

## 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 ( $\mu\text{g} / \text{L}$ )

## What affects it?

Nutrients and Temperature

# Chlorophyll *a*



# Chlorophyll *a*

## 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 ( $\mu\text{S}/\text{cm}$ )

## What affects it?

Temperature, Geology, and Pollution

# Conductivity



# Conductivity

## **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

pH

## 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



Dissolved  
Oxygen

## 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.

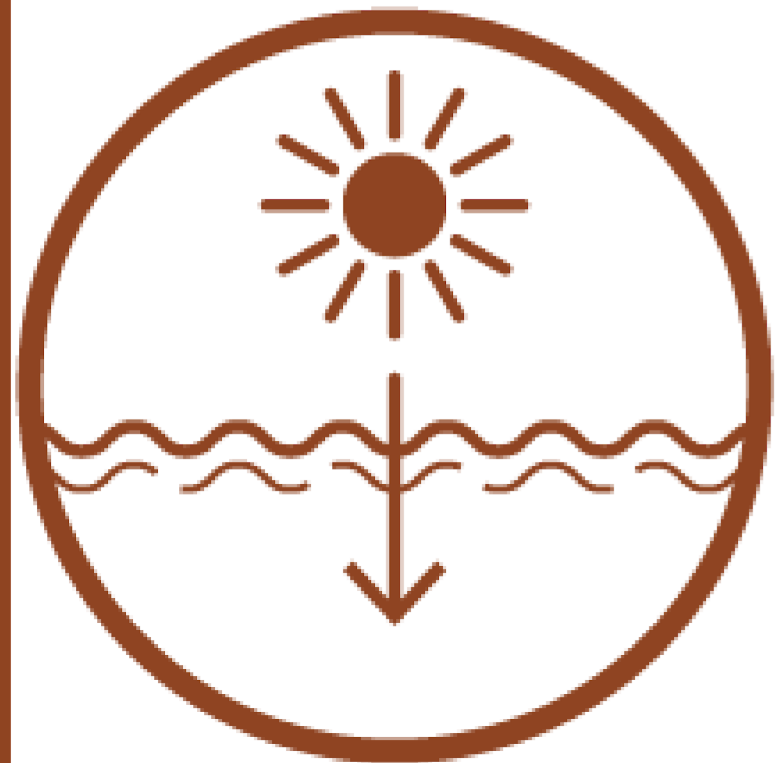
## Unit of Measurement

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

## What affects it?

Chlorophyll, Erosion and Water Color

# Turbidity



# Turbidity

## **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

## **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