

Iliamna (ill-ee-AM-nuh)



People and Place

*Location*¹

Iliamna is located on the northwest side of Iliamna Lake, 225 miles southwest of Anchorage. It is near the Lake Clark Park and Preserve. Iliamna is located in the Lake and Peninsula Borough and the Iliamna Recording District.

*Demographic Profile*²

In 2010, there were 109 inhabitants in Iliamna, making it the 238th largest of 352 total Alaskan communities with recorded populations that year. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents decreased by 10.8% (Table 1). However, population estimates from the U.S. Decennial Census in 2000 and 2010 show a positive growth rate (Table 1), indicating that caution should be used when comparing the decennial and annual estimates. Overall between 1990 and 2010, Decennial Census records show a population increase of 16% in Iliamna.

According to a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, Iliamna community leaders estimated that approximately 100 seasonal workers or transients are also present in Iliamna each year between May and October to participate in mining/exploration activities. They also noted that Iliamna's yearly population peak occurs in July when these seasonal workers are present. In addition to mining activity, community leaders reported that the peak in population is slightly driven by employment in fishing sectors, including commercial, subsistence and/or recreational industries.

In 2010, just over half of Iliamna residents identified themselves as American Indian and Alaska Native (54.1%), along with 33% who identified themselves as White, and 12.8% who identified as two or more races. In addition, 3.7% identified themselves as Hispanic or Latino in 2010 (Figure 1). Compared to 2000, there was a slight decrease in the percentage of the population that identified as White, and a proportional increase in the percentage identifying as American Indian or Alaska Native or as two or more races. It also appears that the Hispanic and Latino community was not represented in Iliamna in 2000.

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

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

The increasing population in Iliamna between 1990 and 2010 is reflecting in the rising number of occupied households in the community during the period, from 30 in 1990 to 35 in 2000, and 39 in 2010. Over the same period, the average number of persons per household decreased, from 3.1 in 1990 to 2.91 in 2000, and 2.79 in 2010, suggesting that the increase in total occupied housing was also due in part to diminishing household size. Of the 58 housing units surveyed for the 2010 U.S. Census, 48.3% were owner-occupied, 19% were renter-occupied, and 32.8% were vacant, mostly due to seasonal use. Between 1990 and 2010, no Iliamna residents were reported to be living in group quarters.

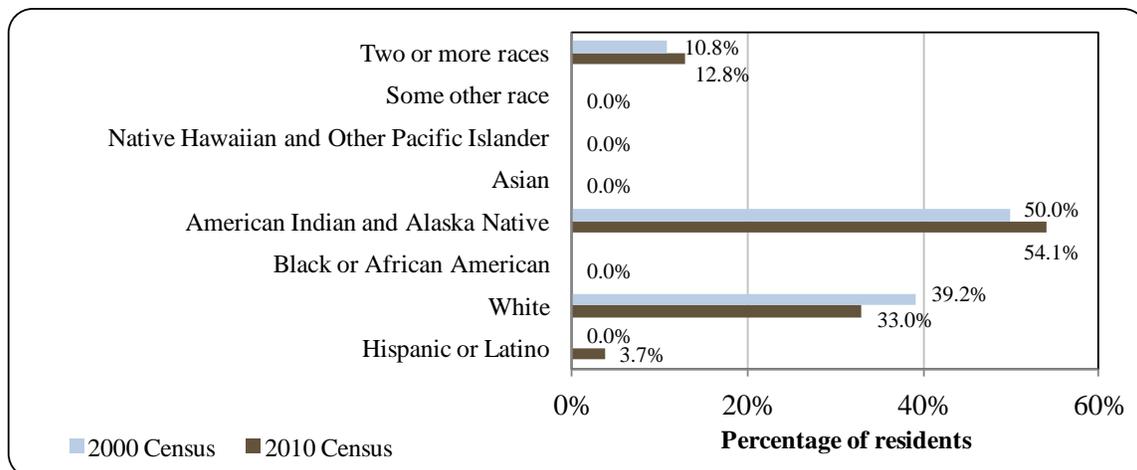
Table 1. Population in Iliamna from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	94	-
2000	102	-
2001	-	95
2002	-	98
2003	-	92
2004	-	90
2005	-	86
2006	-	82
2007	-	87
2008	-	93
2009	-	91
2010	109	-

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>.

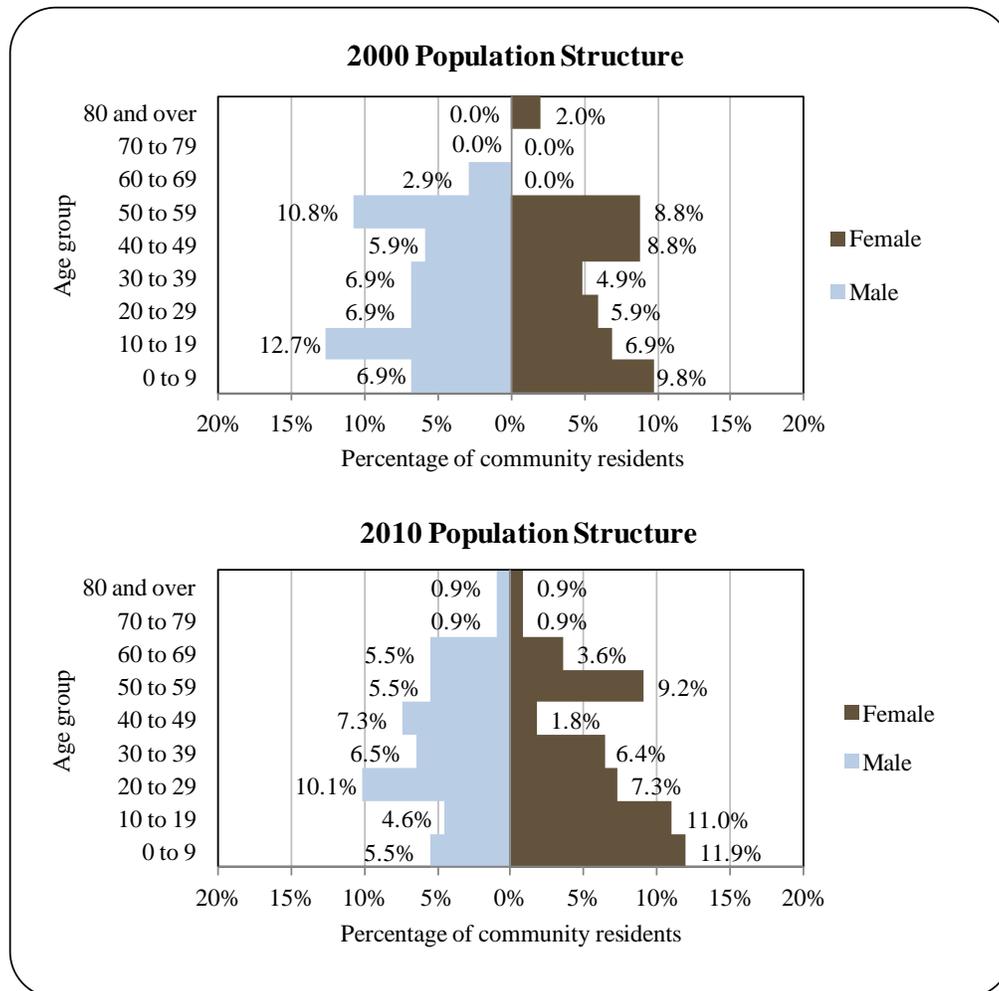
² Alaska Department of Labor. (2011). *Current population estimates for Alaskan Communities*. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

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



In 2010, there were more women than men residing in Iliamna, with a gender balance of 46.7% males and 53.2% female. This is unusual when compared to the state as a whole, which had more males than females overall in 2010 (52% male, 48% female). It is important to note that, in 2000, the gender balance of Iliamna’s population (52.9% male, 47.1% female) was closer to the balance of the state population, which was 51.7% male and 48.3% female. In 2010, the median age in Iliamna was estimated to be 29.9 years, lower than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, 12.7% of the Iliamna population was age 60 or older. The overall population structure of Iliamna in 2000 and 2010 is shown in Figure 2.

