



Healthy Oceans

**Student
Vocabulary**

Healthy Oceans

Coral Reefs and Climate Change

Vocabulary for Students



- **Adaptation:** A behavior or physical characteristic that allows an organism to survive or reproduce in its environment.
- **Biodiversity:** Bio=biological. Diversity=a variety of things. The different kinds of plants, animals and other organisms in an area.
- **Carbon dioxide (CO₂):** A chemical compound composed of two oxygen atoms bonded on either side of a carbon atom. CO₂ is one of the most significant greenhouse gases in Earth's atmosphere.
- **Coral bleaching:** When corals are stressed by changes in conditions such as temperature, light, or nutrients, they expel the symbiotic algae living in their tissues, causing them to turn completely white.
- **Coral reef:** A structure of calcite skeletons built up by coral animals in warm, shallow ocean water. Coral reefs are one of the most diverse ecosystems on Earth.
- **Fossil fuel:** An energy-rich substance such as petroleum, coal, or natural gas formed from the remains of ancient organisms.
- **Climate change:** Changes in the average long-term conditions of temperature, precipitation, winds, and clouds in an area.
- **Greenhouse gases:** Gases in Earth's atmosphere that absorb infrared radiation and trap heat. Some greenhouse gases are naturally occurring compounds (like water vapor, carbon dioxide, methane, and nitrous oxide), while others are human-made (like gases used for aerosols).
- **Ocean acidification:** The process by which atmospheric carbon dioxide dissolves in seawater, causing a decrease in the water's pH and an increase in the ocean's acidity.
- **Twilight zone:** Also called the 'mesophotic zone' (meso='middle'; photic='light'), this is the narrow band of depth in the ocean between 200-500 feet beneath the surface characterized by low light availability. The twilight zone is beyond safe recreational diving limits, but far above the deep regions of the ocean where scientists explore with submarines and ROVs (remotely operated vehicles), which might make it one of the least explored regions on Earth.



Healthy Oceans

Solutions to Human Impacts

Vocabulary for Students



- **Ballast water:** Water that is pumped into tanks in a ship to increase its stability in the water.
- **Dead zones:** Regions in the ocean where there isn't enough oxygen to support most marine life.
- **Invasive species:** Plants, animals, or bacteria and viruses that are not native to an ecosystem and who cause or are likely to cause harm to the ecosystem.
- **Marine Protected Area (MPA):** Area of the oceans or Great Lakes protected and managed for conservation and/or preservation purposes. MPAs can vary in different places in terms of their purpose, level of restriction, and how they are managed.
- **National Marine Sanctuary:** A general type of Marine Protected Area; A designated area of the marine environment that has special national significance.
- **Nutrient pollution:** When too many nutrients like nitrogen and phosphorous get into a body of water, causing excessive growth of algae.

[Video: Solutions to Human Impacts](#)

[Healthy Oceans homepage](#)



Healthy Oceans Sustainable Seafood Vocabulary for Students



- **Aquaculture:** The farming of water organisms.
- **Bycatch:** Any fish or other organism that is unintentionally caught. These items are often wasted.
- **Farmed fish:** Fish that are raised for commercial purposes, usually for food. Fish can be farmed in a variety of environments, including self-contained tanks or enclosures in the open ocean.
- **Food chain:** A series of events in which one organism eats another and obtains energy.
- **Food web:** The pattern of overlapping food chains in an ecosystem.
- **Gillnet:** A wall of netting that hangs vertically in the water and catches fish that try to swim through by the gills. Gillnets can unintentionally entangle a variety of marine animals, including sea turtles, whales, and dolphins.
- **Longline:** A central fishing line that can range from one to 50 miles long and strung with smaller lines of baited hooks, dangling at evenly spaced intervals. The many lines, however, can hook bycatch that are attracted to the bait.
- **Mercury:** A toxic heavy metal that can enter the environment and contaminate water sources from human activities like coal burning. In the ocean, mercury is absorbed into the bodies of fish and accumulates in fish higher up in the food chain.
- **Purse seining:** A method of fishing that uses a large wall of netting to encircle schools of fish. There are several types of purse seines and, depending on which is used, some can catch other animals.
- **Sustainable:** Meeting the needs of the present without compromising the ability of future generations to meet their own needs.
- **Trawling:** A method of fishing using nets towed at various depths to catch fish or shellfish. Trawl nets, which can be as large as a football field, are either dragged along the seafloor or midway between the floor and the surface. Bottom trawling can result in high levels of bycatch.



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Preventing Plastic Pollution

Vocabulary for Students



- **Biodegradable:** Capable of being broken down by bacteria and other decomposers and returned to nature.
- **Compostable:** Organic material that breaks down relatively quickly—at a rate similar to paper—and leaves no toxic residue. This organic material turns into ‘compost,’ or plant fertilizer. ‘Biodegradable’ does not necessarily mean ‘compostable,’ while by definition compostable materials are also biodegradable.
- **Debris:** Discarded garbage or the remains of something that’s been broken apart or destroyed.
- **Gyre:** A large system of circular currents in the ocean that are a result of wind patterns on the Earth and the Earth’s rotation.
- **Microbeads:** Plastic particles less than 5 mm in diameter that are put in some cosmetic and personal care products like toothpaste and face scrubs. Microbeads are too small to be filtered by sewage treatment plants and thus make their way directly into the ocean when they are washed down the drain.
- **Microplastics:** Small pieces of plastic that are less than 5 mm long.
- **Nonrenewable resource:** A natural resource that is consumed faster than it can be replaced naturally.
- **Photodegrade:** To be chemically broken down by light, typically ultraviolet light from the sun.
- **Toxin:** A poisonous substance.
- **UV (ultraviolet) rays:** Electromagnetic waves with wavelengths that are shorter than visible light.

