



NOAA Technical Memorandum NMFS-AFSC-259

Community Profiles for North Pacific Fisheries - Alaska

Volume 9

by
A. Himes-Cornell, K. Hoelting, C. Maguire, L. Munger-Little,
J. Lee, J. Fisk, R. Felthoven, C. Geller, and P. Little

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Alaska Fisheries Science Center

November 2013

NOAA Technical Memorandum NMFS

The National Marine Fisheries Service's Alaska Fisheries Science Center uses the NOAA Technical Memorandum series to issue informal scientific and technical publications when complete formal review and editorial processing are not appropriate or feasible. Documents within this series reflect sound professional work and may be referenced in the formal scientific and technical literature.

The NMFS-AFSC Technical Memorandum series of the Alaska Fisheries Science Center continues the NMFS-F/NWC series established in 1970 by the Northwest Fisheries Center. The NMFS-NWFSC series is currently used by the Northwest Fisheries Science Center.

This document should be cited as follows:

Himes-Cornell, A., K. Hoelting, C. Maguire, L. Munger-Little, J. Lee, J. Fisk, R. Felthoven, C. Geller, and P. Little. 2013. Community profiles for North Pacific fisheries - Alaska. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-259, Volume 9, 514 p.

Reference in this document to trade names does not imply endorsement by the National Marine Fisheries Service, NOAA.



NOAA Technical Memorandum NMFS-AFSC-259

Community Profiles for North Pacific Fisheries - Alaska

Volume 9

by

A. Himes-Cornell, K. Hoelting, C. Maguire, L. Munger-Little,
J. Lee, J. Fisk, R. Felthoven, C. Geller, and P. Little

Alaska Fisheries Science Center
Resource Ecology and Fisheries Assessment Division
Economics and Social Sciences Research Program
7600 Sand Point Way N.E.
Seattle, WA 98115

www.afsc.noaa.gov

U.S. DEPARTMENT OF COMMERCE

Penny. S. Pritzker, Secretary

National Oceanic and Atmospheric Administration

Kathryn D. Sullivan, Under Secretary and Administrator

National Marine Fisheries Service

Samuel D. Rauch III, Acting Assistant Administrator for Fisheries

November 2013

This document is available to the public through:

National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161

www.ntis.gov

Kenai Peninsula and Cook Inlet

REGIONAL INTRODUCTION: KENAI PENINSULA AND COOK INLET.....	1
COMMUNITIES.....	1
PEOPLE AND PLACE.....	2
<i>Location</i>	2
<i>Demographic Profile</i>	2
<i>History</i>	3
NATURAL RESOURCES AND ENVIRONMENT	4
GOVERNANCE	5
INVOLVEMENT IN NORTH PACIFIC FISHERIES	5
REGIONAL CHALLENGES.....	8
ANCHOR POINT	9
PEOPLE AND PLACE.....	9
<i>Location</i>	9
<i>Demographic Profile</i>	9
<i>History, Traditional Knowledge, and Culture</i>	12
NATURAL RESOURCES AND ENVIRONMENT	12
CURRENT ECONOMY	13
GOVERNANCE	15
INFRASTRUCTURE	16
<i>Connectivity and Transportation</i>	16
<i>Facilities</i>	16
<i>Medical Services</i>	17
<i>Educational Opportunities</i>	17
INVOLVEMENT IN NORTH PACIFIC FISHERIES	18
<i>History and Evolution of Fisheries</i>	18
<i>Processing Plants</i>	18
<i>Fisheries-Related Revenue</i>	18
<i>Commercial Fishing</i>	18
<i>Recreational Fishing</i>	27
<i>Subsistence Fishing</i>	27
CLAM GULCH.....	31
PEOPLE AND PLACE.....	31
<i>Location</i>	31
<i>Demographic Profile</i>	31
<i>History, Traditional Knowledge, and Culture</i>	34
NATURAL RESOURCES AND ENVIRONMENT	34
CURRENT ECONOMY	35
GOVERNANCE	37
INFRASTRUCTURE	38
<i>Connectivity and Transportation</i>	38
<i>Facilities</i>	38
<i>Medical Services</i>	39

<i>Educational Opportunities</i>	39
INVOLVEMENT IN NORTH PACIFIC FISHERIES	39
<i>History and Evolution of Fisheries</i>	39
<i>Processing Plants</i>	40
<i>Fisheries-Related Revenue</i>	41
<i>Commercial Fishing</i>	41
<i>Recreational Fishing</i>	49
<i>Subsistence Fishing</i>	49
COOPER LANDING	53
PEOPLE AND PLACE.....	53
<i>Location</i>	53
<i>Demographic Profile</i>	53
<i>History, Traditional Knowledge, and Culture</i>	56
NATURAL RESOURCES AND ENVIRONMENT	56
CURRENT ECONOMY	57
GOVERNANCE	61
INFRASTRUCTURE	62
<i>Connectivity and Transportation</i>	62
<i>Facilities</i>	62
<i>Medical Services</i>	62
<i>Educational Opportunities</i>	62
INVOLVEMENT IN NORTH PACIFIC FISHERIES	63
<i>History and Evolution of Fisheries</i>	63
<i>Processing Plants</i>	63
<i>Fisheries-Related Revenue</i>	63
<i>Commercial Fishing</i>	63
<i>Recreational Fishing</i>	71
<i>Subsistence Fishing</i>	72
FRITZ CREEK	75
PEOPLE AND PLACE.....	75
<i>Location</i>	75
<i>Demographic Profile</i>	75
<i>History, Traditional Knowledge, and Culture</i>	78
NATURAL RESOURCES AND ENVIRONMENT	79
CURRENT ECONOMY	80
GOVERNANCE	83
INFRASTRUCTURE	84
<i>Connectivity and Transportation</i>	84
<i>Facilities</i>	84
<i>Medical Services</i>	84
<i>Educational Opportunities</i>	84
INVOLVEMENT IN NORTH PACIFIC FISHERIES	85
<i>History and Evolution of Fisheries</i>	85
<i>Processing Plants</i>	86
<i>Fisheries-Related Revenue</i>	86

<i>Commercial Fishing</i>	86
<i>Recreational Fishing</i>	95
<i>Subsistence Fishing</i>	97
ADDITIONAL INFORMATION.....	97
HALIBUT COVE	101
PEOPLE AND PLACE.....	101
<i>Location</i>	101
<i>Demographic Profile</i>	101
<i>History, Traditional Knowledge, and Culture</i>	104
NATURAL RESOURCES AND ENVIRONMENT	104
CURRENT ECONOMY	106
GOVERNANCE	108
INFRASTRUCTURE	109
<i>Connectivity and Transportation</i>	109
<i>Facilities</i>	110
<i>Medical Services</i>	110
<i>Educational Opportunities</i>	110
INVOLVEMENT IN NORTH PACIFIC FISHERIES	110
<i>History and Evolution of Fisheries</i>	110
<i>Processing Plants</i>	112
<i>Fisheries-Related Revenue</i>	113
<i>Commercial Fishing</i>	113
<i>Recreational Fishing</i>	122
<i>Subsistence Fishing</i>	124
HOMER	127
PEOPLE AND PLACE.....	127
<i>Location</i>	127
<i>Demographic Profile</i>	127
<i>History, Traditional Knowledge, and Culture</i>	130
NATURAL RESOURCES AND ENVIRONMENT	131
CURRENT ECONOMY	132
GOVERNANCE	135
INFRASTRUCTURE	136
<i>Connectivity and Transportation</i>	136
<i>Facilities</i>	137
<i>Medical Services</i>	138
<i>Educational Opportunities</i>	139
INVOLVEMENT IN NORTH PACIFIC FISHERIES	139
<i>History and Evolution of Fisheries</i>	139
<i>Processing Plants</i>	142
<i>Fisheries-Related Revenue</i>	144
<i>Commercial Fishing</i>	144
<i>Recreational Fishing</i>	156
<i>Subsistence Fishing</i>	158

KASILOF	162
PEOPLE AND PLACE.....	162
<i>Location</i>	162
<i>Demographic Profile</i>	162
<i>History, Traditional Knowledge, and Culture</i>	165
NATURAL RESOURCES AND ENVIRONMENT	166
CURRENT ECONOMY	168
GOVERNANCE	170
INFRASTRUCTURE	171
<i>Connectivity and Transportation</i>	171
<i>Facilities</i>	172
<i>Medical Services</i>	172
<i>Educational Opportunities</i>	172
INVOLVEMENT IN NORTH PACIFIC FISHERIES	173
<i>History and Evolution of Fisheries</i>	173
<i>Processing Plants</i>	174
<i>Fisheries-Related Revenue</i>	175
<i>Commercial Fishing</i>	175
<i>Recreational Fishing</i>	185
<i>Subsistence Fishing</i>	187
KENAI	190
PEOPLE AND PLACE.....	190
<i>Location</i>	190
<i>Demographic Profile</i>	190
<i>History, Traditional Knowledge, and Culture</i>	193
NATURAL RESOURCES AND ENVIRONMENT	193
CURRENT ECONOMY	196
GOVERNANCE	199
INFRASTRUCTURE	201
<i>Connectivity and Transportation</i>	201
<i>Facilities</i>	201
<i>Medical Services</i>	202
<i>Educational Opportunities</i>	203
INVOLVEMENT IN NORTH PACIFIC FISHERIES	203
<i>History and Evolution of Fisheries</i>	203
<i>Processing Plants</i>	205
<i>Fisheries-Related Revenue</i>	206
<i>Commercial Fishing</i>	206
<i>Recreational Fishing</i>	217
<i>Subsistence Fishing</i>	219
MOOSE PASS.....	224
PEOPLE AND PLACE.....	224
<i>Location</i>	224
<i>Demographic Profile</i>	224

<i>History, Traditional Knowledge, and Culture</i>	227
NATURAL RESOURCES AND ENVIRONMENT	228
CURRENT ECONOMY	229
GOVERNANCE	232
INFRASTRUCTURE	233
<i>Connectivity and Transportation</i>	233
<i>Facilities</i>	233
<i>Medical Services</i>	234
<i>Educational Opportunities</i>	234
INVOLVEMENT IN NORTH PACIFIC FISHERIES	234
<i>History and Evolution of Fisheries</i>	234
<i>Processing Plants</i>	235
<i>Fisheries-Related Revenue</i>	235
<i>Commercial Fishing</i>	235
<i>Recreational Fishing</i>	243
<i>Subsistence Fishing</i>	244
ADDITIONAL INFORMATION	245
NANWALEK	248
PEOPLE AND PLACE	248
<i>Location</i>	248
<i>Demographic Profile</i>	248
<i>History, Traditional Knowledge, and Culture</i>	251
NATURAL RESOURCES AND ENVIRONMENT	252
CURRENT ECONOMY	254
GOVERNANCE	257
INFRASTRUCTURE	258
<i>Connectivity and Transportation</i>	258
<i>Facilities</i>	259
<i>Medical Services</i>	259
<i>Educational Opportunities</i>	260
INVOLVEMENT IN NORTH PACIFIC FISHERIES	260
<i>History and Evolution of Fisheries</i>	260
<i>Processing Plants</i>	261
<i>Fisheries-Related Revenue</i>	261
<i>Commercial Fishing</i>	262
<i>Recreational Fishing</i>	270
<i>Subsistence Fishing</i>	272
ADDITIONAL INFORMATION	273
NIKISKI	276
PEOPLE AND PLACE	276
<i>Location</i>	276
<i>Demographic Profile</i>	276
<i>History, Traditional Knowledge, and Culture</i>	279
NATURAL RESOURCES AND ENVIRONMENT	279
CURRENT ECONOMY	281

GOVERNANCE	283
INFRASTRUCTURE	284
<i>Connectivity and Transportation</i>	284
<i>Facilities</i>	285
<i>Medical Services</i>	285
<i>Educational Opportunities</i>	285
INVOLVEMENT IN NORTH PACIFIC FISHERIES	286
<i>History and Evolution of Fisheries</i>	286
<i>Processing Plants</i>	287
<i>Fisheries-Related Revenue</i>	288
<i>Commercial Fishing</i>	288
<i>Recreational Fishing</i>	297
<i>Subsistence Fishing</i>	299
NIKOLAEVSK	302
PEOPLE AND PLACE	302
<i>Location</i>	302
<i>Demographic Profile</i>	302
<i>History, Traditional Knowledge, and Culture</i>	305
NATURAL RESOURCES AND ENVIRONMENT	305
CURRENT ECONOMY	307
GOVERNANCE	310
INFRASTRUCTURE	311
<i>Connectivity and Transportation</i>	311
<i>Facilities</i>	311
<i>Medical Services</i>	312
<i>Educational Opportunities</i>	312
INVOLVEMENT IN NORTH PACIFIC FISHERIES	312
<i>History and Evolution of Fisheries</i>	312
<i>Processing Plants</i>	313
<i>Fisheries-Related Revenue</i>	313
<i>Commercial Fishing</i>	313
<i>Recreational Fishing</i>	323
<i>Subsistence Fishing</i>	325
ADDITIONAL INFORMATION	326
NINILCHIK	329
PEOPLE AND PLACE	329
<i>Location</i>	329
<i>Demographic Profile</i>	329
<i>History, Traditional Knowledge, and Culture</i>	332
NATURAL RESOURCES AND ENVIRONMENT	332
CURRENT ECONOMY	334
GOVERNANCE	337
INFRASTRUCTURE	339
<i>Connectivity and Transportation</i>	339
<i>Facilities</i>	339

<i>Medical Services</i>	340
<i>Educational Opportunities</i>	340
INVOLVEMENT IN NORTH PACIFIC FISHERIES	340
<i>History and Evolution of Fisheries</i>	340
<i>Processing Plants</i>	341
<i>Fisheries-Related Revenue</i>	342
<i>Commercial Fishing</i>	342
<i>Recreational Fishing</i>	352
<i>Subsistence Fishing</i>	354
ADDITIONAL INFORMATION	355
PORT GRAHAM	358
PEOPLE AND PLACE	358
<i>Location</i>	358
<i>Demographic Profile</i>	358
<i>History, Traditional Knowledge, and Culture</i>	361
NATURAL RESOURCES AND ENVIRONMENT	361
CURRENT ECONOMY	363
GOVERNANCE	365
INFRASTRUCTURE	366
<i>Connectivity and Transportation</i>	366
<i>Facilities</i>	366
<i>Medical Services</i>	367
<i>Educational Opportunities</i>	367
INVOLVEMENT IN NORTH PACIFIC FISHERIES	367
<i>History and Evolution of Fisheries</i>	367
<i>Processing Plants</i>	369
<i>Fisheries-Related Revenue</i>	369
<i>Commercial Fishing</i>	369
<i>Recreational Fishing</i>	377
<i>Subsistence Fishing</i>	378
ADDITIONAL INFORMATION	379
SELDOVIA	382
PEOPLE AND PLACE	382
<i>Location</i>	382
<i>Demographic Profile</i>	382
<i>History, Traditional Knowledge, and Culture</i>	385
NATURAL RESOURCES AND ENVIRONMENT	386
CURRENT ECONOMY	388
GOVERNANCE	390
INFRASTRUCTURE	392
<i>Connectivity and Transportation</i>	392
<i>Facilities</i>	393
<i>Medical Services</i>	393
<i>Educational Opportunities</i>	393
INVOLVEMENT IN NORTH PACIFIC FISHERIES	394

<i>History and Evolution of Fisheries</i>	394
<i>Processing Plants</i>	396
<i>Fisheries-Related Revenue</i>	396
<i>Commercial Fishing</i>	397
<i>Recreational Fishing</i>	406
<i>Subsistence Fishing</i>	407
ADDITIONAL INFORMATION.....	408
SEWARD	411
PEOPLE AND PLACE.....	411
<i>Location</i>	411
<i>Demographic Profile</i>	411
<i>History, Traditional Knowledge, and Culture</i>	414
NATURAL RESOURCES AND ENVIRONMENT	415
CURRENT ECONOMY	416
GOVERNANCE	418
INFRASTRUCTURE	420
<i>Connectivity and Transportation</i>	420
<i>Facilities</i>	420
<i>Medical Services</i>	421
<i>Educational Opportunities</i>	421
INVOLVEMENT IN NORTH PACIFIC FISHERIES	421
<i>History and Evolution of Fisheries</i>	421
<i>Processing Plants</i>	423
<i>Fisheries-Related Revenue</i>	424
<i>Commercial Fishing</i>	424
<i>Recreational Fishing</i>	435
<i>Subsistence Fishing</i>	437
ADDITIONAL INFORMATION.....	437
SOLDOTNA	440
PEOPLE AND PLACE.....	440
<i>Location</i>	440
<i>Demographic Profile</i>	440
<i>History, Traditional Knowledge, and Culture</i>	443
NATURAL RESOURCES AND ENVIRONMENT	443
CURRENT ECONOMY	445
GOVERNANCE	448
INFRASTRUCTURE	449
<i>Connectivity and Transportation</i>	449
<i>Facilities</i>	449
<i>Medical Services</i>	450
<i>Educational Opportunities</i>	450
INVOLVEMENT IN NORTH PACIFIC FISHERIES	450
<i>History and Evolution of Fisheries</i>	450
<i>Processing Plants</i>	452
<i>Fisheries-Related Revenue</i>	452

<i>Commercial Fishing</i>	453
<i>Recreational Fishing</i>	462
<i>Subsistence Fishing</i>	463
ADDITIONAL INFORMATION.....	463
STERLING	467
PEOPLE AND PLACE.....	467
<i>Location</i>	467
<i>Demographic Profile</i>	467
<i>History, Traditional Knowledge, and Culture</i>	470
NATURAL RESOURCES AND ENVIRONMENT	470
CURRENT ECONOMY	471
GOVERNANCE	474
INFRASTRUCTURE	475
<i>Connectivity and Transportation</i>	475
<i>Facilities</i>	475
<i>Medical Services</i>	475
<i>Educational Opportunities</i>	475
INVOLVEMENT IN NORTH PACIFIC FISHERIES	476
<i>History and Evolution of Fisheries</i>	476
<i>Processing Plants</i>	477
<i>Fisheries-Related Revenue</i>	477
<i>Commercial Fishing</i>	477
<i>Recreational Fishing</i>	486
<i>Subsistence Fishing</i>	487
TYONEK	491
PEOPLE AND PLACE.....	491
<i>Location</i>	491
<i>Demographic Profile</i>	491
<i>History, Traditional Knowledge, and Culture</i>	494
NATURAL RESOURCES AND ENVIRONMENT	494
CURRENT ECONOMY	496
GOVERNANCE	498
INFRASTRUCTURE	499
<i>Connectivity and Transportation</i>	499
<i>Facilities</i>	499
<i>Medical Services</i>	500
<i>Educational Opportunities</i>	500
INVOLVEMENT IN NORTH PACIFIC FISHERIES	500
<i>History and Evolution of Fisheries</i>	500
<i>Processing Plants</i>	502
<i>Fisheries-Related Revenue</i>	502
<i>Commercial Fishing</i>	502
<i>Recreational Fishing</i>	510
<i>Subsistence Fishing</i>	511

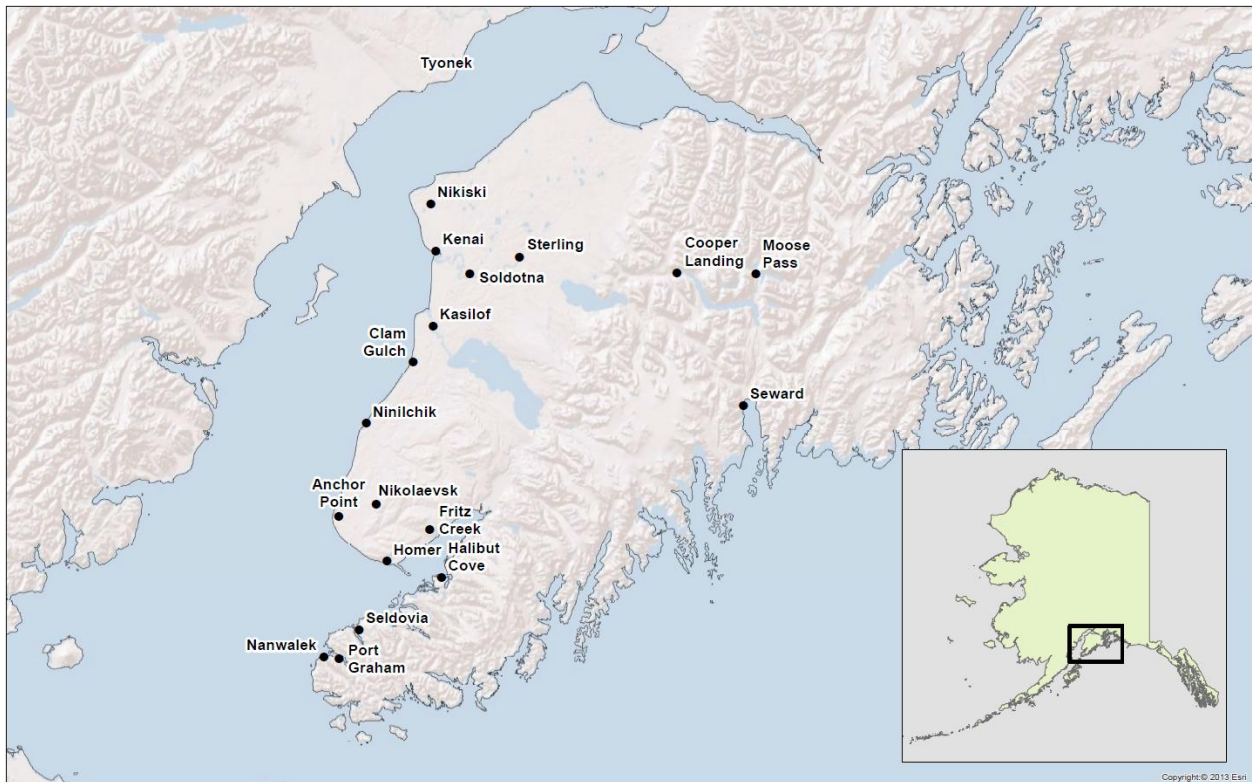
Regional Introduction: Kenai Peninsula and Cook Inlet

Communities

Anchor Point
Clam Gulch
Cooper Landing
Fritz Creek
Halibut Cove
Homer
Kasilof

Kenai
Moose Pass
Nanwalek
Nikiski
Nikolaevsk
Ninilchik
Port Graham

Seldovia
Seward
Soldotna
Sterling
Tyonek



People and Place

Location

Located along the Gulf Coast of Alaska, the Kenai Peninsula and Cook Inlet region encompasses 15,700 square miles of land and 9,900 square miles of water. The Kenai Peninsula extends approximately 150 miles southwest from Anchorage and the Chugach Mountains, and is bordered by the Gulf of Alaska and Prince William Sound to the east and Cook Inlet to the west.

Demographic Profile

The Kenai Peninsula Borough occupies the entirety of the Kenai Peninsula and Cook Inlet Region. A total of 19 communities met criteria for profiling, only 10 of which exceeded 500 residents in 2010. In that year, the total population for the region was 55,400, 12.8% of which lived in the region's largest city of Kenai.¹

In 2010, 84.6% of residents identified themselves as White, 11.6% identified themselves as at least part American Indian or Alaska Native, 2.1% identified themselves as at least part Asian, 1.0% identified themselves as at least part Black or African American, and 0.3% identified themselves as at least part Native Hawaiian or Other Pacific Islander. In addition, 3.0% of residents identified themselves as Hispanic or Latino.²

The region has a mixed economy dependent on key industries, including oil and gas, commercial fishing, tourism, and retail. Government, utilities, educational, and health services also make up a significant portion of the region's economy. Alaska's first viable oil field was discovered in 1957 in the Cook Inlet Basin, which led to the Kenai Peninsula being the first major producer of oil and gas products. While oil production has been declining within the region, gas production has been intensifying. Timber is another economically viable resource within the Kenai Peninsula Borough, although harvests have been declining due to widespread spruce bark beetle infestations. The Cook Inlet/Susitna lowland is the second largest source of coal in Alaska, and coal underlies much of the Kenai Peninsula. Commercial ranching of cattle, horses, buffalo, sheep, poultry, goats, and pigs is present within the Borough, however on a small scale. While in overall decline, the manufacturing sector still has a large presence, specifically in the seafood processing and marketing sectors.

The Kenai Peninsula's proximity to productive fisheries in the Cook Inlet, Prince William Sound, and Gulf of Alaska has allowed it to become one of the largest commercial fishing and seafood processing regions in the state. The region's renowned sportfishing is a major draw for many visitors, and the Kenai River supports the largest recreational coho salmon fishery in Alaska.³

Tourism is one of the region's fastest growing industries because of its close proximity to Anchorage, developed infrastructure, and position as embark/debark point for cruise ships. Both Seward and Whittier maintain cruise line transfer ports, and the Alaska Railroad terminus in

¹ U.S. Census Bureau (2010). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2010 (Demographic Profile SF) Decennial Census. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

² Ibid.

³ Kenai Peninsula Borough. (2005). *Kenai Peninsula Borough Comprehensive Plan*. Retrieved November 27, 2012 from: <http://www.commerce.state.ak.us/dca/plans/KenaiPeninsulaBorough-CP-2005.pdf>.

Whittier provides a unique, high capacity transportation system linking the Borough with Anchorage and Fairbanks.

In 2010, the estimated per capita income for the region was \$29,127 and the estimated median household income was \$57,454. Of the 42,483 residents aged 16 and over, an estimated 64.1% were considered part of the civilian labor force. Of those employed, most (22.3%) were estimated to work in education services, health care, and social assistance sectors; followed by agriculture, forestry, fishing, hunting, and mining (12.1%) and retail trade (10.3%) sectors. Unemployment in 2010 was estimated at 5.5%.⁴

History

According to archaeological evidence, the oldest aboriginal inhabitants of the Cook Inlet region were Riverine Kachemak Eskimos from approximately 1000 B.C. to 1000 A.D. At that time, there appears to have been a shift to inhabitation by Dena'ina Athabascan Indians throughout most of the inlet. This shift may have resulted from changes in climate that altered salmon abundance patterns.⁵ When Russian fur traders arrived in the region in 1741, approximately 1,000 Dena'ina people lived in a village at the site of Kenai known as Shk'ituk't,⁶ and many small seasonal camps were located along the Kenai River and its tributaries.⁷ The Russians called the Dena'ina people 'Kenaitze,' which meant 'the people who live along the Kenai River', although the Kenaitze called themselves Kahthuht'ana, an Athabascan word meaning 'the people of the Kenai'.⁸ Early hostilities between the Russian settlers and the Native inhabitants led the Dena'ina to attack the Fort in 1797 in the Battle of Kenai, resulting in 100 deaths.⁹

The Dena'ina population was decimated by disease in the 1800s and 1900s, and after the flu epidemic of 1919, much of the remaining population consolidated in what was then the village of Kenai. Natives living in the village of Kenai maintained ties to historical village sites, camps, and traplines in the interior through the 1930s and 1940s. Many had summer residences in Kenai and during winter moved to homes along the upper Kenai River.¹⁰

In 1791, Russian fur traders built a fortified trading post at Kenai called Fort St. Nicholas. Soon after the United States purchased Alaska from Russia in 1867, the U.S. military took over the fort and renamed it Fort Kenay. A U.S. post office was established in Kenai in 1899. The commercial fishing industry provided an early economy in the region, and continued to be important as other industries grew. Opportunities for homesteading were opened in the 1940s,

⁴ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

⁵ Fall, J. A., R. T. Stanek, B. Davis, L. Williams and R. Walker. 2004. *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Final Report for Study No. FIS 03-045.

⁶ 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.

⁷ See footnote 5.

⁸ Halliday, Jan. 1998. *Native Peoples of Alaska: A Traveler's Guide to Land, Art, and Culture*. Sasquatch Books, Seattle.

⁹ Kenai Peninsula Economic Development District. 2010. *Kenai Peninsula Borough Comprehensive Economic Development Strategy*. Retrieved September 7, 2012 from <http://commerce.alaska.gov/ded/dev/oedp/pubs/KPEDD%20CEDSD&%20Gap%20Analysis%20Study%202010.pdf>.