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



In terms of educational attainment, the U.S. Census' 2006-2010 American Community Survey (ACS)³ estimated that 90% of residents aged 25 and over held a high school diploma or higher degree in 2010, compared to an estimated 90.7% of Alaskan residents overall. Also in that year, no resident had less than a 9th grade education, compared to an estimated 3.5% of Alaskan residents overall; an estimated 10% had a 9th to 12th grade education but no diploma, compared to an estimated 5.8% of Alaskan residents overall; an estimated 40% had attended some college but not received a degree, compared to an estimated 28.3% of Alaskan residents overall; no Iliamna resident held Associate's or Bachelor's degrees, compared to an estimated 8% and 17.4% of Alaskan residents overall, respectively; and 23.3% were estimated to have a graduate or professional degree, compared to 9.6% of Alaskan residents overall.

History, Traditional Knowledge, and Culture

The Iliamna Lake area has been occupied by humans since prehistory. Two distinct indigenous populations historically inhabited the region: the Central Yup'ik Eskimos south and west of the lake, and the Dena'ina Athabascans on the northern and eastern shores. Distinctions between Native populations were blurred during European contact as a result of population decline due to epidemic disease and movement of people to participate in activities surrounding the fur trade and emerging commercial salmon fishery in Bristol Bay.⁴

In the early 1900s, George Seversen operated a roadhouse at the present site of the community of Iliamna. The 'Seversen Roadhouse' served as an important source of goods and services at a crossroads of the Williamsport-Pile Bay Trail,⁵ a primary route by which supplies and vessels have been transported between Cook Inlet and Bristol Bay.⁶ In the early 1900s, a small community of Yup'ik people was also living at the mouth of the Newhalen River, near the present communities of Iliamna and Newhalen.⁷ The modern community of Iliamna developed around the Seversen Roadhouse, when villagers relocated there in 1935 from "Old Iliamna," and traditional Athabaskan village located approximately 40 miles away at the eastern end of Iliamna Lake.⁸ The new community of Iliamna continued to grow through the 20th century as fishing and hunting lodges were built in the area. Today, Iliamna has a mixed population of Tanaina

³ While ACS estimates can provide a good snap shot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁴ Fall, James A., Davin L. Holen, Brian Davis, Theodore Krieg, and David Koster. 2006. *Subsistence Harvests and Uses of Wild Resources in Iliamna, Newhalen, Nondalton, Pedro Bay and Port Alsworth, Alaska, 2004*. Alaska Dept. of Fish and Game, Division of Subsistence, Technical Paper No. 302. Retrieved January 17, 2012 from <http://www.subsistence.adfg.state.ak.us/TechPap/tp302.pdf>.

⁵ U.S. Dept. of the Interior, Bureau of Land Management. 2004. *Memorandum: Navigability of Kvichak River and Iliamna Lake in the Bristol Bay Region*. Retrieved October 8, 2012 from http://dnr.alaska.gov/mlw/nav/rdi/kvichakgroup/kvichakgroup_blmnav.pdf.

⁶ Alaska Department of Natural Resources. 2005. *Bristol Bay Area Plan for State Lands*. Retrieved January 4, 2012 from <http://dnr.alaska.gov/mlw/planning/areaplans/bristol/index.htm>.

⁷ See footnote 4.

⁸ McDowell Group, Buell, Jim, and Stephen R. Braund & Associates. 2009. *Pebble Project Environmental Baseline Document. Chapter 21: Socioeconomics, Bristol Bay Drainages*. Retrieved October 8, 2012 from <http://www.arlis.org/docs/vol2/Pebble/2004-2008%20EBD/CH21%20Socioeconomics%20BB.pdf>.

Athabascans, Alutiiq and Yup'ik Eskimos, and non-Native residents.⁹ Subsistence harvest is also important to the local economy and way of life.^{10,11} The sale of alcohol is prohibited in the community.¹²

Natural Resources and Environment

Iliamna is located in a climatic transition zone, influenced by both maritime and continental weather patterns. Summer temperatures average between 42 and 62 °F, and winter temperatures between 6 and 30 °F. Iliamna receives 26 inches of rain and 64 inches of snow on average per year.¹³ The immediate landscape in Iliamna is rolling tundra.¹⁴ The Newhalen River valley contains areas of spruce woodlands and shrubs, as well as open spruce forest-shrub-bog mosaic in some places.¹⁵

The Iliamna Lake and Kvichak River drainage is the single most important source of salmon in the Bristol Bay area, producing approximately 50% of the sockeye salmon caught in the Bristol Bay salmon fishery.¹⁶ The Newhalen River and its source, Lake Clark, are a major sockeye salmon spawning area, producing 16% of the world's wild sockeye salmon commercial harvest.¹⁷ A large number of sport fishermen travel to the Iliamna Lake area every year to participate in a trophy rainbow trout fishery¹⁸ along with other sport fisheries (see the *Recreational Fishing* section of this profile). A number of lodges are present along the Newhalen River for sport hunters and fishermen.¹⁹

The area across Iliamna Lake to the south is protected as Katmai National Park and Preserve, a 7,383 square mile wilderness area known for its high concentration of brown bears and the Valley of 10,000 Smokes. Katmai National Park tourism does not affect Newhalen directly, as visitors primarily pass through the King Salmon airport to access the park.²⁰ Lake Clark National Park and Preserve is located northeast of Iliamna, occupying 4 million acres at the north end of the Alaska Peninsula. This National Park and Preserve was established to protect scenic beauty, wild rivers and waterfalls, populations of fish and wildlife, watersheds essential for sockeye salmon, and the traditional lifestyle of local residents. Subsistence activities are

⁹ 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.

¹⁰ See footnote 4.

¹¹ Lake and Peninsula Borough. 2012. *Iliamna Community Action Plan*. Retrieved October 5, 2012 from http://www.lakeandpen.com/vertical/sites/%7B0B64B15E-4D75-4DD6-ACBB-14563D943AB9%7D/uploads/Iliamna_CommunityPlan_9-17-12a.pdf.

¹² See footnote 9.

¹³ Ibid.

¹⁴ LaRoche and Associates. March 2011. *Lake and Peninsula Borough Coastal Management Plan, Revised Public Hearing Draft*. Retrieved January 17, 2012 from http://alaskacoast.state.ak.us/District/DistrictPlans_Final/LakeandPen/revised_phd/vol1_rphd.pdf.

¹⁵ Alaska Department of Natural Resources. April 2005. *Bristol Bay Area Plan for State Lands*. Retrieved January 4, 2012 from <http://dnr.alaska.gov/mlw/planning/areaplans/bristol/index.htm>.

¹⁶ Nondalton Tribal Council. 2006. *Nondalton Long-Range Environmental Plan*. Produced with assistance from Agnew:Beck Consulting. Retrieved January 17, 2012 from http://www.agnewbeck.com/pdf/bristolbay/Nondalton_LREP_Background.pdf.

¹⁷ See footnote 15.

¹⁸ See footnote 9.

¹⁹ See footnotes 15 and 16.

