

Kipnuk (KIP-nuck; A.K.A. Kanganak)

People and Place

*Location*¹

Kipnuk is located on the west bank of the Kugkaktlik River in the Yukon-Kuskokwim River Delta, 85 air miles southwest of Bethel and approximately 485 air miles west of Anchorage. It lies 4 miles inland from the Bering Sea coast. Kipnuk is located in the Bethel Census Area and the Bethel Recording District.

*Demographic Profile*²

In 2010, there were 639 residents in Kipnuk, making it the 97th largest of 352 total Alaskan communities with recorded populations that year. The population of Kipnuk increased by 37.0% between 1990 and 2000, and stayed stable through 2010, with an overall population increase of 35.6% between 1990 and 2010. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents increased by 4.2%, with an average annual growth rate of 0.01%, significantly below than the statewide average of 0.75%.

In 2010, the majority of Kipnuk residents identified themselves as American Indian and Alaska Native (97.7%), along with 2.0% that identified as White, and just under 1% of the population identified with two or more races. Other racial and ethnic groups were not represented in Kipnuk in 2000 or 2010. There was little change in racial and ethnic composition between 2000 and 2010; there was a small increase in the percentage of the population identifying as American Indian and Alaska Native, and a commensurate decrease in the number of individuals identifying with two or more races between 2000 and 2010. The change in population from 1990 to 2010 is provided in Table 1 below, and changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

In 2010, the average household size in Kipnuk was 4.18, a decrease from 4.7 persons per household in 1990 and 2000. The number of households in Kipnuk increased over time, from 99 in 1990 and 137 in 2000, to 153 occupied housing units in 2010. Of a total of 176 housing units surveyed for the 2010 U.S. Decennial Census, 123 (69.9%) were owner-occupied households and 30 (17%) were renter-occupied. In that same year, 23 housing units (13.1%) were vacant, compared to 11% of total housing units in 2000. In 1990, two Kipnuk residents were reported to be living in group quarters. This number fell to zero in 2000 and 2010.

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>.

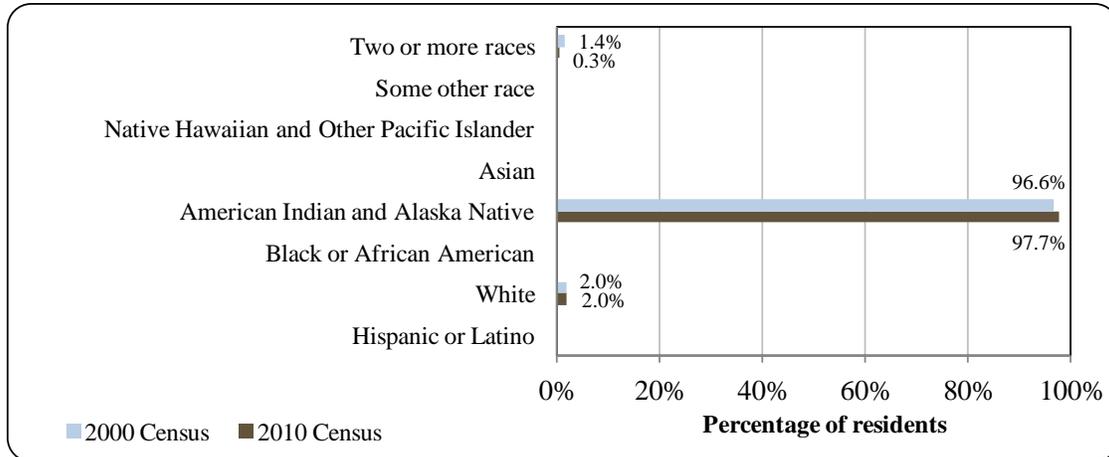
Table 1. Population in Kipnuk from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	470	-
2000	644	-
2001	-	621
2002	-	646
2003	-	649
2004	-	662
2005	-	688
2006	-	667
2007	-	662
2008	-	694
2009	-	671
2010	639	-

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>.

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>.

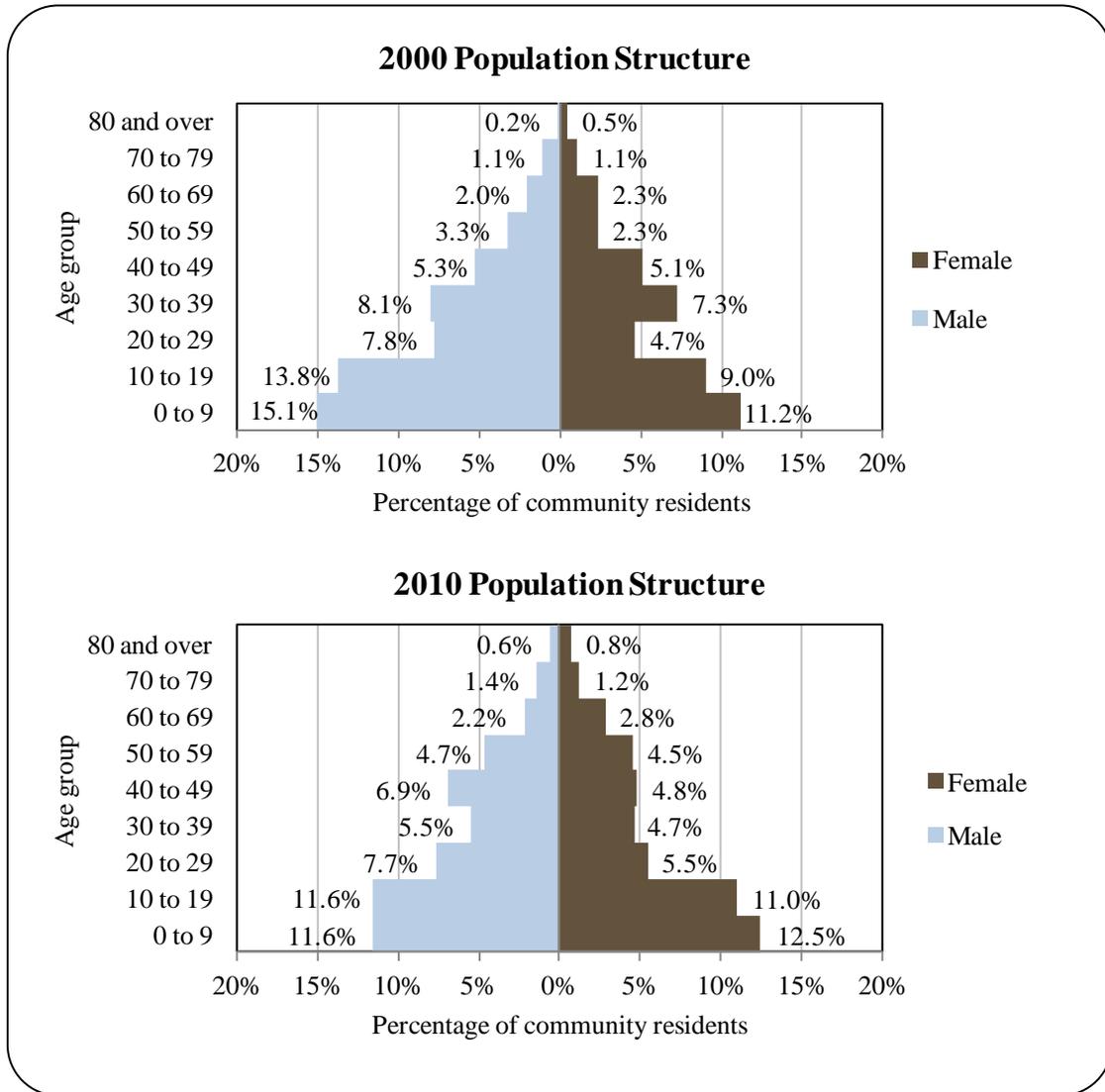
Figure 1. Racial and Ethnic Composition, Kipnuk: 2000-2010 (U.S. Census).



