

# Mining Industry

Photo Credit: Greens Creek Mine



## Southeast Alaska Mining Employment 2010, 2009 & 2003

<b>Annual Average Employment 2010</b>	<b>536</b>
Annual Average Employment 2009	413
Annual Average Employment 2003	291
Change in Employment 2003-2010	84%
Change in Employment 2009-2010	30%
<b>Total Payroll 2010</b>	<b>\$50,965,783</b>
Total Payroll 2009	\$37,980,160
Total Payroll 2003	\$22,034,767
Change in Wages 2003-2010	131%
Change in Wages 2009-2010	34%
<b>Average Wage 2010</b>	<b>\$95,085</b>

**Source:** Alaska Department of Labor

With the 2010 opening of the Kensington Gold Mine in Juneau and the skyrocketing price of gold and other metals, the Southeast mining industry has been booming. In 2010, there were 536 mining jobs in Southeast Alaska and a

payroll of more than \$50 million. This represents a 30 percent increase in employment from 2009, and an 84 percent increase from 2003, when there were just 291 mining jobs in the region. By 2012, JEDC expects the Southeast mining industry to have 600 employees in total and a combined payroll of \$57 million annually.

Mining accounts for one percent of regional jobs, and two percent of regional wages. Mining jobs pay the best wages of any regional sector. In 2010, the average annual regional mining wage was \$95,085, nearly triple the average private sector wage.

The community of Juneau was founded on gold mining in 1880, and Southeast Alaska continues to be one of the most mineral rich areas of North America. The Juneau gold belt stretches from Windham to Berners Bay, approximately 90 miles across the heart of the Alaska panhandle. The region's mineral deposits are large and diverse. They include gold, silver, lead, zinc, copper, molybdenum, platinum, limestone, marble, uranium, and rare earth minerals. There are also substantial quantities of rock, sand, and gravel for use in construction around the region.

## **Gold Prices**

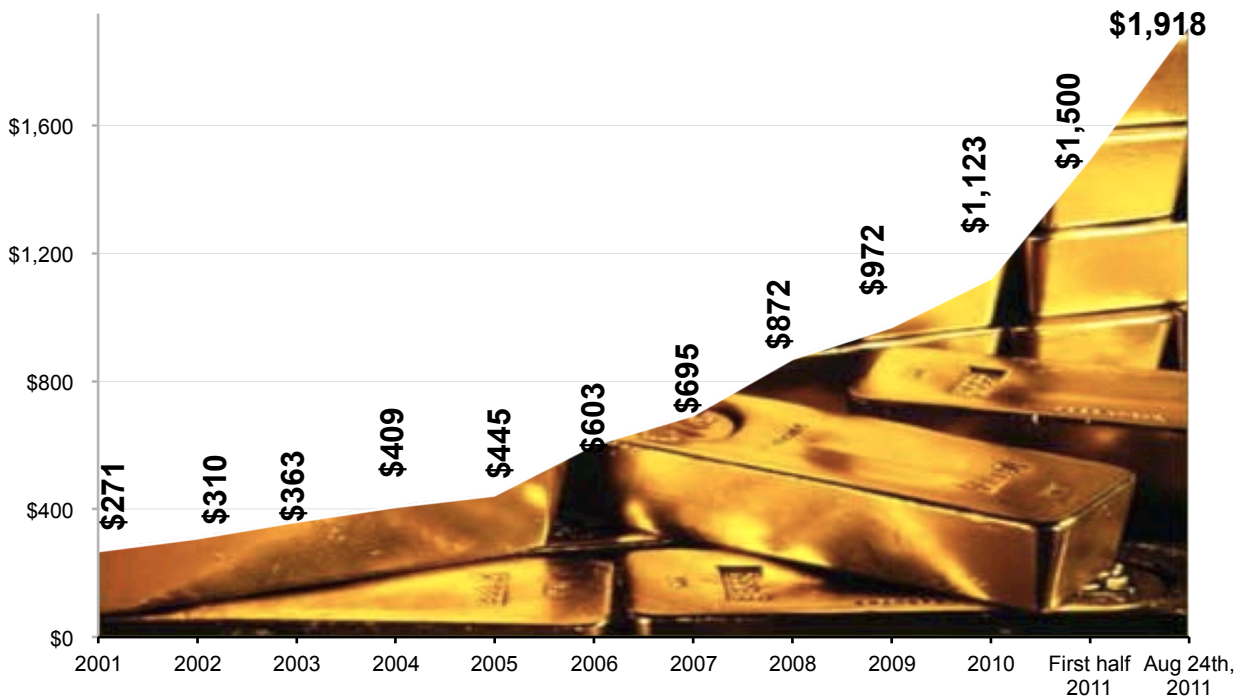
Gold prices stayed within a narrow range during the 1990s—between \$250 and \$420 an ounce—and in 2001, the price of gold was just \$271 per ounce. Since that time gold has increased in value six fold, peaking at a record just below \$1,918 an ounce in August of 2011.<sup>5</sup>

Gold's rise accelerated sharply from 2005 onward, breaking through \$1,000 an ounce in 2008 as the weaker dollar fuelled demand for alternative stores of value. The price of Gold is determined by several factors: It is an important commodity (jewelry), and it is seen as an important way to invest wealth—especially in times of economic uncertainty. While approximately 80% of all gold has been used to make jewelry, investment demand is the primary factor behind the increase in price of gold between 2006 and 2011. Times of economic turmoil or recession tend to increase the value of gold as people move from more risky stock markets to gold.