²⁰ National Park Service. 2011. *Katmai National Park & Preserve*. Retrieved November 17, 2011 from <http://www.nps.gov/katm/>.

permitted in Lake Clark National Park and Preserve. The National Park Service works closely with state and federal fish and wildlife management agencies to determine seasons, bag limits, and similar harvest controls.²¹ A diversity of fish and wildlife are found in both of these National Parks and Preserves, including bears, caribou, moose, wolves, lynx, sea mammals, salmon, Arctic char, Arctic grayling, Dolly Varden, Northern pike, lake trout, rainbow trout, burbot, and whitefish.²²

It is also of note that Iliamna Lake is home to a freshwater population of harbor seals.²³ Seal numbers consistently range between 150 and 220 during molting season, and some portion of the population over-winters in the lake. Local subsistence hunters harvest a small number of these seals each year.²⁴

Significant mineral resources are present in the region, including the Pebble copper-gold-molybdenum deposit. The Pebble site is located approximately 19 miles northwest of Iliamna, at the divide between the Koktuli River and Upper Talarik Creek.²⁵ Northern Dynasty Minerals Limited calls the Pebble deposit, “one of the greatest stores of mineral wealth ever discovered,” and estimates that the deposit includes 5.94 billion tons in the measured and indicated category, including 55 billion pounds of copper, 66.9 million ounces of gold and 3.3 billion pounds of molybdenum, and 4.84 billion tons in the inferred category, including 25.6 billion pounds of copper, 40.4 million ounces of gold and 2.3 billion pounds of molybdenum.²⁶ Concern has been raised about the possible effects of acid mine drainage from development of the Pebble deposit on salmon. Iliamna Lake is the source of the Kvichak River System, the single most important salmon-producing watershed in the Bristol Bay area.²⁷ According to the Pebble Partnership, 95% of the metal that would be produced by the Pebble mine is copper. Dissolved copper is known to be toxic to fish.²⁸

With regard to natural hazards, Iliamna was rated at high risk of severe weather, medium risk of earthquake, volcanic activity, and wildfire, and low risk of tsunami, erosion, and flooding. Avalanche and landslide hazard was not identified in the immediate area. In addition to the direct impact of earthquakes, Iliamna residents are concerned about secondary hazards such as seiche²⁹ and flooding. Flooding is also a threat during ice break-up, when ice jams and ice overflows may funnel water into the community. Severe weather in the form of high winds (70-100 mph) affects the community approximately twice a year. Tundra and brush fires are a serious concern in the

²¹ National Park Service. 2011. *Lake Clark National Park & Preserve Management*. Retrieved June 13, 2012 from <http://www.nps.gov/lac1/parkmgmt/index.htm>.

²² See footnotes 20 and 21.

²³ See footnote 15.

²⁴ Withrow, David and Kymberly Yano, Jennifer Burns, Courtenay Gomez, and Tatiana Askoak. 2011. *Freshwater Harbor Seals of Lake Iliamna, Alaska. Do They Pup and Over-Winter in the Lake?* Poster presented at the 2011 Alaska Marine Science Symposium. Retrieved January 18, 2012 from ftp://ftp.afsc.noaa.gov/posters/pWithrow04_freshwater-seals_2011.pdf.

²⁵ Parker, Geoffrey Y., Francis M. Raskin, Carol Ann Woody, and Lance Trasky. 2008. “Pebble Mine: Fish, Minerals, and Testing the Limits of Alaska’s Large Mine Permitting Process.” *Alaska Law Review* 25:1.

²⁶ Northern Dynasty Minerals Limited website. 2012. *The Pebble Deposit*. Retrieved January 13, 2012 from <http://www.northerndynastyminerals.com/ndm/Pebble.asp>.

²⁷ Alaska Department of Natural Resources. April 2005. *Bristol Bay Area Plan for State Lands*. Retrieved January 4, 2012 from <http://dnr.alaska.gov/mlw/planning/areaplans/bristol/index.htm>.

²⁸ See footnote 25.

²⁹ A seiche is a “wave that oscillate in partially or totally enclosed body of water.” (See footnote 30.)

community, particularly in areas with standing dead trees that resulted from an outbreak of spruce bark beetles.³⁰

According to the Alaska Department of Environmental Conservation, one active environmental cleanup site was located on the south shore of Iliamna Lake as of May 2012. In 1956, the U.S. Air Force constructed a radio relay station on the southern shore of Iliamna Lake as part of a defense communication network and aircraft warning system throughout the State of Alaska. Hazardous materials were stored at the site, including diesel fuel and gasoline, oils, antifreeze, solvents, batteries, asbestos, and electrical transformers containing polychlorinated biphenyls (PCBs). Excavation and thermal treatment of petroleum-contaminated soils was undertaken in 2004 and 2005, removing the source of potential future groundwater contamination. Groundwater wells were also dug to monitor water quality at the site.³¹

Current Economy³²

Sportfishing and tourism are currently important economic drivers in Iliamna.³³ Visitors come to the Iliamna area both for sportfishing and other forms of outdoor recreation.³⁴ Lodges for sport hunting and fishing are common in the area,³⁵ although most lodge employees are not local residents.³⁶ Commercial fishing is also a mainstay of the economy, and many workers travel to Bristol Bay each summer to participate in the sockeye salmon fishery.³⁷ Between 2000 and 2010, the number of salmon permit holders in Iliamna was equivalent to between 17% and 23% of the total local population per year. However, in the 2011 AFSC survey, community leaders indicated that the community derives minimal income from commercial fishing.

Community leaders also noted that mining is an increasingly important industry in Iliamna. Mining-related employment has increased in the Iliamna area as Northern Dynasty Minerals, Ltd. started conducting exploration of the Pebble Mine site, a significant copper-gold-molybdenum deposit located just northwest of Iliamna. If the project moves forward, the mine could provide a range of well-paid jobs for Iliamna residents.³⁸ Community leaders reported in the 2011 AFSC survey that mining also brings a large number of seasonal workers to Iliamna during summer months. However, further development of the mine remains controversial due to concerns about environmental impacts.³⁹

³⁰ Lake and Peninsula Borough. February 2009. *Multi-Hazard Mitigation Plan*. Retrieved January 17, 2012 from http://commerce.alaska.gov/dca/planning/nfip/Hazard_Mitigation_Plans/Lake_Pen_Boro_MJ_HMP.pdf.

³¹ Alaska Dept. of Environmental Conservation. 2012. *List of Contaminated Site Summaries By Region*. Retrieved October 4, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

³² Unless otherwise noted, all monetary data are reported in nominal values.

³³ 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.

³⁴ Lake and Peninsula Borough. 2012. *Iliamna Community Action Plan*. Retrieved October 5, 2012 from http://www.lakeandpen.com/vertical/sites/%7B0B64B15E-4D75-4DD6-ACBB-14563D943AB9%7D/uploads/Iliamna_CommunityPlan_9-17-12a.pdf.

³⁵ Fall, James A., Davin L. Holen, Brian Davis, Theodore Krieg, and David Koster. December 2006. *Subsistence Harvests and Uses of Wild Resources in Iliamna, Nondalton, Pedro Bay and Port Alsworth, Alaska, 2004*. Alaska Dept. of Fish and Game, Division of Subsistence, Technical Paper No. 302. Retrieved January 17, 2012 from <http://www.subsistence.adfg.state.ak.us/TechPap/tp302.pdf>.

³⁶ See footnote 27.

³⁷ See footnote 33.

³⁸ See footnote 34.

³⁹ See footnotes 25 and 34.

Based on household surveys conducted for the 2006-2010 ACS,⁴⁰ in 2010, per capita income in Iliamna was estimated to be \$21,181 and the median household income was estimated to be \$103,750, a significant increase when compared to \$19,741 and \$60,625 reported in 2000, respectively. Taking inflation into account by converting the 2000 values to 2010 dollars,⁴¹ the real per capita income in 2000 is shown to have been \$25,959 and the real 2000 median household income was \$79,721, showing a slight increase in per capita income and substantial increase in median household income over the 2000-2010 period. Median household income in 2010 ranked among the highest in the State, at 8th out of 299 Alaskan communities with household income data that year. In contrast, the 2010 per capita income estimate was close to the State average of \$21,618, ranking 139th of 305 Alaskan communities with per capita income that year.

