Port Graham

People and Place

Location¹



Port Graham is located at the southern end of the Kenai Peninsula on the shore of Port Graham. Also known as Paluwik in the Alutiiq language, it is adjacent to Nanwalek, 7.5 miles southwest of Seldovia, and 28 air miles from Homer. The community encompasses 5.9 square miles of land. Port Graham is unincorporated, is part of the Kenai Peninsula Census area, and is under the jurisdiction of the Kenai Peninsula Borough.

Demographic Profile²

In 2010, there were 177 residents in Port Graham, making it the 207th largest city out of 352 total Alaskan communities with recorded populations in that year. Overall between 1990 and 2010, the population has increased by 6.2%. Between 2000 and 2009, Alaska Department of Labor population estimates indicate that the population of permanent residents fell by 19.88%, though the U.S. Census shows that the population remained the same between 2000 and 2010. The Port Graham average annual growth rate between 2000 and 2009 was -1.26%, indicating a slow rate of decline. The change in population from 1990 to 2010 is provided in Table 1.

The majority of residents in Port Graham in 2010 identified themselves as American Indian and Alaska Native (71.2%), with the remaining racial composition as follows: White (8.5%), African-American (1.1%), and two or more races (19.2%). There were no residents of Port Graham that identified themselves as Hispanic in 2010. The percentage of the population identifying themselves as American Indian and Alaska Natives decreased by 13.6% from 2000 to 2010, with corresponding increases in the percentage of the population identifying themselves as two or more races and African-American. The change in racial and ethnic composition from 2000 to 2010 is provided in Figure 1 below.

In 2010 the average household size was 2.24, a slight decrease from 2.7 in 1990 and 2.44 in 2000. However, there has been an increase in the number of households from 60 in 1990 to 70 in 2000 to 79 in 2010. Of those households surveyed in 2010, 49 were owner-occupied and 29 were vacant, with 30 households being rented in 2010. None of the population of Port Graham was living in group quarters in 2010.

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¹ 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.

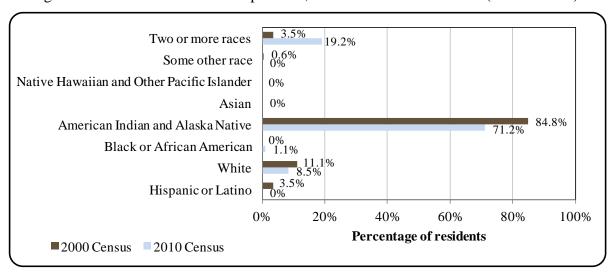
² U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census and the 2010 American Community Survey 5-year estimates. Retrieved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

Table 1. Population in Port Graham from 1990 to 2010 by Source.

| Year | U.S. Decennial Census ¹ | Alaska Dept. of Labor Estimate of Permanent Residents ² |
|------|---------------------------------------|--|
| 1990 | 166 | - |
| 2000 | 176 | - |
| 2001 | - | 178 |
| 2002 | - | 174 |
| 2003 | - | 165 |
| 2004 | - | 153 |
| 2005 | - | 129 |
| 2006 | - | 136 |
| 2007 | - | 137 |
| 2008 | - | 136 |
| 2009 | - | 137 |
| 2010 | 177 | - |

¹ (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, Port Graham: 2000-2010 (U.S. Census).

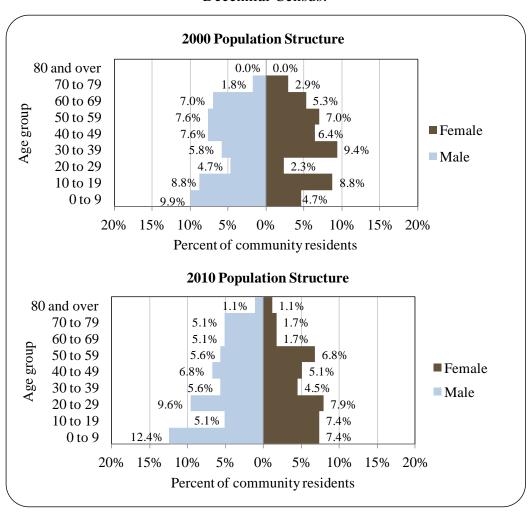


² Alaska Department of Labor. (2011). *Current population estimates for Alaskan Communities*. Retrieved April 15, 2011, from http://labor.alaska.gov/research/pop/popest.htm.

In a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that Port Graham's population is composed entirely of year-round residents.

In 2010, the gender makeup was slightly skewed, at 56.5% male and 43.5% female, and slightly more skewed toward males than the state as a whole (52% male, 48% female). The median age in Port Graham was 30.3 years, lower than the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. The greatest percentage of residents fell within the age category 0-29 years old, with the next largest percentage for the age category 40-59 years old. Relatively few people were 60 or older. The overall population structure of Port Graham in 200 and 2010 is shown in Figure 2.

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



In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),³ 80.9% of residents aged 25 and over held a high school diploma or higher degree in 2009, compared to 90.7% of Alaskan residents overall. Also in 2009, 11.8% of the population had less than a ninth grade education, compared to 3.5% of Alaskan residents overall; 7.4% had a 9th to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 36.8% held a high school diploma or equivalent, compared to 27.4% of Alaskan residents overall; 2.9% had earned an Associate's degree, compared to 8% of Alaskan residents overall; 0% earned a Bachelor's degree, compared to 17.4% of Alaskan residents overall; and 4.4% earned a graduate or professional degree, compared to 9.6% of Alaskan residents overall.⁴

History, Traditional Knowledge, and Culture⁵

Port Graham is a traditional Alutiiq, or Sugpiaq, village with a fishing and subsistence lifestyle. The earliest known settlers were Russians from the nearby trading post at Nanwalek. In 1850, the Russian-American Company established a coal mine at Port Graham, but it was not economical and lasted only a few years. Port Graham became the site of a cannery and wharf in 1909, according to the U.S. Geological Survey. In 1911, the Fidalgo Island Packing Company established a cannery, and Aleuts from Nanwalek moved to the community. A post office operated between 1938 and 1961. The cannery burned in 1960. It was rebuilt in 1968 by Whitney/Fidalgo and sold to the village corporation in 1983. A pink salmon hatchery began operations in 1991, but in January 1998, the hatchery and salmon processing plant were destroyed by fire. The hatchery and processing plant were rebuilt and re-opened in June 1999. The cannery continued to be the main economic activity in the community, employing residents of Nanwalek as well. However, in a survey conducted by the AFSC in 2011, community leaders indicated that the processing plant is not currently operating.

