Arroyos Are Dry Rivers

Welcome to Earth Matters, field notes on the geology of New Mexico's enchanting landscapes.

Arroyos are dry rivers. They come in many shapes and sizes. From steep canyons to wide braiding channels, they wind their way through the landscape, converging and growing until they reach a river. They are super highways, responsible for moving water and rock downhill.

In New Mexico, arroyos are ever-present. Thousands of arroyos connect our large trunk rivers, like the Rio Grande, to the rest of the landscape. These arroyos are quiet most of the year: a single arroyo may only flood 1% of the time! Most of those floods occur in the summer months, when monsoons produce enough rain to cause these arroyos to flood. The more intense the monsoon storm, the more active the arroyo. When an arroyo floods, it has enough power to move large gravel and cobbles. These make create shelter good spawning habitat for fish.

Rivers are always changing landscapes, but arroyos are special because of how quickly they change them. During one flash flood, whole trees can be uprooted, bars and gullies can appear or disappear all in a matter of hours.

The next time you are out, look around you. From the peaks of the Sandias to the Bosque, arroyos are all around our landscape. Find one in your backyard, see where it takes you.

Celebrating Earth Science Week,

This is Kyle Stark a hydrology student at New Mexico Tech