Although Iliamna's small population size may have prevented the ACS from accurately portraying economic conditions,⁴² support for the 2006-2010 ACS per capita income estimate is provided by economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Iliamna in 2010 is \$28,184.^{43,44} This estimate is higher than the 2006-2010 ACS estimate, providing additional evidence for a rise in per capita income between 2000 and 2010. In addition, Iliamna did not meet the Denali Commission's criteria for a 'distressed community' in 2011.⁴⁵ It should be noted that both ACS and DOLWD data are based on wage earnings, and these income statistics do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS, in 2010, 75% of the Iliamna population age 16 and older was estimated to be in the civilian labor force, higher than the statewide rate of 68.8%. That year, approximately 9.9% of local residents were living below the poverty line, similar to the rate of Alaskans overall (9.6%), and the unemployment rate was estimated to be 0%, compared to a statewide unemployment rate of 5.9%. The lack of unemployment in Iliamna estimated by the 2006-2010 ACS conflicts with data reported in the ALARI database, which indicates that unemployment in Iliamna was 27.7%, more than twice ALARI's statewide unemployment rate estimate of 11.5%.⁴⁶

Also based on the 2006-2010 ACS, over half of the Iliamna workforce was estimated to be employed in the private sector (54.5%), along with 36.4% employed in the public sector

⁴⁰ 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>.

⁴¹ 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>).

⁴² 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.

⁴³ See footnote 40.

⁴⁴ 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/>.

⁴⁵ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

⁴⁶ See footnote 44.

(54.5%), and 9.1% estimated to be self-employed. Out of 33 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest number worked in transportation, warehousing, and utilities (36.4%), construction (18.2%), educational services, health care, and social services (15.2%), professional, scientific, management, and administrative and waste management services (15.2%), public administration (6.1%), and other services, except public administration (9.1%). In 2010, none of the workforce was estimated to be working in the agriculture, forestry, and fishing industries. The number of individuals employed in farming, fishing, and forestry industries is probably underestimated in census statistics; fishermen may hold another job and characterize their employment accordingly.

Compared to employment statistics in 2000, the distribution of employment by industry in 2010 appears to have shifted heavily toward transportation, warehousing, and utilities, construction, and professional, scientific, management, and administration and waste management industries. In addition, employment in various industries appears to have been eliminated. Categories represented in 2000 that were no longer represented in 2010 were arts, entertainment, recreation, accommodation and food services, retail trade, information, and finance and insurance, real estate, and rental and leasing industries. The complete loss of estimated employment in these areas may be due to inaccuracy of ACS estimates in communities with small populations.⁴⁷ These shifts in employment by industry are displayed in Figure 3.

Viewing employment from the perspective of occupation, 2006-2010 ACS estimates indicate that the greatest number of Iliamna workers were employed in production, transportation, and material moving occupations (30.3%) and management, business, science, and arts occupations (27.3%), while 18.2% were employed in service occupations, 18.2% in natural resources, construction, and maintenance occupations, and 6.1% in sales and office occupations. The increases in transportation, warehousing, and utilities and construction industries noted above are reflected in a shift toward production, transportation, and material moving and natural resource, construction, and maintenance occupations in Iliamna between 2000 and 2010 (Table 4).

ALARI estimates of employment by industry conflict with 2006-2010 ACS estimates. The ALARI database reports a higher number of employed residents in Iliamna (95) than were estimated by the ACS (33). ALARI data suggest that higher percentages of the 2010 labor force worked in professional and businesses services (40%), and local government (22.1%) compared to ACS estimates. ALARI estimates also showed some employment in industries that were not represented by the 2006-2010 ACS, including 1.1% of the workforce employed in information, 1.1% in financial activities, and 1.1% in leisure and hospitality. In addition, ALARI showed 12.6% of the workforce employed in trade government and trade, transportation, and utilities, 9.5% in education and health services, 8.4% in natural resources and mining, 3.2% in state government, and 1.1% in other industries.⁴⁸ It should be noted that both ACS and DOLWD employment statistics do not reflect residents' activity in the subsistence economy.

⁴⁷ See footnote 42.

⁴⁸ See footnote 44.

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

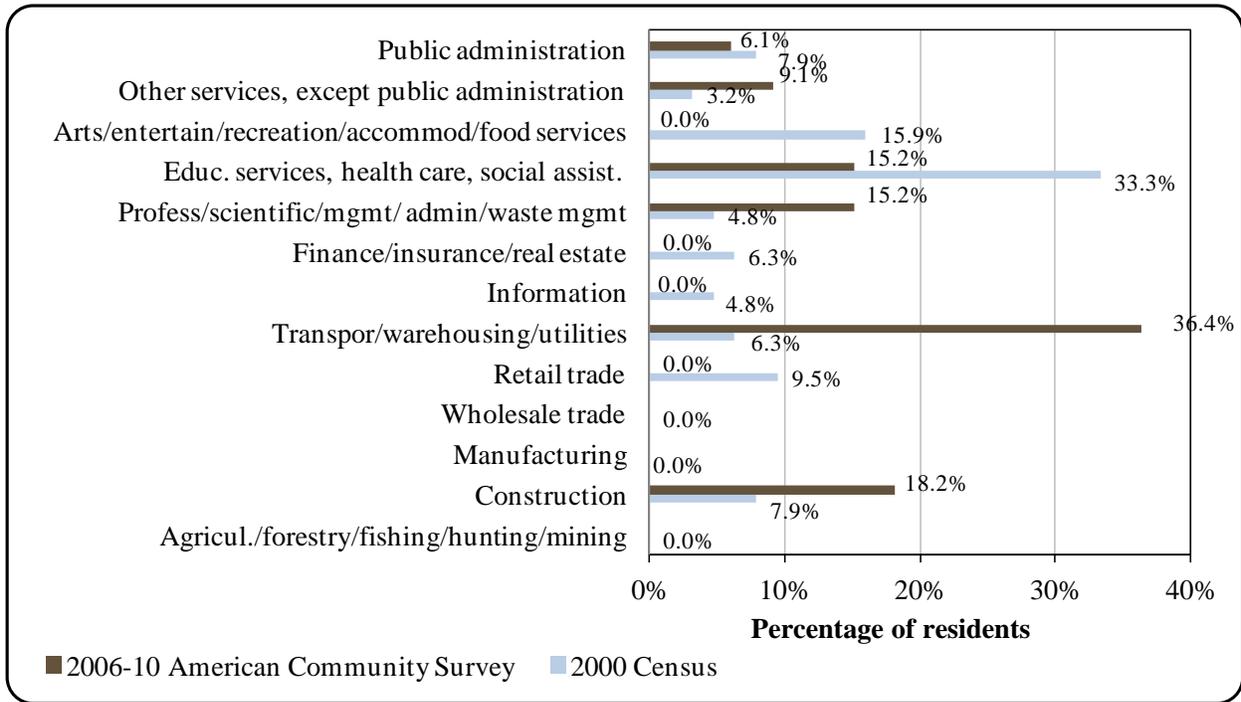
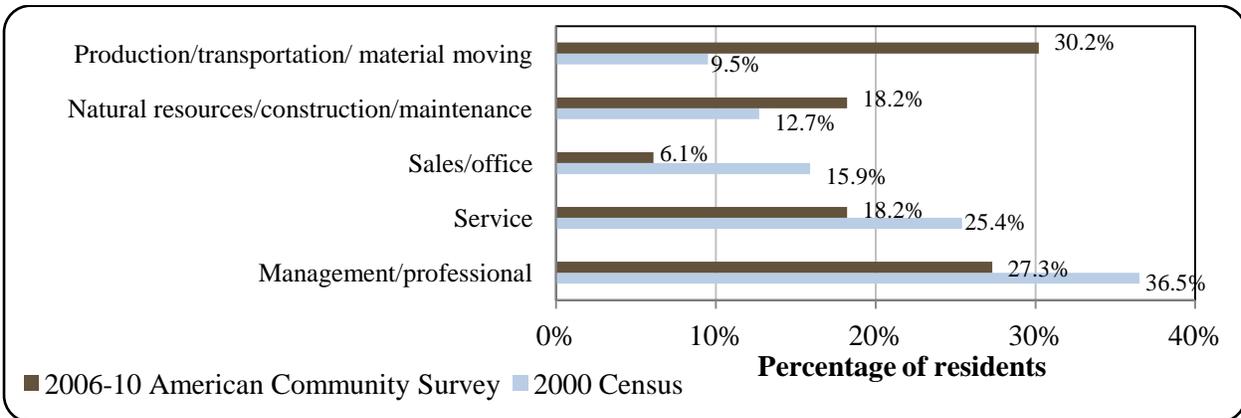


Figure 4. Local Employment by Occupation in 2000-2010, Iliamna (U.S. Census).



