

## **Karluk (KAR-luck)**



### **People and Place**

#### *Location*<sup>1</sup>

Karluk is located on the west coast of Kodiak Island, on the Karluk River, 88 air miles southwest of Kodiak and 301 miles southwest of Anchorage. The community occupies 55.4 sq mi of land and 2.4 sq mi of water. Karluk is unincorporated and under the jurisdiction of the Kodiak Island Borough.

#### *Demographic Profile*<sup>2</sup>

In 2010, there were 37 residents in Karluk, making it the 309<sup>th</sup> largest of 352 communities in Alaska with recorded populations that year. Between 1990 and 2000, the population declined by 62%, followed by a rebound of 37% between 2000 and 2010. Overall, the Karluk's population in 2010 was 47.9% lower than in 1990. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents increased by 40.7%, with an average annual growth rate of 4.06%.

In 2010, a majority of Karluk residents identified themselves as American Indian and Alaska Native (35 individuals; 94.6% of the total population), while 2 individuals (5.4%) identified themselves as White. It is important to note that, although no Asian population appears to be represented in 2010, in 2000 one individual (3.7% of the population) identified as Asian, and no residents identified themselves as White that year. 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 Karluk was 3.08, a slight increase from 3.0 persons per household in 2000, but an overall decrease from 3.9 in 1990. In that year, there were a total of 21 housing units, compared to 27 in 1990 and 24 in 2000. Of the households surveyed in 2010, 43% were owner-occupied, compared to 25% in 2000; 14% were renter-occupied, compared to 13% in 2000; and 43% were vacant or occupied seasonally, compared to 63% in 2000.

The gender distribution in 2010 was skewed towards males at 56.8% male and 43.2% female. This was less even than the statewide distribution (52.0% male, 48.0% female), and similar to the distribution in 2000 (55.6% male, 44.4% female). The median age in 2010 was 18.8 years, which was significantly lower than both the statewide median of 33.8 years and 2000 median of 30.3 years.

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

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

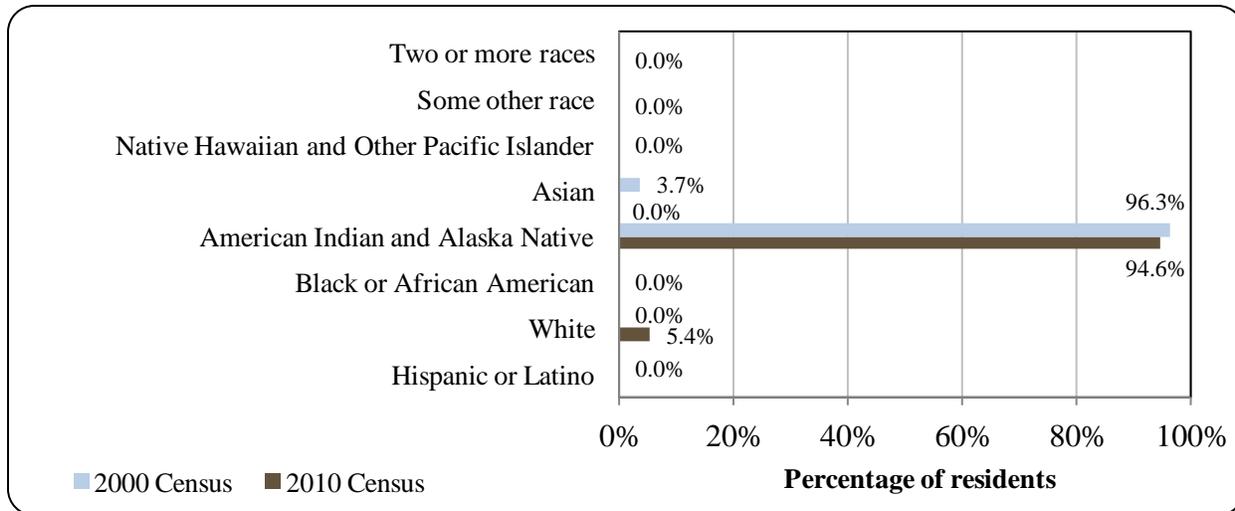
Table 1. Population in Karluk from 1990 to 2010 by Source.

Year	U.S. Decennial Census <sup>1</sup>	Alaska Dept. of Labor Estimate of Permanent Residents <sup>2</sup>
1990	71	-
2000	27	-
2001	-	29
2002	-	27
2003	-	28
2004	-	32
2005	-	35
2006	-	34
2007	-	40
2008	-	38
2009	-	38
2010	37	-

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

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

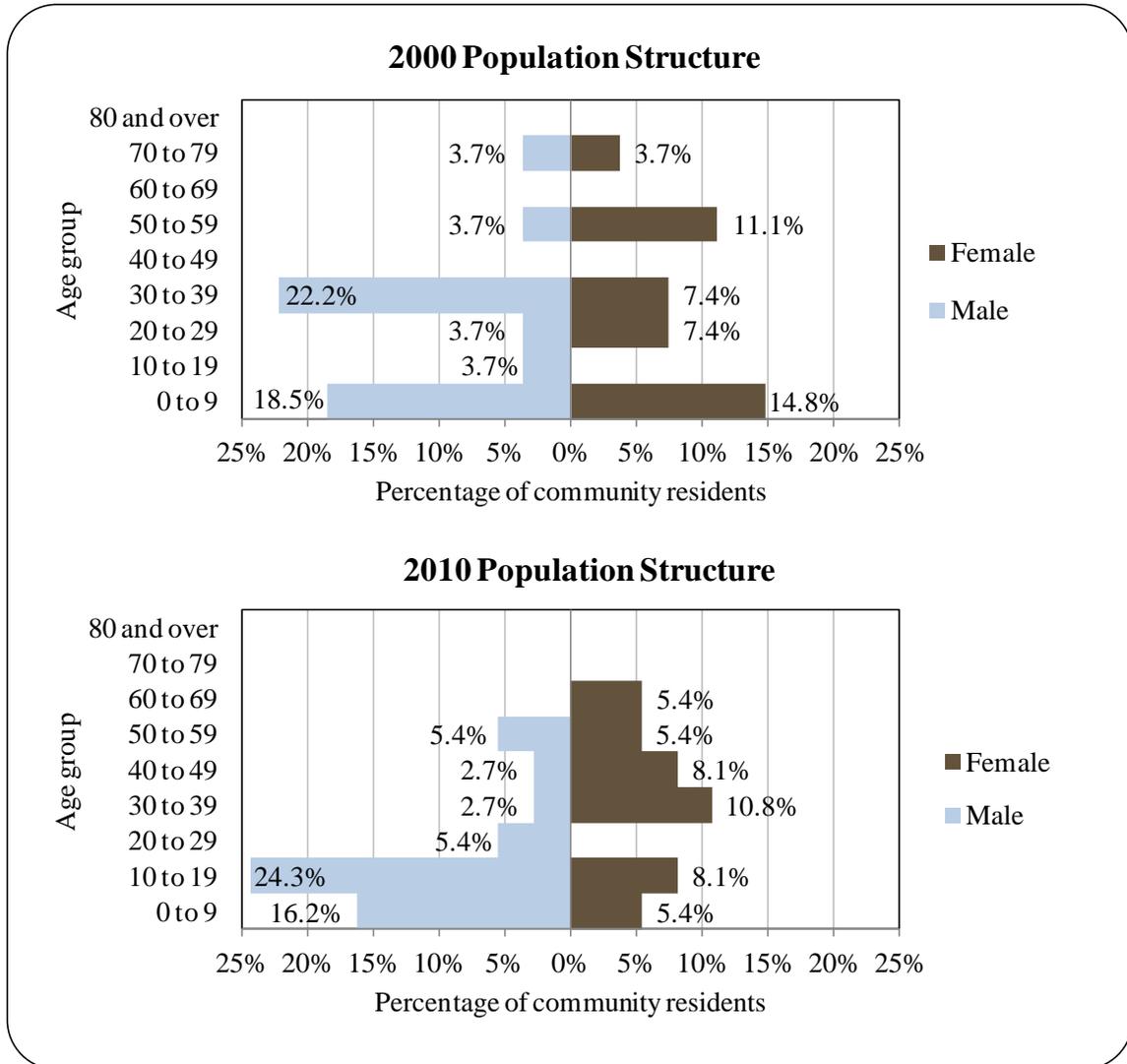
Figure 1. Racial and Ethnic Composition, Karluk: 2000-2010 (U.S. Census).