¹⁰ See footnote 5.

and the population of the area began to grow. The first dirt road connecting Kenai to Anchorage was completed in 1951. The first oil strike took place in 1957 at the Swanson River, 20 miles northeast of Kenai, and the first discovery of offshore oil occurred in 1965.¹¹

Natural Resources and Environment

The Kenai Peninsula is in the maritime climate zone of Alaska. In this area, the Alaska Mountain Range, coupled with plentiful moisture, produces relatively moderate temperatures and a fair amount of rainfall. Winters on the Kenai Peninsula are relatively mild in comparison to other regions of Alaska, with temperatures ranging from 4 to 38° F. Summer temperatures range from 46 to 70° F. Rainfall totals vary quite widely on the Peninsula, from an annual average of 20 inches in Kenai to an average of 66 inches in Seward. Snowfall is common in the wintertime.¹²

The Kenai Peninsula is in southcentral Alaska and is geologically a relatively "young" or recently exposed area. Ice and glaciers, which once covered the entire peninsula, melted from most of the peninsula only 10,000-14,000 years ago. The remnant of this once widespread ice sheet can still be observed today as the Harding Ice Field high in the eastern Kenai mountains of the peninsula. At its greatest depth in the center, the Harding Ice Field is thousands of feet thick. Coastal areas on the west and southwest side of the Kenai Peninsula consist of mudflats, lowlands, sandy beaches, and steep bluffs.¹³

Protected areas include the Kenai National Wildlife Refuge, Chugach National Forest and State Park, Kenai Fjords National Park, Lake Clark National Park and Preserve, Kachemak Bay State Park and Wilderness and Critical Habitat Area, and Clam Gulch State Critical Habitat Area.

Most of the lower elevations on the Kenai Peninsula are covered by boreal forest and numerous lakes. The largest lake on the Kenai Peninsula is Tustumena Lake at nearly 74,000 acres. Boreal forests are the home of moose, wolves, black and brown bears, lynx, snowshoe hares and numerous species of neotropical birds such as olive-sided flycatchers, myrtle warblers and ruby-crowned kinglets.¹⁴

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields on and off shore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.¹⁵

There is limited timber value in the Kenai Peninsula and Cook Inlet area due to poor soil drainage.¹⁶ Some logging takes place to remove timber killed by spruce bark beetle.¹⁷ Tidelands

¹¹ Kevin Waring Associates. 2003. *City of Kenai Comprehensive Plan*. Retrieved September 4, 2012 from <http://www.ci.kenai.ak.us/City-approved%20Kenai%20Plan.pdf>.

¹² See footnote 6.

¹³ Alaska Department of Natural Resources. (2001). *Kenai Area Plan*. Retrieved February 7, 2012 from: http://dnr.alaska.gov/mlw/planning/areaplans/kenai/pdfs/master_KAP.pdf.

¹⁴ Ibid.

¹⁵ Resource Development Council (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

¹⁶ Alaska Dept. of Natural Resources. 2001. *Kenai Area Plan*. Retrieved February 7, 2012 from http://dnr.alaska.gov/mlw/planning/areaplans/kenai/pdfs/master_KAP.pdf.

in the area are valuable for commercial inshore fisheries. There are no active or proposed mineral development sites in the area, although coal beds exist throughout most of the western Kenai Peninsula.¹⁸

Governance

Of the communities profiled within the Kenai Peninsula Borough, five are incorporated. Kenai and Seward are both Home Rule cities; and Soldotna, Homer, and Seldovia are First-class cities. Communities with federally recognized Tribal councils include Nanwalek, Ninilchik, Port Graham, and Tyonek. These communities also have Alaska Native Claims Settlement Act (ANCSA) chartered Native village corporations. The regional ANCSA chartered Native corporation is Cook Inlet Region, Incorporated. In 2010, the Kenai Peninsula Borough administered a 3% sales tax and 4.5 mills property tax. In that year, \$25.95 million in sales tax was collected, compared to \$12.69 million in 2000.¹⁹

Communities eligible for participation in the federal Community Quota Entity (CQE) program include Nanwalek, Port Graham, and Seldovia. CQE groups are eligible to purchase fishing quota share on behalf of residents of their respective communities.

Involvement in North Pacific Fisheries

Commercial fishing, recreational fishing, and seafood processing are important economic drivers on the Kenai Peninsula. Borough residents fish out of Bristol Bay, the Bering Sea, Prince William Sound, Cook Inlet, Kodiak, and Southeast Alaska.²⁰ Local fisheries are present in the Cook Inlet, Prince William Sound, and the Gulf of Alaska.

The Cook Inlet is divided into upper and lower management areas. All five species of Pacific salmon are targeted; however, sockeye and pink are the most abundant. Pacific cod, halibut, scallops, and razor clams are also targeted. Herring, shrimp, and crab harvests have occurred in the past, however fisheries are currently closed until stocks can rebuild. Historically, large razor clam, shrimp, scallop, king, Tanner, and Dungeness crab fisheries existed; however, as shellfish fisheries declined, Pacific cod, sablefish, and pollock fisheries grew. The State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.²¹

As of 2010, there were a total of 25 registered shoreside seafood processors located within the region.²² Communities which had shoreside processors that year included Homer, Kasilof, Kenai, Nikiski, Seward, and Soldotna. A total of 102.91 million pounds of seafood

¹⁷ 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.

¹⁸ Alaska Dept. of Commerce. (n.d.). *Mineral Resources of Alaska*. Retrieved February 8, 2012 from: <http://commerce.alaska.gov/ded/dev/minerals/mining.htm>.

¹⁹ 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.

²⁰ Kenai Peninsula Borough. (2005). *Kenai Peninsula Borough Comprehensive Plan*. Retrieved November 27, 2012 from: <http://www.commerce.state.ak.us/dca/plans/KenaiPeninsulaBorough-CP-2005.pdf>.

²¹ Alaska Department of Fish and Game. (n.d.). *Commercial Fisheries Overview*. Retrieved November 28, 2012 from: <http://www.adfg.alaska.gov/index.cfm?adfg=fishingcommercialbyarea.main>.

²² 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.]

valued at \$154.51 million was landed in 2010, over half of which was landed in Seward.²³ Also in that year, residents held 2,381 commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC), of which 62.6% were actively fished. Most (46.7%) CFEC permits were held by residents of Homer. Salmon accounted for 56.2% of CFEC permits in 2010, as well as the majority of landings made by residents.²⁴ Residents held 39.37 million shares of halibut, 20.84 million shares of sablefish, at 57.87 million shares of crab quota in 2010. Of the communities that were profiled, Homer held the majority of each at 57.1% of halibut, 46.1% of sablefish, and 82.0% of crab quota shares.²⁵

The Kenai, Kasilof, Russian, Anchor, and Ninilchik rivers all support substantial Chinook and sockeye salmon runs which become the hallmark of the Kenai Peninsula's substantial sportfishing industry. To support the industry, both the State and local communities have invested in extensive infrastructure, ranging from visitor accommodations and amenities, to stocking 27 lakes throughout the Kenai Peninsula with rainbow trout and salmon.²⁶

The Northern Cook Inlet Management Area attracts approximately 160,000 residents and non-Alaskan resident anglers and approximately 20,000 personal use fishermen annually.²⁷ At an average of 275,000 annual angler days fished, the Kenai River is Alaska's most popular freshwater coho salmon sportfishing destination.²⁸ In addition, both the Kenai and Kasilof rivers support two personal use sockeye salmon dip net fisheries. Other popular sport fish within the region include Dolly Varden, rainbow trout, steelhead, pink and Chinook salmon, and smelt. Arctic grayling and Northern pike are also targeted, but to a lesser degree.²⁹

Many drainages within the Lower Cook Inlet Management Area support Chinook and coho salmon, steelhead, and Dolly Varden. With access to Kachemak Bay and Halibut Cove, Homer is a popular starting point for recreational anglers targeting Chinook salmon, halibut, and other groundfish. Ferry service to Seldovia provides access to stock Chinook salmon fisheries. Finally, opportunities for harvesting razor and hardshell clams are found along much of the Lower Cook Inlet.³⁰

Seward is located within the Resurrection Bay Sport Fishing Management Area, and is the site of a large and growing charter industry. Most recreational fishing effort is directed at halibut, rockfish, lingcod, and coho salmon. Other groundfish targeted or taken incidentally

²³ 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.]

²⁴ 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.]

²⁵ 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.]

²⁶ See footnote 20.

²⁷ Kenai River Sportfishing Association. (2008). *Economic Values of Sport, Personal Use, and Commercial Salmon Fishing in the Upper Cook Inlet*. Retrieved November 29, 2012 from: http://www.kenairiversportfishing.com/documents_krsa/KRSA%20Economic%20Values%20Report.pdf.

²⁸ Alaska Department of Fish and Game. (n.d.). *The Kenai River*. Retrieved November 29, 2012 from: <http://www.adfg.alaska.gov/static/fishing/PDFs/sport/byarea/southcentral/northkenai2.pdf>.

²⁹ Alaska Department of Fish and Game. (n.d.). *Northern Kenai Peninsula Management Area*. Retrieved November 29, 2012 from: <http://www.adfg.alaska.gov/index.cfm?adfg=ByAreaSouthcentralUpperKenai.main>.

³⁰ Alaska Department of Fish and Game. (n.d.). *Lower Cook Inlet Management Area*. Retrieved November 29, 2012 from: <http://www.adfg.alaska.gov/index.cfm?adfg=ByAreaSouthcentralLowerCookInlet.main>.

include starry and arrowtooth flounder, Pacific cod, walleye pollock, sablefish, greenlings, skates, and spiny dogfish.³¹

In 2010, 81,232 sportfishing licenses were sold in the Kenai Peninsula and Cook Inlet region, 40.4% of which were sold in Soldotna. In addition, residents held 22,941 sportfishing licenses, again most of which were held in Soldotna. Finally, a total of 425 sport fish guide businesses were registered within the region in 2010. Communities with the most registered sport fish businesses that year included Soldotna (141), Homer (72), Kenai (47), and Ninilchik (38).³²

With the exception of Seldovia, Nanwalek, Port Graham, and Tyonek, communities within the Kenai Peninsula and Cook Inlet region fall within a non-subsistence area set by the Alaska Department of Fish and Game.³³ However, personal use fisheries are still allowed on the Kenai and Kasilof rivers. Within the Kenai Peninsula District, federal subsistence priority is currently afforded only to Ninilchik, Cooper Landing, and Hope. Communities including Tyonek, Port Graham, Seldovia, and Nanwalek hold federal rural status giving them subsistence priority on federal lands.³⁴

Eligible residents within the region harvest a diverse range of fish and marine mammals including all five species of Pacific salmon, halibut, Arctic char, rockfish, Steller sea lion, harbor seal, Dolly Varden, eulachon, grayling, herring, herring roe, lake trout, lingcod, Pacific cod, rainbow trout, northern pike, sablefish, sheefish, skates, steelhead, flounder, crab, clams, walleye pollock, and whitefish.³⁵ In 2008, residents reported harvesting 13,089 salmon using 414 subsistence salmon permits. In that year, sockeye salmon accounted for 72.4% of total reported salmon harvests. Most (42.0%) reported salmon harvests were made by residents of Nanwalek, followed by Homer (13.4%) and Tyonek (8.8%).³⁶ Finally, residents harvested an estimated 71,943 pounds of halibut using 244 Subsistence Halibut Registration Certificates. Most (34.3%) halibut by pound was harvested by Nanwalek residents, followed by Seldovia (32.8%) and Port Graham (12.6%).³⁷

³¹ Alaska Department of Fish and Game. (n.d.). *North Gulf Coast Management Area*. Retrieved November 29, 2012 from: <http://www.adfg.alaska.gov/index.cfm?adfg=ByAreaSouthcentralNorthGulfCoast.main>.

³² 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.]

³³ Alaska Department of Fish and Game. (n.d.). *Nonsubsistence Use Areas in Alaska*. Retrieved November 29, 2012 from: <http://www.adfg.alaska.gov/index.cfm?adfg=subsistence.nonsubsistence>.

³⁴ National Subsistence Board. (2007). *Final Rule and Requests for Reconsideration of Decennial Review of Rural/Nonrural Determinations*. Retrieved November 29, 2012 from: <http://alaska.fws.gov/asm/pdf/rural/FinalRuleRFR2007.pdf>.

³⁵ 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).

³⁶ 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.

³⁷ 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.

Regional Challenges

Many issues affecting life in the region are compounded by the region's rapid population growth. The larger towns on the Kenai Peninsula have all seen a doubling or tripling of their populations in the last several decades. This has underscored the need to develop infrastructure and social services at a rapid pace.

In addition, dependence on salmon fishing, combined with falling salmon prices in recent years, has created economic hardship for some communities in the past. Over the years, total gross earnings for fish landed have dropped, although pounds landed have remained relatively constant. As of 2006, the value of commercial salmon permits were at a tenth of what they were during the late 1980s and early 1990s.³⁸ Seafood processing has suffered in recent years as well, and efforts have been made to improve product marketing and value.³⁹

The controversy over rights to subsistence has also been a sore point for many communities. In 2000, the Federal Subsistence Board designated the entire Kenai Peninsula a rural area, only to rescind that determination after backlash from many communities. Today, only a few communities have federal subsistence priority, and many recreational fishermen and hunters continue to be at odds with subsistence users.⁴⁰

³⁸ Kenai River Sportfishing Association. (2008). *Economic Values of Sport, Personal Use, and Commercial Salmon Fishing in the Upper Cook Inlet*. Retrieved November 29, 2012 from:

http://www.kenairiversportfishing.com/documents_krsa/KRSA%20Economic%20Values%20Report.pdf.

³⁹ Kenai Peninsula Borough. (2005). *Kenai Peninsula Borough Comprehensive Plan*. Retrieved November 27, 2012 from: <http://www.commerce.state.ak.us/dca/plans/KenaiPeninsulaBorough-CP-2005.pdf>.

⁴⁰ Juneau Empire. (2000). *Kenai Subsistence Decision Hurts Alaska*. Retrieved November 29, 2012 from: http://juneauempire.com/stories/053000/Ope_editorial.html.



Anchor Point (AN-kur)

People and Place

*Location*⁴¹

Anchor Point is located on the Kenai Peninsula at the junction of the Anchor River and its north fork, 14 mi northwest of Homer and 112 mi southwest of Anchorage. The area occupies 90.8 square mi of land and 0.1 square mi of water. Anchor Point is located in unincorporated and under the jurisdiction of the Kenai Peninsula Borough.

*Demographic Profile*⁴²

In 2010 Anchor Point had 1,930 residents, ranking it 49th of 352 communities in terms of population size. Between 1990 and 2010, the population has grown by 122.9% (Table 1). Between 2000 and 2009, the population fell by 1.7% with an average annual population growth rate of -0.16%; which was less than the statewide average of 0.75% and indicative of relatively little overall population change following the steep growth during the 1990s.

The racial composition of Anchor Point was predominately White in 2010. In that year, 91.8% of residents identified themselves as White, compared to 90.2% in 2000; 3.4% identified themselves as American Indian or Alaska Native, compared to 3.8% in 2000; and 3.8% identified themselves as two or more races, compared to 4.4% in 2000 (Figure 1). All other races each made up less than one-percent of the population, respectively. In addition, 1.7% of residents identified themselves as Hispanic or Latino in 2010, compared to 2.2% in 2000.

The average household size in 2010 was 2.30, compared to 2.70 in 1990 and 2.59 in 2000. In that year, there were a total of 1,239 housing units, compared to 405 in 1990 and 979 in 2000. Of the households surveyed in 2010, 56% were owner-occupied, compared to 62% in 2000; 12% were renter-occupied, compared to 11% in 2000; 12% were vacant, compared to 8% in 2000; and 21% were occupied seasonally, compared to 19% in 2000. No residents were reported as living in group quarters between 1990 and 2010.

The gender distribution was somewhat skewed in 2010 at 53.1% male and 46.9% female. This was similar to both the statewide distribution that year (52.0% male, 48.0% female) and the distribution in 2000 (53.6% male, 46.4% female). The median age in 2010 was 47.1 years, which was significantly older than both the statewide median of 33.8 years and 2000 median of 39.0 years.

Compared with 2000, the population structure in 2010 was significantly more constricted. Older cohorts had age transitions consistent with a stable population meaning that as they aged, they maintained their overall structure. However, there was some attrition in younger cohorts

⁴¹ 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.

⁴² 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>.

possibly indicating low youth retention within the community. In 2010, 22.2% of residents were under the age of 20, compared to 31.9% in 2000; 21.6% were over the age of 59, compared to 11.0% in 2000; 46.5% were between the ages of 30 and 59, compared to 49.0% in 2000; and 9.8% were between the ages of 20 and 29, compared to 8.0% in 2000.

Gender distribution by age cohort in 2010 was similar to 2000, consisting of mostly slight male or female biases (Figure 2). In that year, the greatest absolute gender difference occurred in the 60 to 69 range (8.3% male, 5.6% female), followed by the 40 to 49 (8.3% male, 6.0% female) and 10 to 19 (6.4% male, 4.8% female) ranges. Of those three, the greatest relative gender difference occurred in the 60 to 69 range.

According to the U.S. Census' 2006-2010 American Community Survey (ACS)⁴³ an estimated 92.2% of residents aged 25 and older held a high school diploma or higher degree in 2010, compared to an estimated 90.7% of Alaska residents overall. Also in that year, an estimated 2.1% had less than a 9th grade education, compared to an estimated 3.5% of Alaska residents overall; an estimated 5.8% had a 9th to 12th grade education but no diploma, compared to an estimated 5.8% of Alaska residents overall; an estimated 24.7% had some college but no degree, compared to an estimated 28.3% of Alaska residents overall; an estimated 12.1% held an Associate's degree, compared to an estimated 8.0% of Alaska residents overall; an estimated 11.2% held a Bachelor's degree, compared to an estimated 17.4% of Alaska residents overall; and an estimated 7.6% held a graduate or professional degree, compared to an estimated 9.6% of Alaska residents overall.

Table 1. Population in Anchor Point from 1990 to 2010 by source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	866	-
2000	1,802	-
2001	-	1,809
2002	-	1,780
2003	-	1,809
2004	-	1,831
2005	-	1,756
2006	-	1,794
2007	-	1,785
2008	-	1,808
2009	-	1,772
2010	1,930	-

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>.

⁴³ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

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

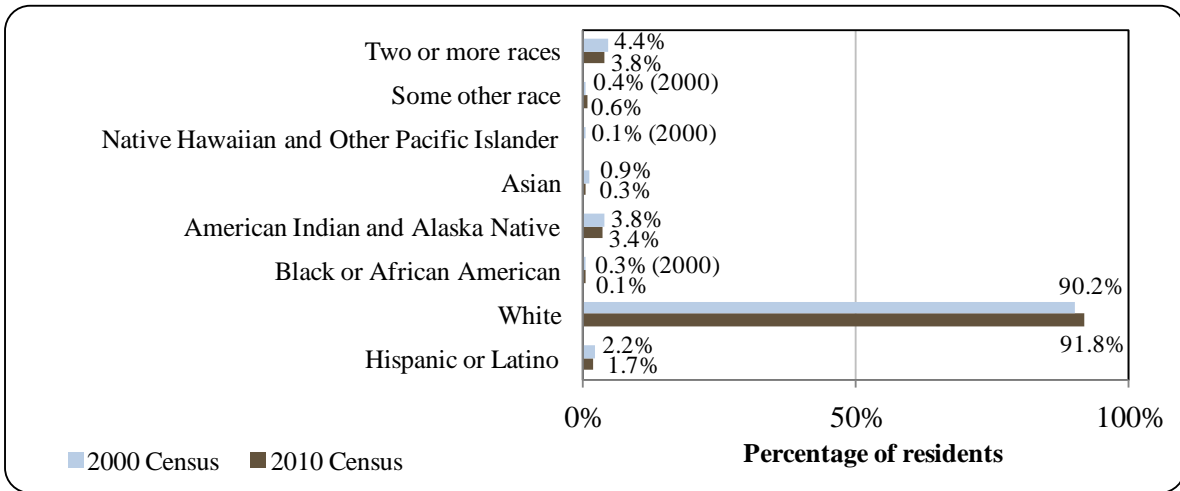
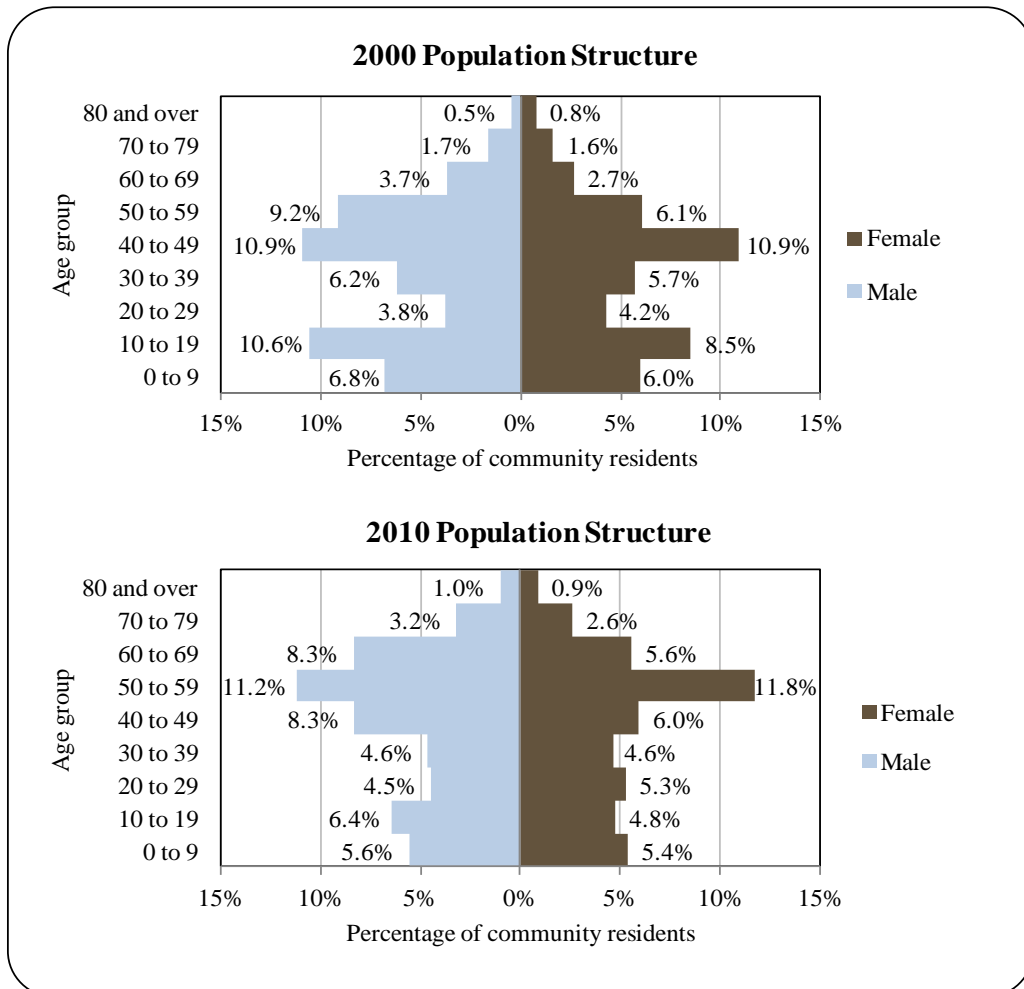


Figure 2. Population Age Structure in Anchor Point Based on the 2000 and 2010 U.S. Decennial Census.



History, Traditional Knowledge, and Culture

The Kachemak Bay area was originally settled by the Kachemak tradition of Tanaina Athabaskans at least 3000 years ago.⁴⁴ Written descriptions of the Kenai Peninsula and its people are found in the 1778 journals of Captain James Cook during his expedition to find a Northwest Passage. According to legend, he gave Anchor Point its name after losing an anchor to strong tidal currents in the area.⁴⁵ The goldrush of the late nineteenth century brought prospectors to pan and sluice the shoreline for gold.⁴⁶ By 1900, homesteaders arrived from Homer, Kenai, and Ninilchik and began farming, fishing, and hunting the area.⁴⁷ Today, Anchor Point is a community of homesteaders, fishermen, business owners, and retirees.⁴⁸

While there are no sites within Anchor Point registered on the National Register of Historic Places (NRHP), there are several historic sites nearby. Archaeological sites include the Yukon Island, Cottonwood Creek, and Chugachick Island sites located around Kachemak Bay. Historic buildings include the Holy Transfiguration of Our Lord Chapel in Ninilchik.⁴⁹

Natural Resources and Environment

Anchor point has a marine climate characterized by mild winters and summers. In January, temperatures range from 4 to 22 °F (-16 to -6 °C). July temperatures range from 46 to 65 °F (8 to 18 °C). Average annual precipitation is 20 inches.⁵⁰

Anchor Point is located on coastal outwash plains dominated by low-lying wetlands. Lowland areas are generally poorly drained and support patches of black spruce with surrounding muskeg. Coastal areas consist of mudflats, sandy beaches, and steep bluffs. The community occupies an area with an abundance of aquatic and terrestrial resources which facilitate many recreational, subsistence, and commercial opportunities. Aquatic species of economic and cultural importance within the Kenai Peninsula and Cook Inlet area include all five species of Pacific salmon, smelt, groundfish, rockfish, grayling, pike, burbot, char, rainbow trout, Dolly Varden char, steelhead trout, lingcod, pollock, halibut, herring, sablefish, Pacific cod, Tanner and Dungeness crab, clams, and scallops. In addition, the Cook Inlet supports a variety of seabirds and marine mammals including whale, porpoise, otter, harbor seal, and sea lion. Terrestrial species include moose, caribou, Dall sheep, mountain goat, brown bear, black bear, wolverine, mink, ermine, river otter, beaver, muskrat, snowshoe hare, wolf, coyote, and a variety of birds.⁵¹

⁴⁴ Workman, W. B., J.E. Lobdell, and K. Wood-Workman. 1980. Recent archeological work in Kachemak Bay, Gulf of Alaska. *Arctic*, 33(2), 385-399.

⁴⁵ Alaska Department of Community and Rural Affairs (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

⁴⁶ Anchor Point Chamber of Commerce (n.d.). *Anchor Point History*. Retrieved November 29, 2011 from: <http://www.anchorpointchamber.org/history.htm>.

⁴⁷ Alaska Department of Natural Resources (n.d.). *Anchor Point History*. Retrieved November 29, 2011 from: <http://dnr.alaska.gov/parks/units/anchoriv.htm>.

⁴⁸ See footnote 46.

⁴⁹ National Park Service (n.d.). *National Register of Historic Places*. Retrieved November 29, 2012 from: <http://www.nps.gov/nr/research/>.

⁵⁰ See footnote 45.

⁵¹ U.S. Fish and Wildlife Service. (n.d.). *Kenai National Wildlife Refuge*. Retrieved November 29, 2011 from: <http://www.fws.gov/refuges/profiles/index.cfm?id=74525>.

There are no active mining projects in the area although the western side of the peninsula does possess large, undeveloped coal deposits.⁵² In addition, there are active oil and gas projects being undertaken within the Cook Inlet.

There are several types of natural hazards which potentially pose threats to Anchor Point. These include earthquakes, tsunamis, flooding, shore erosion, sea level rise, storm surges, and land subsidence.⁵³ There are several major faults in the area including the Castle Mountain fault to the north and the Aleutian Megathrust fault to the south. Historically, the lower Cook Inlet area has produced several earthquakes over magnitude 6. The Anchor River is prone to flood events during heavy rains, ice jams, or rapid snow melt. These flood events can potentially be damaging to local infrastructure and increase erosion of river banks. Coastal and bluff erosion resulting from storm surges is also a concern.⁵⁴

According to the Alaska Department of Environmental Conservation, there were no significant environmental remediation projects active in Anchor Point in 2010.⁵⁵

Current Economy⁵⁶

Anchor Point's economy is largely based on the commercial fishing industry and tourism.⁵⁷ Many residents hold commercial fishing permits and the community's position on the Sterling highway and proximity to Homer increase its attractiveness as a travel destination. The community also caters to the sportfishing industry, and several lodges provide services.⁵⁸ Top employers in 2010⁵⁹ included South Peninsula Hospital Inc., Kenai Peninsula Borough School District, State of Alaska, Anchor River Inn Inc., SPBHS Inc., ASRC Energy Services O&M Inc., Safeway Inc., Lands End Resort, City of Homer, VECO Alaska Inc.

In 2010,⁶⁰ the estimated per capita income was \$26,967 and the estimated median household income was \$50,610, compared to \$18,668 and \$41,094 in 2000, respectively. However, after adjusting for inflation by converting 2000 values into 2010 dollars,⁶¹ the real per capita income (\$24,548) and real median household income (\$54,038) indicate that while individual earnings increased slightly, household earnings declined. In that year, Anchor Point ranked 86th of 305 communities from which per capita income was estimated, and 128th of 299 communities from which median household income was estimated. It should be noted that

⁵² Alaska Department of Natural Resources. (n.d.). *Minerals Resources of Alaska*. Retrieved November 30, 2011 from: <http://commerce.alaska.gov/ded/dev/minerals/mining.htm>.

