

Name: _____ Date: _____

Location: _____ (where are we? name of stream)

We want to know *HOW MUCH WATER* is moving down the stream

1. We need to measure the DEPTH and WIDTH of the stream at this spot to calculate the AREA

QUESTION: Is the stream the same depth all the way across ?

The **Depth** of the stream is feet

The **Width** of the stream is feet

Area = Depth feet x **Width** feet

The **Area** of the stream at this location is square feet

2. We need to measure HOW FAST the water is moving in the stream ~ this is the VELOCITY

QUESTION: Does ALL the water in the stream move at the same speed ?

The **Distance** along the side of the stream is feet

The **Time** it took the object to float down the stream was seconds

Velocity = Distance feet ? **Time** seconds

The **Velocity** of the water at this location is feet per second

3. We can now calculate How Much Water is moving past this spot in the stream ~ this is the FLOW

QUESTION: Will the FLOW be more or less than at the Conn. River site ?

You already found the **Area** and **Velocity** above ~ use them below to find **Flow**

Flow = Area square feet x **Velocity** feet per second

The **Flow** of water at this spot is in cubic feet per second (cfs)

Remember: a cubic foot of water is about 7.5 gallon full jugs