# DATA FORM FOR CALCULATING FLOW

Solving the equation: $\text{Flow} = \frac{A\,L\,C}{T}$

*Where:*

A = Average cross-sectional area of the stream. L = Length of the stream reach measured (usually 6.5 meters). C = A coefficient or correction factor (0.8 for rocky-bottom streams or 0.9 for muddy-bottom streams). T = Time, in seconds, for the float to travel the length of L.

## A: Average Cross-Sectional Area

### Transect #1 (upstream)

| | Interval width (meters) | Depth (meters) |
|---|---|---|
| A to B = | ____ | ____ (at B) |
| B to C = | ____ | ____ (at C) |
| C to D = | ____ | ____ (at D) |
| D to E = | ____ | ____ (shoreline) |
| **Totals** | ☐ | ☐ ÷ 4 |

= Avg. depth ☐ m

**Cross-sectional area of Transect #1**

= Total width (m) X Avg. depth (m)

☐ X ☐ = ☐ $m^2$

### Transect #2 (downstream)

| | Interval width (meters) | Depth (meters) |
|---|---|---|
| A to B = | ____ | ____ (at B) |
| B to C = | ____ | ____ (at C) |
| C to D = | ____ | ____ (at D) |
| D to E = | ____ | ____ (shoreline) |
| **Totals** | ☐ | ☐ ÷ 4 |

= Avg. depth ☐ m

**Cross-sectional area of Transect #2**

= Total width (m) X Avg. depth (m)

☐ X ☐ = ☐ $m^2$

**(Cross-sectional area of Transect #1 + Cross-sectional area of Transect #2) ÷ 2 = Average Cross-sectional area**

$A$ = ( ☐ $m^2$ + ☐ $m^2$ ) ÷ 2 = ☐ $m^2$

## L: Length of Stream Reach

☐ m

## C: Coefficient

☐

## T: Travel Time

| | Travel Time of Float (sec.) |
|---|---|
| Trial #1 | ____ |
| Trial #2 | ____ |
| Trial #3 | ____ |
| Total | ☐ ÷ 3 |

= Avg. time ☐ sec.

**Flow** = $\frac{A\,L\,C}{T}$ = $\frac{\square \quad \square \quad \square}{\square}$ = ☐ **$m^3$/sec.**