⁵³ Alaska Department of Natural Resources. (n.d.). *Coastal Hazards*. Retrieved November 30, 2011 from: http://www.alaskacoast.state.ak.us/ACMPGrants/EGS_05/pdfs/CoastalHazards.pdf.

⁵⁴ Kenai Peninsula Borough. (2011). *Hazard Mitigation Plan*. Retrieved November 30, 2011 from: http://www2.borough.kenai.ak.us/emergency/hazmit/2011/2.0_flood_0711.pdf

⁵⁵ Alaska Department of Environmental Conservation (n.d.). *Contaminated Sites Program*. Retrieved March 28, 2013 from: <http://www.dec.state.ak.us/spar/csp/list.htm>.

⁵⁶ Unless otherwise noted, all monetary data are reported in nominal values.

⁵⁷ See footnote 46.

⁵⁸ See footnote 45.

⁵⁹ 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/>.

⁶⁰ U.S. Census Bureau (n.d.). Profile of selected social, economic and housing characteristics of all places within Alaska. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

⁶¹ 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>).

Anchor Point's small population size may have prevented the American Community Survey from accurately portraying economic conditions.⁶² A potentially more accurate understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development. According to the ALARI database, residents earned \$26.75 million in total wages in 2010.⁶³ When matched with the 2010 population, the per capita income equals \$13,859, suggesting that caution should be used when comparing 2010 ACS estimates with the 2000 Census.⁶⁴

According to 2006-2010 ACS estimates,⁶⁵ 69.6% of residents aged 16 and over were part of the civilian labor force in 2010. In that year, unemployment was estimated at 7.6%, compared to an estimated 5.9% statewide; and an estimated 9.9% of residents were living below the poverty line, compared to an estimated 9.5% of Alaska residents overall. Of those employed in 2010, an estimated 61.7% worked in the private sector, an estimated 17.9% worked in the public sector; and an estimated 20.4% were self-employed.

Anchor Point has a very diverse economy. By industry, most (29.3%) employed residents were estimated to work in education service, health care, and social assistance sectors in 2010; followed by construction sectors (11.7%); transportation, warehousing, and utilities sectors (10.6%); and retail trade sectors (10.5%) (Figure 3). Agriculture, forestry, fishing, hunting, and mining sectors made up 8.8% of sector employment that year. By occupation type, most (26.6%) employed residents were estimated to hold management or professional positions; followed by sales or office positions (21.1%); natural resources, construction, or maintenance positions (19.1%); service positions (17.9%); and production, transportation, or material moving positions (15.3%) (Figure 4). Between 2000 and 2010, there were increases in the proportion of education service, health care, social assistance, transportation, warehousing, and utilities sector employment; while most other sectors experienced declines. According to 2010 ALARI estimates,⁶⁶ most (22.6%) employed residents were estimated to be working in trade, transportation, and utilities sectors; local government sectors (17.1%); leisure and hospitality sectors (13.0%); and natural resources and mining sectors (10.1%).

⁶² While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁶³ ALARI estimates based on wages reported for unemployment insurance purposes. Estimates do not include self-employed or federally employed residents.

⁶⁴ See footnote 59.

⁶⁵ See footnote 62.

⁶⁶ See footnote 59.

Figure 3. Local Employment by Industry in 2000-2010, Anchor Point.

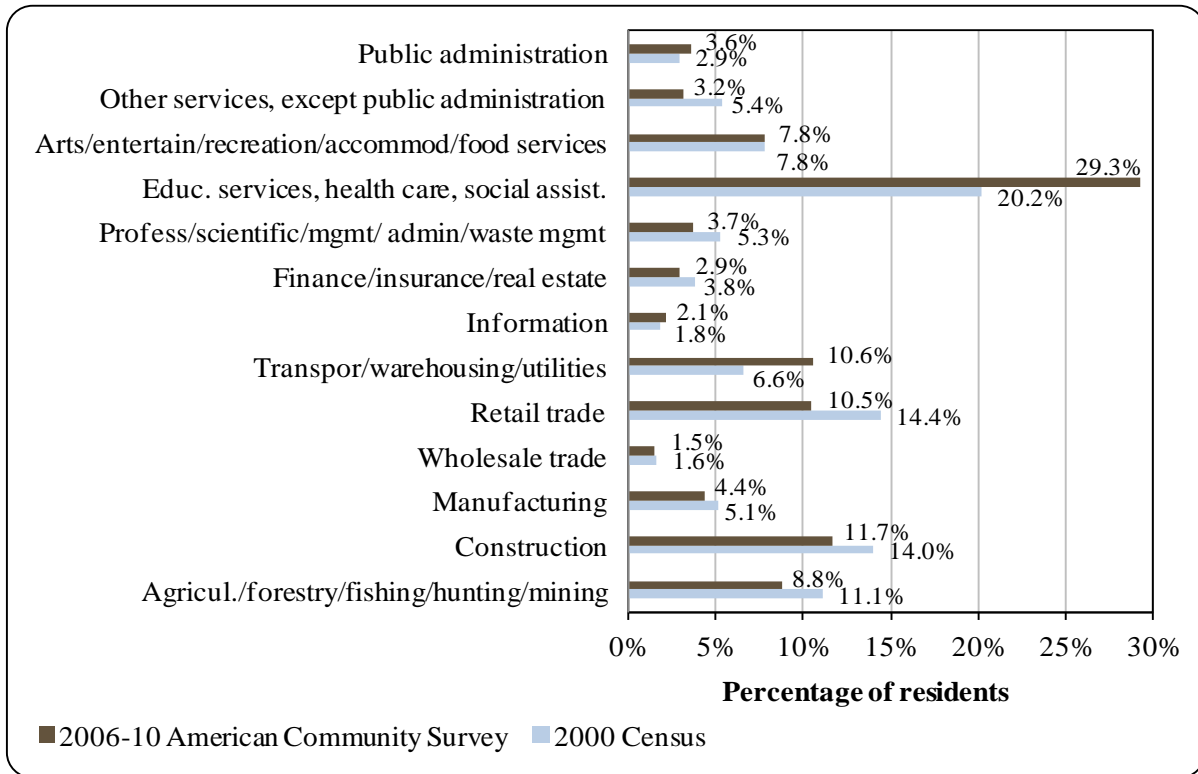
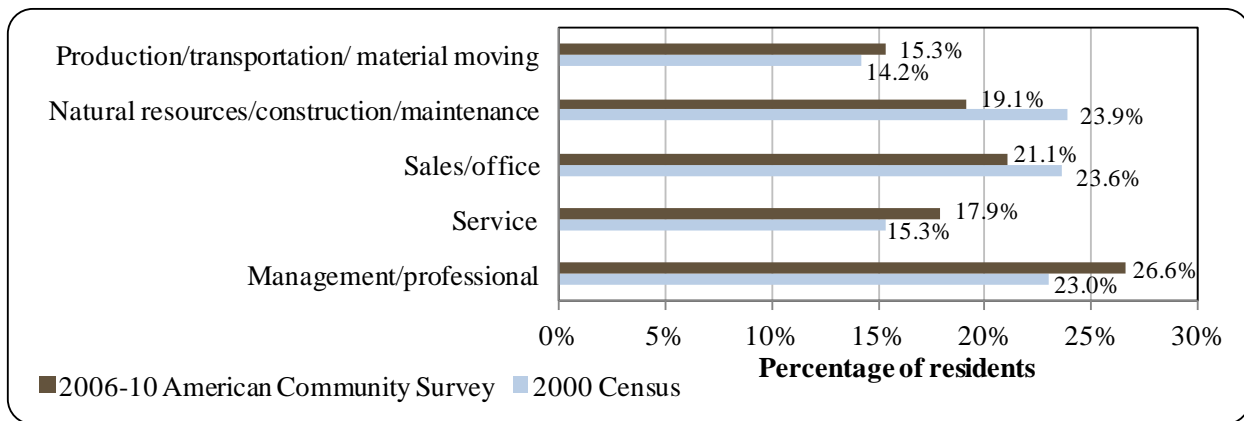


Figure 4. Local Employment by Occupation in 2000-2010, Anchor Point.



Governance

Anchor Point is unincorporated and under the jurisdiction of the Kenai Peninsula Borough. The community was not included in the Alaska Native Claims Settlement Act (ANCSA) and does not have a federally recognized Tribal government. The closest Alaska Department of Fish and Game (ADF&G) and National Marine Fisheries Service (NMFS) offices are located in Homer, 14 mi to the southeast. The closest U.S. Bureau of Citizenship and Immigration Services (BCIS) office is located in Anchorage, 112 mi northeast. Local

organizations include the Anchor Point Chamber of Commerce, Anchor Point Senior Citizens, Friends of the Library, and a local Veterans of Foreign Wars post.

As of 2010, the Borough administered a 3% sales tax as well as a property tax. State and federal fisheries-related grants received by Anchor Point between 2000 and 2010 include \$750,000 for a harbor development project. Information regarding community finances can be found in Table 2.

Infrastructure

*Connectivity and Transportation*⁶⁷

Anchor Point's communication and transportation infrastructure is part of a developed regional system linking many communities on the Kenai Peninsula. Its connection to the Sterling Highway makes the community accessible by road. Air and ferry service are also provided in nearby Homer. In June 2012, roundtrip airfare between Homer and Anchorage was \$239.⁶⁸

*Facilities*⁶⁹

Water is provided through a network of individual and community wells. Five homes are currently using a centralized, treated water distribution system. For sewage disposal, residents use individual septic systems, outhouses, or are connected to a piped sewer system. Refuse is collected by Peninsula Sanitation. Electricity is provided by the Homer Electric Association which operates a hydroelectric plant at Bradley Lake and a gas turbine plant in Soldotna. The borough provides police services and the community has a volunteer fire department. Visitor accommodations include Anchor Point Roadhouse, Anchor River Inn, Grandma Alaska's Place, Our Front Porch B&B, Owl's Nest RV/Tent Park, Eagle Crest RV Park & Cabins, Kyllonen's RV Park, Grubstake Manor B&B, Iliamna Mountain View B&B, Whispering Winds B&B, and the Anchor River State Recreation Area. Senior services are provided by the Anchor Point Senior Center. Additional public facilities include a public library and two school libraries. Communications services include local and long distance telephone, local television, local radio, and broadband internet.

⁶⁷ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

⁶⁸ Airfare was averaged from prices found on travel websites, including <http://www.travelocity.com> (retrieved November, 2011)

⁶⁹ See footnote 67.

Table 2. Selected Municipal, State or Federal Revenue Streams for the Anchor Point Municipal Government from 2000 to 2010.

Year	Total Municipal Revenue ¹	Sales Tax Revenue ²	State/Community Revenue Sharing ³	Fisheries-Related Grants (State and Federal) ⁴
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	\$750,000
2003	n/a	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	n/a
2010	n/a	n/a	n/a	n/a

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

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

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

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

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

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

Medical Services⁷⁰

The Anchor Point Clinic is privately operated, and provides general and emergency care. The community is also part of the Southern Emergency Medical Service (EMS) region. Additional medical services in Homer include South Peninsula Hospital, which is a qualified Acute Care and Long-Term Care facility. Specialized services are provided by several mental and community health centers in Homer.

Educational Opportunities⁷¹

Anchor Point has one school providing a pre-school through 8th grade education. As of 2011, there were 100 students and nine teachers. There are two high schools found in Homer which provide a 9th through 12th grade education. As of 2011, Homer Flex School had 27 students and four teachers while Homer High School has 399 students and 29 teachers. In

⁷⁰ Ibid.

⁷¹ Alaska Department of Education and Early Development (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

addition, Razdolna School in Homer provides a kindergarten through 12th grade education. As of 2011, it had 63 students and seven teachers.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Anchor Point is very dependent on both commercial and recreational fishing. The Lower Cook Inlet and Kachemak Bay provide fertile habitat to many fisheries. In addition the abundant freshwater drainages provide ample recreational opportunities for anglers. Commercial fisheries in the area include salmon, halibut, groundfish, scallop, sablefish, cod, pollock, and to a limited extent herring and Tanner crab. While in past the region has had a robust herring fishery, overfishing in the mid-twentieth century prompted many successive fishery closures to allow stocks to rebuild.⁷² The community itself lacks port infrastructure; however, numerous fisheries support services can be found in nearby Homer. A harbor project was provided funding in 2002, and there are several boat launches in the area.

Anchor Point is located within the Gulf of Alaska (GOA) Federal Reporting Area 630, International Pacific Halibut Commission (IPHC) regulatory area 3A, and Central GOA Sablefish Regulatory Area. Anchor Point is ineligible to participate in the Community Quota Entity (CQE) Program.

Processing Plants

According to the 2010 ADF&G Intent to Operate list, Anchor Point does not have a registered processing plant. However, there are many processors located in Homer including Auction Block Co., Coal Point Seafood Co., The Fish Factory LLC, Homer Fish Processing, and Kachemak Bay Seafoods. These companies process whitefish, halibut, lingcod, Pacific cod, rockfish, sablefish, crab, clams, scallops, shrimp, and salmon.⁷³ Additional processing facilities can be found in Kenai and Soldotna.

Fisheries-Related Revenue

Since Anchor Point is under the jurisdiction of the Kenai Peninsula Borough, no fisheries-related revenue specific to the community have been reported (Table 3).

Commercial Fishing

In 2010, 64 residents, or 3.3% of the population, held a total of 88 permits issued by the Commercial Fisheries Entry Commission (CFEC). In 2000, 88 residents held 174 CFEC permits, representing a 49.4% decline in the number of permits between 2000 and 2010. Of the CFEC permits held in 2010, 50% were for salmon, compared to 32% in 2000; 13% were for groundfish, compared to 27% in 2000; 17% were for halibut, compared to 20% in 2000; 13% were for crab,

⁷² Alaska Department of Fish and Game (2010). *2010 Lower Cook Inlet Annual Finfish Management Report*. Retrieved November 30, 2011 from: <http://www.adfg.alaska.gov/FedAidPDFs/FMR11-26.pdf>.

⁷³ Alaska Seafood Marketing Institute (2011). Retrieved December 12, 2011 from <http://www.alaskaseafood.org/industry/suppliers/index.cfm>.

compared to 6% in 2000; 6% were for sablefish, compared to 10% in 2000; and 2% were for herring, compared to 5% in 2000. In addition, 12 residents held 12 Federal Fisheries Permits (FFP) and 15 residents held 19 License Limitation Program (LLP) groundfish permits. Residents held 1.19 million shares of halibut quota on 19 accounts in 2010, compared to 1.61 million held on 36 accounts in 2000. Residents also held 1.25 million shares of sablefish quota on six accounts that year, compared to 456,125 shares held on 10 accounts in 2000. No residents held crab quota between 2010 and when the program began.

Residents held 72 commercial crew licenses in 2010, compared to 129 in 2000. In addition, residents held majority ownership of 29 vessels, compared to 86 in 2000. Of the CFEC permits held in 2010, 53% were actively fished, compared to 63% in 2000. This varied by fishery from 80% of sablefish and halibut permits, to 55% of salmon and groundfish, 9% of crab, and 0% of herring permits. In addition, 42% of FFP and 26% of LLP groundfish permits were actively fished.

There were no landings reported in Anchor Point between 2000 and 2010. However, landings were reported by residents in those years. Salmon made up the majority of lbs landed by residents in 2010. In that year, residents landed 2.51 million lbs of salmon valued at \$1.60 million ex-vessel, compared to 2.13 million lbs valued at \$924,403 in 2000; an increase of \$0.04 per pound landed after adjusting for inflation⁷⁴ and without considering the species composition of landings. Residents also landed 1.06 million lbs of Pacific cod valued at \$292,799 ex-vessel in that year, compared to 1.23 million lbs valued at \$497,295 ex-vessel; a decrease of \$0.28 per pound after adjusting for inflation.⁷⁵ Finally, 594,141 lbs of halibut were landed valued at \$2.75 million, compared to 487,930 lbs valued at \$1.26 million in 2000; an increase of \$1.08 per pound after adjusting for inflation.⁷⁶ Other groundfish made up a relatively insignificant portion of landings in 2010 at 68,407 lbs valued at \$17,913. All other landings made that year are considered confidential. Information regarding commercial fishing trends can be found in Tables 4 through 10.

⁷⁴ Inflation calculated using Producer Price Index for unprocessed and packaged fish, Bureau of Labor Statistics, <http://www.bls.gov/ppi/#data>.

⁷⁵ Ibid.

⁷⁶ Ibid.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fisheries Resource Landing Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total municipal revenue⁵</i>	n/a	n/a	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 Alaska Department of Community and Economic Development (n.d.) *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

² Alaska Department of Community 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.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Anchor Point

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	30	24	24	23	23	23	26	25	23	21	19
	Active permits	11	6	6	6	4	3	6	6	7	6	5
	% of permits fished	36%	25%	25%	26%	17%	13%	23%	24%	30%	28%	26%
	Total permit holders	28	22	22	21	21	21	21	20	18	17	15
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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Federal Fisheries Permits ¹	Total permits	18	19	20	15	15	15	11	11	12	12	12
	Fished permits	0	0	0	4	4	4	5	5	5	5	5
	% of permits fished	0%	0%	0%	27%	27%	27%	45%	45%	42%	42%	42%
	Total permit holders	16	17	18	13	13	13	11	11	12	12	12
Crab (CFEC) ²	Total permits	10	11	8	8	9	10	9	9	11	11	11
	Fished permits	0	0	0	0	0	1	0	0	1	1	1
	% of permits fished	0%	0%	0%	0%	0%	10%	0%	0%	9%	9%	9%
	Total permit holders	9	10	7	7	8	9	8	8	10	10	10
Other shellfish (CFEC) ²	Total permits	2	2	2	2	0	0	0	0	0	0	0
	Fished permits	0	0	0	1	0	0	0	0	0	0	0
	% of permits fished	0%	0%	0%	50%	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	2	2	2	2	0	0	0	0	0	0	0
Halibut (CFEC) ²	Total permits	35	28	26	27	26	21	20	18	18	16	15
	Fished permits	25	23	22	25	22	17	17	16	15	13	12
	% of permits fished	71%	82%	85%	93%	85%	81%	85%	89%	83%	81%	80%
	Total permit holders	33	27	25	27	26	21	20	18	18	16	15
Herring (CFEC) ²	Total permits	8	7	4	4	4	5	4	4	4	5	2
	Fished permits	1	2	0	0	0	0	0	0	0	0	0
	% of permits fished	13%	29%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	5	5	2	2	2	3	2	2	2	3	1

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Anchor Point

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	17	15	11	10	5	4	7	6	5	4	5
	Fished permits	9	11	10	7	4	3	6	3	3	4	4
	% of permits fished	53%	73%	91%	70%	80%	75%	86%	50%	60%	100%	80%
	Total permit holders	15	13	11	10	5	5	7	6	5	4	5
Groundfish (CFEC) ²	Total permits	47	38	21	21	17	15	8	9	9	11	11
	Fished permits	28	11	10	12	5	2	2	3	4	6	6
	% of permits fished	60%	29%	48%	57%	29%	13%	25%	33%	44%	55%	55%
	Total permit holders	29	25	15	15	13	11	7	8	8	10	11
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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	55	52	46	46	48	38	40	45	47	44	44
	Fished permits	47	36	28	29	27	23	22	24	26	26	24
	% of permits fished	85%	69%	61%	63%	56%	61%	55%	53%	55%	59%	55%
	Total permit holders	59	55	48	48	48	39	40	42	44	44	45
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>174</i>	<i>153</i>	<i>118</i>	<i>118</i>	<i>109</i>	<i>93</i>	<i>88</i>	<i>91</i>	<i>94</i>	<i>91</i>	<i>88</i>
	<i>Fished permits</i>	<i>110</i>	<i>83</i>	<i>70</i>	<i>74</i>	<i>58</i>	<i>46</i>	<i>47</i>	<i>46</i>	<i>49</i>	<i>50</i>	<i>47</i>
	<i>% of permits fished</i>	<i>63%</i>	<i>54%</i>	<i>59%</i>	<i>63%</i>	<i>53%</i>	<i>49%</i>	<i>53%</i>	<i>51%</i>	<i>52%</i>	<i>55%</i>	<i>53%</i>
	<i>Permit holders</i>	<i>88</i>	<i>81</i>	<i>69</i>	<i>73</i>	<i>71</i>	<i>60</i>	<i>60</i>	<i>60</i>	<i>62</i>	<i>61</i>	<i>64</i>

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

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 Anchor Point: 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 Anchor Point ²	Total Net Pounds Landed In Anchor Point ²	Total Ex-Vessel Value Of Landings In Anchor Point ²
2000	129	0	2	86	48	0	0	\$0
2001	84	0	2	84	47	0	0	\$0
2002	75	0	2	72	42	0	0	\$0
2003	71	0	2	74	47	0	0	\$0
2004	71	0	1	68	39	0	0	\$0
2005	67	0	0	30	10	0	0	\$0
2006	48	0	0	26	8	0	0	\$0
2007	66	0	0	30	10	0	0	\$0
2008	56	0	0	32	7	0	0	\$0
2009	68	0	0	30	6	0	0	\$0
2010	72	0	0	29	6	0	0	\$0

¹Alaska 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.]

²Alaska 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.]

³Alaska 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.]

⁴Alaska 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 6. Halibut Catch Share Program Participation in Anchor Point: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	36	1,607,390	179,415
2001	35	1,458,739	193,143
2002	35	1,579,836	214,602
2003	31	1,589,993	237,738
2004	27	1,437,234	228,713
2005	23	1,586,841	235,908
2006	25	1,798,692	258,670
2007	24	1,654,789	240,487
2008	19	1,578,182	224,498
2009	19	1,578,539	206,490
2010	19	1,191,160	148,319

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 Anchor Point: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (pounds)
2000	10	456,125	41,238
2001	7	400,875	37,816
2002	8	445,382	44,708
2003	5	362,445	43,371
2004	4	360,234	49,136
2005	4	360,234	43,872
2006	6	709,301	89,961
2007	4	706,071	83,331
2008	4	706,071	64,807
2009	4	706,071	56,516
2010	6	1,248,749	104,556

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 Anchor Point: 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 Anchor Point: 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>	0	0	0	0	0	0	0	0	0	0	0
	<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>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

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 lbs refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Anchor Point

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Anchor Point 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	487,930	520,154	638,737	798,706	793,806	872,182	489,267	597,102	639,743	608,729	594,141
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	49,206	20,890	22,318	597,507	376,311	16,650	19,230	47,101	31,253	38,957	68,407
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	1,226,681	844,840	813,565	541,424	1,102,539	676,027	185,643	441,845	1,242,430	1,112,220	1,058,834
Pollock	--	1,847	1,929	--	--	--	--	--	--	--	--
Sablefish	95,695	103,377	124,666	159,975	119,088	134,233	--	--	--	19,298	--
Salmon	2,126,202	1,236,038	1,394,514	1,456,155	1,615,875	2,097,480	1,406,732	2,657,200	2,483,871	1,691,697	2,506,463
<i>Total²</i>	<i>3,985,714</i>	<i>2,727,146</i>	<i>2,995,729</i>	<i>3,553,767</i>	<i>4,007,619</i>	<i>3,796,572</i>	<i>2,100,872</i>	<i>3,743,248</i>	<i>4,397,297</i>	<i>3,470,901</i>	<i>4,227,845</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	\$1,261,373	\$1,038,126	\$1,432,022	\$2,332,120	\$2,423,455	\$2,670,863	\$1,869,170	\$2,669,041	\$2,876,181	\$1,871,653	\$2,749,494
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	\$33,364	\$9,886	\$13,562	\$142,856	\$61,513	\$6,164	\$4,572	\$9,355	\$10,498	\$12,673	\$17,913
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	\$497,295	\$299,830	\$247,861	\$191,378	\$340,249	\$213,693	\$79,940	\$229,702	\$766,425	\$334,837	\$292,799
Pollock	--	\$142	\$127	--	--	--	--	--	--	--	--
Sablefish	\$353,667	\$323,236	\$406,361	\$565,790	\$337,216	\$432,918	--	--	--	\$88,717	--
Salmon	\$924,403	\$448,617	\$438,866	\$410,942	\$682,138	\$777,796	\$650,790	\$1,043,536	\$1,759,622	\$1,182,194	\$1,599,245
<i>Total²</i>	<i>\$3,070,101</i>	<i>\$2,119,837</i>	<i>\$2,538,800</i>	<i>\$3,643,086</i>	<i>\$3,844,571</i>	<i>\$4,101,433</i>	<i>\$2,604,472</i>	<i>\$3,951,634</i>	<i>\$5,412,725</i>	<i>\$3,490,075</i>	<i>\$4,659,451</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 lbs refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Recreational Fishing

Recreational fishing is important to communities on the Kenai Peninsula and Anchor Point is no exception. Many lodges and tourism businesses throughout the area provide guided recreational fishing opportunities for tourists. The Anchor River and surrounding drainages and lakes provide excellent opportunities for fishing king, coho, and pink salmon, Dolly Varden char, steelhead, and rainbow trout, arctic grayling, and smelt;⁷⁷ while the Cook Inlet and Kachemak Bay attracts anglers on private boats who target Chinook, coho, pink, sockeye, and chum salmon, Dolly Varden char, rockfish, halibut, lingcod, Pacific cod, shark, smelt, steelhead, Dungeness and Tanner crab, razor clam, and hardshell clam.⁷⁸ In 2010, there were 16 sport fish guide businesses registered in the community, of which 12 were considered active. This represents an overall decline from 2000, when there was 31 registered sport fish guide businesses (22 active). In addition, residents held a total of 27 sport fish guide licenses in 2010, compared to 54 in 2000. In total, 1,758 sportfishing licenses were sold in the community in 2010, compared to 2,012 in 2000. In addition, local residents were sold 888 sportfishing licenses that year, compared to 975 in 2000. Sportfishing license sales in Anchor Point peaked in 2005 at 2,765.

Anchor Point is located in two ADF&G Harvest Survey Areas. The Kenai Peninsula Harvest Survey Area includes all main channels water of the Kenai River downstream of Kenai Lake to Cook Inlet, although it does not include Kenai Lake, Skilak Lake, or any saltwater. The Cook Inlet Harvest Survey Area includes all saltwater of the Kenai Peninsula and Cook Inlet bounded by the Turnagain Arm including Granite Creek Drainage, on the east by the Placer River Drainage, and all waters flowing into the Gulf of Alaska west of Gore Point. In 2010, there were a total of 67,948 saltwater and 99,849 freshwater angler days fished, compared to 109,107 and 181,894 in 2000, respectively. In that year, non-Alaska residents accounted for 70.1% of saltwater angler days fished and 28.3% of freshwater angler days fished, compared to 63.2% and 23.2% in 2000, respectively. In 2010, charter operators kept 159 Chinook salmon, 171 coho salmon, five sockeye salmon, 93 unidentified salmon, 16,055 halibut, 316 lingcod, and 398 rockfish.⁷⁹ Information regarding recreational fishing trends can be found in Table 11.

Subsistence Fishing

With the exception of several communities and residents qualifying for Native preference, federal subsistence regulations prohibit taking fish from federal waterways on the Kenai Peninsula. However, personal use fishing is still allowed on state owned waterways, including parts of the Anchor River. However, Anchor Point is not considered a subsistence based community in the traditional sense.

Information on subsistence activities in Anchor Point is limited, and data regarding subsistence participation by household and marine mammal harvests are unavailable. Of the species listed by ADF&G in Table 13, residents reported harvesting sockeye salmon the most

⁷⁷ Alaska Department of Natural Resources (n.d.). Retrieved November 30, 2011 from: <http://dnr.alaska.gov/parks/units/anchoriv.htm>.

⁷⁸ Alaska Department of Fish and Game (n.d.) *Lower Cook Inlet Management Area*. Retrieved November 30, 2011 from: <http://www.adfg.alaska.gov/index.cfm?ADFG=ByAreaSouthcentralLowerCookInlet.main>

⁷⁹ 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).

often, followed by Chinook and chum salmon. In 2008, residents reported harvesting 236 salmon, compared to 58 in 2000. Reported salmon harvests peaked in 2006 at 419 fish. In 2010, 12 residents held Subsistence Halibut Registration Certificates (SHARC), compared to 11 in 2003. In that year, an estimated 150 lbs of halibut were harvested on one SHARC, compared to 155 lbs harvested on four SHARC cards in 2003. Halibut harvests peaked in 2004 at an estimated 1,888 lbs. Information regarding subsistence trends can be found in Tables 12 through 15.

Table 11. Sport Fishing Trends, Anchor Point: 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 Anchor Point ²
2000	22	54	975	2,012
2001	17	44	957	2,302
2002	18	48	994	2,276
2003	19	48	990	2,376
2004	13	44	995	2,462
2005	24	42	1,143	2,765
2006	21	34	1,090	2,531
2007	19	37	1,059	2,588
2008	16	34	974	2,242
2009	12	28	994	1,893
2010	12	27	888	1,758

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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).

