# **How to Read a Staff Gauge:**

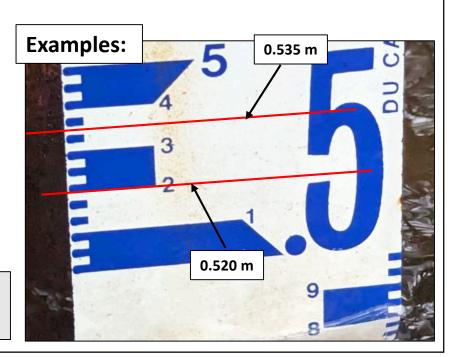
#### Always read to 3 decimal places.

Large numbers represent the 1<sup>st</sup> number after the decimal.

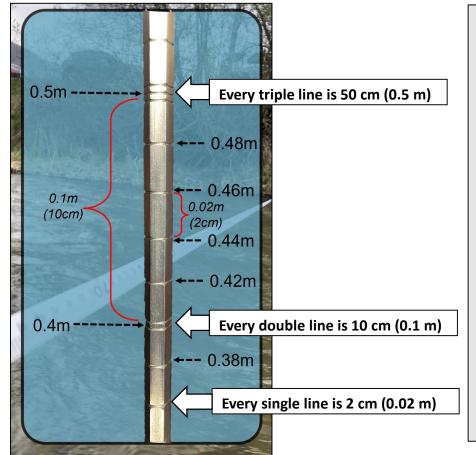
Smaller numbers represent the 2<sup>nd</sup> number after the decimal.

Small hatch marks are equivalent to 2 mm in height and represent the 3<sup>rd</sup> number after the decimal.

Don't forget to note if the water is surging, and by how much.



## **How to Read a Wading Rod:**



#### Tips:

Start at the top and work your way down

E.g., Find the closest triple line (50 cm) to the water level,

then count down by 10 cm (double lines) until the water level is near enough to count down by single lines (2 cm).

Remember to enter your depth into the FT2 in meters.

E.g., a depth of 22 cm would be 0.22 m.

# **Choosing a FlowTracker2 Transect Location:**

## The ideal measurement site will have:

- Uniform flow
- A straight channel with uniform cross section (similar slope and depth across section)
- Stable, defined banks (no undercutting or vegetation)

### Avoid sites with:

- Turbulent flow
- Deep pools
- Bends or steep slopes immediately upstream
- Negative flow/back eddies

## <u>Common FlowTracker2 Errors</u>:

Warning	Description	What To DO?
Boundary Interference	Usually indicates obstacles at or near measurement location	- Check for obstacles near probe - Repeat measurement or move to new location
Low SNR	Clear water, very sediment- poor water conditions (SNR below 4 dB)	-Repeat measurement - Have someone walk upstream of transect to increase sediment (before repeating measurement)
Velocity Angle > QC	Angle of flow at this panel is not perpendicular to tag line	-Check that PROBE is perpendicular to TAGLINE *do not re-orient probe based on flow direction
Standard Error > QC	Velocity variability is greater than 0.010 m/s. Usually occurs in fast moving water or rough streambeds	-Check for obstacles or a change in conditions -Make sure probe isn't moving during measurement

\*A full list of FT2 errors (and other resources) can be found at **CFMNVI.com**