Data Form For Calculating Flow

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.**

Water Quality Assessment Data Sheet
2011-2012

Stream Name:	Site Code:
Latitude/Longitude:	Date/Time:
Site Description:	Investigators:

Weather conditions:

Now		**Past 24 hours**
___	Storm	___
___	Rain (steady)	___
___	Showers (intermittent)	___
___	Clear/sunny	___
___	% cloud cover	___

Has there been heavy rain in the last 7 days?
Air temperature (°C):
Comments: _____

Instream Features:

Parameter	**Field Measurement**
Water temperature	°C
Water pH	
Stream depth	m
Discharge (calculated on separate sheet)	m^3/s
Canopy cover	%
Obvious pollution	Yes or No Describe:

Comments: