# **Moose Pass**

# **People and Place**

Location<sup>1</sup>



Moose Pass is a Census Designated Place (CDP) located 26 miles north of Seward on the Kenai Peninsula. It is on the southwest shore of Upper Trail Lake, off the Seward Highway, at mile 29.3 of the Alaska Railroad. Moose Pass is located is the Kenai Peninsula Borough Census Area and the Seward Recording District.

The demographic and fisheries statistics presented in this profile are specific to Moose Pass CDP. However, it is important to note that residents of nearby Crown Point and Primose CDPs are considered to be part of the Moose Pass community as well.<sup>2</sup>

# Demographic Profile<sup>3</sup>

In 2010, there were 219 residents in Moose Pass, making it the 187<sup>th</sup> largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population of Moose Pass increased by 170%. The majority of this growth occurred between 1990 and 2000, with a population increase from 81 to 206. According to estimates by the Alaska Department of Labor, the population of permanent residents in Moose Pass decreased by 8.3% between 2000 and 2009, with an average annual growth rate of -1.41%. The change in population from 1990 to 2010 is provided in Table 1. It is useful to note that the population of Primrose CDP declined from 93 in 2000 to 78 in 2010, while the population of Crown Point was 75 in 2000 and 74 in 2010.

In 2010, a majority of the population of Moose Pass identified themselves as White (94.1%), along with 1.4% that identified as American Indian and Alaska Native, 1.4% as Black or African American, 0.9% as Native Hawaiian and Other Pacific Islander, 0.5% as Asian, and 1.8% that identified with two or more races. In addition, 2.3% of Moose Pass's population identified themselves as Hispanic in 2010. The percentage of the population made up of individuals identifying as White increased slightly over time, from 88.9% in 1990 and 87.3% in 2000, to 94.1% in 2010. At the same time, the percentage of the population identifying as American Indian and Alaska Native decreased from 11.1% in 1990 and 10.7% in 2000, to 1.4% in 2010. Other than the decrease in Native residents, the population of Moose Pass appeared to be more diverse in 2010 than in previous years, with several new ethnic groups present in the community. Changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

\_

<sup>&</sup>lt;sup>1</sup> Alaska Dept. of Comm. 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>2</sup> Personal communication with a Moose Pass resident.

<sup>&</sup>lt;sup>3</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 Moose Pass from 1990 to 2010 by Source.

Year	U.S. Decennial Census <sup>1</sup>	Alaska Dept. of Labor Estimate of Permanent Residents <sup>2</sup>
1990	81	-
2000	206	-
2001	-	206
2002	-	217
2003	-	219
2004	-	220
2005	-	218
2006	-	203
2007	-	199
2008	-	185
2009	-	189
2010	219	-

<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.

In 2010, the average household size in Moose Pass was 2.35, a slight decrease from the average household size in 2000 (2.45 persons per household) and 1990 (2.4 persons per household). The number of households in Moose Pass has increased over time, from 33 households in 1990 to 84 in 2000, and 93 in 2010. Of the 137 housing units surveyed for the 2010 Decennial Census, 47.4% were owner-occupied, 20.4% were rented, and 32.1% were vacant or used only seasonally. In 2010, no residents of Moose Pass lived in group quarters. In a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that the population of Moose Pass reaches its peak during summer months, in June, July, and August, and approximately 100 seasonal workers are present in the town during these months. They indicated that population fluctuations are somewhat driven by employment in the commercial fishing sector.

In 2010, the gender makeup of Moose Pass's population (53.4% male and 47.3% female) was more weighted toward males than the population of the state as a whole, which was 52% male and 48% female. The median age of Moose Pass residents was 41.5 years, older than the national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, the age group most heavily skewed toward males was 50 to 59 years, while there was a relatively even spread of males and females across other age categories in Moose Pass. In 2010, 17.9% of Moose Pass's population was age 60 or older. The overall population structure of Moose Pass in 2000 and 2010 is shown in Figure 2.

<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.

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

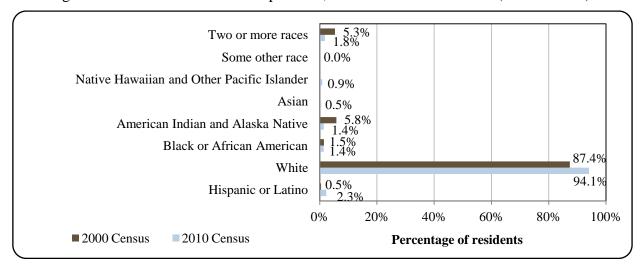
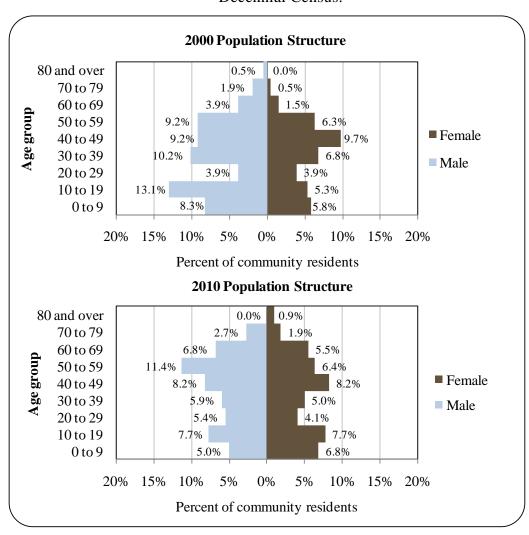


Figure 2. Population Age Structure in Moose Pass Based on the 2000 and 2010 U.S. Decennial Census.



