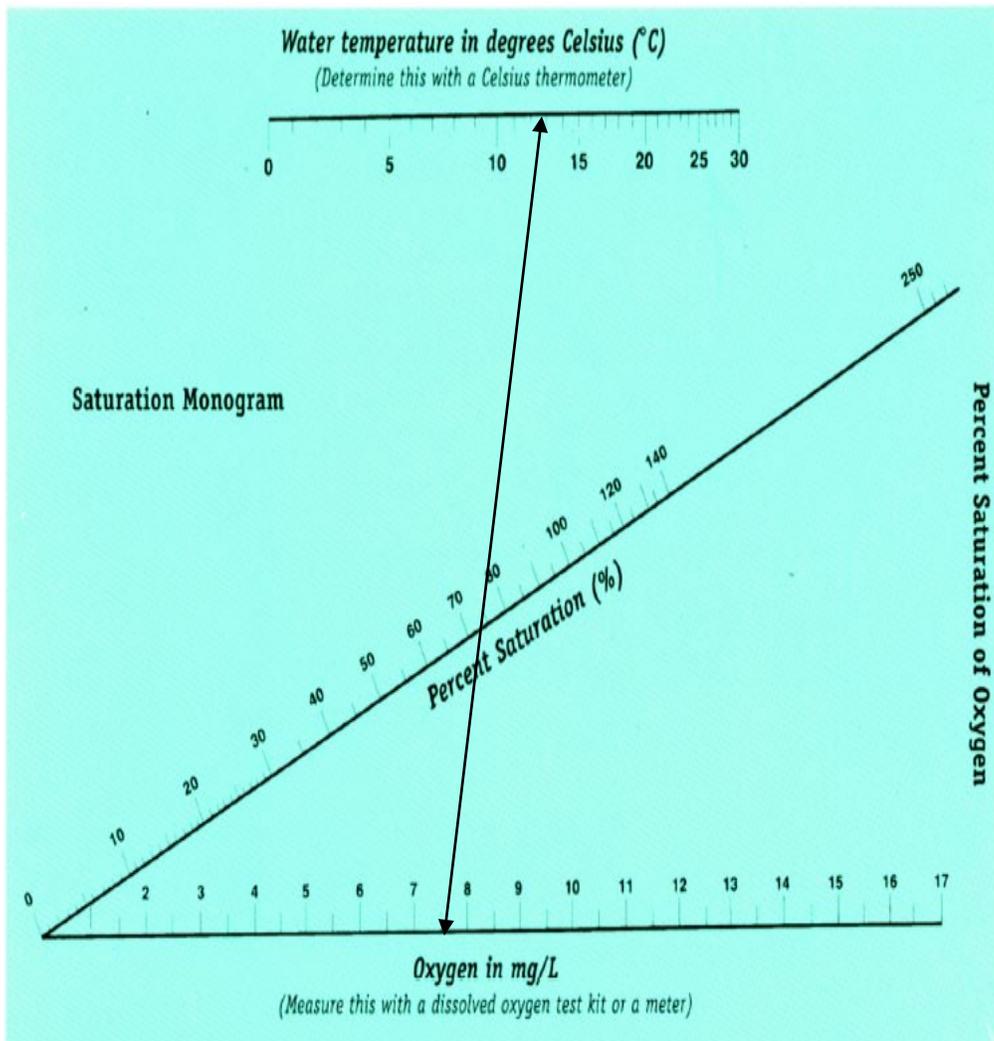


Percent Saturation of Dissolved Oxygen

- Determine water temperature in degrees C and find the value on the temperature scale.
 - F to C conversion: $[(F - 32) \times 5] \div 9$
- Determine dissolved oxygen (DO) and find the value on the lower scale (Note: you result can be in mg/L or ppm).
- Using a straight edge (ruler, piece of paper etc.) draw a line from the temperature value to the dissolved oxygen value. The point at which the line crosses the middle (saturation scale) is the percent saturation of oxygen.



Solubility: Amount of DO that distilled water can hold at a given temperature

Temp. (C)	Solubility (mg/L)
0	14.6
1	14.2
2	13.8
3	13.5
4	13.1
5	12.8
6	12.5
7	12.2
8	11.9
9	11.6
10	11.3
11	11.1
12	10.9
13	10.6
14	10.4
15	10.2
16	10.0
17	9.8
18	9.6
19	9.4
20	9.2
21	9.0
22	8.9
23	8.7
24	8.6
25	8.4
26	8.2
27	8.1
28	7.9
29	7.8
30	7.7

Example: Determine the percent saturations of dissolved oxygen in a stream given the following information: Temperature **13 C**; Dissolved oxygen **7.6 mg/L** (**Answer ~ 72%**)

> 90	89 - 75	74 - 60	< 60
Excellent	Good	Fair	Poor

pH and aquatic organisms

