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| Lakes | Physical: standing water; thermocline within; layering Chemical: oligotrophic (high oxygen, low nutrient) and eutrophic (low oxygen, high nutrient) Geologic: oligotrophic generally deeper Autotrophs: littoral zone (rooted, floating aquatic plants) and limnetic zone (phytoplankton) Animals: fish, limnetic zone (zooplankton), benthic zone (invertebrates) Human Impact: runoff and nutrient enrichment |
| Wetlands | Physical: land with frequent or constant inundation Chemical: high photosynthetic activity, high decomposition, low dissolved oxygen, natural filtration Geologic: basin (shallow), riverine (on river and stream banks), fringe (on sea and lake coasts)  Autotrophs: high productivity; pond lillies, cattails, spruce (periodic anaerobic adaptations) Animals: invertebrates, birds, diverse herbivores/carnivores Human Impact: draining/filling |
| Streams and Rivers | Physical: vertical stratification; speed and volume of water flow Chemical: salt/nutrient increases from headwater to mouth Geologic: rocky bottom to wide/meandering to silty sedimentation Autotrophs: phytoplankton; aquatic plants Animals: fishes; invertebrates Human Impact: pollution, damming, flooding |
| Estuaries | Physical: between river and sea; seawater underneath, river water on top Chemical: nutrient rich; varying salinity Geologic: networked structure Autotrophs: phytoplankton, salt-marsh grasses, algae Animals: fish, crabs, breeding ground Human Impact: filling, dredging, pollution |
| Intertidal Zone | Physical: periodically submerged and resurfaced; more variation in upper zones Chemical: high oxygen and nutrient levels Geologic: rocky and sandy substrate material Autotrophs: high algae diversity Animals: crustaceans, worms, clams, anemones with substrate attachment adaptations Human Impact: oil pollution |
| Oceanic Pelagic Zone | Physical: open water with ocean current mixing Chemical: high oxygen, low nutrients, thermoclines with turnover Geologic: deep and covers 75% of earth's surface Autotrophs: phytoplankton Animals: zooplankton, free swimming animals Human Impact: overfishing, pollution |
| Coral Reefs | Physical: calcium carbonate skeleton of corals; mostly in shallow water Chemical: need high oxygen levels Geologic: coral attaches to hard substrate on island coast - fringing reef - barrier reef - coral atoll Autotrophs: unicellular algae in tissue of coral, red/green algae Animals: corals, high fish/invertebrate diversity Human Impact: collection, pollution, disturbance |
| Marine Benthic Zone | Physical: seafloor by coast (neretic) and offshore (pelagic); no sunlight except neretic; low temperature; high pressure (especially abyssal zone) Chemical: sufficient oxygen Geologic: mostly soft sediment on ocean floor Autotrophs: few photosynthetic organisms (barely light); chemoautotrophic prokaryotes (in deep sea hydrothermal vents that oxidize H2S) Animals: invertebrates, fish (neretic); giant tube worms (deep sea hydrothermal vents); eat organic matter raining down from above Human Impact: overfishing, dumping |