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!

**Acid rain**, **agricultural runoff**, **mining**, and **wastewater discharge**

The **pH** water quality test measures the acidity and alkalinity of the water. **Acid rain** and **mining** alter the chemical composition of water, while **agricultural runoff** and **wastewater discharge** can lead to changes in the biological activity in bodies of water.

**Erosion**

The **turbidity** water quality test measures the clarity of a liquid. **Erosion** can lead to changes in water clarity, making water undrinkable and affecting the ability of fish to survive. **Deforestation** and **impoundments** can also affect water clarity.

**Temperature in**

Temperature influences the biological activity in bodies of water. **Thermal pollution** and **deforestation impoundments** can lead to changes in temperature and affect the biological activity in bodies of water.

**Saline waters** are bodies of water that contain dissolved salt. **Agriculture**, **erosion**, and **deforestation** can lead to changes in saline waters, making water undrinkable and affecting the survival of fish.

**Dissolved oxygen** measures how much oxygen is dissolved in water. **Agriculture**, **erosion**, **deforestation**, and **fertilizer runoff** can lead to changes in dissolved oxygen, making water undrinkable and affecting the survival of fish.

**Nitrogen and phosphorus** are essential nutrients to plants and animals, but an overabundance can cause negative impacts to aquatic ecosystems. **Agriculture**, **erosion**, **deforestation**, and **fertilizer runoff** can lead to changes in nitrogen and phosphorus, affecting the survival of fish and making water undrinkable.

Sources: