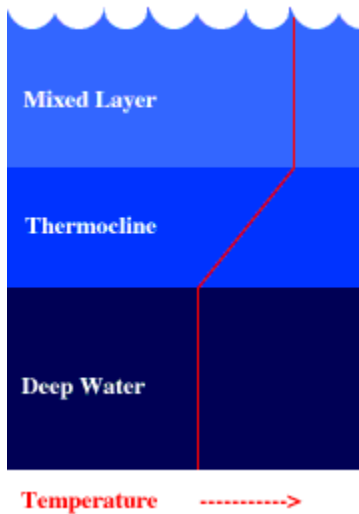


Thermocline

a transition layer between deep and surface water



The thermocline is the transition layer between the mixed layer at the surface and the deep water layer. The definitions of these layers are based on temperature.

The mixed layer is near the surface where the temperature is roughly that of surface water. In the thermocline, the temperature decreases rapidly from the mixed layer temperature to the much colder deep water temperature.

The mixed layer and the deep water layer are relatively uniform in temperature, while the thermocline represents the transition zone between the two.

A deeper thermocline (often observed during El Niño years) limits the amount of nutrients brought to shallower depths by upwelling processes, [greatly impacting the year's fish crop](#)