Natural Resources and Environment

Port Graham experiences cool winters and moderate summers: temperatures range from $14 - 27^{\circ}F$ in the winter (-10 to -3°C) and $45 - 65^{\circ}F$ in the summer (7 to $18^{\circ}C$). Port Graham receives an average of 24 inches of precipitation per year.

Port Graham's economy depends on the area's natural resources, especially fish. In a survey conducted by NOAA's AFSC in 2011, community leaders reported local reliance on fishing, ecotourism, and sport hunting and fishing.

³ 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.

⁴ 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.

⁵ 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.

Port Graham is located near the Kachemak Bay State Park and State Wilderness Park. Alaska's first state park, and only wilderness park, contains roughly 400,000 acres of mountains, glaciers, forests and ocean. The bay's twisted rock formations are evidence of the movement of the earth's crust. Highlighted by constantly changing weather patterns, the park's outstanding scenery is a backdrop for high quality recreation. Park visitors will find opportunities for fishing, boating, kayaking, hiking, camping and mountain sports. Kachemak Bay is a critical habitat area, supporting many species of marine life. Visitors frequently observe sea otters, seals, porpoise and whales. Land mammals include moose, black bear, mountain goats, coyotes and wolves. The many species of birds that inhabit the bay, including eagles, gyrfalcons and puffins, make it a popular area for bird watching.⁷

Port Graham also lies near the western border of Kenai Fjords National Park. This National Park was established in 1980 to "maintain unimpaired the scenic and environmental integrity of the Harding Icefield, its outflowing glaciers and coastal fjords and islands." Fifty-six percent of the park is covered by ice. Animals living in the mountains, the shores and the fjords of the National Park include black bear, brown bear, moose, mountain goat, sea otter, Steller sea lion, harbor seal, Dall's porpoise, Pacific white-sided dolphin, orca, minke whale, humpback whale, fin whale, and birds including bald eagles, puffins, murres, Steller's jay, black-billed magpie, peregrine falcon, and marbled murrelet. Portions of both Kenai Fjords National Park and the Kachemak Bay State Park and State Wilderness Park are included in the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. 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. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures and soil liquefaction. ¹⁰

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields on and off shore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years. ¹¹

The Port Graham/Nanwalek Watershed Council was formed in the 1990s to protect and preserve the two adjacent watersheds of English Bay River and Port Graham River and their tributaries. Because the ecosystems are largely healthy, the management approach of the Watershed Council is to prevent degradation as both communities experience growth in transportation systems, housing, and commercial resource harvests of timber and fish. The

⁸ National Park Service (2010). Kenai Fjords National Park Retrieved December 27, 2011 from http://www.nps.gov/kefj/.

⁷ Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. *Kachemak Bay State Park and State Wilderness Park*. Retrieved February 17, 2012 from http://dnr.alaska.gov/parks/units/kbay/kbay.htm.

⁷ Unless otherwise noted, all monetary data are reported in nominal values.

⁹ Wilderness.net website. (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from http://www.wilderness.net.

¹⁰ Kenai Peninsula Borough. 2010. *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm

¹¹ Resource Development Council. (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from http://www.akrdc.org/issues/oilgas/overview.html.

Council was formed as a result of meetings convened by the Chugachmiut Environmental Health Program to examine where funding for wetlands protection was most needed in the region.¹²

According to the Alaska Department of Environmental Conservation (DEC), there are no notable active environmental cleanup sites located in Port Graham as of October 20123. ¹³

Current Economy¹⁴

The economy of Port Graham is somewhat influenced by commercial fishing. Although only a small number of local residents are directly engaged in commercial fishing activities themselves, a new \$4.5 million fish cannery 15 and hatchery was completed in June 1999. However in a survey conducted by NOAA's AFSC in 2011, community leaders report that the cannery is currently not operational. In addition to the formal economy, residents of Port Graham participate in subsistence fishing and hunting to supplement their incomes.

Based on the 2006-2010 ACS, ¹⁶ the per capita income in Port Graham in 2010 was \$9,368, and the median household income in 2010 was \$18,942, compared to \$13,666 and \$40,250 in 2000, respectively. However, after accounting for inflation by converting the 2000 values to 2010 dollars, ¹⁷ the real per capita income (\$17,971) and the real median household income in 2000 (\$52,928) indicate a substantial decrease between 2000 and 2010. In 2010, Port Graham ranked 282nd out of 305 communities with per capita income that year, and 280th out of 299 Alaskan communities with household income data. Port Graham's small population size may have prevented the ACS from accurately portraying economic conditions. ¹⁸ A potentially more accurate 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, the per capita income in Port Graham in 2010 was \$7,739, which indicates an overall decrease compared to the real per capita income values reported by the U.S. Census in 2000. 19 This is supported by the fact that 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 2010.²⁰ However, it should be noted that ACS and DOLWD data are based on wage earnings and do not take into account the value of subsistence within the local economy.

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¹² U.S. Environmental Protection Agency. March 2000. *Tribal Wetland Program Highlights*. EPA 843-R-99-002. Retrieved December 26, 2011 from http://water.epa.gov/.