In 2010, the gender makeup in Kipnuk was 52.1% male and 47.9% female, nearly identical to the gender distribution statewide (52.0% male, 48.0% female). Also in 2010, the median age was estimated to be 21.9 years, lower than both the U.S. national average of 36.8 years and the median age for Alaska of 33.8 years. That year, 9% of the Kipnuk population was age 60 or older. Compared with 2000, the population structure in 2010 became more constricted. In that year, 46.6% of residents were under the age of 20, compared to 49.1% in 2000; 9.1% were over the age of 59, compared to 7.1% in 2000; 31.1% were between the ages of 30 and 59, compared to 31.4% in 2000; and 13.1% were between the ages of 20 and 29, compared to 12.4%

in 2000. Age distribution by gender cohort was slightly more even in 2010 than in 2000. In 2010, the greatest absolute gender difference occurred within the 20 to 29 age range (7.7% male, 5.5% female), closely followed by the 40 to 49 age range (6.9% male, 4.8% female). The overall population structure of Kipnuk in 2000 and 2010 is shown in Figure 2.

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



In terms of educational attainment, the U.S. Census' 2006-2010 American Community Survey (ACS)³ estimated that 72.4% of residents aged 25 and over held a high school diploma or higher degree in 2010, significantly less than the estimated 90.7% of Alaska residents overall. Also in that year, an estimated 15.6% of residents had less than a 9th grade education, compared to an estimated 3.5% of Alaska residents overall; an estimated 11.9% had a 9th to 12th grade education but no diploma, compared to an estimated 5.8% of Alaska residents overall; an estimated 18.4% had some college but no degree, compared to an estimated 28.3% of Alaska residents overall; 5.4% of resident held a Bachelor's degree, compared to an estimated 17.4% of Alaska residents overall; and no residents held a graduate or professional degree, compared to an estimated 9.6% of Alaska residents overall.

History, Traditional Knowledge, and Culture

Kipnuk is a traditional Yup'ik Eskimo community, maintaining a subsistence lifestyle. The Native people of the Yukon-Kuskokwim (Y-K) Delta region traditionally followed a nomadic, subsistence lifestyle. Extensive trade networks throughout the Y-K Delta were established prior to contact with Russian explorers in the late 19th century, and by the time of contact the Native people in the region already had access to Eurasian goods from trade routes across the Bering Strait. *Pastuliarraq*, near present-day Kotlik, was a trading center which connected these routes with the lower Y-K Delta region. The 19th century was a time of European expansion and development in the region and with it came waves of disease epidemics which had disastrous effects on the Native peoples in the area. In the early 20th century, the influence of missionaries coinciding with the influenza epidemics of 1900 and 1912 drastically changed the social and cultural identity of an entire generation within the region.⁴ According to Bureau of Indian Affairs records, the village of Kipnuk was established around 1922. Today, commercial fishing is an important source of income in Kipnuk. The sale and importation of alcohol is banned in the village.⁵

Natural Resources and Environment

The community is located in a marine climate. Annual precipitation averages 22 inches, with 43 inches of snowfall annually. Summer temperatures range from 41 to 57 °F, and winter temperatures average from 6 to 24 °F.⁶ Kipnuk is located 4 miles from the coast, on the south shore of the Kugkaktlik River, a meandering stream that originates about 30 miles inland.⁷ The

³ While ACS estimates can provide a good snap shot 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 Association of Village Council Presidents. 2000. *2000 Yukon-Kuskokwim Strategic Plan*. Retrieved January 12, 2012 from <http://www.commerce.state.ak.us/dca/plans/YukonKuskokwimDelta-EDP-2000.pdf>.

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.

⁶ Ibid.

⁷ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Alaska Climate Change Impact Mitigation Program: Kipnuk*. Retrieved September 25, 2012 from <http://www.commerce.state.ak.us/dca/planning/ACCIMP/kipnuk.htm>.

entrance to the Kuguklik River is partially protected by a system of barrier islands that extend south of Kinak Bay, including Kwigluk, Pingerbek, and Kikegtek Islands.⁸

The geography of the mainland Y-K Delta is characterized by sub-arctic tundra, tidal wetlands, and boreal forests. The delta plain is crossed by many river channels, meander scars, oxbow lakes, sloughs, and contains more than 400,000 charted lakes. Drainage in the Kipnuk area is limited by fine soils and a permafrost layer underlying the tundra complex. Permafrost in the area varies, and while there is limited local data, regional depths can extend to around 600 feet in some areas. The active permafrost layer is estimated to range between 1.5 and 3 feet deep, depending on conditions. Coastal areas of the delta are classified typically as wet tundra consisting of marshes, swamps, and water ponds.^{9,10}

Fish in the area include all five species of Pacific salmon, boreal smelt, Arctic cisco, northern pike, blackfish, stickleback, sheefish, burbot, and whitefish. Terrestrial wildlife includes bear, moose, hares, beaver, mink, muskrat, otter, fox, weasel, and caribou. Aquatic mammals include seals, walrus, and several species of whale. In addition, the Y-K Delta is renowned as one of the most productive waterfowl breeding areas in the world.¹¹

Kipnuk is located within the 22 million acre Yukon Delta National Wildlife Refuge (NWR). The NWR was established “to conserve fish and wildlife populations and habitats in their natural diversity, including, but not limited to shorebirds, seabirds, tundra swans, emperor, white-fronted and Cackling Geese, black brant and other migratory birds, salmon, muskoxen, and marine mammals; to fulfill treaty obligations; to provide the opportunity for continued subsistence uses; and to ensure water quality and necessary water quantity.” NWR lands are open to sport and subsistence hunting and fishing.¹²

Natural hazards that have been identified to be present in the Bethel Census Area include flooding, earthquakes, and severe weather.¹³ Communities in the region are also suffering from severe erosion of both riverbanks and coastal shorelines, and are susceptible to tundra fires.^{14,15} Flooding and erosion rates, as well as rates of permafrost thawing, are exacerbated by climate change. In 2011, Kipnuk was awarded a \$50,000 State Hazard Impact Assessment grant to identify and define climate-change related hazards in the community and to develop a mitigation plan. Kipnuk is located on a badly eroding bend of the Kuguklik River. Community structures in Kipnuk that may be impacted by erosion, flooding, and permafrost thawing hazards include

⁸ Ceñaliulriit Coastal Resource Service Area. 2008. *Coastal Management Plan: Final Plan Amendment*. Retrieved February 9, 2012 from http://www.alaskacoast.state.ak.us/District/DistrictPlans_Final/Cenaliulriit/plan/plan-4-08.pdf.

⁹ See footnote 4.

