## **Brevig Mission** (BREH-vig)

## **People and Place**

Location 1



Brevig Mission is located at the mouth of Shelman Creek on Port Clarence, 5 mi northwest of Teller, 65 mi northwest of Nome, and 590 mi northwest of Anchorage. The area encompasses 2.6 sq mi of land and 0.1 sq mi of water. Brevig Mission was incorporated as a Second-class city in 1969, is located in the Nome Census Area, and is not under the jurisdiction of a borough.

# Demographic Profile<sup>2</sup>

In 2010, there were 388 residents, ranking Brevig Mission 140<sup>th</sup> of 352 Alaskan communities in terms of population size. Between 1990 and 2010, the population grew by 96.0%. Between 2000 and 2009, the population grew by 29.7% with an average annual growth rate of 1.7%, well above the state average annual growth rate of 0.75% and indicative of steady growth. In a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that there were eight seasonal or transient workers living in the community in 2010. Brevig Mission typically has seasonal or transient residents between August and May. In addition, the population of Brevig Mission reaches its annual peak between October and December although very little of that peak attributed to employment in the fishing sectors. Information regarding population trends can be found in Table 1.

The racial composition of Brevig Mission was predominately Inupiat Eskimo in 2010.<sup>3</sup> In that year, 91.5% of residents identified themselves as American Indian or Alaska Native, compared to 90.6% in 2000; 4.6% identified themselves as White, compared to 8.0% in 2000; 0.5% identified themselves as Black or African American, compared to 0.0% in 2000; 2.8% identified themselves as two or more races, compared to 1.4% in 2000; and 0.5% identified themselves as some other race, compared to 0.0% in 2000. In addition, 0.5% of residents identified themselves as Hispanic or Latino, compared to 0.7% in 2000. Information regarding trends in Brevig Mission's racial and ethnic composition can be found in Figure 1.

In 2010, the average household size was 4.17, compared to 3.7 in 1990 and 4.06 in 2000. In addition, the number of household units in that year was 103, compared 64 in 1990 and 76 in 2000. Of the households surveyed in 2010, 30% were owner-occupied, compared to 80% in 2000; 60% were renter-occupied, compared to 9% in 2000; 9% were vacant, compared to 4% in 2000; and 1% were occupied seasonally, compared to 7% in 2000. There were no reports of residents living in group quarters between 1990 and 2010.

<sup>1</sup> Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF\_BLOCK.htm.

<sup>3</sup> See footnote 1.

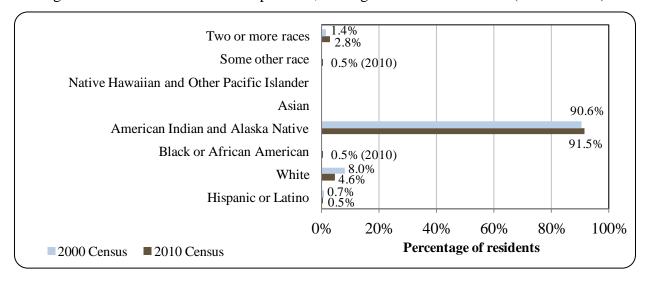
<sup>&</sup>lt;sup>2</sup> U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census and the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml.

Table 1. Population in Brevig Mission from 1990 to 2010 by Source.

Year	U.S. Decennial Census <sup>1</sup>	Alaska Department of Labor Estimate of Permanent Residents <sup>2</sup>
1990	198	-
2000	276	-
2001	-	285
2002	-	308
2003	-	313
2004	-	319
2005	-	328
2006	-	325
2007	-	328
2008	-	350
2009	-	358
2010	388	-

<sup>&</sup>lt;sup>1</sup>(1) U.S. Census Bureau (1990). *CP-1: General Population Characteristics of all places within Alaska*. Retrieved November 1, 2011 from http://www.census.gov/prod/www/abs/decennial/1990.html. (2) U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census and the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml.

Figure 1. Racial and Ethnic Composition, Brevig Mission: 2000-2010 (U.S. Census).



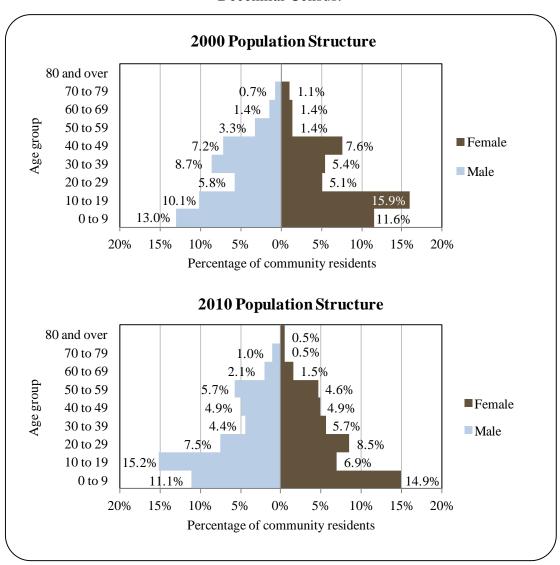
Gender distribution in Brevig Mission was relatively even at 51.8% male and 48.2% female. This was similar to the distribution statewide (52.0% male, 48.0% female) and slightly less even than the distribution in 2000 (50.4% male, 49.6% female). The median age that year was 20.8 years, which was significantly younger than the statewide median of 33.8 years and slightly older than the 2000 median of 19.6 years.

<sup>&</sup>lt;sup>2</sup> Alaska Department of Labor. (2011). *Current population estimates for Alaskan Communities*. Retrieved April 15, 2011, from http://labor.alaska.gov/research/pop/popest.htm.

The population structure in both 2000 and 2010 was similarly expansive. In 2010, 48.1% of residents were under the age of 20, compared to 50.6% in 2000; 5.6% were over the age of 59, compared to 4.6% in 2000; 30.2% were between the ages 30 and 59, compared to 33.6% in 2000; and 16.0% were between the ages of 20 and 29, compared to 10.9% in 2000.

Gender distribution by age cohort was less even in 2010 than in 2000. In that year, the greatest absolute gender difference occurred within the 10 to 19 range (15.2% male, 6.9% female), followed by 0 to 9 (14.9% female, 11.1% male) and 30 to 39 (5.7% female, 4.4% male). Of those three, the greatest relative gender difference occurred within the 10 to 19 range. Information regarding trends in Brevig Mission's population structure can be found in Figure 2.