Governance

Iliamna is an unincorporated community under the jurisdiction of the Lake and Peninsula Borough. There is no local taxing authority, but the Borough does administer a 2% fish tax, 6% bed tax, \$3 per person/day guide tax, and \$1 person/day lodge guide tax.⁴⁹ Given that Iliamna has no municipal government, no municipal revenues were reported for the community. In

⁴⁹ Alaska Dept. of Comm. And Rural Affairs. (n.d.). *Community Information Summaries*. Retrieved January 24, 2012 from http://www.commerce.state.ak.us/dca/commdb/CF_CIS.htm.

addition, no State or Community Revenue Sharing contributions or fisheries-related grants were reported as received by Iliamna between 2000 and 2010 (Table 2).

Iliamna was included under the Alaska Native Claims Settlement Act (ANCSA), and is federally recognized as a Native village. The authorized traditional entity, recognized by the Bureau of Indian Affairs, is the Iliamna Village Council. The local village Native corporation is Iliamna Natives, Limited, which manages 73,059 acres of land. The regional Native corporation to which Iliamna belongs is the Bristol Bay Native Corporation (BBNC).⁵⁰ In addition to the local Village Council, Iliamna is one of seven villages in the Iliamna Lake region that joined to form the Nilavena Tribal Consortium.⁵¹ The Consortium is involved in providing health and cultural services to the Iliamna Lake tribes.^{52,53}

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

Year	Total municipal revenue ¹	Sales tax revenue ²	State/Community Revenue Sharing ^{3,4}	Fisheries-related grants (state and federal) ⁵
2000	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a

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

² Alaska Dept. of Comm. and Econ. Dev. (n.d.). *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

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

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

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

⁵⁰ 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.

⁵¹ Nilavena Tribes website. (n.d.). *Home*. Retrieved October 5, 2012 from <http://nilavenatribes.com/>.

⁵² Anchorage Native News. May 2003. "Construction of Iliamna clinic nears completion." The Newsletter of the Southcentral Foundation, Vol. 4, Issue 3. Retrieved October 8, 2012 from <https://www.scf.cc/May%202003.pdf>.

⁵³ Agnew::Beck. (n.d.). *Nilvena Community Cultural + Visitors Center*. Retrieved October 8, 2012 from <http://www.agnewback.com/pages-portfolio/bristolbay/nilavena-ccvc.htm>.

Iliamna is also a member of the Bristol Bay Native Association (BBNA), a regional non-profit organization headquartered in Dillingham that provides social, economic, cultural, and educational opportunities and initiatives for the benefit of the Tribes and the Native people of Bristol Bay.⁵⁴ The BBNA 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.⁵⁵

The closest regional offices of the Alaska Department of Fish and Game (ADF&G) are in Dillingham and King Salmon, and the Alaska Department of Commerce, Community, and Economic Development also has an office in Dillingham. Kodiak and Homer have the nearest offices of the Alaska Department of Natural Resources and the National Marine Fisheries Service (NMFS), and Kodiak is also the location of the nearest Bureau of Citizenship and Immigration Services office. However, the Anchorage offices of these agencies are perhaps more accessible for the people of the Iliamna Lake region.

Infrastructure

Connectivity and Transportation

Due to a lack of infrastructure in the Iliamna area, travel between communities is usually by small plane, and seasonally by boat, four-wheeler, or snowmobile. Individuals also use personal vehicles, ATVs, and skiffs.⁵⁶ Barges deliver bulk goods to the area via the Kvichak River. An improvised barge landing area is currently available at Iliamna. A breakwater, boat harbor, and dock are also available, although the dock is in poor condition.^{57,58}

A state-owned airport with two gravel airstrips is located several miles west of Iliamna. One airstrip measures 5,086 feet long by 100 feet wide, and the other is 4,800 feet by 100 feet. Iliamna Air Taxi, Inc. provides scheduled mail, freight, and passenger air service to several Iliamna Lake communities.⁵⁹ As of June 2012, a roundtrip flight from the Iliamna Airport to Anchorage cost \$460.⁶⁰ Birchwood Air Service and Lake and Peninsula Air also offer charter and some scheduled air service between Anchorage and Iliamna.^{61,62} In addition to the state-

⁵⁴ Bristol Bay Native Association. (n.d.). *BBNA homepage*. Retrieved November 16, 2011 from www.bbna.com.

⁵⁵ 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>.

⁵⁶ Bristol Bay Native Association. 2011. *Bristol Bay Comprehensive Economic Development Strategy, 2011-2016*. Funded by the U.S. Department of Commerce, Economic Development Administration. Retrieved January 17, 2012 from http://www.bbna.com/website/BBCEDS_2011-10-31.pdf.

⁵⁷ Lake and Peninsula Borough. 2012. *Iliamna Community Action Plan*. Retrieved October 5, 2012 from http://www.lakeandpen.com/vertical/sites/%7B0B64B15E-4D75-4DD6-ACBB-14563D943AB9%7D/uploads/Iliamna_CommunityPlan_9-17-12a.pdf.

⁵⁸ See footnote 50.

⁵⁹ Ibid.

⁶⁰ Personal communication, Iliamna Air Taxi reservation agent, June 13, 2012.

⁶¹ Lake & Pen Air. (n.d.). *Charters & Fares*. Retrieved October 5, 2012 from <http://www.lakeandpenair.com/www.lakeandpenair.com/Booking.html>.

⁶² Holliday Air. 2009. *Welcome Packet 2009*. Retrieved October 5, 2012 from <http://www.hollidayair.com/2009/WelcomePacket2009.pdf>.

owned airport, a private airstrip is located at the Iliamna Roadhouse, and Summit Lake provides private float plane access.⁶³

A paved road connects Iliamna to the Iliamna airport, as well as the community of Newhalen located several miles to the south.⁶⁴ During the winter, a road is passable between Iliamna and Nondalton, 15 miles to the north, although the road is only paved half way.⁶⁵ Construction of a bridge is proposed at the western end of Six Mile Lake, which would provide year-round access to Nondalton.⁶⁶ In addition, an unimproved trail, the Williamsport-Pile Bay Trail, runs along the northern shore of Iliamna Lake, connecting Iliamna and Newhalen with the communities of Pedro Bay and Pile Bay Village to the east. Pile Bay Village is also connected to Cook Inlet by road. This corridor is used to transport fishing boats and supplies between Cook Inlet and Bristol Bay, but is considered difficult to use.⁶⁷

Facilities

Water in Iliamna is derived from well sources. A 270-foot deep well provides water to the community building, village office, and Village Council-operated washeteria, and private households retrieve water from individual wells. There is no piped water or sewer system, although 85% of homes are fully plumbed. Some households have septic tanks, while others use honeybuckets or outhouses. The Village Council assists residents with sewage treatment by providing septic pump services. The Village Council also maintains a landfill, but refuse collection services are not provided. Garbage must be hauled to the landfill by residents. Electricity is provided to Iliamna through the Tazimina Hydroelectric Project which also provides electricity to communities of Nondalton and Newhalen.⁶⁸ The Iliamna – Newhalen - Nondalton Electric Cooperative owns 50 miles of distribution line connecting the three member communities, and also owns a backup diesel powerhouse in Newhalen.⁶⁹ According to the 2011 AFSC survey, community leaders indicated that improvements are expected to alternative energy power sources within the next decade. There are plans to expand the existing electrical intertie to include other communities in the region, linking to additional wild and hydroelectric power sources. Iliamna residents also support installation of insulated power lines. Current underground lines experience frequent power outages.⁷⁰

⁶³ 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.

