What It Measures

The amount of green chlorophyll (klorr·uh·fil) in the water. It can tell us how much algae (al·jee) is growing in the water.

Why Measure It?

Too much or too little algae in the water can cause problems in the ecosystem.

Unit of Measurement

Micrograms per one liter (µg /L)

What affects it?

Nutrients and Temperature

Chlorophyll *a*

Chlorophyll *a*

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What It Measures

The ability of water to conduct an electrical current.

Why Measure It?

Pollution in the water can affect conductivity (kaan·duhk·ti·vuh·tee). It can indirectly tell us about the saltiness of the water.

Unit of Measurement

Microsiemens per centimeter (µS/cm)

What affects it?

Temperature, Geology, and Pollution

Conductivity

Conductivity

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What It Measures

How acidic or basic a water body is.

Why Measure It?

Low pH measurements indicate acidic conditions. High values indicate basic conditions. Aquatic plants and animals are adapted to a certain pH range.

Unit of Measurement

A scale from 0-14

What affects it?

Seasons, Precipitation, Geology and Pollution

pH

pH

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What It Measures

The amount oxygen (aak·suh·jn) in the water. Oxygen enters water from the surface and by photosynthesis (fow·tow·sin·thuh·suhs) in aquatic plants.

Why Measure It?

Oxygen is needed by all living things including the ones living in the water.

Unit of Measurement

Milligrams/Liter (mg/L)

What affects it?

Chlorophyll, Temperature, and Salinity (salt)

Dissolved Oxygen

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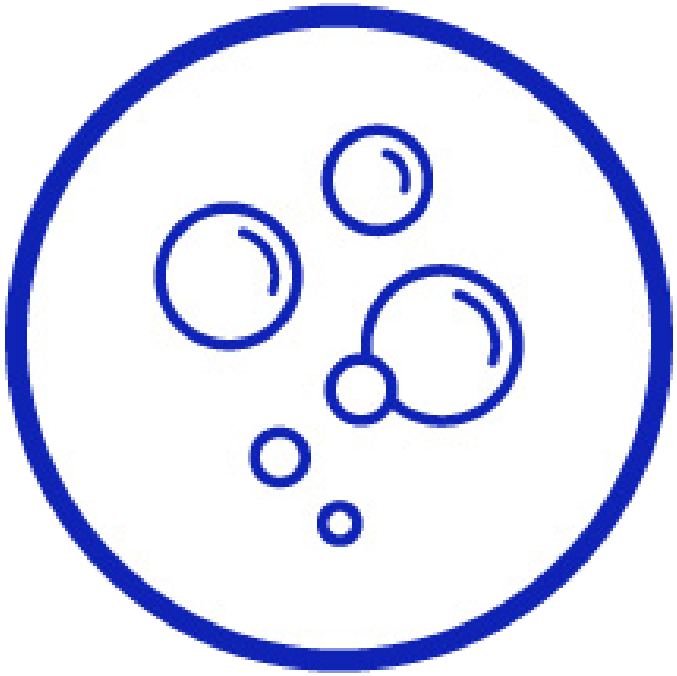

Dissolved Oxygen

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What It Measures

The clearness of water. Turbidity (tr·bi·duh·tee) measures how far light reaches into the water.

Why Measure It?

Cloudy water is said to be turbid. Turbid water blocks the sunlight that living things need to survive.

