



Add all the section areas together to get the area of the whole cross-section. Even though these rectangles are not quite the shape of the riverbed, this should average out to give you a close approximation.

The area of my river cross-section was \_\_\_\_\_ square inches.

How do we get from square inches to square feet? There are 12 inches per foot, so there are 144 square inches per square foot. Divide your cross-section above by 144 to get the area in square feet.

**The area of my cross-section was \_\_\_\_\_ square feet.**

Part C:

But now we need one more dimension to get to cubic feet per second: how far the water travels in one second.

I timed my stick as it floated \_\_\_\_\_ feet. It took \_\_\_\_\_ seconds.

To figure out how many feet per second that is, divide the distance the stick traveled by the number of seconds it took.

**My stick moved \_\_\_\_\_ feet per second.**

Part D:

Almost there! Now we just need to multiply your final answer from Part B (area in  $\text{ft}^2$ ) by your final answer from Part C (speed in  $\text{ft}/\text{s}$ ).

**This stream is flowing at \_\_\_\_\_ cubic feet per second ( $\text{ft}^3/\text{s}$  or CFS).**

Other resources for looking up CFS in Idaho's larger rivers and streams:

[https://waterdata.usgs.gov/id/nwis/current/?agency\\_cd=usgs&parameter\\_cd=staname,datetime,00065,00060,00010,median&group\\_key=basin\\_cd](https://waterdata.usgs.gov/id/nwis/current/?agency_cd=usgs&parameter_cd=staname,datetime,00065,00060,00010,median&group_key=basin_cd)

<https://www.americanwhitewater.org/content/River/state-summary/state/ID/>