



Water vapor in the air (think of steam rising from a pot of boiling water) forms clouds in the sky as the air temperature cools. This is called condensation.

Where will you go next?

Snow

Rain





The temperature in the air is so low that tiny particles of ice form in the clouds. Other vapor particles in the cloud attach to the ice like pet hair sticks to your sweater. The ice crystals get bigger and bigger and eventually fall to the surface of the Earth thanks to the force of gravity. Snow usually occurs at higher elevations (like at the top of mountains) because it is colder. This is one form of precipitation.

> Where will you go next? • Sandia Mountains

SANDIA MOUNTAINS



This popular recreation area is located immediately to the east of Albuquerque, NM. The tallest peak, Sandia Crest, is over 10,000 ft above sea level; making the ideal conditions for rain in the summer and snow in the winter. Precipitation (rain or snow) can infiltrate (seep into the ground like water to a sponge) or flow down the mountain as runoff. If it is dry and warm enough, some water may evaporate back into the air as water vapor.

Where will you go next?

Shallow Mountain Aquifer
 Frost Arroyo

Tree Roots
 Clouds



Plants with shallow roots can suck up water as it seeps into the ground. Some trees have very deep roots. These deep roots can suck up water near the water table. The water is used by the plant for a variety of things that allow it to grow and ultimately gets released as water vapor through the leaves. This process is called transpiration.

Where will you go next? • Clouds

ABQ TAPMATER

The water that finally reaches your home is clean and clear. It has traveled great distances to get to your faucet! Water is precious and should not be wasted!

Where will you go next? • FINISH Table





The water vapor that makes up clouds begin to stick to one another, forming larger and larger water drops. When a water drop gets big enough, gravity will cause it to fall to the surface of the Earth. This is one form of precipitation.

Where will you go next?

Sandia Mountains
 Albuquerque Basin
 Rio Grande

SHALLOW MOUNTAIN AQUIFER

The aquifers of the Sandia Mountains are located 10-100 feet below the land surface. Precipitation that infiltrates, or soaks into the ground, can eventually be drawn down through the soil to the aquifer by gravity. The aquifer is where water saturates (or fills) the empty spaces between sand and gravel particles or fills fractures (cracks in rocks). Once water reaches the aquifer, it keeps moving in a downhill direction because of gravity. The aquifer is also where wells draw water from.

Where will you go next?

Albuquerque Basin



ABQ BASIN



Rain, or precipitation, that falls here can either evaporate back into the air as water vapor, flow over the land surface as runoff, or infiltrate (seep into the ground like water to a sponge). The Santa Fe Group is the silt, sand, and gravel that fills the Albuquerque Basin. Most of the water in the Santa Fe Group is more than 200 feet below land surface in the regions near the Sandia Mountains; but near the Rio Grande, groundwater is just a few feet below the land surface. Albuquerque relied entirely on groundwater until 2008 but demand for water was greater than the amount available in the Santa Fe Group alone. Now, Albuquerque's water is supplemented with river water from the San Juan-Chama Drinking Water Project.

Where will you go next?

Frost Arroyo
 City Supply Well



GITY SUPPLY WELL



In addition to using San Juan-Chama river water from the Rio Grande, Albuquerque has several groundwater wells that supply drinking water. Some of the water here has traveled several miles from the Sandia Mountains, and in some areas it has taken thousands of years to get to the well.

> Where will you go next? • Albuquerque Tap Water

FROST ARROYO



When the amount of precipitation or rate of precipitation (as rain or snowmelt) is more than the land can absorb, the excess water will runoff, and flow downhill to the lowest point. Often this low point is an arroyo or stream, which continues downhill until it infiltrates into the ground, or it may eventually reach a larger stream, like the Rio Grande. Some of this water may also evaporate.

Where will you go next?

- Shallow Mountain Aquifer
 Rio Grande
- Albuquerque Basin
 Clouds





The Rio Grande winds almost 2,000 miles from the Rocky Mountains in Colorado, down to the Gulf of Mexico. Communities along the river rely on it to irrigate their crops. Some of the water will evaporate back into the air as water vapor and some will infiltrate, or soak into the ground, like water to a sponge. The San Juan-Chama Drinking Water Project diverts river water from southern Colorado to Albuquerque. After water quality treatment, Albuquerque uses this water to supplement up to 90% of their drinking water supply.

Where will you go next?

Tree Roots
 Clouds
 Albuquerque Tap Water