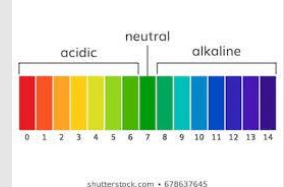



Water Quality Testing Fact Sheet

Parameter	What is it?	Why do we test it?
<p>pH</p> 	<p>Hydrogen ion activity in water, expressed as acidity/alkalinity on a scale of 0 - 14</p>	<p>Aquatic life occurs within a limited pH range (4 - 9) Can indicate acid rain or acid mine runoff</p>
<p>Salinity</p>	<p>Amount of salts dissolved in water</p>	<p>↑ salinity = ↓ DO, ↑ conductivity Impacts aquatic life Winter road salt is a major source</p>
<p>Conductivity</p>	<p>Ability of water to conduct an electrical current</p>	<p>General measure of water quality More contaminants = ↑ conductivity</p>
<p>Total Dissolved Solids (TDS)</p>	<p>Includes salts, metals, & organic matter dissolved in water</p>	<p>General measure of water quality, but does not specify type of minerals present</p>
<p>Phosphates</p>	<p>Forms of phosphorus essential to plant growth but problematic in excess</p>	<p>Excess phosphates = ↓ DO Excess phosphates can lead to algal blooms Sources are fertilizers, soil erosion, manure, sewage</p>
<p>Nitrates</p>	<p>Forms of nitrogen essential to plant growth but problematic in excess</p>	<p>Excess nitrates = ↑ plant growth, ↓ DO Indicator of raw sewage or fertilizer runoff</p>
<p>Turbidity</p>		<p>Clarity of water; “Cloudiness,” not color How much light is scattered by particles suspended in water (silt, algae, etc.)</p> <p>Overall indicator of ecosystem health ↑ turbidity = ↓ DO Helpful for measuring runoff & erosion over time</p>
<p>Dissolved Oxygen (DO)</p>	<p>Amount of oxygen in water</p>	<p>Adequate DO is necessary for survival of most aquatic organisms</p>
<p>Temperature</p>	<p>Degree of heat present Sample temperature can affect measurements of pH, DO, & conductivity</p>	<p>↑ temperature = ↓ DO Thermal pollution from industry can affect aquatic life</p>