

Weekend Science Project – Examining Local Water Quality

To be signed prior to the investigation:

As parent/guardian of _____, I agree to assist my child in the collection of this data to the best of my ability. Further, I accept full responsibility for the safety of my child and will not hold the school, district or staff responsible for any accidents or injuries incurred as a result of this experience.

_____ Parent signature

_____ date



DATA SHEET

Make a best guess estimate to pinpoint location on the map.

Location: _____

Date: _____ Time of day: _____ Air Temperature: _____ Cloud cover: _____

See individual Procedures sheets for details on testing/observations. Record all data on this sheet. Make careful measures and use metric units whenever possible. Have fun!

INORGANIC FACTORS:

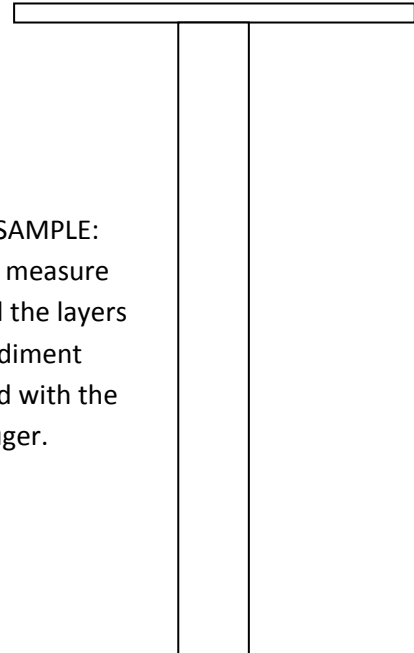
BED COMPOSITION: Circle the response that best describes the underwater floor.

BEDROCK GRAVEL SAND MUD/SILT

TURBIDITY	
1 st measure	
2 nd measure	
Total	
Divide by 2 for Average	

WATER TEMPERATURE	
1 st measure	
2 nd measure	
Total	
Divide by 2 for Average	

CORE SAMPLE:
Sketch, measure and label the layers of sediment collected with the auger.



DISSOLVED OXYGEN (D.O.): Single measure: _____ ppm
Using the nomograph, connect the points that show water temperature and D.O. The point where this line segment intersects the saturation line will give you the percentage.

D.O. SATURATION _____%

FLOW: Circle the response that best describes the movement of the surface water.

LOTIC (moving water - 1 meter/_____ seconds)

LENTIC (still, no current)

pH: single measure _____

ORGANIC FACTORS: Refer to field identification references and pond guide and record observations in the correct category of the water column. Be gentle and return all living things to their habitat.

Surface (living near or on the surface of the water)

Free-living (found throughout the depth of the water)

Benthic (living near or on the underwater floor)

RIPARIAN ZONE: (These floodplain regions border aquatic systems and are occasionally flooded.)

Describe the **vegetation**. Look for evidence of wetland adaptations such as buttressing and water marks on tree trunks.

List the **animals** that make their homes in the riparian zone. Look for evidence such as tracks, scat, feathers, etc.

Although your investigation site may not be evident on this map, use landmarks to estimate about where you collected data. Mark this spot with a star on the map. Based on your spot, can you determine in which major watershed region you are located?



SC Map source - <http://www.sciway.net/map/s/south-carolina-lakes-rivers.html>