Recharge

When rainfall or melting snow soaks into the ground, the water percolates down through the soil and rocks until it reaches the saturated zone. Water just coming into the groundwater system is called RECHARGE. Surface water can be a source of recharge for groundwater, too. Water from a creek or lake can leak down through the soil toward the saturated zone - then it becomes groundwater, too.

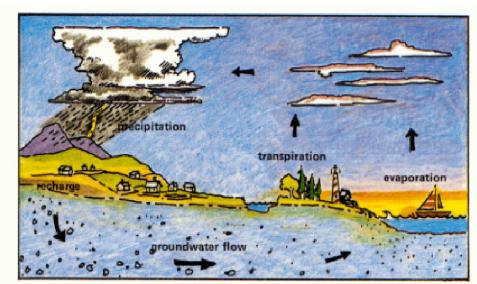
Discharge

Springs and seeps and well water -- where water comes out of the ground -- are called DISCHARGE. Recharge is water going into the ground, discharge is water coming out.

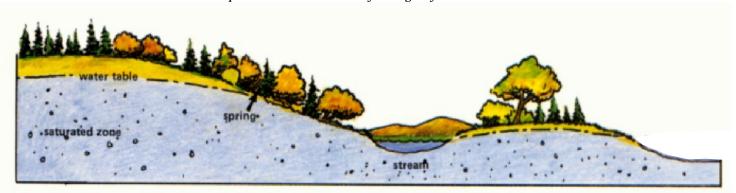
If the water table is going to stay at about the same level, then the water coming into the system (the recharge) must equal the amount of water going out of the system (the discharge).

Recharge adds water to the saturated zone. It replaces water that was pumped out or that seeped out or that moved downward to lower levels.

Here's the first trick: Although groundwater doesn't usually move very fast, water in the saturated zone almost never sits still. Gravity and pressure are always tugging at it, pulling it down through soil and rock layers toward any low point in the water table, where it discharges back to the surface.



The continuous cycling of water through the earth and its atmosphere is known as the hydrologic cycle.



Possible groundwater discharge locations are springs, streams and lakes.