Figure 2. Population Age Structure in Brevig Mission Based on the 2000 and 2010 U.S. Decennial Census.



In terms of educational attainment, The U.S. Census' 2006-2010 American Community Survey (ACS)<sup>4</sup> estimated that 73.6% of the population aged 25 and older held a high school diploma or higher, compared to an estimated 90.7% of Alaska residents overall. Also in 2010, an estimated 11.6% had less than a ninth grade education, compared to an esimtated 3.5% of Alaska residents overall; an estimated 14.7% had a ninth grade to twelfth grade education but no diploma, compared to an esimtated 5.8% of Alaska residents overall; an estimated 13.2% had some college but no degree, compared to an estimated 28.3% of Alaska residents overall; an estimated 3.9% had a Bachelor's degree, compared to an estimated 17.4% of Alaska residents overall; and an estimated 2.3% had a graduate or professional degree, compared to an estimated 9.6% of Alaska residents overall. No residents were esimtated to hold an Associate's degree in 2010.

History, Traditional Knowledge, and Culture<sup>5</sup>

The Brevig Mission area was occupied for centuries by Kauwerak Eskimos who lived in migratory hunting and fishing communities. Trade routes in the area were formed with Siberia, Little Diomede, and King Island prior to European occupation. In 1892, the Teller Reindeer Station was opened near Brevig Mission and was operated until 1900. Norwegian Reverend Tollef L. Brevig, a Lutheran missionary and the community's namesake, began serving the reindeer station in 1894 as pastor and teacher to the Laplanders and Eskimos in the area. A Lutheran mission was constructed at the present village site in 1900, and the village became known as Teller Mission (later changed to Brevig Mission). In 1934, 34 muskoxen were captured in Greenland and brought to Nunivak Island, where populations grew to around 750 by 1968. By the 1960s, muskoxen were introduced to the Seward Peninsula. In 1961, a Long Range Aids to Navigation (LORAN) station was built at Port Clarence across the bay, which housed around two dozen U.S. Coast Guard personnel year-round until it was decommissioned in 2010. During its time, some debate surrounded the station regarding its affect on beluga whale migration patterns. In 1963, a post office was established and the community was incorporated in 1969. Reindeer provided an economic base until 1974 when the industry declined. Today, Brevig Mission is a predominately Inupiat Eskimo village with a subsistence lifestyle. The sale, importation, and possession of alcohol are prohibited.

West of the existing village, there are the remains of an old village site located near the ocean bluff. The site contains house pits and cache remains and efforts to catalog the site are underway. The community maintains one property on the National Register of Historic Places (NRHP). The Teller Mission Orphanage, a Lutheran mission orphanage, was built in 1917 to replace the original building built by T. L. Brevig in 1907. The building was used as an orphanage for children in the area until 1933, when missionaries conceded that they were unable to provide the traditional subsistence education the children needed to survive in the area. <sup>6</sup>

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<sup>&</sup>lt;sup>4</sup> While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

Kawerak, Inc. (2007). *Brevig Mission Local Economic Development Plan 2007-2012*. Retrieved January 10, 2012 from: http://www.commerce.state.ak.us/dca/plans/Brevig%20Mission-EP-2007.pdf.

<sup>&</sup>lt;sup>6</sup> National Park Service (n.d.). *National Register of Historic Places*. Retrieved January 10, 2012 from: http://nrhp.focus.nps.gov/natregsearchresult.do?fullresult=true&recordid=22.

### **Natural Resources and Environment**

Brevig Mission has a maritime climate with continental influences when the Bering Sea freezes. Summer temperatures average 44 to 57 °F (7 to 14 °C). Winter temperatures average -9 to 8 °F (-23 to -13 °C). Annual precipitation averages 11.5 in, and annual snowfall averages 50 in. Port Clarence is generally ice-free between early June and mid-November.

The community lies on a gently sloping coastal plain, southwest of Red Mountain. Soils in the area are generally poorly drained mixtures of clay, sand, and gravel, with a peaty surface layer. Permafrost underlies much of Brevig Mission at variable depths. Vegetation on the Seward Peninsula consists of upland and lowland tundra. Upland areas are characterized by alpine dryaslichen tundra and barrens. Lowland areas a characterized by moist sedge-tussock tundra. Patches of low-growing ericaceous and willow-birch shrubs occur in better-drained areas. There are very few trees in the area and vegetation is generally limited to shrubs, lichens, mosses, bushes, and grasses. Harvestable vegetation in the area includes a variety of berries, roots, mushrooms, and greens. Wildlife in the area includes a variety of terrestrial and aquatic life. Terrestrial wildlife includes moose, caribou, bear, wolf, lynx, wolverine, shorebirds and other waterfowl. Aquatic wildlife includes seal, beluga whale, all five species of Pacific salmon, whitefish, lingcod, tomcod, smelt, northern pike, and trout. No critical habitat areas, refuges, or sanctuaries are located in the area.<sup>8</sup>

Natural hazards primarily include coastal erosion and flooding, riparian flooding, storm surges, and snow-drifting. During the spring breakup, both Reindeer Creek and Shelman Creek flood and are a potential threat to nearby properties. Coastal flooding due to storm surges is also a threat as the community lies within a designated 100-year floodplain. Snow-drifting occurs as a result of little vegetation and prevailing winds. While the community lacks a snow fence, impacts of snowdrifts are minimized by the community's staggered building layout.<sup>9</sup>

Mineral resources in the area include a gold project under development outside of Nome. As of 2010, NovaGold Resources Inc.'s Rock Creek Mine was under temporary closure resulting from capital and permitting issues. 10 There is an estimated 320,000 ounces of gold reserves at the Rock Creek site. 11

According to the Alaska Department of Environmental Conservation (DEC), there are no significant environmental remediation sites active in Brevig Mission. 12

# **Current Economy**<sup>13</sup>

Brevig Mission's economy is based primarily on subsistence activities supported by a seasonal and part-time cash economy. Year-round jobs are scarce, unemployment is high, and

<sup>8</sup> See footnote 5.

<sup>&</sup>lt;sup>7</sup> Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF\_BLOCK.htm.

<sup>&</sup>lt;sup>9</sup> Northern Management. (2003). Brevig Mission Land Use and Capital Plan. Retrieved January 10, 2012 from: http://www.commerce.state.ak.us/dca/plans/Brevig%20Mission-LUP-2003.pdf.

