

Glossary

Cabrillo Marine Aquarium & COSEE-West

“Catch on! Fish Contamination, Bioaccumulation and Healthy Fishing”

June 9, 2007

B **Benthic** – of or pertaining to the bottom of a water body (ocean, stream, etc.)

Bioaccumulation – the build up of a substance, such as a toxic chemical, in various tissues of a living organism. It takes place within an organism when the rate of intake of a substance is greater than the rate of excretion or metabolic transformation of that substance.

Biomagnification (also Biological Magnification) – the increasing concentration of a substance, such as a toxic chemical, in the tissues of organisms at successively higher levels in a food chain. As a result, organisms at the top of the food chain generally suffer greater harm from a persistent toxin or pollutant than those at lower levels.

D **DDT (Dichlorodiphenyltrichloroethane)** – a white, crystalline, water-insoluble solid, $C_{14}H_9Cl_5$, toxic to humans and animals when swallowed or absorbed through the skin. It was one of the most widely used pesticides in the world, but was banned in the United States for most uses in 1972.

L **Lipid** – any of a group of organic compounds, including the fats, oils, waxes, sterols, and triglycerides, that is insoluble in water but soluble in non-polar organic solvents, and are oily to the touch. Together, lipids, carbohydrates, and proteins constitute the principal structural material of living cells.

Lipidophilic – having a strong affinity or preference for lipids.

M **Mercury** – a heavy, silver-white, highly toxic metallic element and is the only one that is liquid at room temperature used in barometers, thermometers, pesticides, pharmaceutical preparations, reflecting surfaces of mirrors, and dental fillings, in certain switches, lamps, and other electric apparatus. Symbol: Hg.

O **Ontogeny** – the development or developmental history of an individual organism.

P **PCBs (Polychlorinated biphenyl)** – a group of highly toxic chemical compounds consisting of two benzene rings in which chlorine takes the place of two or more hydrogen atoms. They are known to accumulate in animal tissue and cause skin diseases and are suspected of causing birth defects and cancer. They were first manufactured in 1929 and used in making paints, lubricants, transformer coolants, and hydraulic fluids because they are stable when exposed to heat and pressure. The US EPA began to phase out their production and use in 1976.

Pelagic – of or pertaining to the open ocean.