



## Flow Monitoring Data Form for Stream Monitors

Your Name: \_\_\_\_\_

Group Name: \_\_\_\_\_ Number of Participants: \_\_\_\_\_

Name of Stream: \_\_\_\_\_ GPS Coordinates: \_\_\_\_\_

City/State: \_\_\_\_\_ Survey Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_

Description of Site Location: \_\_\_\_\_

### WEATHER CONDITIONS (check all that apply)

Today:  Sunny  Overcast  Intermittent Rain  Steady Rain  Heavy Rain  Snow

Yesterday:  Sunny  Overcast  Intermittent Rain  Steady Rain  Heavy Rain  Snow

Day Before Yesterday:  Sunny  Overcast  Intermittent Rain  Steady Rain  Heavy Rain  Snow

### WIDTH

Measure stream width at a point that visually appears to be the average width of the stream from water's edge to water's edge. Measure width rounded to the nearest foot.

Stream width: \_\_\_\_\_ feet

### DEPTH

Measure the stream depth at five equidistant intervals across the stream. Depth will be measured in inches, converted to fractions in feet, then converted to a decimal equivalent in feet. For example, 20 inches =  $1\frac{2}{3}$  feet = 1.66 feet.

1. \_\_\_\_\_ inches/12 = \_\_\_\_\_ feet    2. \_\_\_\_\_ inches/12 = \_\_\_\_\_ feet    3. \_\_\_\_\_ inches/12 = \_\_\_\_\_ feet

4. \_\_\_\_\_ inches/12 = \_\_\_\_\_ feet    5. \_\_\_\_\_ inches/12 = \_\_\_\_\_ feet

Calculate the average stream depth by adding the results, in feet, of 1 through 5 above and dividing by 5.

Average stream depth: \_\_\_\_\_ feet

### AREA

Calculate the area of the stream transect by multiplying the average stream depth by the stream width.

Stream Width ( \_\_\_\_\_ feet) x Average Stream Depth ( \_\_\_\_\_ feet) = \_\_\_\_\_ square feet

**VELOCITY**

**Float Time Trials:** How long it takes the whiffle ball to travel the three-foot length of string.

1. \_\_\_\_\_seconds    2. \_\_\_\_\_seconds    3. \_\_\_\_\_seconds    4. \_\_\_\_\_seconds    5. \_\_\_\_\_seconds

**Average Float Time:** Add the results for each of the 5 float time trials and divide by 5.

Average float time: \_\_\_\_\_seconds

**Average Velocity:** Divide the average float time by 3. (Because each ball traveled three feet, dividing the average float time by 3 provides the average velocity in feet per second.)

Average velocity: \_\_\_\_\_feet/second

**FLOW RATE**

Calculate the flow rate by multiplying the area of the stream transect by the average velocity.

Area ( \_\_\_\_\_square feet) x Average Velocity ( \_\_\_\_\_feet/second) = \_\_\_\_\_cubic feet/second