The population structure was significantly irregular in both 2000 and 2010, likely due to the small population size. However, there was a strong shift to a younger demographic between those years. In 2010, 54.0% of residents were under the age of 20, compared to 37.0% in 2000; 5.4% were over the age of 59, compared to 7.4% in 2000; 35.1% were between the ages of 30 and 59, compared to 44.4% in 2000; and 5.4% were between the ages of 20 and 29, compared to 11.1% in 2000.

Gender distribution by age cohort was significantly less even in 2010 than in 2000. In 2010, the greatest absolute gender difference occurred in the 10 to 19 range (24.3% male, 8.1% female), followed by the 0 to 9 (16.2% male, 5.4% female) and 30 to 39 (10.8% female, 2.7% male) ranges.

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



In terms of educational attainment, the U.S. Census' 2006-2010 American Community Survey (ACS)<sup>3</sup> estimated that 66.7% 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.

<sup>3</sup> 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.

Also in that year, 16.7% of residents had less than a 9<sup>th</sup> grade education, compared to an estimated 3.5% of Alaska residents overall; 16.7% of resident had a 9<sup>th</sup> to 12<sup>th</sup> grade education but no diploma, compared to an estimated 5.8% of Alaska residents overall; 10% of residents had some college but no degree, compared to an estimated 28.3% of Alaska residents overall; no resident held a Bachelor's degree, compared to an estimated 17.4% of Alaska residents overall.

### *History, Traditional Knowledge, and Culture*

Kodiak Island is within the traditional territory of the Alutiiq peoples, and the area is estimated to have been inhabited for at least 7,500 years.<sup>4,5,6</sup> Great numbers of salmon can be harvested at the mouth of the Karluk River. In part due to this abundant resource, the Karluk village site is thought to have been populated by indigenous people for more than 7,000 years. Thirty-six archaeological sites have been identified in the area.<sup>7</sup> At one of the more recent sites called 'Karluk 1' (1250 - 1750 A.D.), a large number of well preserved wooden artifacts have been excavated, including masks, tools, and boxes.<sup>8</sup>

Russian hunters established a trading post and salmon saltery at Karluk in 1786. The Russians often referred to Karluk village as 'Nunakakhvak'. During that period, the village was located on both sides of the Karluk River.<sup>9</sup> Following the U.S. purchase of Alaska from Russia in 1867, commercial exploitation of the salmon resource intensified. The first cannery at Karluk – also the first on Kodiak Island – was built on Karluk Spit in 1882, and by 1884, five other canneries were also operating at Karluk.<sup>10</sup> In the beginning of the industry, few Alaska Natives worked in the local canneries, and a majority of cannery employees were hired from outside the region, primarily from the U.S. and China. In 1890, only 10% of the people living at Karluk were Alaska Native. However, Native Alaskans became increasingly involved in commercial salmon fishing in the early 1900s, and coordinated their commercial fishing activity with subsistence hunting and fishing activities.<sup>11,12</sup> In the early 1900s, Karluk was known for having the largest cannery and the greatest salmon stream in the world.<sup>13</sup> However, overfishing forced all of the Karluk canneries to close by the late 1930s.<sup>14</sup>

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<sup>4</sup> Crowell, A.L. Steffian, A.F., and G.L. Pullar, eds. 2001. *Looking Both Ways: Heritage and Identity of the Alutiiq People*. University of Alaska Press, Fairbanks.

<sup>5</sup> Clark, D.W. 1998. Kodiak Island: The Later Cultures. *Arctic Anthropology* 35:172-186.

<sup>6</sup> Clark, D.W. 1984. Pacific Eskimo: Historical Ethnography. In *Handbook of North American Indians, vol. 5*. D. Damas, ed. Pp 185-197. Smithsonian Institution, Washington D.C.

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

<sup>8</sup> Smithsonian Museum of Natural History, Alaska Native Heritage Center, and Alutiiq Museum & Archaeology Repository. 2001. "Exhibition Catalog: Karluk Village Profile." In *Looking Both Ways: Heritage and Identity of the Alutiiq People of Southern Alaska: An Interactive Exhibition, Text Only Version*. Eds. Crowell, Aron L., Amy F. Steffian, and Gordon L. Pullar. University of Alaska, Fairbanks. Retrieved August 24, 2012 from <http://www.mnh.si.edu/lookingbothways/text/villages/karluk.html>.

<sup>9</sup> See footnotes 7 and 8.

<sup>10</sup> Bowers, George M., Commissioner. 1899. *Bulletin of the United States Fish Commission, Vol. XVIII*, for 1898. Washington D.C. Government Printing Office. 55<sup>th</sup> Congress, 3<sup>rd</sup> Session, Document No. 308.

<sup>11</sup> Mason, Rachel. 1995. *The Alutiiq Ethnographic Bibliography*. Project sponsored by the Kodiak Area Native Association. Retrieved November 30, 2011 from <http://ankn.uaf.edu>.

<sup>12</sup> See footnote 8.

<sup>13</sup> Kodiak Area Native Association. 2011. *Kodiak Rural Regional Comprehensive Economic Development Strategy*. Retrieved August 24, 2012 from <http://www.kanaweb.org/files/CEDS.pdf>.

<sup>14</sup> See footnote 7.

In 1978, a severe storm with winds of 100 miles per hour from the northeast damaged personal property and caused severe coastal erosion, including breaching the spit that connected the two sides of the community of Karluk.<sup>15,16</sup> Following the storm, the Karluk village council chose to relocate the community to its present site, upstream on the south side of the Karluk Lagoon. The U.S. Department of Housing and Urban Development constructed 23 houses at the new community location. Today, Karluk residents continue to engage in commercial fishing and subsistence hunting, fishing, and gathering.<sup>17</sup>

## Natural Resources and Environment

The climate of the Kodiak Islands is dominated by a strong marine influence. There is moderate precipitation, frequent cloud cover and fog, and little to no freezing weather. Severe storms are common from December through February. Annual precipitation averages 60 inches with 87 inches of snowfall. Temperatures remain within a narrow range throughout the year, from 32 to 62 °F.<sup>18</sup>

Karluk is located in close proximity to Kodiak National Wildlife Refuge (KNWR). The KNWR was established in 1941 with the purpose of wildlife conservation, in particular the Kodiak brown bear, unique to the island, as well as fulfillment of treaty obligations, providing for continued subsistence use, and to ensure water quality and quantity.<sup>19</sup> In 2002, the KNWR signed an agreement with Koniag, Inc. (the regional Native corporation for Kodiak Island) and the State of Alaska creating a conservation easement zone on Koniag land surrounding Karluk Lake and the portion of Karluk River within the boundaries of the KNWR. The 22-mile long Karluk River begins in the KNWR and passes through tribal land before emptying into the Gulf of Alaska at Karluk. Koniag, Inc. owns the majority of the land adjacent to the river and the northern portion of Karluk Lake while the Native Village of Karluk owns the land adjacent to the lower 3 miles of the Karluk River and the Karluk Lagoon. To facilitate public use of this zone, the KNWR implemented a cost-free permit system for unguided users of land within one-half mile of Karluk Lake and Karluk River.<sup>20</sup> In addition to the KNWR, protected areas near Karluk include a number of state parks, state historical parks, and state recreation sites located on the northeast corner of Kodiak Island.<sup>21</sup>

Kodiak Island is located in a highly active volcanic and tectonic zone along the Pacific “Ring of Fire”. The earthquake belt along the Aleutian Islands, Alaska Peninsula, and Kenai Peninsula is known as the Alaska-Aleutian subduction zone, where strong earthquakes occur as a result of slipping along the contact zone between the Pacific and Alaska plates. Earthquakes can cause tsunamis, landslides, snow avalanches, and submarine slumps. The risk posed to Karluk by

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<sup>15</sup> Karluk IRA Traditional Council. 1999. *Community Emergency Response Plan*. Retrieved August 24, 2012 from <http://www.city.kodiak.ak.us/Emergency/Documents/Annex%20B%20-%20Karluk.pdf>.

