

Mekoryuk (ma-KOR-ee-yuck)



People and Place

Location

Mekoryuk is situated at the mouth of Shoal Bay, on the north shore of Nunivak Island in the Bering Sea. The Island lies 30 miles off the mainland coast. The community is located about 149 air miles west of Bethel and 553 miles west of Anchorage. The Island's 1.1 million acres are included in the 20-million-acre Yukon Delta National Wildlife Refuge (NWR), and the southern half of the Island has been designated as the Nunivak Wilderness Area. The City of Mekoryuk encompasses 7.4 square miles of land and 0.1 square miles of water, all of which is located within the boundaries of the NWR. Mekoryuk is in the Bethel Census Area and Cape Nome Recording District.^{1,2}

*Demographic Profile*³

In 2010, there were 191 residents in Mekoryuk, making it the 191st largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population of Mekoryuk rose by 7.9%. According to Alaska Department of Labor estimates, the population of permanent residents peaked at 220 individuals in 2006, and then declined again to 174 residents by 2009 (Table 1). The population decline in the last years of the decade is reflected in a negative average annual growth rate between 2000 and 2009 of -1.2% (Table 1).

In 2010, the majority of the population of Mekoryuk identified themselves as American Indian and Alaska Native (93.2%), along with 3.3% who identified as White, and 6.2% identifying with two or more races. In addition, 0.5% of Mekoryuk's population identified themselves as Hispanic in 2010. The percentage of the population identifying as White increased between 1990 and 2000, from 0.6% to 3.3%, and remained stable in 2010 at 3.1% (Figure 1).

The number of households in Mekoryuk increased between 1990 and 2000, from 63 to 73, followed by a slight decrease to 70 occupied housing units in 2010. The average household size in Mekoryuk was 2.73 in 2010, a slight decrease from 2.88 persons per household in 2000 and 2.8 persons per household in 1990. Of the 86 housing units surveyed for the 2010 Decennial Census, 40.7% were owner-occupied, 40.7% were rented, and 18.6% were vacant or used only seasonally. Between 1990 and 2010, no residents of Mekoryuk lived in group quarters.

In a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that the population of Mekoryuk reaches its peak during the summer, in August. They reported that approximately 70 seasonal workers or transients are

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 Wilderness.net website. (n.d.) *Nunivak Wilderness*. Retrieved December 12, 2011 from <http://www.wilderness.net>.

³ 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>.

present during summer months, and that population fluctuations are not driven by employment in the commercial fishing sector.

In 2010, the gender makeup of Mekoryuk’s population was more heavily weighted toward males (56.7% male and 43.3% female) than the state population as a whole, which was 52% male and 48% female. The median age of Mekoryuk residents was 40.5 years, older than the national average of 36.8 years and the median age for Alaska of 33.8 years. In 2010, the age groups most skewed toward males were 40 to 49 and 50 to 59, while there was a relatively even spread of males and females across other age categories in Mekoryuk, and slightly more females in the 20 to 29 age group. Approximately 16.2% of Mekoryuk’s population was age 60 or older in 2010. The overall population structure of Mekoryuk in 2000 and 2010 is shown in Figure 2.

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

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	177	-
2000	210	-
2001	-	214
2002	-	204
2003	-	204
2004	-	199
2005	-	192
2006	-	220
2007	-	207
2008	-	195
2009	-	174
2010	191	-

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, Mekoryuk: 2000-2010 (U.S. Census).

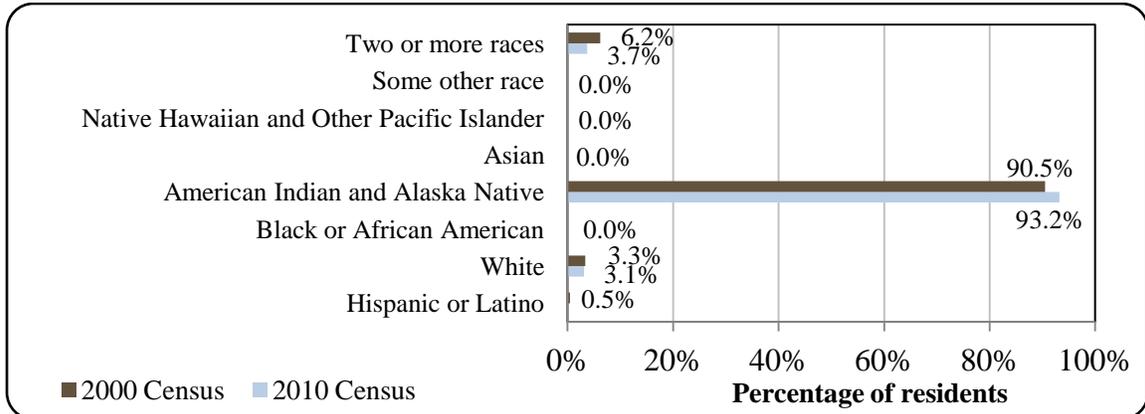
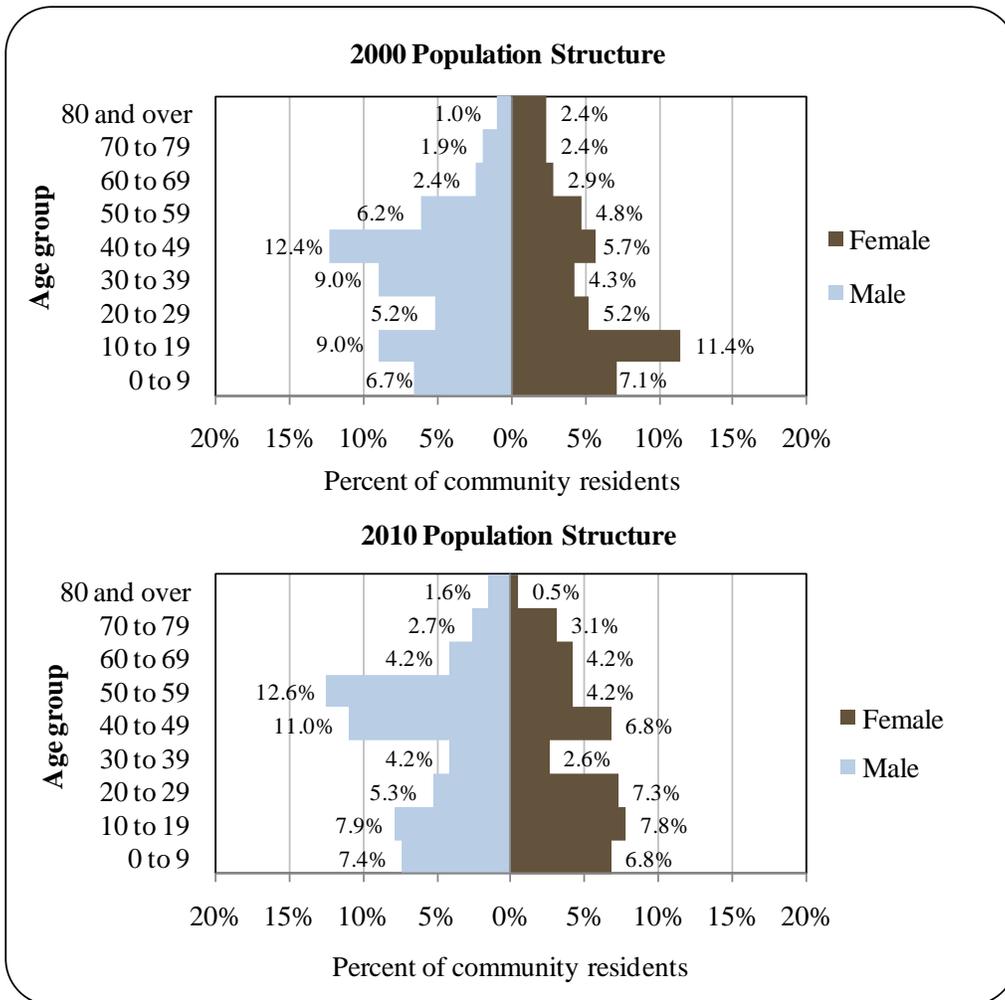


