

WHAT'S IN THAT H₂O? (QUANTITY)

Streamflow Measurement: Field Data Worksheet

Name _____

River or Creek _____ Date _____

Observation Table:

	Stream Length (feet)	Float Time (seconds)	Width (feet)	Depth (feet)
Station #1				
Station #2				
Station #3				
Total				
Average				

Streamflow (Q) Calculation:

$$Q = V \times A$$

V= Average Velocity (ft/s)
A= Cross Sectional Area (ft²)

$$V = \frac{\text{averageLength(ft)}}{\text{averageFloatTime(s)}}$$

$$V = \frac{\text{_____}}{\text{_____}} = \text{_____} (\quad)$$

$$A = \text{averageWidth(ft)} \times \text{averageDepth(ft)}$$

$$A = \text{_____} \times \text{_____} = \text{_____} (\quad)$$

$$Q = \text{_____} \times \text{_____} = \text{_____} (\quad)$$

1. Where does the water that we measured come from, and why does it flow at the velocity we measured?
2. How do continual changes in discharge affect the stream corridor?
3. Give examples of how humans use and alter the natural flow of creeks or rivers.
4. How might climate change impact the hydrologic cycle, and therefore our daily lives?