<sup>16</sup> Norgaard Consultants. 1984. *Karluk Comprehensive Development Plan*. Prepared for Kodiak Island Borough. Retrieved August 27, 2012 from <http://www.commerce.state.ak.us/dca/plans/Karluk-CP-1984.pdf>.

<sup>17</sup> See footnote 7.

<sup>18</sup> Ibid.

<sup>19</sup> U.S. Fish & Wildlife Service. *Kodiak National Wildlife Refuge*. Retrieved November 30, 2011 from <http://kodiak.fws.gov>.

<sup>20</sup> U.S. Fish & Wildlife Service. 2011. *Karluk River Land Status & Public Use Info*. Retrieved August 24, 2012 from [www.fws.gov/uploadedFiles/Region\\_7/NWRS/Zone\\_2/Kodiak/PDF/Koniag%20easement%20leaflet\\_2011.pdf#d](http://www.fws.gov/uploadedFiles/Region_7/NWRS/Zone_2/Kodiak/PDF/Koniag%20easement%20leaflet_2011.pdf#d).

<sup>21</sup> Alaska Dept. of Natural Resources. (n.d.) *Alaska State Parks website*. Retrieved December 6, 2011 from <http://dnr.alaska.gov/parks/>.

any individual earthquake depends on the quake's severity and location. The 1964 Alaska Earthquake and ensuing tsunami, which destroyed the City of Old Harbor and caused significant damage in Kodiak, did not inflict any significant damage in Karluk. The earthquake did cause 1.5 feet of subsidence, causing tides to run slightly earlier into the area.<sup>22</sup> The 1912 eruption of the volcano Novarupta, located 100 miles northwest of Kodiak Island on the Alaska Peninsula, covered the island in ash and gasses and disrupted the local salmon fishery, especially between 1915 to 1919, when many adult fish starved and failed to spawn in ash-choked streams.<sup>23</sup>

In addition to risk of earthquake and volcanic activity, natural hazards that pose a high risk in Karluk include coastal erosion and severe weather. The primary weather hazards in Karluk are freezing rain, heavy snowfall, and high winds. Winds can occasionally exceed 50 miles per hour, with gusts of up to 90 miles per hour. Extreme weather events can also exacerbate the hazard of coastal erosion, which is already a problem in the community. In 1978, extreme winter weather eroded the Karluk spit and forced a relocation of the entire village. Coastal erosion has also occurred in several other places in the village, and has the potential to impact current structures and future residential and commercial development. According to the Karluk Emergency Response Plan of 2000, a hillside road from the airstrip down to the lagoon was eroding away. The potential impact of natural hazards is increased by Karluk's relative isolation from emergency response services.<sup>24</sup>

Kodiak Island was directly impacted by the *Exxon Valdez* Oil Spill in March of 1989, in which 11 million gallons of crude oil spilled into Prince William Sound and spread to surrounding areas.<sup>25</sup> Oil was carried by currents throughout the area of the Alutiiq people, and hit the beaches of Kodiak Island in mid-April.<sup>26</sup> The *Exxon Valdez* Oil Spill Trustee Council was formed following the spill, and has overseen large-scale habitat restoration, protection, and acquisition. On Kodiak Island, the Trustee Council has protected over 260,000 acres, much of it now included within the KNWR.<sup>27</sup>

According to the Alaska Department of Environmental Conservation, there were no notable active environmental cleanup sites located in Karluk as of August 2012.<sup>28</sup>

## Current Economy<sup>29</sup>

From the late 1800s through the 1930s, fish processing was a primary source of livelihood in Karluk.<sup>30,31,32,33</sup> Today, Karluk residents have minimal involvement in commercial

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<sup>22</sup> See footnote 15.

<sup>23</sup> U.S. Geological Survey. 1998. *Can Another Great Volcanic Eruption Happen in Alaska?* Retrieved December 5, 2011 from <http://volcanoes.usgs.gov/about/publications/factsheets.php>.

<sup>24</sup> Karluk IRA Traditional Council. 1999. *Community Emergency Response Plan*. Retrieved August 24, 2012 from <http://www.city.kodiak.ak.us/Emergency/Documents/Annex%20B%20-%20Karluk.pdf>.

<sup>25</sup> United States Environmental Protection Agency. *Exxon Valdez*. Retrieved December 2, 2011 from <http://www.epa.gov/emergencies/content/learning/exxon.htm>.

<sup>26</sup> Mason, R. 1995. *The Alutiiq Ethnographic Bibliography*. Project sponsored by the Kodiak Area Native Association. Retrieved November 30, 2011 from <http://ankn.uaf.edu>.

<sup>27</sup> Restoration Notebook. January 2009. *Habitat Protection – A Successful Restoration Strategy*. Exxon Valdez Oil Spill Trustee Council. Retrieved December 1, 2011 from <http://dnr.alaska.gov>.

<sup>28</sup> Alaska Dept. of Environmental Conservation. 2012. *List of Contaminated Site Summaries By Region*. Retrieved August 24, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

<sup>29</sup> Unless otherwise noted, all monetary data are reported in nominal values.

<sup>30</sup> Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from [http://www.commerce.state.ak.us/dca/commdb/CF\\_BLOCK.htm](http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm).

fishing activities, and the lack of marine facilities in Karluk provides a barrier to higher levels of local involvement. Construction of docking and moorage facilities would allow for expansion in fishing as well as tourism opportunities. Today, the primary economic activity in the community is sport hunting and fishing. As of 2011, there were six lodges in Karluk that provide a limited number of seasonal employment opportunities to local residents. Other top employers in the community are the Native Village of Karluk Traditional IRA Council and the Kodiak Island Borough School District. Local residents rely heavily on subsistence hunting and fishing to supplement their diets.<sup>34</sup> Salmon, trout, ducks, seals, and deer are some of the primary subsistence resources utilized by local residents.<sup>35</sup>

Based on household surveys for the 2006-2010 ACS,<sup>36</sup> in 2010, the per capita income in Karluk was estimated to be \$7,540 and the median household income was estimated to be \$34,375. This represents a decrease from the per capita income reported in the year 2000 (\$13,736) and an increase from the median household income reported in 2000 (\$19,167). If inflation is taken into account by converting 2000 values to 2010 dollars,<sup>37</sup> the drop in per capita income is revealed to be even greater; real per capita income in 2000 was \$18,063. In contrast, the real median household income in 2000 was \$25,204, and the 2010 estimate remains a substantial increase. In 2010, Karluk ranked 300<sup>th</sup> in per capita income out of 305 Alaskan communities with per capita income data, and 220<sup>th</sup> in median household income, out of 299 Alaskan communities with household income data that year.

Although Karluk's small population size may have prevented the ACS from accurately portraying economic conditions,<sup>38</sup> the decline in per capita income suggested by the 2006-2010 ACS estimate is supported by 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 Karluk in

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<sup>31</sup> Smithsonian Museum of Natural History, Alaska Native Heritage Center, and Alutiiq Museum & Archaeology Repository. 2001. "Exhibition Catalog: Karluk Village Profile." In *Looking Both Ways: Heritage and Identity of the Alutiiq People of Southern Alaska: An Interactive Exhibition, Text Only Version*. Eds. Crowell, Aron L., Amy F. Steffian, and Gordon L. Pullar. University of Alaska, Fairbanks. Retrieved August 24, 2012 from <http://www.mnh.si.edu/lookingbothways/text/villages/karluk.html>.

<sup>32</sup> Clark, McGregor, Mecum, Krasnowski and Carroll. 2006. "The Commercial Salmon Fishery in Alaska." *Alaska Fisheries Research Bulletin* 12(1):1-146. Alaska Dept. of Fish and Game. Retrieved January 4, 2012 from <http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clavr12n1.pdf>.

<sup>33</sup> See footnote 26.

<sup>34</sup> Kodiak Area Native Association. 2011. *Kodiak Rural Regional Comprehensive Economic Development Strategy*. Retrieved August 24, 2012 from <http://www.kanaweb.org/files/CEDS.pdf>.

<sup>35</sup> See footnote 30.

<sup>36</sup> U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census and the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

<sup>37</sup> Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved January 5, 2012 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

<sup>38</sup> 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.