¹⁰ Lower Kuskokwim Economic Development Council. 2006. *Comprehensive Economic Development Strategy & Area Plan*. Retrieved March 6, 2012 from <http://www.lkedc.org/ARDPLAN1.pdf>.

¹¹ Ibid.

¹² U.S. Fish and Wildlife Service. 2011. *Yukon Delta National Wildlife Refuge website*. Retrieved December 8, 2011 from <http://yukondelta.fws.gov/>.

¹³ 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.%20SHMP.pdf>.

¹⁴ Climate Adaptation Knowledge Exchange (CAKE). 2011. *Relocating the Village of Newtok, Alaska due to Coastal Erosion*. Retrieved January 19, 2012 from <http://www.cakex.org>.

¹⁵ Village of Newtok, Alaska. March 12, 2008. *Local Hazards Mitigation Plan*. Retrieved January 19, 2012 from http://www.dced.state.ak.us/dca/planning/pub/Newtok_HMP.pdf.

homes, commercial and public buildings, power generation facilities, bulk fuel storage, boardwalks, and communication infrastructure.¹⁶

According to the Alaska Department of Environmental Conservation, there were no significant environmental remediation sites active in Kipnuk as of September 2012.¹⁷ However, it is important to note that a number of contamination concerns have been encountered during preparation for the construction of a new school in Kipnuk. These have included removing and treating effluent and sludge from the previous sewage lagoon, determining the extent of contaminated surface soils from the community's fuel tank farm, and managing demolition of existing structures at the site of the new school that may contain hazardous materials such as asbestos, lead paint, mercury, or polychlorinated biphenyls (PCBs). In addition, the ground in Kipnuk is permeated with methane gas, possibly from thawing of permafrost, an old buried landfill, or leakage from the sewage lagoon.¹⁸

Current Economy¹⁹

Local government and utilities provide a majority of wage employment in Kipnuk,²⁰ along with seasonal activities such as fishing and construction. Subsistence activities also provide a foundation for the local economy and lifestyle. Coastal Villages Seafoods, Inc., a subsidiary of the regional Community Development Quota (CDQ) group, the Coastal Villages Region Fund (CVRF), operates a seafood processor in Kipnuk that processes halibut and salmon.²¹ In 2000, 99 Kipnuk residents held state commercial fishing permits, equivalent to 15% of the total local population, and the number of crew licenses holders (82) was equivalent to 13% of the population. These numbers declined over the decade, with 45 permit holders in 2010 (equivalent to 7% of the total local population), and 31 crew license holders (5% of the population). See the *Commercial Fishing* section for more information. Trapping is also a source of income in Kipnuk.²²

Based on household surveys conducted for the 2006-2010 ACS,²³ in 2010, per capita income in Kipnuk was estimated to be \$11,123 and the median household income was estimated to be \$34,792, compared to \$8,589 and \$34,375 reported in 2000, respectively. Taking inflation

¹⁶ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Alaska Climate Change Impact Mitigation Program: Kipnuk*. Retrieved September 25, 2012 from <http://www.commerce.state.ak.us/dca/planning/ACCIMP/kipnuk.htm>.

¹⁷ Alaska Dept. of Environmental Conservation. 2012. *List of Contaminated Site Summaries By Region*. Retrieved September 25, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

¹⁸ Seely, Nichelle. August, 2012. "Decontaminating Kipnuk: Preparing the site for a new school." *Alaska Business Monthly*. Retrieved September 25, 2012 from <http://www.akbizmag.com/Alaska-Business-Monthly/July-2012/Decontaminating-Kipnuk/>.

¹⁹ Unless otherwise noted, all monetary data are reported in nominal values.

²⁰ Alaska Department of Labor and Workforce Development (n.d.). *Alaska Local and Regional Information Database*. Retrieved September 25, 2012 from <http://live.laborstats.alaska.gov/alari/>.

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 Ibid.

²³ 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>.

into account by converting the 2000 values to 2010 dollars,²⁴ the real per capita income in 2000 is shown to have been \$11,294 and the real 2000 median household income was \$45,203. This shows that per capita income stayed stable over the period, while there appears to have been a real decrease in median per capita income. In 2010, Kipnuk ranked 262nd of 305 Alaskan communities with per capita income that year, and 225th out of 299 Alaskan communities with household income data.

However, Kipnuk's small population size may have prevented the ACS from accurately portraying economic conditions.²⁵ An alternative estimate of per capita income is provided by 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 Kipnuk in 2010 is \$7,540.²⁶ This estimate is lower than the 2000 per capita income reported in by the U.S. Census, suggesting that caution is warranted when citing an per capita income stability in Kipnuk between 2000 and 2010. The lower per capita income estimate derived from the ALARI database is reflected in the fact that the community was recognized as "distressed" by the Denali Commission in 2011,²⁷ indicating that over 70% of residents aged 16 and older earned less than \$16,120 in 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, in 2010, 58.5% of the Kipnuk population age 16 and older was estimated to be in the civilian labor force, lower than the statewide rate of 68.8%. That year, approximately 23.7% of local residents were living below the poverty line, 2.5 times the rate of Alaskans overall (9.6%), and the unemployment rate was estimated to be 12.7%, more than double the statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in Kipnuk in 2010 was 26.1%, more than twice the ALARI statewide unemployment rate estimate of 11.5%.²⁸

Also based on the 2006-2010 ACS, almost half of the Kipnuk workforce was estimated to be employed in the private sector (49.2%), with the other half employed in the public sector (48.1%), and the remaining 2.8% estimated to be self-employed. Out of 181 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest number worked in educational services, health care and social services (41.4%), retail trade (30.4%), transportation, warehousing and utilities (15.5%), and public administration (5%) industries (Figure 3). In 2010, 2.2% of the workforce was also estimated to be working in the agriculture, forestry, and fishing industries. The number of individuals employed in farming, fishing, and forestry industries is probably underestimated in census statistics; fishermen may hold another job and characterize their employment accordingly.

²⁴ 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>).

²⁵ While ACS estimates can provide a good snap shot 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.

²⁶ See footnotes 20 and 23.

²⁷ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

²⁸ See footnote 20.

Compared to employment statistics in 2000, the distribution of employment by industry appears to have remained stable in some key categories in Kipnuk, with a similar percentage of the work force employed in education, health care, and social assistance services. Some of the most notable shifts were a greater than 50% decrease in the number of individuals employed in public administration, and a more than doubling of percentage employed in retail trade. In addition, several industries that had small employment numbers in 2000 appear to no longer be represented in 2010, including arts, entertainment, recreation, accommodation, and food services, finance, and information industries (Figure 3).

Viewing employment from the perspective of occupation, 2006-2010 ACS estimates indicate that the highest percentages of the Kipnuk workforce were employed in sales and office occupations (37.6%) and management, business, science, and arts occupations (35.9%). In addition, 9.9% of the civilian labor force was estimated to be employed in production, transportation, and material moving service occupations, 9.4% in service occupations, and 7.2% in natural resources, construction, and maintenance occupations. Between 2000 and 2010, the percentage of the workforce employed in sales and office occupations increased by over 50%, while the percentage employed in service occupation decreased by almost 50% and the percentage employed in management/professional occupations decreased by almost 20%. This information about employment by occupation is presented in Figure 4.