¹³ Alaska Dept. of Environmental Conservation (n.d.). *List of Contaminated Sites*. Retrieved April 17, 2012 from http://dec.alaska.gov/spar/csp/list.htm.

¹⁴ Unless otherwise noted, all monetary data is reported in nominal values.

¹⁵ 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.

¹⁶ 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.

¹⁷ Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved October 18, 2011 from the Alaska Department of Labor, http://labor.alaska.gov/research/cpi/inflationcalc.htm).

¹⁸ See footnote 16

¹⁹ 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/.

²⁰ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

Based on the 2006-2010 ACS, 2010, 55.4% of the population age 16 and older was estimated to be in the civilian labor force, compared to the statewide rate of 68.8%. The local unemployment rate was 12.2%, compared to the statewide unemployment rate of 5.9%. Approximately 54.9% of local residents were living below the poverty line, compared to 9.6% of Alaskans overall. It should be noted that income and poverty statistics are based on wage income and other money sources; the relatively low income figures and high poverty rates reported for Port Graham are not reflective of the value of subsistence to the local economy. In addition, these unemployment and poverty statistics are likely inaccurate given Port Graham's small population of Port Graham. Another estimate is based on the ALARI database, which indicates that the unemployment rate in 2010 was 12.9%.

Based on the household surveys conducted for the 2006-2010 ACS, the greatest number of workers was employed in the public sector (65.6%), while the remaining 34.4% were employed in the private sector. Out of 32 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest number worked in public administration (48.9%), finance, insurance, and real estate (19.1%), and education services, health care, and social assistance (12.8%), and arts, entertainment, recreation, accommodations, and food services (8.5%). Only 6.4% of the workforce was estimated to be employed in agriculture, forestry, fishing, hunting, and mining, with the remaining 4.3% estimated to be employed in construction. The number of individuals employed in farming, fishing, and forestry occupations and industries may be underestimated in census statistics as fishermen may hold another job and characterize their employment accordingly. Information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

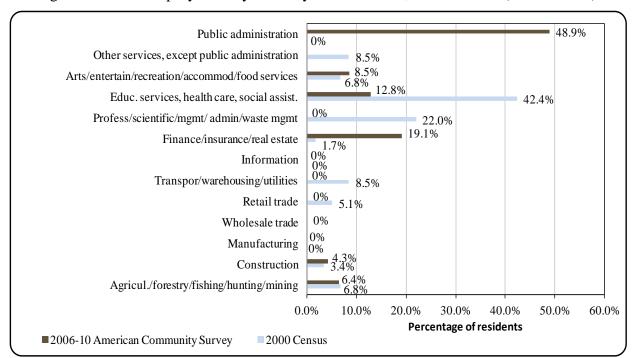


Figure 3. Local Employment by Industry in 2000-2010, Port Graham (U.S. Census).

0.0% Production/transportation/ material moving 0.0% 0.0% 1.7% Construction/extraction/maintenance/repair 0.0% Farming/fishing/forestry 13.6% 12.8% Sales/office 5.1% 38.3% Service 71.2% Management/professional 25.5% 8.5% 0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0% 80.0% Percent of residents ■2006-10 American Community Survey 2000 Census

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

Governance

Port Graham is an unincorporated community governed by a traditional village council and is located within the Kenai Peninsula Borough. The Native Village of Port Graham is federally recognized by the U.S. Bureau of Indian Affairs (BIA). The Port Graham Corporation also holds a land entitlement under the Alaska Native Claims Settlement Act (ANCSA). Port Graham is a member of a regional Native corporation, the Chugach Alaska Corporation. The nearest Alaska Department of Fish and Game (ADF&G), Department of Natural Resources, and National Marine Fisheries Service (NMFS) offices are located in Homer. The nearest Alaska Department of Commerce, Community, and Economic Development office is in Anchorage, as are the nearest offices for U.S. Immigration and Customs Enforcement and the Bureau of Citizenship and Immigration Services.

As of 2010, the Kenai Peninsula Borough administers a 3% sales tax. ²² Port Graham itself does not administer its own sales tax. In addition, since it is unincorporated, Port Graham does not maintain a municipal budget with community revenue and expenditures. Data are not available for community revenues from 2000-2010, with the exception of a grant received by Port Graham in 2008 in the amount of \$80,000 for a floating skiff dock. Information on municipal revenue received by Port Graham between 2000 and 2010 is presented in Table 2.

²¹ 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.

²² Alaska Dept. of Comm. and Econ. Dev. (n.d.). *Alaska Taxable* (2000-2010). Retrieved at http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

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

| Year | Total Municipal Revenue ¹ | Sales Tax Revenue ² | State/Community Revenue Sharing ^{3,4} | Fisheries-Related Grants (State and Federal) ⁵ |
|------|---|-----------------------------------|--|---|
| 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 | \$80,000 |
| 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.

Infrastructure

Connectivity and Transportation

Port Graham is not accessible by road. A state-owned 1,975-foot airstrip is available for local charter flights. There are no roads in the community, but a trail connects Port Graham with the nearby village of Nanwalek. There is no scheduled water taxi or ferry service however non-scheduled barge service for delivery of fuel and supplies is available from Homer. Roundtrip airfare to Anchorage, after a short charter flight to Homer, was \$239.

Facilities²⁶

Water is derived from a surface source and is treated and stored in a 50,000-gallon redwood tank. Port Graham has a piped water and sewer system operated by the village council, sewage disposal in a community septic tank, and a sludge lagoon. Nearly 90% of households are

²⁴ Port Graham Corporation (n.d.). *Our Heritage*. Retrieved November 23, 20110 from http://www.portgraham.corp.com/our-heritage.html.