2010 is \$10,939.<sup>39,40</sup> Although this is higher than the ACS estimate, it remains lower than the reported inflation-adjusted per capita income in 2000. Despite the apparent decline in per capita income in Karluk from 2000 to 2010, the community was not recognized as “distressed” by the Denali Commission in 2011.<sup>41</sup> 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, 48.6% of the population age 16 and older was estimated to be in the civilian labor force, a substantially lower percentage than was estimated to be in the civilian labor force statewide (68.8%). In the same year, 65.5% of local residents were estimated to be living below the poverty line, almost seven times the statewide rate of 9.5%, and the unemployment rate was estimated to be 11.4% compared to the statewide rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in 2010 was 9%, compared to a statewide unemployment rate estimate of 11.5%.<sup>42</sup>

Also based on the 2006-2010 ACS, a majority of Karluk workers were estimated to be employed in the public sector (76.9%), along with 23.1% in the private sector. Of the 13 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest number was estimated to work in transportation, warehousing, and utilities (4 individuals; 30.8% of the civilian labor force), retail trade (3 individuals; 23.1%), educational services, health care, and social assistance (3 individuals; 23.1%), and public administration (3 individuals; 23.1%). In 2010, 0% of the employed civilian labor force was estimated to be working in agriculture, forestry, fishing and hunting, and mining. However, the number of individuals employed in the fishing industry is probably underestimated in census statistics; fishermen may hold another job and characterize their employment accordingly. This information about employment by industry is presented in Figure 3.

By occupation type, most (53.8%) residents were estimated to hold management or professional positions in 2010; followed by service (23.1%) and sales or office (23.1%) positions. Between 2000 and 2010, there was a significant proportional decline in the number of service positions occupied by residents. Conversely, there were significant proportional gains in the number of management and professional positions between those years (Figure 4).

An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 18 employed residents in Karluk in 2010, of which 12 (66.7%) were employed in local government, 3 (16.7%) were employed in financial activities, 2 (11.1%) in trade, transportation, and utilities, and 1 (5.6%) in educational and health services.<sup>43</sup> As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents' activity in the subsistence economy.

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<sup>39</sup> Alaska Department of Labor and Workforce Development (n.d.). *Alaska Local and Regional Information Database*. Retrieved April 23, 2012 from <http://live.laborstats.alaska.gov/alari/>.

<sup>40</sup> See footnote 36.

<sup>41</sup> Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from [www.denali.gov](http://www.denali.gov).

<sup>42</sup> See footnote 39.

<sup>43</sup> Ibid.

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

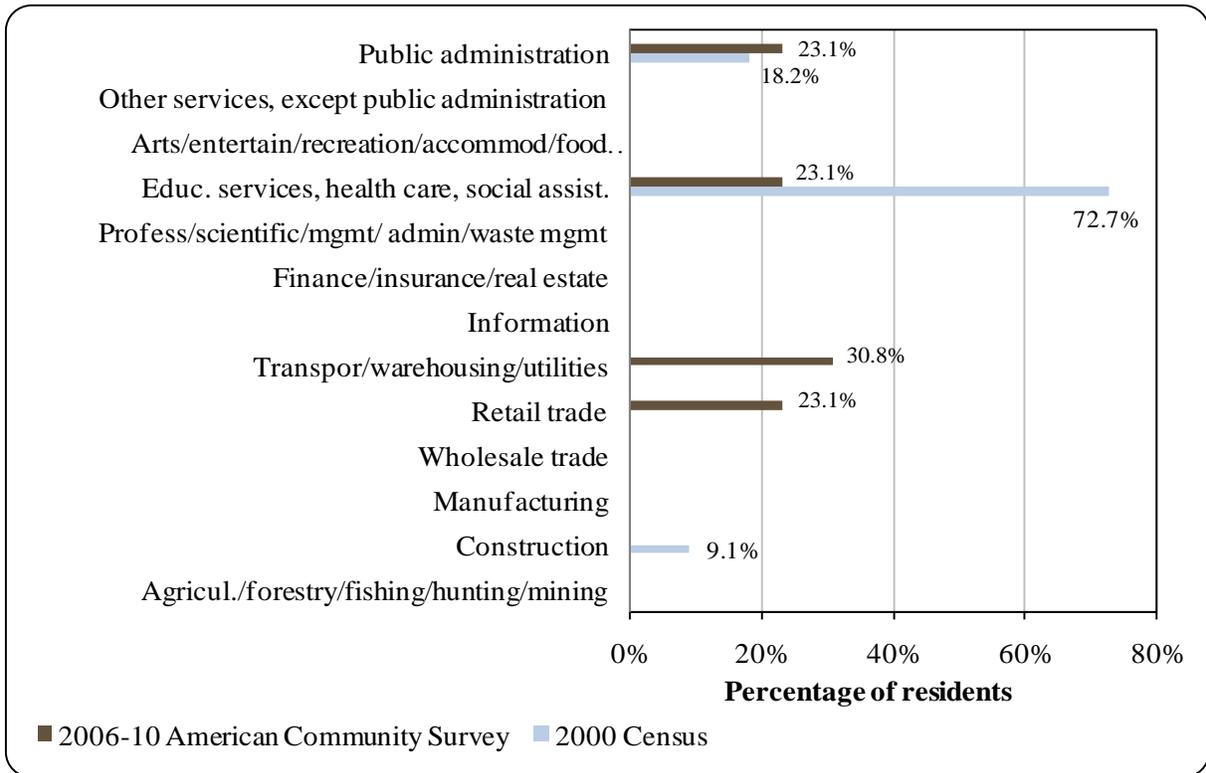
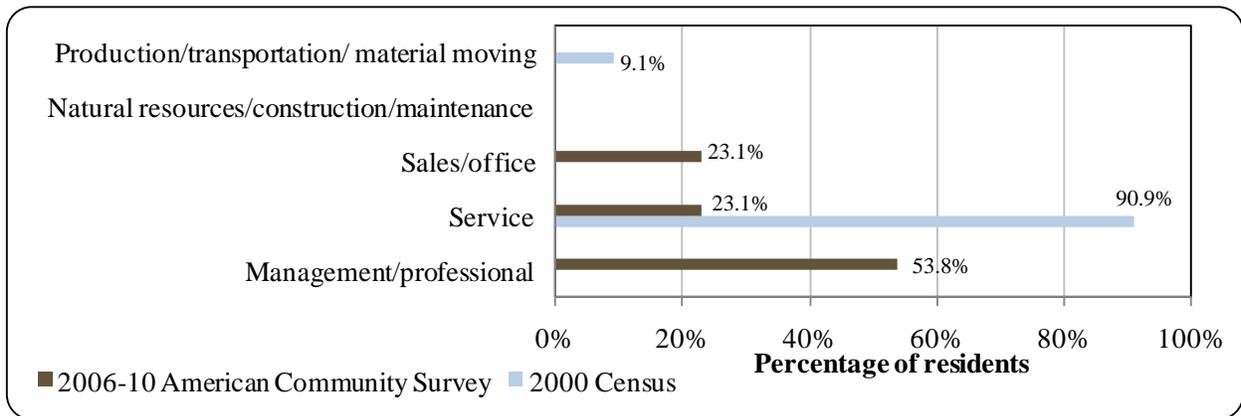


Figure 4. Local Employment by Occupation in 2000-2010, Karluk (U.S. Census).



## Governance

Karluk is an unincorporated community under the jurisdiction of the Kodiak Island Borough. Because the community is not incorporated, no information is available regarding local revenue sources (Table 2). However, the Borough administers a 11.27 mills property tax in Karluk, along with a 5% Bed Tax and 1.05% severance tax. Karluk was included under the Alaska Native Claims Settlement Act (ANCSA), and is federally recognized as a Native village. The authorized Indian Reorganization Act Tribal Council, recognized by the Bureau of Indian Affairs, is the Native Village of Karluk.<sup>44</sup> The Tribal Council administers a variety of federal programs, including local health care, employment assistance, and other social services.<sup>45</sup>

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

Year	Total Municipal Revenue <sup>1</sup>	Sales Tax Revenue <sup>2</sup>	State/Community Revenue Sharing <sup>3,4</sup>	Fisheries-Related Grants (State and Federal) <sup>5</sup>
2000	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a

<sup>1</sup> 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](http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm).

<sup>2</sup> 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](http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm).

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

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

<sup>5</sup> 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](http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm).

