

GEORGIA ADOPT-A-STREAM: Stream Flow

(Also fill out the Basic Visual Form when completing this survey)

CALCULATE AREA

Area = depth x width

It is advisable to take multiple depth and width measurements

Always start at the water's edge with a first measurement of zero

All data should be recorded in feet, with inches replaced by decimals

Depth Measurements	1.	2.	3.	4.	5.	6.	7.	8.	sum
	0 ft								

Average Depth ft = $\frac{\text{sum of depth measurements}}{\text{number of measurements}}$

Width Measurements	1.	2.	sum
	<input type="text"/> ft	<input type="text"/>	<input type="text"/>

Average Width ft = $\frac{\text{sum of width measurements}}{\text{number of measurements}}$

Area ft² = width X depth

CALCULATE SPEED- Measure the time it takes a float to travel a desired distance

It is advisable to take at least 2 measurements of current speed

Take measurements from the stream run

length = feet (20 feet is recommended)

time in seconds	1.	2.	3.	4.	sum
	<input type="text"/> s	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

average time s = $\frac{\text{sum of time measurements}}{\text{number of measurements}}$

Speed ft/s = $\frac{\text{length in feet}}{\text{average time in seconds}}$

CALCULATE STREAM FLOW

Flow cfs = Area X Speed X Coefficient

Flow in cubic feet per second

0.9 coefficient for muddy bottom stream
0.8 coefficient for rocky bottom stream