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¹ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Financial Documents Delivery System*. Retrieved at http://www.commerce.state.ak.us/dcra/commfin/CF FinRec.cfm

²Alaska Dept. of Comm. and Econ. Dev. (n.d.). *Alaska Taxable* (2000-2010). Retrieved at http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm

³Alaska Dept. of Rev. (n.d.). (2000-2009) Taxes and Fees Annual Report. Accessed at www.tax.state.ak.us

⁴ The State Revenue Sharing program ceased in 2003 and was replaced by the Community Revenue Sharing program starting in 2009.

⁵Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Funding Database*. Retrieved at http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm. Data retrieved April 15, 2011.

²³ See footnote 21.

²⁵ Airfare was obtained on the travel website http://www.travelocity.com for a round-trip ticket for travel from June 1 to June 8, 2012. Retrieved on November 16, 2011.

²⁶ See footnote 21.

fully plumbed, and all households have some level of indoor plumbing. Electricity is provided by the Homer Electric Association and is produced by a hydroelectric facility and natural gas generator. Police services are provided by local Village Public Safety Officers and state troopers stationed in Homer. Fire and rescue services are provided by the Port Graham Emergency Medical Services and local ambulance service.

In a survey conducted by the AFSC in 2011, community leaders reported that docking facilities in Port Graham are served by electricity and water and that there are roads serving the dock space. However, there is currently no dock space available for permanent or transient vessels to moor in Port Graham. Vessels up to 80 feet long can use the moorage in Port Graham. Community leaders noted that a new landfill/solid waste site for Port Graham is in progress, and that noted that fishermen in Port Graham are seeking improvements to the public dock and harbor facilities. In the same survey, community leaders reported that, for fisheries-related businesses not available in Port Graham, community members travel to Homer.

Medical Services²⁷

There is a local health clinic, the Anesia Anahonak Moonin Clinic, which is operated by the village council. The clinic is a Community Health Aid Program site. The village council also operates the South Kachemak Alcohol Program. Emergency Services have coastal and air access, and emergency service is provided by volunteers and a health aide. The nearest hospital is in Homer.

Educational Opportunities²⁸

The Port Graham School provides instruction to students from kindergarten through 12th grade. In fiscal year 2011, the school had two teachers and 20 students.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Port Graham has been the site of subsistence harvest of marine resources for thousands of years. It was probably a seasonal hunting and food gathering site when it was first recorded in 1786 by Captain Portlock of the Cook party. ²⁹ Archaeological evidence reveals that marine mammals were a primary food source for early Eskimo residents of the area, and that finfish and shellfish increased in importance over time. ³⁰

With the purchase of Alaska by the U.S. in 1867, the commercial fishing industry began to grow in the Cook Inlet region. In 1883, a salmon saltery was opened by the Alaska Commercial Company (ACC) in Port Graham Bay. In 1911, a cannery was established at

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²⁷ Ibid

²⁸ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from http://eed.alaska.gov/stats/.

²⁹ ASCG Incorporated. September 2006. *Chugachmiut Facilitated Integrated Resources Management Plan for Nanwalek and Port Graham.* Retrieved December 26, 2011 from ftp://200-10-178-69.static.gci.net/.

³⁰ Stanek, R. T. 1999. *Ethnographic Overview and Assessment for Nanwalek and Port Graham*. Draft. Division of Subsistence, Alaska Department of Fish and Game. Retrieved December 27, 2011 from http://www.alaska.boemre.gov/.

Seldovia, and the community of Port Graham was founded when a cannery was built there in 1912. Salmon was the primary focus of fishing and processing effort in early years of the fishing industry, and herring was also an important early product. A cannery was also built nearby at English Bay in 1920, which was the first to can king crab, known at that time as 'spider crab.' 31

In the early years of commercial fishing, Native residents of the Cook Inlet area typically lacked the resources to purchase expensive fishing vessels. Instead, they participated in commercial fishing as cannery workers, salmon trap attendants, and setnet fishers. Native residents were also unable to work a full summer season at the cannery, since they also needed to put up subsistence resources for their winter food supply. By the 1950s, villagers were able to afford to lease or purchase commercial fishing vessels and gear.³²

Port Graham is located within Port Graham Bay, within the Southern district of the ADF&G-managed Lower Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts. Purse seine gear is used throughout the Lower Cook Inlet management area, while set gillnets are limited to the Kachemak Bay sub-district. In some years during the 2000-2010 period, one Cook Inlet 'special harvest area' (hatchery) permit was also held in Port Graham. Sockeye salmon escapement in the English Bay Lakes system reached a low of 5,000 adults in 1985, from a historical high of 40,000 fish. ADF&G closed the fishing season to allow the stock to recover. To meet the need, the Port Graham Salmon Enhancement Project began operations in 1990 at the Port Graham hatchery facility. Currently, eggs are taken from the English Bay Lakes system, incubated and reared at the Port Graham hatchery, and fry are released into Port Graham Bay. In 2011, the Cook Inlet Aquaculture Association coordinated cost recovery harvest of Port Graham Bay and other Cook Inlet hatchery returns.

Port Graham is also located in Pacific Halibut Fishery Regulatory Area 3A, the Central Gulf of Alaska Sablefish Regulatory Area, and Federal Statistical and Reporting Area 630. Port Graham is eligible participate in the Community Quota Entity Program and has set up the Port Graham CQE, Inc. in order to be able to purchase quota. As of Fall 2013, the Port Graham CQE, Inc. had not yet purchased any commercial halibut IFQ or non-trawl groundfish License Limitation Program permits for lease to eligible community members. However, the non-profit had acquired seven halibut charter permits for lease to community members. The community is not eligible to participate in the Community Development Quota program.

In a survey conducted by the AFSC in 2011, community leaders reported that Port Graham's annual population is "somewhat" driven by employment in the fishing sectors (e.g., processing plants, commercial fishing, subsistence fishing, recreation and sportfishing, and charter fishing). Community leaders also reported that "limited entry of all fisheries has had [a] negative impact on Port Graham's economy." They indicated that Port Graham participates in

³¹ 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.