<sup>&</sup>lt;sup>10</sup> AND. (2008). NovaGold Forced to Suspend Operation of Rock Creek Mine. Retrieved January 10, 2012 from: http://www.adn.com/2008/11/24/600762/novagold-forced-to-suspend-operation.html.

<sup>&</sup>lt;sup>11</sup> Alaska Department of Natural Resources. (2010). *Alaska's Mineral Industry 2010*.

<sup>&</sup>lt;sup>12</sup> Alaska Department of Environmental Conservation. (n.d.). Contaminated Sites Program. Retrieved June 20, 2012 from: http://dec.alaska.gov/spar/csp/list.htm#Western.

<sup>&</sup>lt;sup>13</sup> Unless otherwise noted, all monetary data are reported in nominal values.

seasonal jobs in mining and construction have become limited due to complications concerning the Rock Creek Mine. Top employers in 2010<sup>14</sup> included the City of Brevig Mission, Bering Strait School District, Brevig Mission Native Corp., Brevig Mission Traditional Council, Kawerak Inc., Norton Sound Health Corp., Norton Sound Economic Development Corp., and Bering Straits Regional Housing Authority.

In 2010,<sup>15</sup> the estimated per capita income was \$7,898 and the estimated median household income was \$29,750, compared to \$7,278 and \$21,875 in 2000, respectively. However, after accounting for inflation by converting the 2000 values into 2010 dollars,<sup>16</sup> the real per capita income (\$9,570) and real median household income (\$28,765) indicate a decline in individual earnings. In 2010, Brevig Mission ranked 296<sup>th</sup> of 305 Alaskan communities from which per capita income was estimated, and 248<sup>th</sup> of 299 Alaskan communities from which median household income was estimated; placing the community among the lowest in the state in terms of personal and household income.

Brevig Mission's small population size may have prevented the ACS from accurately portraying economic conditions. Another way of understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). According to the ALARI database, residents earned \$2.12 million in total wages in 2010. When matched with the population in 2010, the per capita income equals \$5,462 suggesting that caution should be used when comparing 2010 ACS estimates with the 2000 Census. In addition, the community was recognized as "distressed" by the Denali Commission indicating that over 70% of residents aged 16 and older earned less than \$16,120 in 2010. However, it should be noted that American Community Survey and DOLWD data are based on wage earnings and do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS estimates, 67.9% of the population aged 16 and over were part of the civilian labor force in 2010. In that year, unemployment was estimated at 23.9%, compared to an estimated 5.9% statewide; and 43.2% of residents were estimated to be living below the poverty line, compared to an estimated 9.5% of Alaska residents overall. There is a possibility that unemployment and poverty statistics are inaccurate given the small population of Brevig Mission. Another estimate is based on the ALARI database, which indicates that the unemployment rate in 2010 was 35.4%.

Of those employed in 2010, an estimated 65.9% worked in the public sector, an estimated 33.0% worked in the private sectors, and an estimated 1.1% were self-employed. By industry, most (51.1%) employed residents were estimated to work in education services, health care, and social assistance sectors in 2010; followed by public administration sectors (17.0%); and transportation, and utilities sectors (12.5%). By occupation type, most (35.2%) employed residents were estimated to hold management or professional positions that year; followed by

<sup>16</sup> Inflation was calculated using the Anchorage Consumer Price Index for 2000 and 2010 (retrieved January 5, 2012 from the Alaska Department of Labor, http://labor.alaska.gove/research/cpi/inflationcalc.htm).

<sup>&</sup>lt;sup>14</sup> Alaska Department of Labor and Workforce Development (n.d.). Alaska Local and Regional Information Database. Retrieved April 23, 2012 from http://live.laborstats.alaska.gov/alari/.

<sup>&</sup>lt;sup>15</sup> U.S. Census. American Community Survey 2006-10 estimates.

<sup>&</sup>lt;sup>18</sup> ALARI estimates based on wages reported for unemployment insurance purposes. Estimates do not include selfemployed or federally employed residents.

<sup>&</sup>lt;sup>19</sup> Denali Commission. (2011). Distressed Community Criteria 2011 Update. Retrieved April 16, 2012 from: www.denali.gov.

service positions (25.0%); sales or office positions (21.6%); production, transportation, or material moving positions (14.8%); and natural resources, construction, or maintenance positions (3.4%). Between 2000 and 2010, there were notable proportional increases in public administration, transportation, warehousing, and utilities sectors; while there were notable decreases in arts, entertainment, recreation, accommodation, and food service sectors.

No individuals characterized themselves as working in natural resource based industries that include fishing in 2010, and no residents held commercial fishing permits between 2000 and 2010. Information regarding employment trends can be found in Figures 3 and 4.

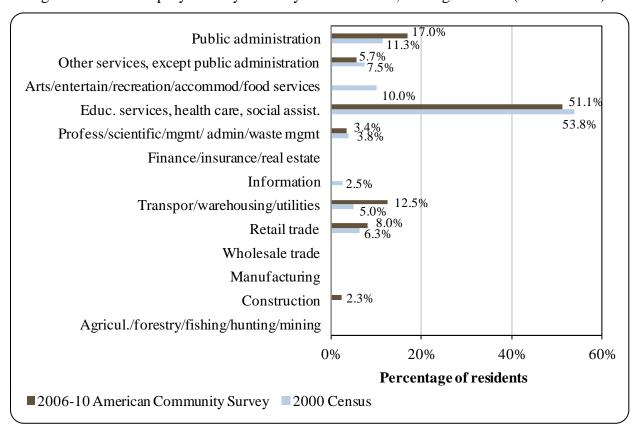


Figure 3. Local Employment by Industry in 2000-2010, Brevig Mission (U.S. Census).

**1**4.8% Production/transportation/ material moving 11.3% 3.4% Natural resources/construction/maintenance 2.5% 21.6% Sales/office 16.3% Service Management/professional 42.5% 0% 10% 20% 30% 40% 50%

Percentage of residents

Figure 4. Local Employment by Occupation in 2000-2010, Brevig Mission (U.S. Census).

## **Governance**<sup>20</sup>

■2006-10 American Community Survey ■2000 Census

Brevig Mission is a Second-class city with a mayoral form of government. In addition, there is a U.S. Bureau of Indian Affairs (BIA) recognized Tribal village council (Native Village of Brevig Mission) and Alaska Native Claims Settlement Act (ANCSA) chartered Native village corporation (Brevig Mission Native Corporation). Bering Straits Native Corporation is the regional ANCSA for-profit corporation.

