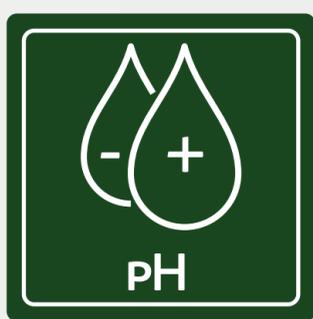


THE TESTS OF WATER QUALITY

Water exists in every ecosystem, as it is vital to life. All organisms rely on water for their survival, and in aquatic ecosystems, plants and animals have adapted to live in water with specific conditions. We can monitor these conditions to ensure the health of ecosystems so that they can continue to serve as habitat to wildlife and provide us with valued ecosystem services. Read about some of the common water quality indicators, why they are important, and how we measure them!

TYPES OF WATER QUALITY TESTS



WHAT DOES THE TEST MEASURE?

The pH water quality test measures the acidity and alkalinity of the water.

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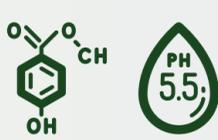
SOURCES OF POLLUTION



Acid rain, agricultural runoff
Mining, wastewater discharge

.....

EFFECT ON WATER QUALITY



Alters chemical composition of water

.....



WHAT DOES THE TEST MEASURE?

The turbidity water quality test measures the clarity of a liquid.

.....

SOURCES OF POLLUTION



Erosion

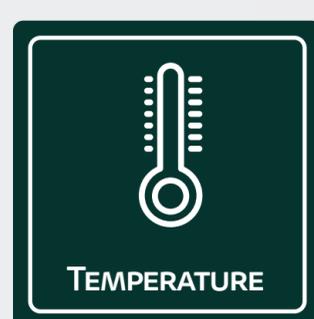
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EFFECT ON WATER QUALITY



Water clarity

.....



WHAT DOES THE TEST MEASURE?

Temperature influences the biological activity in bodies of water.

.....

SOURCES OF POLLUTION



Thermal pollution,
Deforestation impoundments

.....

EFFECT ON WATER QUALITY



Water density (ice), Dissolved oxygen, Habitat for species

.....



WHAT DOES THE TEST MEASURE?

Saline waters are bodies of water that contain dissolved salt.

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SOURCES OF POLLUTION



Agriculture,
Erosion, Excessive pumping

.....

EFFECT ON WATER QUALITY



Makes water undrinkable,
Makes ecosystem an unfit habitat for plants and animals

.....



WHAT DOES THE TEST MEASURE?

Dissolved oxygen (DO) measures how much oxygen is dissolved in water.

.....

SOURCES OF POLLUTION



Clearing land,
Destruction of riparian areas

.....

EFFECT ON WATER QUALITY



Influences abilities for fish to survive

.....



WHAT DOES THE TEST MEASURE?

Nitrogen and phosphorus are essential nutrients to plants and animals, but an overabundance can cause negative impacts to aquatic ecosystems.

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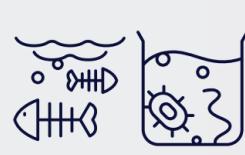
SOURCES OF POLLUTION



Agriculture,
Fertilizer runoff

.....

EFFECT ON WATER QUALITY



Eutrophication

.....

SOURCES

- <https://www.usgs.gov/special-topic/water-science-school/science/ph-and-water>
- <https://www.usgs.gov/special-topic/water-science-school/science/turbidity-and-water>
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