



Chesapeake Bay Program
A Watershed Partnership

Background

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Over the past three years, researchers, scientists and policymakers from six states, the District of Columbia and the federal government, have worked together to develop new science-based goals that will allow the Bay states and the District to implement plans to reduce nutrient pollution entering the Bay through local streams and rivers.

This list contains a few of the common terms found throughout their work.

Glossary of Water Quality Terms

Bathymetry – The physical characteristics, including depth, contour, and shape of the bottom of a body of water.

Benthic macroinvertebrates – Macroinvertebrates are large, generally soft-bodied organisms that lack backbones. Benthic macroinvertebrates live in or on the bottom sediment in aquatic environments.

Cap load – Cap loads are the maximum pollutant load of nutrients and sediments that can be allowed and still meet Chesapeake Bay water quality criteria.

Cap load allocations – Based on each tributary's nutrient and sediment input to the Bay, the total Chesapeake Bay load is apportioned to each tributary and jurisdiction. The cap load allocations show where the nutrient and sediment loads will most effectively be reduced to achieve the restoration goal.

Chlorophyll a – A pigment contained in plants that is used to turn light energy into food. Chlorophyll also gives plants their green color.

Designated use – An element of a water quality standard, expressed as a narrative statement, describing an appropriate intended human and/or aquatic life objective for a water body. Designated uses for a water body may include: recreation, shellfishing, water supply and/or aquatic life habitat.

Diatoms – Microscopic algae with plate like structures composed of silica. Diatoms are considered a good food source for zooplankton.

Dissolved Inorganic Nitrogen (DIN) – An important nutrient for the growth of plants. DIN is nitrogen that is readily usable by plants.

Epiphytic – Substances that grow or accumulate on the leaves of submerged aquatic plants. This material can include algae, bacteria, detritus, and sediment.

Eutrophic – Describes an aquatic system with high nutrient concentrations. These nutrient concentrations fuel algal growth. This algae eventually dies and decomposes, which reduces the amount of dissolved oxygen in the water.

Impaired waters list (or impairments) – Impaired waters are waters that do not meet State water quality standards. Under the Clean Water Act, section 303(d), States, territories and authorized tribes are required to develop lists of impaired waters. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDLs for these waters.

Light attenuation – Absorption, scattering, or reflection of light by water, chlorophyll a, dissolved substances, or particulate matter. Light attenuation reduces the amount of light available to submerged aquatic vegetation.

Mesotrophic – Describes an aquatic system somewhere between eutrophic (nutrient enriched) and oligotrophic (nutrient poor).

Phytoplankton – Plankton are usually very small organisms that cannot move independently of water currents. Phytoplankton are any plankton that are capable of making food via photosynthesis.

