

Calculating Stream Width

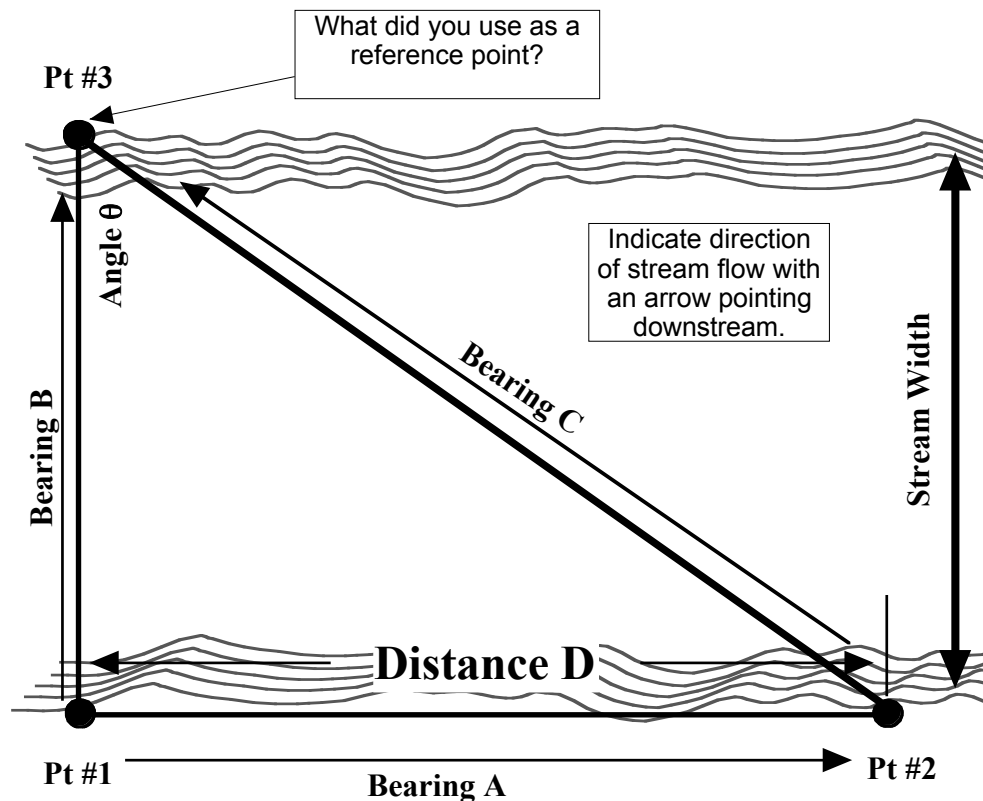
Procedures

2. **Distance D** from #1 to #2: _____
(feet or meters)
3. Compass **Bearing A** from #1 to #2: _____ °
4. Compass **Bearing B** from Pt #1 to Pt #2:
_____ ° +/- 90° = _____ °
Bearing A **Bearing B**
6. Compass **Bearing C** from #2 to #3: _____ °
7. Calculate **Angle θ**:
larger of Bearing B or C _____ °
smaller of Bearing B or C - _____ °
_____ ° = **Angle θ**
8. Calculate the stream width using the following formula and a calculator.

$$\text{stream width} = (\text{Distance D}) \div (\tan \theta)$$

$$\text{stream width} = (\text{_____}) \div (\tan \text{_____})$$

$$= \text{_____} \text{ (unit of measure: feet or meter ?)}$$



Post-trip Data

6. Look up the streamflow data for the East Fork of the Lewis River at the following website:

<http://waterdata.usgs.gov/wa/nwis/uv?station=14222500>

Record the following information:

Current or estimated flow: _____ cubic ft per second (t³/sec)

for _____ (date) _____ (time)

Mean flow for this date based on 74+ years: _____ ft³/sec