

# *Water Quality Test Descriptions*

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**pH:** pH is the measure of how acidic or basic water is. On a scale from 0-14, a pH of 7 means that water is neutral. Anything below a 7 is acidic (lemon juice, vinegar) and anything above a 7 is basic (soap, ammonia). For the purposes of water testing, a pH of 7 (neutral) is ideal for aquatic plants and organisms.

**Phosphate:** Like nitrates, phosphates are inorganic compound nutrients which encourage the growth of algae and aquatic organisms. Their presence in lakes and ponds encourage rapid growth, which depletes water-dissolved oxygen, resulting in dead zones and the elimination of other forms of aquatic life. Low phosphate content is ideal for aquatic plants and organisms.

**Dissolved Oxygen (DO):** Fish, like humans, need oxygen to survive. Instead of breathing oxygen out of the air, fish breathe oxygen out of the water. Adequate dissolved oxygen levels are necessary for good water quality. Low levels of oxygen, resulting from high nutrient content (nitrates and phosphates) can cause aquatic life to 'suffocate'. Mid-to-high levels of dissolved oxygen (DO) are ideal for aquatic plants and organisms.

**Turbidity:** Turbidity is the measure of how cloudy water is. Cloudiness can be caused by high sediment or mud content in water. High turbidity (cloudy) can result in less light reaching aquatic plants, hindering growth. Heat from sun light can also absorb into the suspended sediment causing water temperatures to rise and dissolved oxygen levels to drop. Low turbidity is ideal for aquatic plants and organisms.

**Temperature:** Temperature is a crucial part of water quality. The colder the water is the more dissolved oxygen it can hold. High temperatures can often lead to lower dissolved oxygen levels. Temperatures around 15 degrees Celsius (58-60 degrees Fahrenheit) are ideal for aquatic plants and organisms.