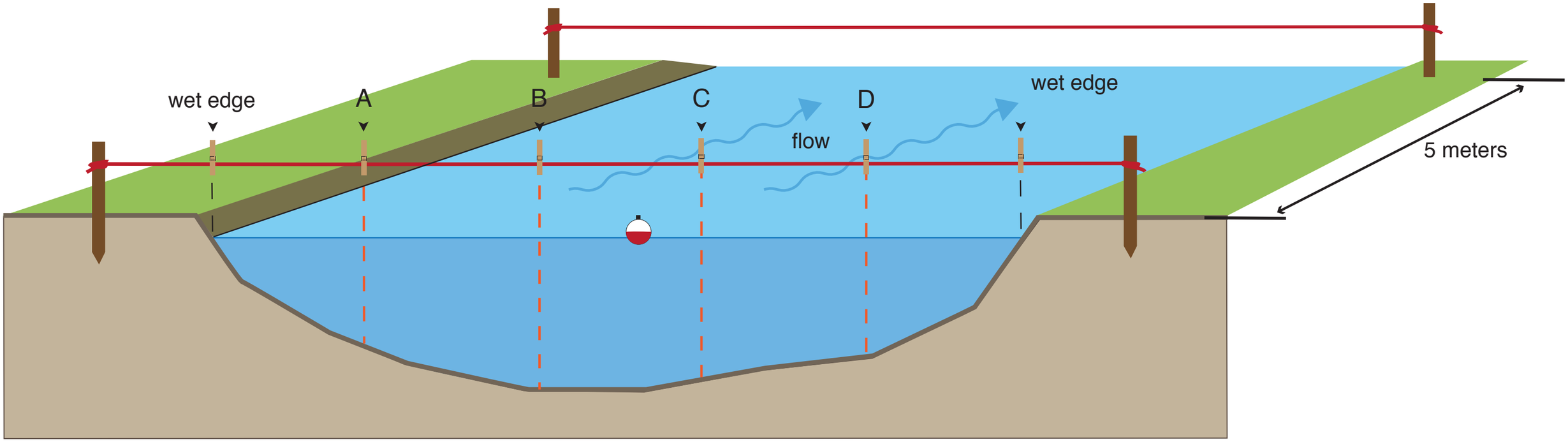
Watershed EDUCATION

Volume of Flow = W x D x V x C



W

Measure **width** from wet edge to wet edge.

D

Depth = $\frac{A+B+C+D}{4}$ meters

measure at 4 equidistant points on width and average.

V

To get **velocity**

1 Drop float four times (once at A,B,C,& D) and average the times it takes to reach the 5-meter line.

$\frac{t1 + t2 + t3 + t4}{4}$ = avg time (sec)

2 Divide the distance the float traveled by the avg time

5m / avg time (sec) = velocity (m/sec)

C

Constant of friction stream bottom

0.8 = cobble

0.9 = mud, silt, or sand

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pennsylvania DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES