Vocabulary/Ch. 15

Withgott

**surface water**: Water located atop Earth’s surface.

**groundwater:** Water held in aquifers underground.

**aquifers:** An underground water reservoir.

**water table:** The upper limit of groundwater held in an aquifer.

**recharge zone:** An area where water infiltrates Earth’s surface and reaches an aquifer below.

**confined aquifer:** A water-bearing porous layer of rock, sand, or gravel that is trapped between an upper and lower layer of less permeable substrate, such as clay. The water is in a confined aquifer is under pressure because it is trapped between two impermeable layers.

**unconfined aquifer:** A water-bearing, porous layer of rock, sand, or gravel that lies atop a less permeable substrate. The water is an unconfined aquifer is not under pressure because there is no impermeable upper layer to confine it.

**runoff:** The water from precipitation that flows into streams, rivers, lakes, and ponds, and (in many cases) eventually to the ocean.

**watershed:** The entire area of land from which water drains into a given river.

**floodplain:** The region of land over which a river has historically wandered and periodically floods.

**oligotrophic:** Term describing a water body that has low-nutrient and high-oxygen conditions.

**eutrophic:** Term describing a water body that has high-nutrient and low-oxygen conditions.

**wetlands:** A system in which the soil is saturated with water and which generally features shallow standing water with ample vegetation. These biologically productive systems include freshwater marshes, swamps, bogs, and vernal pools.

**consumptive use:** Use of fresh water in which water is removed from a particular aquifer or surface water body and is not returned to it.

**nonconsumptive use:** Use of fresh water in which the water from a particular aquifer or surface water body either is not removed or is removed only temporarily and then returned.

**sinkholes:** An area where the ground has given way with little warning as a result of subsidence caused by depletion of water from an aquifer.

**flooding:** The spillage of water over a river’s banks due to heavy rainor snowmelt.

**levees:** A long raised mound of earth erected along a river bank to protect against floods by holding rising water in the main channel. Synonymous with dike.

**desalinaton (desalinization):** The removal of salt from seawater to generate fresh water for human use.

**xeriscaping:** Landscaping using plants that are adapted to arid conditions.

**water pollution:** The release of matter or energy into waters that causes undesirable impacts on the health and well-being of humans or other organisms. Water pollution can be physical, chemical, or biological**.**

**point source:** A specific spot—such as a factory—where large quantities of air pollutants or water pollutants are discharged.

**non-point source:** A diffuse source of pollutants, often consisting of many small sources.

**wastewater:** Any water that is used in households, businesses, industries, or public facilities and s drained or flushed down pipes, as well as the polluted runoff from streets and stormdrains.

**septic systems:** A wastewater disposal method, common in rural areas, consisting of an underground tank and series of drainpipes. Wastewater runs from the house to the tank, where solids precipitate out. The water proceeds downhill to a drain field of perforated pipes laid horizontally in gravel-filled trenches, where microbes decompose the remaining waste.

**primary treatment:** A stage of wastewater treatment in which contaminants are physically removed. Wastewater flows into tanks in which sewage, solids, grit, and particulate matter settle to the bottom. Greases and oils float to the surface and can be skimmed off.

**secondary treatment:** A stage of wastewater treatment in which biological means are used to remove contaminants remaining after primary treatment. Wastewater is stirred up in the presence of aerobic bacteria, which degrade organic pollutants in the water. The wastewater then passes to another settling tank, where remaining solids drift to the bottom.