³³ Clark, McGregor, Mecum, Krasnowski and Carroll. 2006. "The Commercial Salmon Fishery in Alaska." *Alaska Fisheries Research Bulletin* 12(1):1-146. Alaska Dept. of Fish and Game. Retrieved January 4, 2012 from http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1.pdf.

³⁵ Cook Inlet Aquaculture Association. April 2011. 2011 Prospective Fish Sales. Retrieved December 27, 2011 from http://www.ciaanet.org/.

³⁶ NOAA Fisheries. (2013). *Community Quota and License Programs and Community Quota Entities*. Retrieved October 30, 2013 from http://alaskafisheries.noaa.gov/ram/cqp.htm.

the fisheries management process in Alaska through a paid staff member that attends North Pacific Fisheries Management Council meetings and/or Board of Fisheries meetings, through a Port Graham representative that sits on regional fisheries advisory and/or working groups run by the ADF&G, and by relying on regional organizations (such as the Gulf of Alaska Coastal Communities Coalition, Southeast Conference, or Southwest Alaska Municipal Conference) to provide information on fisheries management issues.

Processing Plants³⁷

Port Graham became the site of a cannery and wharf in 1909, according to the U.S. Geological Survey. In 1911, the Fidalgo Island Packing Company established a cannery, and Aleuts from Nanwalek moved to the community. The cannery burned in 1960. It was rebuilt in 1968 by Whitney/Fidalgo and sold to the village corporation in 1983. A pink salmon hatchery began operations in 1991. In January 1998, the hatchery and salmon processing plant were destroyed by fire. The hatchery and processing plant were rebuilt and re-opened in June 1999. The cannery continued to be the main economic activity in the community, employing residents of Nanwalek, as well. However, in a survey conducted by the AFSC in 2011, community leaders indicated that the processing plant is not currently operating.

Fisheries-Related Revenue

Given that Port Graham has no taxing authority and does not manage a community budget, no data were available regarding revenue received by Port Graham from fisheries-related taxes and fees (Table 3). However, in 2008, Port Graham received a grant in the amount of \$80,000 for work on a floating skiff dock.³⁸

Commercial Fishing

Between 2000 and 2010, data regarding total pounds landed and ex-vessel value of 2010 landings were considered confidential due to the small number of participants. While the single halibut Commercial Fisheries Entry Commission (CFEC) permit held by a Port Graham resident was fished between 2000 and 2010, neither the Federal Fisheries Permits or salmon CFEC permits issued in Port Graham were recorded as fished. The halibut CFEC permit was issued for the statewide longline fishery using vessels under 60 feet. No other commercial fishing permits were held by local residents in 2010 (Table 4).

In 2010, four Port Graham residents held a combined 95,884 halibut quota shares and were allotted 10,365 pounds of halibut. While the number of quota shares allotted to participants remained the same between 2001 and 2010, the total poundage allotted has decreased slightly during that same time period (Table 6). Also in 2010, one Port Graham resident held 380 sablefish quota shares, with a 27 pound allotment. While the number of quota shares allotted to participants remained the same between 2001 and 2010, the pounds allotted have decreased slightly during that same time period (Table 7). There were no residents of Port Graham holding crab quota shares between 2005 and 2010 (Table 8).

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³⁷ See footnote 31

³⁸ 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.

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

| Revenue source | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|------|------|------|------|------|------|------|------|------|------|------|
| Raw fish tax ¹ | n/a |
| Shared Fisheries Business Tax ¹ | n/a |
| Fisheries Resource Landing Tax ¹ | n/a |
| Fuel transfer tax ² | n/a |
| Extraterritorial fish tax ² | n/a |
| Bulk fuel transfers ¹ | n/a |
| Boat hauls ² | n/a |
| Harbor usage ² | n/a |
| Port/dock usage ² | n/a |
| Fishing gear storage on public land ³ | n/a |
| Marine fuel sales tax ³ | n/a |
| Total fisheries-related revenue ⁴ | n/a |
| Total municipal revenue ⁵ | n/a |

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

¹ Alaska Dept. of Comm. and Econ. Dev. (n.d.) Alaska Taxable (2000-2010). Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

² Alaska Dept. of Comm. 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.

³ Reported by community leaders in a survey conducted by the AFSC in 2011.

⁴ Total fisheries related revenue represents a sum of all revenue sources in the previous rows.

⁵ Total municipal revenue represents the total revenue that the City reports each year in its municipal budget. Alaska Dept. of Comm. 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, Port Graham: 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total permit holders | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Federal Fisheries | Total permits | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Permits ¹ | Fished permits | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | % of permits fished | - | - | - | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| | Total permit holders | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Crab (CFEC) ² | 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) ² | 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) ² | Total permits | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Fished permits | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | % of permits fished | 100% | 100% | - | - | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| | Total permit holders | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Herring (CFEC) ² | 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, Port Graham: 2000-2010.

| Species | | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-----------------------------------|----------------------|------|------|------|------|------|------|------|------|------|------|------|
| Sablefish (CFEC) ² | Total permits | 1 | 1 | 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 | 0% | 0% | - | - | - | - | - | - | - | - | - |
| | Total permit holders | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Groundfish (CFEC) ² | Total permits | 1 | 1 | 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 | 0% | 0% | - | - | - | - | - | - | - | - | = |
| | Total permit holders | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Finfish (CFEC) ² | 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) ² | Total permits | 15 | 11 | 11 | 11 | 12 | 11 | 9 | 9 | 8 | 8 | 6 |
| | Fished permits | 4 | 2 | 1 | 3 | 4 | 3 | 1 | 1 | 1 | 1 | 0 |
| | % of permits fished | 27% | 18% | 9% | 27% | 33% | 27% | 11% | 11% | 13% | 13% | 0% |
| | Total permit holders | 15 | 11 | 12 | 13 | 15 | 13 | 9 | 9 | 8 | 8 | 6 |
| Total CFEC Permits ² | Permits | 18 | 14 | 11 | 11 | 13 | 12 | 10 | 10 | 9 | 9 | 7 |
| | Fished permits | 5 | 3 | 1 | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 1 |
| | % of permits fished | 28% | 21% | 9% | 27% | 38% | 33% | 20% | 20% | 22% | 22% | 14% |
| | Permit holders | 15 | 11 | 12 | 13 | 15 | 13 | 9 | 9 | 8 | 8 | 6 |

¹ National Marine Fisheries Service. 2011. Data on License Limitation Program, 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.]