Figure 2. Population Age Structure in Mekoryuk Based on the 2000 and 2010 U.S. Decennial Census.



In terms of educational attainment, according to 2006-2010 American Community Survey (ACS) estimates,⁴ 75.4% of Mekoryuk residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaska residents overall. Also in 2010, 17.7% of the population was estimated to have less than a 9th grade education, compared to 3.5% of Alaska residents overall; 6.9% were estimated to have a 9th to 12th grade education but no diploma, compared to 5.8% of Alaska residents overall; 23.8% were estimated to have some college but no degree, compared to 28.3% of Alaska residents overall; 3.1% were estimated to have an Associate's degree, compared to 8% of Alaska residents overall; 7.7% were estimated to have a Bachelor's degree, compared to 17.4% of Alaska residents overall; and 3.8% were estimated to have a graduate or professional degree, compared to 9.6% of Alaska residents overall.

History, Traditional Knowledge, and Culture

Historically, the Native Eskimo people present in the area of Mekoryuk have been the Yup'ik peoples, specifically the Nuniwarmiut people who are Cup'ig Eskimos. Nunivak Island itself has been peopled for at least 2,000 years. In 1821, the first outside contact occurred with the Russian American Company. The Company documented 400 people living in 16 villages on the Island. In 1874 a summer village camp by the name of "Koot" was noted at the modern day site of Mekoryuk. There was an epidemic in 1900 which decimated the population. Only four families in the village survived. An Eskimo missionary built the Evangelical Covenant Church in the 1930s in the village, and a Bureau of Indian Affairs (BIA) school was built in 1939. The school attracted people to relocate from other parts of the Island to the village.⁵

An Eskimo-Russian trader introduced reindeer for commercial purposes in 1920. In the 1940s, the operation was purchased by the BIA, and in 1945 a slaughterhouse was constructed. The reindeer were bred with caribou from Denali Park, resulting in animals that are larger and more difficult to handle than other reindeer in the State of Alaska. In 1934, 34 musk oxen from Greenland were brought to Nunivak Island in an effort to save the animal from extinction. Presently the herd numbers at around 500 musk oxen, not including calves from the herd that have been relocated to start herds in other areas of Alaska. In 1940, a U.S. post office opened in the village. During this time period, traditional ceremonies and beliefs were still practiced by the Native people. Women lived in semi-subterranean sod houses and men lived in one or more men's community houses.⁶ Extensive change came to the Island in the 1950s and 1960s. In 1957, an airstrip was built and the Territorial Guard was formed, which caused men from Nunivak Island to go to Fort Richardson in Anchorage for training. By 1957, the only permanent community left on the Island was Mekoryuk, and around this time many of the families moved to the community of Bethel to be closer to a high school. Families returned seasonally to Mekoryuk for fishing and sea mammal hunting in the late spring. The City of Mekoryuk was incorporated

⁴ 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.

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.

in 1969. In 1978, a high school was constructed in the community.⁷ The sale, importation, and possession of alcohol are banned in the community.⁸

Natural Resources and Environment

The Bering Sea, which surrounds Nunivak Island, strongly influences the local climate. Foggy and stormy weather are frequent. Average annual precipitation is 15 inches, and annual snowfall averages 57 inches. In the summer, high temperatures average 48 to 54 °F, and winter high temperatures range from 37 to 44 °F. Extremes have been recorded from 76 to -48 °F.⁹

The entirety of Nunivak Island (1.1 million acres) is included in the Yukon Delta 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, muskox, and marine mammals; to fulfill treaty obligations; to provide the opportunity for continued subsistence uses; and to ensure water quality and necessary water quantity.” Nunivak Island is characterized by 100 to 450-ft-high coastal bluffs and immense sand dunes (up to more than 100 ft) backing sandy beaches along the southern coast, and rocky shores, saltwater lagoons, and eelgrass beds in other areas. The shores are frequented by migratory birds and sea mammals.^{10,11}

Nunivak Island is of volcanic origin. The interior of the island contains lava flows and craters, some holding deep lakes. The famous herds of Nunivak reindeer and great shaggy musk oxen reside on the large upland plateau, a landscape dominated by tundra rising 500 to 800 ft above sea level. The reindeer, a cross between reindeer and caribou from Denali National Park, are owned and managed by the Village of Mekoryuk. The musk oxen were introduced from Greenland in 1935, following the extinction of the Alaskan musk ox around 1865.^{12,13} Today, the herd numbers around 500,¹⁴ and a permit system is used to determine which hunters will be allowed to shoot a few each year.¹⁵

According to the Coastal Management Plan for the Ceñaliulriit Coastal Resource Services Area, which includes Nunivak Island, high risk natural hazards in the area include flooding, erosion, storm surges, sea ice, and thawing of permafrost.¹⁶

According to the Alaska Department of Environmental Conservation, there are no notable active environmental cleanup sites located in Mekoryuk as of May 2012.¹⁷

⁷ Ibid.

⁸ Alaska Dept. of Public Safety (2011). *Local Option Restrictions*. Retrieved May 31, 2012 from <http://dps.alaska.gov/abc/restrictions.aspx>.

⁹ See footnote 5.

¹⁰ U.S. Fish and Wildlife Service (2011). *Yukon Delta National Wildlife Refuge website*. Retrieved December 12, 2011 from <http://yukondelta.fws.gov/>.

¹¹ Wilderness.net website. (n.d.) *Nunivak Wilderness*. Retrieved December 12, 2011 from <http://www.wilderness.net>.

¹² Ibid.

¹³ See footnote 10.

¹⁴ See footnote 5.

¹⁵ Alaska Dept. of Fish and Game (2008). *Muskox – Wildlife Notebook Series*. Retrieved December 15, 2011 from <http://www.adfg.alaska.gov/static/education/wns/muskox.pdf>.