In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),<sup>4</sup> 95.3% of Moose Pass residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaska residents overall. Also in 2010, 0% of the population was estimated to have less than a 9<sup>th</sup> grade education, compared to 3.5% of Alaska residents overall; 4.7% were estimated to have a 9<sup>th</sup> to 12<sup>th</sup> grade education but no diploma, compared to 5.8% of Alaska residents overall; 16.7% were estimated to have some college but no degree, compared to 28.3% of Alaska residents overall; 22.6% were estimated to have an Associate's degree, compared to 7.9% of Alaska residents overall; 42.3% were estimated to have a Bachelor's degree, compared to 17.4% of Alaska residents overall; and 6.5% were estimated to have a graduate or professional degree, compared to 9.6% of Alaska residents overall.

## History, Traditional Knowledge, and Culture'

The history of the name "Moose Pass" began prior to the town's settlement. A mail carrier and his dog team reportedly had difficulty gaining the right-of-way from a moose in 1903. That same year, the Alaska Railroad Company constructed its first 50 miles of railroad from Seward north, passing close to Moose Pass. The site gained importance as a crossroads on the Iditarod Trail, a dogsled route between Seward and Nome that was blazed in 1908 to service mining camps in Nome and the Yukon-Kuskokwim Delta. By 1910, after a series of gold rushes starting in the late 1800s, the non-Native population of Alaska had swelled to over 30,000, and the Iditarod and several other dogsled routes were the only form of winter communication with isolated communities.

The first residents of Moose Pass, Oscar Christensen and Mickey Natt, arrived by horse and dogsled in 1909 and built a log cabin at the crossroads. They soon built a log roadhouse, providing lodging and supplies to miners en route to mining camps further north. In 1927, the Alaska Railroad Company built a small freight shed and receiving platform for heavy equipment at the Moose Pass station. Mail service involved sacks of mail being tossed off the train as it passed. Desire for a more efficient mail system prompted establishment of a post office in 1928.

Leora Roycroft, the first postmaster of Moose Pass, also started a school in the town in 1928. For the first few years school took place in a tent, until a schoolhouse was built in 1930. A small hydroelectric plant was installed in 1927 and provided electricity to the roadhouse, school, local stores, and homes until Chugach Electric Company began provided electric service to Moose Pass in 1956. Today, Moose Pass remains a small, quiet community situated along the

<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.

<sup>&</sup>lt;sup>5</sup> Alaska Dept. of Comm. 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>6</sup> Alaska Railroad Corporation website (n.d.). *Alaska Railroad History*. Retrieved December 14, 2011 from http://alaskarailroad.com.

<sup>&</sup>lt;sup>7</sup> Iditarod Historic Trail Alliance (n.d.). *Historic Overview*. Retrieved December 14, 2011 from http://www.iditarodnationalhistorictrail.org/.

<sup>&</sup>lt;sup>8</sup> Moose Pass, Alaska website (n.d.). *History*. Retrieved December 14, 2011 from http://www.moosepass.net.

Alaska Railroad. A Solstice Festival each summer attracts visitors and raises funds to maintain the community hall and support the fire department and library.

In 2009, legislation was passed to create the Kenai Mountains-Turnagain Arm (KMTA) National Heritage Area. The purpose of the designation is to encourage preservation and conservation of the region's nationally important story about the many different people who traveled through, settled, and developed the rugged mountain valleys of the KMTA region. 10

# **Natural Resources and Environment**

Moose Pass is located in a maritime climate zone, with temperatures moderated by the ocean. Average winter temperatures in Moose Pass range from 6 to 44 °F, and average summer temperatures vary from 41 to 67 °F. The average annual precipitation is 28 inches, and average annual snowfall is 81 inches. 11

Moose Pass is located in a lower elevation portion of the Kenai Peninsula that is covered by boreal forest and lakes. 12 The community is within the boundary of the Chugach National Forest, the western and northern-most National Forest, comprising 5.5 million acres. The eastern portion of the Kenai Peninsula makes up 21% of the total area of this National Forest. Of the 5,000 moose living on the Kenai Peninsula, 1,000 live within the National Forest's boundary. The Russian River, located just west of Moose Pass along the Chugach National Forest border, attracts approximately 150,000 sport fishermen each year. <sup>13</sup> The Kenai National Wildlife Refuge (NWR) begins approximately 40 miles southwest of Moose Pass. The NWR was established to conserve moose, bears, mountain goats, Dall sheep, wolves and other furbearers, salmonids and other fish, and waterfowl and other migratory and non-migratory birds. 14