Table 12. Subsistence Participation by Household and Species, Anchor Point: 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, Anchor Point: 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	6	6	8	n/a	n/a	n/a	50	n/a	n/a
2001	2	4	n/a	n/a	n/a	n/a	80	n/a	n/a
2002	n/a	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	5	6	4	n/a	n/a	n/a	5	n/a	n/a
2004	5	5	23	n/a	n/a	n/a	170	n/a	n/a
2005	3	3	n/a	n/a	n/a	n/a	328	n/a	n/a
2006	6	6	30	n/a	n/a	n/a	389	n/a	n/a
2007	7	7	17	n/a	1	n/a	197	n/a	n/a
2008	5	4	13	n/a	n/a	n/a	223	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, Anchor Point: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	11	4	155
2004	12	7	1,888
2005	11	n/a	942
2006	12	n/a	n/a
2007	15	n/a	n/a
2008	8	2	218
2009	9	2	529
2010	12	1	150

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, Anchor Point: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Clam Gulch



People and Place

*Location*⁸⁰

Located on the Kenai Peninsula, Clam Gulch lies on the Sterling Highway 24 mi south of the City of Kenai and 85 mi southwest of Anchorage. The area encompasses 13.7 sq mi of land. Although Clam Gulch is not incorporated as a municipality, it is under the jurisdiction of the Kenai Peninsula Borough.

*Demographic Profile*⁸¹

In 2010, there were 176 residents, ranking Clam Gulch 208th of 352 Alaskan communities in terms of population size. Between 1990 and 2010, the population grew by 122.8%, but has stayed relatively stable since 2000. Between 2000 and 2009, the population fell by 4.1% with an average annual growth rate of -0.74%, less than the statewide average of 0.75% and indicative of a variable population trend. Information regarding population trends can be found in Table 1.

Clam Gulch is predominately a White community, with 85.2% of residents identifying themselves as such in 2010, compared to 92.5% in 2000. Also in that year, 5.7% identified themselves as American Indian or Alaska Native, compared to 2.9% in 2000; 0.6% identified themselves as Native Hawaiian or Other Pacific Islander, compared to 0.0% in 2000; 8.0% identified themselves as two or more races, compared to 3.5% in 2000; and 0.6% identified themselves as some other race, compared to 0.0% in 2000. In addition, 0.6% of residents identified themselves as Hispanic or Latino, compared to 0.0% in 2000. Information regarding Clam Gulch's racial and ethnic composition can be found in Figure 1.

In 2010, the average household size was 1.93, compared to 2.7 in 1990 and 2.58 in 2000. In that year, there were 160 total housing units, compared to 56 in 1990 and 115 in 2000. Of the households surveyed in 2010, 45% were owner-occupied, compared to 51% in 2000; 12% were renter-occupied, compared to 7% in 2000; 9% were vacant, compared to 6% in 2000; and 34% were occupied seasonally, compared to 36% in 2000. There were no residents living in group quarters between 1990 and 2010.

The gender distribution in 2010 was relatively skewed at 55.1% male and 44.9% female. This was less even than the statewide distribution (48% female, 52% male) and 2000 distribution (51.4% male, 48.6% female). The median age that year was 51.7 years, which was markedly older than the statewide median age of 33.8 years and 2000 median of 37.5 years and representative of an aging population.

⁸⁰ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

⁸¹ 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>.

Compared with 2000, the population structure of Clam Gulch is notably more constricted with 18.7% of the population under the age of 20 in 2010, compared to 34.7%. In addition, 22.8% of residents were over the age of 59 in 2010, compared to 12.2%; 54.5% were between the ages of 30 and 59, compared to 46.7% in 2000¹ and 4.0% were between the ages of 20 and 29, compared to 6.4% in 2000. There was a notable amount of attrition within the 10 to 19 cohort between 2000 and 2010, possibly indicating lower youth retention (Figure 2).

Table 1. Population in Clam Gulch from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Department of Labor Estimate of Permanent Residents ²
1990	79	-
2000	173	-
2001	-	168
2002	-	173
2003	-	176
2004	-	164
2005	-	171
2006	-	165
2007	-	177
2008	-	159
2009	-	166
2010	176	-

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, Clam Gulch: 2000-2010 (U.S. Census).

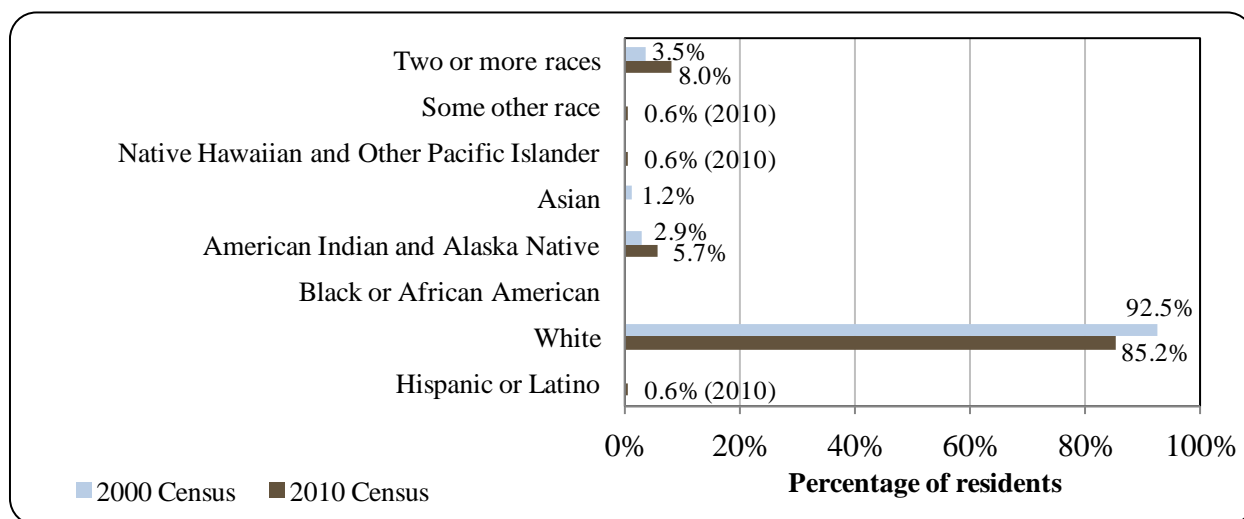
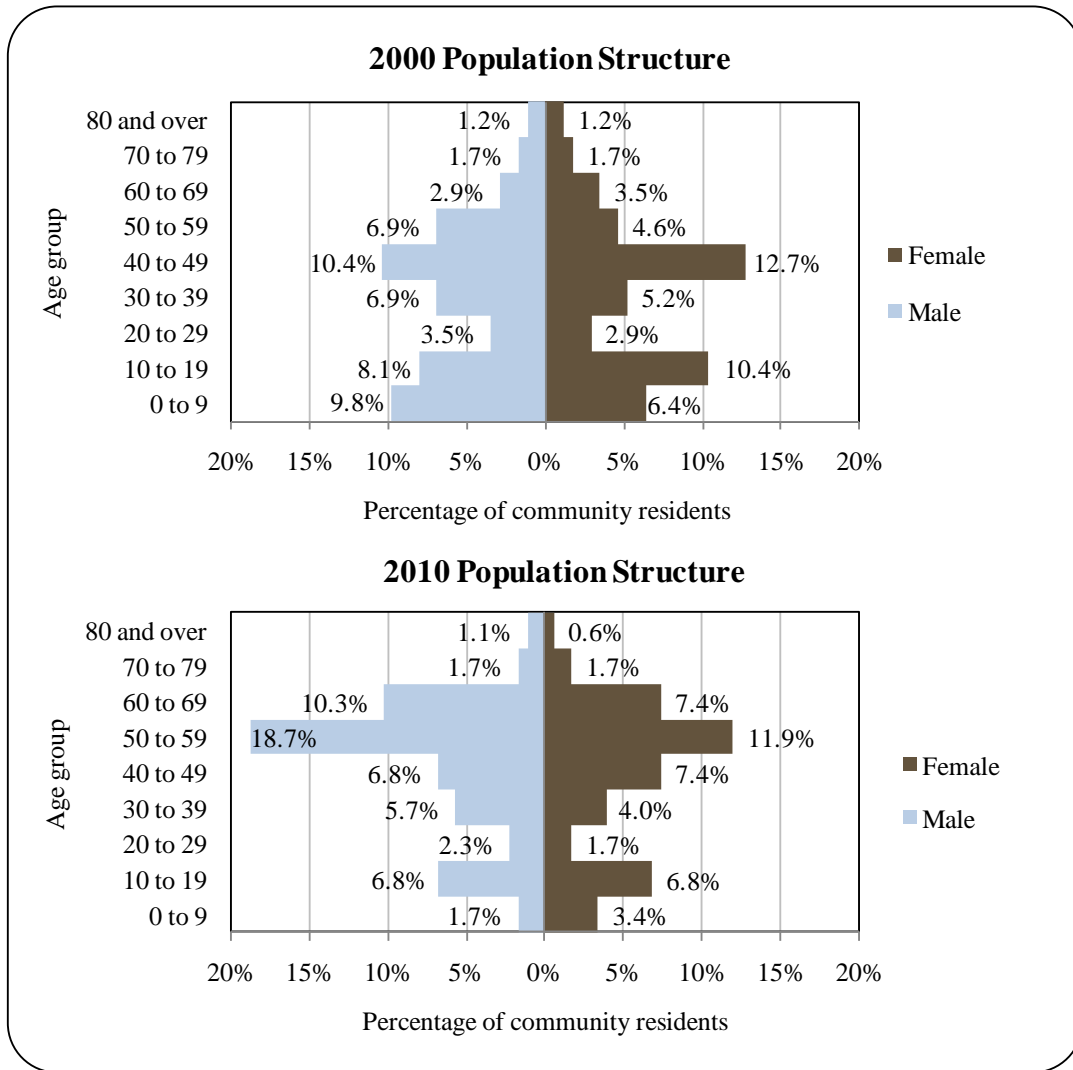


Figure 2. Population Age Structure in Clam Gulch Based on the 2000 and 2010 U.S. Decennial Census.



In terms of educational attainment, the U.S. Census’ 2006-2010 American Community Survey (ACS)⁸² estimated that 84.7% of residents over the age of 25 held a high school diploma or higher degree in 2010, compared to an estimated 90.7% of Alaska residents overall. Also in that year, an estimated 15.3% of residents had a 9th to 12th grade education but no diploma, compared to an estimated 5.8% of Alaska residents overall; and an estimated 44.4% had some college but no degree, compared to an estimated 28.3% of Alaska residents overall. No residents were estimated to have less than a 9th grade education or any post-secondary degrees in 2010.

⁸² While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

History, Traditional Knowledge, and Culture

Although Athabascans have occupied the Kenai Peninsula for thousands of years, occupation of Clam Gulch did not occur until White homesteaders entered the area in the early to middle 20th century. Named after the Clam Gulch Ravine, the area surrounding what is now Clam Gulch was first reported in 1947 by Barnes and Cobb of the U.S. Geological Survey.⁸³ Occupation of the area was not officially reported until the 1970 Census, when the community's population was 47.⁸⁴ Since then, Clam Gulch has developed as a homestead community and tourism destination along the Sterling Highway, famous for clamming.⁸⁵

Natural Resources and Environment

Clam Gulch is located within a maritime climate zone, characterized by mild winters and cool summers. January temperatures range from 4 to 22° F (-16 to -6° C). July temperatures vary from 46 to 65° F (8 to 18° C). Average annual precipitation is 20 inches.⁸⁶

The community is located next to the Clam Gulch State Recreation Area (CGSRA) and Clam Gulch Critical Habitat Area (CGCHA). The CGSRA is famous for hosting one of eight known major concentrations of razor clams on the Pacific Coast.⁸⁷ The CGCHA extends along the eastern shores of the Cook Inlet from Cape Kasilof to Happy Valley and serves as important habitat for not only razor clams, but many migratory birds, waterfowl, and shorebirds as well. In addition, Deep Creek is a major spawning ground for all five species of Pacific salmon.⁸⁸

Clam Gulch is located on coastal outwash plains dominated by low-lying wetlands. Lowland areas are generally poorly drained and support patches of black spruce with surrounding muskeg. Coastal areas consist of mudflats, sandy beaches, and steep bluffs. Recreation resources are abundant in the area and include sportfishing, camping, and clam digging. Both the Kasilof River to the north and CGSRA are valuable recreational resource areas and demand for recreational use continues to grow. Commercial fishery resources are important on both a local and regional level, and salmon heading to the Kasilof River, Kenai River, and upper Cook Inlet can be intercepted locally. Tidelands along much of the coastlines in the area are lined with Shore Fishery Leases along with sportfishing and personal-use set netting and dip netting. Moose, caribou, ducks, geese, and trumpeter swans all provided hunting opportunities. Freshwater species include rainbow trout and Dolly Varden char.⁸⁹ There are no active or

⁸³ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

⁸⁴ Camp, J. 2007. *Kenai Peninsula Borough Situations and Prospects: Economic Trends for Year Ending December 31, 2006*. Retrieved February 7, 2012 from: <http://www.commerce.state.ak.us/dca/plans/KenaiPeninsulaBorough-EDP-2007.pdf>.

⁸⁵ Deb's Webs (2011). *Clam Gulch*, Retrieved February 7, 2012 from: <http://www.clamgulchalaska.com/index.htm>.

⁸⁶ See footnote 83.

⁸⁷ Alaska Division of Parks and Outdoor Recreation (n.d.). *Clam Gulch Recreation Area*. Retrieved February 7, 2012 from: <http://dnr.alaska.gov/parks/units/clamgulch.htm>.

⁸⁸ Alaska Department of Fish and Game (n.d.). *Clam Gulch Critical Wildlife Area*. Retrieved February 7, 2012 from: <http://www.adfg.alaska.gov/index.cfm?ADFG=clamgulch.species>.

⁸⁹ Alaska Department of Natural Resources (2001). *Kenai Area Plan*. Retrieved February 7, 2012 from: http://dnr.alaska.gov/mlw/planning/areaplans/kenai/pdfs/master_KAP.pdf.

proposed mineral development sites in the area, although coal beds exist throughout most of western Kenai Peninsula.⁹⁰

Clam Gulch's coastal position makes it susceptible to a range of natural hazards including tsunamis, coastal flooding, and coastal erosion. Bluffs and coastlines in the area are composed of poorly consolidated glacial and alluvial deposits making coastal regions susceptible to erosion. A study of bluff erosion within the area ranging from Homer to Nikiski concluded that between 1952 and 2004, coastal bluffs have eroded by one foot per year on average, although erosion is typically episodic and not gradual. Flood hazards have been increasing in the area due to development, soil erosion, and hydrologic and ecological changes resulting from spruce bark beetle infestations. This has in turn impacted runoff volumes and stream dynamics resulting in increased flood events south of Clam Gulch. In addition to flooding and erosion, Clam Gulch is situated between the Bruin Bay and Border Ranges faults. Secondary impacts from an earthquake event include tsunamis and soil destabilization.⁹¹

According to the Alaska Department of Environmental Conservation, there were no significant environmental remediation projects active in Clam Gulch in 2010.⁹²

Current Economy⁹³

Much of Clam Gulch's economy is tied to the Kenai Peninsula region as a whole, and many residents work in nearby Kasilof. Locally, recreational services and commercial fishing provide most employment. Top employers in 2010⁹⁴ included Kenai Peninsula Borough School, Ed's Seafoods Inc., Central Peninsula General Hospital, KGB & Associates LLC, University of Alaska, Ice Services, Inc., State of Alaska, Access Alaska Inc., VECO Alaska Inc., and Home Depot USA Inc.

In 2010,⁹⁵ the estimated per capita income was \$38,944 and the estimated median household income was \$34,091, compared to \$17,983 and \$37,500 in 2000 respectively. After accounting for inflation by converting 2000 values to 2010 dollars,⁹⁶ the real per capita income (\$23,647) and real median household income (\$49,312) indicate that while individual earnings increased, overall household earnings decreased. In 2010, Clam Gulch ranked 14th of 305 communities from which per capita income was estimated and 221st of 299 communities from which median household income was estimated.

⁹⁰ Alaska Department of Commerce (n.d.). *Mineral Resources of Alaska*. Retrieved February 8, 2012 from: <http://commerce.alaska.gov/ded/dev/minerals/mining.htm>.

⁹¹ Kenai Peninsula Borough (2000). *All Hazards Mitigation Plan*. Retrieved February 8, 2012 from: <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>.

⁹² Alaska Department of Environmental Conservation (n.d.). *Contaminated Sites Program*. Retrieved April 2, 2013 from: <http://www.dec.state.ak.us/spar/csp/list.htm>.

⁹³ Unless otherwise noted, all monetary data are reported in nominal values.

⁹⁴ 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/>.

⁹⁵ U.S. Census Bureau (n.d.). Profile of selected social, economic and housing characteristics of all places within Alaska. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

⁹⁶ 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>).

Clam Gulch's small population size may have prevented the ACS from accurately portraying economic conditions.⁹⁷ Another way of understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). According to the ALARI database, residents earned \$2.8 million in total wages in 2010.⁹⁸ When matched with the population in 2010, the per capita income equals \$15,932, which is significantly less than the ACS estimate and suggests that caution should be used when comparing 2010 ACS and 2000 Census figures.⁹⁹

According to 2006-2010 ACS estimates,¹⁰⁰ 46.3% of the population aged 16 and over were part of the civilian labor force in 2010. Unemployment that year was estimated at 6.3%, compared to an estimated 5.9% statewide; and an estimated 10.0% of residents were living below the poverty level, compared to an estimated 9.5% of Alaska residents overall. Of those employed in 2010, an estimated 100% worked in the private sector.

By industry, most (34.3%) employed residents were estimated to be working in agriculture, forestry, fishing, hunting, and mining sectors in 2010; followed by transportation, warehousing, and utilities sectors (34.4%); professional, scientific, management, administrative, and waste management sectors (15.5%); and education services, health care, and social assistance sectors (15.6%). in 2010. By occupation type, most (53.1%) employed residents were estimated to hold production, transportation, or material moving positions that year; followed by natural resources, construction, or maintenance positions (15.6%); sales or office positions (15.6%); and management or professional positions (15.6%). Employment by industry became less diverse between 2000 and 2010, with substantial proportional declines in many sectors. These changes may either be attributed to shifts in economic conditions and population structure, or ACS sampling error resulting from Clam Gulch's small population size. According to 2010 ALARI estimates, most (22.4%) employed residents worked in education and health service sectors; followed by trade, transportation, and utilities sectors (12.9%); natural resources and mining sectors (11.8%); and local government sectors (11.8%). Information regarding employment trends can be found in Figures 3 and 4.

⁹⁷ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁹⁸ ALARI estimates based on wages reported for unemployment insurance purposes. Estimates do not include self-employed or federally employed residents.

⁹⁹ See footnote 94.

¹⁰⁰ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

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

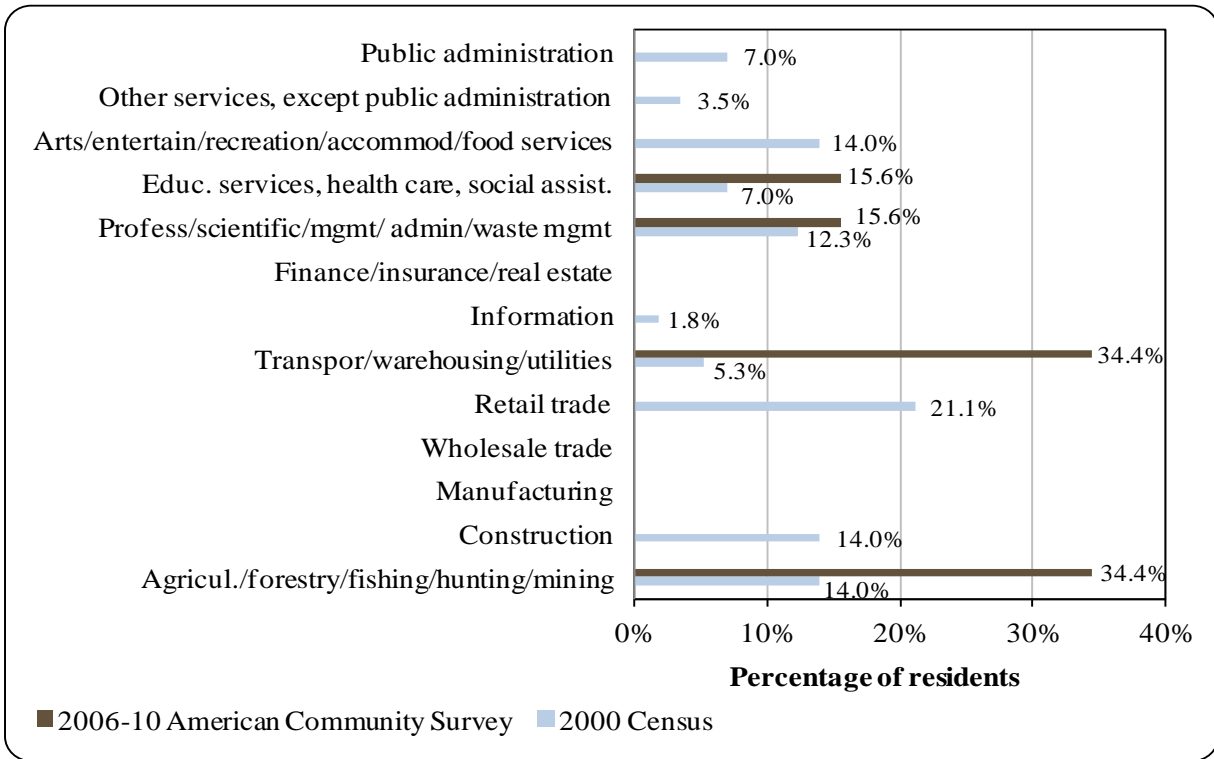
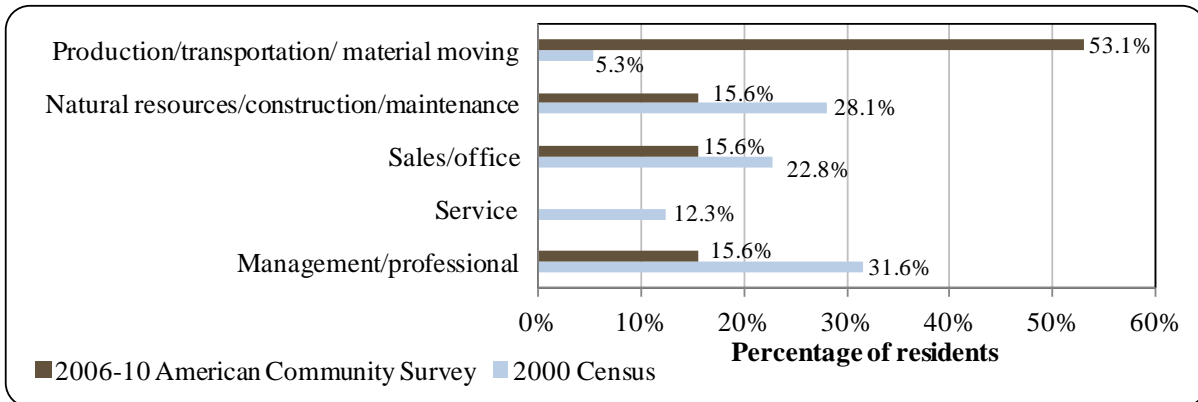


Figure 4. Local employment by occupation in 2000-2010, Clam Gulch (U.S. Census).



Governance

Clam Gulch is unincorporated and therefore unable to administer taxes (Table 2). However, the Kenai Peninsula Borough administers a 3% sales tax and a 4.5 mills property tax. The community was not included in the Alaska Native Claims Settlement Act (ANCSA) and does not possess a federally recognized Tribal government. The closest Alaska Department of Fish and Game (ADF&G) office is located in Kenai, 22 mi north. The closest National Marine Fisheries Service (NMFS) and U.S. Bureau of Citizenship and Immigration Services offices are located in Anchorage, 85 mi northeast.

Table 2. Selected Municipal, State or Federal Revenue Streams for the Community of Clam Gulch 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 Department of Community 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 Department of Community and Economic Development. (n.d.). *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

³ Alaska Department of Revenue. (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 Department of Community and Rural Affairs. (n.d.). *Community Funding Database*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm.

Infrastructure

*Connectivity and Transportation*¹⁰¹

The Sterling Highway provides access to Anchorage and beyond. Nearby Kenai (24 mi) offers an airport and docking facilities. The cost of roundtrip airfare between Anchorage and Kenai in June 2012 was \$171.¹⁰²

*Facilities*¹⁰³

Many homes use individual wells and septic systems. However, nearly one-third derive water from a central watering point or water delivery. Over half of all homes use privies, and more than half are fully plumbed. Borough refuse transfer sites are available in Ninilchik (15 mi) or in Kasilof (10 mi). Public safety services are provided by State Troopers in Soldotna and fire

¹⁰¹ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

¹⁰² Airfare was calculated using lowest fare. Retrieved November 22, 2011 from <http://www.travelocity.com>.

¹⁰³ See footnote 101.

and rescue services are provided by the borough and Clam Gulch Volunteer Fire Department. Local visitor accommodations are provided by the Clamshell Lodge and Clam Gulch Lodge.¹⁰⁴ The community lacks dock and harbor infrastructure; however, port facilities can be accessed in Kasilof and Kenai.

*Medical Services*¹⁰⁵

Clam Gulch lacks local medical facilities. The community is served by Central Peninsula General Hospital in Soldotna. Limited Emergency Medical Services are provided by the Clam Gulch Volunteer Fire Department.

*Educational Opportunities*¹⁰⁶

There are no schools located directly in Clam Gulch. There is an elementary school located in Kasilof and additional educational opportunities located in Kenai.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Commercial harvest of salmon in Cook Inlet began in 1882¹⁰⁷ with the development of a cannery at the mouth of the Kasilof River, in English Bay. An additional 17 canneries had been built in central Alaska by 1890.¹⁰⁸ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.¹⁰⁹ In the 1920s, herring had become increasingly valued for oil and meal, and a number of reduction plants were built. Commercial crab fisheries began to develop in the GOA in the 1930s. Historically, a sizable spawning biomass of herring was found in western Cook Inlet, and Lower Cook Inlet also supported commercial fisheries for Dungeness, king, and Tanner crab. However, crab and herring fisheries are currently closed due to low stock abundance.^{110,111}

¹⁰⁴ Clam Gulch Lodge (n.d.). *Clam Gulch Lodge*. Retrieved February 8, 2012 from: <http://www.clamgulch.com/>.

¹⁰⁵ Ibid.

¹⁰⁶ Alaska Department of Education and Early Development (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

¹⁰⁷ Clark, J. H., A. McGregor, R. D. Mecum, P. Krasnowski, and A. M. Carroll. 2006. The Commercial Salmon Fishery in Alaska. *Alaska Fisheries Research Bulletin* 12(1):1-146. Alaska Department of Fish and Game. Retrieved January 4, 2012 from <http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1.pdf>.

¹⁰⁸ Cook, L., and F. Norris. 1998. *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

¹⁰⁹ Thompson, W. F. and N. L. Freeman. 1930. *History of the Pacific Halibut Fishery*. Report of the International Fisheries Commission. Number 5. Retrieved June 1, 2012 from <http://www.iphc.int/publications/scirep/Report0005.pdf>.

¹¹⁰ Woodby, D., D. Carlile, S. Siddeek, F. Funk, J. H. Clark, and L. Hulbert. 2005. *Commercial Fisheries of Alaska*. Alaska Department of Fish and Game, Special Publication No. 05-09. Retrieved December 29, 2011 from <http://www.adfg.alaska.gov/FedAidPDFs/sp05-09.pdf>.

¹¹¹ Alaska Department of Fish and Game (2012). *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

Today, ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.¹¹²

Groundfish and crab fisheries that occur within 3 nmi of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nmi in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch (TAC) set by NMFS applied to both fisheries. Beginning in 1997, an additional ‘state-waters fishery’ for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.¹¹³

As a relatively young community, Clam Gulch has not had a long history participating in North Pacific Fisheries. Nevertheless, commercial fishing is important to the community. Many residents holding licenses participate in Cook Inlet salmon fisheries, and seafood processors in Kasilof and Kenai provide nearby markets for catch.¹¹⁴ Clam Gulch is located in Federal Reporting Area 630, International Pacific Halibut Commission (IPHC) Regulatory Area 3A, and the GOA Sablefish Regulatory District. The community is not eligible for participation in the Community Quota Entity program.