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

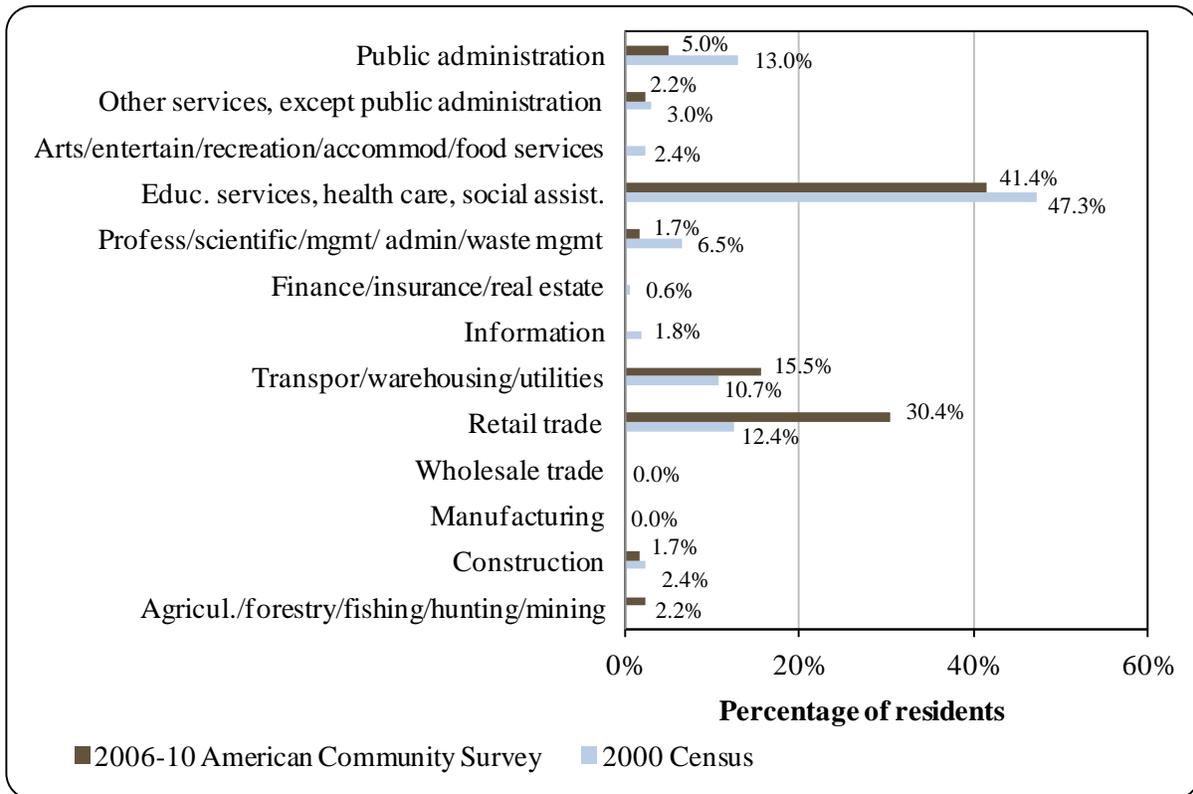
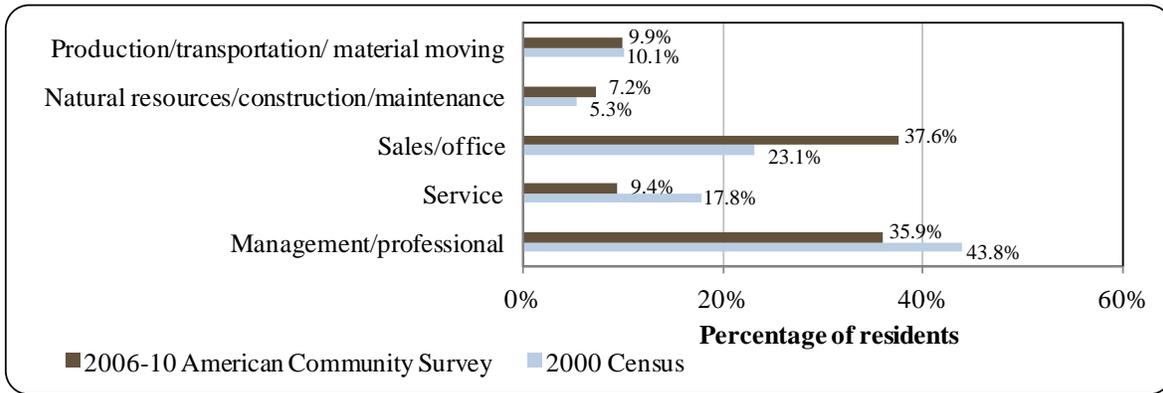


Figure 4. Local Employment by Occupation in 2000-2010, Kipnuk (U.S. Census).



The 2010 ALARI estimate of employment by industry mirrors 2006-2010 ACS estimates, with high percentages of the labor force working in government and trade, transportation, and utilities positions. Economic data compiled in the ALARI database indicate that there were 295 employed residents in Kipnuk in 2010, of which 44.4% were employed in local government, 22.7% were employed in trade, transportation, and utilities, 7.8% in education and health services, 7.5% in manufacturing, 3.7% in financial activities, 1.4% in construction, 0.7% in leisure and hospitality, 0.7% in state government, 0.3% in natural resources and mining, 0.3% in information, and 10.5% in other industries.²⁹ ACS estimates conflict somewhat with economic data compiled in the ALARI database, which shows the greatest number of Kipnuk residents employed in production, transportation, and material moving occupations, along with a high number employed in service occupations. It should also be noted that ACS and DOLWD employment statistics do not reflect residents’ activity in the subsistence economy.

Governance

Kipnuk is an unincorporated community and is not located in an organized borough. There is no taxing authority in Kipnuk,³⁰ and no municipal revenue information was reported by the community between 2000 and 2010. The community did receive State Revenue Sharing contributions of between \$3,000 and \$4,000 per year from 2000 to 2003, as well as a \$474,525 grant from the U.S. Economic Development Administration (EDA) in 2001 to assist with construction of a new halibut processing facility (see *Processing Plants* section for more information). Details about these selected community revenue sources are presented in Table 2.

Kipnuk was included under the Alaska Native Claims Settlement Act (ANCSA), and is federally recognized as a Native village. The authorized traditional entity, recognized by the Bureau of Indian Affairs (BIA), is the Native Village of Kipnuk. The local village Native corporation is Kugkaktlik, Limited, which manages 115,200 acres of land. Kipnuk belongs to the Calista Corporation, the regional Native corporation of the lower Yukon River, the central and

²⁹ Ibid.

³⁰ Alaska Dept. of Comm. And Rural Affairs. (n.d.). *Community Information Summaries*. Retrieved January 24, 2012 from http://www.commerce.state.ak.us/dca/commdb/CF_CIS.htm.

lower Kuskokwim River, and the Bering Sea coast from the mouth of the Yukon River south to Cape Newenham.³¹

Kipnuk is also a member of the Association of Village Council Presidents (AVCP), a tribal 501(c)(3) non-profit organization headquartered in Bethel that serves communities in the Yukon-Kuskokwim Delta. At the request of villages, AVCP provides social services, human development and culturally relevant programming to “promote tribal self-determination and self-governance and to work to protect tribal culture and traditions.”³² The AVCP is one of the 12 regional Alaska Native 501(c)(3) nonprofit organizations that were identified under ANCSA and charged with naming incorporators to create regional for-profit corporations. Today, these regional Native Associations receive federal funding to administer a broad range of services to villages in their regions.³³ AVCP is made up of 56 villages and 45 village corporations.³⁴

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Kipnuk 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	\$4,170	n/a
2001	n/a	n/a	\$3,707	\$474,525
2002	n/a	n/a	\$3,681	n/a
2003	n/a	n/a	\$3,631	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

¹ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Financial Documents Delivery System*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

² 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.