Natural hazards present in the Kenai Peninsula Borough include high risk of earthquake and volcanic activity, and medium risk of flooding events, wildfire, tsunami, and seiche. The area is also rated at risk of snow and avalanche, landslides, erosion, and drought. <sup>15</sup> In January and February of 2000, a series of avalanches closed the Seward Highway. Moose Pass and several other communities were cut off from road, rail, and air access, and faced supply shortages. Frequent and often devastating earthquakes and volcanic activity occur in the area as a result of nearby fault lines and subduction of the Pacific plate under the North American plate. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt, and Mount Spurr. 16

<sup>&</sup>lt;sup>10</sup> Kenai Mountains-Turnagain Arm National Heritage Area (2011). *Draft Management Plan*. Retrieved December 14, 2011 from http://www.kmtacorridor.org/files/KMTA\_plan\_low\_res.pdf.

<sup>&</sup>lt;sup>11</sup> Temperature, precipitation and snowfall information retrieved December 14, 2011 from www.weatherbase.com. <sup>12</sup> U.S. Fish and Wildlife Service (n.d.). Kenai National Wildlife Refuge. Retrieved December 14, 2011 from http://kenai.fws.gov/.

<sup>&</sup>lt;sup>13</sup> Chugach National Forest website (n.d.). Forest Facts. Retrieved December 14, 2011 from http://www.fs.usda.gov/chugach/.

<sup>&</sup>lt;sup>14</sup> See footnote 12.

<sup>&</sup>lt;sup>15</sup> State of Alaska (2002). *Hazard Mitigation Plan*. Retrieved February 8, 2012 from http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%

<sup>&</sup>lt;sup>16</sup> Kenai Peninsula Borough (2010). All-Hazard Mitigation Plan. Retrieved January 26, 2012 from http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm

According to the Alaska Department of Environmental Conservation, there are no notable active environmental cleanup sites located in Moose Pass as of July 2012.<sup>17</sup>

# **Current Economy**<sup>18</sup>

The economy of Moose Pass is tied to forest resources. The U.S. Forest Service's Kenai Work Station is an important employer in the community, providing approximately 40 to 45 full time positions and 35 to 40 seasonal positions. As of April 2012, approximately 25 Moose Pass residents held full time employment at the Kenai Work Station. Additional employers in the community include the Department of Transportation, U.S. Postal Service, Alaska Railroad, state troopers, and the Kenai Peninsula School District. Many local residents also work as craftsmen. 1920,21 According to a survey conducted by the AFSC in 2011, community leaders reported that timber harvest and management is the natural resource-based industry on which the local economy is most dependent. The community is not located along the coast, and although a number of individual residents participate in commercial fishing (see Commercial Fishing section of this profile), employment within the community of Moose Pass itself is not based on this fishing activity. It is important to note that two active sport fish guide businesses were registered in Moose Pass in 2010, providing some local employment opportunity (see the *Recreational Fishing* section of this profile).

Based on household surveys conducted for the 2006-2010 ACS, <sup>22</sup> in 2010, the per capita income in Moose Pass was estimated to be \$39,543 and the median household income was estimated to be \$68,571. This represents a sizeable increase in per capita income from \$28,147 in the year 2000. In contrast, median household income declined substantially from \$87,147 in 2000. If inflation is taken into account by converting the 2000 values to 2010 dollars. <sup>23</sup> the increase in per capita income is less substantial (real per capita income in 2000 was \$37,013), and the decline in median household income is even greater (real median household income in 2000 was \$114,786). In 2010, Moose Pass ranked 12<sup>th</sup> of 305 Alaskan communities with per capita income data that year, and 50<sup>th</sup> in median household income, out of 299 Alaskan communities with household income data. It is possible that household income estimates may be inflated, as one or more Moose Pass residents may have over-reported personal income levels.<sup>24</sup>

<sup>&</sup>lt;sup>17</sup> Alaska Dept. of Environmental Conservation (n.d.). *List of contaminated sites*. Retrieved April 17, 2012 from http://dec.alaska.gov/spar/csp/list.htm.

<sup>&</sup>lt;sup>18</sup> Unless otherwise noted, all monetary data are reported in nominal values.

<sup>&</sup>lt;sup>19</sup> Moose Pass Sportsman's Club. (2012). Moose Pass Community Facilities Development Plan.Parts I, II, III, IV,

<sup>&</sup>lt;sup>20</sup> Alaska Dept. of Comm. 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>21</sup> Personal communication with a Moose Pass resident.

<sup>&</sup>lt;sup>22</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.

<sup>&</sup>lt;sup>23</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.gov/research/cpi/inflationcalc.htm).

