

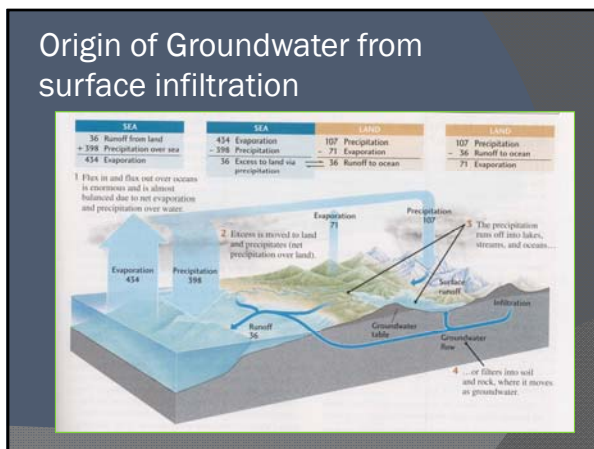
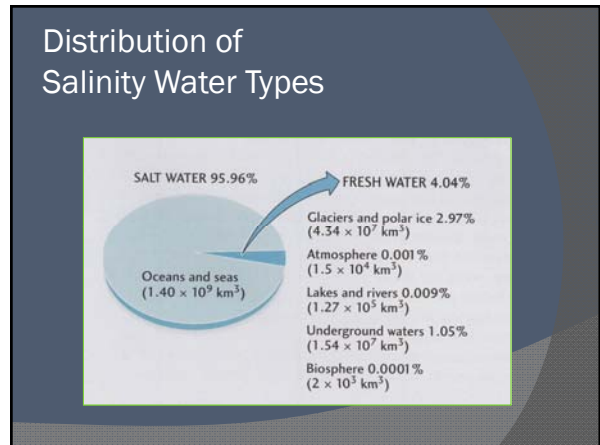


Ground Water Definition:

- All the water contained in spaces (pores) within the bedrock and soil

Salinity Water Types

Water Types	TDS, mg/L=total dissolved solutes
Fresh	< 1000
Brackish	1000-10,000
Saline	10,000-100,000
Brine	>100,000



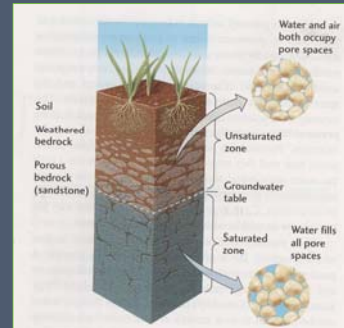
Groundwater Recharge:

- Large areas where surface water soaks into soil, surface sediments and bedrock

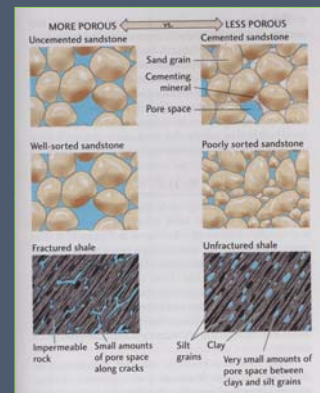
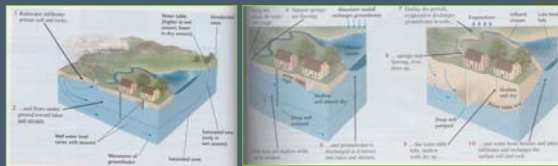
Ground Water Discharge:

- Areas where groundwater leaks back out onto surface (ex. Springs)

Groundwater Table



Groundwater Movement



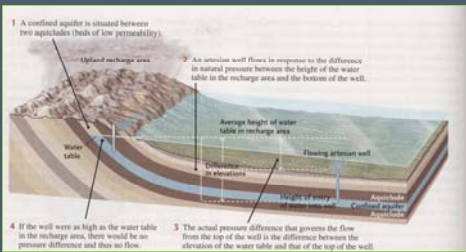
Groundwater migration rate depends on:

1. Percentage Porosity
2. Porosity type and size
3. Permeability
4. Hydraulic gradient- slope of water table

Groundwater Aquifer

- Large body of porous and permeable material in saturated zone that produces water when drilled into.
 1. Unconfined: water table open directly to overlying surface
 2. Confined: aquifer bounded by aquicludes

Confined Aquifer



Perched water table

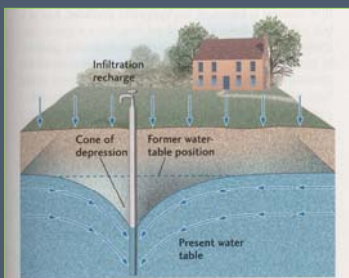
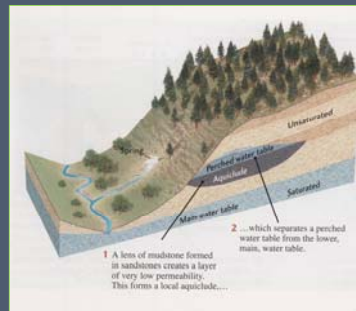
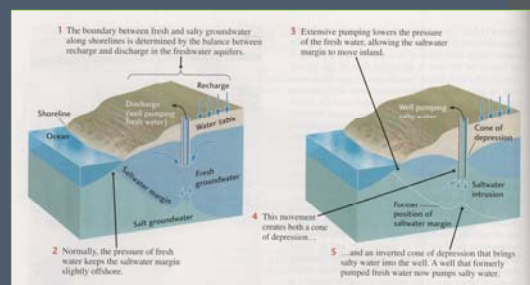
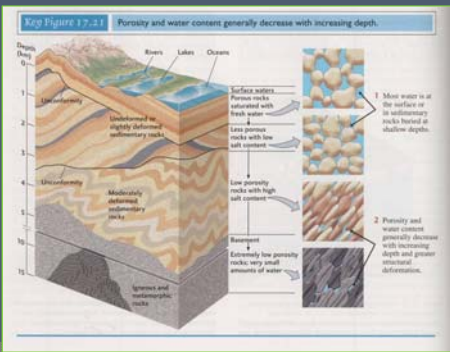


Figure 17.12 Excessive pumping in relation to recharge draws down the water table into a cone-shaped depression around a well. The water level in the well is lowered to the depressed level of the water table.

Recharge and discharge



Depth of Groundwater System



Origin of Hotsprings

