

WATER – Terms and Definitions

Based on Addison-Wesley (AW) Authors: Robert E. Fariel, Robert W. Hinds, David B. Berey

FRESH WATER

Water On the Ground (AW – Chpt. 7 Section 1)

condense	To change from a gas to a liquid.
divide = Br watershed	The highest land that separates the direction in which water will run off the earth's surface. (rozdvi)
evaporate	To change from a liquid to a gas.
freeze	To change from a liquid to a solid.
glacier	A moving mass of ice and snow.
lake	A body of water that collects in a hole or depression in the earth's surface; larger and deeper than a pond.
pond (US)	A body of water that is smaller and shallower than a lake. (US)
river basin, catchment area /basin, drainage area / basin = US watershed	All the land that drains into a river, with its system of streams and other tributaries. (povodi)
runoff	Water that follows off the earth's surface.
sheet runoff	Water that has no channels to direct its flow as it runs off the earth's surface.
stream	Runoff that follows in a channel between banks of soil, rock, or other material.
swamp [o]	A low-lying water-soaked marsh or bog that forms when a lake or pond fills with sediment and vegetation.
transpiration	The process by which green plants, as they make food, give off water vapor through small openings in their leaves.
tributaries	Streams and small rivers that empty into one large river system.
water cycle	The process by which water is continually recycling between the earth's surface and the atmosphere; also called the hydrologic cycle.

Water In the Ground (AW – Chpt. 7 Section 2)

adhesion	The attraction of water molecules to other kinds of molecules.
aquifer	A layer of permeable rock through which water travels. Water-bearing strata. (zvodeň)
artesian spring	A natural flow of water from an artesian system.
artesian system	A combination of rock layers in which water passes downward through an aquifer.
capillary action	The upward movement of water in soil due to adhesion and cohesion.
capillary fringe	An area just above the water table that receives its moisture by capillary action.
cohesion	The attraction of one molecule to another molecule of the same kind.
geyser	The eruption from the ground of water and steam that has been heated by hot magma or rocks in the earth's crust.
ground water	Water that has infiltrated the earth.
impermeable	Property allowing no water to pass through a material.
infiltration	The process by which water sinks into the ground.
permeability	Property determining how easily water flows through a material.
pore spaces	Spaces between particles of sand or soil.
porosity	The total volume of the pore spaces in a certain volume of material.
spring	The place where ground water flows out of the ground because the water table has intersected the earth's surface.
viscosity	A measure of how easily a liquid flows.
water table	The boundary between the zone of aeration and the zone of saturation. Upper boundary surface of the saturated zone. (Strahler) Upper limit of the ground water body.
zone of aeration	The layer of soil between the water table and the earth's surface.
zone of saturation	The layer of soil below the water table.

THE OCEAN

The Bottom of the Ocean (AW Chapter 8 Section 1)

abyssal plain	Large flat area of the deep sea floor; formed by sediment flows that spill off the continental margins.
continental margin	The region of the ocean bottom near the land areas; contains most of the sediment eroded from the land; separates a continent from the deep sea floor.
continental slope	The steeper middle part of a continental margin. (svah) VH
continental rise	The lowest part of a continental margin. (úpatí) VH
echo sounding	A method of using noise (pings) to measure the depth of the ocean.
island arc	A chain of islands, usually curved, that separates a marginal sea from a major ocean.
marginal sea	A smaller body of salt water found along the margin of a major ocean.
mid-ocean ridge	A system of rugged mountains that extends down the middle of the ocean basins.
Mid-Atlantic Ridge	A part of a mid-ocean ridge (Středoatlantský hřbet). VH
East Pacific Rise	A part of a mid-ocean ridge (Východopacifický práh). VH
ocean	The entire body of salt water that covers much of the earth's surface; also, any of its major geographical divisions.
ocean basin	The low-lying earth formation that contains the ocean's water; consists mainly of dense basaltic crustal rock.
rift valley	Deep valley in the center of the mid-ocean ridge; a site of active volcanism.
Ring of Fire	The region of volcanic activity that surrounds the basin of the Pacific Ocean.
trench	A long narrow depression of the deep sea floor; generally has steep sides; usually bordered by areas of volcanic activity.
guyot [gijot]	A flat topped underwater mountain.
seamount	Volcanic cone growing upward from the ocean bottom layer by layer, usually rising more than 1000m above the floor.

Properties of Ocean Water (AW Chapter 8 Section 2)

photic zone	The uppermost zone of the open ocean and the zone of most light.
aphotic zone	The part of the ocean that is in total darkness.
disphotic zone	A zone of reduced light in the ocean; between 200m and 1000m deep.
brine pool	isolated spot of hot ocean water that contains concentrated amounts of dissolved solids (solanka); it forms when deep water circulation is restricted (VH)
floe	A flat mass of ice, smaller than ice field, floating at sea.
freezing point	The temperature at which a liquid freezes.
icebergs	Floating masses of ice that broke off fresh water glaciers .
pack ice	A large expanse of floating sea ice that has been broken and then refrozen into jagged pressure ridges. (pole ledových ker)
salinity	Saltiness; a measure of the amount of total dissolved materials in water; grams of dissolved materials per kilogram of water (ppt = parts per thousand).
sea ice	Frozen ocean water.
water mass	A large volume of water characterized by a similar temperature, salinity, and density throughout its mass.
water pressure	The force that a mass of overlying water exerts upon a submerged surface.

The Circulation of Ocean Water (AW Chapter 8 Section 3)

crest	The highest point of a wave. (hřeben)
gyre [džaiə]	A closed system of rotating ocean currents. (koloběh proudů)
high tide	When the waterline of a body of water reaches its highest point.
low tide, ebb	When the waterline of a body of water reaches its lowest point.
pounding of waves	repeated heavy blows (vlnobití)
rogue wave [rəʊg]	A very high wave that forms on the open ocean when high waves of about the same wavelength have their crests coincide. (ničivá vlna)
surf zone	The area where breaking waves occur.
swell	A rhythmic pattern of waves. (vlnění)
trough [trof]	The lowest point between two wave crests. (pata vlny)
tsunami	A huge wave caused by an underwater earthquake somewhere along the ocean bottom; barely noticeable out at sea.
upwelling	A process by which deep, cold, nutrient rich water is brought to the surface and replaces lighter surface water. (výstup spodních vod)
wave base	The point below the surface of water at which the orbital motion of a wave nearly disappears (1/2 a wavelength below the midheight of the wave).
wave height [hait]	The vertical distance between a wave's highest and lowest points.
wavelength	The horizontal distance from a point on one wave to the corresponding point on the next wave.