In 2010, the city administered a 3% sales tax. When adjusted for inflation, <sup>21</sup> municipal revenues increased by 43.3% between 2000 and 2010, from \$710,818 to \$1.32 million. In 2010, most local revenues were collected from gaming fees, water/sewer service charges, equipment rentals, Alaska Village Electric Cooperative reimbursements, and leasing rents. Most outside revenues were collected from Community Revenue Sharing, Norton Sound Economic Development Corporation (NSEDC) benefits, and payments in lieu of taxes. Municipal revenues peaked in 2008 and 2009, although peaks were largely attributed to sizable project grants. Locally generated operating revenue remained relatively constant between 2003 and 2010.

In 2010, sales tax revenues accounted for 2.4% of total revenue, compared to 2.4% in 2000. State allocated Community Revenue Sharing accounted for 8.6% of municipal revenues in 2010, compared to 3.8% from State Revenue Sharing in 2000. Brevig Mission received approximately \$1.9 million in state and federal grants between 2000 and 2010 for fisheriesrelated projects. Funds awarded went to a bulk fuel project (\$1.4 million), subsistence activities (\$4,430), and several NSEDC projects (\$493,500). Information regarding municipal budget trends can be found in Table 2.

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<sup>&</sup>lt;sup>20</sup> Alaska Department of Community and Rural Affairs. (n.d.). Community Database Online. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF\_BLOCK.htm. <sup>21</sup> Inflation calculated using Anchorage CPI from Alaska DOL: http://labor.alaska.gov/research/cpi/cpi.htm.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Brevig Mission from 2000 to 2010.

Year	Total Municipal Revenue <sup>1</sup>	Sales Tax Revenue <sup>2</sup>	State/Community Revenue Sharing <sup>3,4</sup>	Fisheries- Related Grants (State and Federal) <sup>5</sup>
2000	\$710,818	\$16,822	\$27,000	\$4,431
2001	\$719,757	\$21,659	\$30,000	n/a
2002	\$772,334	\$24,661	\$27,143	n/a
2003	\$2,064,713	\$29,146	\$27,143	\$35,000
2004	\$2,048,533	\$29,781	-	\$10,000
2005	\$1,514,900	\$29,430	-	\$38,000
2006	\$1,993,106	\$29,000	-	\$25,000
2007	\$2,685,661	\$23,030	-	\$141,999
2008	\$4,505,087	\$23,790	-	\$526,000
2009	\$5,146,912	\$26,552	\$112,904	\$998,500
2010	\$1,316,834	\$31,571	\$113,000	\$120,000

<sup>&</sup>lt;sup>1</sup> Alaska Department of Community and Rural Affairs. (n.d.). *Financial Documents Delivery System*. Retrieved April 15, 2011from http://www.commerce.state.ak.us/dcra/commfin/CF FinRec.cfm.

#### Infrastructure

Connectivity and Transportation<sup>22</sup>

There are no maintained roads connecting Brevig Mission with other villages. Access to the community is limited to water and air; however, in the winter it can also be accessed by ice road or winter trail. Teller, nine mi south, is connected to Nome via the Nome/Teller Highway which is seasonally maintained by the state. There is a state-owned 3000-ft long by 100-ft wide gravel airstrip with a 2,110-ft by 75-ft wide gravel crosswind strip allowing year-round, regular air service from Nome. Flights can also be chartered from Nome and Teller. Roundtrip airfare between Anchorage and Nome in June 2012 was \$442. Roundtrip airfare between Nome and Brevig Mission was \$245.

<sup>&</sup>lt;sup>2</sup>Alaska Department of Community and Economic Development (n.d.). *Alaska Taxable* (2000-2010). Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa\_summary.cfm.

<sup>&</sup>lt;sup>3</sup>Alaska Department of Rev. (n.d.). (2000-2009) Taxes and Fees Annual Report. Retrieved April 15, 2011from https://www.tax.state.ak.us.

<sup>&</sup>lt;sup>4</sup> The State Revenue Sharing program ceased in 2003 and was replaced by the Community Revenue Sharing program starting in 2009.

<sup>&</sup>lt;sup>5</sup>Alaska Department of Community and Rural Affairs. (n.d.). *Community Funding Database*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF\_Grants.htm.

<sup>&</sup>lt;sup>22</sup> Kawerak, Inc. (2007). *Brevig Mission Local Economic Development Plan 2007-2012*. Retrieved January 10, 2012 from: http://www.commerce.state.ak.us/dca/plans/Brevig%20Mission-EP-2007.pdf.

<sup>&</sup>lt;sup>23</sup> Airfare was calculated using lowest fare. Source: http://www.travelocity.com (retrieved November 22, 2011).

<sup>&</sup>lt;sup>24</sup> Bering Air. (n.d.) Retrieved November 22, 2012 from: http://www.beringair.com/.

## Facilities<sup>25</sup>

A piped water and sewer system was completed in 2002, and extensions were completed in 2007 connecting new housing units and the multi-purpose building. Water is supplied by two underground wells located near Shelmon Creek. Water is treated and stored in a 100,000-gallon tank, which is filled monthly. There is a Class-3 permitted landfill in the area managed by the City, and electricity is supplied by diesel generator. Brevig Mission community tank farm services the community's fuel needs, and fuel is barged in during the summer months. There are often fuel shortages in the community during winter months due to increased demand over the years. Brevig Mission's communications services include in-state and long-distance telephone services, internet, satellite and cable television, and radio. Public safety services are provided by a local Village Public Safety Officer (VPSO).

Municipal offices are located in the same building as the "washeteria," as well as the recently constructed multi-purpose building which also houses the local search and rescue operations and community center. The City owns the Post Office building and the VPSO holding cell, and manages staff at the water plant, power plant, and clinic. The Brevig Mission Traditional Council also has offices in the new multi-purpose building. There is a public library at the school and internet is provided to the public via computers at the Traditional Council office. Additional public facilities include a bingo hall and Lutheran Church.