⁶⁴ Ibid.

⁶⁵ Fall, James A., Davin L. Holen, Brian Davis, Theodore Krieg, and David Koster. December 2006. *Subsistence Harvests and Uses of Wild Resources in Iliamna, Newhalen, Nondalton, Pedro Bay and Port Alsworth, Alaska, 2004*. Alaska Dept. of Fish and Game, Division of Subsistence, Technical Paper No. 302. Retrieved January 17, 2012 from <http://www.subsistence.adfg.state.ak.us/TechPap/tp302.pdf>.

⁶⁶ See footnote 57.

⁶⁷ Alaska Department of Natural Resources. 2005. *Bristol Bay Area Plan for State Lands*. Retrieved January 4, 2012 from <http://dnr.alaska.gov/mlw/planning/areaplans/bristol/index.htm>.

⁶⁸ See footnote 63.

⁶⁹ Nondalton Tribal Council. 2006. *Nondalton Long-Range Environmental Plan*. Produced with assistance from Agnew::Beck Consulting. Retrieved January 17, 2012 from http://www.agnebeck.com/pdf/bristolbay/Nondalton_LREP_Background.pdf.

⁷⁰ Lake and Peninsula Borough. 2012. *Iliamna Community Action Plan*. Retrieved October 5, 2012 from http://www.lakeandpen.com/vertical/sites/%7B0B64B15E-4D75-4DD6-ACBB-14563D943AB9%7D/uploads/Iliamna_CommunityPlan_9-17-12a.pdf.

Police services are provided in Iliamna the locally-stationed state troopers Village Public Safety Officer. Fire and rescue services are provided by the Iliamna Volunteer Fire Department and the Iliamna/Newhalen Rescue Squad. Telephone and internet service is available in Iliamna, but no cable providers offer local service.⁷¹ A fiber optic cable is currently being extended to Iliamna.⁷² Community facilities include several sport hunting and fishing lodges, a recreation center, and a community hall/village office building.^{73,74} Community leaders indicated in the 2011 AFSC survey that a post office was also built within the last 10 years.

With regard to fisheries-related infrastructure, community leaders reported that 100 feet of dock space is available for permanent vessel moorage, while no moorage is available for transient or public moorage. They reported that construction of new dock space was completed within the last 10 years, as well as new roads serving the dock. They also indicated that dock facilities at Iliamna are not capable of handling regulated vessels such as Coast Guard, ferries, or HAZMAT vessels. Fisheries-related businesses and services noted to be available in Iliamna included sales of boat fuel, bait, and tackle. Community leaders indicated that local residents can access additional fisheries-related businesses and services at area fishing lodges.

Medical Services

The Iliamna Health Clinic, operated by the Bristol Bay Area Health Corporation, provides Iliamna residents with basic medical services. The Clinic is part of the Community Health Aide Program.⁷⁵ In addition, the Nilavena Subregional Clinic (NSC) is located in Iliamna. The NSC offers primary care, radiology, laboratory, pharmacy, and immunization services to residents of Iliamna and six other communities in the Lake and Peninsula Borough. The NSC is funded by a federal grant, and offers medical services on a sliding fee schedule based on household income and size.⁷⁶ Local emergency services are provided by the community health aide and volunteers, and additional emergency services have limited highway, lake, and air access to Iliamna. Alternative health care is provided by the Iliamna/Newhalen Rescue Squad Emergency service is provided by volunteers and the health aide.⁷⁷

Educational Opportunities

No schools are located directly in Iliamna. The nearby Newhalen School, located several miles south in the community of Newhalen, serves Iliamna students.⁷⁸ The Newhalen School offers a pre-school through 12th grade education. As of 2011, there were 8 teachers and 77 students attending the school.⁷⁹

⁷¹ See footnote 63.

⁷² See footnote 70.

⁷³ See footnote 63.

⁷⁴ Lake and Peninsula Borough. 2009. *Multi-Hazard Mitigation Plan*. Retrieved January 17, 2012 from http://commerce.alaska.gov/dca/planning/nfip/Hazard_Mitigation_Plans/Lake_Pen_Boro_MJ_HMP.pdf.

⁷⁵ See footnote 63.

⁷⁶ Southcentral Foundation website. 2012. *Nilavena Subregional Clinic*. Retrieved October 4, 2012 from <https://www.scf.cc/services/nilavena.ak>.

⁷⁷ See footnote 63.

⁷⁸ See footnote 74.

⁷⁹ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Subsistence harvest of fisheries resources has been important for residents of the Iliamna Lake region since prehistory. Commercial exploitation of salmon resources began to develop in Bristol Bay in the 1890s, and today is one of the most important commercial salmon fisheries in the world. Harvest primarily consists of sockeye salmon returning to spawn in the many lakes of the Bristol Bay region, along with several other species harvested in lower volumes.⁸⁰ Commercial catch of herring for human consumption began in 1878 in Alaska, while harvest of herring for bait began around 1900, and herring sac roe fisheries developed in the late 1970s. The largest aggregation of herring in Alaska spawns along the northern shore of Bristol Bay, southwest of Nushagak River near the village of Togiak.⁸¹

Subsistence harvest continues to be an important foundation for the local economy in Iliamna,⁸² and tourism related to sportfishing activity has grown in importance in the Iliamna Lake region,^{83,84} as outlined below in the *Subsistence Fishing* and *Recreational Fishing* sections of this profile.

Bristol Bay is the nearest marine area to the community of Iliamna. The Bay is encompassed by Federal Statistical and Reporting Area 514, Pacific Halibut Fishery Regulatory Area 4E, and Bering Sea Sablefish Regulatory Area. Iliamna is not eligible to participate in the Community Development Quota program or the Community Quota Entity program. According to the 2011 AFSC survey, community leaders reported that Iliamna does not actively participate in fisheries management processes in Alaska.

Processing Plants

According to ADF&G's 2010 Intent to Operate list, Iliamna does not have a registered processing plant. However, several processing facilities were listed in nearby communities in Bristol Bay, including Naknek, Egegik, and Dillingham.

Fisheries-Related Revenue

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

⁸⁰ 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>.

⁸¹ 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>.

⁸² 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.

⁸³ Alaska Department of Natural Resources. 2005. *Bristol Bay Area Plan for State Lands*. Retrieved January 4, 2012 from <http://dnr.alaska.gov/mlw/planning/areaplans/bristol/index.htm>.

⁸⁴ Nondalton Tribal Council. 2006. *Nondalton Long-Range Environmental Plan*. Produced with assistance from Agnew::Beck Consulting. Retrieved January 17, 2012 from http://www.agnewbeck.com/pdf/bristolbay/Nondalton_LREP_Background.pdf.

Commercial Fishing

In the 2011 AFSC survey, community leaders reported that the Bristol Bay sockeye salmon fishery is the primary commercial fishery in which Iliamna residents are involved. They indicated that the fishery takes place between June and October, with October harvest focused primarily on subsistence. Iliamna residents have also been involved in the Bristol Bay herring fishery.

Between 2000 and 2010, Iliamna residents were involved in commercial fisheries as state permit holders, crew license holders, and vessel owners. Numbers of permit holders remained stable over the period, varying between 17 and 22 permit holders per year. In 2010, 19 permit holders held a total of 16 state-issued Commercial Fisheries Entry Commission (CFEC) permits. Of these 15 were held in the Bristol Bay salmon fishery, including 9 drift gillnet and 6 set gillnet permits. In addition, one permit was held in the Bristol Bay herring gillnet fishery. The herring permit was held from 2003 to 2010, but was not actively fished in any of these years. In contrast, a high percentage of salmon permits were actively fished each year, varying from a low of 53% of Bristol Bay salmon permit actively fished in 2002 to a high of 100% fished in 2008. Information about CFEC permits is presented in Table 4).

