

Physical Assessment

Chapter 7



Physical Assessment*

* Shares datasheet with Chemical Assessment

◆ Recommended Frequency – Monthly



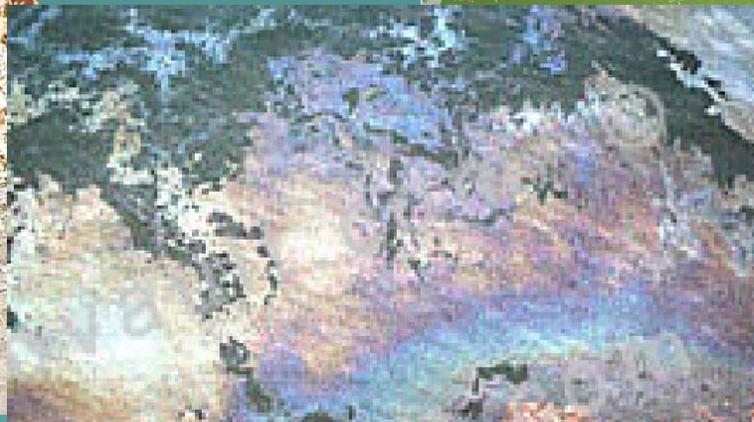
Weather

- ◆ Sunny
- ◆ Partly Sunny
- ◆ Cloudy
- ◆ Rain/Snow
- ◆ Windy
- ◆ Calm



Water Color

Milky
Gray



Oily Sheen

If oily sheens are present, conduct a simple test to determine whether or not the sheens are natural.

Poke the sheen with a stick.

- If the sheen swirls back together immediately, it's petroleum.
- If the sheen breaks apart and does not flow back together, it is from bacteria or plant or animal decomposition.



Photo by Evan De Groot



Photo by Evan De Groot

Water Odor



Manure or Sewage –
urban or animal waste

Rotten egg – low
oxygen levels

Petroleum – a direct
pollution source

Fishy – Stressed
biological life (for Lakes
monitoring)



Air Temperature

- ◆ Make sure thermometer is dry
- ◆ Keep thermometer out of direct sunlight



Water Temperature

- ◆ Let thermometer stabilize (at least 2 minutes)



Precipitation

Over the past 24 hours



- ◆ Rain decreases point source pollution concentrations because of dilution.
- ◆ Rain increases non-point pollution effects because of surface run-off.



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- Database
- Precipitation Information