In a survey conducted by the AFSC in 2011, community leaders reported that facilities constructed or improved upon between 2000 and 2010 included airport facilities, water and sewer pipelines, diesel generator, sewage treatment, water treatment, alternative energy, waste disposal, community center/library, public safety, emergency response services, fire department, school, communications services, post office, and "washeteria." In addition, there were plans as of 2010 to improve existing port facilities including the construction of additional dock space and barge landing area, improvements to existing dock infrastructure, and improvement of dock utilities and access. Vessels up to 125 ft in length can use moorage in Brevig Mission, although there is no public moorage available for permanent or transient vessels. Fisheries-related businesses and services located in the community include fishing gear sales, boat fuel sales, and air taxi services. Residents go to Nome, Unalakleet, and Anchorage for businesses and services not available locally. Between 2005 and 2010, the community has seen a slight increase in the number of private boats and vessels shorter than 35 ft long visiting the community.

Medical Services<sup>26</sup>

The Brevig Mission Clinic is a Primary Health Care facility and Community Health Aid Program (CHAP) site. Acute, long term and other specialized care is provided in Nome.

Educational Opportunities<sup>27</sup>

The Brevig Mission School offers preschool through twelfth grade instruction. As of 2011, there were 126 students enrolled and 14 teachers employed.

<sup>&</sup>lt;sup>25</sup> See footnote 22.

<sup>&</sup>lt;sup>26</sup> See footnote 20.

<sup>&</sup>lt;sup>27</sup> Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from http://eed.alaska.gov/stats/.

### **Involvement in North Pacific Fisheries**

History and Evolution of Fisheries

Brevig Mission has historically been a subsistence community, and still is to this day. Locals do not participate in commercial fisheries and there is limited recreational fishing. While opportunities to participate in commercial fisheries are limited, the community is committed to developing a local industry using a holistic approach which includes the creation of cultural, social, and youth programs, building a tourism economy, providing commercial fisheries/crabbing opportunities, and developing dock and harbor infrastructure. In a survey conducted by the AFSC in 2011, community leaders reported that a current challenge to building commercial fisheries in the community includes educating local youth in how to become active in the commercial fishing industry.

According to a survey conducted by the AFSC in 2011, community leaders reported that the community is involved in fisheries management processes through a representative who participates in North Pacific Fishery Management Council (NPFMC) committees or advisory groups, as well as a representative who participates in the Federal Subsistence Board or Federal Subsistence Regional Advisory Council process. The community is eligible to participate in the Community Development Quota (CDQ) program and is represented by the NSEDC. The CDQ program was implemented to help alleviate economic distress in rural communities in western Alaska by allocating a percentage of halibut, crab, and groundfish to six CDQ non-profit organizations representing 65 communities in the Bering Strait and Aleutian Islands region. Managers of CDQ organizations authorize individual fishermen and fishing vessels to harvest a certain portion of the allocated CDQ.

The community is located in Federal Reporting Area 514, International Pacific Halibut Commission (IHPC) Regulatory Area 4E, Bering Sea Sablefish Regulatory District, and Alaska Sport Fishing Survey Area W (Seward Peninsula-Norton Sound).

#### **Processing Plants**

According to the 2010 Alaska Department of Fish and Game's Intent to Operate list, Brevig Mission does not have a registered processing plant. The closest seafood processor is located in Nome.

#### Fisheries-Related Revenue

Between 2000 and 2010, Brevig Mission received revenue from raw fish taxes and Shared Fisheries Business Taxes. However, very little revenue was received from those sources during that time. In a survey conducted by the AFSC in 2011, community leaders reported that in 2010, the community received \$25,000 in grants and \$100,000 in special allocations from NSEDC. Information regarding fisheries-related revenue trends can be found in Table 3.

<sup>&</sup>lt;sup>28</sup> Fina, M. (2011). Evolution of Catch Share Management: Lessons from Catch Share Management in the North Pacific. *Fisheries*, Vol. 36(4). Retrieved September 12, 2012 from <a href="http://www.fakr.noaa.gov/npfmc/PDFdocuments/catch\_shares/Fina\_CatchShare\_411.pdf">http://www.fakr.noaa.gov/npfmc/PDFdocuments/catch\_shares/Fina\_CatchShare\_411.pdf</a>.

It should be noted that a direct comparison between fisheries-related revenue and total municipal revenue cannot reliably be made as not all fisheries-related revenue sources are included in the municipal budget.

## Commercial Fishing

Residents of Brevig Mission did not participate in commercial fisheries in 2010. Between 2000 and 2010, there were no Commercial Fisheries Entry Commission (CFEC) permits, Federal Fisheries Permits (FFP), or License Limitation Program (LLP) permits issued to residents. In addition, no residents have held halibut, sablefish, or crab quota shares since those programs began.

Between 2000 and 2010, no landings were made in the community and no landings were reported by residents. Information regarding commercial fishing trends can be found in Tables 4 through 10.

Table 3. Known Fisheries-Related Revenue (in U.S. Dollars) Received by the Community of Brevig Mission: 2000-2010.

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax <sup>1</sup>	\$200	n/a	\$100	\$174	\$69	\$70	n/a	\$200	n/a	n/a	n/a
Shared Fisheries Business Tax <sup>1</sup>	\$58	\$120	\$174	n/a	\$69	\$176	\$212	\$165	\$89	\$66	\$82
Fisheries Resource Landing Tax <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax <sup>2</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax <sup>2</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls <sup>2</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage <sup>2</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage <sup>2</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land <sup>3</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax <sup>3</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total fisheries-related revenue <sup>4</sup>	\$258	\$120	\$274	\$174	\$138	\$246	\$212	\$365	\$89	\$66	\$82
Total municipal revenue <sup>5</sup>	\$710,818	\$719,757	\$772,334	\$2.06 M	\$2.05 M	\$1.51 M	\$1.20 M	\$2.69 M	\$4.51 M	\$5.15 M	\$1.32 M

*Note: n/a indicates that no data were reported for that year.* 

<sup>&</sup>lt;sup>1</sup> Alaska Department of Community and Economic Development (n.d.) *Alaska Taxable* (2000-2010). Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa summary.cfm.

<sup>&</sup>lt;sup>2</sup> Alaska Department of Community and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF\_FinRec.cfm.

<sup>&</sup>lt;sup>3</sup> Reported by community leaders in a survey conducted by the AFSC in 2011.

<sup>&</sup>lt;sup>4</sup> Total fisheries related revenue represents a sum of all known revenue sources in the previous rows.

<sup>&</sup>lt;sup>5</sup> Total municipal revenue represents the total revenue that the city reports each year in its municipal budget. Alaska Department of Community and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF FinRec.cfm.