According to data reported by ADF&G and the Alaska Commercial Fisheries Entry Commission (CFEC), declining trends were observed in total crew license holders and vessel ownership in Iliamna over the decade. In 2000, ADF&G reported 45 crew license holders and the CFEC reported 46 vessels primarily owned by Iliamna residents. These numbers fell to 28 crew licenses held and 7 vessels owned in 2010 (Table 5). According to the CFEC, the number of vessels homeported in Iliamna also declined over the period, falling from 58 in 2000 to 4 in 2010. This information about vessels conflicts somewhat with information reported by community leaders in the 2011 AFSC survey, who indicated that the number of fishing vessels present in Iliamna had not changed in recent years.

No Federal Fisheries Permits (FFP) or federal License Limitation Program permits (LLP) were issued to Iliamna residents between 2000 and 2010. This permit information is presented in Table 4. Between 2000 and 2010, no quota share accounts or quota shares were held by Iliamna residents in federal catch share fisheries for halibut, sablefish, or crab (Tables 6 through 8).

No fish buyers or processing plants were present in Iliamna between 2000 and 2010 (Table 5), and no ex-vessel revenue was generated in the community (Table 9). Iliamna vessel owners delivered their catches elsewhere. In 2010, Iliamna vessel owners landed 450,395 net pounds of salmon, earning \$399,945 in ex-vessel revenue. This was higher than average for salmon landings and ex-vessel revenue over the 2000-2010 period. Information about landings and ex-vessel revenue generated by Iliamna fishermen in other fisheries is considered confidential due to the small number of participants. This information is presented in Table 10.

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

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

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

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

² Alaska Dept. of Comm. and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

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

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

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

Table 4. Permits and Permit Holders by Species, Iliamna: 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	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) ²	Total permits	0	0	0	1	1	1	1	1	1	1	1
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	0	0	0	1	1	1	1	1	1	1	1

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Groundfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Other Finfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	19	19	17	17	17	16	16	17	18	19	15
	Fished permits	17	17	9	10	13	12	14	14	18	17	13
	% of permits fished	89%	89%	53%	59%	76%	75%	88%	82%	100%	89%	87%
	Total permit holders	19	19	19	17	18	17	19	17	19	22	19
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>19</i>	<i>19</i>	<i>17</i>	<i>18</i>	<i>18</i>	<i>17</i>	<i>17</i>	<i>18</i>	<i>19</i>	<i>20</i>	<i>16</i>
	<i>Fished permits</i>	<i>17</i>	<i>17</i>	<i>9</i>	<i>10</i>	<i>13</i>	<i>12</i>	<i>14</i>	<i>14</i>	<i>18</i>	<i>17</i>	<i>13</i>
	<i>% of permits fished</i>	<i>89%</i>	<i>89%</i>	<i>53%</i>	<i>56%</i>	<i>72%</i>	<i>71%</i>	<i>82%</i>	<i>78%</i>	<i>95%</i>	<i>85%</i>	<i>81%</i>
	<i>Permit holders</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>17</i>	<i>18</i>	<i>17</i>	<i>19</i>	<i>17</i>	<i>19</i>	<i>22</i>	<i>19</i>

¹National 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.]

²Alaska 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 Iliamna: 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 Iliamna ²	Total Net Pounds Landed In Iliamna ^{2,5}	Total Ex-Vessel Value Of Landings In Iliamna ^{2,5}
2000	45	0	0	46	58	0	0	\$0
2001	35	0	0	47	59	0	0	\$0
2002	21	0	0	52	62	0	0	\$0
2003	28	0	0	48	66	0	0	\$0
2004	25	0	0	59	77	0	0	\$0
2005	22	0	0	11	9	0	0	\$0
2006	18	0	0	11	7	0	0	\$0
2007	34	0	0	10	5	0	0	\$0
2008	32	0	0	10	5	0	0	\$0
2009	36	0	0	10	3	0	0	\$0
2010	28	0	0	7	4	0	0	\$0

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 Iliamna: 2000-2010.

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

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

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

Year	Number of Crab Quota Share Account Holders	Crab Quota Shares Held	Crab IFQ Allotment (pounds)
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0

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

Table 9. Landed Pounds and Ex-vessel Revenue, by Species, in Iliamna: 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	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>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>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>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>\$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.]

¹ Net pounds 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 Iliamna 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	-	-	-	-	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	273,279	213,085	100,507	176,181	235,985	281,238	325,921	653,261	581,999	389,554	450,395
<i>Total²</i>	<i>273,279</i>	<i>213,085</i>	<i>100,507</i>	<i>176,181</i>	<i>235,985</i>	<i>281,238</i>	<i>325,921</i>	<i>653,261</i>	<i>581,999</i>	<i>389,554</i>	<i>450,395</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	-	-	-	-	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	\$181,187	\$89,462	\$48,112	\$86,566	\$118,786	\$170,436	\$213,657	\$434,104	\$419,469	\$310,807	\$399,945
<i>Total²</i>	<i>\$181,187</i>	<i>\$89,462</i>	<i>\$48,112</i>	<i>\$86,566</i>	<i>\$118,786</i>	<i>\$170,436</i>	<i>\$213,657</i>	<i>\$434,104</i>	<i>\$419,469</i>	<i>\$310,807</i>	<i>\$399,945</i>

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

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

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

² Totals only represent non-confidential data.

Recreational Fishing

The Newhalen River attracts a large number of recreational fishermen each year to participate in the trophy rainbow trout fishery on Iliamna Lake, as well as fisheries for other species such as salmon. Numerous sportfishing and hunting lodges are present in the Iliamna area.^{85,86,87} Although few active sport fish guide businesses were located in Iliamna during the 2000-2010 period, numerous licensed sport fish guides were present in the community throughout the decade. The number of licensed guides varied from 7 to 18 per year. The number of sportfishing licenses sold to Iliamna residents ranged from 54 to 90 per year, while the number of sportfishing licenses sold in the community varied from 364 to 493 per year. The higher number of sportfishing licenses sold in Iliamna than were purchased by local residents provides evidence that sportfishing is one of the primary activities drawing visitors to the Iliamna area.⁸⁸

In a survey conducted by the AFSC in 2011, community leaders reported that both local residents and visitors use private boats for sportfishing, and non-residents also fish out of lodges. They also indicated that sockeye salmon is the primary salmon species targeted by recreational fishers. The Alaska Statewide Harvest Survey,⁸⁹ conducted by ADF&G between 2000 and 2010, confirmed this and noted the following species targeted by private anglers in Iliamna-Newhalen: sockeye salmon, rainbow trout, Dolly Varden, and Arctic grayling. No kept/release logbook data were reported for fishing charters out of Iliamna between 2000 and 2010.⁹⁰

Iliamna is located within Alaska Sport Fishing Survey Area S – Kvichak River Drainage. Information is available about both saltwater and freshwater sportfishing activity at this regional scale. Non-Alaska resident anglers fished consistently more days than Alaska resident anglers in both freshwater and saltwater between 2000 and 2010, reflective of the large amount of sportfishing-related tourism in the region. Freshwater sportfishing activity was significantly more important than saltwater fishing in the region. The number of freshwater angler days for non-Alaska resident sport fishermen varied between 17,234 and 30,340 between 2000 and 2010, while Alaska resident freshwater angler days varied between 3,077 and 10,297. This information about the sportfishing sector in and near Iliamna is displayed in Table 11.

⁸⁵ 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.

⁸⁶ Alaska Department of Natural Resources. April 2005. *Bristol Bay Area Plan for State Lands*. Retrieved January 4, 2012 from <http://dnr.alaska.gov/mlw/planning/areaplans/bristol/index.htm>.

⁸⁷ Nondalton Tribal Council. 2006. *Nondalton Long-Range Environmental Plan*. Produced with assistance from Agnew::Beck Consulting. Retrieved January 17, 2012 from http://www.agnewbeck.com/pdf/bristolbay/Nondalton_LREP_Background.pdf.

