

THE PH OF WATER

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GUIDING QUESTION

How do some natural sources of water compare to each other in terms of pollution?

I will use the pH scale to measure the cleanliness of the water. PH measures water by putting it on a scale of 0 to 14. 7 is neutral. From 8 to 14, it's basic and from 0 to 6 it's acidic. An example of something that is a 0 on the pH scale is lime juice. When water becomes polluted it becomes more acidic. You can tell if a body of water is polluted because it has a 5 or lower on the pH scale. Here is a quote from the website sciencing in the article water pH & pollution. "One of the most devastating side effects of pollution is increased acidity in rain and groundwater. This affects animals and plants, and has long-term implications for our environment."

HYPOTHESIS

I think that the water from the rivers will have the least pollution because they are always moving. Moving water might filter out the pollution and make it a little cleaner than something like a lake or a pond because they are just sitting still most of the time.

MATERIALS

- Sample of water from each body of water: Snohomish river X2, Puget Sound X2, Thomas Lake, Beverly Lake, Runoff Collection Pond, Silver Lake, Tap Water
- Jar X9
- Labels X9
- PH testing strips

VARIABLES

Controlled Variable

- Only examining water
- Using the same pH strips

Manipulated Variables

- Different sources of water

Measured Variables

- The pH of the water

PROCEDURE

1. Collect water samples at source location
2. Label samples
3. Using pH testing strips measure pH level
4. Compare results to provided measurement indicator