¹⁶ 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.

Current Economy¹⁸

In Mekoryuk, major employers include the school, local and regional government and non-profit organizations, commercial fishing, construction, and service industries. Reindeer herding and value-added processing is an important source of local employment, as is Coastal Villages Seafoods, Inc., which processes halibut and salmon in Mekoryuk.^{19,20} Many families earn income from trapping and Native crafts, such as spinning and knitting qiviut (musk ox underwool).²¹ According to a survey conducted by the AFSC in 2011, community leaders reported that commercial fishing is the primary resource-based industry on which the economy depends. In addition, most families in Mekoryuk engage in subsistence fishing, and most have fish camps. Subsistence activities focus on salmon, reindeer, and seal meat and oil.²² In the AFSC survey, community leaders noted that halibut is also an important subsistence resource.

Based on household surveys for the 2006-2010 ACS,²³ in 2010, the per capita income in Mekoryuk was estimated to be \$23,827 and the median household income was estimated to be \$34,792. This represents a sizeable increase from the per capita income reported in the year 2000 (\$11,958), but only a slight increase from the median household income reported in 2000 (\$30,833). If inflation is taken into account by converting the 2000 values to 2010 dollars,²⁴ the 2010 median household income estimate is revealed to in fact be lower than the real median household income in 2000 (\$40,545), while the 2010 per capita income estimate remains significantly higher than the real per capita income in 2000 of \$15,725. In 2010, Mekoryuk ranked 120th of 305 Alaskan communities with per capita income data that year, and 214th in median household income, out of 299 Alaskan communities with household income data.

Although Mekoryuk's small population size may have prevented the ACS from accurately portraying economic conditions,²⁵ the 2010 ACS per capita income estimate is supported 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 Mekoryuk

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

¹⁸ Unless otherwise noted, all monetary data are reported in nominal values.

¹⁹ 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.

²⁰ 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/>.

²¹ See footnote 15.

²² See footnote 19.

²³ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

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 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.

in 2010 is \$10,150.²⁶ This is slightly lower than the 2006-2010 ACS estimate, and provides additional evidence that per capita income declined slightly in Mekoyruk from 2000 to 2010. This decline is reflected in 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 2010.²⁷ It is important to note that both ACS and DOLWD data are based on wage earnings, and do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS, in 2010, a similar percentage of Mekoryuk residents was estimated to be in the civilian labor force (67.3%) as in the civilian labor force statewide (68.8%). In the same year, 22.4% of local residents were estimated to be living below the poverty line, compared to an estimated 9.5% of Alaska residents overall, and the unemployment rate was estimated to be 13%, compared to a statewide unemployment rate of 5.9%. An alternative estimate of unemployment is based on the ALARI database, which indicates that the 2010 unemployment rate in Mekoryuk was 32%, compared to a statewide unemployment rate estimate of 11.5%.²⁸

Also based on the 2006-2010 ACS, the greatest number of workers were estimated to be employed in the private sector (56.8%), while 36.4% were employed in the public sector and 6.8% were self-employed. Of the 88 people aged 16 and over that were estimated to be employed in the civilian labor force, the industries in which the greatest numbers were estimated to be working included public administration (18.2%), transportation, warehousing, and utilities (15.9%), other services except public administration (14.8%), educational services, health care, and social assistance (12.5%), and manufacturing (11.4%). The occupations in which the greatest percentages of the workforce were estimated to be employed were management/professional (36.4%), sales/office (18.2%), and natural resource/construction/maintenance (18.2%). Information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

It is important to note that the number of individuals employed by fishing is probably underestimated in census statistics, as fishermen may hold another job and characterize their employment accordingly. Although 16 workers were estimated to be employed in natural resource/construction/maintenance occupations (18.2%), a breakdown of this category reveals that 0 individuals were employed in farming, fishing, and forestry occupations. Likewise, 0% of the civilian labor force was estimated to be employed in agriculture agriculture, forestry, and fishing industries in 2010.

²⁶ See footnotes 20 and 23.

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

²⁸ 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/>.

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

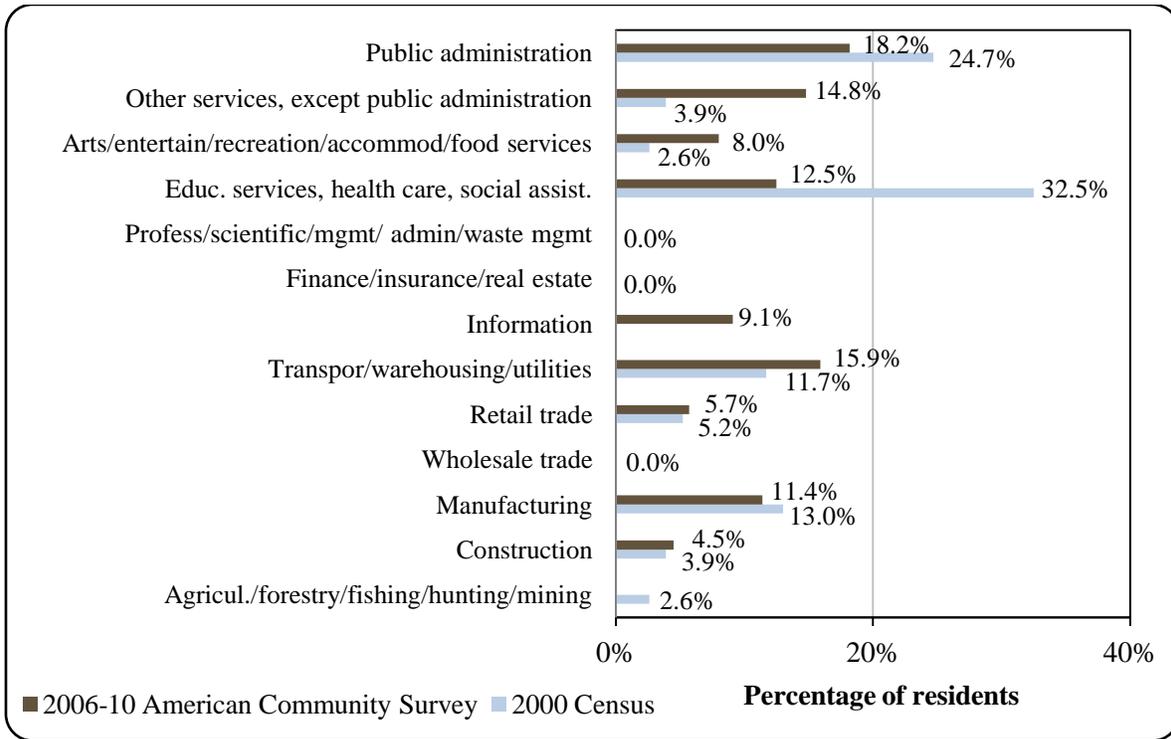
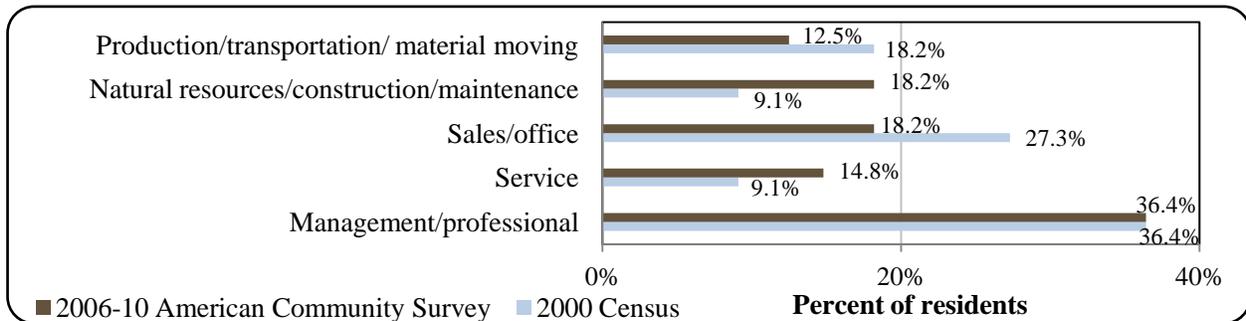


