

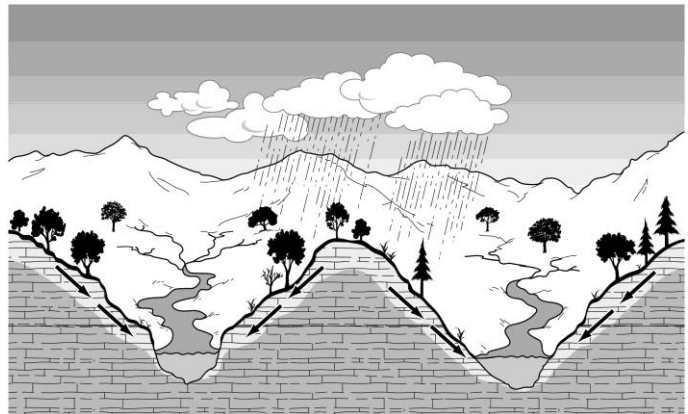
Watersheds

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.

In Bexar County, all streams and creeks eventually flow into the San Antonio and Medina Rivers. Eventually, these two rivers merge to form the San Antonio River which eventually empties its water into the Gulf of Mexico.



Draining the Land

When rain or snow falls onto the earth, it just doesn't sit there -- it starts moving according to the laws of gravity. A portion of the precipitation seeps into the ground to replenish Earth's ground water. Most of it flows downhill as runoff. Runoff is extremely important in that not only does it keep rivers and lakes full of water, but it also changes the landscape by the action of erosion. Flowing water has tremendous power -- it can move boulders and carve out canyons (Just look at the Grand Canyon!).

Wearing Down the Land

Rivers and streams have great power to shape the land. Once rock has been broken up by weathering, the small pieces can be moved by water, ice, wind or gravity. The totality of forces that carry rocks and earth away is called erosion.

As water moves downhill, it is able to carry off pieces of the material over which it is flowing. The volume of water, the slope and the amount of ground cover all play a role in the amount of material that is eroded. Various factors influence the rate of erosion. Faster moving streams that have a greater volume of water are able to cut away at the stream bank more rapidly. Over time, faster moving streams are able to change their appearance as the stream bank erodes. As changes to the stream occur, different types of organisms and vegetation will be evident.