
CHAPTER 9

GLOSSARY

This page intentionally left blank.

9. GLOSSARY

Affected environment—The physical features, land, and area or areas to be influenced, affected by, or created by an alternative under consideration; also includes various social and environmental factors and conditions pertinent to an area.

Annelid—Worm with a cylindrical body segmented both internally and externally.

Aquaculture—Farming of plants and animals that live in water, such as fish, shellfish, and algae.

Area of special biological significance—An outdated term. New term is a state water quality protection area (as of January 1, 2003). The ASBS or state water quality protection designation is based on the presence of certain species or biological communities that, because of their value or fragility, deserve special protection by preserving and maintaining natural water quality conditions to the extent practicable.

Benthic—Literally, living on the bottom. Refers to material, especially sediment, at the bottom of an aquatic ecosystem, or it can be used to describe the organisms that live on, or in, the bottom of a water body.

Benthos—A region that includes the bottom of the sea and the **littoral zone** (see below); also refers to the benthic invertebrate community, which is a group of animals that lives on or in the bottom sediments.

Bioprospecting—Scientific research that looks for a useful application, process, or product in nature. Also called biodiversity prospecting. In many cases, bioprospecting is a search for useful organic compounds in microorganisms, plants, and fungi that grow in extreme environments, such as rainforests, deserts, hot springs, and the ocean bottom.

Brackish—Slightly salty water.

Cetacean—Large aquatic carnivorous mammal with fin-like forelimbs, no hind limbs includes whales, dolphins, porpoises, and narwhals. Also of or relating to these animals.

Chumming—Intentionally feeding or attracting a living resource. Often refers to the practice of using animal carcass parts and bloody body parts to attract sharks.

Cold seep—Regions on the seafloor that release sulfide- and methane-rich fluids.

Continental shelf—The gently seaward-sloping surface that extends between the shoreline and the top of the continental slope at about 150 meters (345 feet) depth. The average gradient of the shelf is between 1:500 and 1:1000 and, although it varies greatly, the average width is approximately 70 kilometers (44 miles). This can also be a judicial term; for example, the outer limit of the legal continental shelf is determined by reference to be a distance of 200 nautical miles (370 kilometers,

230 miles) or to the outer edge of the geological continental margin, wherever the margin extends beyond 200 nautical miles (370 kilometers; 230 miles).

Continental slope—That part of the continental margin that lies between the continental shelf and the bottom of the ocean. Sunlight does not penetrate this area, and mostly it is home to scavengers. It is characterized by a relatively steep slope of 3 to 6 degrees.

Crustacean—Includes a diversity of marine, freshwater, and terrestrial animals. All crustaceans have a head and five pairs of appendages, two of which are antennae. Many microscopic crustaceans, like krill and brine shrimp, are marine plankton, an important food source for other animals in the sea. Shrimp, lobsters, crabs, crayfish, and barnacles are crustaceans.

Demersal—Living near, deposited on, or sinking to the bottom of the sea.

de minimis level—Negligible level.

Diapause—A state of rest, halted development, or arrested development or growth, accompanied by greatly decreased metabolism, often correlated with the seasons, usually applied only to insects.

Downwelling—Downward movement of surface ocean waters in a nearshore ocean ecosystem.

Effluent—A waste product that is discharged to the environment, usually used to mean treated wastewater discharged from a wastewater treatment plant, sewer, or industrial outfall.

El Niño—Refers to the large-scale ocean-atmosphere climate phenomenon linked to a periodic warming in sea-surface temperatures across the central and east-central equatorial Pacific Ocean.

Epifaunal—Living on the surface of the **substrate** (see below).

Estuaries—A water body that has constant exchange and interaction with ocean water; also, a marine embayment with no more than a temporary separation from seawater.

Eutrophication—The process whereby an aquatic environment becomes rich in dissolved nutrients, causing excessive growth and decomposition of oxygen-depleting plant life and resulting in injury or death to other organisms.

Halophytic—A plant that can tolerate or thrive in alkaline soil rich in sodium or calcium salts; tolerant of saline (salty) conditions.

Harassment—Any act that injures or has the significant potential to injure marine mammal, bird, or terrestrial animal stock in the wild; also, any act that disturbs or is likely to disturb such animals by disrupting natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered.

Holdfast—The base of seaweed that attaches to a rock or other hard surface. Holdfasts are superficially similar to roots on plants; however, they differ functionally because holdfasts secure **sessile** (see below); seaweed individuals to a location but do not absorb liquids or nutrients.

Hydrocarbons—Chemical compounds that contain hydrogen and carbon. Most motor vehicles and engines are powered by hydrocarbon-based fuels, such as gasoline and diesel. Hydrocarbons include many toxic compounds that cause cancer and other adverse health effects.

