



# GLOSSARY & ABBREVIATIONS

## Appendix 1

**Acidification:** the process of a substance becoming acidic (pH<7)

**Algae Blooms:** mats or floating clumps on the surface or within the water column of a waterbody formed by the accelerated and excessive growth of algae and often producing odours

**Algal Biomass:** the amount of algae organic matter in a given area or volume

**Atmospheric Deposition:** process of pollutant transport from land sources into the atmosphere, further processed, and released or deposited on land or waterbodies at distances further away

**Bacteria fixation:** the process of bacteria converting nitrogen from the atmosphere into ammonia

**Basin:** a natural depression in the land surface that often drains into a lake

**Buffering Capacity:** the ability of a waterbody to neutralize acids and resist changes to pH

**Catchment (drainage basin):** an area of land where surface water from precipitation events drains to a single point

**Calcareous:** mostly or partly composed of calcium carbonate

**Cyanobacteria:** a type of bacteria found in lakes with high nutrients and warm temperatures requiring photosynthesis for survival. Also referred to as blue-green algae and may contain toxins.

**Denitrification:** the process of microbial breakdown changing nitrate to molecular nitrogen for plant uptake

**Dissolved oxygen-temperature profile:** a line graph depicting depth along the y-axis (with the surface depth of 0 meters at the top), compared to temperature and dissolved oxygen on the x-axis to represent changes in both parameters within the water column of a lake

**Drowned-lands:** a man-made area that has been flooded to create a reservoir, pond, or lake

**Ecozone:** a large area of land or water displaying unique biotic and abiotic characteristics

**Ecoregion:** a major ecosystem containing a geographically distinct assemblage of species, natural communities and environmental conditions

**Epilimnion:** the top or warmest layer of a lake that readily mixes due to low density and interaction with wind currents

**Eutrophic:** a trophic classification inferring a water body has excessive nutrient and plant growth (reduced lake health)

**Eutrophication:** the process of accumulating excessive amounts of nutrients from external sources

**Endangered species:** means a wildlife species that is facing imminent extirpation or extinction

**Extirpated:** a species that has been completely wiped out and no longer present from its natural environment

**Groundwater discharge:** the movement of water from the bottom layers of sediment (earth) to the surface (often into lakes and streams)

**Groundwater recharge:** the movement of water from lakes and streams (surface water) through the sediments into groundwater sources (usually aquifers)

**Headwaters:** the most upstream portion of a watershed

**Hypolimnion:** the deepest and coldest layer of a lake with limited mixing

**Invasive Species:** species that are non-native to an area and were introduced and established within a new environment

**Lake Turnover:** the process of seasonal lake mixing

**Mesotrophic:** a trophic classification of a waterbody inferring moderate plant and nutrient concentrations

**Metalimnion:** the middle section of a lake containing the thermocline where the temperature changes between layers by a minimum of 1°C

**Niche:** the role and interaction of an organism with the environment and community

**Nitrogen-fixing:** the ability to create nitrogen from the surrounding environment

**Nutrient Loading:** the process of nutrients entering an ecosystem within a given time frame

**Oligotrophic:** a trophic classification of a waterbody inferring low or poor nutrient concentrations

**Organic matter:** materials consisting of natural components derived from living things and often undergoing various stages of decomposition

**pH:** a measure of acidity and alkalinity, based on the concentration of hydrogen ions, using a logarithmic scale ranging from 0-14. 7 represents neutral, less than 7 increases in acidity, and greater than 7 increases in alkaline conditions

**Primary Producer:** organisms in an ecosystem at the bottom of a food chain producing biomass or energy for other organisms (often photosynthetic organisms such as plants)

**Primary Production:** the process of converting light energy into food through photosynthesis

**Secchi Disk:** a black and white plate that is lowered into the water column for determining the depth of transparency

**Secchi Disk Depth:** the measurement reading in meters when the Secchi Disk disappears from view when lowered into the water

**Shallow (versus deep):** a waterbody where sunlight can reach the bottom sediments

**Species of Special Concern:** means a wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats

**Stratification (stratifies):** seasonal changes of lake temperature, chemistry, and density whereby layers are formed within a waterbody

**Tannins:** a group of often yellow or brown compounds called polyphenols that naturally exist in many plant tissues (bark, grape skin)

**Thermal Regime:** a classification of the average temperature of waterbodies throughout the year to be used for determining habitat suitability for sensitive species. Lakes and streams can be classified as coldwater or warmwater.

**Threatened species:** means a wildlife species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction

**Total Kjeldahl Nitrogen:** the sum of organic nitrogen, ammonia, and ammonium used as a parameter to analyze soil, water, and wastewater

**Transparency:** the visible depth to where light is able to penetrate the water column

**Trophic:** the nutrition or growth of a lake, often referred to as the “trophic state” or the amount of nutrients (predominantly phosphorus and nitrogen) in a waterbody

**Turbidity:** the degree of cloudiness in a fluid based on the number of individual particles present, measured in NTU (nephelometric turbidity unit) or FNU (formazine nephelometric unit) and often associated with colour

**Watershed:** an area of land and water that drains to a common outlet

**Winterkill:** reduced dissolved oxygen levels under ice and snow buildup that prevents light penetration and photosynthesis, therefore killing of a number of species that cannot survive these new conditions

ANSI	Area of Natural and Scientific Interest
CCME	Canadian Council of Ministers of the Environment
CWQG	Canadian Water Quality Guidelines
DFO	Fisheries and Oceans Canada
ISWP	Invasive Species Watch Program
LPP	Lake Partner Program
MNRF	Ministry of Natural Resources and Forestry
MOECC	Ministry of the Environment and Climate Change
NCC	Nature Conservancy of Canada
OFAH	Ontario Federation of Anglers and Hunters
PWQO	Provincial Water Quality Objectives
PSW	Provincially Significant Wetland