A village corporation, Karluk Native Corporation, was formed in 1971 pursuant to ANCSA. Karluk Native Corporation selected and received 83,787 acres of land conveyance, approximately 90% of the total acreage to which it was entitled. On December 6, 1980, Karluk Native Corporation merged with Koniag, Incorporated, the regional Native corporation for Kodiak Island. The merged corporation owns both surface and subsurface rights to lands

<sup>44</sup> Alaska Dept. of Comm. And Rural Affairs. (n.d.). *Community Information Summaries*. Retrieved December 27, 2011 from [http://www.commerce.state.ak.us/dca/commdb/CF\\_CIS.htm](http://www.commerce.state.ak.us/dca/commdb/CF_CIS.htm).

<sup>45</sup> Kodiak Area Native Association. 2011. *Kodiak Rural Regional Comprehensive Economic Development Strategy*. Retrieved August 24, 2012 from <http://www.kanaweb.org/files/CEDS.pdf>.

originally titled to Karluk Native Corporation.<sup>46</sup> Shareholders of the original village corporation received additional shares of Koniag stock, and the Native Village of Karluk received 1,860 acres of land near the village and \$35,340 to divide among its former shareholders.<sup>47</sup>

In early 2012, the Native Village of Karluk brought a lawsuit against Koniag, Incorporated in an effort to have former reservation lands put under the control of the IRA Council. In July 2012, a federal court blocked the lawsuit, saying that Karluk tribal court lacks jurisdiction over Kodiak Island's regional Native corporation.<sup>48</sup>

Karluk is a member of the Kodiak Area Native Association (KANA), a tribal non-profit organization headquartered in Kodiak that serves communities in the Kodiak Archipelago.<sup>49</sup> KANA 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.<sup>50</sup> KANA provides health and development services, as well as career development and other community services, with the goal of promoting economic self sufficiency and promote healthy families.<sup>51</sup> KANA provides health services in Karluk under an agreement with the Native Village of Karluk.<sup>52</sup>

The closest National Marine Fisheries Service (NMFS), Alaska Department of Fish and Game (ADF&G), and U.S. Bureau of Citizenship and Immigration Services offices are all located within the City of Kodiak. The nearest Alaska Department of Natural Resources office is a Division of Parks and Outdoor Recreation office, also located in Kodiak, and the nearest office of the Alaska Department of Commerce, Community, and Economic Development is in Anchorage.

## Infrastructure

### *Connectivity and Transportation*

Karluk is accessible by air and water. Regular and charter flights depart from nearby Kodiak. There are both a state-owned 2,000 feet long by 60 feet wide gravel airstrip and a seaplane base at Karluk Lake.<sup>53</sup> As of early June 2012, a roundtrip ticket between Kodiak and Anchorage cost \$360.<sup>54</sup> Several companies offer service between Kodiak and Karluk if a minimum number of passengers charter a plane. As of summer 2012, a roundtrip ticket between

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<sup>46</sup> Norgaard Consultants. 1984. *Karluk Comprehensive Development Plan*. Prepared for Kodiak Island Borough. Retrieved August 27, 2012 from <http://www.commerce.state.ak.us/dca/plans/Karluk-CP-1984.pdf>.

<sup>47</sup> Koniag, Incorporated. 2012. *Shareholder News*. Retrieved August 23, 2012 from [http://www.koniag.com/wp-content/uploads/2012/07/KON207-Shareholder-Newsletter-MAY\\_v13A.pdf](http://www.koniag.com/wp-content/uploads/2012/07/KON207-Shareholder-Newsletter-MAY_v13A.pdf).

<sup>48</sup> Anchorage Daily News. July 12, 2012. "Federal judge blocks village lawsuit against Native corporation." Retrieved August 23, 2012 from <http://www.adn.com/2012/07/12/v-printer/2539564/federal-judge-blocks-village-lawsuit.html>.

<sup>49</sup> Kodiak Area Native Association. (n.d.). Retrieved February 16, 2012 from <http://www.kanaweb.org/>.

<sup>50</sup> 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>.

<sup>51</sup> See footnote 49.

<sup>52</sup> Kodiak Area Native Association. 2011. *Kodiak Rural Regional Comprehensive Economic Development Strategy*. Retrieved August 24, 2012 from <http://www.kanaweb.org/files/CEDS.pdf>.

<sup>53</sup> Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from [http://www.commerce.state.ak.us/dca/commdb/CF\\_BLOCK.htm](http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm).

<sup>54</sup> This price was calculated on November 21, 2011 using kayak.com.

Kodiak and Karluk with Island Air Service cost \$300 roundtrip, and was available Monday, Wednesday, or Friday with a minimum of two passengers. Servant Air did not offer scheduled service to Karluk, but a stop could be added for three or more seat fares.<sup>55</sup> Barge service is available twice a month from Kodiak, and goods are lightered to shore by skiff.<sup>56</sup> Karluk does not have a harbor or docking facilities, so landing crafts are used to bring supplies ashore. Local residents who transport their own supplies will anchor off shore and haul their goods with smaller boats or skiffs. There is about one mile of gravel road in the community.<sup>57</sup>

### *Facilities*

Water in Karluk is retrieved from a creek and is treated and stored in a 50,000-gallon tank. All occupied homes are fully plumbed. A community septic tank and sewage lagoon are used to manage waste. There is no organized refuse collection service, and individuals must haul their own garbage. The landfill is a temporary, unpermitted site, and is operated by the Village Council. The school organizes aluminum recycling. Power is provided by a diesel powerhouse operated by the Village Council.<sup>58</sup> The Kodiak Island Borough is considering options for renewable energy sources. Some of the most promising opportunities include electrical interties between communities that are currently powered by hydroelectric and nearby communities still operating diesel plants, such as a possible intertie between Larsen Bay and Karluk. In addition, wind power generation is of interest. Karluk is one of several communities on Kodiak Island that may have potential for wind generation, although the proximity to the KNWR may present challenges to gaining approval of such a facility.<sup>59</sup>

Police services in Karluk are provided by a Village Public Safety Officer stationed in Karluk. The nearest state trooper post is located in Kodiak. Fire and rescue services are provided by the Karluk Village Response Team.<sup>60</sup> Additional community facilities include a community hall and the school library, which is accessible to the public, and a small post office operated by the U.S. Postal Service. As of August 2012, a telephone system was in place in Karluk. Residents can access internet through purchase of individual satellite dishes. No cable service is available locally.<sup>61,62</sup>

### *Medical Services*

The Karluk Health Clinic provides residents with basic medical services. The Clinic is a Community Health Aid Program site. It is owned and operated by the Karluk Village Council.<sup>63</sup> KANA provides health services in Karluk under an agreement with the Native Village of

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<sup>55</sup> Price information retrieved June 26, 2012 from [http://www.kodiakislandair.com/summer\\_schedule.htm](http://www.kodiakislandair.com/summer_schedule.htm) and [http://www.servantair.com/schedules\\_summer.html](http://www.servantair.com/schedules_summer.html).

<sup>56</sup> See footnote 53.

<sup>57</sup> See footnote 52.

<sup>58</sup> See footnote 53.

<sup>59</sup> Kodiak Island Borough. 2009. *Regional Energy Plan*. Retrieved August 24, 2012 from <ftp://ftp.aidea.org/2010AlaskaEnergyPlan/Regional%20Energy%20Plans/Kodiak%20Island%20Borough%20Regional%20Energy%20Plan.pdf>.

<sup>60</sup> See footnote 53.

<sup>61</sup> Ibid.

<sup>62</sup> See footnote 52.

<sup>63</sup> See footnote 53.

Karluk.<sup>64</sup> Emergency Services have coastal floatplane and air access.<sup>65</sup> The nearest hospital is located in the City of Kodiak.

