



12. CREEK ARCHITECTURE

What happens when a little creek like Rattlesnake gets water? It's like getting religion: dramatic, thrilling, and awe-inspiring. Paradoxically, it is also ordinary. In much of the American West, and certainly in Santa Barbara, water delivery comes in infrequent and enormous packages. A climatologist with the state Department of Water Resources called California weather "skewed to extremeness," with no predictable cycles.

Although Santa Barbara's average annual rainfall is more than 18 inches, the standard deviation is 8½ inches. Thus anything from 10 to 27 inches is considered normal. Droughts and floods are both typical in Santa Barbara.

The drought cycle is gradual. Wildflowers are smaller and less abundant; the tree canopy turns gray-green and droops a bit. Some crisped dry leaves hang on beside leathery older ones. Occasionally the drying soil releases a small rock overhanging a cliff or creek bed, shattering the hot, hushed quiet with a sharp crack as it drops. The creek sound diminishes and dies. A few disconnected pools remain, supporting tepid, still water. Fish in the lower, shallower pools die in the warm water or are picked off by raccoons or dogs. The desiccation is slow and predictable.

Sporadic rain in dry years likely begins high in the mountains, spattering off the parched ground, failing to penetrate the hard clay. It trickles down to the lowest point: the creek. The trickles coalesce to tiny tributaries and the creek may emerge from underground, wetting the rocks lining the bottom of the creek. Sounds also converge: rain, creek, and pebbles shifting. Before there's much action though, the storm system collapses and the creek subsides.

Flood years, on the other hand, jar the creek out of complacency. In the abundant rain years of 1995 and 1998, the rain kept coming, to the delight and eventually the alarm of residents. The Santa Barbara record for the greatest rainfall intensity over a short period was set in 1995; 1998 claimed the highest rainfall ever recorded in more than a century of recordkeeping: 46.97 inches. The 2005 season followed this heavy pattern as well.

Between the 1998 and 2005 seasons were a half dozen years of typical rainfall pattern: three years in the low- to mid-20 inches interspersed with three years each under 11 inches. Then steady rain in early October 2004 cut short the fire season; mountain residents breathed a collective sigh of relief for another year. Santa Barbarans celebrated the showers with delight. Their landscapes soaked it up thirstily. The next rain dampened

Thanksgiving and lasted several days. It was raining again at Christmas, and almost every day from then until New Year's.

In early December 2004 the city's reservoir, Lake Cachuma, was only one-third full. The water district prepared to institute drought measures for the upcoming spring. By mid-January, however, the reservoir overtopped the spillway. It could have filled again completely in February. Few people from the ocean side of the Santa Ynez Mountains witnessed this end-of-drought event, since rain-provoked landslides closed the mountain pass between Santa Barbara and the lake.

Residents welcomed the free car washes and captured water in trash cans to use later for potted patio plants. I was content as well. At last I learned where to locate the windshield wipers on my steering column. It's usually so long between uses that I don't retain that information.

Few residents complained about frequently canceled outdoor exercise, though the constant wetness became a bit of an inconvenience. Drainage issues were a typical topic of conversation. Hikers thought twice before heading up the trail on an overcast day. If they were caught in a storm on the trail, they turned around and tromped back quickly, overcoming their natural desire to tough it out.

The trail muddied dust on their boots that may have accumulated there for six years. Mud accompanied hikers to their cars and houses ill-equipped for the messy effects of inclement weather. After several months of intermittent rain I began to look north just a little. Weren't these rains meant for Oregon and Washington, or at least Northern California? In fact, they were – the Pacific Northwest was in unaccustomed drought.

By January the runoff flowing into Rattlesnake Creek created a thundering watercourse audible from my deck one-third mile away. I avoided the trail during storms, but sometimes imagined the wild descending journey of some small boulder from the upper canyon. The boulder might be embarking on the next leg of a journey that began in a previous storm after breaking

free of a parent boulder.

My boulder's story might be thus: as the storm intensifies, a sandstone rock slips a bit, loosened when soil below it liquefies into mud. It teeters slowly under the unequal pressure of spattering rain before sloping into the creek. Then a brief outburst of rain directly overhead sends the boulder on a wild journey down Rattlesnake Creek.

Its progress is slow at first. It rolls a few feet and splashes deep into the rollicking creek, temporarily stabilized in a shallow elbow. The force of the water secures it into position. The rain continues and the creek rises further, destabilizing the boulder. It eases into the main channel and quickly whips downstream, bumping into other rocks, hopping over tree roots, and bouncing around embankments.

At around 1,100 feet in elevation, the rock approaches the spot Ray Ford reached in 1995 when he hiked the path following the downpour that broke the rainfall intensity record. "I can picture going up Rattlesnake Canyon that first time, seeing the creek crossing where there's that vertical sandstone slab. It was just a rock jumble; there was no impression of a trail anywhere. The east side of Rattlesnake Canyon was unrecognizable," he said. "A mile past the meadow there were sections where the side creek had new channels because a six foot boulder rolled into the main channel. If you went in the water, you'd just go cascading



Rattlesnake Creek at the trailhead, dry season.