<sup>&</sup>lt;sup>24</sup> See footnote 21.

The small population size in Moose Pass may have prevented the 2006-2010 ACS from accurately portraying economic conditions. <sup>25</sup> An alternative estimate of per capita income is obtained from economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Moose Pass in 2010 is \$15,070.<sup>26,27</sup> This alternative estimate is lower than the 2006-2010 ACS per capita income estimate, and suggests that caution is warranted when citing a large increase in per capita income in Moose Pass between 2000 and 2010. It should be noted that both ACS and DOLWD data are based on wage earnings, and these income statistics do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS, a larger percentage of the Moose Pass population, aged 16 and older, was estimated to be in the civilian labor force (81.3%) than in the civilian labor force statewide (68.8%). No local residents were estimated to be living below the poverty line in 2010, compared to a 9.5% of Alaska residents overall, and the unemployment rate was estimated to be 7.1%, compared to a statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in 2010 was 13.8%, compared to a statewide unemployment rate estimate of 11.5%. <sup>28</sup>

Also based on the 2006-2010 ACS, a majority of the Moose Pass workforce was estimated to be employed in the private sector (61.5%). Of the 179 people aged 16 and over that were estimated to be employed in the civilian labor force, the greatest number of workers was employed in agriculture, forestry, fishing and hunting, and mining (22.9%), transportation, warehousing, and utilities (22.3%), educational services, health care, and social assistance (17.3%), and construction industries (14.5%). When viewing employment in terms of occupation, the greatest numbers of workers were estimated to be employed in management/ professional (49.2%) and service occupations (28.5%). Compared to 2000, there was a significant decline in census reported employment in natural resource/construction/maintenance occupations, from 40.5% in 2000 to 0% in 2010. Information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

<sup>&</sup>lt;sup>25</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.

<sup>&</sup>lt;sup>26</sup> Alaska Dept. of Labor and Workforce Development (n.d.). *Alaska Local and Regional Information*. Retrieved May 22, 2012 from: http://live.laborstats.alaska.gov/alari/.

<sup>&</sup>lt;sup>27</sup> See footnote 22.

<sup>&</sup>lt;sup>28</sup> See footnote 26.

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

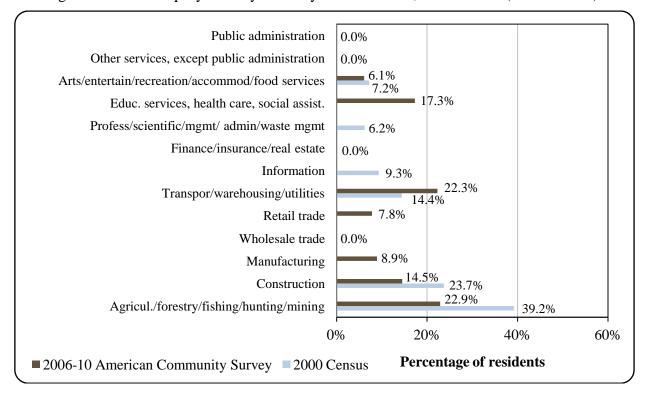
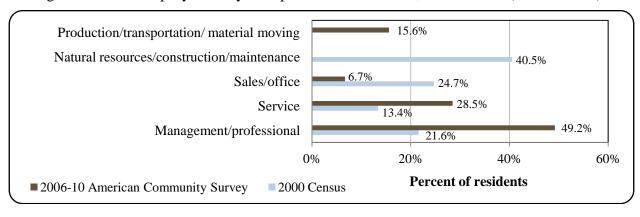


Figure 4. Local employment by occupation in 2000-2010, Moose Pass (U.S. Census).



An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 83 employed residents in Moose Pass in 2010, of which 19.3% were employed in state government, 15.7% in trade, transportation, and utilities, 15.7% in leisure and hospitality, 13.3% in local government, 12% in natural resources and mining, 8.4% in construction, 6% in manufacturing, 4.8% in professional and business services, 2.4% in education and health services, and 2.4% in other industries. As with income and poverty statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents' activity in the personal use and subsistence economy.

-

<sup>&</sup>lt;sup>29</sup> Ibid.

#### Governance

Moose Pass is an unincorporated community in the Kenai Peninsula Borough. The community does not administer any local taxes, although the Borough does administer a 3% sales tax and 4.5 mills property tax. Given that Moose Pass is not incorporated, there was no municipal revenue reported between 2000 and 2010. The Moose Pass Sportsman's Club (MPSC) serves as the local representative body for Moose Pass. Organizational leadership includes a President, Vice President, Treasurer, and Secretary. The MPSC owns and manages the community hall and manages community functions. It also funds civic activities, and represents the community with other government agencies. In 2011, the MPSC received \$50,000 from the State of Alaska toward development of a comprehensive community land use plan. No fisheries-related grants were reported received by the community between 2000 and 2010. Information about selected local revenue sources in Moose Pass is presented in Table 2.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Moose Pass 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	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a
2010	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> Alaska Department of Commerce, Community, and Economic Development. (n.d.). *Financial Documents Delivery System*. Retrieved at http://www.commerce.state.ak.us/dcra/commfin/CF\_FinRec.cfm. Data retrieved April 15, 2011.