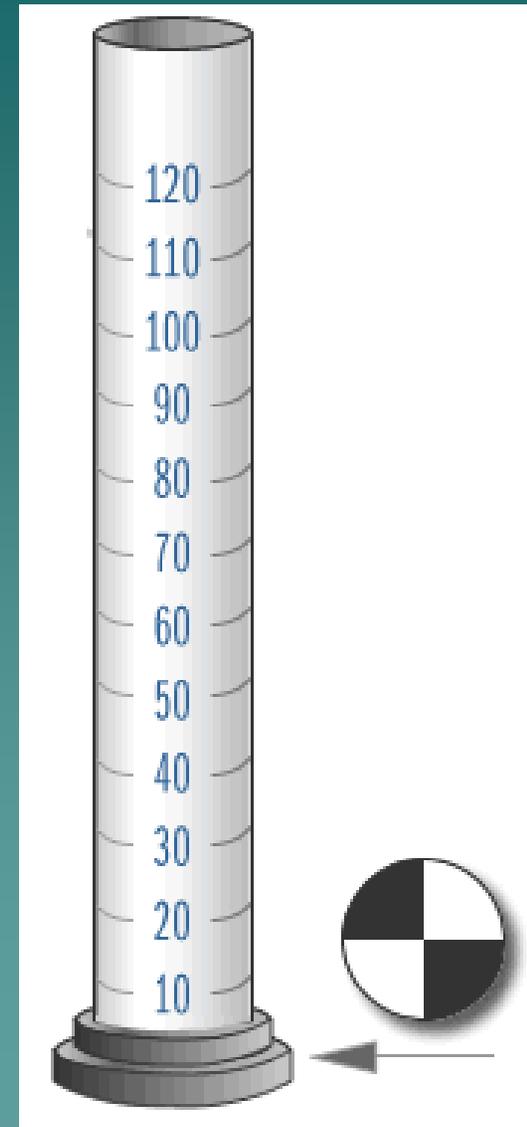
Transparency

- ◆ Measured in centimeters

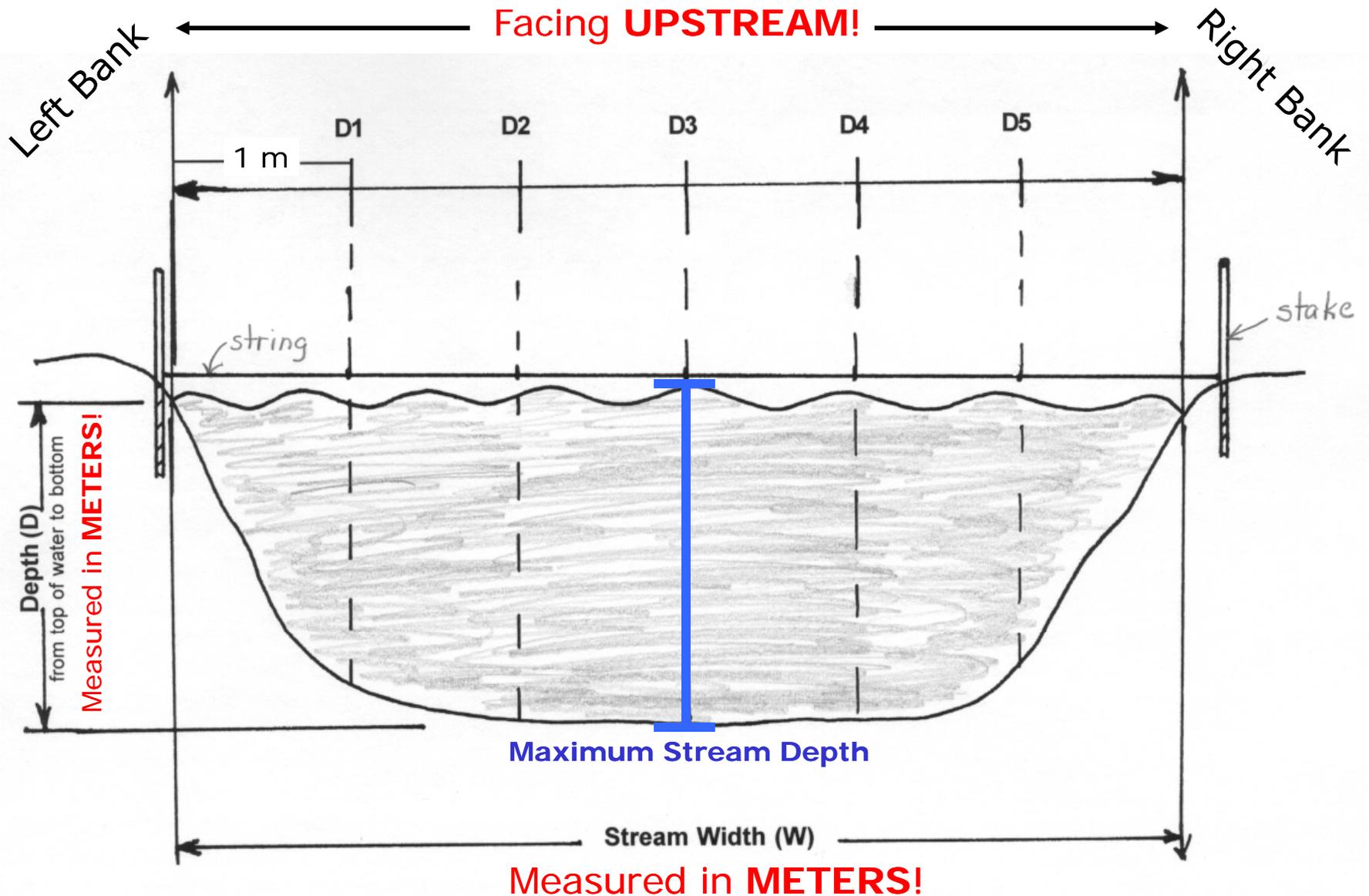


How far can you see through the water?

- ◆ Transparency is a measure of how *clear* the water is.
- ◆ **Turbidity** is a measure of how *dirty* the water is.



Stream Width & Depth

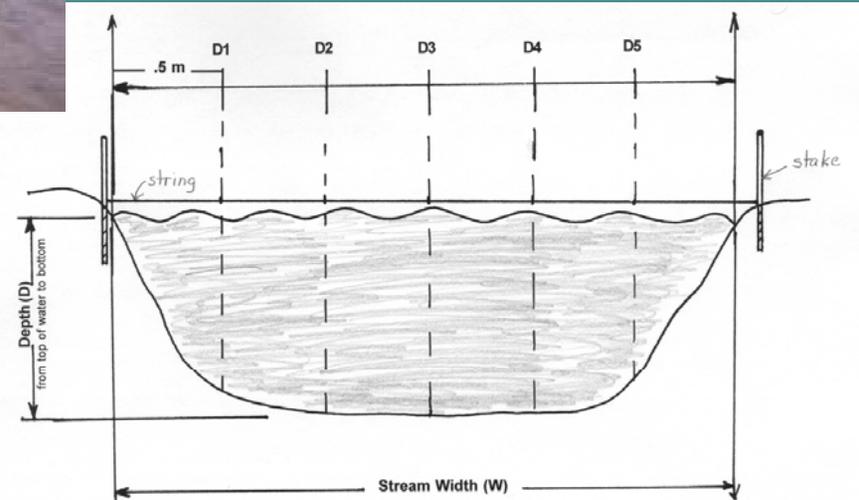


Centimeters to Meters Conversion

100 cm = 1 m OR 0.01 m = 1 cm



Stream Velocity



Stream Flow (Discharge)

- ◆ **Strong** influence on water quality.
- ◆ Calculated from depth, width & velocity
- ◆ Estimated as:
 - High
 - Normal
 - Low
 - Not sure