Table 4. Permits and Permit Holders by Species, Brevig Mission: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) 1	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Crab (LLP) 1	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Federal Fisheries	Total permits	0	0	0	0	0	0	0	0	0	0	0
Permits <sup>1</sup>	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Crab (CFEC) <sup>2</sup>	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Other shellfish (CFEC) <sup>2</sup>	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Halibut (CFEC) <sup>2</sup>	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Herring (CFEC) <sup>2</sup>	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0

Table 4 cont'd. Permits and Permit Holders by Species, Brevig Mission: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) <sup>2</sup>	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Groundfish (CFEC) <sup>2</sup>	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Other Finfish (CFEC) <sup>2</sup>	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) <sup>2</sup>	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Total CFEC Permits <sup>2</sup>	Permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Permit holders	0	0	0	0	0	0	0	0	0	0	0

<sup>&</sup>lt;sup>1</sup>National Marine Fisheries Service. (2011). Data on Limited Liability Permits, Alaska Federal Processor Permits (FPP), Federal Fisheries Permits (FFP), and Permit holders. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

<sup>&</sup>lt;sup>2</sup> Alaska Commercial Fisheries Entry Commission. (2011). Alaska commercial fishing permits, permit holders, and vessel licenses, 2000 – 2010. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 5. Characteristics of the Commercial Fishing Sector in Brevig Mission: 2000-2010.

Year	Crew License Holders <sup>1</sup>	Count Of All Fish Buyers <sup>2</sup>	Count Of Shore- Side Processing Facilities <sup>3</sup>	Vessels Primarily Owned By Residents <sup>4</sup>	Vessels Homeported <sup>4</sup>	Vessels Landing Catch In Brevig Mission <sup>2</sup>	Total Net Pounds Landed In Brevig Mission <sup>2,5</sup>	Total Ex-Vessel Value Of Landings In Brevig Mission <sup>2,5</sup>
2000	0	0	0	0	0	0	0	\$0
2001	0	0	0	0	0	0	0	\$0
2002	0	0	0	0	0	0	0	\$0
2003	1	0	0	0	0	0	0	\$0
2004	0	0	0	0	0	0	0	\$0
2005	1	0	0	0	0	0	0	\$0
2006	0	0	0	0	0	0	0	\$0
2007	1	0	0	0	0	0	0	\$0
2008	1	0	0	0	0	0	0	\$0
2009	1	0	0	0	0	0	0	\$0
2010	0	0	0	0	0	0	0	\$0

<sup>&</sup>lt;sup>1</sup> Alaska Department of Fish and Game. (2011). Alaska sport fish and crew license holders, 2000 – 2010. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

<sup>&</sup>lt;sup>2</sup> Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. (2011). Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

<sup>&</sup>lt;sup>3</sup> Alaska Department of Fish and Game. (2011). Data on Alaska fish processors. ADF&G Division of Commercial Fisheries. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

<sup>&</sup>lt;sup>4</sup> Alaska Commercial Fisheries Entry Commission. (2011). Alaska commercial fishing permits, permit holders, and vessel licenses, 2000 – 2010. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

<sup>&</sup>lt;sup>5</sup> Totals only represent non-confidential data.

Table 6. Halibut Catch Share Program Participation in Brevig Mission: 2000-2010.

Year	Number of Halibut	Halibut	Halibut IFQ
	Quota Share Account Holders	Quota Shares Held	Allotment (pounds)
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0

Source: National Marine Fisheries Service. (2011). Alaska Individual Fishing Quota (IFQ) permit data. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 7. Sablefish Catch Share Program Participation by Residents of Brevig Mission: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (pounds)
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0

Source: National Marine Fisheries Service. (2011). Alaska Individual Fishing Quota (IFQ) permit data. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 8. Bering Sea and Aleutian Island Crab Catch Share Program Participation by Residents of Brevig Mission: 2000-2010.

Year	Number of Crab Quota	Crab Quota Shares	Crab IFQ
	<b>Share Account Holders</b>	Held	Allotment (pounds)
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0

Source: National Marine Fisheries Service. (2011). Alaska Individual Fishing Quota (IFQ) permit data. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 9. Landed Pounds and Ex-vessel Revenue, by Species, in Brevig Mission: 2000-2010.

Total Net Pounds <sup>1</sup>											
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	
	1	Ex-vessel	Value (1	nominal	U.S. doll	lars)					
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           2000         2001         2002           \$0         \$0         \$0           \$0         \$0         \$0           \$0         \$0         \$0           \$0         \$0         \$0           \$0         \$0         \$0           \$0         \$0         \$0           \$0         \$0         \$0           \$0         \$0         \$0           \$0         \$0         \$0           \$0	2000         2001         2002         2003           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           2000         2001         2002         2003           \$0         \$0         \$0         \$0           \$0         \$0         \$0         \$0           \$0         \$0         \$0         \$0	2000         2001         2002         2003         2004           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           2000         2001         2002         2003         2004           \$0         \$0         \$0	2000         2001         2002         2003         2004         2005           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0         0           0	2000         2001         2002         2003         2004         2005         2006           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0	2000         2001         2002         2003         2004         2005         2006         2007           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0 </td <td>2000         2001         2002         2003         2004         2005         2006         2007         2008           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0</td> <td>2000         2001         2002         2003         2004         2005         2006         2007         2008         2009           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         &lt;</td>	2000         2001         2002         2003         2004         2005         2006         2007         2008           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0	2000         2001         2002         2003         2004         2005         2006         2007         2008         2009           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         <	

Source: Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. (2011). Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

1 Net lbs refers to the landed weight recorded in fish tickets.

2 Totals only represent non-confidential data.

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

Sablefish

Salmon

 $Total^2$ 

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Brevig Mission Residents: 2000-2010.