Processing Plants

According to the 2010 ADF&G Intent to Operate list, Clam Gulch does not have a registered processing plant. The closest seafood processor is located in Kasilof.

¹¹² See footnote 107.

¹¹³ See footnote 110.

¹¹⁴ 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.]

Fisheries-Related Revenue

The community does not collect any fisheries-related taxes or fees (Table 3); however, fisheries-related revenue is collected at the borough level. Revenue raised through the Borough is distributed throughout unincorporated Borough communities.

Commercial Fishing

In 2010, most commercial permit holders participated in drift gillnet salmon fisheries in the Cook Inlet. The second most popular fishery in 2010 was the Cook Inlet herring roe gillnet fishery followed by the statewide halibut longline fishery.¹¹⁵ In 2010, 35 residents, or 20.3% of the population, held 46 commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC). In 2000, 37 residents held 54 CFEC permits. Of the CFEC permits held in 2010, 70% were for salmon, compared to 70% in 2000; 15% were for herring, compared to 11% in 2000; 9% were for halibut, compared to 13% in 2000; and 4% were for groundfish, compared to 6% in 2000. Two residents held Federal Fisheries Permits (FFP) and 3 residents held License Limitation Program (LLP) groundfish permits. In 2010, residents held 449,539 shares of halibut quota on nine accounts, compared to 604,582 shares held on 13 accounts in 2000. No residents held sablefish or crab quota between 2010 and when the programs began.

A total of 22 residents held commercial crew licenses in 2010, compared to 34 in 2000. In addition, 19 residents held majority ownership of commercial vessels, compared to 28 in 2000. Of the CFEC permits held in 2010, 74% were actively fished, compared to 69% in 2000. This varied by fishery from 88% of salmon permits, to 75% of halibut, 50% of groundfish, and 29% of herring permits. In addition, 100% of LLP and 50% of FFP were actively fished that year. Overall, permit activity remained relatively constant between 2000 and 2010, ranging from 56% (2003) and 74% (2010) of total permits. Salmon permits not only made up the majority of total permits held by residents, but were also fished at a relatively high rate; ranging from 63% (2003) to 91% (2009) of permits held. Halibut permits were also highly active between 2000 and 2010, although relatively few permits were held in the community. Both groundfish and herring permits experienced low activity during those years, never making it above 50% of permits held. However, it should be noted that relatively few groundfish and herring permits were held in the Clam Gulch between 2000 and 2010.

Between 2000 and 2010, no commercial landings were made in the community; however, landings were reported by residents during those years. In 2010, 204,221 lbs of salmon were landed by residents valued at \$217,313 ex-vessel, compared to 144,285 lbs valued at \$87,025 ex vessel in 2000; an increase of \$0.23 per pound landed after adjusting for inflation¹¹⁶ and without considering the species composition of landings. Non-confidential salmon landings by residents peaked in 2007 at 524,554 lbs. Information regarding commercial fishing trends can be found in Tables 4 through 10.

¹¹⁵ Ibid.

¹¹⁶ Inflation calculated using Producer Price Index for unprocessed and packaged fish, Bureau of Labor Statistics,

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

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

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

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

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

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Clam Gulch

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	2	2	2	2	2	3	3	3	3	3	3
	Active permits	1	0	0	0	0	1	1	1	1	3	3
	% of permits fished	50%	0%	0%	0%	0%	33%	33%	33%	33%	100%	100%
	Total permit holders	2	2	2	2	2	3	3	3	3	3	3
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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Federal Fisheries Permits ¹	Total permits	4	4	4	1	2	2	2	2	2	2	2
	Fished permits	0	0	0	0	1	1	2	1	1	1	1
	% of permits fished	0%	0%	0%	0%	50%	50%	100%	50%	50%	50%	50%
	Total permit holders	4	4	4	1	2	2	2	2	2	2	2
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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	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	1	1
	Fished permits	0	0	0	0	0	0	0	0	0	1	0
	% of permits fished	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	100%	0%
	Total permit holders	0	0	0	0	0	0	0	0	0	1	1
Halibut (CFEC) ²	Total permits	7	7	7	5	5	4	4	4	4	5	4
	Fished permits	6	4	5	5	3	3	3	4	4	3	3
	% of permits fished	86%	57%	71%	100%	60%	75%	75%	100%	100%	60%	75%
	Total permit holders	7	7	7	5	5	4	4	4	4	5	4
Herring (CFEC) ²	Total permits	6	5	11	11	9	9	11	8	8	9	7
	Fished permits	0	2	5	3	3	4	4	3	2	1	2
	% of permits fished	0%	40%	45%	27%	33%	44%	36%	38%	25%	11%	29%
	Total permit holders	5	4	10	10	8	8	9	7	7	8	6

Table 4. Cont. Permits and Permit Holders by Species, Clam Gulch: 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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Groundfish (CFEC) ²	Total permits	3	4	2	2	2	4	5	4	4	3	2
	Fished permits	1	0	0	0	0	0	1	1	1	1	1
	% of permits fished	33%	0%	0%	0%	0%	0%	20%	25%	25%	33%	50%
	Total permit holders	3	4	2	2	2	3	5	4	4	3	2
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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	38	33	32	32	31	33	32	33	33	35	32
	Fished permits	30	27	27	20	27	29	24	25	28	32	28
	% of permits fished	79%	82%	84%	63%	87%	88%	75%	76%	85%	91%	88%
	Total permit holders	36	32	30	30	30	33	30	31	31	36	34
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>54</i>	<i>49</i>	<i>52</i>	<i>50</i>	<i>47</i>	<i>50</i>	<i>52</i>	<i>49</i>	<i>49</i>	<i>53</i>	<i>46</i>
	<i>Fished permits</i>	<i>37</i>	<i>33</i>	<i>37</i>	<i>28</i>	<i>33</i>	<i>36</i>	<i>32</i>	<i>33</i>	<i>35</i>	<i>38</i>	<i>34</i>
	<i>% of permits fished</i>	<i>69%</i>	<i>67%</i>	<i>71%</i>	<i>56%</i>	<i>70%</i>	<i>72%</i>	<i>62%</i>	<i>67%</i>	<i>71%</i>	<i>72%</i>	<i>74%</i>
	<i>Permit holders</i>	<i>37</i>	<i>33</i>	<i>36</i>	<i>37</i>	<i>33</i>	<i>36</i>	<i>31</i>	<i>33</i>	<i>35</i>	<i>40</i>	<i>35</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 Clam Gulch: 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 Clam Gulch ²	Total Net Lbs Landed In Clam Gulch ²	Total Ex-Vessel Value Of Landings In Clam Gulch ²
2000	34	0	0	28	24	0	0	\$0
2001	23	0	0	25	18	0	0	\$0
2002	17	0	0	24	19	0	0	\$0
2003	22	0	0	22	19	0	0	\$0
2004	21	0	0	23	18	0	0	\$0
2005	14	0	0	19	14	0	0	\$0
2006	16	0	0	18	17	0	0	\$0
2007	20	0	0	21	17	0	0	\$0
2008	18	0	0	20	15	0	0	\$0
2009	14	0	0	22	17	0	0	\$0
2010	22	0	0	19	17	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.]

Table 6. Halibut Catch Share Program Participation in Clam Gulch: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	13	604,582	59,863
2001	14	608,931	72,089
2002	14	593,536	72,653
2003	14	593,536	72,631
2004	13	517,065	70,067
2005	11	492,534	67,843
2006	11	492,534	67,122
2007	10	456,931	64,742
2008	9	449,539	58,881
2009	9	449,539	52,754
2010	9	449,539	48,597

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 Clam Gulch: 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 Clam Gulch: 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 Clam Gulch: 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 lbs 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 Clam Gulch 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	58,452	61,386	--	--	--	--	--	--	--	--	--
Herring	--	--	14,489	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	144,285	183,049	244,374	208,005	--	--	--	524,554	439,745	681,963	204,221
<i>Total²</i>	<i>202,737</i>	<i>244,435</i>	<i>258,863</i>	<i>208,005</i>	--	--	--	<i>524,554</i>	<i>439,745</i>	<i>681,963</i>	<i>204,221</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	\$153,606	\$125,368	--	--	--	--	--	--	--	--	--
Herring	--	--	\$455	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	\$87,025	\$80,996	\$104,589	\$92,614	--	--	--	\$242,754	\$335,221	\$365,292	\$217,313
<i>Total²</i>	<i>\$240,630</i>	<i>\$206,364</i>	<i>\$105,044</i>	<i>\$92,614</i>	--	--	--	<i>\$242,754</i>	<i>\$335,221</i>	<i>\$365,292</i>	<i>\$217,313</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 lbs refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Recreational Fishing

Recreational fishing is an important part of Clam Gulch's local economy. The CGSRA, Kasilof River, and Kenai River provide opportunities for clam digging as well as dip/set netting for salmon. In 2010, there were a total of 4 active sportfishing guide businesses registered in the community, compared to 7 in 2000. The number of residents holding sportfishing licenses declined from 6 in 2000, to 4 in 2010. Overall, the number of active sportfishing guide businesses and resident sportfishing license holders remained relatively constant between those years. In addition, residents held 146 sportfishing licenses in 2010, compared to 147 in 2000. Sportfishing licenses held by residents peaked in 2003 at 168. No sportfishing licenses were sold in the community between 2000 and 2010. The community's location on the Sterling Highway makes it very accessible for non-resident tourists and residents from Anchorage and surrounding communities. The Kenai River is one of the most popular personal-use fisheries in Alaska, and attracts residents from all over the south-central area.

Clam Gulch is located in the Kenai Peninsula Freshwater and Cook Inlet Saltwater ADF&G Harvest Survey Areas which include all freshwater drainages on the Kenai Peninsula which drain into the Cook Inlet as well as saltwater within the Cook Inlet itself. According to ADF&G Harvest Survey data,¹¹⁷ total freshwater and saltwater angler days fished declined between 2000 and 2010. In 2010, there was a combined total of 67,948 saltwater angler days fished, compared to 109,107 in 2000. Of those, non-Alaska residents accounted for 70% of angler days fished, compared to 63% in 2000. In that same year, there was a combined total of 99,849 freshwater angler days fished, compared to 181,894 in 2000. Of those, non-Alaska residents accounted for 28% of angler days fished, compared to 23% in 2000. According to ADF&G harvest survey data,¹¹⁸ private anglers in Clam Gulch target Chinook, coho, sockeye, and pink salmon, halibut, shark, razor clams, and hardshell clams. There is no kept-released charter information available for Clam Gulch. Information regarding recreational fishing trends can be found in Table 11.

Subsistence Fishing

Clam Gulch is not a federally designated rural area and therefore, ineligible for subsistence fishing in federal waters. This may explain why limited local subsistence harvesting has been reported. Reports by ADF&G on subsistence use are limited and no data are available on household participation in subsistence activities, subsistence halibut fishing, or subsistence harvest of marine mammal resources. One household was reported to have been issued a subsistence salmon permit in both 2005 and 2008; however, no information was available regarding harvest activity in those years. Information regarding subsistence fishing trends can be found in Tables 12 through 15.

¹¹⁷ 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).

¹¹⁸ Ibid.

Table 11. Sport Fishing Trends, Clam Gulch: 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 Clam Gulch ²
2000	7	7	147	0
2001	5	6	161	0
2002	5	6	140	0
2003	5	6	168	0
2004	6	5	158	0
2005	5	1	145	0
2006	4	1	138	0
2007	4	1	123	0
2008	3	0	127	0
2009	3	0	129	0
2010	4	0	146	0

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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).

Table 12. Subsistence Participation by Household and Species, Clam Gulch: 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 (Lbs)
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, Clam Gulch: 2000-2010.

Year	Subsistence Salmon Permits Issued ¹	Salmon Permits Returned ¹	Chinook Salmon Harvested ¹	Chum Salmon Harvested ¹	Coho Salmon Harvested ¹	Pink Salmon Harvested ¹	Sockeye Salmon Harvested ¹	Lbs of Marine Inverts ²	Lbs of Non-Salmon Fish ²
2000	n/a	n/a	n/a	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	n/a	n/a	n/a
2002	n/a	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	n/a
2004	n/a	n/a	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.

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, Clam Gulch: 2003-2010.

Year	SHARC issued	SHARC 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, Clam Gulch: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Cooper Landing



People and Place

*Location*¹¹⁹

Cooper Landing lies at the west end of Kenai Lake on a stretch of the Sterling Highway, 30 mi northwest of Seward and 46 mi south of Anchorage. Located in the Chugach Mountains, it covers 66 sq mi of land and 3.9 sq mi of water. Cooper Landing is unincorporated and is under the jurisdiction of the Kenai Peninsula Borough.

*Demographic Profile*¹²⁰

In 2010, there were 289 residents living in Cooper Landing, ranking it 166th of 352 Alaskan communities in terms of population size. Between 1990 and 2010, the population grew by 18.93%. Between 2000 and 2009, the population fell by 6.8% with an average annual growth rate of 0.38%, which was similar to the statewide average of 0.75% and reflective of the variable population growth following the peak in 2001. Information regarding population trends can be found in Table 1.

The racial composition of Cooper Landing was predominately White in 2010, with 95.5% of residents identifying themselves as such, compared to 91.6% in 2000. Also in that year, 1.4% of residents identified themselves as American Indian or Alaska Native, compared to 3.0% in 2000, 0.7% identified themselves as Asian, compared to 1.6% in 2000; and 2.4% identified themselves as two or more races, compared to 3.3% in 2000. Information regarding racial and ethnic composition can be found in Figure 1.

In 2010, the average household size was 1.8, compared to 2.4 in 1990 and 2.14 in 2000. In that year, there were a total of 395 housing units, compared to 281 in 1990 and 379 in 2000. Of the households surveyed in 2010, 30% were owner-occupied, compared to 31% in 2000; 11% were renter-occupied, compared to 11% in 2000; 7% were vacant, compared to 9% in 2000; and 52% were occupied seasonally, compared to 49% in 2000. There were no residents living in group quarters in 2010, compared to 22 residents in 2000.

Gender distribution in 2010 was somewhat skewed at 53.6% male and 46.4% female. This was slightly less even than the statewide distribution (52.0% male, 48.0% female) and similar to the 2000 distribution (53.9% male, 46.1% female). The median age that year was 55.6 years, which was significantly higher than both the statewide median of 33.8 years and 2000 median of 45.7 years.

When compared with 2000, the population structure in 2010 was significantly more constricted. In that year, 8.6% of residents were under the age of 20, compared to 20.5% in 2000;

¹¹⁹ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

¹²⁰ 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>.

40.9% were over the age of 59, compared to 26.0% in 2000; 43.9% were between the ages of 30 and 59, compared to 41.9% in 2000; and 6.6% were between the ages of 20 and 29, compared to 11.6% in 2000.

Gender distribution by age cohort was less even in 2010 than in 2000, with male biases among most age ranges. In that year, the greatest absolute gender difference occurred within the 60 to 69 range (12.1% male, 9.7% female), followed by the 50 to 59 (12.1% male, 10.0% female) and 30 to 39 (6.6% male, 4.5% female) ranges. Of those three, the greatest relative gender difference occurred within the 30 to 39 range. Information regarding trends in Cooper Landing’s population structure can be found in Figure 2.

Table 1. Population in Cooper Landing from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Department of Labor Estimate of Permanent Residents ²
1990	243	-
2000	369	-
2001	-	389
2002	-	370
2003	-	351
2004	-	345
2005	-	343
2006	-	356
2007	-	356
2008	-	357
2009	-	344
2010	289	-

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, Cooper Landing: 2000-2010 (U.S. Census).

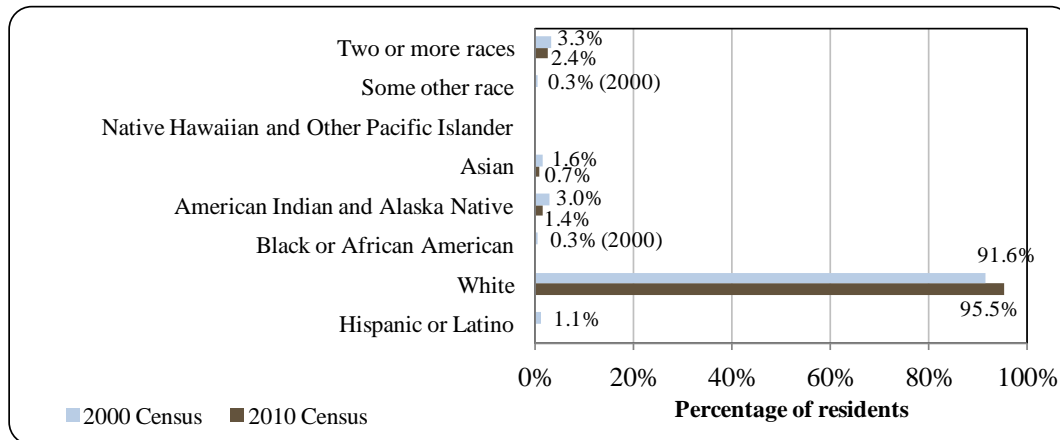
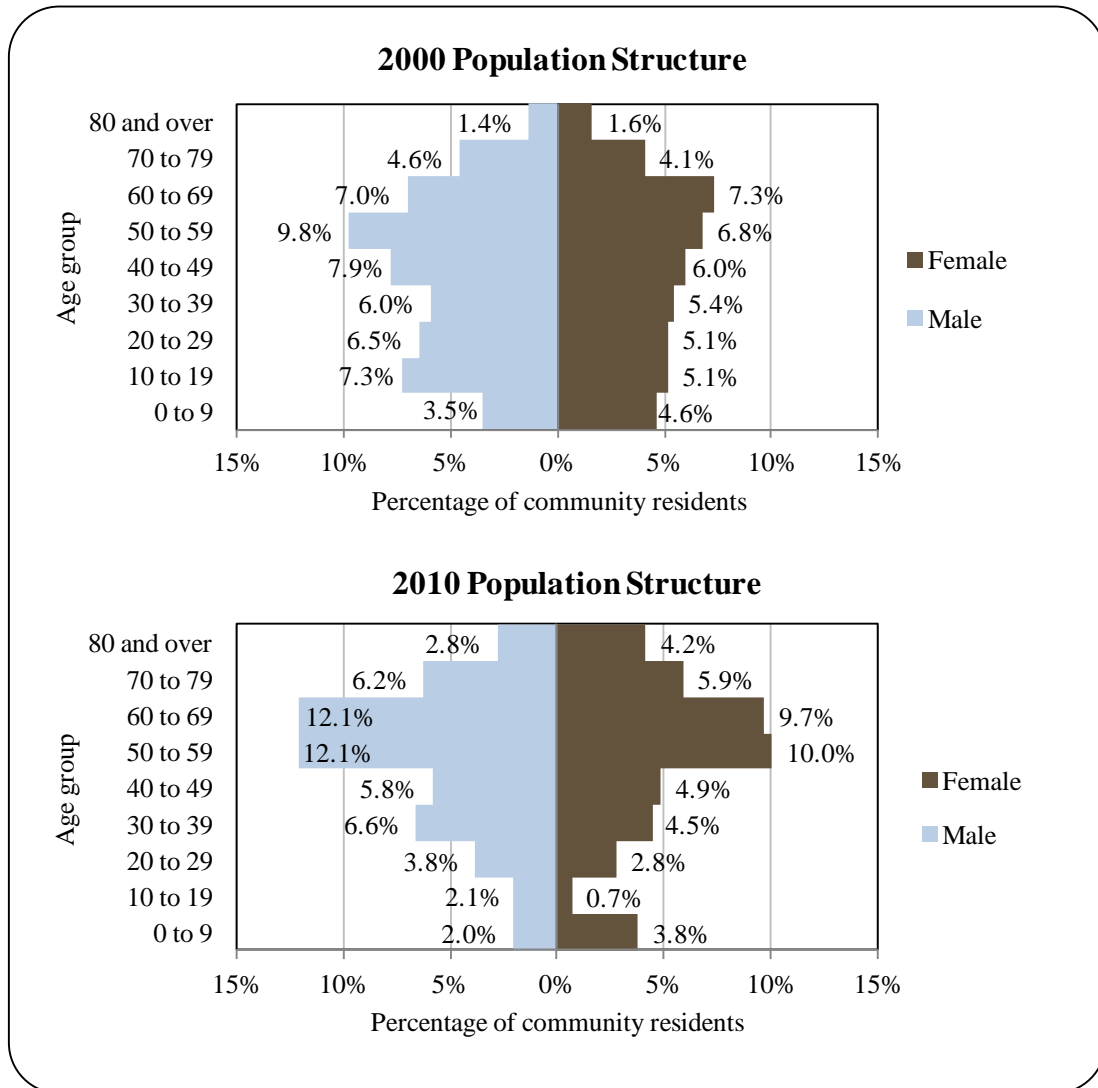


Figure 2. Population Age Structure in Cooper Landing Based on the 2000 and 2010 U.S. Decennial Census.



In terms of educational attainment, the U.S. Census' 2006-2010 American Community Survey (ACS)¹²¹ estimated that 100% of residents aged 25 and older held a high school diploma or higher degree in 2010, compared to an estimated 90.7% of Alaska residents overall. Also in that year, an estimated 41.8% of residents had some college but no degree, compared to an estimated 28.3% of Alaska residents overall; an estimated 4.2% held an Associate's degree, compared to an estimated 8% of Alaska residents overall; and estimated 19.7% held a Bachelor's degree, compared to an estimated 17.4% of Alaska residents overall; and an estimated 2.5% held a graduate or professional degree, compared to an estimated 9.6% of Alaska residents overall.

¹²¹ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

History, Traditional Knowledge, and Culture

The Cooper Landing area was settled first between 1848 and 1851, when Russian engineer P. Doroshin found gold in the area. Later, Cooper Landing was named for Joseph Cooper, a miner who discovered gold in Cooper Landing in 1884. Cooper Creek was first recorded in 1898 by the U.S. Geological Survey. In 1900, the census found 21 miners and one wife living at Cooper Creek. The Riddiford Post Office began operations in 1924, and the Riddiford School opened in 1928. In 1938, a road was constructed to Seward. In 1948, a road to Kenai was opened, and by 1951 residents could drive to Anchorage. The Cooper Landing Community Club was first formed in 1949. The Cooper Lake Hydroelectric Facility was constructed in 1959-60.¹²²

Cooper Landing has two properties listed under the National Register of Historic Places (NRHP).¹²³ The Cooper Landing Historic District is a group of five structures covering 4.25 acres built between 1905 and 1927 and associated with the Kenai River transportation corridor, when many people used the river itself for transportation. The Cooper Landing Post Office, which was originally a dog-team mail runner's cabin, was built facing the now denuded Cooper Trading Post. The Trading Post was the first structure built in Cooper Landing in the 1880s. The cabin was built facing the now denuded Cooper Trading Post; the first structure built in Cooper Landing in the 1880s.

Natural Resources and Environment

January temperatures range from 4 to 22° F (-16 to -6° C). July temperatures vary from 46 to 65° F (8 to 18° C). Average annual precipitation is 20 in.¹²⁴ Cooper Landing is located in the Chugach State Park, which covers a half-million acres of the Chugach Mountains.

The landscape surrounding Cooper Landing was shaped by alpine glaciers and is dominated by large lakes, forested valleys, and high-relief mountain ridges. Soils on slopes are shallow, and often sparsely forested. Soils in valley basins consist of alluvial gravel terraces formed by the erosive Kenai River. Forests consist of mixed birch and spruce stands, with stunted growth in poorly drained or elevated areas.¹²⁵ Clearwater streams and tributaries host all five species of Pacific salmon, Dolly Varden char, whitefish, rainbow trout, and lake trout.¹²⁶ Terrestrial wildlife includes black and brown bear, moose, Dall sheep, mountain goat, lynx, snowshoe hare, wolverine, marten, porcupine, and beaver.¹²⁷

Natural resources in the area are associated with timber, mining, and recreation. Scenic views are abundant along the Sterling Highway as is wildlife viewing. Local high-value habitat includes eagle winter concentration areas, wildlife travel corridors, moose rutting and wintering areas, and bear viewing areas. The abundant wildlife also contributes to recreational hunting and

¹²² Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

¹²³ National Park Service (n.d.). *National Register of Historic Places*. Retrieved February 21, 2012 from: <http://nrhp.focus.nps.gov/>.

¹²⁴ See footnote 122.

¹²⁵ Alaska Department of Natural Resources (2001). *Kenai Area Plan*. Retrieved February 21, 2012 from: http://dnr.alaska.gov/mlw/planning/areaplans/kenai/pdfs/master_KAP.pdf.

¹²⁶ U.S. Fish and Wildlife Service (n.d.). *Kenai National Wildlife Refuge*. Retrieved February 21, 2012 from: <http://www.fws.gov/refuges/profiles/index.cfm?id=74525>

¹²⁷ Ibid.

fishing resources in the area. The Kenai Lake and Kenai River support boating, fishing, camping, and hiking activities. State lands are also accessible via Snug Harbor Road, which attracts hikers, skiers, and snowmachiners. Small-scale placer mining occurs on scattered claims primarily along Quartz Creek and its tributaries. Much of the Kenai Lake is off-limits to mineral development and is instead reserved for recreation and wildlife. There have been several small-scale timber sales since the 1970s and personal use timber harvests are also prevalent in the area. However, spruce bark beetles have had a severe impact on timber health in the region.¹²⁸

Potential natural hazards in the area include wildfire, avalanche, and river flooding and erosion. Wildfires threatened the community in the past,¹²⁹ and an increase in spruce bark beetle infestations continues to raise the potential for wildfires in the area.¹³⁰ Seasonal rains, glacier melt, and glacier outburst flooding can produce elevated river levels, potentially leading to flooding and bank erosion. Finally, steep slopes in the vicinity of Cooper Landing can produce hazardous avalanches and landslides.

Currently there is one historic cleanup site identified by the Alaska Department of Environmental Conservation in Cooper Landing. Gasoline sourced from an underground fuel storage tank next to Mile 48.5 of the Sterling Highway contaminated groundwater adjacent to the Kenai River. As of 2008, the contaminants were contained and cleanup was reported as complete.¹³¹

Current Economy¹³²

Cooper Landing's economy is heavily dependent on tourism. The Sterling Highway provides a great deal of traffic through the community by Alaska residents and tourists traveling from Anchorage to the Kenai Peninsula. In addition, its location in the Chugach State Park makes the community an attractive destination for recreation enthusiasts. There are many tourism-based attractions and services located in the community, the largest of which is Princess Tours' Kenai Princess Wilderness Lodge; a 70-room resort style lodge.¹³³ There are also limited employment opportunities in construction, forestry, and natural resources. In 2010, top employers¹³⁴ included Alaska Hotel Properties LLC, Kenai Peninsula Borough School, State of Alaska, Quartz Creek Enterprises Inc., Jon James Construction LLC, Wildman TR Inc., VECO Alaska Inc., Hamilton's Place, Gwin Lodge Inc., and Kenai Cache Guides LLC.

In 2010,¹³⁵ the estimated per capita income was \$38,135 and the estimated median household income was \$111,343, compared to \$24,795 and \$34,844 in 2000, respectively. After

¹²⁸ See footnote 125.

¹²⁹ See footnote 123.

¹³⁰ Cooper Landing Chamber of Commerce (n.d.). *Homepage*. Retrieved February 22, 2012 from: <http://www.cooperlandingchamber.com/history.shtml>.

¹³¹ Alaska Department of Environmental Conservation (n.d.). *Contaminated Sites Program*. Retrieved February 22, 2012 from: <http://www.dec.state.ak.us/spar/csp/list.htm>.

¹³² Unless otherwise noted, all monetary data are reported in nominal values.

¹³³ Princess Tours (n.d.). *Homepage*. Retrieved from <http://www.princesslodges.com/>

¹³⁴ 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/>.

¹³⁵ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

accounting for inflation by converting 2000 values into 2010 dollars,¹³⁶ the real per capita income (\$32,605) and real median household income (\$45,819) indicate a significant increase in household earnings, and modest increase in individual earnings. In 2010, Cooper Landing ranked 16th of 305 communities from which per capita income was estimated, and 6th of 299 communities from which median household income was estimated.

