

VOCABULARY

acid – a compound that reacts with a substance by dissolving or eating it away. A substance that has a pH of less than 7, which is neutral.

aquifer – a geological formation that is water bearing. Usually refers to water-bearing formations capable of yielding water in sufficient quantity to constitute a useable supply for people's uses. An aquifer is where well water comes from.

base – a substance that has a pH of more than 7 which is neutral.

boxwork – a speleothem or cave decoration which is a fragile, honeycomb-shaped structure of calcite attached to the walls and ceilings of the cave.

calcite - calcium carbonate, the predominate mineral in limestone, found in the cave in a variety of crystalline forms.

caprock – strong or resistant rock over an area where softer or less resistant rock has eroded; rock covering layers of other rock

crystal – the solid form of a substance in which the atoms or molecules are arranged in a certain definite pattern.

condensation – the process of water vapor in the air turning into liquid water.

deposition – process that allows secondary cave formations to form; the process where sediments filter into a body of water.

discharge – the volume of water that passes a given location within a given period of time.

domestic water use – water used for household purposes, such as drinking, food preparation, bathing, washing clothes, dishes, etc.

ecology - the study of the interrelationships between living things and the relationships between organisms and their physical environment.

ecosystem - a living community of plants and animals and the physical environment (oxygen, water, sunlight, soil) around them.

environment – surroundings; all of the conditions surrounding and affecting the development of an organism.

erosion – the process in which a material is worn away by a stream of liquid (water) or air.

evaporation – the process of liquid water becoming water vapor.

exotic – foreign, introduced into an area where it does not naturally occur.

groundwater – water stored underground in rock crevices and in the pores of geologic materials that make up the earth's crust.

habitat - the place where a plant or animal lives.

hydrological cycle – the cyclic transfer of water vapor from the earth's surface via evaporation or transpiration into the atmosphere, from the atmosphere via precipitation back to earth, and through runoff or infiltration into streams, rivers, lakes, caves, groundwater, and into oceans.

infiltration – flow of water from the land surface into the subsurface.

irrigation – the managed application of water to soil for the purpose of increasing crop production.

karst – an irregular area of limestone in which erosion has produced fissures, sinkholes, underground streams, and caverns.

leaching – the way water moves, or seeps, from the surface to groundwater.

non-point source pollution – pollution discharged over a wide land area, not from one specific location.

osmosis – the movement of water molecules through a thin membrane.

permeability – the ability of a material to allow the passage of a liquid, such as water through rocks. Permeable materials, such as gravel and sand allow water to move quickly through them, whereas impermeable material, such as clays, don't allow water to flow freely.

pH – a measure of the relative acidity or alkalinity of water.

point source pollution – water pollution coming from a single point, such as sewage-outflow pipe.

porosity – allowing the movement of gas or liquid through pores.

potable water - water of a quality suitable for drinking.

precipitation – rain, snow, hail, sleet, dew, and frost

recharge – water added to an aquifer, for example, rain that seeps into the ground.

riparian water rights – the rights of an owner whose land abuts water. They differ from state to state and often depend on whether the water is a river, lake, or ocean.

runoff – that part of precipitation, snow melt, or irrigation water that appears in uncontrolled surface streams, rivers, drains, or sewers.

saturated – completely full, as groundwater is an area within a rock layer that is completely filled or saturated with water.

sediment – usually applied to material in suspension in water or recently deposited from suspension. The word is applied to all kinds of deposits from the waters of streams, lakes, or seas.

sedimentary rock - rock formed of sediment, such as limestone is formed from sediments at the bottom of an ocean.

sludge – solid material (septage or biosolids) settled from a wastewater treatment facility.

septic tank – a tank used to detain domestic wastes to allow the settling of solids prior to distribution to a leach field for soil absorption. Septic tanks are used when a sewer line is not available to carry them to a treatment plant.

sewage treatment plant – a facility designed to receive the wastewater from domestic sources and to remove materials that damage water quality and threaten public health and safety when discharged into streams or bodies of water.

sewer – a system of underground pipes that collect and deliver wastewater to treatment facilities or streams.

sinkhole – a depression in the earth's surface caused by dissolving of underlying limestone.

speleothem – a formation in a cave for example: boxwork, stalactite, or stalagmite.

transpiration – process by which water that is absorbed by plants, usually through the roots, is evaporated into the atmosphere from the plant surface, such as leaf pores.

wastewater – water that has been used in homes, industries, and businesses that is not for reuse unless it is treated.

watertable – the top of the water's surface in groundwater or the saturated part of an aquifer.

watershed – the land area that drains water to a particular stream, river or lake.