Figure 4. Local Employment by Occupation in 2000-2010, Mekoryuk (U.S. Census).



An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 122 employed residents in Mekoryuk in 2010, of which 41.8% were employed in local government, 22.1% in financial activities, 16.4% in trade, transportation, and utilities, 8.2% in manufacturing, 3.3% in education and health services, 3.3% in natural resources and mining, 0.8% in information, 0.8% in professional and business services, and 3.3% in other industries.²⁹ As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents’ activity in the subsistence economy.

²⁹ Ibid.

Governance

Mekoryuk was incorporated as a 2nd Class City in 1969. The City has a Strong Mayor form of government, which includes a seven-person city council, including the mayor, a nine-person advisory school board, and several municipal employees. The City is not part of an organized borough. The City enforces a 4% sales tax, but administers no other taxes.³⁰ In addition to sales tax revenues, other locally-generated revenue sources during the 2000-2010 period included state and federal lease fees, equipment rentals, and revenues from water/sewer service fees, the washeteria,³¹ and cable TV service. Outside revenue sources included various state revenue sharing programs, including State Revenue Sharing program contributions from 2000 to 2003 (approximately \$25,000 each year) and a \$105,000 Community Revenue Sharing program contribution in 2010. The City also received state revenue sharing funding from other sources, including the Shared Fisheries Business Tax and raw fish tax refunds (see the *Fisheries-Related Revenue* section of this profile), and federal revenue sharing from the Payment In Lieu of Taxes program. Grants were also received by the City in some years, including grants for job training, community policing, suicide prevention, and infrastructure development, including funds for a washeteria upgrade, equipment purchases, and for the library. It is also important to note that Mekoryuk received state and federal fisheries-related grants in some years to assist with design, construction, and dredging of the small boat harbor. Information about selected revenue streams in Mekoryuk is presented in Table 2.

Mekoryuk 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 BIA, is the Native Village of Mekoryuk. The Native village corporation is the Nunivak Island Mekoryuk Alaska (NIMA) Corporation, which manages 115,200 acres of land. The regional Native corporation to which Mekoryuk belongs is the Calista Corporation.³²

The non-profit cultural heritage office of the Village of Mekoryuk, Nuniwarmit Piciryarata Tamaryalkuti, offers cultural program and undertakes projects to “strengthen our peoples’ (Cup’ig Eskimo) cultural identity – especially young people – through the development of specific cultural resources relating to Cup’ig history and Native language.”³³

³⁰ 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.

³¹ “Washeteria” is another word for laundromat. In Alaska, washeterias often include shower facilities.

³² See footnote 30.

³³ Nuniwarmit Piciryarata Tamaryalkuti (2008). *Organization Mission Statement*. Retrieved June 1, 2012 from <http://www.nunivakisland.org/>.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Mekoryuk 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	\$263,146	\$15,955	\$27,332	n/a
2001	\$296,868	\$15,995	\$26,349	n/a
2002	\$243,317	\$12,774	\$23,104	\$800,000
2003	\$294,574	\$13,554	\$26,349	\$5,000,000
2004	\$291,453	\$15,640	n/a	n/a
2005	\$144,371	\$18,000	n/a	n/a
2006	\$221,417	\$15,300	n/a	n/a
2007	\$262,016	\$30,222	n/a	\$571,450
2008	\$307,394	\$39,672	n/a	n/a
2009	\$333,022	\$49,544	\$n/a	n/a
2010	\$382,596	\$37,487	\$105,948	n/a

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

¹ Alaska Department of Commerce, Community, and Economic Development. (n.d.). *Financial Documents Delivery System*. Retrieved at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm. Data retrieved April 15, 2011.

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

³ Alaska Department of Revenue. (n.d.). *(2000-2009) Taxes and Fees Annual Report*. Accessed at www.tax.state.ak.us. Data retrieved April 15, 2011.

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

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

Mekoryuk 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.”³⁴ The AVCP is one of the 12 regional Alaska Native 501(c)(3) non-profit 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.³⁵ AVCP is made up of 56 villages and 45 village corporations.³⁶

The closest offices of the Alaska Department of Fish and Game (ADF&G) and the Alaska Department of Commerce, Community and Economic Development are located in Bethel. A National Marine Fisheries Service (NMFS) field office is also located in Bethel, and a

³⁴ Association of Village Council Presidents (n.d.). *Homepage*. Retrieved December 6, 2011 from www.avcp.org.

³⁵ 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>.

³⁶ Calista Corporation. 2011. *Our Communities: The Villages of the Calista Region*. Retrieved February 6, 2012 from <http://www.calistacorp.com/shareholders/communities>.

main office is located in Anchorage. The nearest U.S. Bureau of Citizenship and Immigration Services and Alaska Department of Natural Resources offices are in Anchorage.

Infrastructure

Connectivity and Transportation

The community is very dependent upon air transport for cargo, mail, and passenger services. A 3,070-ft state-owned gravel runway provides year-round access to Mekoryuk.³⁷ The approximate cost to travel by air roundtrip to Anchorage from Mekoryuk in early June 2012 was \$726.³⁸ Goods are delivered to the community either once or twice a year from Bethel by barges. The shoreline is protected from the extreme waves of the Bering Sea by a breakwater. Local residents use ATVs, boats, and snowmobiles for travel within the community.³⁹

Facilities

A diesel powerhouse operated by the Alaska Village Electric Cooperative provides electricity to the Village.⁴⁰ In 2010, two wind turbines were erected along the road between the Village and the airport, and a new control module was installed next to the existing AVEC powerhouse. The new turbines are expected to generate up to 50% of the energy normally generated by the diesel fuel in the community.⁴¹ Water is provided to Mekoryuk residents by the City, with the exception of the school, which has its own well.⁴² The City draws water from the Mekoryuk River using a submersible pump laid on the bottom. The water is stored in an earth-lined impoundment and is then distributed to two watering points near the water treatment plant. Approximately 90% of homes receive water through a flush tank haul system operated by the City. Wastewater is discharged to a newly permitted, two-cell sewage lagoon.⁴³ The community washeteria, operated by the City, has piped disposal directly to the sewage lagoon. The landfill in the community is also operated by the City.⁴⁴ Police services are provided by the City Public Safety Office and the VPSO (Village Public Safety Officer) stationed in Mekoryuk.^{45,46} The nearest state trooper post is located in Emmonak.⁴⁷ Additional facilities located in Mekoryuk include a City Hall, City Volunteer Fire Department, City Public Safety Office holding cell, a

³⁷ 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.