Cooper Landing's small population size may have prevented the ACS from accurately portraying economic conditions, as evidenced by the dramatic increase in household earnings.¹³⁷ Another understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). According to the ALARI database, residents earned \$4.40 million in total wages in 2010.¹³⁸ When matched with the population in 2010, the per capita income equals \$15,211, which is significantly lower than the 2010 ACS estimate and suggests that caution should be used when comparing 2010 ACS and 2000 Census figures.¹³⁹

According to 2006-2010 ACS estimates,¹⁴⁰ 88.5% of residents aged 16 and older were part of the civilian labor force in 2010. In that year, unemployment was estimated at 6.9%, compared to 5.9% statewide, and an estimated 0.0% of residents were living below the poverty line, compared to an estimated 9.5% of Alaska residents overall. It is possible that the 2010 ACS misrepresented unemployment in Cooper Landings because of the community's small population size. According to ALARI estimates, local unemployment was 17.9% based on unemployment insurance claimants.

Of those employed in 2010, an estimated 78.6% of residents worked in the private sector, an estimated 8.5% worked in the public sector, and an estimated 12.9% were self-employed. If accurate, the high proportion of self-employed residents estimated by the 2010 ACS may have impacted the accuracy of ALARI estimates, which do not account for self-employed workers.

By industry, Cooper Landing had a diversified economy in 2010, with most (21.9%) employed residents estimated to be working in arts, entertainment, accommodations, or food service sectors; followed by information sectors (23.7%); and retail trade sectors (25.9%). By occupation type, most (34.4%) of those employed were estimated to hold sales or office positions in that year; followed by management or professional positions (31.7%), natural resources, construction, or maintenance positions (17.4%); and service positions (16.5%). Overall, the 2006-10 ACS estimated large variations between 2000 and 2010, with significant declines or increases across most sectors. However, it should again be noted that ACS sampling techniques may not have captured the true scope of industry representation. According to 2010 ALARI estimates, most (43.2%) employed residents worked in leisure and hospitality sectors; followed by trade, transportation, and utilities sectors (10.8%); and natural resources and mining sectors (9.4%). Information regarding employment trends can be found in Figures 3 and 4.

¹³⁶ 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>).

¹³⁷ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

¹³⁸ ALARI estimates based on wages reported for unemployment insurance purposes. Estimates do not include self-employed or federally employed residents.

¹³⁹ See footnote 134.

¹⁴⁰ See footnote 137.

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

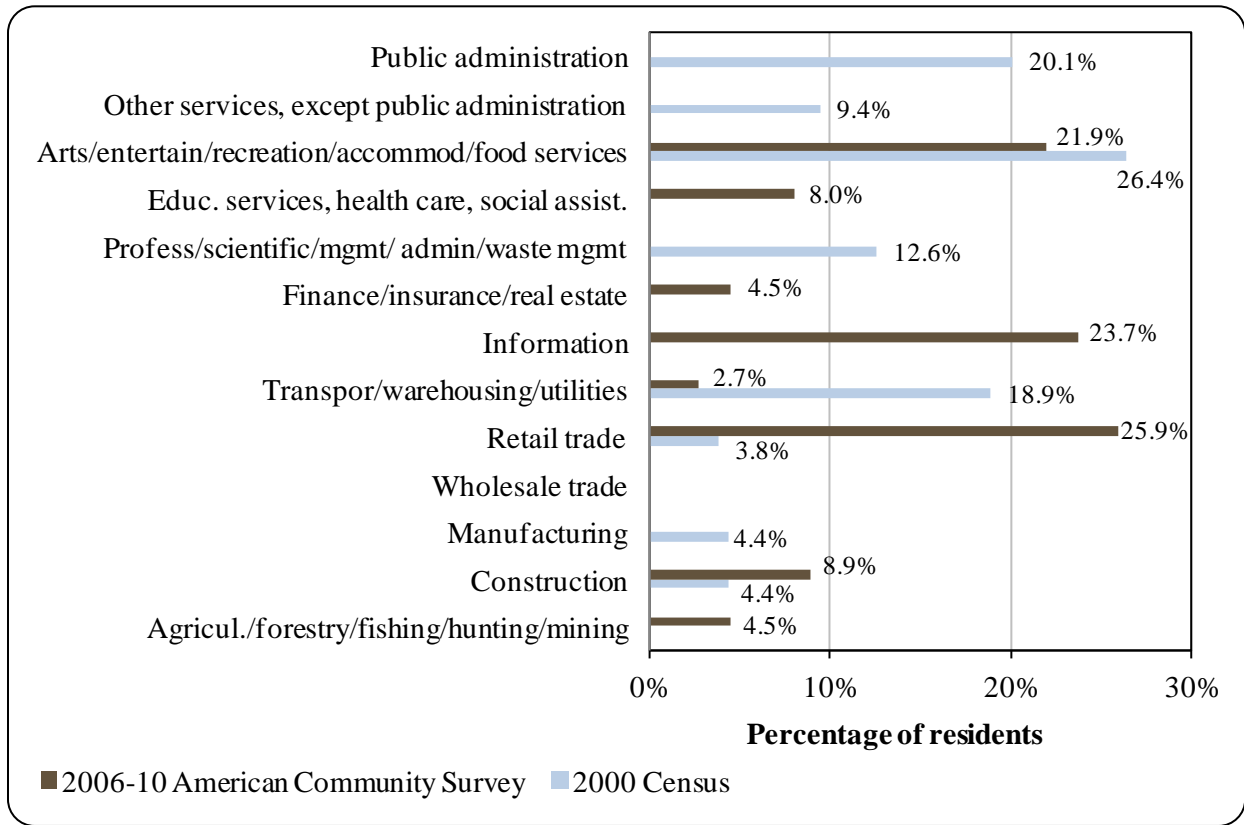
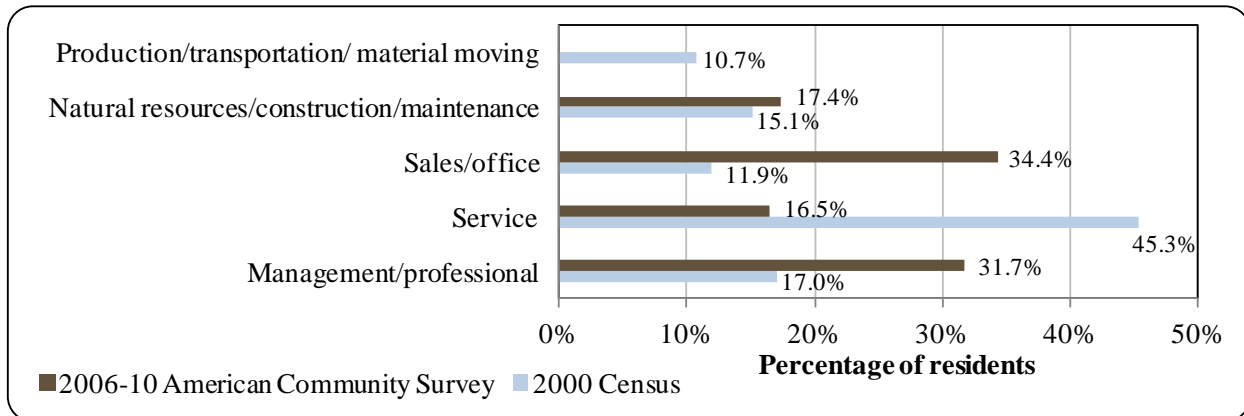


Figure 4. Local Employment by Occupation in 2000-2010, Cooper Landing (U.S. Census).



Governance

Cooper landing is unincorporated. In addition, the community was not included in the Alaska Native Claims Settlement Act and does not have a federally recognized tribal government. However, it is governed under the jurisdiction of the Kenai Peninsula Borough. The closest Alaska Department of Fish and Game (ADF&G) office is located in Seward, although it is only open seasonally. The closest permanent ADF&G office is located in Soldotna, 40 mi west. The closest National Marine Fisheries Service (NMFS) office is located in Seward and the closest U.S. Bureau of Citizenship and Immigration Services (BCIS) office is located in Anchorage.

Since Cooper Landing is not a municipality, it is unable to collect tax revenue (Table 2). However, the Kenai Peninsula Borough did administer a 3% sales tax and 4.5 mills property tax in 2010.

Table 2. Selected Municipal, State or Federal Revenue Streams for the Community of Cooper Landing 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 Department of Community 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 Department of Community and Economic Development (n.d.). *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

³ Alaska Department of Revenue (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 Department of Community and Rural Affairs (n.d.). *Community Funding Database*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm.

Infrastructure

*Connectivity and Transportation*¹⁴¹

The Sterling Highway provides access to Anchorage and beyond. Kenai offers air transportation and docking facilities. A privately-owned boat launch is available. The state-owned Quartz Creek Airport provides a 2,200-ft long by 60-ft wide gravel runway, and float planes may land at Cooper Lake.

*Facilities*¹⁴²

Two-thirds of homes use individual water wells and septic tank systems and are completely plumbed. The school has its own well water system. The remainders haul or have water delivered and use privies. The Borough provides a refuse transfer site at mile 44 on the Sterling Highway. There are many options for accommodations in the community. Public safety is provided by local State Troopers. Fire and rescue services are provided by Cooper Landing Volunteer Fire and Rescue, and Borough Emergency Services. Phone and internet services are available, as are a community hall and library. Cooper Landing's fisheries infrastructure is limited to public boat launch facilities,¹⁴³ tackle sales, limited processing and shipping services, charter services, and general outfitters.¹⁴⁴

*Medical Services*¹⁴⁵

There are no general health services provided in the Cooper Landing aside from emergency ambulance and medical. Central Peninsula General Hospital in Soldotna or Providence Seward Medical Center provide nearby healthcare.

*Educational Opportunities*¹⁴⁶

Cooper Landing School offers kindergarten through 8th grade instruction. As of 2011, there were 10 students enrolled and 4 teachers employed.

¹⁴¹ Alaska Department of Community and Rural Affairs (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

¹⁴² Ibid.

¹⁴³ Alaska Department of Natural Resources (n.d.). Retrieved February 22, 2012 from: <http://dnr.alaska.gov/parks/aspunits/kenai/cooperlandingbl.htm>.

¹⁴⁴ Cooper Landing Chamber of Commerce (n.d.) *Homepage*. Retrieved February 22, 2012 from: <http://www.cooperlandingchamber.com/history.shtml>.

¹⁴⁵ See footnote 141.

¹⁴⁶ 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

Little of Cooper Landing's history is associated with fisheries. While it was originally founded as a mining community, more recent development in local tourism has increased local involvement in recreational fisheries. In 2010, 4 residents held commercial fishing permits. Residents who hold commercial fishing permits base their operations in other communities.

Processing Plants

According to ADF&G's 2010 Intent to Operate list, Cooper Landing does not have a registered processing plant. The nearest shoreside processing plants are located in Seward and Kenai.

Fisheries-Related Revenue

There is no record of fisheries-related taxes or fees collected by the community between 2000 and 2010 (Table 3). However, the Kenai Peninsula Borough receives revenue through Shared Fisheries Business Taxes and Fisheries Resource Landings Taxes.

Commercial Fishing

In 2010, 4 residents, or 1.4% of the population, held 4 commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC). In 2010, 5 residents held five CFEC permits. Of the CFEC permits held in 2010, 100% were for salmon, as was the case in 2000. One resident held a CFEC permit for herring from 2003 to 2006, although it was never actively fished. Between 2000 and 2010, no residents held Federal Fisheries Permits (FFP) or License Limitation Program (LLP) permits. Between 2000 and 2007, 1 quota share account held 1,052 shares of halibut quota. No residents held sablefish or crab quota between 2010 and when the programs began.

There were 3 residents who held commercial crew licenses in 2010, compared to 3 in 2000. In addition, residents did not hold majority ownership in any vessels in that year, compared to 27 vessels in 2000. Of the CFEC salmon permits issued in 2010, 75% were actively fished, compared to 100% in 2000. The only fishery prosecuted by residents that year was the Bristol Bay set gillnet salmon fishery.¹⁴⁷

Between 2000 and 2010, no landings were reported in the community. In addition landings were only reported by Cooper Landing residents between 2000 and 2008. All landings reported by residents are considered confidential. Information regarding commercial fishing trends can be found in Tables 4 through 10.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fisheries Resource Landing Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>Total municipal revenue⁵</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>

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

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

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

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Cooper Landing

Table 4. Permits and Permit Holders by Species, Cooper Landing: 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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Herring (CFEC) ²	Total permits	0	0	0	0	1	1	1	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a	n/a	n/a	n/a	0%	0%	0%	n/a	n/a	n/a	n/a
	Total permit holders	0	0	0	0	1	1	1	0	0	0	0

Table 4 cont'd. Permits and Permit Holders by Species, Cooper Landing: 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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	5	4	5	5	6	7	5	4	4	4	4
	Fished permits	5	3	4	5	5	6	5	4	3	4	3
	% of permits fished	100%	75%	80%	100%	83%	86%	100%	100%	75%	100%	75%
	Total permit holders	5	4	5	5	6	6	5	4	4	4	4
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>5</i>	<i>4</i>	<i>5</i>	<i>5</i>	<i>7</i>	<i>8</i>	<i>6</i>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>
	<i>Fished permits</i>	<i>5</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>5</i>	<i>6</i>	<i>5</i>	<i>4</i>	<i>3</i>	<i>4</i>	<i>3</i>
	<i>% of permits fished</i>	<i>100%</i>	<i>75%</i>	<i>80%</i>	<i>100%</i>	<i>71%</i>	<i>75%</i>	<i>83%</i>	<i>100%</i>	<i>75%</i>	<i>100%</i>	<i>75%</i>
	<i>Permit holders</i>	<i>5</i>	<i>4</i>	<i>5</i>	<i>5</i>	<i>6</i>	<i>6</i>	<i>5</i>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Cooper Landing: 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 Cooper Landing ²	Total Net Lb Landed In Cooper Landing ²	Total Ex-Vessel Value Of Landings In Cooper Landing ²
2000	3	0	0	27	31	0	0	\$0
2001	1	0	0	29	28	0	0	\$0
2002	3	0	0	31	30	0	0	\$0
2003	6	0	0	29	31	0	0	\$0
2004	4	0	0	30	34	0	0	\$0
2005	3	0	0	1	1	0	0	\$0
2006	5	0	0	4	0	0	0	\$0
2007	5	0	0	2	0	0	0	\$0
2008	2	0	0	1	0	0	0	\$0
2009	3	0	0	0	0	0	0	\$0
2010	3	0	0	0	0	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.]

Table 6. Halibut Catch Share Program Participation in Cooper Landing: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	1	1,052	104
2001	1	1,052	124
2002	1	1,052	128
2003	1	1,052	128
2004	1	1,052	142
2005	1	1,052	144
2006	1	1,052	143
2007	1	1,052	149
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 Cooper Landing: 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 Cooper Landing: 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 Cooper Landing: 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 lb refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

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

	<i>Total Net Pounds¹</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	--	--	--	--	--	--	--	--	--	0	0
Finfish	--	--	--	--	--	--	--	--	--	0	0
Halibut	--	--	--	--	--	--	--	--	--	0	0
Herring	--	--	--	--	--	--	--	--	--	0	0
Other Groundfish	--	--	--	--	--	--	--	--	--	0	0
Other Shellfish	--	--	--	--	--	--	--	--	--	0	0
Pacific Cod	--	--	--	--	--	--	--	--	--	0	0
Pollock	--	--	--	--	--	--	--	--	--	0	0
Sablefish	--	--	--	--	--	--	--	--	--	0	0
Salmon	--	--	--	--	--	--	--	--	--	0	0
<i>Total²</i>	--	--	--	--	--	--	--	--	--	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
Finfish	--	--	--	--	--	--	--	--	--	\$0	\$0
Halibut	--	--	--	--	--	--	--	--	--	\$0	\$0
Herring	--	--	--	--	--	--	--	--	--	\$0	\$0
Other Groundfish	--	--	--	--	--	--	--	--	--	\$0	\$0
Other Shellfish	--	--	--	--	--	--	--	--	--	\$0	\$0
Pacific Cod	--	--	--	--	--	--	--	--	--	\$0	\$0
Pollock	--	--	--	--	--	--	--	--	--	\$0	\$0
Sablefish	--	--	--	--	--	--	--	--	--	\$0	\$0
Salmon	--	--	--	--	--	--	--	--	--	\$0	\$0
<i>Total²</i>	--	--	--	--	--	--	--	--	--	\$0	\$0

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

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

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

² Totals only represent non-confidential data.

Recreational Fishing

Sportfishing is an immensely popular activity around Cooper Landing. Bolstered by its accessibility and extensive tourism infrastructure, the community receives a sizable influx of resident and non-resident recreationists annually. The number of registered sport fish businesses grew between 2000 and 2010 from 8 to 16, while the number of sport fish guide licenses peaked in 2004 at 40. However, the number of active sport fish guide businesses remained very low during those years (Table 11). In 2010, 5,551 sportfishing licenses were sold in the community, compared to 2,601 in 2000. In addition, residents were sold 195 sportfishing licenses that year, compared to 207 in 2000. Total sportfishing licenses sold in the community peaked in 2008 at 5,873. Total sportfishing licenses sold to residents peaked in 2005 at 243 (Table 11).

There are abundant sportfishing services available in Cooper Landing. Alaska River Adventures offers floatplane fly-outs for fly- and spin-fishing for trout and salmon. Alaska Wildland Adventures offers salmon and trout fishing excursions. Services include upper Kenai River fly fishing float trips and lower Kenai River powerboat trips. Angle 45 Adventures offers guided trips on the upper and middle Kenai River as well as its tributaries. Lodging and rafting trips are also available. Cooper Landing Fish Camp provides guide service and cabin rentals. Kenai River Float-n-Fish offers guided float fishing trips on the Kenai River. Alaska Rivers Company specialized in upper Kenai River sockeye, coho, Dolly Varden char, and rainbow trout fishing. Kenai River Fly Fishing offers guided trips on special Chugach National Forest and Kenai National Wildlife Refuge permits. Alaska Kenai Fishing For Fun provides guide services targeting salmon, trout, char, and grayling. Kenai Cache Outfitters is a full service outfitter providing tackle, processing, shipping, and guided trips. Charter booking services are also available. Finally, Alaska Troutfitters provides lodging, outfitting, and guiding services for trout and salmon.¹⁴⁸

Cooper Landing is located in the Kenai Peninsula Freshwater ADF&G Harvest Survey Area which includes all freshwater drainages on the Kenai Peninsula which drain into the Cook Inlet. According to ADF&G Harvest Survey data,¹⁴⁹ total freshwater angler days fished in the region declined between 2000 and 2010. In 2010, there was a combined total of 99,849 freshwater angler days fished, compared to 181,894 in 2000. Of those combined angler days fished, non-Alaska residents accounted for 28%, compared to 23% in 2000 (Table 11). According to ADF&G Harvest Survey data, species targeted by private anglers in Cooper Landing include king, coho, sockeye, and chum salmon, rainbow trout, Dolly Varden char, whitefish, Pacific halibut, rockfish, lingcod, Pacific cod, and razor clams. Records of charter activity in Cooper Landing are unavailable.¹⁵⁰

¹⁴⁸ Cooper Landing Chamber of Commerce (n.d.). *Homepage*. Retrieved February 22, 2012 from: <http://www.cooperlandingchamber.com/history.shtml>.

¹⁴⁹ 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).

¹⁵⁰ Ibid.

Table 11. Sport Fishing Trends, Cooper Landing: 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 Cooper Landing ²	Freshwater Angler Days Fished – Non-residents ³	Freshwater Angler Days Fished – Alaska Residents ³
2000	1	23	207	2,601	42,157	139,737
2001	1	24	214	2,643	28,245	69,053
2002	0	26	205	3,087	26,479	83,335
2003	0	28	225	3,100	35,299	80,368
2004	0	36	231	3,582	39,009	83,478
2005	0	34	243	3,762	37,309	91,489
2006	0	40	234	4,354	33,988	76,100
2007	0	39	221	5,329	31,105	89,061
2008	0	37	195	5,873	28,780	70,285
2009	0	38	194	5,561	24,959	77,945
2010	1	39	195	5,551	28,294	71,555

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

Cooper Landing is not designated as rural by the Federal Subsistence Board and therefore subsistence activities are only allowed on state-owned waterways in the area. Subsistence information is limited and ADF&G data on subsistence participation by household is unavailable. Of the reported harvests documented by ADF&G in Table 13, sockeye salmon were harvested most by residents, followed by coho and Chinook salmon. Reported salmon harvests peaked significantly in 2008 as did the number of subsistence salmon permits issued to residents. No residents were issued Subsistence Halibut Registration Certificates (SHARC) by NMFS between 2010 and when the program began. Data regarding marine mammal harvests are unavailable. Information regarding subsistence trends can be found in Tables 12 through 15.

Table 12. Subsistence Participation by Household and Species, Cooper Landing: 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 (Lb)
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, Cooper Landing: 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	4	4	13	n/a	1	n/a	306	n/a	n/a
2001	3	2	6	n/a	1	n/a	167	n/a	n/a
2002	3	3	1	n/a	n/a	n/a	241	n/a	n/a
2003	5	5	6	n/a	6	n/a	138	n/a	n/a
2004	4	4	5	n/a	10	n/a	205	n/a	n/a
2005	4	4	7	n/a	n/a	n/a	324	n/a	n/a
2006	1	1	4	n/a	n/a	n/a	202	n/a	n/a
2007	4	4	4	n/a	n/a	n/a	144	n/a	n/a
2008	87	80	2	n/a	7	n/a	1,141	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, Cooper Landing: 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, Cooper Landing: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Fritz Creek



People and Place

*Location*¹⁵¹

Fritz Creek is situated on the Kenai Peninsula, 7 miles northeast of Homer off the Sterling Highway. It is located on the north shore of Kachemak Bay and lies at the foot of Bald Mountain. The Fritz Creek CDP (Census Designated Place) encompasses 54.4 square miles of land but does not include water area. Fritz Creek is located the Kenai Peninsula Borough and the Kenai Recording District.

*Demographic Profile*¹⁵²

In 2010, there were 1,932 inhabitants in Fritz Creek, making it the 48th largest of 352 total Alaskan communities with recorded populations that year. Overall, between 1990 and 2010, the population in Fritz Creek increased from 1,426 to 1,932 people. Between 2000 and 2009, the average annual growth rate was 0.81%, reflecting the slow steady increase through the decade.

A majority (89.9%) of Fritz Creek residents identified themselves as White in 2010, along with 5.1% that identified as two or more races (5.1%), American Indian and Alaska Native (2.9%), and the remaining groups (e.g., Native Hawaiian and Other Pacific Islander, Black or African American, Asian, and some other race) each made up less than one percent of the population. None of Fritz Creek's residents identified themselves as Hispanic in 2000 or 2010. The percentage of White residents in the population declined by 3.1% since 2000. 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 estimated average household size in Fritz Creek was 2.28, a slight decline from 2.90 in 1990 and 2.43 in 2000. There has been an overall increase in occupied households, with 491 in 1990, 661 in 2000, and an estimated 848 in 2010. Of those occupied households surveyed in between 2006 and 2010, 76.4% were owner-occupied and 18.3% were renter-occupied. Of the 1,094 housing units reported in 2010, 22.4% were considered vacant, compared to 17.6% in 2000. There were no residents living in group quarters in 2000 and 2010.

¹⁵¹ 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.

¹⁵² 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>.

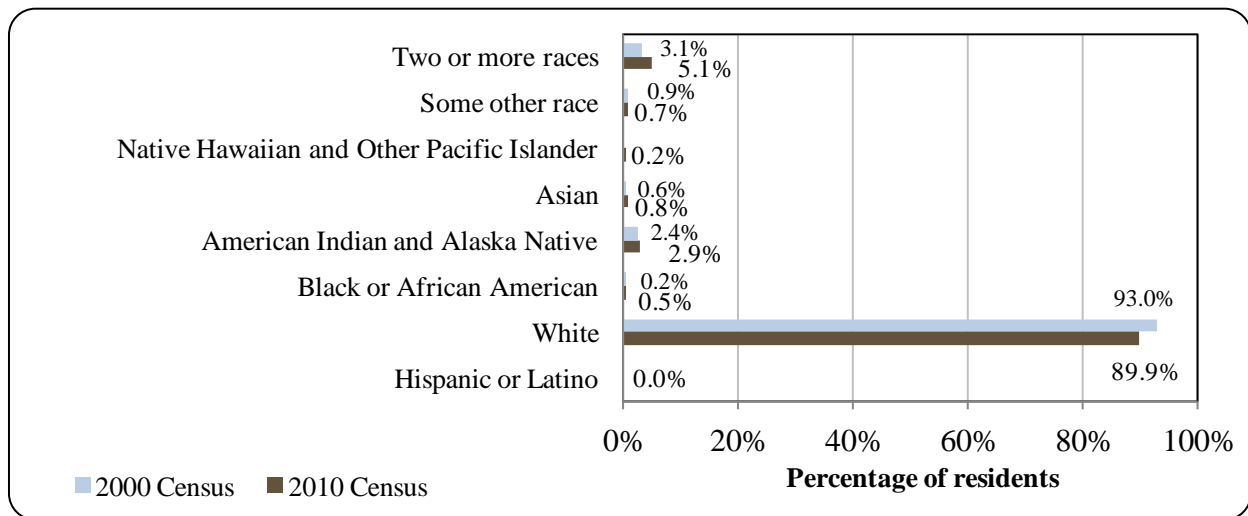
Table 1. Population in Fritz Creek from 1990 to 2010 By Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	1,426	-
2000	1,603	-
2001	-	1,663
2002	-	1,734
2003	-	1,743
2004	-	1,733
2005	-	1,764
2006	-	1,734
2007	-	1,777
2008	-	1,834
2009	-	1,818
2010	1,932	-

¹U.S. Census, 1990, 2000 and 2010 Decennial Census.

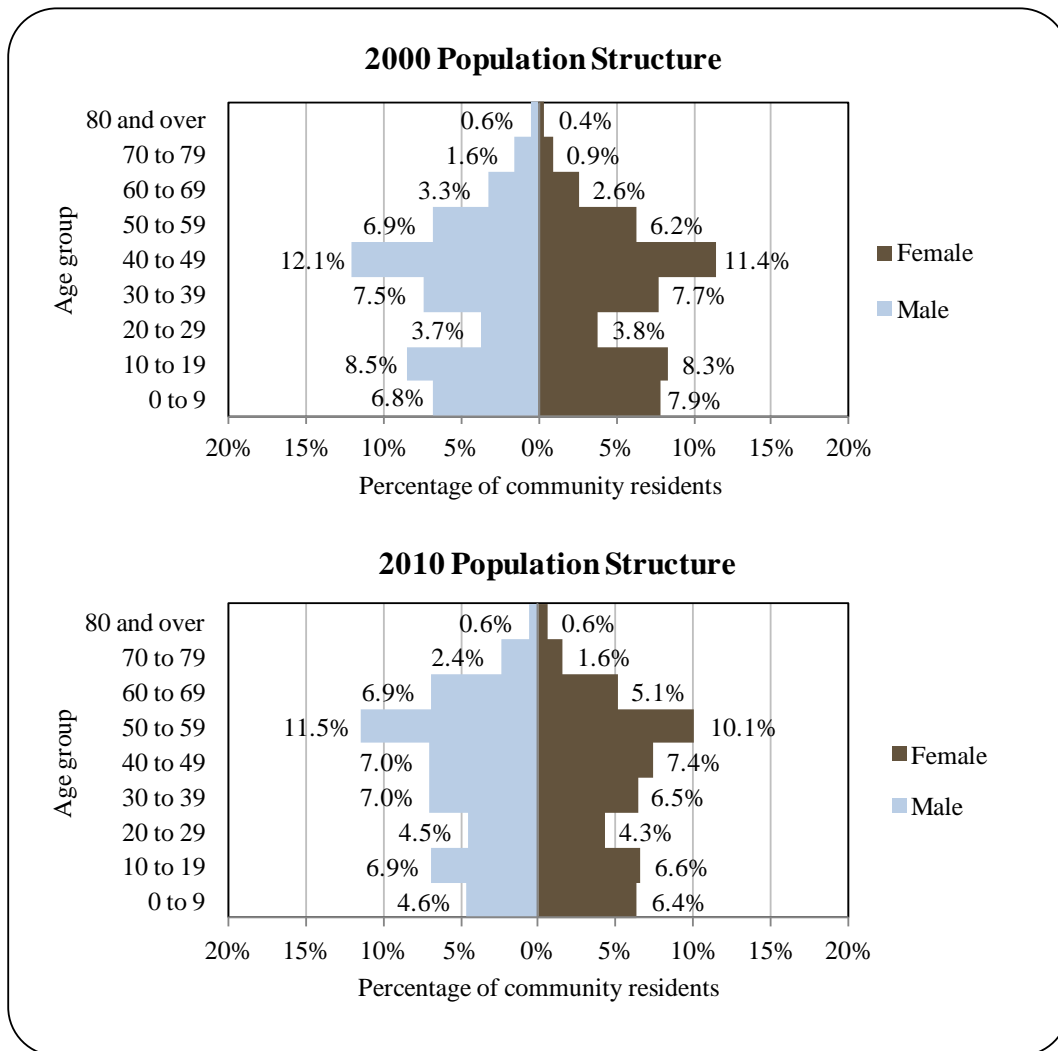
²Alaska Department of Labor. 2011. *Current population estimates for Alaskan Communities*. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

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



In 2010, the gender makeup of Fritz Creek was 51.6% male and 48.4% female, similar to the gender makeup of the state as a whole (52% male, 48% female). Compared to 2000, the population of Fritz Creek appears to have aged. The median age of Fritz Creek residents in 2010 was 42.3 years (higher than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years). It also shows an increase from the median age in 2000 of 38.1 years. The percentage of the population under the age of 20 decreased from 31.4% in 2000 to 24.5% in 2010, while the percentage of the population over the age of 60 increased from 9.2% to 17.2%. Gender distribution was relatively even across age cohorts in both 2000 and 2010. Further information regarding trends in Fritz Creek’s population structure is displayed in Figure 2.

