

GLOSSARY

Appendix A

33/50 Program: A pollution prevention program sponsored by USEPA in voluntary partnerships with industry. The program's goals are to reduce targeted chemicals by 33 percent by 1992 and 50 percent by 1995.

Anthropogenic: Effects or processes that are derived from human activities, as opposed to natural effects or processes that occur in the environment without human influence.

Benthic: Pertaining to plants and animals that live on the bottom of aquatic environments.

Bioaccumulation: The accumulation by organisms of contaminants through ingestion or contact with skin or respiratory tissue.

Bioaccumulative Chemical of Concern (BCC) (Bioaccumulative Toxics): Any chemical that has the potential to cause adverse effects which upon entering the surface waters, by itself or as its toxic transformation products, accumulates in aquatic organisms by a human health bioaccumulation factor greater than 1000, after considering metabolism and other physiochemical properties that might enhance or inhibit bioaccumulation, in accordance with the methodology in Appendix B of Part 132 - Water Quality Guidance for the Great Lakes System. Source: Water Quality Guidance for the Great Lakes System.

Combined Sewer Overflow (CSO): A pipe that, during storms, discharges untreated wastewater from a sewer system that carries both sanitary wastewater and stormwater. The overflow occurs because the system does not have the capacity to transport and treat the increased flow caused by stormwater runoff.

Deforestation: The clearing of wooded areas.

Degradation: A term used in the indicators of beneficial use impairments defined by the Great Lakes Water Quality Agreement to indicate an environmental condition or state that is considered to be unacceptable or less than the condition that would exist in a healthy ecosystem. In the development of the LaMP the condition was determined after consideration of the Ecosystem Goals for Lake Ontario (Section 1.7) and the preliminary ecosystem objectives.

Diatoms: A class of planktonic one-celled algae with skeletons of silica.

Ecosystem: An ecological community and its environment functioning as a unit in nature.

Eutrophic: Relatively high amounts of nutrients (phosphorus and nitrogen) in the water column. Although eutrophic conditions occur naturally in the late stages of many lakes, rapid increases in nutrients due to human activities can destabilize aquatic food webs because plants and aquatic organisms cannot adjust to rapid changes in nutrient levels.

Final Effluent Limits: The amount of a pollutant allowed to be discharged by a U.S. industry or municipality.

Food Web: A network of interconnected food chains and feeding interactions among organisms.

Isothermal: Marked by equality of temperature.

Littoral: Relating to or existing on a shore.

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Macroinvertebrates: Small organisms that do not have spinal columns; may filter bottom sediments and water for food.

Mesotrophic: Refers to a lake with relatively moderate amounts of nutrients (phosphorus and nitrogen) in its surface water.

Metric Tonne: Unit of weight used in Canada equal to 1,000 kilograms or 2,246 pounds. Equivalent to 1.102 U.S. tons.

Non-point Source: An indirect discharge, not from a pipe or other specific source.

Oligotrophic: Relatively low amounts of nutrients (phosphorus and nitrogen) in the water column. Lake Ontario's original nutrient levels can best be described as oligotrophic.

Pelagic: Related to or living in the open lake, rather than waters adjacent to the land.

Persistent Toxic Substance (Persistent Toxic Chemical): Any toxic substance with a half-life, i.e., the time required for the concentration of a substance to diminish to one-half of its original value, in any medium -- water, air, sediment, soil, or biota -- of greater than eight weeks, as well as those toxic substances that bioaccumulate in the tissue of living organisms. Source: Great Lakes Water Quality Agreement of 1978, expanded by the IJC's Sixth Biennial Report of Great Lakes Water Quality.

Phytoplankton: Microscopic forms of aquatic plants.

Publicly-owned Treatment Works (POTW): A system that treats (which can include recycling and reclamation) municipal sewage or industrial wastes of a liquid nature. Large facilities are generally owned and operated by local governments.

Riparian: Habitat occurring along the bank of a waterway.

Sewage Treatment Plant (STP): A system that treats (which can include recycling and reclamation) municipal sewage or industrial wastes of a liquid nature. Large facilities are generally owned and operated by local governments.

Thermal Stratification (Thermocline): Differential rates of seasonal heating and cooling of shallow and deep waters result in the development of two horizontal layers of water having very different water temperatures. The depth where this abrupt temperature change occurs is known as the thermocline.

Toxic Substance: Any substance which can cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological or reproductive malfunctions, or physical deformities in any organism or its offspring, or which can become poisonous after concentration in the food chain or in combination with other substances. Source: 1978 Great Lakes Water Quality Agreement.

Volatilization: Evaporation.

Watershed: The land area that drains into a stream, river, estuary, or other water body; same as drainage area.



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Water Quality Standards: In the U.S., a designated use of a water body (i.e., swimming, fishing, etc.) and the numerical or other criteria to protect that use.

Water Pollution Control Facility (WPCF): A system that treats (which can include recycling and reclamation) municipal sewage or industrial wastes of a liquid nature. Large facilities are generally owned and operated by local governments.

Water Pollution Control Plant (WPCP): A system that treats (which can include recycling and reclamation) municipal sewage or industrial wastes of a liquid nature. Large facilities are generally owned and operated by local governments.

Zooplankton: Microscopic animals that move passively in aquatic ecosystems.