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

<sup>&</sup>lt;sup>3</sup>Alaska Department of Revenue. (n.d.). (2000-2009) Taxes and Fees Annual Report. Accessed at www.tax.state.ak.us. Data retrieved April 15, 2011.

<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>30</sup> Alaska Dept. of Comm. And Rural Affairs (n.d.). *Community Information Summaries*. Retrieved December 27, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF CIS.htm.

<sup>&</sup>lt;sup>31</sup> Moose Pass Sportsman's Club. (2012). Moose Pass Community Facilities Development Plan.Parts I, II, III, IV, and V.

<sup>&</sup>lt;sup>32</sup> Alaska Office of Management and Budget. (2011). *Total Project Snapshot Report: Moose Pass Sportsman's Club – Community Development.* Retrieved August 8, 2013 from http://omb.alaska.gov/ombfiles/12\_budget/CapBackup/proj55326.pdf.

<sup>5</sup> Alaska Department of Commerce, Community, and Economic Development. (n.d.). Community Funding Database. Retrieved at http://www.commerce.state.ak.us/dca/commdb/CF\_Grants.htm. Data retrieved April 15, 2011.

Moose Pass was not included under the Alaska Native Claims Settlement Act, and is not federally recognized as a Native village.<sup>33</sup> Offices of the Alaska Department of Fish and Game (ADF&G), Alaska Department of Natural Resources (DNR), Alaska Department of Commerce, Community, and Economic Development, the National Marine Fisheries Service (NMFS), and the U.S. Bureau of Citizenship and Immigration Services are all located in Anchorage, a 100 mile drive north from Moose Pass. Several DNR offices (Division of Forestry and a Division of Parks and Recreation office) are also located in Soldotna, a 65 mile drive west from the community. An office of ADF&G is also located in Kenai, 75 miles west of Moose Pass, and a NMFS enforcement office is located in Seward, 30 miles to the south.

## Infrastructure

Connectivity and Transportation

The Seward Highway connects to Alaska's road system, with access to Anchorage located 100 miles north by road, as well as other cities on the Kenai Peninsula. Seward, 30 miles south of Moose Pass, offers access to the Alaska Railroad, harbor/dock facilities, and the Alaska State Ferry. Seward has a state-maintained 4533-ft-long by 100-ft- wide runway. No commercial scheduled flights service Seward, but the runway is open for air taxis and general aviation. Commercial flights serve the Kenai Municipal Airport, located 75 miles west of Moose Pass. The approximate cost to travel by air roundtrip to Anchorage from Kenai in early June 2012 was \$179. Air access to Moose Pass is also available by seaplane, with a landing site at Summit Lake, located 16 miles north of the community along the Seward Highway. The seward Highway.

#### **Facilities**

In Moose Pass, a majority of homes retrieve water from individual wells, and the school operates its own water system. Septic tanks and outhouses are used to manage wastewater and sewage; over 50% of households are fully plumbed. Many homes in this area are used only seasonally. A landfill is operated by the Borough. Borough refuse transfer containers are located at mile 24 on the Seward Highway. Electricity is provided to the community by Chugach Electric Association, and is generated using hydro and natural gas. Public safety services are provided by state troopers stationed in Soldotna and the Moose Pass Volunteer Fire/Emergency Medical Services. <sup>38</sup> The Moose Pass Sportsman's Club operates a community hall, a public library, and

<sup>&</sup>lt;sup>33</sup> Alaska Dept. of Comm. 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>34</sup> Ibid.

<sup>&</sup>lt;sup>35</sup> Airport information retrieved December 14, 2011 from http://www.airnav.com/.

<sup>&</sup>lt;sup>36</sup> This price was calculated on November 21, 2011 using kayak.com.

<sup>&</sup>lt;sup>37</sup> See footnote 33

<sup>38</sup> Ibid.

volunteer fire department.<sup>39</sup> A school library is also available. Telephone and internet service providers offer service in Moose Pass, but no cable service provider is reported.<sup>40, 41</sup>

According to an AFSC survey conducted in 2011, community leaders reported that no fishing-related infrastructure was present in Moose Pass. They also said that residents travel to Seward, Cooper Landing, and Soldotna to access fishing support businesses not available in Moose Pass.