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



According to the 2006-2010 American Community Survey (ACS),¹⁵³ in terms of educational attainment, an estimated 93% of residents aged 25 and over held a high school diploma or higher degree in 2010, compared to 91% of Alaska residents overall. Also in 2010, an estimated 5% of the population had less than a 9th grade education, compared to 4% of Alaska residents overall; an estimated 2% had a 9th to 12th grade education but no diploma, compared to 6% of Alaska residents overall; an estimated 29% had some college but no degree, compared to 28% of Alaska residents overall; an estimated 5% earned an Associate’s degree, compared to 8% of Alaska residents overall; an estimated 21% earned a Bachelor’s degree, compared to 17% of Alaska residents overall; and an estimated 11% earned a graduate or professional degree,

¹⁵³ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

compared to 10% of Alaska residents overall.

History, Traditional Knowledge, and Culture

Due to its maritime climate and easy access, southcentral Alaska has long been a gathering place for Native Alaskans of diverse places. Human occupation of, and migration across, the Kenai Peninsula is known to date from some several thousand years ago at places such as Beluga Point along the Seward Highway. The area around Kachemak Bay is considered to have historically been Dena'ina Athabascan Indian territory, although archaeological sites also suggest the presence of Pacific Eskimo or Alutiiq people as early as 4,500 years ago.¹⁵⁴

The northeastern portion of Fritz Creek CDP borders the community of Voznesenka, a settlement of *Staroveri*, or “Russian Old Believers.”¹⁵⁵ Some Old Believer families also live interspersed with other families throughout the Fritz Creek CDP, known as “Fritz Creek East.”¹⁵⁶ The predecessors of the Alaskan *Staroveri* came to the Kenai Peninsula in the 1960s by way of Woodburn, Oregon, after many decades spent in China and Turkey and various other intermediary countries (see the *Additional Information* section for more history).¹⁵⁷ A group of Old Believer settlers received a grant from the Tolstoy Foundation in New York to purchase land at Nikolaevsk in 1967, and in 1968 the first families arrived.¹⁵⁸ Three additional communities of Old Believers were later founded on the Kenai Peninsula, including Voznesenka, Razdolna, and Kachemak Selo. A majority of residents of these communities are members of the Old Believers, and are careful to keep their traditions alive. Many children learn Russian as their first language, and learn English once they begin formal schooling. Many residents wear traditional clothing.^{159,160}

According to the Alaska Historical Commission, Fritz Creek itself was named by R.W. Stone of the U.S. Coast & Geodetic Survey in 1904. Russian, and subsequently American, attempts to exploit Kachemak Bay coal in the area in late 1800's proved to be unsuccessful. Fritz Creek is popularly known as the “End of The Road” and the “Cosmic Hamlet by the Sea.” It was popularized by Tom Bodett in his series of books about life at the “End of the Road.” The Fritz Creek area, like nearby Halibut Cove, is now a mecca for famous and aspiring artists, as well as those who enjoy wilderness and outdoor adventure.¹⁶¹

¹⁵⁴ Halliday, Jan. (1998). *Native Peoples of Alaska: A Traveler's Guide to Land, Art, and Culture*. Seattle: Sasquatch Books.

¹⁵⁵ Lee Silva, Amber (2009). *Unsettling Diaspora: The Old Believers of Alaska*. Masters Thesis, McGill University, Montreal. Retrieved January 26, 2012 from http://digitool.library.mcgill.ca/webclient/StreamGate?folder_id=0&dvs=1328564311584~157.

¹⁵⁶ Fall, J.A., V. Vanek, L. Brown, G. Jennings, R.J. Wolfe, and C. Utermohle. (2000). *Wild Resource Harvests and Uses by Residents of Selected Communities of the Kenai Peninsula Borough*. Alaska Dept. of Fish and Game Division of Subsistence, Technical Paper No. 253. Retrieved March 19, 2013 from <http://www.subsistence.adfg.state.ak.us/download/Technical%20Papers/tp253.pdf>.

¹⁵⁷ Johnson, Patricia White (1982). *Dress and Acculturation among Russian Old Believers in Oregon*. Masters Thesis, Oregon State University. Retrieved January 30, 2012 from <http://ir.library.oregonstate.edu/xmlui/handle/1957/7891>.

¹⁵⁸ 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.

¹⁵⁹ Homer News. (2013). “Russian Old Believer communities keep their traditions alive.” *2013 Visitor's Guide*. Retrieved March 20, 2013 from http://homer.alaska.com/stories/Russian_Villages.shtml.

¹⁶⁰ See footnote 156.

¹⁶¹ See footnote 158.

Natural Resources and Environment

Fritz Creek is located on the north shore of the mountainous and picturesque Kachemak Bay. Located at the base of Bald Mountain, Fritz Creek is an ideal destination for hiking and wilderness exploration. Winter temperatures range from 14 to 27 °F, and summer temperatures vary from 45 to 65 °F. Average annual precipitation is 24 inches.¹⁶²

Protected areas near Fritz Creek include Kachemak Bay State Park and Wilderness, the Kachemak Bay State Critical Habitat Area, and the Kenai Wilderness. The Kachemak Bay State Park and Wilderness is Alaska's first and only "wilderness park". A small unit of the State Park and Wilderness, known as Cottonwood and Eastland Creeks, is located on the northern shore of Kachemak Bay within the boundaries of Fritz Creek CDP, but a majority of the State Park's 400,000 acres are located on the southern side of Kachemak Bay. Its terrain includes mountains, glaciers, forests, and ocean. Visitors to the State Park enjoy fishing, boating, wildlife viewing, kayaking, hiking, camping, and mountain sports.^{163,164} Portions of Kachemak Bay State Park and Wilderness overlap with the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.¹⁶⁵

Kachemak Bay itself was designated as a State Critical Habitat Area (CHA) by the Alaska Legislature in 1974. In 1972, the Fox River Flats, at the mouth of the Bay, was also designated a CHA by the Legislature. The purpose of these CHAs is to "protect and preserve habitat areas especially crucial to the perpetuation of fish and wildlife, and to restrict all other uses not compatible with that primary purpose." Eleven species of marine mammals utilize Kachemak Bay, including sea otters, Steller sea lions, harbor seals, beluga, minke, and orca whales, harbor porpoises, and Dall's porpoises, as well as a diversity of marine plants and invertebrates, birds, and fish and shellfish. The Fox River Flats and associated intertidal zone support at least 21 species of terrestrial mammals, including moose, black bear, brown bear, coyote, wolf, beaver, river otter, and small furbearers.¹⁶⁶ In addition to their status as CHAs, Kachemak Bay and the Fox River Flats were designated as part of the National Estuarine Research Reserve System (NERRS) in 1999, a network of 28 estuaries around the U.S. representing different biogeographic regions that are used for long-term research, water-quality monitoring, education, and coastal stewardship. It is the only Research Reserve located in Alaska.¹⁶⁷

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes—Fourpeaked, Augustine, Iliamna, Redoubt and Mount Spurr—are located within the Kenai Peninsula Borough, and are all situated on the west side of Cook Inlet. Major damage can also be caused by secondary earthquake hazards, including landslides,

¹⁶² See footnote 158.

¹⁶³ Alaska Dept. of Natural Resources (2009). *Kachemak Bay State Park and State Wilderness Park*. Retrieved January 27, 2012 from <http://dnr.alaska.gov/parks/units/kbay/kbay.htm>.

¹⁶⁴ Alaska Dept. of Natural Resources. (2013). *Map of Kachemak Bay State Park & Wilderness Park*. Retrieved March 20, 2013 from <http://dnr.alaska.gov/parks/units/kbay/kbaymap.htm>.

¹⁶⁵ Wilderness.net website (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from <http://www.wilderness.net>.

¹⁶⁶ Alaska Dept. of Fish and Game (1993). *Kachemak Bay and Fox River Flats Critical Habitat Areas Management Plan*. Retrieved June 14, 2012 from http://www.adfg.alaska.gov/static/lands/protectedareas/_management_plans/kachemak_bay.pdf.

¹⁶⁷ National Estuarine Research Reserve System (n.d.). *Kachemak Bay Research Reserve website*. Retrieved June 15, 2012 from <http://www.nerrs.noaa.gov/Reserve.aspx?ResID=KBA>.

floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures, and soil liquefaction.¹⁶⁸ Other natural hazards that have also been identified as threats in the Kenai Peninsula Borough include flooding, wildfires, snow and avalanches, seiches, severe weather, erosion, and drought.¹⁶⁹

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields onshore and offshore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.¹⁷⁰

According to the Alaska Department of Environmental Conservation, there are no notable active environmental remediation sites located in Fritz Creek as of May 2012.¹⁷¹

Current Economy¹⁷²

The economy of Fritz Creek is intimately linked with that of nearby Homer, which is relatively diverse though predominantly based on fishing and fish processing. The top employers in Fritz Creek in 2010 included the Kenai Peninsula Borough School, South Peninsula Hospital Inc., State of Alaska, South Peninsula Behavioral Health Services Inc., City of Homer, Safeway Inc., University of Alaska, Lands End Resort, Job Ready Inc., and the Arctic Slope Regional Corporation Energy Services O&M Inc.¹⁷³

Based on the 2006-2010 ACS,¹⁷⁴ in 2010, the estimated per capita income in Fritz Creek was \$24,937 and the estimated median household income was \$53,393, compared to \$18,937 and \$41,400 in 2000, respectively. After adjusting for inflation by converting 2000 values into 2010 dollars,¹⁷⁵ the real per capita income (\$24,902) and real median household income (\$54,440) indicate that both individual and household earnings increased only slightly between 2000 and 2010. In 2010, Fritz Creek ranked 109th of 305 communities for which per capita income was estimated, and 111th of 299 communities for which median household income was estimated. However, Fritz Creek's small population size may have prevented the ACS from accurately portraying economic conditions.¹⁷⁶ An alternative estimate of per capita income is

¹⁶⁸ Kenai Peninsula Borough (2010). *All-Hazard Mitigation Plan*. Retrieved July 31, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

¹⁶⁹ State of Alaska (2002). *Hazard Mitigation Plan*. Retrieved July 31, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

¹⁷⁰ Resource Development Council. (n.d.). *Alaska's Oil and Gas Industry*. Retrieved July 31, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

¹⁷¹ Alaska Dept. of Environmental Conservation (n.d.). *List of contaminated site summaries by region*. Retrieved July 31, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

¹⁷² Unless otherwise noted, all monetary data are reported in nominal values.

¹⁷³ Alaska Department of Labor and Workforce Development (n.d.). *Alaska Local and Regional Information Database*. Retrieved June 15, 2012 from <http://live.laborstats.alaska.gov/alari/>.

¹⁷⁴ 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>.

¹⁷⁵ 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>).

¹⁷⁶ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not

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 Fritz Creek in 2010 is \$13,118.¹⁷⁷ This estimate is lower than both reported per capita income in 2000 and the 2006-2010 ACS estimate, suggesting that caution is warranted when referencing an increase in income over the decade. 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.

Fritz Creek did not meet the Denali Commission's primary criteria as a "distressed community" in 2010. However, Fritz Creek did make a list of additional communities that meet the distressed classification when a plus/minus 3% formula is used.¹⁷⁸

Also based on the 2006-2010 ACS, in 2010, an estimated 70.1% of residents aged 16 and older were estimated to be in the civilian labor force, compared to the statewide rate of 68.8%. That year, unemployment was estimated at 7.1%, compared to 5.9% statewide, and an estimated 9.7% of Fritz Creek residents were living below the poverty line, compared to an estimated 9.5% of Alaska residents overall. Of those employed in the civilian labor force in 2010, an estimated 55.2% worked in the private sector, along with 21.5% in the public sector and 23.3% estimated to be self-employed.

Estimates of employment by industry suggest that the largest number of Fritz Creek residents were employed in education services, health care, and social assistance sectors (26.1%), followed by arts, entertainment, recreation, accommodations, and food services (12.4%), and professional, scientific, and management (11.3%). Compared with data collected in the 2000 Decennial Census, significant proportional increases in employment occurred in professional, scientific, and management industries, information industries, and education services, health care, and social assistance. There was also a slight decline in the percentage of those estimated to be employed in trade, construction, and transportation, warehouse, and utilities sectors over the decade. Employment by industry is presented in Figure 3.

When viewing employment by occupation, 2006-2010 ACS estimates suggest that the greatest percentage of the workforce was employed in management/professional occupations in 2010 (38.8%), with the next greatest portion of the workforce in sales/office occupations (22.9%). Compared to 2000, an increase was observed in the percentage of workers employed in management/professional occupations, while a decline was observed in natural resource/construction/maintenance employment. Employment is broken down by occupation in Figure 4.

In 2010, 6.6% of the Fritz Creek workforce was estimated to be employed in agriculture, forestry, fishing, hunting or mining industries. Likewise, detailed occupation tables show 3.12% of the workforce employed in farming, fishing, and forestry occupations that year. It is important to note that the number of individuals employed in the fishing industry may be underestimated in census statistics as fishermen may hold another job and characterize their employment

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.

¹⁷⁷ See footnotes 173 and 174.

¹⁷⁸ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

accordingly. As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents’ activity in the subsistence economy.

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

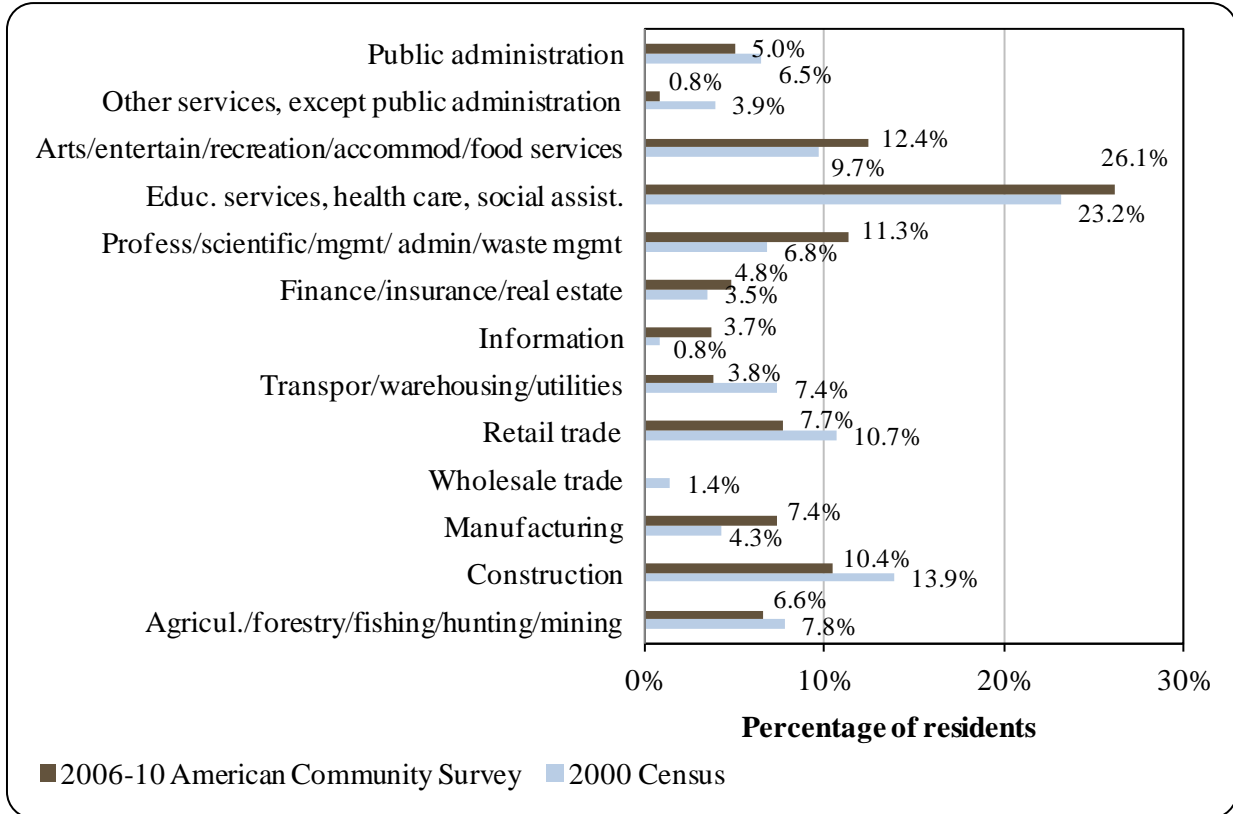
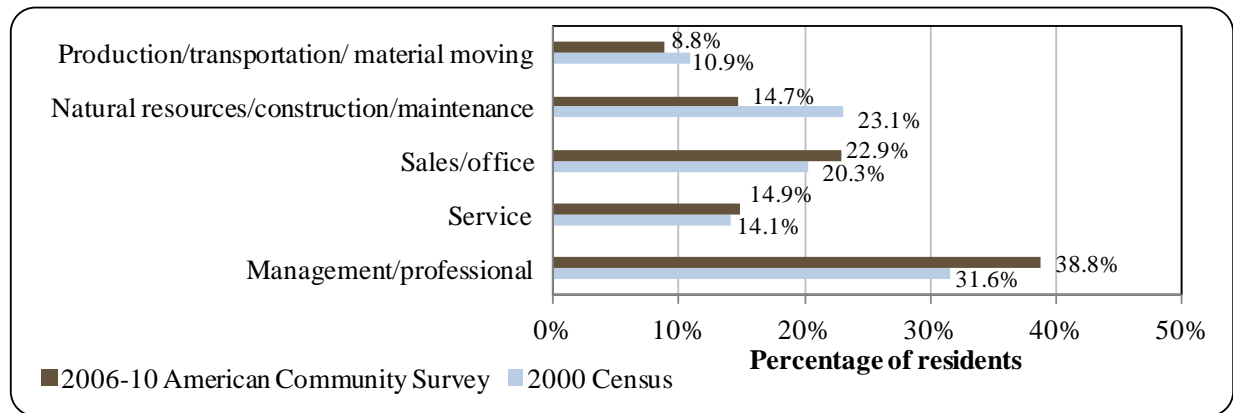


Figure 4. Local Employment by Occupation in 2000-2010, Fritz Creek (U.S. Census).



Governance

Fritz Creek is an unincorporated community located within the Kenai Peninsula Borough. Because of the community’s status as unincorporated, there are no municipal or borough finances dispersed to the community (Table 2). Fritz Creek was not included in the Alaska Native Claims Settlement Act (ANCSA) and therefore has no land allotment under the Act. Fritz Creek is not a federally recognized Native village nor does the community have a Native village corporation or belong to a regional Native corporation.

The closest offices of the Alaska Department of Fish and Game (ADF&G), the Alaska Department of Natural Resources, and the National Marine Fisheries Service (NMFS) are located in Homer. The closest offices of the Alaska Department of Commerce, Community, and Economic Development and the U.S. Bureau of Citizenship and Immigration Services are located in Anchorage.

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

Year	Total municipal revenue ¹	Sales tax revenue ²	State/Community Revenue Sharing ³	Fisheries-related grants (state and federal) ⁴
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

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

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

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

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

⁴ Alaska Department of Commerce, Community, and Economic Development. (n.d.). *Community Funding Database*. Retrieved at http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm. Data retrieved April 15, 2011.

Infrastructure

*Connectivity and Transportation*¹⁷⁹

Fritz Creek is readily accessible by road along the Sterling Highway, which connects the community to Anchorage. Airport, harbor and docking facilities are available in nearby Homer, which has a deep-water dock capable of accommodating 340-ft-long vessels and a boat harbor with moorage for 920 vessels. The community receives year-round barge service. Ferry service is accessible to residents of Fritz Creek via the Alaska Marine Highway Terminal located in Homer. The city-owned airport in Homer is the nearest airport and has a 6,700-ft paved runway as well as a seaplane base. As of June 2012, roundtrip airfare from Anchorage to Homer costs \$255.¹⁸⁰

*Facilities*¹⁸¹

Electricity in Fritz Creek is provided by Homer Electric Association, Inc. Most households in Fritz Creek haul water, have water delivered, or use individual well water. Most have individual septic systems for sewage disposal, while the remainder use privies. Sixty to 70% of households are fully plumbed. The Kenai Peninsula Borough provides a refuse transfer station in Anchor Point, at mile 157 Sterling Highway, and residents also use Homer sanitation facilities. Any fishing-related infrastructure that residents rely on is accessible in Homer.

Safety services are provided by state troopers posted in nearby Homer. Residents of Fritz Creek also rely upon City of Homer and Borough officials for fire protection services. The community does not have its own post office nor does it have an internet service provider. Fritz Creek does have local and long-distance telephone services.

*Medical Services*¹⁸²

The nearest hospital to Fritz Creek is the South Peninsula Hospital in Homer. Emergency services have highway and coastal access and are within 30 minutes of the South Peninsula Hospital.

*Educational Opportunities*¹⁸³

In 2012, the Fritz Creek had one school, the Kachemak Selo School, which offers pre-school through 12th grade education, and has 6 teachers and 75 students. Fritz Creek is within the Kenai Peninsula School District.

¹⁷⁹ Alaska Dept. of Comm. and Rural Affairs (n.d.). *Community Database Online*. Retrieved May 17, 2012 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

¹⁸⁰ Airfare was calculated using lowest fare. <http://www.travelocity.com> (retrieved November 22, 2011).

¹⁸¹ See footnote 179.

¹⁸² Ibid.

¹⁸³ 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

Commercial harvest of salmon in Cook Inlet began in 1882,¹⁸⁴ with the development of a cannery at the mouth of the Kasilof River, in English Bay. An additional 17 canneries had been built in central Alaska by 1890.¹⁸⁵ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after the development of diesel engines, which allowed fishing vessels to undertake longer trips.¹⁸⁶

Today, ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kachemak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gill net is the only gear allowed in the Northern District, while set and drift gill net and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gill nets are limited to the Kachemak Bay sub-district.¹⁸⁷

Groundfish and crab fisheries that occur within three nautical miles (nmi) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond three nmi in the U.S. EEZ (Exclusive Economic Zone) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission. Kachemak Bay is considered to be one of Alaska's most popular destinations for chartered halibut fishing.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The TAC (Total Allowable Catch) set by NOAA Fisheries applied to both fisheries. Beginning in 1997, an additional "state-waters fishery" for Pacific cod was initiated in Cook Inlet. Management plans for fisheries in state waters are approved by the Alaska Board of Fish, and GHL (guideline harvest limits) are set by ADF&G. Typically, fisheries in state waters are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.¹⁸⁸

¹⁸⁴ 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>.

¹⁸⁵ Cook, Linda, and Frank Norris (1998). *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved July 31, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

¹⁸⁶ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

¹⁸⁷ See footnote 184.

¹⁸⁸ 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 July 31, 2012 from <http://www.adfg.alaska.gov/FedAidPDFs/sp05-09.pdf>.

Residents of Fritz Creek have long been involved in the fishing industry, especially given its close proximity to Homer, which offers access to fishing grounds and fish processing services. Fritz Creek is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area. Fritz Creek is not eligible to participate in either the CQE (Community Quota Entity) or the CDQ (Community Development Quota) program.

Processing Plants

According to ADF&G's 2010 Intent to Operate list, Fritz Creek does not have a registered processing plant. Since there are no fish processing plants in the community, there were no fish landings reported in 2010. The nearest shore-side processing plants are located in Homer.

Fisheries-Related Revenue

Based on the best available data and reporting system, no fisheries-related revenue was received by the community of Fritz Creek between 2000 and 2010 (Table 3).

Commercial Fishing

Between 2000 and 2010, Fritz Creek residents participated in both state and federal fisheries as vessel owners, crew license holders, and permit and quota share account holders. In 2010, 12 Fritz Creek residents - or less than one percent of the total population - held a total of 23 state-issued Commercial Fisheries Entry Commission (CFEC) permits (Table 4). Of all the CFEC permits issued, 70% were actively fished in 2010. Between 2000 and 2010, the primary CFEC permits were held in salmon, groundfish, crab, and halibut fisheries. The number of salmon permit holders fluctuated between three and seven during the 2000-2010 period. Most recently, the majority of residents holding permits participated in the statewide halibut longline, Cook Inlet Dungeness crab, the Cook Inlet salmon drift gill net, and the statewide miscellaneous saltwater finfish fisheries. In addition, one local permit holder participated in each of the following fisheries: statewide sablefish longline, lingcod hand troll, miscellaneous saltwater finfish pot or mechanical jig fisheries, herring spawn in Prince William Sound, and Tanner crab pot gear fishery off Kodiak Island. Three Federal Fisheries Permits (FFP) and three federal License Limitation Program (LLP) permits were also held by Fritz Creek residents (Table 4).

There were 9 vessel owners in 2010, compared to 10 in 2000, and 17 crew license holders in 2010, compared to 23 in 2000. There were no vessels homeported between 2000 and 2006. There was one vessel homeported in 2007, and there were two vessels homeported from 2008 to 2010 (Table 5).

In 2000, five Fritz Creek residents held quota share accounts in the federal halibut catch share fishery. This number increased to six in 2001, declined to three in 2004, and increased to five again in 2010. Total halibut quota shares held increased from 296,479 in 2000 to 391,637 by 2010, and the maximum number of shares was held in 2008 and 2009. The annual halibut individual fishing quota (IFQ) allotment between 2000 and 2010 ranged from 32,750 lb to 81,051 lb. In 2000, two Fritz Creek residents held quota share accounts in the federal sablefish catch share fishery. Between 2000 and 2010, this number declined to one only in 2007. Total

sablefish shares held between 2000 and 2005 was the same each year, at 111,580. Total sablefish shares held declined to approximately 28,000 in 2006 and 2007, then increased to 629,498 in 2008 and 2009. Shares held in 2010 totaled 506,333. Between 2000 and 2010, annual sablefish IFQ allotments ranged from 3,189 to 58,458 lb. There was a 75.4% decline in allotments between 2005 and 2006, and a significant increase in allotments from 2007 (3,189) and to 2008 (58,458). No quota share accounts were held by Fritz Creek residents in federal crab catch share fisheries during the 2000-2010 period. Information about federal catch share participation is presented in Tables 6 through 8.

