The California Gold Rush began in 1848 with the discovery of gold along the South Fork of the American River in the Sierra foothills. The lower western slopes of the Sierra, between the Feather and Merced Rivers, turned out to contain the richest deposits of gold ore ever found on Earth. This narrow belt of gold-bearing quartz veins became known as the Mother Lode. In northwestern California, the Trinity, Klamath, and Marble Mountains also contain significant gold deposits. Smaller deposits of gold also exist in southern California, where some discoveries even pre-date the Gold Rush.

The first miners used shovels and pans to pluck gold from streambeds. Within two years, gold became much harder to find, and miners used picks and rocking sluice boxes (sometimes called Long Toms) to enable them to process more material, often exploring beyond existing streams into dry channels. Eventually, large companies formed and invested in equipment to extract gold that was not at or near the ground surface. In a process called hydraulic mining, large water cannons were used to blast away layers of sediment accumulated from thousands of years of erosion of the Sierra, thus exposing more veins. This process diverted hundreds of streams and washed tons of material from the Sierra Nevada into the Central Valley. In addition to causing flooding and landscape change in agricultural areas, the use of mercury in hydraulic mining generated toxic pollution. Forty-nine of California’s counties have produced some gold. Both mining, though now at a smaller scale, and its environmental impacts continue to be an influence on the state.

Image below: Hydraulic mining at Malakoff Diggings, Nevada County around 1876. In the Sierra Nevada foothills, water was diverted from streams and then forced through metal cannons to break up the soil and rock and expose long-buried gold deposits.