				Total N	et Pound	ts <sup>1</sup>					
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	0	0	0	0	0	0	0	0	0	0	0
Finfish	0	0	0	0	0	0	0	0	0	0	0
Halibut	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0
Other Groundfish	0	0	0	0	0	0	0	0	0	0	0
Other Shellfish	0	0	0	0	0	0	0	0	0	0	0
Pacific Cod	0	0	0	0	0	0	0	0	0	0	0
Pollock	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0
Total <sup>2</sup>	0	0	0	0	0	0	0	0	0	0	0
			Ex-vessel	l Value (i	nominal	U.S. doll	lars)				

		ì	Ex-vessel	l Value (	nominal	U.S. doll	lars)				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Finfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Halibut	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Herring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Groundfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Shellfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pacific Cod	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pollock	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sablefish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Salmon	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total <sup>2</sup>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Source: Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. (2011). Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

#### Recreational Fishing

In a survey conducted by the AFSC in 2011, community leaders reported that no sport fishing takes place in Brevig Mission, although it is possible that they are referring to commercial sport fishing, as several residents held sport fishing licenses in 2010. Between 2000 and 2010, there were no active sport fish business locally registered or sport fish guide licenses held by residents. In 2010, 23 sport fishing licenses were sold in the community and 21 sport fishing licenses sold to residents, compared to 15 and 11 in 2000, respectively.

Brevig Mission is located in the Seward Peninsula-Norton Sound ADF&G Harvest Survey Area which includes all waters north of the Yukon River drainage; north and west of Pastol Bay and south of the Selawik River drainage. This area has seen fluctuations in the number of resident and non-Alaska resident saltwater angler days fished, however, 2010 was the lowest year for both on record with 34 resident angler days fished and 43 non-resident angler days fished. Saltwater angler days fished peaked in 2000 with 2,663 resident angler days fished, and 196 non-Alaska resident angler days fished.

Net lbs refers to the landed weight recorded in fish tickets.

<sup>&</sup>lt;sup>2</sup> Totals only represent non-confidential data.

In 2010, there were 10,533 total freshwater angler days fished, compared to 15,584 in 2000. In that year, non-Alaska residents accounted for 41.1% of freshwater angler days fished, compared to 24.3% in 2000. Total freshwater angler days fished peaked in 2008 at 21,340 although yearly totals varied greatly. Further information regarding recreational fishing trends can be found in Table 11.

Table 11.	Sport	Fishing	Trends,	Brevig	Mission:	2000-2010.

Year	Active Sport Fish Guide Businesses <sup>1</sup>	Sport Fish Guide Licenses <sup>1</sup>	Sport Fishing Licenses Sold to Residents <sup>2</sup>	Sport Fishing Licenses Sold in Brevig Mission <sup>2</sup>
2000	0	0	11	15
2001	0	0	13	14
2002	0	0	13	14
2003	0	0	11	25
2004	0	0	10	10
2005	0	0	10	10
2006	0	0	32	32
2007	0	0	24	27
2008	0	0	31	35
2009	0	0	16	22
2010	0	0	21	23

	Saltw	ater	Freshwater			
Year	Angler Days Fished – Non- residents <sup>3</sup>	Angler Days Fished – Alaska Residents <sup>3</sup>	Angler Days Fished – Non- residents <sup>3</sup>	Angler Days Fished – Alaska Residents <sup>3</sup>		
2000	196	2,663	3,789	11,795		
2001	64	988	2,087	7,816		
2002	94	1,650	4,321	12,260		
2003	30	1,530	3,632	7,211		
2004	204	497	4,183	8,439		
2005	56	1,940	8,307	6,764		
2006	90	1,400	3,547	12,535		
2007	49	530	3,688	12,400		
2008	0	655	3,761	17,579		
2009	133	897	4,198	11,995		
2010	43	34	4,334	6,199		

<sup>&</sup>lt;sup>1</sup> Alaska Department of Fish and Game. (2011). Alaska sport fish guide licenses and businesses, 2000 – 2010. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

<sup>&</sup>lt;sup>2</sup> Alaska Department of Fish and Game. (2011). Alaska sport fish and crew license holders, 2000 – 2010. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

<sup>&</sup>lt;sup>3</sup> Alaska Department of Fish and Game. (2011). Alaska Sport Fishing Survey results, 2000 – 2010. ADF&G Division of Sport Fish, Alaska Statewide Harvest Survey project. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. http://www.adfg.alaska.gov/sf/sport fishingsurvey/ (Accessed September 2011).

Subsistence Fishing<sup>29</sup>

Subsistence fishing and hunting is a central part of life in Brevig Mission. In a survey conducted by the AFSC in 2011, community leaders reported that all local species of fish and marine mammals are harvested by resident subsistence users. In the spring when sea ice recedes, walrus, bearded seal, and a variety of birds are hunted. Seal meat is dried and the blubber is rendered, the dried meat then stored in oil. In the fall, a variety of seals are hunted. The common seal is hunted for skin and meat for feeding dogs, although some parts are consumed by humans. Bearded seals are used for meat and blubber. Walrus flippers are blubber are fermented and the rest, including intestines, kidneys, and blubber are frozen. Walrus ivory is often used to carve tools, jewelry, and various pieces of art. Birds caught in the area include Canadian geese, snow geese, emperor geese, brandt geese, eider duck, mallard ducks, pintail ducks, and ptarmigan. Eggs are also gathered. In the winter, moose and caribou provide meat which is dried or frozen. Very few people have access to the privately owned reindeer herds. Wolves and wolverine are hunted for skins. During the summer months, a variety of salmon are dried, salted, or smoked. Northern pike are also caught. In the winter, tomcod and smelt are caught using ice-fishing hooks. From May through September, various greens and roots are picked. In late August and September salmonberries, blueberries, and blackberries are picked. According to ADF&G's Community Subsistence Information System, <sup>30</sup> species that are harvested or used by Brevig Mission residents include clams, king crab, mussels, shrimp, Tanner crab, bearded seal, bowhead whale, gray whale, ribbon seal, ringed seal, spotted seal, Steller sea lion, blackfish, burbot, cisco, Dolly Varden, flounder, grayling, herring, herring roe, northern pike, saffron cod, sculpin, sheefish, smelt, sole, sucker, trout, and whitefish.

Of the species documented by the ADF&G in Table 13, pink salmon were harvested the most, followed by chum and sockeye salmon. In 2008, residents reported harvesting 5,382 salmon, compared to a reported 2,863 in 2000. In 2008, the reported number of sockeye, coho, chum, and Chinook salmon harvested declined compared to previous years, as did the number of subsistence salmon permits issued. However, the number of pink salmon harvested increased that year to its highest reported level since 2000; accounting for 3.7% of statewide reported harvests for that species. There is no information regarding household participation in subsistence activities or halibut subsistence activities. Between 2000 and 2010, 113 walrus were harvested. Walrus harvests peaked in 2010 at 45 animals. Data on Steller sea lion, harbor seal, and spotted seal harvests are not available. Information regarding subsistence trends can be found in Tables 12 through 15.