---

<sup>5</sup> Adjusted for inflation, the record gold price reached \$2,500 in 1980—just over \$600 in nominal dollars.

## Gold Prices, 2001 to 2011



Source: Kitco Metals Inc. <http://www.kitco.com/>

### Greens Creek

The Greens Creek Mine, Juneau's top private employer with 337 permanent year round employees, is located on Admiralty Island near Juneau. In 2010, Greens Creek produced 7.2 million ounces of silver. The mine is the second largest silver producer in North America and the sixth largest silver producer in the world. Greens Creek is a high-grade, silver-gold-zinc-lead enriched deposit.

In the course of more than two decades of operation, Greens Creek has produced over 200 million ounces of silver, nearly 2 million ounces of gold, and almost 1.8 billion tons of zinc and lead combined. Over the years, Greens Creek has consistently replaced the ore mined, and has kept a 9-10 year mine life ahead of it. The mine has identified 100 million ounces of silver reserves.<sup>6</sup>

### Kensington

After two decades of efforts, the Coeur Alaska owned Kensington Mine began producing gold in June of 2010. By 2011, the company employed 207 permanent year-round employees, and 38 contract employees. The company anticipates

<sup>6</sup> <http://216.139.227.101/interactive/hl2010/>

that Kensington will average approximately 125,000 ounces of gold annually over the mine's initial 12.5 year life. For its first year, production is expected to be a little over a 100,000 ounces. According to Coeur Alaska, 30 percent of the workers currently at Kensington are Native or Native affiliated, and approximately 75 percent are Alaska residents.

### **Other significant mining prospects in Southeast Alaska**

Another potential opportunity in mining comes from increased interest in rare earth elements (REEs). Bokan Mountain, located on southern Prince of Wales Island, approximately 37 miles southwest of Ketchikan, is thought to hold about 3.8 million tons of rare earth elements. Rare earths are a group of 17 minerals that are highly valuable today with unique high technology and energy properties. REEs, have become vital components in computer hard drives, cell phones, hybrid vehicles, and other clean energy technology. As the global demand for REEs grows, the worldwide supply is starting to dwindle. Bokan Mountain deposits are currently being explored by UCore for rare earth elements such as dysprosium, and one source suggested production could occur as early as 2012. Bokan Mountain produced 1.3 million pounds of uranium between 1957 and 1971 and is the only uranium mine in Alaska. <sup>7</sup>

Another exciting prospect is close to Bokan Mountain. The Niblack Project is a copper-zinc-gold-silver deposit located on Prince of Wales Island, 27 miles southwest of Ketchikan. The Niblack site has a history of mining and exploration going back to the early 1900s. Approximately 25,000 tons of ore was mined between 1902 and 1908. Exploration resumed in 1974. Niblack conducted an "aggressive" active drilling exploration program during the summers of 2010 and 2011. The current indicated resource consists of 2.6 million tons of ore, composed of copper, zinc, gold, and silver. In July 2010 the company announced an ongoing expansion of the resource base for the project, partly due to the discovery of very high-grade deposits located outside the original estimate. In June 2011, the company proposed an "optimistic" opening date of 2015 but no permit applications have yet been filed. The ore likely will not be milled at Prince of Wales Island due to electricity costs. Approximately 35 people are employed year-round in the exploration work at the Niblack site.

---

<sup>7</sup> Abstract: The Bokan Mountain REE-U Deposit, Prince of Wales Island, Alaska H. Keyser, J. Dostal, A. Mariano, and C. Hanson, Ucore Uranium Inc.

**Other mining prospects in Southeast Alaska include the following:**

- The **Poorman Prospect** near Kaasan is being explored for its magnetite (iron ore) potential by Eagle Industrial.
- The copper-rich **Palmer Project**, near Haines, is one of North America's newest volcanogenic massive sulphide discoveries.
- The gold, silver and zinc **Woewodski and Zarembo prospects** are located on separate islands near Petersburg and Wrangell.
- The **Admiral Calder Calcium Carbonate Mine** on Prince of Wales Island was purchased from Sealaska by Tri-Valley in 2005. The mine is currently in a care and maintenance mode while Select Resources Inc., the mineral division of Tri-Valley Corp., organizes a customer base before restarting the mine.

**Southeast Alaska Mines and Significant Mineral Deposits**



Source: Alaska Department Natural Resources Division of Geological & Geophysical Surveys