## Silver and Gold Mining in Manhattan Gulch

Evidence of historic mining was apparent in Manhattan Gulch, where remaining tailings appeared on maps like an enormous prehistoric snake.

In 1866, George Nicholl was the first to find rich silver deposits in the Toquima Range. Later, in the early 20th century, miners scrambled stake mining claims in the Manhattan Mining District. By the end of 1905, the fledgling town of Manhattan boomed with a population of more than 1000. But in 1906, the San Francisco earthquake prompted investors to pull their money from their mining interests in Nevada.

Continuing the boom-and-bust cycle of mining, prosperity returned in 1909 with the discovery of extensive gold placer deposits. After 1920, the cycle slowed again until 1933, when President Franklin D. Roosevelt raised the price of gold from \$20 to \$35 per ounce. The increased price of gold, the lower cost of operation due to the Great Depression, and the development of large-scale mechanized mining methods all contributed to a rekindling of interest in the area.

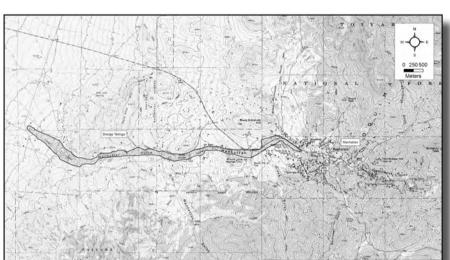
The population of Manhattan comes out for a drilling contest, c. 1906 (Nevada Historical Society).

At the cutting edge of mining techniques, the Natomas Company of

Sacramento, California organized the Manhattan Gold Dredging Company in 1937. In 1938, a huge dredge was built to work the placer deposits. Additional money was spent on the formation of a small town named Jamestown, after John L. James, the chief engineer and manager of the dredging operation.

The enormous dredge, designed by Leland S. Rosener of San Francisco and fabricated at the Bethlehem Steel Company plant in Alameda, California, loomed as a behemoth oddity in the Nevada landscape. Its various parts, some weighing 20 tons, were assembled on site in the lower end of Manhattan Gulch. The dredge crept four miles along the prehistoric riverbed of Manhattan Gulch, ingesting the gold-rich gravels and leaving behind a continuous trail of tailings.

Until World War II limited mining operations, the dredge operated 24 hours a day, turning out \$8,000 worth of gold per week. The dredge, 172 feet long by 60 feet wide, could lift as many as 6,580 yards of gravel in an eight-hour shift. Left-over crushed rock (the tailings piles) remained, snaking four miles through the Gulch. Before being dismantled in 1947 and relocated to Copper Canyon in Lander County, the dredge had produced gold worth \$4.6 million (equivalent to more than \$47 million in 2013).



The dredge's path along Manhattan Gulch. The town of Manhattan is at the far right end of the dredge pile (USGS Topographic Quadrangle).

From 28,000 feet, the tailings look like a

giant snake (© 2010 Google).



The Manhattan Gold Dredge in action in 1939 (Central Nevada Museum, Tonopah).

The winter sun casts undulating shadows on the dredge pile (J. Richard Breitling, 2010).