³ Alaska Dept. of Rev. (n.d.). *(2000-2009) Taxes and Fees Annual Report*. Retrieved April 15, 2011 from <https://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.

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

³¹ Calista Corporation. *Region/Land Description*. Retrieved December 6, 2011 from http://www.calistacorp.com/about/region_description.html.

³² Association of Village Council Presidents. (n.d.). AVCP homepage. Retrieved December 6, 2011 from www.avcp.org.

³³ U.S. Government Accountability Office. 2005. *Alaska Native Villages: Report to Congressional Addressees and the Alaska Federation of Natives*. Retrieved February 7, 2012 from <http://www.gao.gov/new.items/d05719.pdf>.

³⁴ Calista Corporation. 2011. *Our Communities: The Villages of the Calista Region*. Retrieved February 6, 2012 from <http://www.calistacorp.com/shareholders/communities>.

The closest offices of the Alaska Department of Fish and Game (ADF&G) and Alaska Department of Commerce, Community, and Economic Development are located in Bethel. A National Marine Fisheries Service (NMFS) field office is located in Bethel and a main office is located in Anchorage. The nearest offices of the Alaska Department of Natural Resources and the Bureau of Citizenship and Immigration Services are located in Anchorage.

Infrastructure

Connectivity and Transportation

Kipnuk offers a state-owned 2,120 feet long by 35 feet wide gravel airstrip, with scheduled air taxi service and available charter services. As of June 2012, roundtrip airfare from Anchorage to Kipnuk costs \$726.³⁵ A seaplane base is also available. Boats and skiffs are used by residents for local travel during the summer, with snowmobiles in the winter. Winter trails lead to Tuntutuliak (77 miles), Chefornek (20 miles), and Kwigillingok (35 miles). Although there is no dock, barges from Bethel deliver cargo each summer.³⁶

Facilities

Electricity in Kipnuk is provided by the Kipnuk Light Plant, a diesel plant operated by the Village Council. Water is supplied from a 210,000 gallon water storage tank, which is filled from a reservoir on a nearby lake and maintained by the Village Council and the school. Homes in Kipnuk are not plumbed. Residents haul filtered and chlorinated water to their homes from several watering points throughout the community. The Village Council provides honeybuckets haul service, and sewage is deposited in a sewage lagoon. Some outhouses are also in use in Kipnuk.³⁷ In 2009, the Alaska Native Tribal Health Consortium received a grant from the U.S. Environmental Protection Agency for construction of a new sewage lagoon in Kipnuk to meet Clean Water Act standards.^{38,39} The old sewage lagoon was affected by flooding and overflow events.⁴⁰ The Village Council also offers refuse collection services and maintains a Class III unpermitted landfill.⁴¹

Other community facilities in Kipnuk include the Kanganak Community Hall is located in Kipnuk, a volunteer fire department, and a school library. Safety services are provided by the Village Public Safety Officer stationed in Kipnuk. The nearest state trooper post is in Bethel.

³⁵ Airfare was calculated using lowest fare. <http://www.travelocity.com> (retrieved November 22, 2011).

³⁶ 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.

³⁷ See footnote 36.

³⁸ ProPublica website. 2012. "Grant: Alaska Native Tribal Health Consortium, Inc." *Recovery Tracker – Eye on the Stimulus*. Retrieved September 25, 2012 from <http://projects.propublica.org/recovery/item/20120201/14755>.

³⁹ Bezek Durst Seiser Inc. 2012. *Lower Kuskokwim School District – Kipnuk K-12 Renovation / Addition – Specifications Volume IV of V. Bid Documents*. Retrieved September 26, 2012 from <http://www.djc.com/func/project.php?action=plans&jobid=2000112724>.

⁴⁰ Seely, Nichelle. August, 2012. "Decontaminating Kipnuk: Preparing the site for a new school." *Alaska Business Monthly*. Retrieved September 25, 2012 from <http://www.akbizmag.com/Alaska-Business-Monthly/July-2012/Decontaminating-Kipnuk/>.

⁴¹ See footnote 36.

Visitor accommodations are not available in Kipnuk. Local and long-distance telephone service, cable, and internet access are all available locally.⁴² Kipnuk also has a post office.

With regard to fisheries-related infrastructure, no dock infrastructure is available in Kipnuk.⁴³

Medical Services

The Kipnuk Clinic, owned by the Village Council and operated by the Yukon Kuskokwim Health Corporation, provides residents with basic medical services. The clinic is a Community Health Aid Program site. The health aide provides emergency services in the community. Outside Emergency Services have coastal and air access.⁴⁴ The nearest hospital is located in Bethel.

Educational Opportunities

There is one school in the Kipnuk, which offers a preschool through 12th grade education. As of 2011, the Chief Paul Memorial School had with 211 students and 14 teachers. Kipnuk is located in the Lower Kuskokwim School District.⁴⁵

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Harvest of marine resources has been important to residents of the Kipnuk area since prehistory. Yup'ik Eskimo people were historically very mobile, following the migration and seasonal availability of subsistence resources.⁴⁶ Today, subsistence harvest remains fundamental to the way of life and economy in Kipnuk, and commercial fisheries are also an important source of income.⁴⁷ Between 2000 and 2010, residents of Kipnuk were involved in commercial fisheries for herring, halibut, and salmon (see *Commercial Fishing* section).

Kipnuk is located near the Kuskokwim River. Commercial harvest of salmon first took place in the Kuskokwim area in 1913, although in the early years it was a quasi-commercial fishery with limited distribution. Catch was dried and sold as food for sled dogs during the 1930s when dog teams were the primary means of hauling freight to villages in Western Alaska. When Alaska became a state in 1959, commercial fishing districts were defined along the Kuskokwim River. In the 1960s and 1970s, commercial salmon fisheries in the Kuskokwim River were still considered experimental, and management efforts focused on increasing commercial use while ensuring continued supply for subsistence use. Harvest levels continued to increase until the mid-1990s, after which time fishing effort, harvest levels, and salmon prices decreased. Current state-

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

⁴⁶ Alaska Native Heritage Center. (n.d) *Yup'ik & Cup'ik - Who We Are website*. Retrieved December 8, 2011 from http://www.alaskanative.net/en/main_nav/education/culture_alaska/yupik/.