#### **Medical Services**

Health care for Moose Pass residents is available in Soldotna at Central Peninsula General Hospital (65 miles west) and in Seward at Providence Seward Medical Center (30 miles south). Emergency Services have highway and helicopter access and are within 30 minutes of a higher-level satellite health care facility. Emergency service is provided by 911 Telephone Service and volunteers.<sup>42</sup>

## Educational Opportunities

There is one school in the community, which offers a Kindergarten through 12<sup>th</sup> grade education. The Moose Pass School had a total of 17 students and 1 teacher in 2011.<sup>43</sup>

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

## History and Evolution of Fisheries

The community of Moose Pass has historically been more connected to the mining and timber industries than the commercial fishing industry (see the *History, Traditional Knowledge, and Culture* section of this profile). Nevertheless, individual residents actively participate in commercial, sport, and subsistence fisheries.

Although Moose Pass is not located directly on the coast, it is worth noting that the marine areas surrounding the Kenai Peninsula are encompassed by Pacific Halibut Fishery Regulatory Area 3A, the Central Gulf of Alaska Sablefish Regulatory Area, and Federal Statistical and Reporting Area 630. Moose Pass is not eligible to participate in either the Community Development Quota (CDQ) program or the Community Quota Entity (CQE) program.

According to a survey conducted by the AFSC in 2011, community leaders reported that Moose Pass participates in fisheries management processes in Alaska. They indicated that the primary way in which the community is engaged is by sending a representative to sit on regional fisheries advisory and/or working groups run by ADF&G.

<sup>41</sup> Personal communication with a Moose Pass resident.

<sup>&</sup>lt;sup>39</sup> Alaska Office of Management and Budget. (2011). *Total Project Snapshot Report: Moose Pass Sportsman's Club – Community Development.* Retrieved August 8, 2013 from

http://omb.alaska.gov/ombfiles/12 budget/CapBackup/proj55326.pdf.

<sup>&</sup>lt;sup>40</sup> See footnote 33.

<sup>&</sup>lt;sup>42</sup> See footnote 33.

<sup>&</sup>lt;sup>43</sup> Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from http://eed.alaska.gov/stats/.

## **Processing Plants**

ADF&G's 2010 Intent to Operate list did not list a registered processing plant in Moose Pass. Processing facilities were registered in Seward, 30 miles south of Moose Pass, as well as other communities on the Kenai Peninsula.

#### Fisheries-Related Revenue

Between 2000 and 2010, no data were reported about fisheries-related revenue received by Moose Pass (Table 3).

# Commercial Fishing

Between 2000 and 2010, several Moose Pass residents were involved in commercial fishing activity as crew members, vessel owners, and permit and quota share account holders. In 2010, five residents held commercial crew licenses and one fishing vessel was primarily owned by a Moose Pass resident. Information about the commercial fishing sector in Moose Pass is presented in Table 5.

In 2010, two residents of Moose Pass held Bristol Bay salmon set gill net permits issued by the Commercial Fisheries Entry Commission (CFEC), and both were actively fished. One halibut CFEC permit was held between 2003 and 2006, but was actively fished only in 2003. Likewise, one sablefish permit was held between 2003 and 2006, but was only actively fished during 2003. Moose Pass residents did not hold any Federal Fisheries Permits (FFPs) or License Limitation Program permits (LLPs) during the 2000-2010 period. State and federal permit holdings in Moose Pass are displayed in Table 4.

Also in 2010, two Moose Pass residents held quota share accounts in the federal halibut catch share fishery, holding a total of 18,083 quota shares (Table 6). The annual halibut individual fishing quota (IFQ) allotment increased between 2000 and 2005, then declined again in the second half of the decade. In the same year, one resident held a quota share account in the federal sablefish catch share fishery, holding a total of 5,194 quota shares (Table 7). Sablefish allotment also declined in the second half of the decade. There were no quota share account holders in federal crab catch share fisheries in Moose Pass between 2005 and 2010 (Table 8).

Given the lack of fish buyers in Meyers Chuck (Table 5), no landings or ex-vessel revenue were generated locally between 2000 and 2010 (Table 9). Information about landings and ex-vessel revenue generated by vessel owners residing in Moose Pass is considered confidential between 2000 and 2010 due to the small number of participants (Table 10).

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

fa n/a fa n/a fa n/a fa n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
a n/a	n/a			n/a	n/a	n/a	n/a	n/a	n/a
		n/a	/					11/ a	11/ a
a n/a	,		n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
a n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
a n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
a n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
a n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
a n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
a n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
a n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
′a n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
′a n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	'a n/a	da         n/a         n/a           da         n/a         n/a	fa         n/a         n/a         n/a           fa         n/a         n/a         n/a	fa         n/a         n/a         n/a           fa         n/a         n/a         n/a           n/a         n/a         n/a         n/a	fa         n/a         n/a         n/a         n/a           fa         n/a         n/a         n/a         n/a	fa         n/a         n/a         n/a         n/a         n/a           fa         n/a         n/a         n/a         n/a         n/a         n/a           fa         n/a         n/a         n/a         n/a         n/a         n/a         n/a	fa         n/a         n/a	da         n/a         n/a	fa         n/a         n/a

