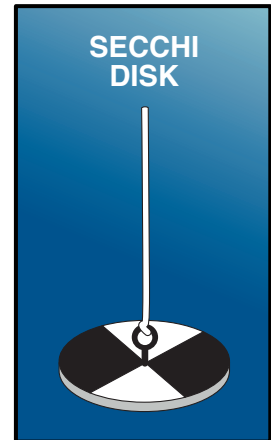


Water Quality Indicators – Overview

Water Temperature may vary daily depending on the wind and the sun. Temperature also varies seasonally. Cool water (39.2 degrees F) is dense and sinks. Water temperature is important to fish and aquatic plants.

Water Acidity (pH): Most water bodies in the U.S. have pH values between 6.5 and 8.5. Hydrogen ions (H⁺) present allows us to determine whether it is acidic, neutral, or basic on a scale: 0 (most acidic), 14 (most basic), and 7 (neutral).

- Optimal pH for many fish and plant species is between 7.0 and 9.0
- Note: Each unit of pH value represents a tenfold increase in how much hydrogen is present. (For example, water with a pH of 7.5 is 10 times more acidic than water with a pH of 8.5.)



A small amount of oxygen, about ten molecules of oxygen per million molecules of water, is dissolved in water. Fish, phytoplankton, and zooplankton need dissolved oxygen to survive (fish can suffocate if oxygen levels are low).

Turbid water is cloudy or opaque and includes particulate matter or sediment (soil, silt, or plankton) suspended in water. Sediment can be stirred up just after a heavy rain or as a result of runoff (pollutants, nutrients like phosphorus and nitrogen). Sediment can clog fish gills.



Specific Conductance measures the capacity of water to conduct an electrical current. It depends on the amount of “dissolved solids,” such as salt, in the water.

The amount of dissolved calcium and magnesium in water determines its “hardness.” Iron oxide is the culprit of brown sinks or staining. Learn more about drinking water from [USGS](#).

Suspended Sediment is the amount of soil circulating in water. The amount depends in part on the speed of the water flow. Fast-flowing water can pick up and hold, or suspend, more soil.

What you Can Do: Crystal and Perch Lakes Property Owners have an important role in maintaining the health of the lakes. Maintaining your septic system, reducing erosion and runoff, eliminating the use of phosphorus, using organic fertilizers sparingly, and planting shrubs, trees and perennials native to this area helps protect the water quality of our lakes.