³⁸ This price was calculated on November 21, 2011 using kayak.com.

³⁹ See footnote 37.

⁴⁰ Ibid.

⁴¹ Mekoryuk Community Development (n.d.) *Community Infrastructure*. Retrieved December 12, 2011 from <http://mekoryuk.org/>.

⁴² See footnote 37.

⁴³ See footnote 41.

⁴⁴ See footnote 37.

⁴⁵ Dept. of Public Safety, Alaska State Troopers. *Active VPSO's by Village, December 2011*. Retrieved December 12, 2011 from <http://www.dps.alaska.gov/>.

⁴⁶ See footnote 37.

⁴⁷ Alaska Dept. of Public Safety (2012). *Alaska State Trooper Detachments*. Retrieved June 1, 2012 from <http://www.dps.state.ak.us/ast/detachments.aspx>.

school gymnasium, and a library. Phone, internet, and cable services are all available in Mekoryuk.⁴⁸

With regard to fisheries-related infrastructure, in 2009, improvements were completed to the small boat harbor in Mekoryuk. The project involved dredging the shoreline to improve moorage and navigation, and reinforcement of the side slope of the harbor.⁴⁹ However, according to a survey conducted by the AFSC in 2011, community leaders reported that no dock space is currently available for moorage of permanent, transient, or public vessels. They also reported that a breakwater and fish cleaning station have been present in Mekoryuk since the 1990s, and that the open beach is used for boat haul-outs and barge access. A site for a potential deep-water port facility on the northeast side of Nunivak Island has also been identified. The U.S. Army Corps of Engineers is currently studying the feasibility of building a port and barge landing facility at the site. The Village of Mekoryuk has identified a route through NIMA (Nunivak Island Mekoryuk Alaska) Corporation lands for potential construction of a port access road.⁵⁰

Medical Services

Health care is available at the Mekoryuk Health Clinic, which is owned by the City and operated by the Yukon-Kuskokwim Health Corporation. Emergency Services have coastal and air access. Emergency service is provided by a health aide.⁵¹ The nearest hospital is located in Bethel.

Educational Opportunities

There is one school in the City, Nuniwarmiut School, which teaches Kindergarten through 12th grade. As of 2011, the school had a total of 31 students and 5 teachers.⁵² Nuniwarmiut School is a Cup'ig language immersion school, offering a bilingual education, and involves elders in teaching the youth about culture and language.⁵³

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Prior to the arrival of Europeans, subsistence hunting and fishing was the basis of the economy for people living on Nunivak Island and surrounding areas of the Yukon-Kuskokwim Delta. Today almost all local families continue to engage in subsistence activities, and most have fish camps. Salmon and seal meat and oil are some of the most important marine resources utilized by residents.⁵⁴ In a survey conducted by the AFSC in 2011, community leaders also

⁴⁸ Ibid.

⁴⁹ See footnote 41.

⁵⁰ Ibid.

⁵¹ See footnote 37.

⁵² Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

⁵³ Mekoryuk Community Development website (n.d.) *Current Services and Providers*. Retrieved December 12, 2011 from <http://mekoryuk.org/>.

⁵⁴ 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.

noted the importance of halibut as a subsistence resource. Subsistence activities are combined with employment in commercial fishing and processing.⁵⁵

Between 2000 and 2010, a majority of commercial fishing permits held by Mekoryuk residents were for halibut and herring fisheries (Table 4). 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.⁵⁶ Today, Pacific halibut fisheries are managed under the International Pacific Halibut Commission. Commercial catch of herring for human consumption began in Alaska in 1878, harvest for bait began around 1900, and herring sac roe fisheries developed in the late 1970s. Along the Yukon-Kuskokwim coast there are six commercial gill net sac roe districts: Security Cove, Goodnews Bay, Cape Avinof, Nelson Island, Nunivak 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.⁵⁷

Mekoryuk is located in Federal Statistical and Reporting Area 514, Pacific Halibut Fishery Regulatory Area 4E, and the Bering Sea Sablefish Regulatory Area. Mekoryuk participates in the Community Development Quota (CDQ) program. In 1995, management of the Pacific halibut and sablefish fisheries shifted from limited entry to a catch share program. The program includes allocation of the annual Total Allowable Catch (TAC) of halibut and sablefish via Individual Fishing Quota (IFQ). In the Bering Sea – Aleutian Islands (BSAI) region, quota shares are also allocated to six CDQ non-profit organizations representing 65 communities in Western Alaska.⁵⁸ The CDQ non-profit representing the Native Village of Mekoryuk is the Coastal Villages Region Fund (CVRF), which promotes employment opportunities for residents as well as participation in the Bering Sea crab and groundfish fisheries. In 2010, the CVRF received an allocation of 348,000 lb of CDQ halibut quota. Seventy percent of this quota was allocated for harvest within Area 4E, and the remaining 30% was allocated for harvest within Area 4D.⁵⁹ Total BSAI sablefish CDQ allocations in 2009 and 2011 were 5.3 million lb in each year. No sablefish CDQ report was available from NOAA for the 2010 season.⁶⁰ Managers of CDQ organizations authorize individual fishermen and fishing vessels to harvest a certain portion of the CDQ allocations.⁶¹

CVRF is also active at the local level, operating a fish processing plant in Mekoryuk.^{62,63} The community is not eligible to participate in the Community Quota Entity (CQE) program.

⁵⁵ Ibid.

⁵⁶ 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>.

⁵⁷ 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>.

⁵⁸ Fina, Mark. 2011. Evolution of Catch Share Management: Lessons from Catch Share Management in the North Pacific. *Fisheries*, Vol. 36(4). Retrieved September 12, 2012 from http://www.fakr.noaa.gov/npfmc/PDFdocuments/catch_shares/Fina_CatchShare_411.pdf.

⁵⁹ NOAA National Marine Fisheries Service. 2010. *Memorandum: 2010 Community Development Quota (CDQ) Halibut Allocations*. Retrieved January 8, 2013 from <http://www.fakr.noaa.gov/ram/10ifqcdqtac.pdf>.