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

<sup>&</sup>lt;sup>1</sup> Alaska Department of Commerce, 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 Commerce, Community, and Economic Development. (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 financial statements. Alaska Department of Commerce, Community, and Economic Development. (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, Moose Pass: 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	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Halibut (CFEC) <sup>2</sup>	Total permits	0	0	0	1	1	1	0	0	0	0	0
	Fished permits	0	0	0	1	0	0	0	0	0	0	0
	% of permits fished	-	-	-	100%	0%	0%	-	-	-	-	-
	Total permit holders	0	0	0	1	1	1	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	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) <sup>2</sup>	Total permits	0	0	0	1	1	1	0	0	0	0	0
	Fished permits	0	0	0	1	0	0	0	0	0	0	0
	% of permits fished	-	-	-	100%	0%	0%	-	-	-	-	-
	Total permit holders	0	0	0	1	1	1	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	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) <sup>2</sup>	Total permits	2	2	2	1	1	1	3	2	3	2	2
	Fished permits	2	1	1	1	1	1	2	2	3	2	2
	% of permits fished	100%	50%	50%	100%	100%	100%	67%	100%	100%	100%	100%
	Total permit holders	2	2	2	1	1	1	3	2	3	2	2
Total CFEC Permits <sup>2</sup>	Permits	2	2	2	3	3	3	3	2	3	2	2
	Fished permits	2	1	1	3	1	1	2	2	3	2	2
	% of permits fished	100%5 0%	50%	100%	33%	33%	67%	100%	100%	100%	100%	
	Permit holders	2	2	2	2	2	2	3	2	3	2	2

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

<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 Moose Pass: 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 Moose Pass <sup>2</sup>	Total Net Lb Landed In Moose Pass <sup>2,5</sup>	Total Ex- Vessel Value Of Landings In Moose Pass 2,5
2000	2	0	0	1	0	0	0	\$0
2001	5	0	0	1	0	0	0	\$0
2002	2	0	0	1	0	0	0	\$0
2003	5	0	0	1	0	0	0	\$0
2004	4	0	0	1	0	0	0	\$0
2005	5	0	0	1	0	0	0	\$0
2006	4	0	0	1	0	0	0	\$0
2007	5	0	0	1	0	0	0	\$0
2008	4	0	0	1	0	0	0	\$0
2009	5	0	0	1	0	0	0	\$0
2010	5	0	0	1	0	0	0	\$0

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 Moose Pass: 2000-2010.

Year	Number of Halibut Quota Share	Halibut Quota	Halibut IFQ Allotment (pounds)
	<b>Account Holders</b>	Shares Held	
2000	1	374	37
2001	1	374	44
2002	1	374	45
2003	1	374	45
2004	1	374	50
2005	1	374	51
2006	1	374	50
2007	2	18,083	2,562
2008	2	18,083	2,368
2009	2	18,083	2,122
2010	2	18,083	1,954

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 Moose Pass: 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	1	5,194	507
2008	1	5,194	451
2009	1	5,194	409
2010	1	5,194	369

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 Moose Pass: 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 Moose Pass: 2000-2010.

Total Net Pounds <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-v	essel Val	ue (nomii	nal U.S. de	ollars)				
	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

\$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.]

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

Sablefish

Salmon

 $Total^2$ 

<sup>&</sup>lt;sup>1</sup> Net lb refers to the landed weight recorded in fish tickets.

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

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

				Tota	ıl Net Pou	nds <sup>1</sup>					
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	-	-	-	-	-	-	-	-	-	-	-
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	-	-	-	-	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	-	-	-	-	-	-	-	-	-
Total <sup>2</sup>	0	0	0	0	0	0	0	0	0	0	0
Ex-vessel Value (nominal U.S. dollars)											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	-	-	-	-	-	-	-	-	-	-	-
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	-	-	-	-	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	-	-	-	-	-	-	-	-	-
Total <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-

Note: Cells showing "-" indicate that the data are considered confidential.

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.]

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

Totals only represent non-confidential data.

## Recreational Fishing

Starting in 2005, at least one active sport fish guide businesses was present per year in Moose Pass through 2010, and the number of licensed sport fish guides present in the community increased from one in 2000 to six by 2010. No sportfishing licenses were sold in the community, but residents purchased between 100 and 159 (irrespective of point of sale) each year during the 2000-2010 period. Information related to sportfishing businesses is presented in Table 11.

In a survey conducted by the AFSC in 2011, community leaders reported that freshwater sportfishing is accessed near Moose Pass by hiking or flying in to area lakes and streams. Nearby Russian River, a tributary of the Kenai River, draws approximately 150,000 sport fishermen per year. The Alaska Statewide Harvest Survey, sonducted by ADF&G between 2000 and 2010, recorded the following species targeted by private anglers in Moose Pass between 2000 and 2010: Chinook, coho, sockeye, and pink salmon, rainbow trout, Dolly Varden char, Arctic grayling, Pacific halibut, rockfish, and lingcod. The survey also noted the harvest of razor clams Moose Pass sport fishermen. No kept/release log book data were reported for fishing charters out of Moose Pass between 2000 and 2010.

