

Conductivity:

Conductivity is one of the most useful and commonly measured water quality parameters.

In addition to being the basis of most salinity and total dissolved solids calculations, conductivity is an early indicator of change in a water system.

Most bodies of water maintain a fairly constant conductivity that can be used as a baseline of comparison to future measurements.

Significant change, whether it is due to natural flooding, evaporation or man-made pollution can be very detrimental to water quality.

A sudden increase or decrease in conductivity in a body of water can indicate pollution.

	uS/cm
DISTILLED WATER	0.5 - 3
MELTED SNOW	2 - 42
TAP WATER	50 - 800
POTABLE WATER IN THE US	30 - 1500
FRESHWATER STREAMS	100 - 2000
INDUSTRIAL WASTEWATER	10000
SEAWATER	55000

Agricultural runoff or a sewage leak will increase conductivity due to the additional chloride, phosphate and nitrate ions.

An oil spill or addition of other organic compounds would decrease conductivity as these elements do not break down into ions.

In both cases, the additional dissolved solids will have a negative impact on water quality.

