

# SAN ANTONIO WATER FROM THE **B**EGINNING

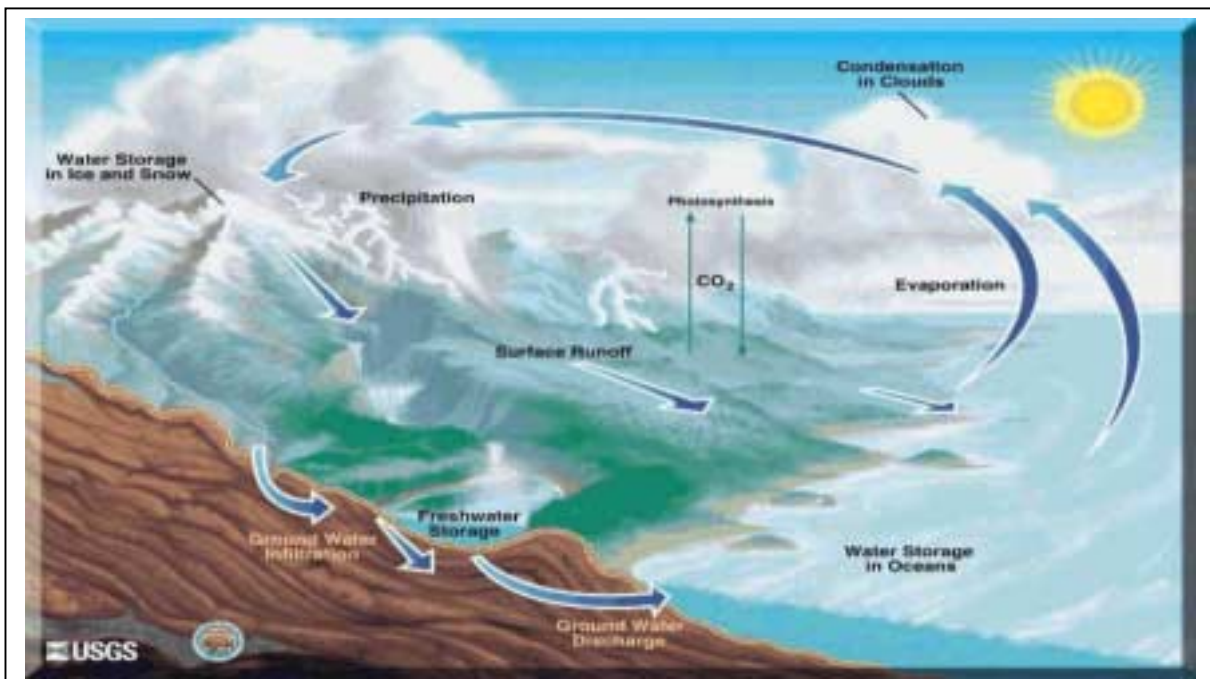
**“If there is magic on this planet, it is contained in water.”**  
*-Loren Eiseley*



## **Background Information**

### **EXACTLY WHAT IS WATER?**

Water surrounds us. It is in the air as rain, ice, snow, steam and fog. It is in lakes, streams, rivers, oceans and glaciers. When you go to the water fountain to get a drink of fresh clean water, that water is new to you. But it really isn't new water at all. That water has been recycled time and time again, from the very beginning of the Earth, through numerous life forms like dinosaurs, a rabbit or even Abraham Lincoln. This is called the water cycle and it happens through condensation, precipitation, evaporation, surface runoff, and percolation. One very important fact to remember is that at this moment, we have all the water we will ever have, or ever have had. No new water is being manufactured.