DATA

SOURCE OF WATER

PH LEVEL

Tap water

7

Runoff pond

7

Beverly lake

7

Thomas lake

7

Silver lake

6.5

Snohomish river, Snohomish

7

Snohomish river, Everett

6.5

Puget sound, Everett

6.5

Puget sound, Mukilteo

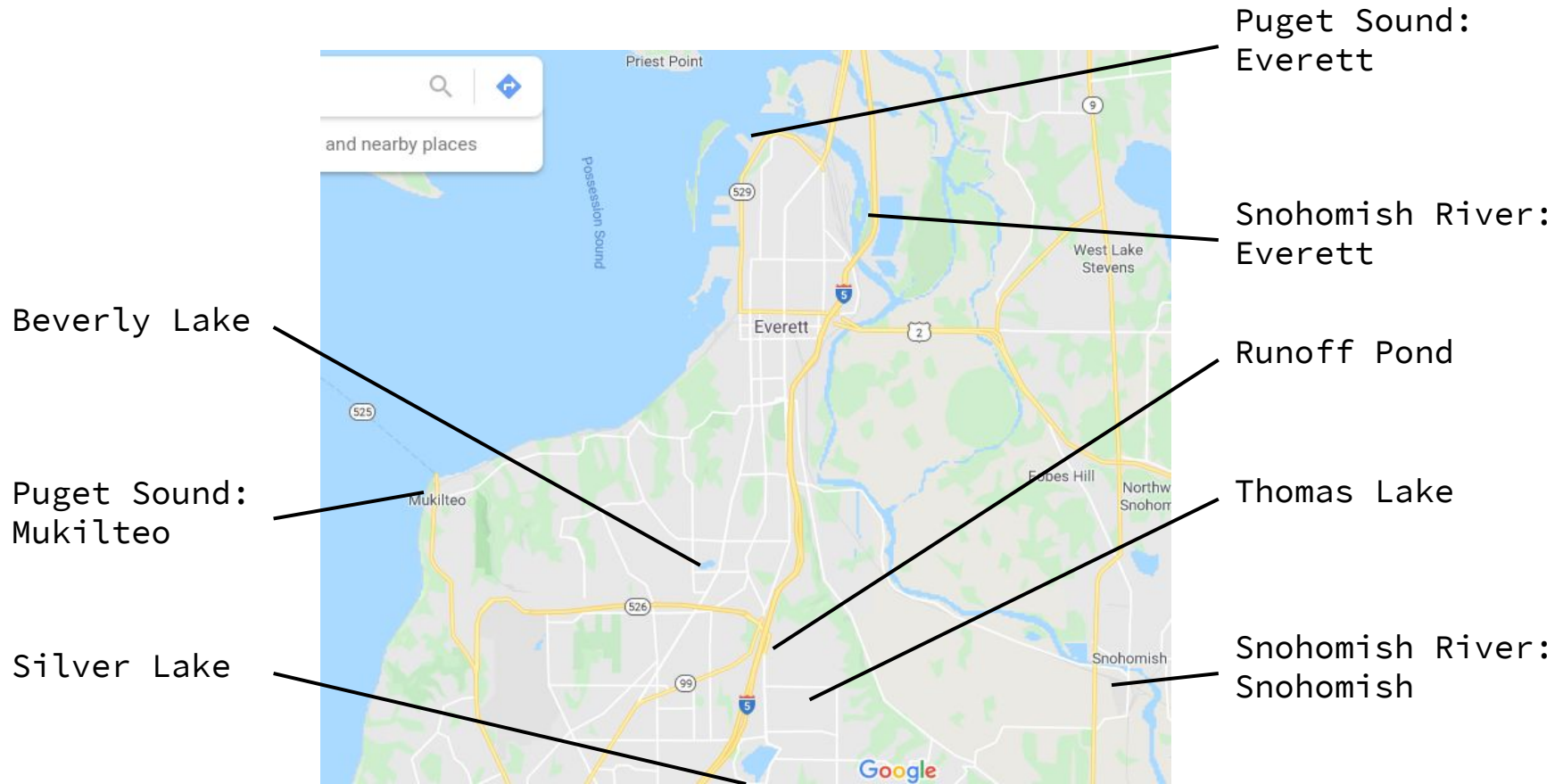
6.5

CONCLUSION

The results of my science project are that all the body's of water have pretty much the same pH level. All the body's of water have a pH of about 6 ½. That means that my hypothesis was wrong. My hypothesis was that the water in the river's would be the cleanest sources of water because they were always moving. In the end my hypothesis was incorrect.

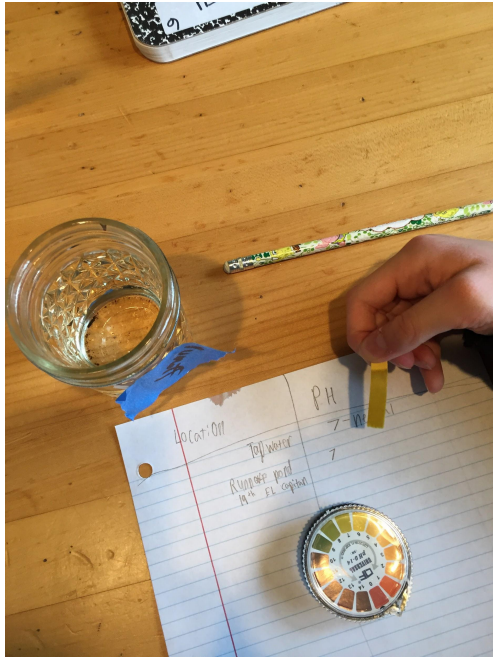
I learned from doing this experiment that the water in our area is all pretty clean.

