

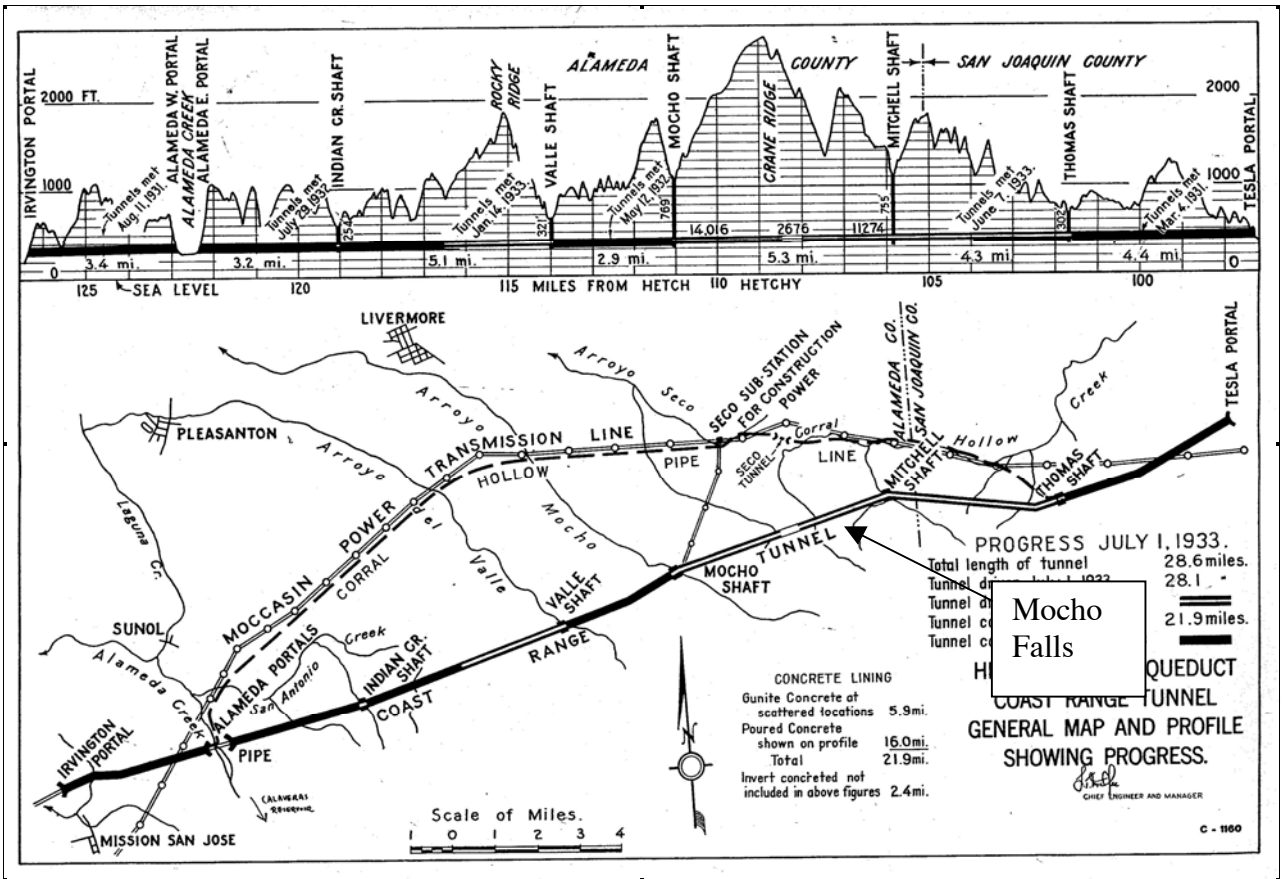
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Migratory fish headwaters of the Arroyo Mocho

The headwaters of the Arroyo Mocho, as far as migratory fish are concerned, are the Mocho Falls. Mines Road roughly follows the Arroyo Mocho with distance measured from Tesla Road, Livermore. Migratory fish cannot go beyond the Mocho Falls (shown in the two photos) located at the 12.8 milepost on Mines Road.