### *Educational Opportunities*

One school is present in Karluk. The school offers a Kindergarten through 12<sup>th</sup> grade education. However, due to the small student population residing in Karluk and the requirement that a rural school have a minimum of 10 students enrolled to retain funding, each year the Karluk school is at the risk of being closed for the year.<sup>66</sup> The school was closed due to low enrollment during the 1999-2000 and 2002-2003 school years.<sup>67</sup> In 2010, Karluk School had 13 enrolled students and 2 teachers, in 2011 there were 15 students and 4 teachers, and in 2012 there were 16 students and 3 teachers.<sup>68</sup> A few high school students attend Mount Edgecumbe High School in Sitka, Alaska.<sup>69</sup>

## **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 Kodiak Island and surrounding areas. The Koniags historically migrated between permanent winter villages and temporary summer fish camps. For up to 7,000 years, the mouth of the Karluk River has been utilized as a village site due to the great numbers of salmon can be harvested there. Like Alutiiq people today, the ancient residents of Karluk smoked and dried the river salmon they caught during the summer to provide food through the long winter.<sup>70,71</sup> In addition to salmon, the Alutiiq people of Kodiak Island also harvested other fish, intertidal resources, and marine mammals, including whales, sea lions, seals, and sea otters.<sup>72,73</sup>

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<sup>64</sup> Kodiak Area Native Association. 2011. *Kodiak Rural Regional Comprehensive Economic Development Strategy*. Retrieved August 24, 2012 from <http://www.kanaweb.org/files/CEDS.pdf>.

<sup>65</sup> Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from [http://www.commerce.state.ak.us/dca/commdb/CF\\_BLOCK.htm](http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm).

<sup>66</sup> Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

<sup>67</sup> See footnote 65.

<sup>68</sup> Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

<sup>69</sup> See footnote 59.

<sup>70</sup> Smithsonian Museum of Natural History, Alaska Native Heritage Center, and Alutiiq Museum & Archaeology Repository. 2001. "Exhibition Catalog: Karluk Village Profile." In *Looking Both Ways: Heritage and Identity of the Alutiiq People of Southern Alaska: An Interactive Exhibition, Text Only Version*. Eds. Crowell, Aron L., Amy F. Steffian, and Gordon L. Pullar. University of Alaska, Fairbanks. Retrieved August 24, 2012 from <http://www.mnh.si.edu/lookingbothways/text/villages/karluk.html>.

<sup>71</sup> See footnote 65.

<sup>72</sup> Mason, Rachel. 1995. *The Alutiiq Ethnographic Bibliography*. Project sponsored by the Kodiak Area Native Association. Retrieved November 30, 2011 from <http://ankn.uaf.edu>.

<sup>73</sup> Clark, McGregor, Mecum, Krasnowski and Carroll. 2006. "The Commercial Salmon Fishery in Alaska." *Alaska Fisheries Research Bulletin* 12(1):1-146. Alaska Dept. of Fish and Game. Retrieved January 4, 2012 from <http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1.pdf>.

With the arrival of Russian colonists to Kodiak Island in the late 1700s, the Alutiiq people were forced to hunt for sea otters to fuel the trade of their valuable pelts. The Russians also began commercial salmon exploitation in the early 1800s. They blocked salmon streams, such as the Karluk River on the west side of Kodiak Island, using fish weirs. Commercial processing involved salting. In addition, Alutiiq women dried the fish for the winter for use in the Russian colony.<sup>74</sup>

After the U.S. purchase of Alaska, American entrepreneurs arrived to continue hunting sea otter and to develop other industries, including salmon fishing. The first cannery at Karluk – the first on Kodiak Island – was built on Karluk Spit by Smith & Hirsch in 1882, who had previously operated a salting operation there. In 1884, this cannery was organized under the title of Karluk Packing Company. By 1884, five other canneries were also operating at Karluk, including canneries operated by the Alaska Improvement Company and the Alaska Packers Association (APA). By 1897, the APA operated all of the local canneries.<sup>75</sup> Few Natives worked initially worked in the local canneries, and a majority of cannery employees were hired from outside the region, primarily from the United States and China. By 1890, only 10% of the people living at Karluk were Alaska Native. However, Native Alaskans became increasingly involved in commercial salmon fishing in the early 1900s, and coordinated their commercial fishing activity with subsistence hunting and fishing activities.<sup>76,77</sup>

By 1901, the Karluk salmon fishery harvest reached about 4 million sockeye, but after that point began to decline.<sup>78</sup> At that time, Karluk was known for having the largest cannery and the greatest salmon stream in the world.<sup>79</sup> In the early 1900s, additional canneries were constructed in the area by the APA.<sup>80</sup> The APA finally opened a hatchery in 1896 because officials believed that hatcheries would protect the dwindling salmon runs. But overfishing continued to reduce the number of salmon at the Karluk River. In 1911, the APA moved its prominent cannery operations from the village of Karluk to the sheltered inlet at Larsen Bay due to the lack of a harbor in Karluk and the frequent shipwrecks in the shallow and rocky waters. The hatchery was closed in 1917.<sup>81,82</sup> Overfishing forced all of the Karluk canneries to close by the late 1930s.<sup>83</sup>

Through the early decades of the 1900s, the salmon fishery remained the primary focus of local commercial fishing activity, and the most common fishing gear was the beach seine. With the rise of diesel engines in the 1920s, the range of fishing vessels expanded, and commercial exploitation of halibut and groundfish extended into the Gulf of Alaska. The rise of fuel-powered vessels also led to a shift toward use purse seines in the salmon fishery. Herring

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<sup>74</sup> See footnotes 72 and 73.

<sup>75</sup> Bowers, George M., Commissioner. 1899. *Bulletin of the United States Fish Commission, Vol. XVIII*, for 1898. Washington D.C. Government Printing Office. 55<sup>th</sup> Congress, 3<sup>rd</sup> Session, Document No. 308.

<sup>76</sup> See footnote 72.

<sup>77</sup> See footnote 70.

<sup>78</sup> See footnote 73.

<sup>79</sup> See footnote 64.

<sup>80</sup> Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from [http://www.commerce.state.ak.us/dca/commdb/CF\\_BLOCK.htm](http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm).

<sup>81</sup> KMXT Radio. September 6, 2011. "Larsen Bay Cannery is 100 This Year." Retrieved August 24, 2012 from [http://www.kmxt.org/index.php?option=com\\_content&task=view&id=3110&Itemid=2](http://www.kmxt.org/index.php?option=com_content&task=view&id=3110&Itemid=2).

<sup>82</sup> See footnote 70.

<sup>83</sup> See footnote 80.

fishermen also began stopping in Kodiak by the 1920s, and a herring reduction also operated in Kodiak until the early 1960s.<sup>84,85,86</sup>

Since the closure of the Karluk canneries in the 1930s,<sup>87</sup> no processing facilities have been operational locally, although it is important to note that Icicle Seafoods currently operates a cannery at nearby Larsen Bay.<sup>88</sup> Today, the primary economic activity in Karluk is sport hunting and fishing. As of 2011, there were six lodges in Karluk that provide a limited number of seasonal employment opportunities to local residents. Local residents also rely heavily on subsistence hunting and fishing to supplement their diets.<sup>89</sup> Salmon, trout, ducks, seals, and deer are some of the primary subsistence resources utilized by local residents.<sup>90</sup>

Karluk is located in Federal Statistical and Reporting Area 620, Pacific Halibut Fishery Regulatory Area 3A, and the Central Gulf of Alaska Sablefish Regulatory Area. Karluk is eligible to participate in the Community Quota Entity. The governing body that recommended Karluk was the Native Village of Karluk, but as of August 2012, the community had not formed a CQE.<sup>91</sup> The impetus for the CQE program followed the implementation of the halibut and sablefish Individual Fishing Quota (IFQ) program in 1995. The IFQ program restructured fixed gear halibut and sablefish fisheries into a catch share program which issued transferable quota shares that allocated and apportionment of the annual Total Allowable Catch to eligible vessels and processors. Although the IFQ program resulted in many benefits to fishermen, processors, and support businesses, and unintended consequence was that many quota holders in smaller Alaskan communities either transferred quota outside the community or moved out themselves. In addition, as quota became increasingly valuable, entry into halibut or sablefish fisheries became difficult. In many cases, it was more profitable for small-scale operators to sell or lease their quota rather than fish it due to low profit margins and high quota value. These factors lead decreased participation in communities traditionally dependent on the halibut or sablefish fisheries. To address this issue, the North Pacific Fishery Management Council implemented the CQE program in 2005. Under the program, eligible communities could form a non-profit corporation to purchase and manage quota share on their behalf.

### *Processing Plants*

According to ADF&G's 2010 Intent to Operate list, there were no registered shore-side processing plants in Karluk. Karluk was a historical center of the Kodiak salmon fishery

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<sup>84</sup> Ibid.

