Float Method of Estimating Flow (C)

1. Measure the wetted width (ft)

2. Calculate the average depth of the segment: measure the depth in 1 ft increments across the channel (all depths added up divided by the number of measurements taken = average depth in ft.)

3. Estimate the cross-sectional area of the channel: width x average depth (step 2)

4. Measure **50 feet** between the start and finish point and mark with flagging tape or something noticeable so that you are able to do repeatable measurements. I suggest doing this somewhere in the middle of the fish survey segment and marking with a string across the channel.

5. Gently release the orange slightly before the upstream marker and start the timer once the orange has passed the marker. Make sure there aren't any obstacles. Stop the timer when it passes the downstream marker.

6. Repeat two more times. Record time for reach run.

7. Calculate the average float time in seconds.

8. Calculate the average velocity.

9. Calculate the stream flow.

Segment ID: _____   Date : _____

    Upstream Lat/Long: _____   Wetted Width : _____

    Downstream Lat/Long: _____   Bedform :   Run   Riffle

    Substrate :   Sand   Silt   Clay   Rocks   Debris

2) Depth Measurements

Depth 1: _____
Depth 2: _____
Depth 3: _____
Depth 4: _____
Depth 5: _____
Depth 6: _____
Depth 7: _____
Depth 8: _____
Depth 9: _____
Depth 10: _____

3) Wetted Width   x   Average Depth   =   Cross-Sectional Area (ft^2)

_____   _____   _____

6) Float Time (Sec)

_____
_____
_____

7) Average Float Time: _____

8) Average Velocity : $\dfrac{50\ ft}{\text{Average Float Time}}$ = _____

9) Stream Flow: $\dfrac{\text{Area x Velocity}}{0.85}$ = $\dfrac{}{0.85}$ = _____ cfs