⁶⁰ NOAA National Marine Fisheries Service. (n.d.). *IFQ Halibut/Sablefish Reports and CDQ Halibut Program Reports*. Retrieved February 22, 2013 from <http://www.fakr.noaa.gov/ram/ifqreports.htm>.

⁶¹ International Pacific Halibut Commission. 2012. *Pacific Halibut Fishery Regulations 2012*. Retrieved October 16, 2012 from <http://www.iphc.int/publications/regs/2012iphcregs.pdf>.

⁶² Coastal Villages Region Fund (n.d.). *Homepage*. Retrieved December 12, 2011 from <http://www.coastalvillages.org/>.

According to the 2011 AFSC survey, community leaders reported that Mekoryuk does not actively participate in fisheries management processes in Alaska.

Processing Plants

Coastal Villages Seafood, LLC, a subsidiary of CVRF, currently operates a halibut processing facility in Mekoryuk. The plant was first constructed in the 1980s and operated by Bering Sea Reindeer Products, Inc., which also operated a reindeer processing plant. It was purchased in 1999 by Coastal Villages Seafood. In 2004, with CDQ grant funding, a new processing plant was constructed. The presence of a plant provides the opportunity for fishermen to sell their catch to a local market. Processed halibut are flown to Bethel for air transport to the fresh market.⁶⁴

The Mekoryuk facility processes halibut from June through August. CVRF maintains a local community service center that helps 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.⁶⁵

Fisheries-Related Revenue

According to information provided in Mekoryuk's annual municipal budget between 2000 and 2010, the primary sources of fisheries-related revenue in Mekoryuk were a raw fish tax and Shared Fisheries Business Tax. In 2010, Mekoryuk received \$82 in raw fish tax and \$85 from the Shared Fisheries Business Tax, as well as \$96 from the Fisheries Resource Landing Tax. 2010 was the only reported year in which revenue was earned from the Fisheries Resource Landing Tax. Information about selected fisheries-related revenue sources is found in Table 3.⁶⁶

It is also important to note that the CVRF uses fisheries revenue from the CDQ program to provide grants, scholarships and training, and other financial assistance to fishermen and residents of member villages.⁶⁷ In the 2011 AFSC survey, community leaders reported receiving \$16,120 in funding or grants and \$5,960 in special allocations from CVRF in 2010.

Commercial Fishing

According to the 2011 AFSC survey, community leaders reported that commercial fishing is the natural resource-based industry upon which Mekoryuk's economy is most dependent. In 2010, there were 58 Mekoryuk residents holding a total of 100 Commercial Fisheries Entry Commission (CFEC) permits, including 40 halibut permits (12 statewide hand troll and 28 statewide longline) and 60 permits in the Nelson Island, Nunivak Island, Goodnews Bay, and Norton Sound herring gill net fisheries. In prior years, several halibut fisherman also

⁶³ Mekoryuk Community Development website (n.d.) *Current Services and Providers*. Retrieved December 12, 2011 from <http://mekoryuk.org/>.

⁶⁴ Ibid.

⁶⁵ Coastal Villages Seafoods (n.d.). Retrieved August, 2011 from <http://coastalvillages.org/>.

⁶⁶ 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.

⁶⁷ See footnote 62.

used mechanical jig gear. Of the total 100 permits held in 2010, only 30 were actively fished that year, all of which were halibut permits; none of the 60 herring permits held by Mekoryuk in 2010 were actively fished. The use of herring permits declined steeply during the first half of the 2000-2010 period. In 2000, 58% of the 64 herring permits were actively fished, declining to 2% actively fished in 2005, and 0% fished between 2006 and 2010. The total number of CFEC halibut permits also declined slightly over the period, from 48 of 52 permits (92%) fished in 2000, to 30 of 40 total permits (75%) fished in 2010.

It is important to note that Mekoryuk residents also occasionally held CFEC permits in other fisheries during this period, including one salmon permit held in 2000 in the Bristol Bay drift gill net fishery, and one held in 2007 and 2008 in the Kuskokwim River gill net fishery. The Bristol Bay permit was actively fished in 2000, but the Kuskokwim permits were not actively fished in either 2007 or 2008. One groundfish permit was held in 2000 and 2004 (longline vessel under 60 ft in length, statewide), but was not actively fished in either year. No residents of Mekoryuk held Federal Fisheries Permits (FFP) or federal License Limitation Program permits (LLP) between 2000 and 2010. Information about state and federal fisheries permits held by Mekoryuk residents is presented in Table 4.

In addition to CFEC permits, several Mekoryuk residents held quota share accounts in the federal halibut catch share fishery between 2000 and 2010. In 2000 and 2001, two accounts were held, with a total of 210,470 halibut quota shares. The number of quota shares held generally increased during the 2000-2010 period, although the number of quota share accounts held fell to one in 2006. The annual halibut individual fishing quota (IFQ) allotment increased slightly in the first half of the decade, and then decreased starting in 2007. Between 2000 and 2010, no residents of Mekoryuk held quota share accounts in federal catch share fisheries for sablefish or crab. Information about federal catch share participation is presented in Tables 6 through 8.

In 2010, a total of 38 Mekoryuk residents held commercial crew licenses, 35 fishing vessels were primarily owned by residents, and 31 vessels landed catch in Mekoryuk. With the exception of the number of vessels landing catch in the community, these numbers represent a decline in fishing activity since 2000, when 50 Mekoryuk residents held crew licenses and 47 vessels were owned by residents. Information about the commercial fishing sector in Mekoryuk is presented in Table 5. According to the 2011 AFSC survey, community leaders reported that commercial fishing boats using Mekoryuk as a base of fishing operations were longliners under 35 ft in length. When asked to describe changes in the fleet over time, they noted that fishing boats have been increasing in capacity. It is also important to note that, in addition to longline fishing gear, community leaders identified “fishing poles” as a common gear type used in Mekoryuk.

Although a fish processing plant was registered in the Mekoryuk each year from 2000 to 2010, a fish buyer was only reported to be present in 2009 and 2010 (Table 5). The only species landed in Mekoryuk in 2009 and 2010 was halibut, and landings volume and ex-vessel revenue information is considered confidential due to the small number of participants (Table 9). Mekoryuk ranked 51st in landings and 49th in ex-vessel revenue out of 67 Alaskan communities that received commercial fisheries landings in 2010. Table 10 presents information about landings and ex-vessel revenue earned by vessel owners residing in Mekoryuk, including all delivery locations. In 2010, Mekoryuk vessel owners landed 125,491 net lb of halibut, valued at \$395,219 in ex-vessel revenue. In 2005, the last year that Mekoryuk vessel owners participated in the herring fishery, 209,656 net lb of herring were landed, generating \$11,112 in ex-vessel revenue. Herring landings and ex-vessel revenue are considered confidential beginning in 2006,

and information about other fisheries is considered confidential in all years between 2000 and 2010.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	\$554	\$400	\$500	\$2,100	\$2,100	\$222	\$222	\$222	n/a	\$82
Shared Fisheries Business Tax ¹	\$555	\$537	\$4,035	\$2,123	\$2,660	\$1,847	\$2,154	\$4,111	\$3,943	\$6,794	\$85
Fisheries Resource Landing Tax ¹	n/a	\$96									
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 revenue⁴	\$555	\$1,091	\$4,435	\$2,623	\$4,760	\$3,947	\$2,376	\$4,333	\$4,165	\$6,794	\$263
Total municipal revenue⁵	\$263,146	\$296,868	\$243,317	\$294,574	\$291,453	\$144,371	\$221,417	\$262,016	\$307,394	\$333,022	\$382,596

