

In 1905, the UP-controlled San Pedro, Los Angeles & Salt Lake Railroad built a connection from the UP's Frisco Branch in central Utah to the (SP-built) AT&SF mainline at Daggett, California, a few miles east of Barstow. This connection gave UP access to southern California via AT&SF's California Southern-built route over Cajon Pass and, more famously, gave birth to Las Vegas as a gambling resort.

In southeastern California, the SPLA&SL route follows the Mojave River from its terminus at Soda Lake, near Baker California, up the river westward to Daggett, where the AT&SF/California Southern continues up-river to the Mojave's source near Cajon Pass. At Afton Canyon, the Mojave River cuts a narrow gorge through the Cady Mountains. Several bridges were required to negotiate the grade though Afton Canyon. Note the sand dune on the mountain side; the sand is blown westward from dry Soda Lake.



During the wetter Pleistocene epoch (aka the "Ice Age"), prior to 40,000 years ago, the Mojave River terminated at ancient Lake Manix. Ancient Lake Manix covered a large area from Barstow to the Cady Mountain, the latter blocking the river from draining to the lower-elevation Lake Mojave Basin to the east (present Soda Lake). In the late Pleistocene, several high-stands of Lake Manix breached a low point in the Cady Mountain drainage divide and flowed eastward to cut Afton Canyon and ultimately establish modern Soda Lake as the Mojave River terminus. Recent research identified three major breaching events between 40,000 and 25,000 years ago, the last resulting in a permanent breaching and complete draining of Lake Manix. During the 15,000-year-long breaching process, Lake Manix periodically discharged through paleo-Afton Canyons at higher elevations than the present canyon and resulted in both erosion and deposition of sediment.

The breaching of the Cady Mountains represents "capture" of the Mojave River by the Lake Mojave drainage basin, thus lengthening of the Mojave River drainage. Afton Canyon is an example of "stream capture," a geomorphic feature often followed by railroads because they offer the easiest grades between valleys. Here, the Mojave River has eroded coarse sediment deposited during earlier breaching events. The resulting canyon was followed by the SPLA&SL tracks, on this day plied by a UP container trains bringing empties to Los Angeles ports.



Another UP container train in Afton Canyon, the bed of the Mojave River in the forground.



At the east end of Afton Canyon, an abandoned mining operation once had a loading facility with some sort of rail spur, as indicated by the ties. This rail grade goes from this loading area a few hundred yards to the SPLA&SL mainline, which is out of sight in the distance.