Holocene Epoch—A geologic time segment of the Quaternary Period, dating from the end of the Pleistocene Epoch, approximately 8,000 years ago until the present.

Indigenous—Originating where it is found. Refers to species or peoples found locally and from the local area.

Intertidal—The zone between the high and low water marks.

Invertebrate—An animal without a backbone or spinal column, such as an insect.

Isobath—Line connecting points of equal water depth on a nautical chart; a seabed contour.

La Niña—The periodic cooling of surface temperatures in the central and east-central equatorial Pacific Ocean; occurs approximately every three to five years.

Lagoon—A water body often separated from ocean water exchange, with enclosure as a defining characteristic.

Lightering—Smaller boats supplying larger boats with supplies and/or carrying fuel; lightering operations include transfers within the vessel, to lightering barges, or if necessary, into the sea.

Lithic—Of or pertaining to stone.

Littoral zones—That portion of the coast from high water area to area with no attached plants; interface between land and water; highly productive biologically.

Mariculture—Farming or aquaculture of marine animals in tanks, pens, ponds, or cages or net enclosed areas in the open sea.

Migratory bird—Any mutation or hybrid of a listed species, as well as any part, egg, or nest of such bird. Protected under the Migratory Bird Treaty Act.

Mollusk—An invertebrate having a soft unsegmented body, usually enclosed in a shell. Also a group of freshwater and saltwater animals, including oysters, clams, mussels, snails, conches, scallops, squid, and octopus.

Nautical mile—A distance measurement equivalent to 1.15 statutory miles, or 1.8 kilometers.

Nearshore—In beach terminology, an indefinite zone extending seaward from the shoreline well beyond the breaker zone. Typically at water depths of the order of 20 meters (66 feet).

Parapodia—Paired lateral appendages extending from the body segments.

Perturbation—A secondary influence on a system that causes it to deviate.

Pelagic—Referring to the open seas or in the middle portion of the water column.

Petroglyph—A prehistoric carving or drawing on rock.

Phytoplankton—Microscopic floating aquatic plants that produce their own nutrients through photosynthesis.

Pinnipeds—Aquatic carnivorous mammals having a streamlined body specialized for swimming with limbs modified as flippers, for example, seals.

Plankton—Very small, free-floating organisms of the ocean or other aquatic systems, including phytoplankton and zooplankton, which get their nutrients from organisms.

Plume—A narrow thermal feature, which can be either hot or cold, that rises or sinks because of its anomalous temperature compared to the surrounding fluid.

Polychaete—A class of mainly marine annelids, characterized by parapodia bearing numerous hairs; for example, bristle worm.

Promulgated—Formally made public; published accounts.

Offshore—In beach terminology, the comparatively flat zone of variable width, extending from the shore to the edge of the continental shelf. It is continually submerged. Also the breaker zone directly seaward of the low tide line.

Remedial/remedial action—The implementation of a permanent resolution to address a release or potential release of a hazardous substance from a site.

Riprap—A rubble sustaining wall, often used along shorelines to prevent erosion.

Rookery—A breeding ground for gregarious animals or birds.

Salinian/Salinian block—The piece of rock west of the San Andrea Fault moving northward.

Sea fan—Corals having a treelike or fan-shaped horny skeleton.

Sessile—Attached directly by the base; not having an intervening stalk; As in, the shell of a sessile barnacle is attached directly to a substrate. Usually refers to marine animals and plants.

Stipe—The stem-like structure on seaweed.

Substrate— Any **stratum** (see below) lying underneath another.

Stratum— Several parallel layers of material arranged one on top of another.

Take—Currently under revision in the Marine Mammal Protection Act, meaning “to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal.” In the Endangered Species Act, the definition includes to harass, harm, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. A notable component of this definition is “harm,” which means an act that actually kills or injures protected wildlife. Such acts may include significant habitat modification or degradation that actually kills or injures wildlife by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering.

Tertiary—A geologic period dating from 63 million to 2 million years ago.

Trawling—The operation of towing a net (trawl) to catch fish and/or shellfish. Trawls are towed either with bottom contact or in midwater. The towing speed varies, according to such factors as the type of trawl and trawling and the target species.

Vertical hook and line fishing—Analogous to the rod and reel used by recreational anglers, this is a method that attracts fish by a natural or artificial bait (lures) placed on a hook fixed to the end of a line, on which they get caught. A vertical line is attached to a sinker and several hooks.

Upwelling—Divergence of water currents or the movement of surface water away from land, leading to upward movement of cold nutrient-rich water from the ocean depths; often associated with great production of fish and fisheries.

This page intentionally left blank.