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

¹ Alaska Department of Commerce, Community, and Economic Development. (n.d.) *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

² Alaska Department of Commerce, Community, and Economic Development. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

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 Department of Commerce, Community, and Economic Development. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

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Table 4. Permits and Permit Holders by Species, Mekoryuk: 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	52	65	53	46	47	47	43	45	41	39	40
	Fished permits	48	45	38	34	36	35	33	37	32	31	30
	% of permits fished	92%	69%	72%	74%	77%	74%	77%	82%	78%	79%	75%
	Total permit holders	43	50	43	39	39	39	36	40	37	35	35
Herring (CFEC) ²	Total permits	64	63	61	59	57	56	57	59	59	60	60
	Fished permits	37	6	10	8	4	2	0	0	0	0	0
	% of permits fished	58%	10%	16%	14%	7%	4%	0%	0%	0%	0%	0%
	Total permit holders	45	44	43	44	43	42	44	46	46	46	46

Table 4 cont'd. Permits and Permit Holders by Species, Mekoryuk: 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	1	0	0	0	1	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	0	0	0	1	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	1	0	0	0	0	0	0	1	1	0	0
	Fished permits	1	0	0	0	0	0	0	0	0	0	0
	% of permits fished	100%	-	-	-	-	-	-	0%	0%	-	-
	Total permit holders	1	0	0	0	0	0	0	1	1	0	0
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>118</i>	<i>128</i>	<i>114</i>	<i>105</i>	<i>105</i>	<i>103</i>	<i>100</i>	<i>105</i>	<i>101</i>	<i>99</i>	<i>100</i>
	<i>Fished permits</i>	<i>86</i>	<i>51</i>	<i>48</i>	<i>42</i>	<i>40</i>	<i>37</i>	<i>33</i>	<i>37</i>	<i>32</i>	<i>31</i>	<i>30</i>
	<i>% of permits fished</i>	<i>73%</i>	<i>40%</i>	<i>42%</i>	<i>40%</i>	<i>38%</i>	<i>36%</i>	<i>33%</i>	<i>35%</i>	<i>32%</i>	<i>31%</i>	<i>30%</i>
	<i>Permit holders</i>	<i>58</i>	<i>62</i>	<i>59</i>	<i>58</i>	<i>57</i>	<i>55</i>	<i>55</i>	<i>61</i>	<i>61</i>	<i>58</i>	<i>58</i>

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

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 Mekoryuk: 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 Mekoryuk ²	Total Net Lb Landed In Mekoryuk ^{2,5}	Total Ex-Vessel Value Of Landings In Mekoryuk ^{2,5}
2000	50	0	1	47	45	0	0	\$0
2001	31	0	1	46	48	0	0	\$0
2002	29	0	1	42	44	0	0	\$0
2003	34	0	1	37	39	0	0	\$0
2004	29	0	1	39	38	0	0	\$0
2005	31	0	1	37	39	0	0	\$0
2006	32	0	1	37	39	0	0	\$0
2007	34	0	1	39	40	0	0	\$0
2008	40	0	1	34	34	0	0	\$0
2009	39	1	1	38	37	30	-	-
2010	38	1	1	35	34	31	-	-

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 Mekoryuk: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	2	210,470	19,968
2001	2	210,470	23,741
2002	2	387,772	46,225
2003	2	387,772	46,207
2004	2	387,772	51,014
2005	2	387,772	51,763
2006	1	474,672	63,023
2007	1	374,106	51,275
2008	1	374,106	47,400
2009	1	374,106	42,468
2010	1	374,106	39,122

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 Mekoryuk: 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 Mekoryuk: 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.]

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Table 9. Landed Pounds and Ex-vessel Revenue, by Species, in Mekoryuk: 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>

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 lb refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Mekoryuk Residents: 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	-	-	-	-	-	-	-	-	-	-	-
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	160,876	99,069	139,557	79,530	116,424	101,976	86,123	161,894	145,603	133,435	125,491
Herring	265,564	114,137	663,515	627,544	172,695	209,656	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	-	-	-	-	-	-	-	-	-
<i>Total²</i>	<i>426,440</i>	<i>213,206</i>	<i>803,072</i>	<i>707,074</i>	<i>289,119</i>	<i>311,632</i>	<i>86,123</i>	<i>161,894</i>	<i>145,603</i>	<i>133,435</i>	<i>125,491</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	-	-	-	-	-	-	-	-	-	-	-
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	\$363,668	\$124,938	\$294,167	\$102,642	\$145,118	\$225,517	\$320,676	\$696,080	\$436,809	\$314,430	\$395,219
Herring	\$24,102	\$5,707	\$40,477	\$32,055	\$18,306	\$11,112	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	-	-	-	-	-	-	-	-	-
<i>Total²</i>	<i>\$387,770</i>	<i>\$130,645</i>	<i>\$334,644</i>	<i>\$134,697</i>	<i>\$163,424</i>	<i>\$236,629</i>	<i>\$320,676</i>	<i>\$696,080</i>	<i>\$436,809</i>	<i>\$314,430</i>	<i>\$395,219</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 lb refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Recreational Fishing

Between 2000 and 2010, there were no active sport fish guide businesses in Mekoryuk, although one licensed sport fish was present in 2000 and again in 2003. In 2010, Mekoryuk residents purchased 32 sportfishing licenses (irrespective of point of sale), although no licenses were sold in the City of Mekoryuk itself.⁶⁸ In a survey conducted by the AFSC in 2011, community leaders reported that few non-Alaska residents fish recreationally out of Mekoryuk, and sportfishing by local residents primarily targets pink, chum, and coho salmon, and Pacific halibut. The Alaska Statewide Harvest Survey,⁶⁹ conducted by ADF&G between 2000 and 2010, did not provide further information about species targeted by private anglers in Mekoryuk. No kept/release log book data were reported for fishing charters out of Mekoryuk between 2000 and 2010.⁷⁰

Mekoryuk 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. Between 2000 and 2010, saltwater sportfishing activity was minimal, with between zero and 28 non-resident angler days fished per year, and between zero and 108 Alaska resident angler days fished per year. A majority of sportfishing activity occurred in freshwater, with non-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). This information about the sportfishing sector in and near Mekoryuk is displayed in Table 11.