⁴⁷ See footnote 36.

dictated management is focused on sustainability of salmon runs, ensuring first that subsistence needs are met followed by providing opportunity for commercial harvest of available surpluses.⁴⁸

Commercial catch of herring for human consumption began in 1878 in Alaska, while harvest of herring for bait began around 1900, and herring sac roe fisheries developed in the late 1970s. The largest aggregation of herring in Alaska spawns along the northern shore of Bristol Bay, near the village of Togiak. Spawning herring are harvested using purse seines and gillnets in the Togiak sac roe fishery. A spawn-on-kelp harvest is also taken in Togiak. Along the coast of the Y-K Delta there are six commercial gillnet sac roe districts: Security Cove, Goodnews Bay, Cape Avinof, Nelson Island, and Cape Romanzof. Harvests in these areas have been declining in recent years, in part due to lack of processing capacity in the region.⁴⁹

Commercial exploitation of halibut first extended into the Bering Sea region in 1928 after development of diesel engines, which allowed fishing vessels to undertake longer trips.⁵⁰ Today, Pacific halibut fisheries are managed under the International Pacific Halibut Commission.

The closest marine area to Kipnuk, Kinak Bay, is included in Federal Statistical and Reporting Area 514, Pacific Halibut Fishery Regulatory Area 4E, and the Bering Sea Sablefish Regulatory Area. Kipnuk is a member of the CVRF, a CDQ group that promotes employment opportunities for residents as well as participation in the Bering Sea crab and groundfish fisheries.⁵¹ Kipnuk is not eligible to participate in the Community Quota Entity program.

Processing Plants

According to ADF&G's 2010 Intent to Operate list, Coastal Villages Seafoods operates a seafood processing plant in Kipnuk. The facility was constructed during the summer of 2002,⁵² funded by a grant from the EDA (see *Governance* section). The Kipnuk facility processes halibut from June to July. Coastal Villages maintains a local community service center that helps local fishing families maintain, repair, service, and modify their boats, motors, and fishing gear. The local plant provides free room and board to its fish processing workers, as well as transportation to and from the plant site and a cash bonus for all those who complete their contracts.⁵³

⁴⁸ Clark, McGregor, Mecum, Krasnowski and Carroll. 2006. "Kuskokwim Commercial Salmon Fishery." In *The Commercial Salmon Fishery in Alaska*. Alaska Dept. of Fish and Game, Pgs. 105-146. Retrieved December 28, 2011 from http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1_p4.pdf.

⁴⁹ Woodby, Doug, Dave Carlile, Shareef Siddeek, Fritz Funk, John H. Clark, and Lee Hulbert. 2005. *Commercial Fisheries of Alaska*. Alaska Dept. of Fish and Game, Special Publication No. 05-09. Retrieved December 29, 2011 from <http://www.adfg.alaska.gov/FedAidPDFs/sp05-09.pdf>.

⁵⁰ Thompson, W. F. and N. L. Freeman. 1930. *History of the Pacific Halibut Fishery*. Report of the International Fisheries Commission. Number 5. Retrieved June 1, 2012 from <http://www.iphc.int/publications/scirep/Report0005.pdf>.

⁵¹ Coastal Villages Region Fund. (n.d.). *Home page*. Retrieved December 12, 2011 from <http://www.coastalvillages.org/>.

⁵² Coastal Villages Region Fund. 2002. *CDQ Quarterly Report: October 1 through December 31, 2002*. Retrieved September 25, 2012 from www.commerce.state.ak.us/bsc/CDQ/pub/CDQ_CV_Qtr4_Report_02.pdf.

⁵³ Coastal Villages Region Fund website. 2010. *Community Service Centers, Careers, and Halibut Commercial Fishing*. Retrieved September 25, 2012 from <http://coastalvillages.org/>.

Fisheries-Related Revenue

Between 2000 and 2010, no information was reported regarding fisheries-related revenue in Kipnuk (Table 3).

Commercial Fishing

During the 2000-2010 period, Kipnuk residents were active in commercial fisheries for herring, halibut, and salmon. They participated in fisheries for these species as state permit holders, vessel owners, and crew license holders, with declining participation numbers over the decade. In 2000, 99 Kipnuk residents held state issued Commercial Fishery Entry Commission (CFEC) permits, 85 residents held commercial crew licenses, and 90 vessels were primarily owned by a Kipnuk resident. By 2010, 45 Kipnuk residents were CFEC permit holders, 31 held crew licenses, and 34 vessels were primarily owned by residents. The number of vessels that were homeported in Kipnuk also decreased steadily through this period. Permit information is presented in Table 4, and other statistics about the commercial fishing sector in Kipnuk are presented in Table 5.

In 2010, 45 Kipnuk residents held a total of 61 CFEC permits, including 24 halibut permits, 21 salmon permits, and 14 herring permits. The number of herring permits held by Kipnuk residents decreased substantially over the 2000-2010 period, from a high of 89 permits held by 89 permit holders in 2000 to a low of 3 permits held by 2 permit holders in 2008, rebounding slightly by 2010. Salmon permit numbers declined very slightly over the period, while halibut permit numbers remained stable despite greater yearly variability.

Throughout the 2000-2010 period, salmon CFEC permits were held in the Kuskokwim gillnet and Bristol Bay drift gillnet fisheries, with a much higher rate of active permits in the Bristol Bay fishery. In 2010, herring CFEC permits were held in the Nelson Island gillnet fishery, the Cape Avinof and Goodnews Bay roe herring gillnet fisheries, and the Bristol Bay spawn-on-kelp hand-picking fishery. No herring permits were actively fished from 2006 to 2010. From 2000 to 2005, all active herring permits were fished in the Cape Avinof roe herring gillnet fishery, with 63 active permits in 2000 declining to 14 by 2005. Halibut permits were held in the statewide hand troll fishery, the statewide longline fishery using vessels under 60 feet in length, and the statewide mechanical jig fishery. The total number of halibut permits held were spread relatively evenly across these three gear types, and the rate at which the gear types were actively fished was similar across gear types as well. It is important to note that very few halibut permits were actively fished in the earlier years of the 2000-2010 period. The increase in the number of halibut permits actively fished starting in 2003 may be related to the construction of the new halibut processing plant in Kipnuk, which was completed in 2002.⁵⁴

Between 2000 and 2010, no Federal Fisheries Permits or federal License Limitation Permits were held by Kipnuk residents (Table 4), and no Kipnuk residents held participated in federal catch share fisheries for halibut, sablefish, or crab (Tables 6 through 8).

In addition to commercial fishing activity, the community of Kipnuk is engaged in seafood processing. Starting in 2002, one shore-side processing facility was located in Kipnuk (see *Processing Plants* section). No locally operating fish buyers were reported between 2000 and 2008, and no vessels were reported to make landings during those years. However, in 2009

⁵⁴ See footnote 52.

and 2010, one fish buyer was reported to be present, and 19 vessels were reported to have delivered landings in Kipnuk. In 2010, Kipnuk ranked 60th in landings and 58th in ex-vessel revenue out of 67 Alaskan ports that received landings in 2010. Total landings and revenue in Kipnuk is considered confidential for 2009 or 2010 due to the small number of fish buyers in operation (Table 5).