Seasonal changes in the Mocho water flow frequently cause much of the stream to dry up to the detriment of many species. The Hetch-Hetchy Aqueduct Tunnel, built 1931-1933, intersects the Mocho at about 6 miles out Mines Road (see figure below of the Hetch-Hetchy Tunnel). An obvious idea to increase the water flow would involve a release of water from the Hetch-Hetchy Tunnel into the Mocho. There would be some pumping cost because the Mocho is 1040' above sea level and the Hetch-Hetchy Tunnel is only about 350' above sea level. The waterfall six miles further upstream is about 1860' above sea level. A year round stream below the Hetch-Hetchy Tunnel, would leave an intermittent or seasonal flow only between the Falls and the Tunnel.

Maybe this Hetch-Hetchy Tunnel could be used to deliver water that is traded for water entering the South Bay Aquaduct. Or some other water could be made available by a mitigation arrangement or some other trade or agreement.



Map and contour plot of the Hetch-Hetchy Tunnel [from T. Wurm, Ed. 1973, *Building Hetch-Hetchy and its dam railroad*. Berkeley: Howell-North].



Photo of the Arroyo Mocho at the Falls located near Mines Road 12.8 miles from Tesla Road southeast of Livermore (courtesy of Don Podesta).

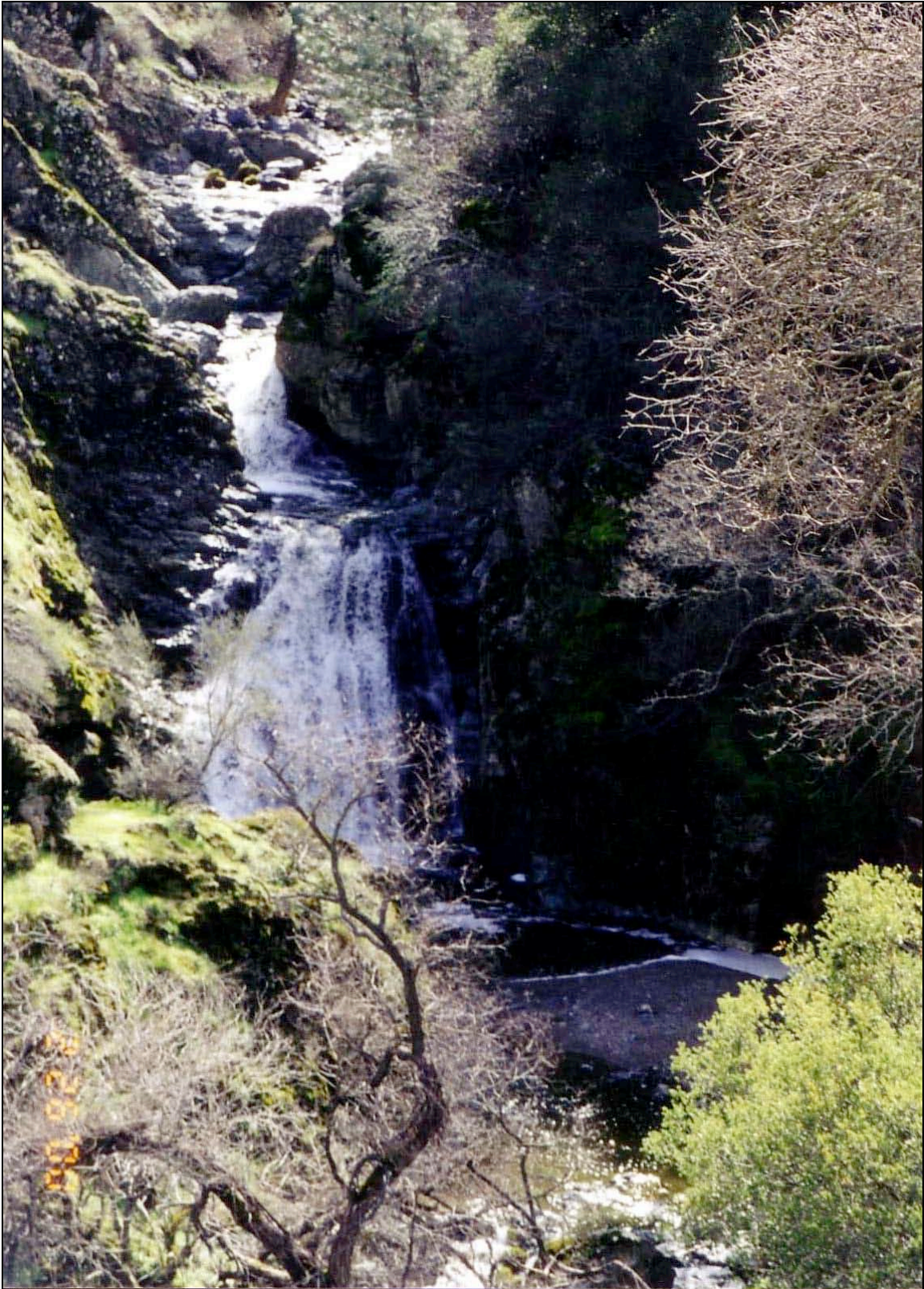
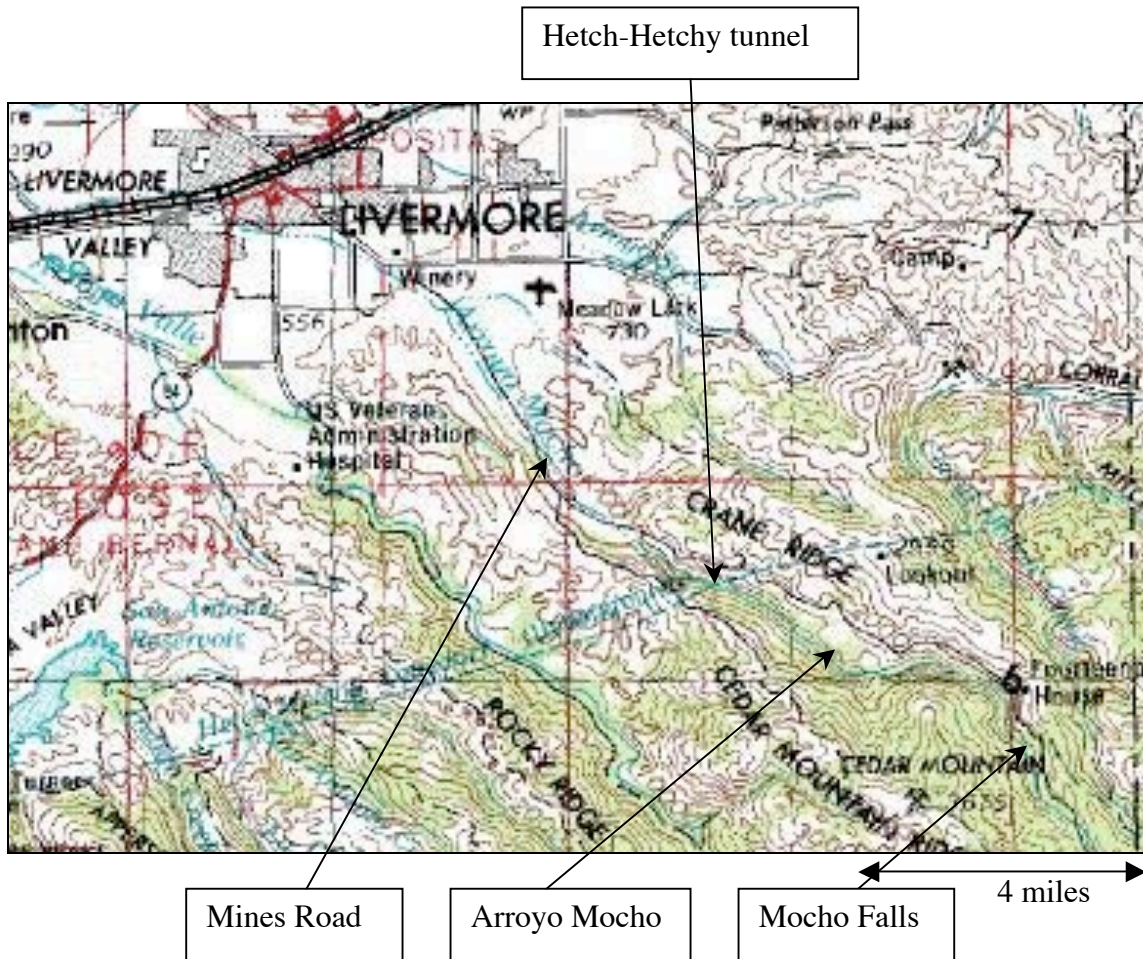
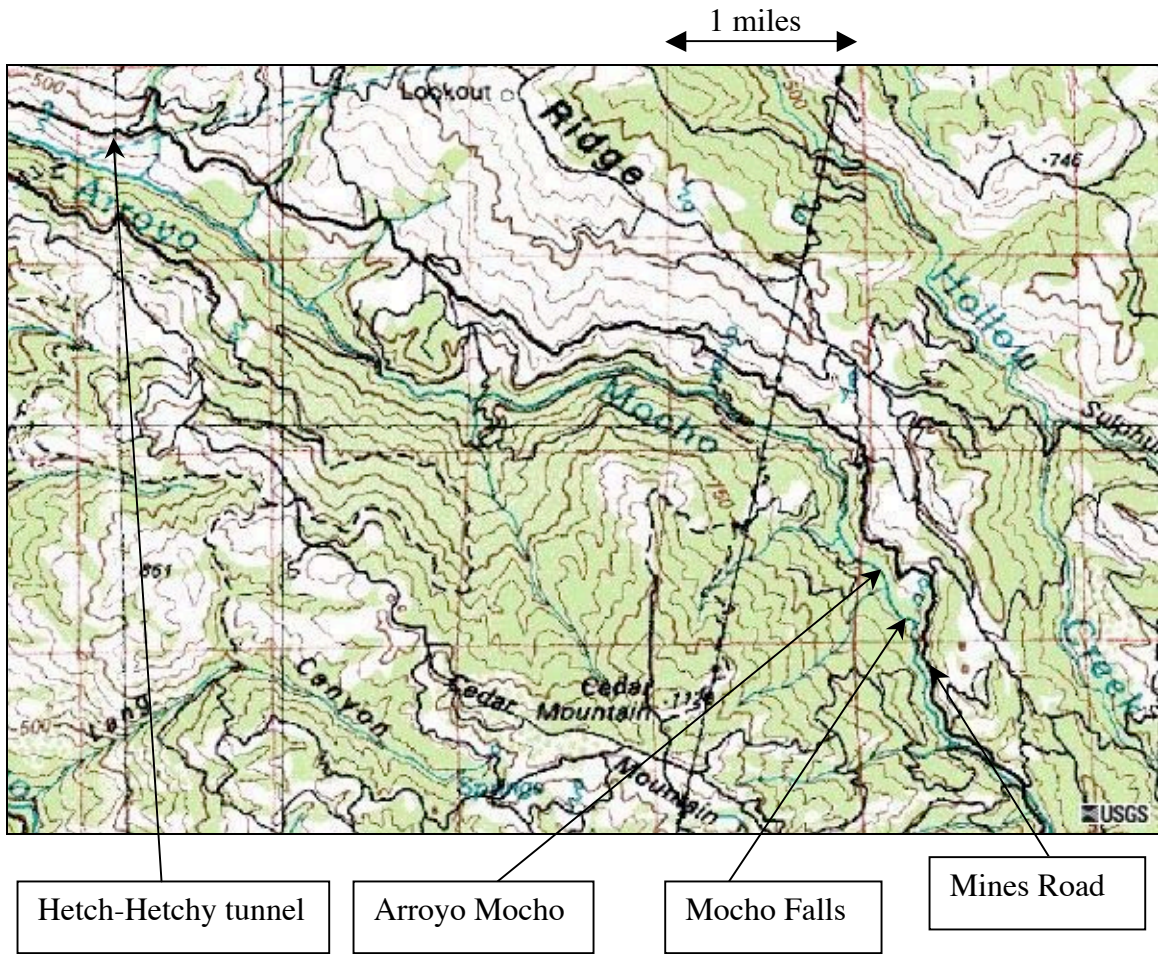


Photo of the Arroyo Mocho at the Falls located near Mines Road 12.8 miles from Tesla Road southeast of Livermore (courtesy of Don Podesta).



Map of the Arroyo Mocho alongside Mines Road to the Falls, located 12.8 miles from Tesla Road, Livermore. Note the Fourteen Mile House is measured from the Livermore Flag Pole at First St. and Livermore Avenue. The Hetch-Hetchy Tunnel is shown.



Map detail of the Arroyo Mocho from the Hetch-Hetchy Tunnel to the Falls.