<sup>&</sup>lt;sup>29</sup> Kawerak, Inc. (2007). *Brevig Mission Local Economic Development Plan 2007-2012*. Retrieved January 10, 2012 from: http://www.commerce.state.ak.us/dca/plans/Brevig%20Mission-EP-2007.pdf.

<sup>&</sup>lt;sup>30</sup> Alaska Department of Fish and Game. (2011). Community Subsistence Information System (CSIS). ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. http://www.adfg.alaska.gov/sb/CSIS/ (Accessed February 2011).

Table 12. Subsistence Participation by Household and Species, Brevig Mission: 2000-2010.

Year	% Households Participating In Salmon Subsistence	% Households Participating In Halibut Subsistence	% Households Participating In Marine Mammal Subsistence	% Households Participating In Marine Invertebrate Subsistence	% Households Participating In Non-Salmon Fish Subsistence	Per Capita Subsistence Harvest (Pounds)
2000	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a

*Note: n/a indicates that no data were reported for that year.* 

Source: Alaska Department of Fish and Game. 2011. Community Subsistence Information System (CSIS). ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. http://www.adfg.alaska.gov/sb/CSIS/ (Accessed February 2011).

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Brevig Mission: 2000-2010.

Year	Subsistence Salmon Permits Issued <sup>1</sup>	Salmon Permits Returned <sup>1</sup>	Chinook Salmon Harvested <sup>1</sup>	Chum Salmon Harvested <sup>1</sup>	Coho Salmon Harvested <sup>1</sup>	Pink Salmon Harvested <sup>1</sup>	Sockeye Salmon Harvested <sup>1</sup>	Lbs of Marine Inverts <sup>2</sup>	Lbs of Non- Salmon Fish <sup>2</sup>
2000	69	57	32	486	530	808	1,007	n/a	n/a
2001	68	55	41	1,041	1,070	468	2,040	n/a	n/a
2002	71	67	65	1,534	1,741	2,347	2,127	n/a	n/a
2003	74	66	92	1,382	1,098	2,955	1,983	n/a	n/a
2004	42	41	120	1,132	682	2,860	2,763	n/a	n/a
2005	38	38	89	1,110	326	2,898	1,736	n/a	n/a
2006	45	45	89	1,700	705	2,068	1,470	n/a	n/a
2007	45	44	40	1,620	354	773	2,385	n/a	n/a
2008	39	39	70	940	387	3,089	896	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Note: n/a indicates that no data were reported for that year.

<sup>&</sup>lt;sup>1</sup> Fall, J.A., C. Brown, N. Braem, J.J. Simon, W.E. Simeone, D.L. Holen, L. Naves, L. Hutchinson-Scarborough, T. Lemons, and T.M. Krieg. 2011, revised. Alaska subsistence salmon fisheries 2008 annual report. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 359, Anchorage. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

<sup>&</sup>lt;sup>2</sup> Alaska Department of Fish and Game. (2011). Community Subsistence Information System (CSIS). ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. http://www.adfg.alaska.gov/sb/CSIS/ (Accessed February 2011).

Table 14. Subsistence Halibut Fishing Participation, Brevig Mission: 2003-2010.

Year	SHARC Issued	SHARC Fished	SHARC Halibut Lbs Harvested
2003	n/a	n/a	n/a
2004	n/a	n/a	n/a
2005	n/a	n/a	n/a
2006	n/a	n/a	n/a
2007	n/a	n/a	n/a
2008	n/a	n/a	n/a
2009	n/a	n/a	n/a
2010	n/a	n/a	n/a

Note: N/A Indicates That No Data Were Reported For That Year.

Source: Fall, J.A. And D. Koster. (2011). Subsistence Harvests Of Pacific Halibut In Alaska, 2009. Alaska Department Of Fish And Game Division Of Subsistence, Technical Paper No. 357, Anchorage. Data Compiled By Alaska Fisheries Information Network For Alaska Fisheries Science Center, Seattle.

Table 15. Subsistence Harvests of Marine Mammal Resources, Brevig Mission: 2000-2010.

Year	# of Beluga Whales <sup>1</sup>	# of Sea Otters <sup>2</sup>	# of Walrus <sup>2</sup>	# of Polar Bears <sup>2</sup>	# of Steller Sea Lions <sup>3</sup>	# of Harbor Seals <sup>3</sup>	# of Spotted Seals <sup>3</sup>
2000	n/a	n/a	7	n/a	n/a	n/a	n/a
2001	n/a	n/a	22	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	n/a	8	n/a	n/a	n/a	n/a
2004	n/a	n/a	3	n/a	n/a	n/a	n/a
2005	n/a	n/a	3	n/a	n/a	n/a	n/a
2006	n/a	n/a	2	n/a	n/a	n/a	n/a
2007	n/a	n/a	20	n/a	n/a	n/a	n/a
2008	n/a	n/a	1	n/a	n/a	n/a	n/a
2009	n/a	n/a	2	n/a	n/a	n/a	n/a
2010	n/a	n/a	45	n/a	n/a	n/a	n/a

*Note: n/a indicates that no data were reported for that year.* 

#### **Additional Information**

In a survey conducted by the AFSC in 2011, community leaders reported concerns over bycatch. Specifically, there are concerns over how bycatch in the trawl pollock industry is affecting returns of king and sockeye salmon in the area. There is fear that if trends continue, sockeye and king salmon runs will decline to the point that there will no longer be a viable subsistence fishery for those species. There are also concerns over current subsistence regulations being too constrictive.

<sup>&</sup>lt;sup>1</sup> Frost, K.J., and R.S. Suydam. 2010. Subsistence harvest of beluga or white whales (*Delphinapterus leucas*) in northern and western Alaska, 1987–2006. J. Cetacean Res. Manage. 11(3): 293–299. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

<sup>&</sup>lt;sup>2</sup> U.S. Fish and Wildlife Service. 2011. Marking, Tagging and Reporting Program data bases for northern sea otter, Pacific walrus and polar bear. Office of Marine Mammals Management. Anchorage, Alaska. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

<sup>&</sup>lt;sup>3</sup> Wolfe, R.J., Fall, J.A. and M. Riedel. 2009. The subsistence harvest of harbor seals and sea lions by Alaska Natives in 2008. Alaska Native Harbor Seal Commission and Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 347, Anchorage.