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

Year	Active Sport Fish Guide Businesses¹	Sport Fish Guide Licenses¹	Sport Fishing Licenses Sold to Residents²	Sport Fishing Licenses Sold in Mekoryuk²
2000	0	1	45	0
2001	0	0	44	0
2002	0	0	37	0
2003	0	1	36	0
2004	0	0	41	0
2005	0	0	35	0
2006	0	0	44	0
2007	0	0	30	0
2008	0	0	27	0
2009	0	0	12	0
2010	0	0	32	0

⁶⁸ 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.]

⁶⁹ 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).

⁷⁰ 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, Mekoryuk: 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

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

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

Almost all families in Mekoryuk engage in subsistence and hunting activities, in combination with employment in commercial fishing and processing and other industries. Salmon, reindeer, and seal meat and oil are all important staples.⁷¹ In a survey conducted by the AFSC in 2011, Mekoryuk community leaders said that halibut is also one of the most important subsistence resources utilized by local residents.

No information is available from ADF&G regarding per capita subsistence harvest or the percentage of households utilizing various marine resources for subsistence purposes between 2000 and 2010 (Table 12). However, a 1990 subsistence survey previously found that 59% of Mekoryuk households were involved in harvest of herring and herring sac roe. The survey also found that 100% of households used these resources, indicated the presence of a sharing network in Mekoryuk.⁷²

⁷¹ 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.

⁷² 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).

Between 2000 and 2008, subsistence salmon permits were issued to between 63 and 95 households per year in Mekoryuk. Of harvests that were reported, chum was the most heavily harvested salmon species over time, with an average of 1,062 chum harvested per year. No information was reported regarding subsistence harvest of marine invertebrates and non-salmon fish during the 2000-2010 period. This information about subsistence fisheries is presented in Table 13.

Mekoryuk residents were very active in the Subsistence Halibut Registration Certificates (SHARC) program. Between 2003 and 2005, 15 permits were issued to Mekoryuk residents each year, declining to 5 or 6 permits issued per year from 2008 to 2010. The largest volume of halibut was reported harvested in 2005 (2,966 lb), when 15 SHARC cards were issued and 13 were returned. In 2010, two of the six SHARC cards were fished, and 410 lb of halibut were harvested. This information about the subsistence halibut fishery is presented in Table 14.

According to data from the U.S. Fish and Wildlife Service, residents of Mekoryuk also participated in subsistence hunting of walrus and beluga between 2000 and 2010. The greatest number of walrus were reported harvested in 2004 (6 animals), along with one or two walrus harvested in 6 other years during the period. Beluga harvest was also reported in 2007 and 2010. It is of note that beluga harvest numbers reported here represent a combined harvest by the communities of Mekoryuk and Tununak. No information was available from management agencies regarding harvest of sea otter, polar bear, Steller sea lion, harbor seal, or spotted seal during the 2000-2010 period. Information about subsistence harvest of marine mammals is presented in Table 15.

Table 12. Subsistence Participation by Household and Species, Mekoryuk: 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, Mekoryuk: 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	89	18	2	2,120	78	n/a	7	n/a	n/a
2001	88	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2002	95	19	13	1,292	114	n/a	213	n/a	n/a
2003	94	17	10	1,484	112	n/a	2	n/a	n/a
2004	79	8	3	881	126	n/a	8	n/a	n/a
2005	79	5	2	460	58	n/a	n/a	n/a	n/a
2006	79	1	n/a	n/a	14	n/a	n/a	n/a	n/a
2007	79	1	n/a	134	n/a	n/a	n/a	n/a	n/a
2008	63	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, Mekoryuk: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	15	9	1,779
2004	15	13	2,966
2005	15	9	1,964
2006	14	10	1,538
2007	14	10	1,786
2008	5	5	1,019
2009	6	6	1,359
2010	5	2	410

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, Mekoryuk: 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	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	1	n/a	n/a	n/a	n/a
2002	n/a	n/a	2	n/a	n/a	n/a	n/a
2003	n/a	n/a	1	n/a	n/a	n/a	n/a
2004	n/a	n/a	3	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2007	8	n/a	1	n/a	n/a	n/a	n/a
2008	n/a	n/a	1	n/a	n/a	n/a	n/a
2009	n/a	n/a	1	n/a	n/a	n/a	n/a
2010	1	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.

⁴ Note that Beluga harvest numbers reported here represent a combined harvest total for the communities of Mekoryuk and Tununak.

Additional Information⁷³

The Alaska Department of Fish and Game compiled the following history of the extinction and reintroduction of muskoxen to Alaska. Nunivak Island plays an important role in their reintroduction:

“The return of muskoxen to Alaska is an important success story in wildlife conservation. The original Alaska muskoxen disappeared in the mid-or late 1800s as they had much earlier in Europe and Asia. Overhunting likely contributed to their demise, at least in some areas. By the 1920s, muskox distribution was reduced to arctic Canada and East Greenland where a high take by whalers, hide hunters, and Natives continued. Concern over the impending extinction of the species worldwide led to a move to restore a protected population to Alaska. In 1930, 34 muskoxen captured in East Greenland were brought to Fairbanks. In 1935 and 1936, all survivors and their calves were transported from Fairbanks to Nunivak Island and released. Muskoxen thrived on Nunivak Island and increased from 31 in 1936 to an estimated 750 by 1968.

Muskoxen from Nunivak Island were intended to provide stock for relocating animals to formerly occupied ranges. Nunivak Island muskoxen have been transplanted to the Arctic National Wildlife Refuge, Cape Thompson, the Seward Peninsula, Nelson Island, and to Wrangel Island and the Taimyr Peninsula in Russia. Additional animals have been donated to zoos and other institutions.

Most of the transplanted animals quickly adapted to their new surroundings and increased. Further transplants may be considered in the future. However, dispersal from previously translocated herds will be the primary method by which future range expansion occurs.

By 2000, the muskox population in Alaska had grown to approximately 3,800: 650 on Nunivak Island, 250 on Nelson Island, 550 in north-central and northeastern Alaska, 450 in northwestern Alaska, 1,800 on the Seward Peninsula, 100 on the Yukon-Kuskokwim Delta, and an additional 105 animals in captivity in domestic herds, research herds, and the Alaska Zoo in Anchorage. The Nunivak Island and Nelson Island populations have been stabilized by hunting. Between 2000 and 2006, the population in northcentral and northeastern Alaska declined to about 200 muskoxen. Causes of the decline are currently under investigation. The other wild populations are expected to continue to increase and to expand their range.

Hunting of muskoxen under a limited permit system is conducted on Nunivak Island and Nelson Island. Muskoxen are considered a unique and valuable trophy. Muskox meat is highly valued among those who have tried it. This hardy survivor of the ice ages is an important attraction to tourists, photographers, researchers, and students of wildlife.

The soft brownish wool-like underhair, or “qiviut,” has been called the rarest fiber in the world. A domestic muskox herd at Palmer is farmed exclusively for the production of qiviut, but Eskimos on Nunivak Island collect the naturally shed wool clinging to bushes and tundra plants, and spin it by hand.”

⁷³ See footnote 21.