Given the lack of fish buyers in Kipnuk between 2000 and 2008, no landings or ex-vessel revenue were reported in the community during those years. Given the small number of fish buyers present in 2009 and 2010, landings in Kipnuk in these two years is considered confidential for all species except crab, which received no landings (Table 9). In addition to local landings in Kipnuk, vessel owners based out of Kipnuk made landings in various ports between 2000 and 2010. In the case of salmon, halibut, and herring landings, data can be reported in most years, but in some years is considered confidential due to the small number of participants, and information is considered confidential for all other management groups in all years of the period. For those years in which data can be reported, salmon landings averaged 352,931 net pounds per year, with an average ex-vessel revenue of \$234,548 per year. From 2000 to 2005, prior to the precipitous drop in herring permit activity, herring landings averaged 303,747 net pounds per year, valued on average at \$20,690. Not including 2001 and 2002 when few halibut permits were fished, halibut landings by Kipnuk vessel owners averaged 7,778 net pounds per year, valued on average at \$21,991. This information about landings and revenue generated by Kipnuk vessel owners is presented in Table 10.

Table 3. Known Fisheries-Related Revenue (in U.S. Dollars) Received by the Community of Kipnuk: 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										
<i>Total fisheries-related revenue⁴</i>	<i>n/a</i>										
<i>Total municipal revenue⁵</i>	<i>n/a</i>										

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 known revenue sources in the previous rows.

⁵ Total municipal revenue represents the total revenue that the city reports each year in its financial statements. 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.

NOAA-TM-AFSC-259 – Volume 10
Community Profiles for North Pacific Fisheries – Alaska: Kipnuk

Table 4. Permits and Permit Holders by Species, Kipnuk: 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 Permits ¹	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
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	21	19	19	33	27	17	19	26	26	31	25
	Fished permits	7	0	1	24	16	9	14	22	21	24	21
	% of permits fished	33%	0%	5%	73%	59%	53%	74%	85%	81%	77%	84%
	Total permit holders	21	19	19	33	27	17	19	26	24	30	24
Herring (CFEC) ²	Total permits	89	65	55	38	33	28	20	5	3	6	15
	Fished permits	63	40	31	17	21	14	0	0	0	0	0
	% of permits fished	71%	62%	56%	45%	64%	50%	0%	0%	0%	0%	0%
	Total permit holders	89	65	55	38	33	28	19	4	2	5	14

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (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
Groundfish (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 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	25	24	24	23	23	24	22	21	21	21	21
	Fished permits	15	9	6	10	12	11	9	8	8	9	11
	% of permits fished	60%	38%	25%	43%	52%	46%	41%	38%	38%	43%	52%
	Total permit holders	28	26	23	25	23	25	23	23	21	22	21
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>135</i>	<i>108</i>	<i>98</i>	<i>94</i>	<i>83</i>	<i>69</i>	<i>61</i>	<i>52</i>	<i>50</i>	<i>58</i>	<i>61</i>
	<i>Fished permits</i>	<i>85</i>	<i>49</i>	<i>38</i>	<i>51</i>	<i>49</i>	<i>34</i>	<i>23</i>	<i>30</i>	<i>29</i>	<i>33</i>	<i>32</i>
	<i>% of permits fished</i>	<i>63%</i>	<i>45%</i>	<i>39%</i>	<i>54%</i>	<i>59%</i>	<i>49%</i>	<i>38%</i>	<i>58%</i>	<i>58%</i>	<i>57%</i>	<i>52%</i>
	<i>Permit holders</i>	<i>99</i>	<i>78</i>	<i>69</i>	<i>70</i>	<i>59</i>	<i>50</i>	<i>47</i>	<i>49</i>	<i>44</i>	<i>51</i>	<i>45</i>

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 Kipnuk: 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 Kipnuk ²	Total Net Pounds Landed in Kipnuk ^{2,5}	Total Ex-Vessel Value of Landings in Kipnuk ^{2,5}
2000	82	0	0	90	85	0	0	\$0
2001	47	0	0	70	65	0	0	\$0
2002	53	0	1	61	56	0	0	\$0
2003	37	0	1	59	56	0	0	\$0
2004	34	0	1	54	49	0	0	\$0
2005	32	0	1	40	34	0	0	\$0
2006	22	0	1	35	30	0	0	\$0
2007	21	0	1	34	29	0	0	\$0
2008	25	0	1	31	24	0	0	\$0
2009	28	1	1	35	28	19	-	-
2010	31	1	1	34	28	19	-	-

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 Kipnuk: 2000-2010.

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

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

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

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

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

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

Year	Number of Crab Quota Share Account Holders	Crab Quota Shares Held	Crab IFQ 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 Kipnuk: 2000-2010.

	<i>Total Net Pounds¹</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	0	0	0	0	0	0	0	0	0	-	-
Finfish	0	0	0	0	0	0	0	0	0	-	-
Halibut	0	0	0	0	0	0	0	0	0	-	-
Herring	0	0	0	0	0	0	0	0	0	-	-
Other Groundfish	0	0	0	0	0	0	0	0	0	-	-
Other Shellfish	0	0	0	0	0	0	0	0	0	-	-
Pacific Cod	0	0	0	0	0	0	0	0	0	-	-
Pollock	0	0	0	0	0	0	0	0	0	-	-
Sablefish	0	0	0	0	0	0	0	0	0	-	-
Salmon	0	0	0	0	0	0	0	0	0	-	-
<i>Total²</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>-</i>	<i>-</i>
	<i>Ex-vessel Value (Nominal U.S. Dollars)</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
Finfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
Halibut	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
Herring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
Other Groundfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
Other Shellfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
Pacific Cod	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
Pollock	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
Sablefish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
Salmon	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	-
<i>Total²</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>-</i>	<i>-</i>

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.

² Totals only represent non-confidential data.

NOAA-TM-AFSC-259 – Volume 10
Community Profiles for North Pacific Fisheries – Alaska: Kipnuk

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

	<i>Total Net Pounds¹</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	-	-	-	-	-	-	-	-	-	-	-
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	2,716	-	-	5,516	1,854	1,146	4,061	7,683	17,545	15,406	14,079
Herring	538,676	414,550	128,377	326,430	115,843	298,604	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	348,158	110,240	-	198,638	406,436	395,633	407,445	457,630	419,933	495,032	290,161
<i>Total²</i>	<i>889,550</i>	<i>524,790</i>	<i>128,377</i>	<i>530,584</i>	<i>524,133</i>	<i>695,383</i>	<i>411,506</i>	<i>465,313</i>	<i>437,478</i>	<i>510,438</i>	<i>304,240</i>
	<i>Ex-vessel Value (Nominal U.S. Dollars)</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	-	-	-	-	-	-	-	-	-	-	-
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	\$3,398	-	-	\$6,896	\$2,317	\$2,077	\$14,865	\$33,007	\$53,297	\$37,717	\$44,349
Herring	\$50,033	\$19,484	\$6,034	\$16,974	\$14,596	\$17,021	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	\$231,853	\$46,527	-	\$96,928	\$204,374	\$235,631	\$259,527	\$297,850	\$312,276	\$388,605	\$271,907
<i>Total²</i>	<i>\$285,284</i>	<i>\$66,011</i>	<i>\$6,034</i>	<i>\$120,798</i>	<i>\$221,287</i>	<i>\$254,729</i>	<i>\$274,392</i>	<i>\$330,857</i>	<i>\$365,573</i>	<i>\$426,322</i>	<i>\$316,256</i>

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.

² Totals only represent non-confidential data.