⁸⁸ Lake and Peninsula Borough. 2012. *Iliamna Community Action Plan*. Retrieved October 5, 2012 from http://www.lakeandpen.com/vertical/sites/%7B0B64B15E-4D75-4DD6-ACBB-14563D943AB9%7D/uploads/Iliamna_CommunityPlan_9-17-12a.pdf.

⁸⁹ 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).

⁹⁰ 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, Iliamna: 2000-2010.

Year	Active Sport Fish Guide Businesses ¹	Sport Fish Guide Licenses ¹	Sport Fishing Licenses Sold to Residents ²	Sport Fishing Licenses Sold in Iliamna ²
2000	0	8	68	427
2001	0	10	75	427
2002	0	10	78	364
2003	0	10	90	417
2004	0	7	72	414
2005	0	14	54	466
2006	0	11	58	412
2007	1	15	68	477
2008	1	18	77	493
2009	0	15	88	410
2010	0	10	76	386

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	68	168	20,848	10,297
2001	214	43	21,554	8,202
2002	435	14	19,495	6,618
2003	74	50	18,248	5,831
2004	129	101	20,785	5,263
2005	38	79	22,156	4,179
2006	114	28	28,013	4,054
2007	229	38	30,340	3,077
2008	179	65	24,104	5,127
2009	0	0	17,234	6,514
2010	0	22	20,068	5,613

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

Subsistence harvest is an important part of the Iliamna economy. Several fish species are of primary importance, along with land animals such as moose, caribou, bear, porcupine, and rabbits.⁹¹ During fieldwork for a 2004 survey of subsistence resource use in Iliamna and surrounding communities, researchers recorded current resource concerns in the communities of Newhalen and Iliamna. Local residents' concerns centered on caribou, and particularly the Mulchatna Herd. They expressed concern about overharvest of the herd by nonlocal hunters, and were also concerned about lichen being too thin to support the formerly large herd of caribou near the Mulchatna River. They indicated that lichen was thicker around the Nushagak River, and felt that the herd may not return to the Mulchatna River for 10 years.⁹²

In addition to caribou, sockeye salmon are one of the most important subsistence resource in Iliamna, as they return in great numbers to the Newhalen River. In a survey conducted by the AFSC in 2011, community leaders reported that sockeye salmon is the most important aquatic subsistence resource for residents of Iliamna. Other salmon species are also used for subsistence purposes, along with trout and Arctic grayling. In addition, harbor seals are utilized for subsistence purposes by Iliamna residents.⁹³ Iliamna Lake is home to a freshwater population of harbor seals.⁹⁴ Local subsistence hunters harvest a small number of these seals each year.^{95,96}

In 2004, the only year between 2000 and 2010 that a subsistence focused household survey was conducted by ADF&G in the community of Iliamna, 100% of households were recorded as participating in salmon subsistence, 23% in halibut subsistence, 31% in marine mammal subsistence, 46% in marine invertebrate subsistence, and 56% in non-salmon fish subsistence (other than halibut). The per capita annual subsistence harvest of land- and sea-based resources in Iliamna was 470 pounds in 2004. Information about per capita subsistence harvest and subsistence participation by household and species is presented in Table 12. In 2004, a Iliamna residents harvested a total of 117 pounds of marine invertebrates and 2,388 pounds of non-salmon fish (Table 13).

Specific species of marine invertebrates harvested by Iliamna residents in 2004 included razor and butter clam, while specific species of non-salmon fish included Dolly Varden, rainbow trout, Arctic grayling, lake trout, pike, burbot, humpback whitefish, round whitefish, and sucker. It is of note that a number of species were reported as used by a greater percentage of households

⁹¹ 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.

⁹² Fall, James A., Davin L. Holen, Brian Davis, Theodore Krieg, and David Koster. December 2006. *Subsistence Harvests and Uses of Wild Resources in Iliamna, Newhalen, Nondalton, Pedro Bay and Port Alsworth, Alaska, 2004*. Alaska Dept. of Fish and Game, Division of Subsistence, Technical Paper No. 302. Retrieved January 17, 2012 from <http://www.subsistence.adfg.state.ak.us/TechPap/tp302.pdf>.

⁹³ Ibid.

⁹⁴ Alaska Department of Natural Resources. April 2005. *Bristol Bay Area Plan for State Lands*. Retrieved January 4, 2012 from <http://dnr.alaska.gov/mlw/planning/areaplans/bristol/index.htm>.

⁹⁵ Ibid.

⁹⁶ Withrow, David and Kymberly Yano, Jennifer Burns, Courternay Gomez, and Tatiana Askoak. 2011. *Freshwater Harbor Seals of Lake Iliamna, Alaska. Do They Pup and Over-Winter in the Lake?* Poster presented at the 2011 Alaska Marine Science Symposium. Retrieved January 18, 2012 from ftp://ftp.afsc.noaa.gov/posters/pWithrow04_freshwater-seals_2011.pdf.

than reported direct involvement in harvest, suggesting that additional households received these fish through sharing networks.⁹⁷

Information about subsistence salmon permits is available for 6 years between 2000 and 2008. During this period, the number of subsistence salmon permits issued to Iliamna households varied between 26 and 35. Sockeye salmon was by far the most heavily harvested salmon species in the area. Information about subsistence salmon harvest is presented in Table 13. No information was reported regarding the number of Subsistence Halibut Registration Certificates (SHARC) issued to residents of Iliamna between 2003 and 2010 (Table 14), despite the fact that ADF&G reported a high percentage of households participating in halibut subsistence (Table 12).

Some information about subsistence harvest of marine mammals was reported in several years during the 2000-2010 period. According to data reported by NMFS, beluga whales were harvested in 5 different years, with total harvest ranging from two to five animals. No information was reported by management agencies regarding subsistence harvest of sea otter, walrus, polar bear, Steller sea lion, harbor seal, or spotted seal (Table 15).

Additional Information

Many of Iliamna's earliest residents relocated from the village of "Old Iliamna" in 1935. Old Iliamna was a traditional Athabascan village located approximately 40 miles east of the current site, near the mouth of the Iliamna River at the east end of Iliamna Lake. In 1794, The Russian Lebedev-Lastochkin Company established a fur trading post near Old Iliamna, which was destroyed by Native groups in 1798. The trading post was reestablished by the Russian American Company in the early 1800s. Today, Old Iliamna is a seasonal camp.⁹⁸

⁹⁷ 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).

⁹⁸ McDowell Group, Buell, Jim, and Stephen R. Braund & Associates. 2009. *Pebble Project Environmental Baseline Document. Chapter 21: Socioeconomics, Bristol Bay Drainages*. Retrieved October 8, 2012 from <http://www.arlis.org/docs/vol2/Pebble/2004-2008%20EBD/CH21%20Socioeconomics%20BB.pdf>.

Table 12. Subsistence Participation by Household and Species, Iliamna: 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	100%	23%	31%	46%	56%	470
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	81%	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, Iliamna: 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	32	31	3	n/a	n/a	n/a	3,769	n/a	n/a
2001	2	2	n/a	2	n/a	n/a	4	n/a	n/a
2002	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3,325
2004	28	28	10	n/a	n/a	n/a	6,649	117	2,388
2005	29	26	n/a	n/a	n/a	n/a	5,588	n/a	n/a
2006	26	25	n/a	n/a	n/a	n/a	5,500	n/a	n/a
2007	35	34	1	n/a	n/a	n/a	5,388	n/a	n/a
2008	31	31	n/a	n/a	n/a	n/a	7,128	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, Iliamna: 2003-2010.

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

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

Source: Fall, J.A. and D. Koster. 2011. Subsistence harvests of Pacific halibut in Alaska, 2009. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 357, Anchorage. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

Table 15. Subsistence Harvests of Marine Mammal Resources, Iliamna: 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	2	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	2	n/a	n/a	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2008	3	n/a	n/a	n/a	n/a	n/a	n/a
2009	3	n/a	n/a	n/a	n/a	n/a	n/a
2010	5	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.