Water Quality Terminology

(There is no water quality report available at the time of publication. A report will be available at the annual meeting.)

SECCHI DISK — Measures the water clarity, or transparency of the lake. Factors which reduce clarity, are algae, zooplankton, water color and silt. Since algae are generally the most abundant, measuring transparency indirectly measures the alga productivity.

COLOR — The amount of "color" in a lake refers to the concentration of natural dissolved organic acids such as tannins and lignins.

pH — The pH of a lake reflects how acidic or basic the water is and helps determine which plant and animal species are present.

ALKALINITY — Alkalinity is a measure of the capacity of water to neutralize acids and is also known as the buffering capacity.

CONDUCTIVITY — Conductivity is a measure of the ability of water to carry an electrical current. Conductivity will increase if there is an increase of pollutants entering the lake.

TOTAL PHOSPHORUS — Total Phosphorus is one of the major nutrients needed for plant growth. It is generally present in small amounts and limits the plant growth in lakes. As phosphorus increases, the amount of algae also increases.

DISSOLVED OXYGEN PROFILES — Dissolved oxygen is the measure of the amount of oxygen dissolved in the water. All living organisms, except for certain types of bacteria, need oxygen to survive. Too little oxygen severely reduces the diversity and population of aquatic communities. Low oxygen can directly kill or stress organisms such that they will not be able to successfully reproduce or grow.

TEMPERATURE — Temperature is the measure of heat in the water and can affect the water's chemistry and biology. The amount of oxygen water can hold is directly related to the temperature of the water. The higher the temperature the less oxygen the water can hold. Oxygen naturally declines during the summer months as water temperatures rise. Temperature can also determine the kinds of plants and animals found in the lake. Certain species of fish, insects and algae will predominate during the cooler temperatures of the spring and fall, yet disappear during the warmer temperatures of summer. The late summer temperature and dissolved oxygen profiles in data reports represent the lake's most stressed open water period.