<sup>85</sup> Thompson, William F. and Norman L. Freeman. 1930. *History of the Pacific Halibut Fishery*. Report of the International Fisheries Commission. Number 5. Retrieved June 1, 2012 from <http://ww.iphc.int/publications/scirep/Report0005.pdf>.

<sup>86</sup> 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>.

<sup>87</sup> See footnote 80.

<sup>88</sup> Icicle Seafoods. (n.d.). *Larsen Bay*. Retrieved August 24, 2012 from <http://www.icicleseafoods.com/locations/lbs/>

<sup>89</sup> Kodiak Area Native Association. 2011. *Kodiak Rural Regional Comprehensive Economic Development Strategy*. Retrieved August 24, 2012 from <http://www.kanaweb.org/files/CEDS.pdf>.

<sup>90</sup> See footnote 80.

<sup>91</sup> NOAA Fisheries, Alaska Regional Office. 2012. *Name and Contact Information of Community Quota Entities*. Retrieved August 20, 2012 from <http://www.fakr.noaa.gov/ram/daily/cqenamescontacts.pdf>.

beginning in the late 1800s, but the last canneries in the area were closed by the late 1930s.<sup>92</sup> It is important to note that one shore-side processing facility is located nearby in the community of Larsen Bay (see the community profile for Larsen Bay profile).

### *Fisheries-Related Revenue*

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

### *Commercial Fishing*

Karluk residents are minimally involved in commercial fishing. Two Karluk residents held commercial crew license in 2010, representing a decline of crew licenses through the decade when compared to six crew license holders in 2000. In 2000, there were also two vessels homeported and two vessels primarily owned by Karluk residents, but none in other years during the decade. No fish buyers or shore-side processors were present in any year during the 2000-2010 period, and it follows that no landings or ex-vessel revenue were reported locally (Table 5).

The only state Commercial Fisheries Entry Commission (CFEC) permit held by a Karluk resident between 2000 and 2010 was a groundfish permit held by one permit holder in 2004. The permit was held in the statewide miscellaneous saltwater finfish fishery, and was associated with mechanical jig gear. The permit was actively fished that year. Between 2000 and 2010, no Karluk residents held other state CFEC permits, federal License Limitation Permits or Federal Fisheries Permits (Table 4). In addition, no Karluk residents held quota share accounts in federal catch share fisheries for halibut, sablefish, or crab during the period (Tables 6 through 8). Given the lack of fish buyers and shore-side processors (Table 5), no landings or ex-vessel revenue were generated in the community during the 2000-2010 period (Table 9). Two vessels were owned by Karluk residents in 2000, but due to the small number of participants, landings and ex-vessel revenues generated by Karluk vessel owners are considered confidential that year. Given the lack of vessel owners in the remaining years of the period, no data are reported from 2001 to 2010 (Table 10).

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<sup>92</sup> Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from [http://www.commerce.state.ak.us/dca/commdb/CF\\_BLOCK.htm](http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm).

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

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

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

<sup>1</sup> 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](http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm).

<sup>2</sup> 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](http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm).

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

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

<sup>5</sup> Total municipal revenue represents the total revenue that the City reports each year in its municipal budget. Alaska Dept. of Comm. and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at [http://www.commerce.state.ak.us/dcra/commfin/CF\\_FinRec.cfm](http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm).

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

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

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

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

<sup>1</sup>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.]

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

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

Year	<sup>1</sup>	Count Of All Fish Buyers <sup>2</sup>	Count Of Shore-Side Processing Facilities <sup>3</sup>	Vessels Primarily Owned By Residents <sup>4</sup>	Vessels Homeported <sup>4</sup>	Vessels Landing Catch In Karluk <sup>2</sup>	Total Net Pounds Landed In Karluk <sup>2,5</sup>	Total Ex-Vessel Value Of Landings In Karluk <sup>2,5</sup>
2000	6	0	0	2	2	0	0	\$0
2001	4	0	0	0	0	0	0	\$0
2002	1	0	0	0	0	0	0	\$0
2003	3	0	0	0	0	0	0	\$0
2004	3	0	0	0	0	0	0	\$0
2005	2	0	0	0	0	0	0	\$0
2006	1	0	0	0	0	0	0	\$0
2007	0	0	0	0	0	0	0	\$0
2008	0	0	0	0	0	0	0	\$0
2009	0	0	0	0	0	0	0	\$0
2010	2	0	0	0	0	0	0	\$0

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

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

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

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

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

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

<b>Year</b>	<b>Number of Halibut Quota Share Account Holders</b>	<b>Halibut Quota Shares Held</b>	<b>Halibut IFQ Allotment (pounds)</b>
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 Karluk: 2000-2010.

<b>Year</b>	<b>Number of Sablefish Quota Share Account Holders</b>	<b>Sablefish Quota Shares Held</b>	<b>Sablefish IFQ Allotment (pounds)</b>
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 Karluk: 2000-2010.

<b>Year</b>	<b>Number of Crab Quota Share Account Holders</b>	<b>Crab Quota Shares Held</b>	<b>Crab IFQ Allotment (pounds)</b>
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 Karluk: 2000-2010.

	<i>Total Net Pounds<sup>1</sup></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	0	0
Finfish	0	0	0	0	0	0	0	0	0	0	0
Halibut	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0
Other Groundfish	0	0	0	0	0	0	0	0	0	0	0
Other Shellfish	0	0	0	0	0	0	0	0	0	0	0
Pacific Cod	0	0	0	0	0	0	0	0	0	0	0
Pollock	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0
<i>Total<sup>2</sup></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>0</i>	<i>0</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	\$0	\$0
Finfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Halibut	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Herring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Groundfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Shellfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pacific Cod	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pollock	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sablefish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Salmon	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Total<sup>2</sup></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>\$0</i>	<i>\$0</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.]

<sup>1</sup> Net pounds refers to the landed weight recorded in fish tickets.

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

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

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

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

Source: Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. 2011. Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

[URL not publicly available as some information is confidential.]

<sup>1</sup> Net pounds refers to the landed weight recorded in fish tickets.

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

### *Recreational Fishing*

Today, the primary economic activity in Karluk is sport hunting and fishing. As of 2011, there were six lodges in Karluk that provide a limited number of seasonal employment opportunities to local residents.<sup>93</sup> However, according to data reported by ADF&G, sportfishing activity appears to have declined between 2000 and 2010. While there were sport fish guide businesses registered in Karluk between 2000 and 2010, none were active during those years. The number of sport fish guide licenses held in the community declined from 14 in 2000 to 1 in 2009. No residents held sport fish guide licenses in 2010 (Table 11). Eight residents purchased sportfishing licenses in 2000 (irrespective of point of sale), while only two purchased licenses in 2009. Similarly, the number of sportfishing licenses purchased in Karluk fell from 85 in 2000 to 4 in 2009, and 0 in 2010. Given that a greater number of licenses were purchased each year in Karluk than were purchased by local residents indicates that sportfishing activities brought visitors to Karluk during the 2000-2010 period.

Karluk is located within Alaska Sport Fishing Survey Area Q – Kodiak. Information is available about both saltwater and freshwater sportfishing activity at this regional scale. On average, Alaska resident anglers fished more angler days per year than non-Alaska residents in both saltwater and freshwater sport fisheries, and more angler days were fished per year in freshwater than in saltwater in the Kodiak region between 2000 and 2010. However, sportfishing activity in by both Alaska resident and non-Alaska resident anglers, and in both saltwater and freshwater, was extremely high. Information about the sportfishing sector in and near Karluk is displayed in Table 11.

The Alaska Statewide Harvest Survey,<sup>94</sup> conducted by ADF&G between 2000 and 2010, noted the following species targeted in freshwater by private anglers in Karluk: Chinook, coho, and sockeye salmon. They also noted sport harvest of Pacific halibut in saltwater by private anglers in Karluk. No kept/release log book data were reported for sportfishing charters out of Karluk between 2000 and 2010.<sup>95</sup>

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<sup>93</sup> Kodiak Area Native Association. 2011. *Kodiak Rural Regional Comprehensive Economic Development Strategy*. Retrieved August 24, 2012 from <http://www.kanaweb.org/files/CEDS.pdf>.