Table 11. Sport Fishing Trends, Moose Pass: 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 Moose Pass <sup>2</sup>
2000	0	1	100	0
2001	0	1	106	0
2002	0	1	113	0
2003	0	1	119	0
2004	0	2	137	0
2005	1	2	159	0
2006	1	4	131	0
2007	1	3	127	0
2008	1	3	128	0
2009	1	3	137	0
2010	2	6	119	0

-

<sup>&</sup>lt;sup>44</sup> Chugach National Forest website (n.d.). *Forest Facts*. Retrieved December 14, 2011 from http://www.fs.usda.gov/chugach/.

<sup>&</sup>lt;sup>45</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/sportfishingsurvey/ (Accessed September 2011).

<sup>&</sup>lt;sup>46</sup> Alaska Department of Fish and Game (2011). *Alaska sport fish charter logbook database*, 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.]

Table 11 cont'd. Sport Fishing Trends, Moose Pass: 2000-2010.

	Saltw	ater	Freshwater			
Year	Angler Days Fished – Non- residents <sup>3</sup>	Angler Days Fished – Non- residents <sup>3</sup>	Angler Days Fished – Alaska Residents <sup>3</sup>	Angler Days Fished – Alaska Residents <sup>3</sup>		
2000	68,928	40,179	42,157	139,737		
2001	62,340	22,585	28,245	69,053		
2002	53,537	22,745	26,479	83,335		
2003	49,366	24,522	35,299	80,368		
2004	57,167	24,224	39,009	83,478		
2005	65,997	27,827	37,309	91,489		
2006	67,259	23,225	33,988	76,100		
2007	67,556	24,465	31,105	89,061		
2008	54,136	21,762	28,780	70,285		
2009	41,925	21,446	24,959	77,945		
2010	47,656	20,292	28,294	71,555		

<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.]

Moose Pass is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, both saltwater and freshwater sportfishing at this regional level were substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska residents logged 20,292 saltwater angler days and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska resident anglers, and the opposite was true of freshwater sportfishing. For both Alaska resident and non-Alaska resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased between 2000 and 2010. This information about regional sportfishing activity is presented in Table 11.

#### Subsistence Fishing

According to a survey conducted by the AFSC in 2011, community leaders indicated that residents of Moose Pass do not participate in subsistence activities. Data presented about subsistence harvest in Table 12 echoes this, with no information reported regarding per capita subsistence harvest or the percentage of households utilizing various marine resources for subsistence purposes between 2000 and 2010 (Table 12). In addition, no information was reported by management agencies regarding subsistence harvest of marine invertebrates, non-

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/sportfishingsurvey/ (Accessed September 2011).

salmon fish, halibut, or marine mammals (Table 13 through 15). However, several Moose Pass households were reported to have participated in the subsistence salmon fishery between 2000 and 2008. In 2008, the last year for which data were reported, one Moose Pass household was issued a subsistence salmon permit. No information was available about the number of salmon harvested with the permit that year. For years in which information was reported, sockeye was the primary species harvested using subsistence salmon permits in Moose Pass (Table 13).

#### **Additional Information**

According to information compiled about Moose Pass for the Kenai Mountains-Turnagain Arm National Heritage Area, the community has a resident ghost:

"The counter at the present day grocery store was at one time part of the original roadhouse bar. In *Alaska's Kenai Peninsula: The Road We've Traveled,* historian Ann C. Whitmore-Painter writes, "Locals say an old-timer died at a barstool there and haunts the store today." 'Al' is friendly ghost, however." "47

Table 12. Subsistence Participation by Household and Species, Moose Pass: 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).

<sup>&</sup>lt;sup>47</sup> Kenai Mountains-Turnagain Arm National Heritage Area website. (n.d.) *Communities within the Heritage Area*. Retrieved December 14, 2011 from http://www.kmtacorridor.org/communities.php.

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Moose Pass: 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	1	1	n/a	n/a	8	n/a	1	n/a	n/a
2001	3	3	n/a	n/a	n/a	n/a	30	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	1	2	n/a	n/a	n/a	n/a	30	n/a	n/a
2004	2	2	n/a	n/a	n/a	n/a	15	n/a	n/a
2005	1	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	2	2	n/a	n/a	n/a	n/a	55	n/a	n/a
2007	2	2	n/a	n/a	n/a	n/a	100	n/a	n/a
2008	1	1	n/a	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	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.* 

Table 14. Subsistence Halibut Fishing Participation, Moose Pass: 2003-2010.

Year	SHARC Issued	SHARC Cards 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.

<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 15. Subsistence Harvests of Marine Mammal Resources, Moose Pass: 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	n/a	n/a	n/a	n/a	n/a
2001	n/a	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	n/a
2003	n/a	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	n/a
2005	n/a	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	n/a
2007	n/a	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	n/a
2009	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

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

<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.