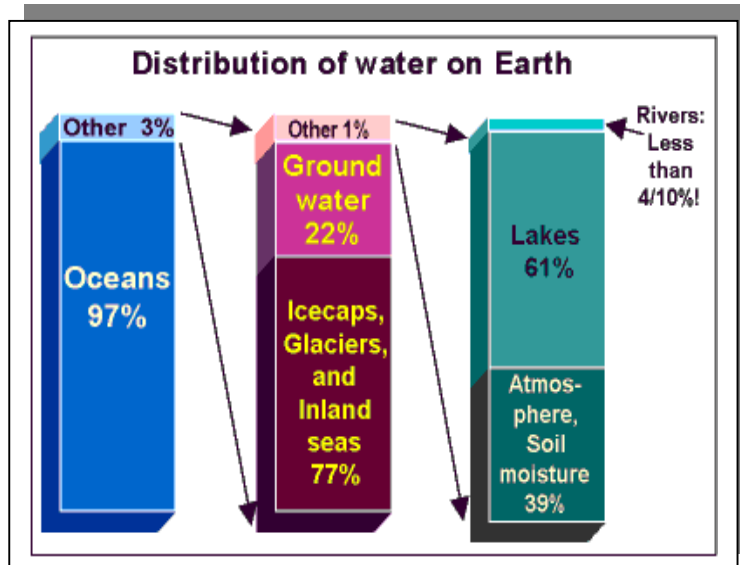


## WATER IS ALSO...

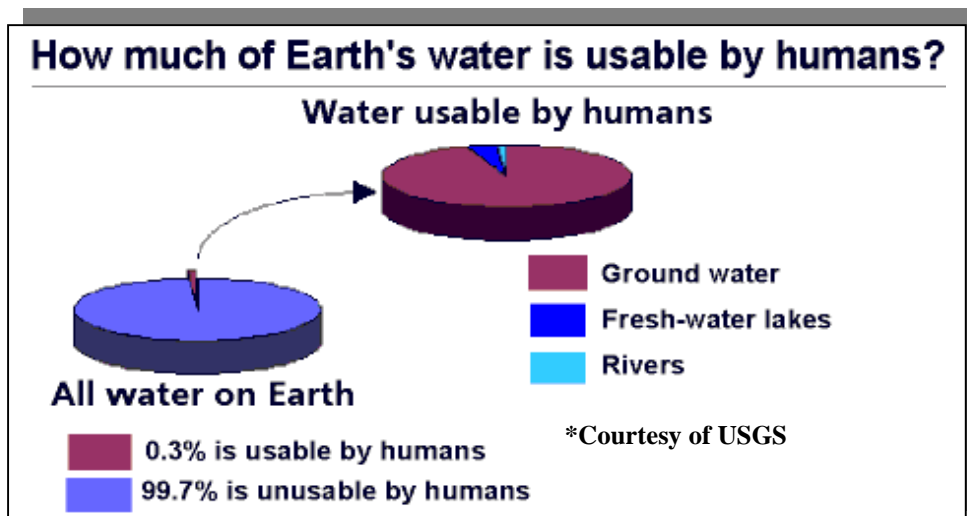
- \*Made of two elements: hydrogen and oxygen.
- \*The only substance that occurs naturally in all three physical states (solid, liquid and gas).
- \*A large portion of all living materials. Humans are composed mostly of water but also lose water through perspiration, respiration and waste elimination. Plants also lose water through a process called transpiration.
- \*Odorless, tasteless, colorless.
- \*Essential to life.
- \*The most abundant, unique and important substance on earth.

## WATER USE

Water is the most abundant substance on Earth. Over 70% of the Earth's surface is covered with water. The world's supply of water is about 326 million cubic miles. If it were poured on the United States, it would submerge the country to a depth of 90 miles. However, only a small portion of that water supply is usable fresh water. Most of the water on Earth is salt water, which is found in the oceans and seas. Salt water comprises over 97% of the water on the Earth. Just over two percent of the water on the Earth is fresh water frozen in glaciers and the polar ice caps.



Less than one percent of the water on Earth is fresh ground water and fresh water lakes, rivers and streams that is usable for humans.



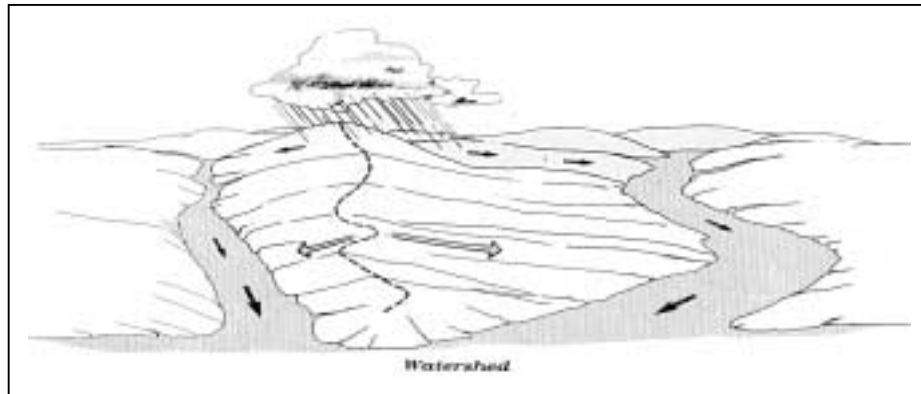
Water can be found in three forms: a liquid, a solid, and a vapor. Water can be found most often in its liquid form and becomes a solid when the temperature drops below freezing at 32° F or 0°. Water becomes a vapor when it escapes into the air. The more heat that is applied to water, the faster it vaporizes. Water is in a constant cycle of changing from a liquid to a vapor because it is made up of millions of molecules that are in constant motion.

## **WATERSHEDS AND WATERWAYS**

**WATERSHEDS**-Everyone lives in a watershed. A watershed is an area of land from which all the water drains (runs downhill) to a particular body of water such as a stream, pond, lake or river. A ridge or other area of elevated land, called a divide, separates one watershed from another. Streams on one side flow a different direction than streams on the other side.

A watershed can be large, such as the Upper San Antonio River Watershed or quite small, such as a couple of acres that drain into a pond. Larger watersheds are often called basins and usually contain many smaller watersheds.

Human activities can have a great impact on what happens to a watershed and subsequently a waterway such as a creek. Therefore, waterways are good indicators of events that occur on the land in the watershed.



**RIVERS**-Rivers are large natural waterways that flow to the ocean. They are important as sources of water supply for farms, industry and even drinking water. The amount of water a river will yield is the result of various factors including climate of the area and the size of the river's drainage basin.

**CREEKS**-A creek is a small waterway that is usually a shallow or intermittent tributary to a river.

