

### Glossary

**A Abiotic** - A nonliving (physical or chemical) component of the environment.

**Anadromous** - Fishes that migrate as juveniles from freshwater to saltwater and then return as adults to spawn in freshwater; most Pacific salmon are anadromous.

**Anthropogenic** - Caused or produced by humans.

**B Baseline** - A set of reference data sets or analyses used for comparative purposes; it can be based on a reference year or a reference set of (standard) conditions.

**Benthic** - 1. Defining a habitat or organism found on the sea bottom; 2. Of or pertaining to the seafloor (or bottom) of a water body.

**Biomass (B)** - 1. Or standing stock. The total weight of a group (or stock) of living organisms (e.g. fish, plankton) or of some defined fraction of it (e.g. spawners) in an area, at a particular time; 2. Measure of the quantity, usually by weight in pounds or metric tons (2,205 pounds or 1 metric ton), of a stock at a given time.

**Biota** - The plant and animal life characteristic of a specific region or biosphere, or given time period.

**Biotic** - Pertaining to the living components of their environment.

**Bony Fishes** - Fishes with a calcified hard skeleton and belonging to Class Osteichthyes; includes most fish species except sharks, rays, skates, hagfish, and lampreys.

**Brackish** - Water of intermediate salinity; water that is somewhat salty.

**C Catadromous** - Fishes that spend most of their life in freshwater and then migrate into saltwater to spawn.

**Catchment** - Something for catching water, such as a reservoir or basin.

**Community** - The populations that live and interact physically and temporally in the same area.

**D Delta** - The result of interacting fluvial (river) and, usually, marine systems. They can form anywhere a stream flows into shallower or open water and are found throughout the world except at the poles. Some common characteristics include: 1) the presence of a large catchment or drainage basin 2) they are located at the mouths of large river systems that carry large quantities of sediments and 3) they are not near geologically active coastlines. In order to have a large catchment basin, a very complex tributary

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system is necessary. These long, complex systems take a long time to develop, so they are rarely situated on tectonically active coasts.

**Distal** - Situated away from the point of origin or attachment (i.e. the distal portion of a river is the end furthest away from its origin).

**E Ecosystem** - A geographically specified system of organisms, the environment, and the processes that control its dynamics. Humans are an integral part of an ecosystem.

**Ecosystem Approach to Management (EAM)** - Management that is adaptive, is specified geographically, takes into account ecosystem knowledge and uncertainties, considers multiple external influences, and strives to balance diverse social objectives.

**Ecosystem Assessment** - A social process through which the findings of science concerning the causes of ecosystem change, their consequences for human well-being, and management and policy options are brought to bear on the needs of decision makers.

**Ecosystem Function** - An intrinsic ecosystem characteristic related to the set of conditions and processes whereby an ecosystem maintains its integrity. Ecosystem functions include such processes such as decomposition, production, nutrient cycling, and fluxes of nutrients and energy.

**Ecosystem Health** - A measure of the stability and sustainability of ecosystem functioning or ecosystem services that depends on an ecosystem being active and maintaining its organization, autonomy, and resilience over time. Ecosystem health contributes to human well-being through sustainable ecosystem services and conditions for human health.

**Ecosystem Services** - Ecosystem services are the benefits people obtain from ecosystems. These include provisioning services, such as food and water; regulating services, such as flood and disease control; cultural services, such as spiritual and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth.

**Endemism** - Of or relating to a native species or population occurring under highly restricted conditions due to the presence of a unique environmental factor that limits its distribution.

**Estuarine** - 1. Relating to, or formed in an estuary (e.g. estuarine currents; estuarine animals); 2. Belonging to an estuary (river mouth), an area in which sea water is appreciably diluted by fresh water from rivers.

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**Estuary** - A coastal ecological ecosystem that is partially enclosed, receives freshwater input from land, and has a horizontal fresh-salt salinity gradient; the average salinity of estuarine waters is defined as being 30 practical salinity units (PSU) for at least 1 month per year.

**Eutrophication** - Generally, the natural or human-induced process by which a body of water becomes enriched in dissolved mineral nutrients (particularly phosphorus and nitrogen) that stimulate the growth of aquatic plants and enhances organic production of the water body. Excessive enrichment may result in the depletion of dissolved oxygen and eventually to species mortality.

**F Fluvial** - Of or pertaining to a river; produced by or found in a river.

**Flood** - A great flowing or overflowing of water, most often over land not usually submerged.

**Food Chain** - The transfer of energy from the source in plants through a series of organisms with repeated eating and being eaten. At each transfer, a large proportion of the potential energy is lost as heat. The shorter the food chain (or the nearer the organism is from the beginning of the food chain), the greater the available energy which can be converted in biomass.

**H Habitat** - 1. The locality, site and particular type of local environment occupied by an organism, including everything that surrounds and affects their life, e.g. water quality, bottom, vegetation, associated species (including food supplies).

**Health** - The condition of the marine environment from the perspective of adverse effects caused by anthropogenic (human) activities, in particular habitat destruction, changed sedimentation rates and the mobilization of contaminants. Such conditions refer to the contemporary state of the ocean, prevailing trends, and the prognosis for improvement or deterioration of its quality.

