**Indicators: Conductivity**

**What is conductivity?**

Conductivity is a measure of the ability of water to pass an electrical current. Because dissolved salts and other inorganic chemicals conduct electrical current, conductivity increases as salinity increases. Organic compounds like oil do not conduct electrical current very well and therefore have a low conductivity when in water. Conductivity is also affected by temperature: the warmer the water, the higher the conductivity.

**Why is it important to evaluate conductivity?**

Conductivity is useful as a general measure of water quality. Each water body tends to have a relatively constant range of conductivity that, once established, can be used as a baseline for comparison with regular conductivity measurements. Significant changes in conductivity could then be an indicator that a discharge or some other source of pollution has entered the aquatic resource.

**What can conductivity tell us about the condition of water?**

Significant changes (usually increases) in conductivity may indicate that a discharge or some other source of disturbance has decreased the relative condition or health of the water body and its associated biota. Generally, human disturbance tends to increase the amount of dissolved solids entering waters which results in increased conductivity. Water bodies with elevated conductivity may have other impaired or altered indicators as well.

(https://www.epa.gov/national-aquatic-resource-surveys/indicators-conductivity)