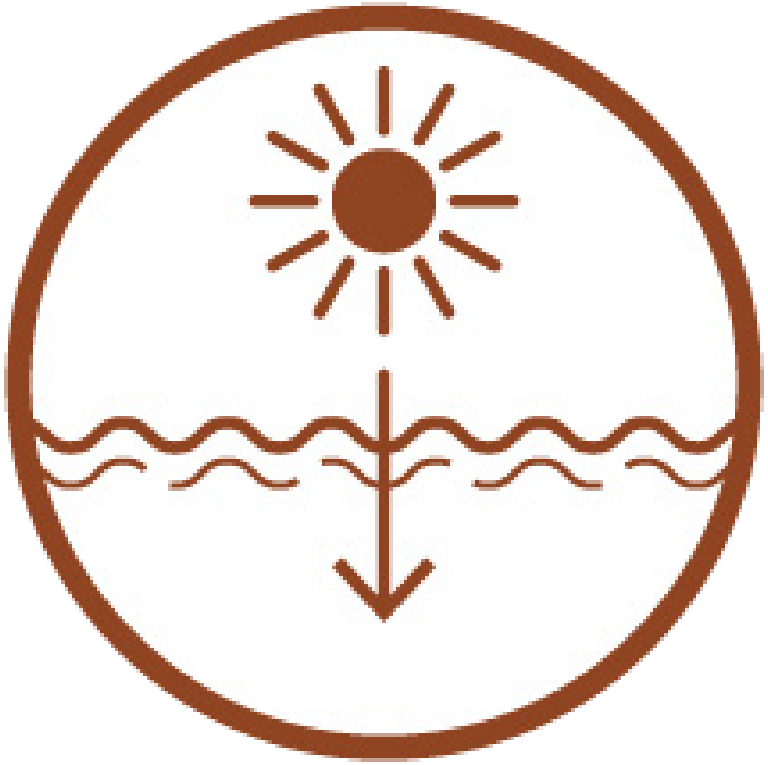
Unit of Measurement

Nephelometric (neph·elom·et·ric) Turbidity Units or NTUs

What affects it?

Chlorophyll, Erosion and Water Color

Turbidity



Turbidity

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What It Measures

The amount of heat or thermal energy in the water. Temperature (tem·pruh·chr) changes depending on the time of the year and the size of the water body.

Why Measure It?

Temperature is very important to aquatic life and has an impact on other water quality measurements.

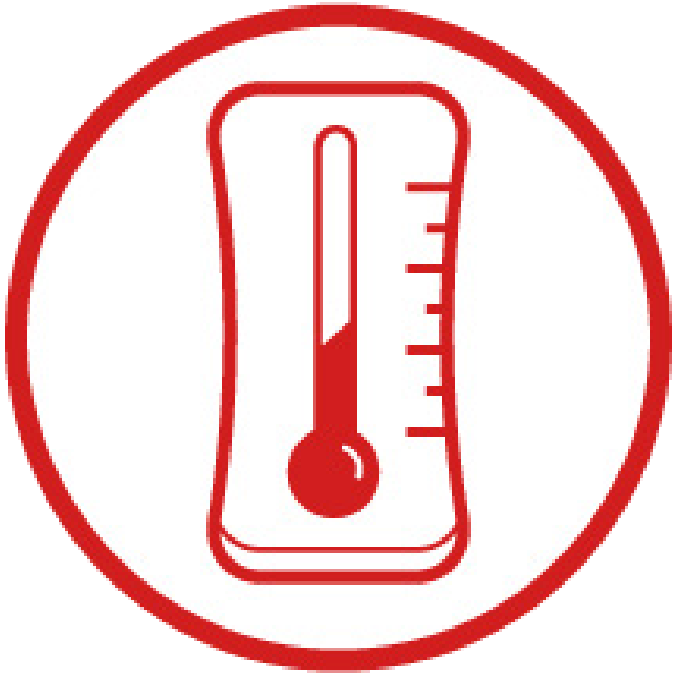
Unit of Measurement

Degrees Celsius (° C) or Fahrenheit (° F)

What affects it?

Depth, Water Flow, Seasons, Shoreline Habitat, and Water Clarity

Temperature



Temperature

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What It Measures

The Secchi (sek·ee) disk measures the clarity of the water. The Secchi depth is a measure of the point at which the disk can no longer be seen.

Why Measure?

A change in water clarity over time can show there has been a change in the ecosystem.

Unit of Measurement

Depth in Meters

What affects it?

Turbidity, Erosion, and Wave Action

Secchi Disk

Secchi Disk

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