**I Introduced Species** - With respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem. Introduced species often compete with and cause problems for native species. Introduced species are also called exotic, nonnative, and alien species.

**Invasive species** - An introduced species that out-competes native species for space and resources.

**Invertebrate** - Animals without a backbone. Examples include lobsters, clams, shrimps, oysters, crabs, and sea urchins.

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**M Macrofauna** - Large animals (for example fish).

**Macrophyte** - A plant (especially a marine plant) large enough to be visible to the naked eye.

**Meander** - A winding path or course; a turn or winding of a stream.

**Migration** - The systematic (as opposed to random) movement of individuals of a population from one place to another, often related to season.

**N Native Species** - A local species that has not been introduced.

**Non-Point Sources** - Sources of sediment, nutrients, or contaminants that originate from many locations.

**P Point Source** - A source of sediment, nutrients, or contaminants into a body of water that comes from one discharge location.

**Pollution** - 1. The introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results in or is likely to result in such deleterious effects as harm to living resources and marine life; hazards to human health; hindrance to marine activities, including fishing and other legitimate uses of the sea; impairment of quality of sea water; and reduction of amenities; 2. Presence of substances and heat in environmental media (air, water, land) whose nature, location, or quantity produces undesirable environmental effects; 3. Activity that generates pollutants.

**Population** - The number of individuals of a particular species that live within a defined area.

**Predation** - Relationship between two species of animals in which one (the predator) actively hunts and lives off the meat and other body parts of the other (the prey).

**R Recreational Fishery** - Harvesting fish for personal use, sport, and challenge (e.g. as opposed to profit or research). Recreational fishing does not include sale, barter, or trade of all or part of the catch.

**Resilience** - Capacity of a natural system (community or ecosystem) to recover from heavy disturbances such as intensive fishing.

**Resources** - 1. A natural source of wealth and revenue. Biological resources include genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use of value for humanity. 2. Anything that has value; living and nonliving components of nature such as fish, oil, water, and

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air.

**Riparian** - Living on or near the bank of a river or lake.

**Riparian Habitat** - Areas adjacent to rivers and other water bodies that have a high density and large variety of plants and animal species relative to nearby uplands.

**River Plume** - Turbid freshwater flowing from land and generally in the distal part of a river (mouth) outside the bounds of an estuary or river channel.

**Runoff** - Portion of rainfall, melted snow, or irrigation water that flows across the ground's surface and is eventually returned to streams. Runoff can pick up pollutants from air or land and carry them to receiving waters.

**S Salt Marsh** - A habitat comprised of emergent rooted macrophytes in a soft sedimentary substrate tolerant of long periods of partial submersion along the shores of estuaries and sheltered coasts.

**Species** - Group of animals or plants having common characteristics, able to breed together to produce fertile (capable of reproducing) offspring, and maintaining their “separateness” from other groups.

**Species Diversity** - The variety of species in a community, which can be expressed quantitatively in ways which reflect both the total number of species present and the extent to which the system is dominated by a small number of species.

**Species Richness** - Species richness/abundance is the distribution of the number of species and the number of individuals of each species in a community.

**Stakeholder** - 1. A large group of individuals and groups of individuals (including governmental and non-governmental institutions, traditional communities, universities, research institutions, development agencies and banks, donors, etc.) with an interest or claim (whether stated or implied) that has the potential of being impacted by or having an impact on a given project and its objectives. Stakeholder groups that have a direct or indirect “stake” can be at the household, community, local, regional, national, or international level; 2. An actor having a stake or interest in a physical resource, ecosystem service, institution, or social system, or someone who is or may be affected by a public policy.

**Surface Runoff** - The flow across the land of water that accumulates on the land surface when the rainfall rate exceeds the infiltration capacity of the soil.

**Surface Water** - All water naturally open to the atmosphere, including rivers, lakes, reservoirs, streams, impoundments, seas, estuaries, and so on. The term also covers

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springs, wells or other collectors of water that are directly influenced by surface waters.

**T Total Maximum Daily Load** - The amount of pollutant that a water body can receive and still meet water quality standards. Set by the Environmental Protection Agency.

**Turbid** - Not clear or transparent because of stirred-up sediment or the like; clouded; opaque; obscured.

**W Water Pollution** - Presence in water of harmful and objectionable material—obtained from sewers, industrial wastes, and rainwater runoff—in sufficient concentrations to make it unfit for use.

**Water Quality** - The chemical, physical, and biological characteristics of water in respect to its suitability for a particular purpose.

**Water Quality Criteria** - Specific levels of water quality desired for identified uses, including drinking, recreation, farming, fish production, propagation of other aquatic life, and agricultural and industrial processes.

**Water Resources** - Water usable as inputs for economic production and livelihoods. A distinction is made between renewable and nonrenewable water resources. Nonrenewable water resources are not replenished at all or for a very long time by nature. This includes the so-called fossil waters. Renewable water resources are rechargeable due to the hydrological cycle unless they are overexploited, comprising groundwater aquifers and surface water like rivers and lakes.

**Watershed** - The area of land where all of the water that falls in it and drains off of it ends up.

**Wetland** - Land where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface.