

# GLOSSARY

## General

**Watershed:** is the land area that drains into a particular body of water, such as a lake or a river, and includes all the natural and human communities found there.

**Trophic Status:** relates to the amount of nutrient, or food, available to organisms.

## Water

**Abiotic:** is the nonliving component of the environment including soil, water, air, light and nutrients.

**Acid Deposition:** is rain, snow, fog and other form of precipitation with extremely low pH (acid).

**Alkalinity:** is a substance which combines with acid and neutralizes it to form a salt.

**Biodiversity:** the natural variance in the biological community

**Critical Load:** is the maximum yearly amount of [acid deposition](#) that will allow 95% of the lakes within a region to maintain a pH of 6 or more.

**Dissolved Organic Compounds (DOC):** predominantly carbon, the most abundant element found in all organisms. In aquatic environments, it is produced by plant photosynthesis and bacterial growth.

**Ecosystem:** is the biotic community and its [abiotic](#) environment functioning as a system

**Ecology:** the study of organisms in relation to their environment.

***Escherichia coli (E. coli):*** is a water-borne bacteria found in human and animal waste that can cause illness or in some cases, death.

**Eutrophic:** a body of water with high nutrient content and high productivity.

**Inorganic:** something that does not have the characteristics of a living organism or a chemical substance that does not contain carbon.

**Mesotrophic:** a body of water that is moderately enriched with nutrients.

**Oligotrophic:** a body of water that is low in nutrient and productivity.

**Paleo Core:** A core sample of lake sediment used to study the [ecology](#) of past lake communities by means of fossil records.

**Riparian Zone:** the area of land along banks of rivers, lakes and streams.

**Remedial Action Plan:** A community-based action plan to address water quality issues on a lake.  
**Source Water Protection:** is the process, programs and actions required to protect municipal sources of drinking water.

**Secchi Depth:** is a measure of clarity for a lake. The higher the Secchi depth value the clearer the lake.

## Air

**Smog:** is a word derived from 'smoke' and 'fog' mixing. Smog is now used to describe a condition when particles and chemical pollutants are present in high density. This condition reduces visibility and may irritate eyes and respiratory systems.

**Air Mass:** is a body of air in which temperature and moisture conditions are uniform over a large area such as the Great Lakes and central Ontario. Cold dry air masses in winter originate in the Arctic ocean and tundra. Warm moist air masses originate over tropical areas.

**Fine particulate matter (PM<sub>2.5</sub>):** is a complex mixture of very small (2.5 micron) liquid droplets or solid particles in the [air](#). Major sources are cars, trucks, construction equipment, coal-fired power plants, wood burning, vegetation and livestock.

**Acid Precipitation:** is the broad term used to describe several ways that a weak [solution](#) of [inorganic](#) acids, such as nitric and [sulfuric](#) acid, falls out of the [atmosphere](#) as rain, snow, [mist](#) and fog.

**Volatile Organic Compounds (VOC):** are primarily the lighter parts of oil or hydrocarbons. Emissions come, for example, from households (cleaners, cosmetics, lacquering), the metal industry (paints and coatings), the printing industry (inks and cleaners), oil refineries (loading, storage and transfer of hydrocarbons products), petrol stations (the pumping of petrol) and the dry-cleaning industry (cleaning solvents).

**Nitrogen Oxide (NO<sub>x</sub>):** is the generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. Many of the nitrogen oxides are colorless and odorless. Nitrogen oxides form when fuel is burned at high temperatures, as in a combustion process. The primary sources of NO<sub>x</sub> are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuels.

**Air Quality Index (AQI):** The Air Quality Index (AQI) is an indicator of air quality, based on hourly pollutant measurements of some or all of the six most common air pollutants: sulphur dioxide, ozone, nitrogen dioxide, total reduced sulphur compounds, carbon monoxide and [fine particulate matter](#).

**Transboundary Air Pollution:** is air pollutants that originate in the United States and are brought into Canadian air space as part of a large [air mass](#).

**Air Quality Exceedance Day:** is any day when the AQI is greater than 50.

**Concentration:** the relative amount of a substance mixed with another substance. An example is five parts per million of [carbon monoxide](#) in [air](#) or 1 milligram/liter of iron in [water](#).

**EPA:** refers to the Environmental Protection Agency in the United States.

## Land

**Aquifer:** an underground layer of rock and sand that contains water

**Base Flow:** The portion of river surface flow which remains after deduction of storm flow.

**Boreal Forest:** a northern forest comprised of trees such as black spruce, jack pine and tamarack.

**Core Natural Area:** The area of habitat essential in the breeding, nesting and rearing of young, up to the point of dispersal of the young.

**Indicator Species:** A species whose status provides information on the overall condition of the [ecosystem](#) and of other species in that ecosystem. They reflect the quality and changes in environmental conditions as well as aspects of community composition.

**Geographic Information System:** A computer system designed for storing, manipulating, analyzing, and displaying data in a geographic context.

**Provincially Significant Wetlands (PSW):** A wetlands that score high under the provincial wetland evaluation protocol.

**Representative Sample:** A sample that has approximately the same distribution of characteristics as the population from which it was drawn.

**Stewardship Agreement:** A voluntary agreement that commits the signatories to caring for land and associated resources in order to pass healthy [ecosystems](#) to future generations

**Wetland Complex:** a series of wetlands in close proximity to each other and joined together hydrologically.