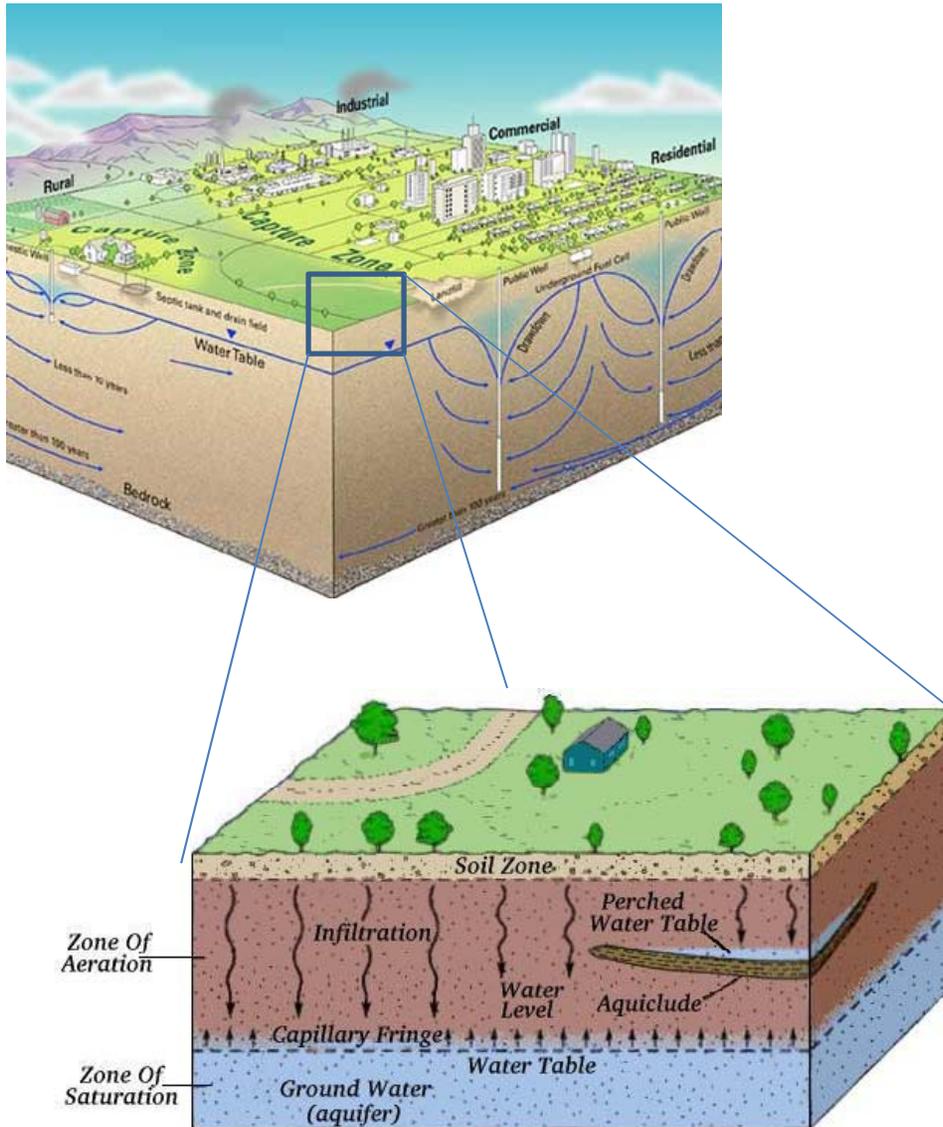


Groundwater Supplies



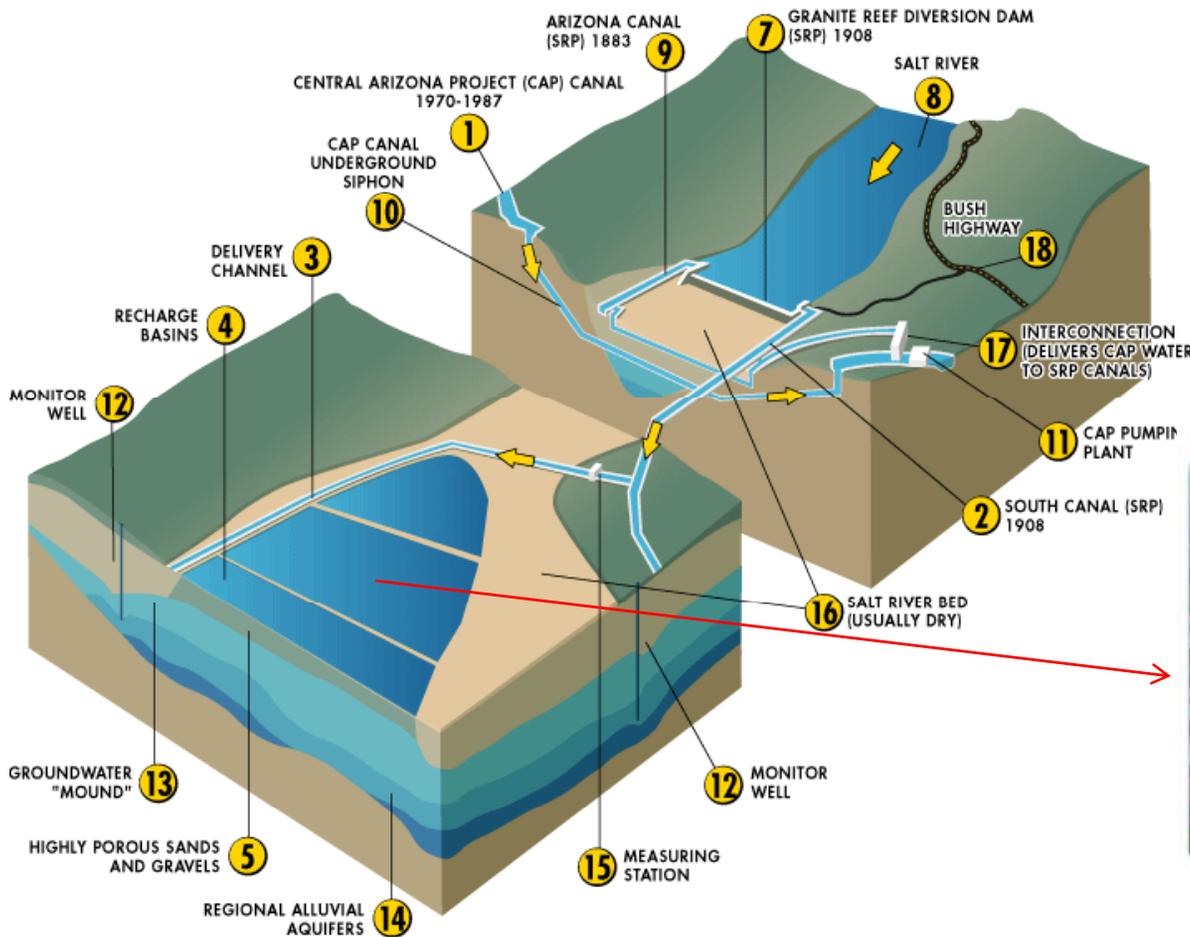
If you could view through a cross section under Mesa, this image closely represents what you would see. A groundwater aquifer is an underground layer that holds water within soil, porous rock, or similar material.

Groundwater is illustrated in the groundwater cross sectional diagram as water below the blue line which is called the water table. The area between the land surface and the water table is referred to as the unsaturated zone. Areas where the water table is being deflected into a cone shape illustrates a pumping well that is drawing water into the well and forming a cone of depression.

Mesa doesn't just pump water from the aquifer. It adds water to the aquifer in a process called recharge. An aquifer is the porous material in which water is contained underground. It can consist of gravel, fractured rock, sand, silt or a blend of such materials and vary in thickness from a few feet to 1,000 feet or more. Through artificial groundwater recharge, water is retained in huge, porous earthen basins and allowed to seep into the natural underground aquifer below.

Mesa has physical and legal access to more than 1.2 million acre feet of groundwater and to date, has recharged nearly 500,000 acre feet of surface water or effluent underground.

Recharge and Water Banking (Stored Water)



Water is stored in the aquifer and withdrawn by well-pumping when needed. Water supplies that can be recharged and recovered later includes Colorado River water, Salt and Verde River water or effluent.



GRUSP facts

Construction: Completed in 1994; basin expansion in 1999
 Partners: Operated by SRP. Owned by SRP, Chandler, Gilbert, Phoenix, Mesa, Scottsdale, and Tempe.
 Water sources: Salt/Verde River water, Central Arizona Project water via the South Canal; reclaimed water via pipeline from Mesa water reclamation facility
 Number of basins: Seven
 Surface area (approx.): 217 acres
 Storage capacity: 200,000 acre-feet per year permitted; about 100,000 acre-feet per year actual
 Location: On Salt River-Pima-Maricopa Indian Community land, in the Salt River bed just west of SRP's Granite Reef Dam
 Distinction: First major recharge facility in the state, and one of the largest of its kind in the U.S.