Water Quality

This mini lab was focused around water quality. There were parts that I enjoyed doing and thought were very interesting. I was able to see this mini lab from both a teachers perspective and a students perspective.

While looking at this lab from a students point of view I was interested about the topic but other pieces were difficult. During this lab I was able to use technology to do most of the lab. I started by going into the introduction area of the website. This allowed me to see what I would be learning about, a key pieces, and a video that explain and gave visuals about the topic. I was then able to go to the appropriate level that focused around five levels. I picked to do the first level because that would be the closest level to the grade that I teach. I enjoyed the website because it gave visuals like graphs that showed data. I was able to zoom in on the graphs and take a closer look. After looking at the website I did the student worksheet. This was interesting because I was able to fully connect what I had learned and apply it to something else.

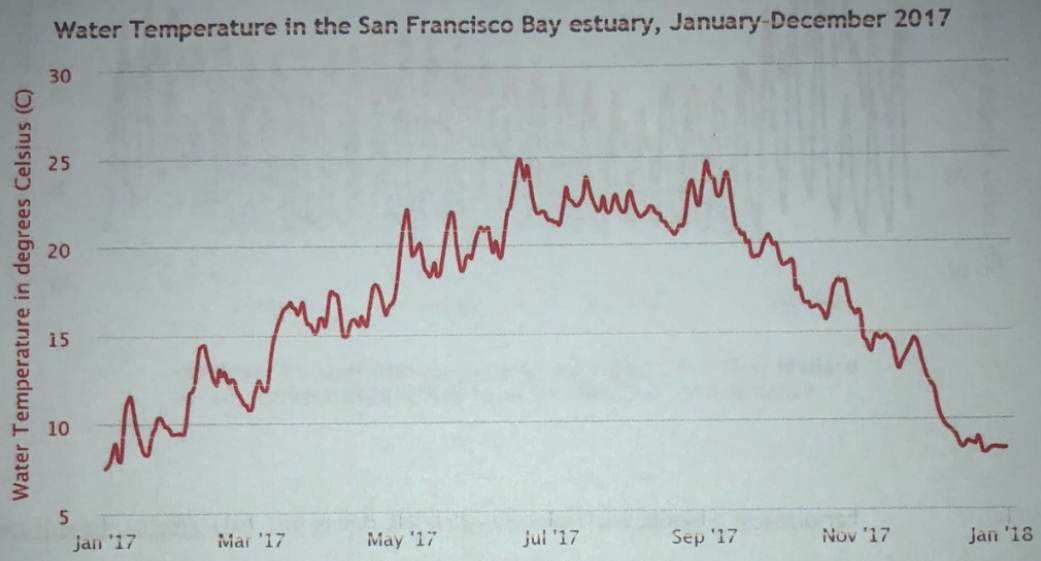
From a teachers point of view I think that this was a lesson that I could apply in an older classroom. The lesson was great because it broke down what needed to be taught. It broken down every level into more in-depth content. I think this would be a great lesson to teach in a higher grade, but would not work for the level that I am at. If I were to apply it to a closer grade I would have to make adjustments to make it more hands on as well as break it down to make it to grade level.

Resources:

National Oceanic and Atmospheric Administration. Water Quality. Retrieved from: https://portal.nnvl.noaa.gov/arcgis/apps/MapSeries/index.html?appid=57b4158173f44ebd8f43e3eab758768e

STUDENT WORKSHEET - LEVEL 1

ANALYZING TEMPERATURE DATA IN ESTUARIES

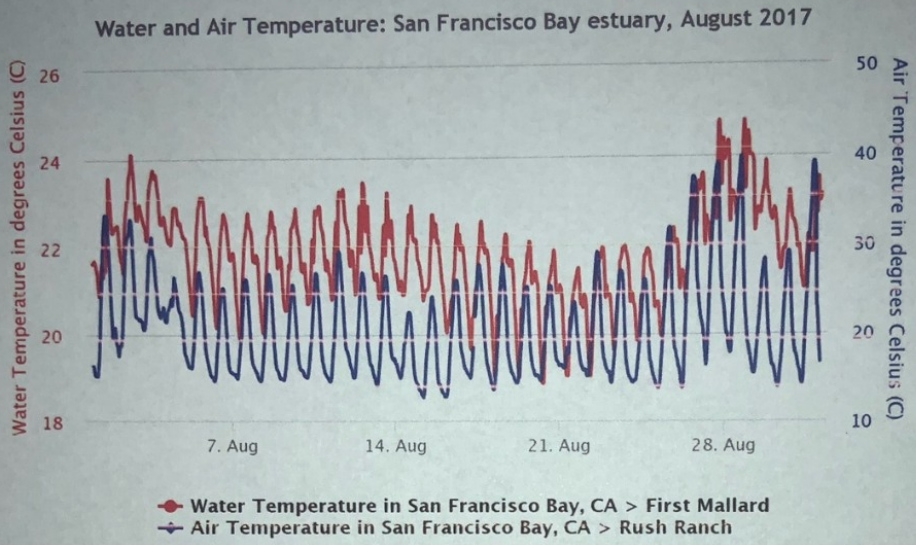


Part 1: Instructions: Use the graph above to answer the following questions:

1. The water temperature was lowest during which month of the year?
   A. January
   B. February
   C. June
   D. December

2. Water temperature was highest during the following months:
   A. January-March
   B. May-August
   C. June-September
   D. August-October

3. Any fish that lives at this location throughout the year would have to be well-adapted to temperatures ranging from approximately __10__ degrees C to __26__ degrees C.



Part II: Instructions: Use the graph above to answer the following questions:

4. In late August 2017, a record-breaking heat wave hit the San Francisco Bay area, causing air temperatures to soar above 38°C (100 °F). Use the data to describe the apparent effect of the heat wave on water temperature at this location.

The water temperature increased by >2°C.

5. When water temperatures rise (or fall) above what is normal, how might organisms be affected?

When water temperatures rise or fall there will be a negative effect on the animals and organisms like dying or migrating away.

6. How might an estuary, and the organisms living within it, be impacted by global climate change?

Estuary and the living organisms will negatively such as to warm of living conditions that would be caused by global climate change.