<sup>94</sup> Alaska Department of Fish and Game. 2011. *Alaska Sport Fishing Survey results, 2000 – 2010*. ADF&G Division of Sport Fish, Alaska Statewide Harvest Survey project. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sf/sportfishingsurvey/> (Accessed September 2011).

<sup>95</sup> Alaska Department of Fish and Game. 2011. *Alaska sport fish charter logbook database, 2000 – 2010*. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

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

Year	Active Sport Fish Guide Businesses <sup>1</sup>	Sport Fish Guide Licenses <sup>1</sup>	Sport Fishing Licenses Sold to Residents <sup>2</sup>	Sport Fishing Licenses Sold in Karluk <sup>2</sup>
2000	0	14	8	84
2001	0	10	7	85
2002	0	9	7	38
2003	0	6	3	56
2004	0	7	6	54
2005	0	4	3	47
2006	0	3	6	47
2007	0	1	3	19
2008	0	1	4	16
2009	0	1	3	4
2010	0	0	3	0

Year	Saltwater		Freshwater	
	Angler Days Fished – Non-Alaska residents <sup>3</sup>	Angler Days Fished – Alaska residents <sup>3</sup>	Angler Days Fished – Non-Alaska residents <sup>3</sup>	Angler Days Fished – Alaska residents <sup>3</sup>
2000	16,767	38,809	18,524	47,307
2001	14,761	24,604	18,299	19,757
2002	18,356	19,737	15,018	35,113
2003	17,715	23,726	13,362	34,034
2004	18,896	22,787	21,331	31,124
2005	21,269	33,917	23,789	36,753
2006	23,511	21,991	23,483	26,239
2007	21,668	31,554	26,916	31,072
2008	20,275	31,944	24,944	24,876
2009	20,813	26,520	10,859	21,283
2010	20,012	20,365	18,871	22,211

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

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

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

### *Subsistence Fishing*

Villages have existed through history at the mouth of the Karluk River, where great numbers of salmon can be harvested. Like Alutiiq people today, the ancient residents of Karluk smoked and dried the river salmon they caught during the summer to provide food through the winter.<sup>96</sup> In addition to salmon, Alutiiq people living on Kodiak Island caught other fish and gathered intertidal resources on the shores. Hunting was done with harpoons and clubs, and fish were speared, gaffed, harpooned or hooked. Salmon were often caught in weirs built across rivers.<sup>97</sup> Today, local residents rely heavily on subsistence hunting and fishing to supplement their diets.<sup>98</sup> Salmon, trout, ducks, seals, and deer are some of the primary subsistence resources utilized by local residents.<sup>99</sup>

Between 2000 and 2010, ADF&G did not report any information about the percentage of Karluk households participating in marine resource subsistence or regarding per capita subsistence harvest (Table 12). An earlier ADF&G subsistence survey provides species-level household participation information regarding marine invertebrate, marine mammal, and non-salmon fish harvest in 1991. That year, 54% of Karluk households reported harvesting black chitons, 39% harvested mussels, 31% harvested butter clams, 23% harvested sea urchin, 15% harvested Pacific littleneck clams, 8% harvested geoducks, and 8% reported harvesting octopus. Although no households reported harvest of Dungeness crab, Tanner crab, or scallops, 8% of households reported using each of these subsistence resources in 1991. In the same year, 8% of Karluk households reported harvesting harbor seal, while 39% of households reported using harbor seal. Also in 1991, species of non-salmon fish harvested by the greatest percentage of Karluk households included Dolly Varden (69% of households reported involvement in harvesting), steelhead (46%), flounder (23%), rainbow trout (15%), and black rockfish (8%). Although no households reported harvest of Pacific cod or red rockfish in 1991, 23% of households reported using Pacific cod and 8% reported using red rockfish for subsistence. The fact that some households utilized resources not harvested in the community suggests sharing of resources between communities. It is also important to note that, in many cases, the percentage of households using subsistence resources was higher than the percentage involved in harvest, indicating the presence of sharing networks within Karluk as well.<sup>100</sup>

Some information was available regarding subsistence salmon, halibut, and marine mammal harvest between 2000 and 2010 in Karluk. For those years in which data were available between 2000 and 2010, the number of subsistence salmon permits issued to Karluk households varied between one and three. In addition, a number of permits were reported as returned in

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<sup>96</sup> Smithsonian Museum of Natural History, Alaska Native Heritage Center, and Alutiiq Museum & Archaeology Repository. 2001. "Exhibition Catalog: Karluk Village Profile." In *Looking Both Ways: Heritage and Identity of the Alutiiq People of Southern Alaska: An Interactive Exhibition, Text Only Version*. Eds. Crowell, Aron L., Amy F. Steffian, and Gordon L. Pullar. University of Alaska, Fairbanks. Retrieved August 24, 2012 from <http://www.mnh.si.edu/lookingbothways/text/villages/karluk.html>.

<sup>97</sup> Mason, Rachel. 1995. *The Alutiiq Ethnographic Bibliography*. Project sponsored by the Kodiak Area Native Association. Retrieved November 30, 2011 from <http://ankn.uaf.edu>.

<sup>98</sup> Kodiak Area Native Association. 2011. *Kodiak Rural Regional Comprehensive Economic Development Strategy*. Retrieved August 24, 2012 from <http://www.kanaweb.org/files/CEDS.pdf>.

<sup>99</sup> Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from [http://www.commerce.state.ak.us/dca/commdb/CF\\_BLOCK.htm](http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm).

<sup>100</sup> Alaska Department of Fish and Game. 2011. *Community Subsistence Information System (CSIS)*. ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sb/CSIS/> (Accessed February 2011).

2001, 2002, and 2003 although no data were available regarding the total number issued to households in those years. No information was reported regarding the species harvested using these permits. In addition, no data were reported regarding total harvest of marine invertebrates or non-salmon fish in Karluk between 2000 and 2010 (Table 13). Between 2003 and 2007, one Subsistence Halibut Fishing Certificate (SHARC) was issued per year to an individual in Karluk, and no information was reported regarding the number of permits returned or the total pounds harvested using these SHARC. In 2010, 9 SHARC were issued, and an estimated 595 lbs of halibut harvested (Table 14). Marine mammals were also harvested by Karluk residents between 2000 and 2010. According to data reported by ADF&G, between 2000 and 2008, Karluk residents harvested 11 to 63 harbor seals per year, and also harvested 2 to 3 Steller sea lions in some early years of the period (Table 15).

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

Year	Subsistence Salmon Permits Issued <sup>1</sup>	Salmon Permits Returned <sup>1</sup>	Chinook Salmon Harvested <sup>1</sup>	Chum Salmon Harvested <sup>1</sup>	Coho Salmon Harvested <sup>1</sup>	Pink Salmon Harvested <sup>1</sup>	Sockeye Salmon Harvested <sup>1</sup>	Lbs of Marine Inverts <sup>2</sup>	Lbs of Non-Salmon Fish <sup>2</sup>
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004	3	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	1	1	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	n/a	n/a
2007	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2008	1	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	1	n/a	n/a
2004	1	n/a	n/a
2005	1	n/a	n/a
2006	1	n/a	n/a
2007	1	n/a	n/a
2008	n/a	n/a	n/a
2009	n/a	n/a	n/a
2010	9	5	595

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, Karluk: 2000-2010.

Year	# of Beluga Whales <sup>1</sup>	# of Sea Otters <sup>2</sup>	# of Walrus <sup>2</sup>	# of Polar Bears <sup>2</sup>	# of Steller Sea Lions <sup>3</sup>	# of Harbor Seals <sup>3</sup>	# of Spotted Seals <sup>3</sup>
2000	n/a	n/a	n/a	n/a	2	22	n/a
2001	n/a	n/a	n/a	n/a	3	18	n/a
2002	n/a	n/a	n/a	n/a	3	18	n/a
2003	n/a	n/a	n/a	n/a	n/a	32	n/a
2004	n/a	n/a	n/a	n/a	n/a	21	n/a
2005	n/a	n/a	n/a	n/a	n/a	11	n/a
2006	n/a	n/a	n/a	n/a	n/a	11	n/a
2007	n/a	n/a	n/a	n/a	n/a	21	n/a
2008	n/a	n/a	n/a	n/a	n/a	63	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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