² 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 Port Graham: 2000-2010.

| Year | Crew License Holders ¹ | Count Of All Fish Buyers ² | Count Of Shore- Side Processing Facilities ³ | Vessels Primarily Owned By Residents ⁴ | Vessels Homeported ⁴ | Vessels Landing Catch In Port Graham ² | Total Net Pounds Landed In Port Graham ^{2,5} | Total Ex- Vessel Value Of Landings In Port Graham ^{2,5} |
|------|---|---|---|---|------------------------------------|--|---|--|
| 2000 | 12 | 1 | 0 | 11 | 5 | 1 | | |
| 2001 | 11 | 1 | 0 | 11 | 6 | 4 | | |
| 2002 | 6 | 0 | 1 | 7 | 3 | 0 | 0 | \$0 |
| 2003 | 9 | 0 | 0 | 10 | 7 | 0 | 0 | \$0 |
| 2004 | 10 | 0 | 1 | 12 | 9 | 0 | 0 | \$0 |
| 2005 | 3 | 2 | 1 | 9 | 7 | 2 | | |
| 2006 | 1 | 0 | 0 | 8 | 5 | 0 | 0 | \$0 |
| 2007 | 0 | 0 | 0 | 7 | 5 | 0 | 0 | \$0 |
| 2008 | 5 | 0 | 0 | 7 | 6 | 0 | 0 | \$0 |
| 2009 | 7 | 0 | 0 | 8 | 7 | 0 | 0 | \$0 |
| 2010 | 2 | 0 | 0 | 8 | 6 | 0 | 0 | \$0 |

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

¹ 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.]

² 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.]

³ 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.]

⁴ 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.]

⁵ Totals only represent non-confidential data.

Table 6. Halibut Catch Share Program Participation by Residents of Port Graham: 2000-2010.

| Year | Number of Halibut Ouota Share | Halibut Ouota | Halibut IFQ Allotment (pounds) |
|------|----------------------------------|------------------|-----------------------------------|
| | Account Holders | Shares Held | rmothient (pounus) |
| 2000 | 3 | 22,965 | 2,273 |
| 2001 | 4 | 95,884 | 11,351 |
| 2002 | 4 | 95,884 | 11,736 |
| 2003 | 4 | 95,884 | 11,733 |
| 2004 | 4 | 95,884 | 12,993 |
| 2005 | 4 | 95,884 | 13,207 |
| 2006 | 4 | 95,884 | 13,067 |
| 2007 | 4 | 95,884 | 13,585 |
| 2008 | 4 | 95,884 | 12,558 |
| 2009 | 4 | 95,884 | 11,252 |
| 2010 | 4 | 95,884 | 10,365 |

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 Port Graham: 2000-2010.

| Year | Number of Sablefish Quota Share Account Holders | Sablefish Quota Shares Held | Sablefish IFQ Allotment (pounds) |
|------|---|--------------------------------|-------------------------------------|
| 2000 | Holders | ^ | 0 |
| 2000 | 0 | 0 | 0 |
| 2001 | 1 | 380 | 32 |
| 2002 | 1 | 380 | 32 |
| 2003 | 1 | 380 | 38 |
| 2004 | 1 | 380 | 43 |
| 2005 | 1 | 380 | 43 |
| 2006 | 1 | 380 | 38 |
| 2007 | 1 | 380 | 37 |
| 2008 | 1 | 380 | 33 |
| 2009 | 1 | 380 | 29 |
| 2010 | 1 | 380 | 27 |

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 Port Graham: 2000-2010.

| Year | Number of Crab Quota | Crab Quota Shares | Crab IFQ |
|------|-----------------------|-------------------|--------------------|
| | Share Account Holders | 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 Port Graham: 2000-2010.

| | | | Tota | ıl Net Po | ounds ¹ | | | | | | |
|------------------------|----------|--------|------------|------------|--------------------|----------|------------|------------|------------|------------|------------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Crab | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Finfish | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Halibut | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Herring | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Other Groundfish | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Other Shellfish | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Pacific Cod | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Pollock | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Sablefish | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Salmon | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Total ² | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| | | Ex-ves | sel Valu | e (nomi | nal U.S | . dollar | s) | | | | |
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Crab | | | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Finfish | | | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Halibut | | | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Herring | | | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other Groundfish | | | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other Shellfish | | | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| | | | | | | | Φ0 | ¢Ω | Φ0 | 40 | \$0 |
| Pacific Cod | | | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | \$0 | ΦU |
| Pacific Cod Pollock | | | \$0 \$0 | \$0 \$0 | \$0 \$0 | | \$0 \$0 | \$0 \$0 | \$0 \$0 | \$0 \$0 | \$0 \$0 |
| | | | | | | | | | | | |
| Pollock | | | \$0 | \$0 | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |

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.]

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

²Confidential data are not included in annual totals.

