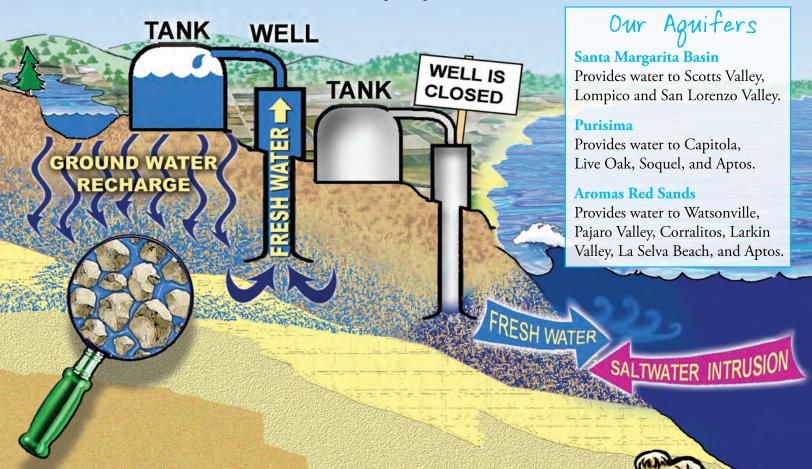
Water in the Ground



We pump **groundwater** from hundreds of feet underground where it is found in layers of rock and sand, called **aquifers**. To get groundwater out of aquifers, we drill **wells** and **pump** water up through these wells into tanks and pipes. About 80% of Santa Cruz County's water supply comes from underground aquifers.

Water can travel from the soil and from the bottoms of rivers and lakes down into the aquifer. This is called **groundwater recharge**. Water in aquifers is usually found in the spaces between the particles of sand or rocks. Layers of **sandstone** make good aquifers because there are many holes and cracks among the **sand grains**. These holes let water travel, or **percolate**, into the sandstone. Layers of **clay** trap water on top because water does not travel through clay. Clay creates the bottom and, sometimes, the top of aquifers.



Groundwater Recharge

The water that we pump from wells could have fallen onto the ground last year, or it could have rained down 2 million years ago, first rolling off the back of a mastodon. The travel time depends on the path the water took through the ground to the well.

Dangers to our Groundwater

Overdraft occurs when groundwater is used faster than it is recharged. Only a small amount of rainwater flows back into an aquifer. Most of Santa Cruz County aquifers are either in overdraft or are very close to being in overdraft.

Seawater intrusion happens when there is too much overdraft near the ocean and saltwater seeps into the aquifer. When saltwater gets into the aquifer, that part of the aquifer is **contaminated** and can never be used again. Some coastal wells have been shut down because of seawater intrusion.