



LSPA

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Lake Glossary

(terms and definitions adapted from NHDES & EPA)

Algal Bloom: A heavy growth of algae in and on a body of water. This usually is a result of high nitrates and phosphate concentrations entering water bodies.

Benthic: Located on the bottom of a body of water or in the bottom sediments.

Bioaccumulation: The process by which the concentration of a substance is increased through successive links in a food web which may result in toxic concentrations in the apex species.

Chlorophyll-a: The green pigment found in plants that is essential to photosynthesis. It is sometimes used to measure the amount of algae in the lake.

Chlorides: Calcium, magnesium and sodium (table salt; most commonly used) chlorides are used to de-ice roads, sidewalks and parking areas during winter months. Chlorides get absorbed into soils and washed into nearby lakes and streams resulting in elevated levels in the waterbody. Elevated chloride levels can have an adverse affect on aquatic plants and animals.

Conductivity: A measure of the electrolytes in the water, which may be elevated by the presence of salts resulting from soil composition, faulty septic systems, or road salts.

Culvert: Stormwater structure that directs water beneath roads.

Cyanobacteria (Blue-Green Algae): Bacteria that photosynthesize (use sunlight to produce food) and are blue-green in color. While cyanobacteria occur naturally in all lakes and ponds, elevated nutrient levels may cause cyanobacteria to "bloom" or grow out of control and cover the lake surface.

Dissolved Oxygen: The amount of oxygen in the water. Dissolved oxygen may be produced by algae and aquatic plants or mixed into the water from the air. It is used by fish, aquatic insects, crayfish and other aquatic animals. Dissolved oxygen is usually measured in milligrams per liter.

Epilimnion: The upper, well-circulated, warm layer of a thermally stratified lake. (*Refer to Hypolimnion and Metalimnion*)

Eutrophic: Nutrient rich waters, generally characterized by high levels of biological production. (*Refer to Mesotrophic and Oligotrophic*)

Groundwater: (1) water that flows or seeps downward and saturates soil or rock, supplying springs and wells. The upper surface of the saturated zone is called the water table. (2) Water stored underground in rock crevices and in the pores of geologic materials that make up the Earth's crust.

Hypolimnion: The deep, cold, relatively undisturbed bottom waters of a thermally stratified lake. (*Refer to Epilimnion and Metalimnion*)

Leaching: The process by which soluble materials in the soil, such as salts, nutrients, pesticide chemicals or contaminants, are washed into a lower layer of soil or are dissolved and carried away by water.

Lentic: Referring to standing waters such as ponds and lakes.

Limiting Nutrient: An essential nutrient for plant growth, which has the least abundance in the environment relative to the needs of the plant. Phosphorous is usually the limiting nutrient in freshwater lakes and rivers.

Littoral: The shoreline zone of a lake where sunlight penetrates to the bottom and is sufficient to support rooted plant growth.

Mesotrophic: Waters containing an intermediate level of nutrients and biological production. (*Refer to Eutrophic and Oligotrophic*)

Metalimnion: The middle layer of water in a thermally stratified lake, between the epilimnion and hypolimnion, where the decrease in temperature with depth is at its greatest. (*Refer to Epilimnion and Hypolimnion*)

Non-Point Pollution: Pollution originating from a diffuse area (not a single point) in the watershed, often entering the waterbody via surface runoff or groundwater.

Oligotrophic: Nutrient poor waters, generally characterized by low biological production. (*Refer to Eutrophic and Mesotrophic*)

pH: The measure of how acidic the water is, on a scale of 1-14; 1 is very acidic, and 14 is very basic. New Hampshire lakes tend to be acidic due to acid rain and snow.

Phosphorus: The nutrient most necessary for plant and algal growth in New Hampshire lakes, which comes from many sources including faulty septic systems, lawn fertilizers, and decaying plant matter.

Point Source Pollution: Pollution into a waterbody from a specific and identifiable source, such as industrial waste or municipal sewers.

Runoff: Precipitation that enters surface waters from overland flow and from groundwater.

Sedimentation: The transport and deposition of sediment particles by flowing water.

Stormwater: Stormwater is water from rain or melting snow that does not soak into the ground. It can carry sediment and other pollutants into the lake.

Transparency: A measure of water clarity often determined by the depth at which a Secchi disk can be seen below the surface of the water. Transparency may be reduced by the presence of algae and suspended materials such as silt and pollen.

Turbidity: A measure of the particles suspended in the water column which affect the clarity and transparency of the water. These particles may include silt, clay, and algae.

Watershed: The land area draining to a particular waterway (i.e. lake, river, wetland, etc).