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

| | | | Tota | al Net P | ounds ¹ | | | | | | |
|---|----------|----------|-----------|----------|--------------------|-----------|----------|----------|----------|----------|--------------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Crab | | | | | | | | | | | |
| Finfish | | | | | | | | | | | |
| Halibut | | | | | | | | | | | |
| Herring | | | | | | | | | | | |
| Other Groundfish | | | | | | | | | | | |
| Other Shellfish | | | | | | | | | | | |
| Pacific Cod | | | | | | | | | | | |
| Pollock | | | | | | | | | | | |
| Sablefish | | | | | | | | | | | |
| Salmon | 145,338 | | | | | | | | | | |
| Total ² | 145,338 | | | | | | | | | | |
| | | Ex-ve | ssel Vali | ue (nom | inal U.S | S. dollar | s) | | | | |
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Crab | | | | | | | | | | | |
| Finfish | | | | | | | | | | | |
| Halibut | | | | | | | | | | | |
| Herring | | | | | | | | | | | |
| | | | | | | | | | | | |
| Other Groundfish | | | | | | | | | | | |
| Other Groundfish Other Shellfish | | | | | | | | | | | |
| | | | | | | | | | | | |
| Other Shellfish | | | | | | | | | | | |
| Other Shellfish Pacific Cod | | | | | | | | | | | |
| Other Shellfish Pacific Cod Pollock | | | | | | | | | | | |

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 pounds refers to the landed weight recorded in fish tickets.

Confidential data are not included in annual totals.

Recreational Fishing

According to the ADF&G's Statewide Harvest Survey, coho salmon, pink salmon, rockfish, Pacific cod, Pacific halibut, Dolly Varden, and chum salmon are caught by private anglers in Port Graham. According to a survey conducted by the AFSC in 2011, community leaders indicated that the following saltwater species are targeted by recreational fishermen that use boats based in Port Graham: pink salmon, chum salmon, Chinook/king salmon, coho/silver salmon, sockeye/red salmon, halibut, rockfish, crab, shrimp, and clams.

Port Graham lies along the outskirts of Kachemak Bay; a very popular area for marine sportfishing. Despite this, sportfishing activity within the community is relatively low. There are very few active sport fish guide businesses, and relatively few sportfishing licenses sold within the community. This may be attributed to a lack of visitor infrastructure and high travel costs.

In 2010, there was one locally registered sport fish guide business in operation, and three locally held sport fish guide licenses. A total of 44 sportfishing licenses were sold to residents of Port Graham (irrespective of the location of the point of sale). In comparison, a total of 61 sport fish licenses were sold in Port Graham, indicating the potential that visitors to Port Graham are participating in recreational fishing activities. Between 2000 and 2010, the ratio of saltwater angler days fished in the Kenai Peninsula region by private anglers that are non-Alaska residents has increased slightly. In 2000, approximately 23% of the total saltwater angler days fished in this region were fished by non-Alaska residents, while in 2010 non-Alaska residents accounted for 28% of the total saltwater angler days fished. Between 2000 and 2010, the number of freshwater angler days fished by both Alaska residents and non-Alaska residents in the Kenai Peninsula region decreased, though the proportion of angler days fished by non-Alaska residents increased during this time. In 2000, approximately 42% of the total freshwater angler days fished in this region were fished by non-Alaska residents, while in 2010 non-Alaska residents accounted for 47% of the total freshwater angler days fished (Table 11).

Table 11. Sport Fishing Trends, Port Graham: 2000-2010.

| Year | Active Sport Fish Guide Businesses ¹ | Sport Fish Guide Licenses ¹ | Sport Fishing Licenses Sold to Residents ² | Sport Fishing Licenses Sold in Port Graham ² |
|------|---|--|---|---|
| 2000 | 0 | 0 | 36 | 45 |
| 2001 | 0 | 0 | 54 | 57 |
| 2002 | 0 | 0 | 56 | 63 |
| 2003 | 0 | 0 | 31 | 37 |
| 2004 | 0 | 0 | 30 | 40 |
| 2005 | 0 | 0 | 37 | 42 |
| 2006 | 0 | 1 | 32 | 31 |
| 2007 | 0 | 0 | 42 | 55 |
| 2008 | 0 | 0 | 36 | 51 |
| 2009 | 0 | 3 | 36 | 58 |
| 2010 | 1 | 3 | 44 | 61 |

Table 11 cont'd. Sport Fishing Trends, Port Graham: 2000-2010.

| | Saltw | ater | Freshwater | | |
|------|--|---|--|---|--|
| Year | Angler Days Fished – Non- residents ³ | Angler Days Fished – Alaska Residents ³ | Angler Days Fished – Non- residents ³ | Angler Days Fished – Alaska Residents ³ | |
| 2000 | 42,157 | 139,737 | 242,224 | 333,118 | |
| 2001 | 28,245 | 69,053 | 202,305 | 269,047 | |
| 2002 | 26,479 | 83,335 | 199,512 | 299,839 | |
| 2003 | 35,299 | 80,368 | 205,810 | 273,743 | |
| 2004 | 39,009 | 83,478 | 251,002 | 297,877 | |
| 2005 | 37,309 | 91,489 | 281,942 | 270,164 | |
| 2006 | 33,988 | 76,100 | 229,520 | 268,434 | |
| 2007 | 31,105 | 89,061 | 281,832 | 313,012 | |
| 2008 | 28,780 | 70,285 | 234,826 | 295,184 | |
| 2009 | 24,959 | 77,945 | 203,584 | 299,194 | |
| 2010 | 28,294 | 71,555 | 222,375 | 247,239 | |

¹ 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.]

Subsistence Fishing

Many residents of Port Graham supplement their incomes and diet with subsistence resources. ³⁹ According to a survey conducted by the AFSC in 2011, community leaders indicated that king salmon, halibut, and seals/sea lions are the three most important subsistence marine or aquatic resources to the residents of Port Graham. There is considerable harvest of halibut for subsistence by residents in Port Graham that hold a valid Subsistence Halibut Registration Certificate (SHARC) card issued by NMFS (Table 14). Of the marine species documented by the ADF&G Division of Subsistence, salmon, marine mammals, marine invertebrates, halibut, and non-salmon fish make up the majority of targeted subsistence species for residents of Port Graham involved in subsistence fishing.