APPENDIX 1: SOURCE LOCATIONS



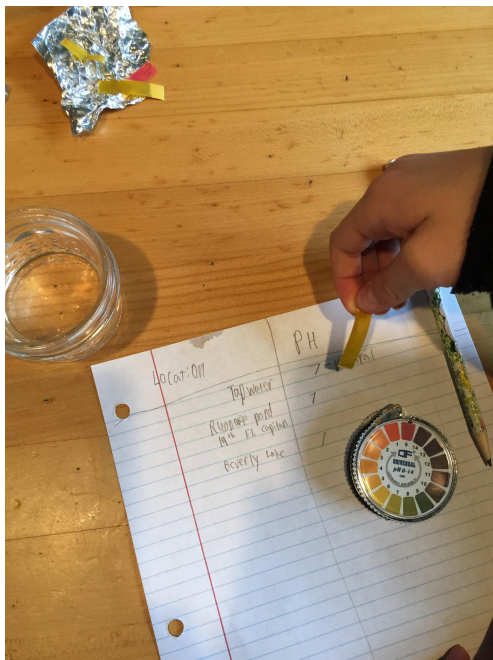
APPENDIX 2: DATA IN DETAIL

Runoff collection pond at 19th and El Capitan Way



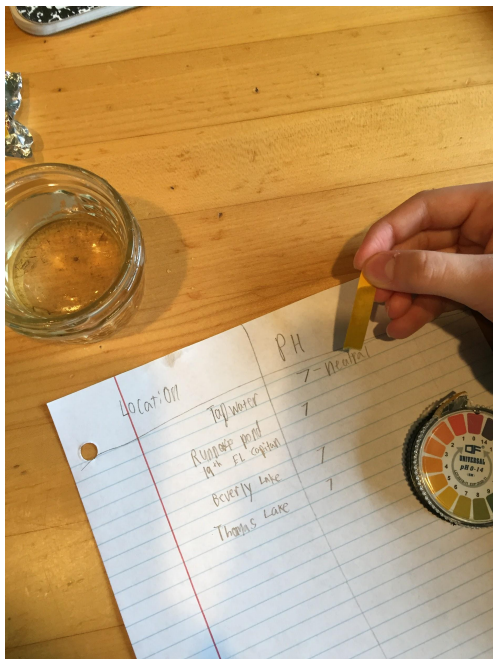
APPENDIX 2: DATA IN DETAIL

Beverly Lake



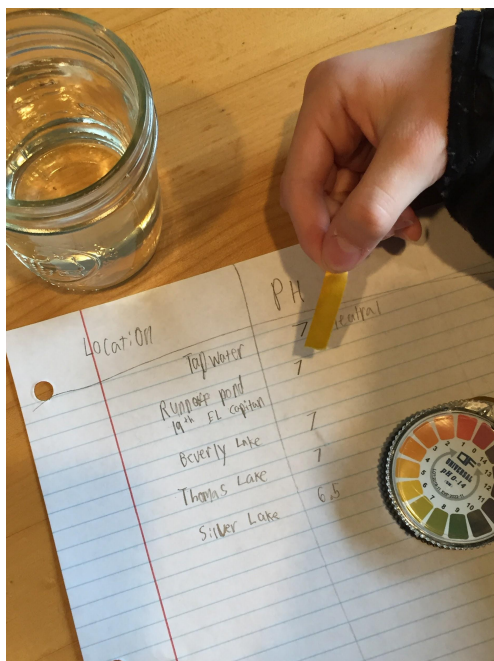
APPENDIX 2: DATA IN DETAIL

Thomas Lake



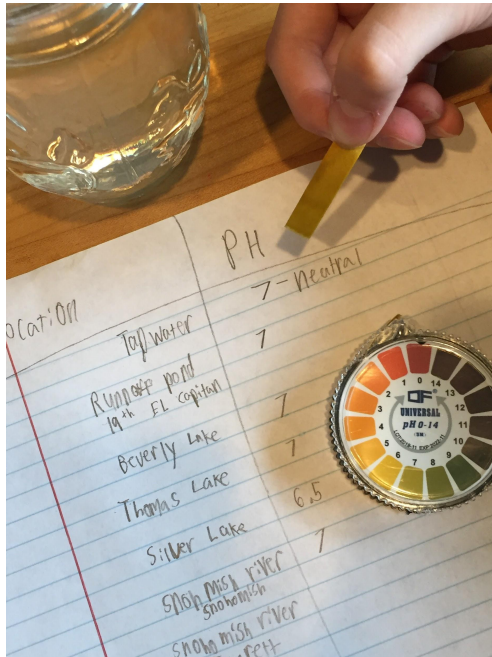
APPENDIX 2: DATA IN DETAIL

Silver Lake



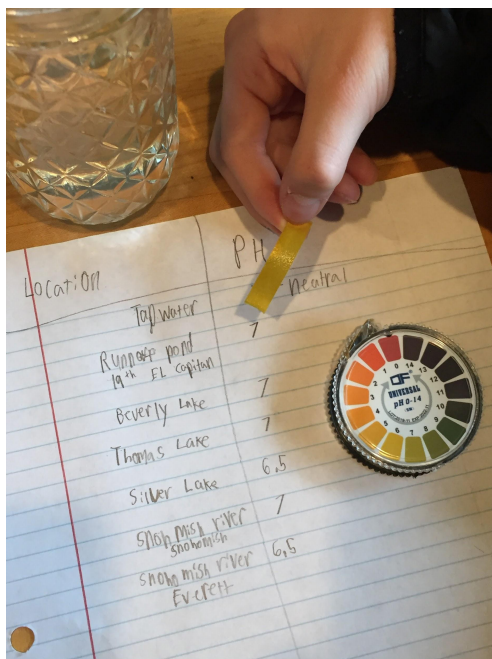
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Snohomish River: Snohomish



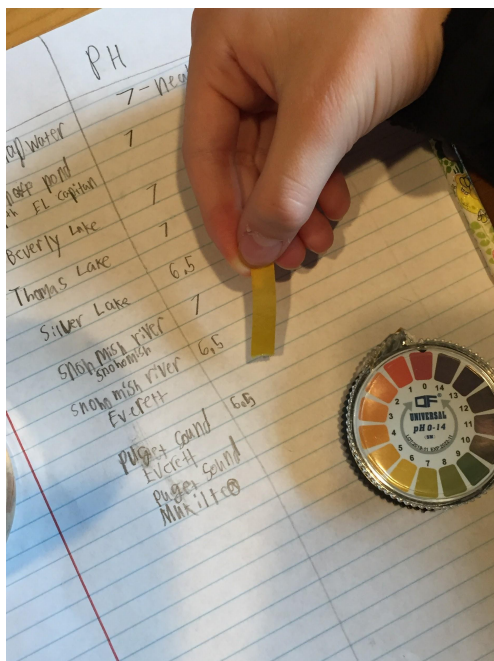
APPENDIX 2: DATA IN DETAIL

Snohomish River: Everett



APPENDIX 2: DATA IN DETAIL

Puget Sound: Everett



APPENDIX 2: DATA IN DETAIL

Puget Sound: Mukilteo

