LAKES WATERSHED (Use the 'USGS Streamer' website & Watershed Google Slides!)

__ 17. Label the five Great Lakes on the map.

__ 18. On the map, draw the 'continental divide' using a green colored pencil. Use the website to help. [Note: A 'continental divide' is a natural land boundary between watersheds. One one side of the divide, water will flow a different direction than on the other side of the divide.]

__ **19.** In what direction does the water flow North of the continental divide? South of the continental divide?

__ 20. Locate and label the Cuyahoga River in red, Sandusky River in blue, and the Maumee River in yellow.

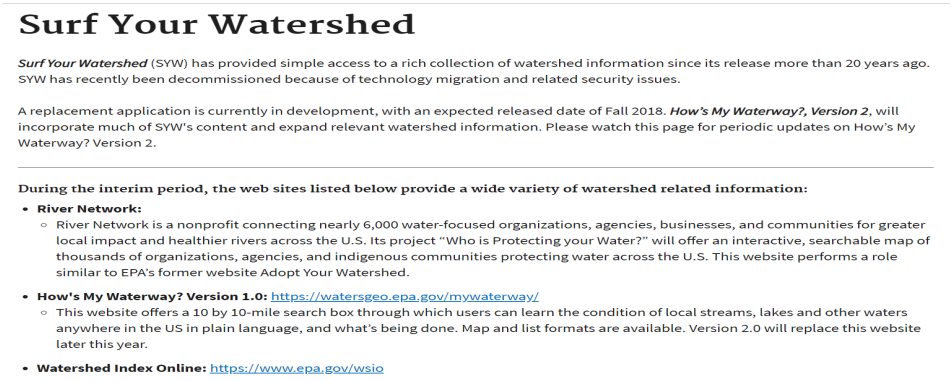
__ **21.** How many states are included in the Great Lakes Watershed and drain water into the Great Lakes?

__ **22.** In detail, describe where a drop of water that enters the West Branch Rocky River near Medina, Ohio will eventually end up. List the tributaries (streams & rivers) and bodies of water (lakes or oceans) is travels along while on its journey. It actually does not stop at Lake Erie. Note how Lake Erie is connect to other lakes that eventually lead out into an ocean! Include all of those!

__ **23.** On the map draw a green dot to represent where Highland Middle School is located. Is HMS located in the Great Lakes Watershed, having its water run North towards the Great Lakes. Or, is HMS located in the Mississippi Watershed, having its water run South towards the Gulf of Mexico?

__ **24.** On the map draw a red star represent where your home is located. Is your home located in the Great Lakes Watershed, having its water run North towards the Great Lakes. Or, is HMS located in the Mississippi Watershed, having its water run South towards the Gulf of Mexico?

__ **25.** What smaller watershed overlap the main watersheds and help to transfer water into and out of the area near Highland Middle School (zip code 44256) and near your home (zip code ?????).



Surf Your Watershed

Surf Your Watershed (SYW) has provided simple access to a rich collection of watershed information since its release more than 20 years ago. SYW has recently been decommissioned because of technology migration and related security issues.

A replacement application is currently in development, with an expected released date of Fall 2018. ***How's My Waterway?, Version 2***, will incorporate much of SYW's content and expand relevant watershed information. Please watch this page for periodic updates on How's My Waterway? Version 2.

During the interim period, the web sites listed below provide a wide variety of watershed related information:

- **River Network:**
  - River Network is a nonprofit connecting nearly 6,000 water-focused organizations, agencies, businesses, and communities for greater local impact and healthier rivers across the U.S. Its project "Who is Protecting your Water?" will offer an interactive, searchable map of thousands of organizations, agencies, and indigenous communities protecting water across the U.S. This website performs a role similar to EPA's former website Adopt Your Watershed.
- **How's My Waterway? Version 1.0:** https://watersgeo.epa.gov/mywaterway/
  - This website offers a 10 by 10-mile search box through which users can learn the condition of local streams, lakes and other waters anywhere in the US in plain language, and what's being done. Map and list formats are available. Version 2.0 will replace this website later this year.
- **Watershed Index Online:** https://www.epa.gov/wsio

Use the website: surf your watershed (https://www.epa.gov/waterdata/surf-your-watershed) . . .

__ 'How's my watershed' link,

__ 'choose a location' button,

__ enter zip code, then select 'go',

__ select 'view map' to check the location,

__ select 'other water info' tab, list the smaller watershed(s)