In 2008, the last year for which data are available, the total subsistence harvest of salmon appeared to decrease by 47% from the previous year after a few years of relatively stable harvest levels. The number of subsistence salmon permits issued to Port Graham households fell dramatically from 2005 to 2006 (Table 13). From 2003 to 2010, the pounds of halibut harvested for subsistence also decreased by nearly half. In 2010, an estimated 5,271 pounds of halibut was harvested on 18 SHARC, compared to an estimated 11,454 pounds harvested on 35 in 2003. The number of SHARC held in the community remained relatively stable, at an average of 52 in any

² 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.]

³ 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).

³⁹ 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.

given year between 2003 and 2010. However, the number of SHARC fished declined significantly between 2009 and 2010 from 35 to 18, despite a yearly average of 31 active permits (Table 14). Port Graham residents harvested a variety of marine mammal species for subsistence purposes between 2000 and 2010. According to data reported by the U.S. Fish and Wildlife Service, sea otter harvest varied from one to six animals harvested per year (for year in which data were reported). According to data reported by ADF&G, an average of three sea lions and 39 harbor seals were harvested per year (for those years in which data were reported) (Table 15).

The ADF&G Division of Subsistence reported that the following species of marine invertebrates were used for subsistence in Port Graham during this period: black (small) chitons, butter clams, limpets, octopus, oyster, Pacific littleneck clams (steamers), red (large) chitons, sea urchin, shrimp, snails, unknown cockles, unknown mussels, and whelk. Marine mammals reported as harvested for subsistence use included harbor seal and Steller sea lion. Non-salmon fish reported as harvested for subsistence use included: black rockfish, Dolly Varden, eel, eulachon (hooligan candlefish), herring, herring roe/unspecified, herring sac roe, lingcod, Pacific cod (gray), Pacific tom cod, rainbow trout, red rockfish, sablefish (black cod), sea bass, starry flounder, steelhead, unknown greenling, unknown Irish lord, unknown shark, and unknown sole. 40

Additional Information

The Port Graham region has some of the most unique tourism areas in the state. High mountain vistas, tidewater and massive glaciers, deep fjords, protected bays and inlets, abundance of wildlife and access from major population centers make this region ideally suited for the tourism industry.⁴¹

⁴⁰ 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). ⁴¹ Port Graham Corporation (n.d.). *Our Lands*. Retrieved November 23, 2011 from http://www.portgrahamcorp.com/our-lands.html.

Table 12. Subsistence Participation by Household and Species, Port Graham: 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 | 85% | 95% | 34% | 100% | 37% | 466.35 |
| 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, Port Graham: 2000-2010.

| Year | Subsistence Salmon Permits Issued ¹ | Salmon Permits Returned ¹ | Chinook Salmon Harvested ¹ | Chum Salmon Harvested ¹ | Coho Salmon Harvested ¹ | Pink Salmon Harvested ¹ | Sockeye Salmon Harvested ¹ | Lbs of Marine Inverts ² | Lbs of Non- Salmon Fish ² |
|------|---|--|---|--|--|--|---|--|---|
| 2000 | n/a | 35 | 241 | 483 | 252 | 355 | 784 | n/a | n/a |
| 2001 | n/a | 15 | 104 | 32 | 57 | 20 | 176 | n/a | n/a |
| 2002 | n/a | 23 | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| 2003 | n/a | 16 | n/a | n/a | n/a | n/a | n/a | 1,873 | 7576 |
| 2004 | 55 | 55 | 260 | 118 | 461 | 323 | 557 | n/a | n/a |
| 2005 | 48 | 48 | 267 | 52 | 51 | 349 | 202 | n/a | n/a |
| 2006 | 14 | 14 | 164 | 89 | 21 | 93 | 344 | n/a | n/a |
| 2007 | 14 | 14 | 164 | 89 | 21 | 93 | 344 | n/a | n/a |
| 2008 | 18 | 18 | 77 | 22 | n/a | 36 | 550 | 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.

¹ 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.

² 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, Port Graham: 2003-2010.

| Year | SHARC | SHARC | SHARC Halibut |
|-------|--------|--------------|---------------|
| 1 ear | Issued | Cards Fished | Lbs Harvested |
| 2003 | 52 | 35 | 11,454 |
| 2004 | 57 | 42 | 12,241 |
| 2005 | 52 | 18 | 16,358 |
| 2006 | 50 | 30 | 6,194 |
| 2007 | 59 | 36 | 8,493 |
| 2008 | 48 | 30 | 9,097 |
| 2009 | 47 | 35 | 6,426 |
| 2010 | 47 | 18 | 5,271 |

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, Port Graham: 2000-2010.

| Year | # of Beluga Whales ¹ | # of Sea Otters ² | # of Walrus ² | # of Polar Bears ² | # of Steller Sea Lions ³ | # of Harbor Seals ³ | # of Spotted Seals ³ |
|------|------------------------------------|---------------------------------|-----------------------------|----------------------------------|--|-----------------------------------|------------------------------------|
| 2000 | n/a | 4 | n/a | n/a | 2 | 40 | n/a |
| 2001 | n/a | 6 | n/a | n/a | n/a | 39 | n/a |
| 2002 | n/a | n/a | n/a | n/a | n/a | 39 | n/a |
| 2003 | n/a | 3 | n/a | n/a | 1 | 45 | n/a |
| 2004 | n/a | n/a | n/a | n/a | 7 | 44 | n/a |
| 2005 | n/a | n/a | n/a | n/a | n/a | 63 | n/a |
| 2006 | n/a | n/a | n/a | n/a | n/a | 51 | n/a |
| 2007 | n/a | 1 | n/a | n/a | n/a | 8 | n/a |
| 2008 | n/a | 6 | n/a | n/a | 3 | 17 | 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.

¹ 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.

² 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.