Recreational Fishing

Between 2000 and 2010, no active sport fish guide businesses or licensed sport fish guides were present in Kipnuk. A small number of Kipnuk residents purchased sportfishing licenses during this period, varying between 7 and 33 per year. For most years during the period, no sportfishing licenses were sold within the community of Kipnuk. This indicates that Kipnuk is not a center of sportfishing activity in the Y-K delta region, and that Kipnuk residents must travel elsewhere to prepare for sportfishing activity.

The Alaska Statewide Harvest Survey,⁵⁵ conducted by ADF&G between 2000 and 2010, did not provide information regarding the species targeted by private anglers in on the Kugkaktlik River near Kipnuk. No kept/release log book data were reported for fishing charters out of Nunapitchuk between 2000 and 2010.⁵⁶ However, Kipnuk is located within Alaska Sport Fishing Survey Area V – Kuskokwim River and Bay Drainages. Information is available about both saltwater and freshwater sportfishing activity at this regional scale (Table 11). Between 2000 and 2010, saltwater sportfishing activity was minimal, with between 0 and 28 non-Alaska resident angler days fished per year, and between 0 and 108 Alaska resident angler days fished per year. A majority of sportfishing activity occurred in freshwater, with non-Alaska resident anglers fishing consistently more angler days (12,624 – 17,582 angler days per year) than Alaska resident anglers (5,166 – 9,152 angler days per year).

Table 11. Sport Fishing Trends, Kipnuk: 2000-2010.

Year	Active Sport Fish Guide Businesses¹	Sport Fish Guide Licenses¹	Sport Fishing Licenses Sold to Residents²	Sport Fishing Licenses Sold in Kipnuk²
2000	0	0	7	0
2001	0	0	24	0
2002	0	0	15	0
2003	0	0	20	0
2004	0	0	18	0
2005	0	0	20	0
2006	0	0	18	0
2007	0	0	13	0
2008	0	0	23	0
2009	0	0	33	10
2010	0	0	27	15

⁵⁵ 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).

⁵⁶ 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, Kipnuk: 2000-2010.

Year	Saltwater		Freshwater	
	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	27	13	13,388	6,602
2001	0	0	16,437	4,236
2002	0	0	14,583	6,062
2003	28	63	16,923	7,355
2004	0	15	16,239	9,152
2005	19	18	13,725	5,685
2006	0	0	14,773	7,616
2007	0	0	13,390	7,816
2008	0	108	17,582	8,172
2009	0	0	12,625	5,166
2010	0	0	14,033	5,422

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.]

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).

Subsistence Fishing

Historically, Yup'ik Eskimos along the Bering Sea coast harvested herring, marine mammals, Pacific halibut, salmon, flounder, and a variety of freshwater fish species.⁵⁷ Traditionally, dried herring has also been an important protein source for residents of Bering Sea communities such as Kipnuk, where salmon are not as readily available as in other regions.⁵⁸ Today, subsistence harvest remains a fundamental aspect of the local economy and culture. Marine mammals are harvested throughout the year, except for the short days of December and January and the peak of subsistence salmon harvest during summer. Subsistence herring harvest is primarily conducted during May and June.⁵⁹

⁵⁷ Fienup-Riordan, A. 1994. *Boundaries and Passages: Rule and Ritual in Yup'ik Eskimo Oral Tradition*. Norman: University of Oklahoma Press.

⁵⁸ Woodby, Doug, Dave Carlile, Shareef Siddeek, Fritz Funk, John H. Clark, and Lee Hulbert. 2005. *Commercial Fisheries of Alaska*. Alaska Dept. of Fish and Game, Special Publication No. 05-09. Retrieved December 29, 2011 from <http://www.adfg.alaska.gov/FedAidPDFs/sp05-09.pdf>.

⁵⁹ Ceñaliulriit Coastal Resource Service Area. 2008. *Coastal Management Plan: Final Plan Amendment*. Retrieved February 9, 2012 from http://www.alaskacoast.state.ak.us/District/DistrictPlans_Final/Cenaliulriit/plan/plan-4-08.pdf.

No information was reported by ADF&G between 2000 and 2010 regarding per capita subsistence harvest or the percentage of Kipnuk households utilizing various marine resources for subsistence purposes (Table 12). Likewise, no information was reported about total pounds of marine invertebrates or non-salmon fish harvested for subsistence purposes in Kipnuk (Table 13).

However, information was reported by ADF&G regarding both subsistence salmon permits and Subsistence Halibut Registration Certificates (SHARC) issued in Kipnuk for some years during the 2000-2010 period. Between 2000 and 2008, the number of subsistence salmon permits issued to Kipnuk households stayed very consistent, fluctuating between 175 and 177 per year. Subsistence salmon harvest was relatively low compared to communities along the Kuskokwim and Yukon Rivers, and areas further south in Alaska (Table 13). For those years in which harvest data were reported, coho and chum salmon were the most heavily harvested species, averaging 154 and 108 fish harvested per year, respectively. Smaller numbers of sockeye and Chinook salmon were reported as harvested in some years. No pink salmon were reported harvested between 2000 and 2008.

Between 2003 and 2010, the number of SHARC cards issued to Kipnuk residents declined from 89 to 12. The highest harvest volume of subsistence halibut during the reported period took place in 2007, when 64 SHARC cards were fished with a total harvest of 17,364 pounds of halibut. This was much higher than harvest in other years during the period (Table 14).

Bering Sea coastal communities, including Kipnuk, are known to harvest sea mammals year-round,⁶⁰ and residents of other communities in the region have traditionally traveled to Kipnuk and other coastal villages to participate in subsistence harvest of walrus and seal.⁶¹ Data reported by the U.S. Fish and Wildlife Service between 2000 and 2007 indicate that an average of 5 walrus were harvested per year by Kipnuk households (39 total walrus during this period). No data were reported by management agencies regarding harvest of beluga whale, sea otter, sea lion, or seal species by Kipnuk residents between 2000 and 2010 (Table 15).

⁶⁰ Ibid.

⁶¹ Coffing, M. 1991. *Kwethluk Subsistence: Contemporary Land Use Patterns, Wild Resource Harvest and Use, and the Subsistence Economy of a Lower Kuskokwim River Area Community*. Alaska Dept. of Fish and Game, Division of Subsistence. Technical Paper No. 157.

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

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

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

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

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Kipnuk: 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	177	13	170	269	223	n/a	179	n/a	n/a
2001	176	1	1	2	74	n/a	4	n/a	n/a
2002	176	1	1	5	69	n/a	11	n/a	n/a
2003	176	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004	175	10	49	156	250	n/a	89	n/a	n/a
2005	175	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	175	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2007	175	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2008	176	n/a	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.

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, Kipnuk: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	89	67	8,273
2004	88	68	7,677
2005	87	38	4,409
2006	87	68	8,976
2007	88	64	17,364
2008	11	12	1,680
2009	12	7	273
2010	12	2	490

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, Kipnuk: 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	n/a	10	n/a	n/a	n/a	n/a
2001	n/a	n/a	5	n/a	n/a	n/a	n/a
2002	n/a	n/a	1	n/a	n/a	n/a	n/a
2003	n/a	n/a	4	n/a	n/a	n/a	n/a
2004	n/a	n/a	2	n/a	n/a	n/a	n/a
2005	n/a	n/a	6	n/a	n/a	n/a	n/a
2006	n/a	n/a	6	n/a	n/a	n/a	n/a
2007	n/a	n/a	5	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.

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.

³ 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.