Between 2000 and 2010, no landings were made in Fritz Creek, due to the fact that no fish buyers or shore-side processing plants were located in the community during this time (Tables 5 and 9). However, local residents did land catch in other communities. Non-confidential landed pounds between 2000 and 2010 ranged from a low of 186,407 lb in 2002 and peaking at 1,614,562 lb in 2007, with an ex-vessel value of \$85,397 and \$650,814, respectively, and only included salmon between 2000 and 2009 (Table 10). In 2010, Fritz Creek residents landed a total of 495,410 lb of salmon, compared to 206,368 lb of salmon landed in 2000 (Table 10). Between 2000 and 2010, 2010 was the only year in which landings by residents of Pacific cod were not confidential, with a total of 50,084 lb landed with an ex-vessel value of \$44,221. Landings made by residents of other species during this time period are considered confidential due to the small number of participants.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fisheries Resource Landing Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>Total municipal revenue⁵</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>

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

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

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

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Fritz Creek

Table 4. Permits and Permit Holders by Species in Fritz Creek: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	4	4	5	5	5	5	4	4	3	3	3
	Active permits	1	1	2	2	2	2	1	1	1	1	1
	% of permits fished	25%	25%	40%	40%	40%	40%	25%	25%	33%	33%	33%
	Total permit holders	3	3	4	4	4	4	3	3	3	3	3
Crab (LLP) ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Federal Fisheries Permits ¹	Total permits	3	3	3	3	3	3	2	2	3	2	3
	Fished permits	0	0	0	2	0	0	1	2	2	2	2
	% of permits fished	0%	0%	0%	67%	0%	0%	50%	100%	67%	100%	67%
	Total permit holders	3	3	3	2	2	2	2	2	2	2	3
Crab (CFEC) ²	Total permits	4	5	4	4	4	4	4	4	5	3	4
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	4	5	4	4	4	4	4	4	5	3	4
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	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Halibut (CFEC) ²	Total permits	6	4	4	4	5	5	4	4	5	5	4
	Fished permits	3	4	3	4	4	5	4	3	5	5	3
	% of permits fished	50%	100%	75%	100%	80%	100%	100%	75%	100%	100%	75%
	Total permit holders	5	4	4	4	5	5	4	4	5	5	4
Herring (CFEC) ²	Total permits	2	2	2	2	2	2	2	2	2	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%	0%	0%	0%
	Total permit holders	2	2	2	2	2	2	2	2	2	1	1

Table 4 Cont. Permits and Permit Holders by Species in Fritz Creek: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	2	2	2	2	2	2	1	2	2	1	1
	Fished permits	2	2	2	2	2	2	1	1	2	1	1
	% of permits fished	100%	100%	100%	100%	100%	100%	100%	50%	100%	100%	100%
	Total permit holders	2	2	2	2	2	2	1	2	2	1	1
Groundfish (CFEC) ²	Total permits	9	5	4	3	3	3	1	1	1	2	6
	Fished permits	7	2	1	2	1	2	1	1	1	2	5
	% of permits fished	78%	40%	25%	67%	33%	67%	100%	100%	100%	100%	83%
	Total permit holders	5	3	2	2	2	2	1	1	1	2	4
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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	8	4	5	3	5	5	6	8	8	7	7
	Fished permits	7	4	5	3	4	5	5	8	7	5	7
	% of permits fished	88%	100%	100%	100%	80%	100%	83%	100%	88%	71%	100%
	Total permit holders	7	4	6	3	5	5	5	7	7	6	6
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>31</i>	<i>22</i>	<i>21</i>	<i>18</i>	<i>21</i>	<i>21</i>	<i>18</i>	<i>21</i>	<i>23</i>	<i>19</i>	<i>23</i>
	<i>Fished permits</i>	<i>19</i>	<i>12</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>14</i>	<i>11</i>	<i>13</i>	<i>15</i>	<i>13</i>	<i>16</i>
	<i>% of permits fished</i>	<i>61%</i>	<i>55%</i>	<i>52%</i>	<i>61%</i>	<i>52%</i>	<i>67%</i>	<i>61%</i>	<i>62%</i>	<i>65%</i>	<i>68%</i>	<i>70%</i>
	<i>Permit holders</i>	<i>14</i>	<i>11</i>	<i>13</i>	<i>10</i>	<i>13</i>	<i>12</i>	<i>11</i>	<i>13</i>	<i>14</i>	<i>10</i>	<i>12</i>

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

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

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 Fritz Creek: 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 Fritz Creek ²	Total Net Lb Landed In Fritz Creek ²	Total Ex-Vessel Value Of Landings In Fritz Creek ²
2000	23	0	0	10	0	0	0	\$0
2001	17	0	0	8	0	0	0	\$0
2002	13	0	0	8	0	0	0	\$0
2003	15	0	0	7	0	0	0	\$0
2004	13	0	0	8	0	0	0	\$0
2005	13	0	0	7	0	0	0	\$0
2006	13	0	0	8	0	0	0	\$0
2007	17	0	0	10	1	0	0	\$0
2008	12	0	0	11	2	0	0	\$0
2009	13	0	0	6	2	0	0	\$0
2010	17	0	0	9	2	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.]

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

Year	Number of Halibut Quota Share Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (lbs)
2000	5	296,479	32,750
2001	6	305,355	38,837
2002	5	353,569	44,471
2003	4	314,027	47,025
2004	3	313,777	50,757
2005	4	391,549	60,642
2006	4	391,549	58,301
2007	5	391,637	56,648
2008	6	544,763	81,051
2009	6	544,763	75,443
2010	5	391,637	43,161

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 Fritz Creek: 2000-2010.

Year	Number of Sablefish Quota Share Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (lbs)
2000	2	111,580	10,860
2001	2	111,580	11,370
2002	2	111,580	12,164
2003	2	111,580	13,835
2004	2	111,580	15,500
2005	2	111,580	13,722
2006	2	28,773	3,370
2007	1	28,386	3,189
2008	2	629,498	58,458
2009	2	629,498	51,914
2010	2	506,333	37,098

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 Fritz Creek: 2000-2010.

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

Note: n/a indicates that no data were reported for that year. 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 Fritz Creek: 2000-2010.

	<i>Total Net Lbs¹</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 lb refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Table 10. Landed Pounds and Ex-Vessel Revenue, by Species, by Fritz Creek Residents: 2000-2010.

	<i>Total Net Lbs¹</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	--	--	--	--	--	--	--	--	--	--	150,084
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	206,368	186,407	208,618	--	--	194,183	1,614,562	1,435,867	791,476	924,011	495,410
<i>Total²</i>	<i>206,368</i>	<i>186,407</i>	<i>208,618</i>	--	--	<i>194,183</i>	<i>1,614,562</i>	<i>1,435,867</i>	<i>791,476</i>	<i>924,011</i>	<i>645,494</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	--	--	--	--	--	--	--	--	--	--	\$44,221
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	\$128,235	\$102,498	\$85,397	--	--	\$200,169	\$445,490	\$650,814	\$523,236	\$423,788	\$453,689
<i>Total²</i>	<i>\$128,235</i>	<i>\$102,498</i>	<i>\$85,397</i>	--	--	<i>\$200,169</i>	<i>\$445,490</i>	<i>\$650,814</i>	<i>\$523,236</i>	<i>\$423,788</i>	<i>\$497,910</i>

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

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

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

² Totals only represent non-confidential data.

Recreational Fishing

Recreational fishing is important to communities on the Kenai Peninsula and Kachemak Bay is no exception. Kachemak Bay is considered to be one of Alaska's most popular destinations for recreational halibut fishing. While Fritz Creek itself has few active charter fishing companies, it does offer a less crowded sportfishing scene than nearby Homer, which is considered a major sportfishing destination. The number of active sport fish guide businesses increased slightly over the 2000-2010 period, from one in 2000 to three in 2010, while the number of licensed sport fish guides present in the community ranged between three and eight per year (Table 11). Statistics provided by charter logbook information indicate that all five species of salmon, halibut, lingcod, other rockfish, pelagic rockfish, shark, and yelloweye are caught by anglers fishing from charter vessels based in Fritz Creek.¹⁸⁹

No sportfishing licenses were sold in Fritz Creek between 2000 and 2006. Starting in 2007, limited licenses were sold each year, topping out at 19 licenses sold in 2010. The number of licenses issued to residents over time has increased only slightly. Residents held 212 sportfishing licenses that year, compared to 175 in 2000. Given that residents hold significant numbers of sportfishing licenses and few are actually sold in the community, residents are likely travelling to other communities to purchase their licenses. The Alaska Statewide Harvest Survey,¹⁹⁰ conducted by ADF&G between 2000 and 2010, noted harvesting of the following species by Fritz Creek sport fishermen: Chinook, coho, and sockeye salmon are harvested by recreational fishermen in both salt and freshwater, while Dolly Varden char are targeted in freshwater only. Other saltwater recreational species caught by Fritz Creek fishermen include Pacific halibut, rockfish, and Pacific cod. The survey also noted recreational harvest of hardshell and razor clams by Fritz Creek residents.

Fritz Creek is located within Alaska Sport Fishing Survey Area PF – Kenai Peninsula (Freshwater) – and PS – Cook Inlet (Saltwater). Information about saltwater and freshwater sportfishing activity is also available at these two regional scales. Between 2000 and 2010, Alaska residents fished more angler days in freshwater than non-Alaska residents each year, while non-residents fished more saltwater days. The percentage of total saltwater angler days fished by non-Alaska residents increased over the decade, from 63% in 2000 to 70% in 2010. The percentage of freshwater angler days fished by non-Alaska residents also increased, from 23% in 2000 to 28% in 2010 (Table 11).

¹⁸⁹ 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.]

¹⁹⁰ 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).

Table 11. Sport Fishing Trends, Fritz Creek: 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 Fritz Creek ²
2000	1	4	175	0
2001	1	4	169	0
2002	1	5	215	0
2003	2	7	192	0
2004	1	7	179	0
2005	1	3	195	0
2006	3	5	198	0
2007	3	8	193	15
2008	2	4	181	8
2009	2	5	198	15
2010	3	5	212	19

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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 plays an essential role for households located within the Fritz Creek CDP. In 1998, the ADF&G Division of Subsistence conducted a subsistence survey of households in the Fritz Creek area. The survey found that 100% of households in both Voznesenka and Fritz Creek East utilized subsistence resources. The survey also found that a large majority of these households engaged in hunting, fishing, or gathering, and engaged in sharing of wild resources between households. However, trapping was not found to be a common activity among Fritz Creek residents. According to the survey, halibut was the most frequently used subsistence resource by area residents.¹⁹¹

Between 2000 and 2010, no information was reported by ADF&G regarding the percentage of households in Fritz Creek East and Voznesenka using different marine resources, or per capita harvest of subsistence resources by area residents (Table 12). However, the earlier ADF&G subsistence survey provides information about species of marine invertebrates, non-salmon fish (not including halibut), and marine mammals harvested by Fritz Creek and Voznesenka households in 1998. The species of marine invertebrates harvested by the greatest percentage of households in the Fritz Creek CDP area overall included razor clams, mussels, butter clams, and Pacific littleneck clams. Species of non-salmon fish used for subsistence purposes by the greatest percentage of households included red and black rockfish, eulachon (hooligan candlefish), sablefish, Dolly Varden char, Pacific cod, and rainbow trout. The survey did not provide information about marine mammal harvest by households in this area. It is important to note that, while households in both Voznesenka and Fritz Creek East were recorded as utilizing marine invertebrates and non-salmon fish, rates of marine invertebrate harvest were highest in Fritz Creek East, and rates of non-salmon fish harvest were highest in Voznesenka.¹⁹²

Between 2000 and 2010, no information was available from management agencies regarding marine mammal harvest by Fritz Creek area residents (Table 15). However, limited data are available for the 2000-2010 period regarding salmon and halibut subsistence harvest. Subsistence salmon permit information was reported by ADF&G for the year 2005 only. That year, two Fritz Creek area households held subsistence salmon permits. Of these, one permit was returned, and 3 Chinook and 37 sockeye salmon were reported as harvested that year. Between 2003 and 2010, the number of Fritz Creek area residents that participated in the Subsistence Halibut Registration Certificate (SHARC) program declined from two to one. Information about total harvest was available for 2010 only, when 200 lb of halibut were harvested using one SHARC card by a Fritz Creek resident. Information about the subsistence salmon fishery is presented in Table 13, and information about subsistence halibut harvest is presented in Table 14.

Additional Information

The history of the Russian Old Believers movement began in the mid-1600s, when reforms introduced by Nikon, the Patriarch of the Russian Orthodox Church from 1652 to 1658,

¹⁹¹ Fall, J.A., V. Vanek, L. Brown, G. Jennings, R.J. Wolfe, and C. Utermohle. (2000). *Wild Resource Harvests and Uses by Residents of Selected Communities of the Kenai Peninsula Borough*. Alaska Dept. of Fish and Game Division of Subsistence, Technical Paper No. 253. Retrieved March 19, 2013 from <http://www.subsistence.adfg.state.ak.us/download/Technical%20Papers/tp253.pdf>.

¹⁹² Ibid.

were upheld by the Church Councils of 1666 to 1667. These reforms included the number of times “alleluia” is said during prayers, the number of fingers used to perform the sign of the cross, leading processions counter-clockwise rather than clockwise, and spelling the name of Jesus with two i’s instead of one (“Iisus”).¹⁹³ Those who disagreed with these reforms were anathematized by the Church. These dissenters, and those that have followed them, are collectively known as “Old Believers.”¹⁹⁴

Persecution followed for those who resisted the reforms. Many Old Believers were burned at the stake, or chose to burn themselves to escape capture by government troops. In addition to resisting church reforms, the Old Believers were in opposition to forms of Westernization that began to appear in Russia under Peter the Great in the late 1600s and early 1700s. Peter required women to participate in social activities, such as dances and parties, in the style of the West. He mandated use of Western clothing and required all male members of the ruling class to shave their beards. Those choosing to wear beards were forced to pay a tax of 100 rubles per year, and peasants entering town to sell produce had to pay a fee of one kopek for the right to wear their beard in town for one day. The Old Believers viewed Peter as the “Antichrist,” and many fled to northern Russia, Siberia, the Cossack lands and the Ural Mountains, far from the power of the central government, where they could practice their traditional customs and rituals undisturbed.¹⁹⁵

The Old Believers dispersed further through the ensuing centuries. The ancestors of those who founded Nikolaevsk initially settled in Turkey and several areas of China. In the 1900s, they were resettled to countries including Brazil, Australia, Argentina, New Zealand, Paraguay, Uruguay, Canada, and the United States. The first Old Believers in Woodburn, Oregon came by way of Brazil, moving from Brazil to Oregon starting in 1962. Other Old Believers who had come to United States joined them in Oregon in the years that followed. A group of Old Believers left Woodburn and traveled to the Kenai Peninsula and founded Nikolaevsk in 1968, to the north of Homer.¹⁹⁶ In later years, three additional communities were founded in the Homer area, including Voznesenka, Razdolna, and Kachemak Selo.¹⁹⁷

¹⁹³ Johnson, P.W. 1982. *Dress and Acculturation among Russian Old Believers in Oregon*. Masters Thesis, Oregon State University. Retrieved January 30, 2012 from <http://ir.library.oregonstate.edu/xmlui/handle/1957/7891>.

¹⁹⁴ Lee Silva, Amber. 2009. *Unsettling Diaspora: The Old Believers of Alaska*. Master’s Thesis, McGill University, Montreal. Retrieved January 26, 2012 from http://digitool.library.mcgill.ca/webclient/StreamGate?folder_id=0&dvs=1328564311584~157..

¹⁹⁵ See footnote 193.

¹⁹⁶ Ibid.

¹⁹⁷ Homer News. (2013). “Russian Old Believer communities keep their traditions alive.” *2013 Visitor’s Guide*. Retrieved March 20, 2013 from http://homer-alaska.com/stories/Russian_Villages.shtml.

Table 12. Subsistence Participation by Household and Species, Fritz Creek: 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 (lbs)
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, Fritz Creek: 2000-2010.

Year	Subsistence Salmon Permits Issued ¹	Salmon Permits Returned ¹	Chinook Salmon Harvested ¹	Chum Salmon Harvested ¹	Coho Salmon Harvested ¹	Pink Salmon Harvested ¹	Sockeye Salmon Harvested ¹	Lbs of Marine Inverts ²	Lbs of Non-Salmon Fish ²
2000	n/a	n/a	n/a	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	n/a	n/a	n/a
2002	n/a	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	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	2	1	3	n/a	n/a	n/a	37	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	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	2	n/a	n/a
2004	2	n/a	n/a
2005	2	n/a	n/a
2006	2	n/a	n/a
2007	2	n/a	n/a
2008	1	n/a	n/a
2009	1	n/a	n/a
2010	1	1	200

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, Fritz Creek: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Halibut Cove



People and Place

*Location*¹⁹⁸

Halibut Cove is in the Kachemak Bay State Park on the Kenai Peninsula. It lies on the south shore of Kachemak Bay, 12 miles across the inlet from the Homer Spit. Halibut Cove is located in the Kenai Peninsula Borough and the Homer Recording District.

*Demographic Profile*¹⁹⁹

In 2010, there were 76 residents in Halibut Cove, ranking it as the 274th largest of 352 communities in Alaska with recorded populations that year. Halibut Cove first appeared in U.S. Census records in 1940 with 23 residents, increasing to a peak of 78 in 1990. U.S. Decennial Census population estimates show a population decline of 55.1% between 1990 and 2000, followed by a 46% rebound between 2000 and 2010. Decennial Census records conflict with Alaska Department of Labor estimates between 2000 and 2009, which suggest that the population of permanent residents decreased by 22.9% over the decade, with an average annual growth rate of -1.22% (Table 1). This discrepancy indicates that caution should be used when comparing the decennial and annual estimates.

In 2010, the majority of Halibut Cove residents identified themselves as White (86.8%), compared to 97.1% in 2000; 6.6% identified themselves as American Indian and Alaskan Native, compared to 0.0% in 2000; and 6.6% identified themselves as of two or more races, compared to 2.9% in 2000. In addition, 1.3% of the Halibut Cove population identified themselves as Hispanic or Latino, compared to 0.0% in 2000. As seen in Figure 1, the biggest changes were seen in the White and Alaska Native populations.

The increase in population over the last decade is reflected in an increase in the number of households in Halibut Cove, from 18 occupied housing units in 2000 to 34 in 2010. The average number of persons per household also increased, from 1.94 in 2000 to 2.42 in 2010. Housing estimates in the 1990 Decennial Census were based on a survey of 15.1% of households. According to these estimates, there were 23 occupied housing units in 1990, with an average of 1.7 persons per household. However, these housing estimates suggest a much lower population than the reported 76 residents that year (Table 1). This could be partially explained by the fact that 39 Halibut Cove residents were reported to be living in group quarters in 1990. No residents were reported to be living in group quarters in 2000 or 2010. Of the 161 total housing units surveyed in 2010, 15.5% were owner-occupied, 5.6% were rented, and a majority of

¹⁹⁸ 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.

¹⁹⁹ 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>.

residences (78.9%) were vacant. Of 127 vacant housing units in 2010, 99 (78%) were vacant due to seasonal use.

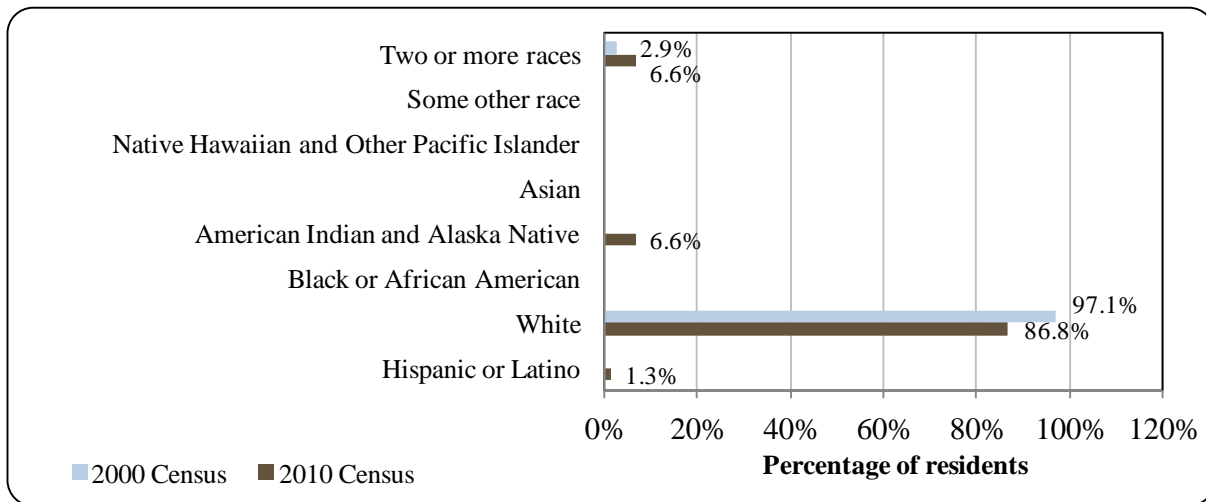
Table 1. Population in Halibut Cove from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	78	-
2000	35	-
2001	-	29
2002	-	28
2003	-	27
2004	-	26
2005	-	23
2006	-	24
2007	-	20
2008	-	23
2009	-	27
2010	76	-

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>.

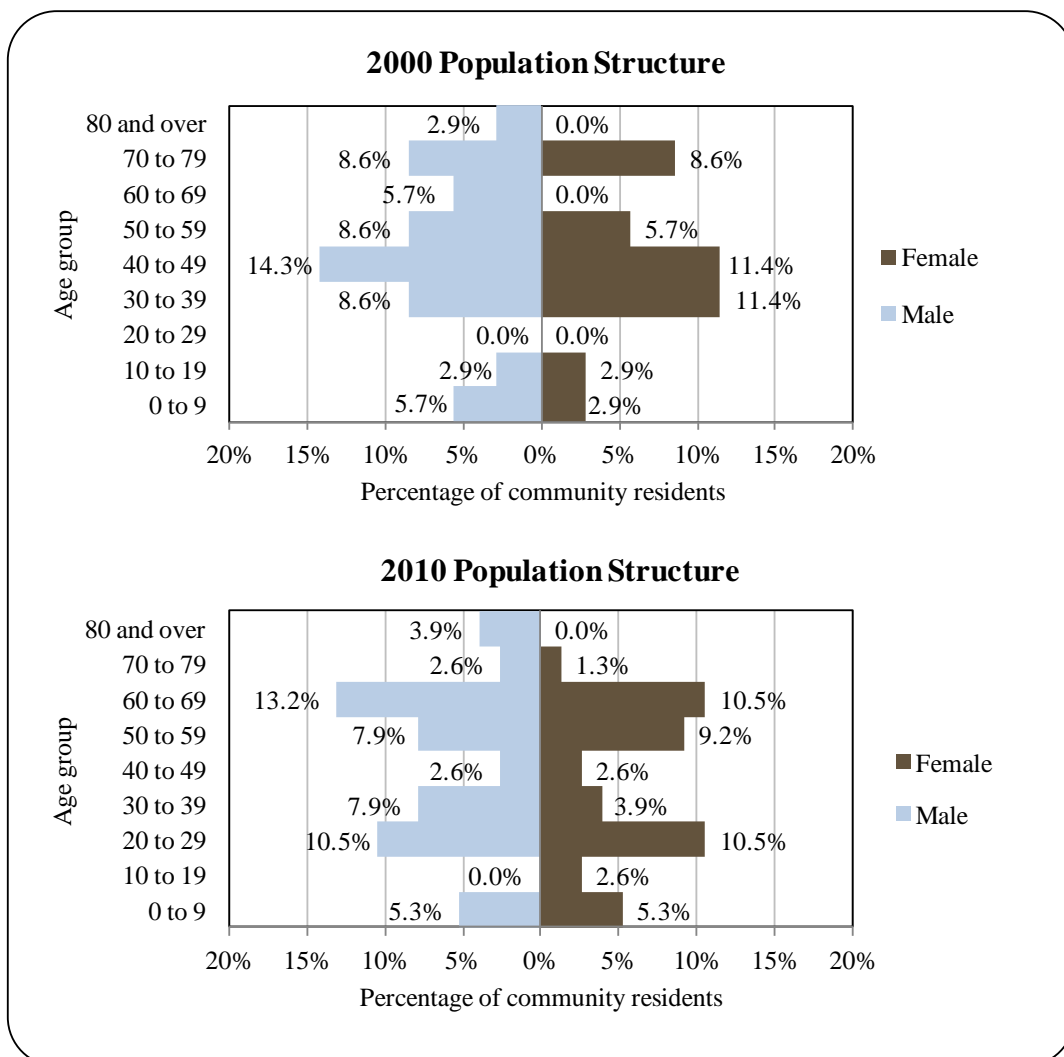
² Alaska Department of Labor. 2011. Current population estimates for Alaskan Communities. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

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



In 2010, the gender makeup in Halibut Cove was 53.9% male and 46.1% female, slightly more weighted toward males than the population of the State as a whole that year (52% male, 48% female). The median age was estimated to be 47.5 years, higher than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, females outnumbered males in the 10-19 and the 50-59 age groups, and males outnumbered females in all other age groups. Compared to 2000, the greatest population shifts were an increase in population in the 20-29 age group (from zero residents in this age group in 2000), and a overall slight aging of the population; in 2010, 31.6% of the population was age 60 or older, compared to 25.7% of the population in 2000 (Figure 2).

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



The 2006-2010 American Community Survey (ACS) did not provide any information regarding educational attainment in Halibut Cove in 2010. Although the U.S. Decennial Census recorded 76 permanent residents in Halibut Cove in 2010, the ACS estimated zero residents aged 16 and over in 2010.²⁰⁰ In 2000, Decennial Census sample data estimates indicate that there were 60 individuals aged 25 or older residing in Halibut Cove, all of which were held high school diplomas. In addition, 23 Halibut Cove residents had attended some college but held no degree, and 20 residents had a graduate or professional degree.

History, Traditional Knowledge, and Culture

The Halibut Cove area was historically home to the Kachemak Eskimo and Dena'ina Athabascan Indians. Archaeological sites suggest the presence of Pacific Eskimo or Alutiiq people as early as 4,500 years ago, with increasing occupation of the Kenai Peninsula by the Dena'ina around 1000 A.D.^{201,202} Midden sites at Halibut Cove provide evidence of a large settlement at the site during prehistoric times.²⁰³ Halibut Cove was named by W.H. Dall of the U.S. Coast and Geodetic Survey in 1880.²⁰⁴ In 1914, a herring fishery developed at Halibut Cove, and the industry boomed in 1918 as a result of a new curing method called scotch curing. That year, there were 36 herring plants in Alaska, of which 15 were located in Kachemak Bay. By 1926, there were 61 plants in Alaska, and 32 in Lower Cook Inlet. Most of these plants were located in Halibut Cove, along with facilities in Portlock, Port Graham, Seldovia, and elsewhere. However, overfishing led to a precipitous crash in the local herring industry after 1926, and by 1929, only one herring plant remained in Lower Cook Inlet.²⁰⁵

The contemporary community of Halibut Cove is primarily an artist colony, pioneered by Diana and Clem Tillion. Several artists live and work in Halibut Cove, attracting visitors and apprentices to their galleries and studios. The community's history as a booming center for herring processing inspired the name of a local restaurant, known as The Saltry.²⁰⁶

Natural Resources and Environment

Halibut Cove is located in a maritime climate zone, dominated by the moderating effects of a marine environment and characterized by high humidity, precipitation and fog cover as well

²⁰⁰ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

²⁰¹ Fall, James A., Ronald T. Stanek, Brian Davis, Liz Williams and Robert Walker. (2004). *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Final Report for Study No. FIS 03-045. Retrieved December 27, 2011 from <http://alaska.fws.gov/asm/index.cfm>.

²⁰² Halliday, Jan. (1998). *Native Peoples of Alaska: A Traveler's Guide to Land, Art, and Culture*. Seattle: Sasquatch Books.

²⁰³ Halibut-Cove-Alaska.com. (2011). *The History of Halibut Cove*. Retrieved October 30, 2012 from <http://www.halibut-cove-alaska.com/halibut-cove-history.htm>.

²⁰⁴ 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.

²⁰⁵ Cook, Linda, and Frank Norris. (1998). *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

²⁰⁶ See footnote 203.

as warm winters and cool summers. Winter temperatures range from 14 to 27° F, and summer temperatures vary from 45 to 65° F. Average annual precipitation is 24 inches, with annual winter snowfall averaging 55 inches.²⁰⁷

Protected areas near Halibut Cove include Kachemak Bay State Park and Wilderness, the Kachemak Bay State Critical Habitat Area (CHA), and the Kenai Wilderness. Halibut Cove is one departure point to enter the trail network in Kachemak Bay State Park.²⁰⁸ The State Park is Alaska's first and only 'wilderness park.' A majority of the State Park's 400,000 acres are located on the southern side of Kachemak Bay, along with a small unit on the Bay's northern shore, and its terrain includes mountains, glaciers, forests, and ocean. Visitors to the State Park enjoy fishing, boating, wildlife viewing, kayaking, hiking, camping, and mountain sports.²⁰⁹ Portions of Kachemak Bay State Park and Wilderness overlap with the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.²¹⁰

Kachemak Bay itself was designated as a State CHA in 1974, and the Fox River Flats at the mouth of the Bay were also designated as a CHA in 1972. The purpose of these CHAs is to "protect and preserve habitat areas especially crucial to the perpetuation of fish and wildlife, and to restrict all other uses not compatible with that primary purpose". Eleven species of marine mammals utilize Kachemak Bay, including sea otters, Steller sea lions, harbor seals, beluga, minke and orca whales, harbor porpoises, and Dall's porpoises, as well as a diversity of marine plants and invertebrates, birds, and fish and shellfish. The Fox River Flats and associated intertidal zone support at least 21 species of terrestrial mammals, including moose, black bear, brown bear, coyote, wolf, beaver, river otter, and small furbearers.²¹¹ In addition to their status as CHAs, Kachemak Bay and the Fox River Flats were designated as part of the National Estuarine Research Reserve System in 1999, a network of 28 estuaries around the U.S. representing different biogeographic regions that are used for long-term research, water-quality monitoring, education, and coastal stewardship. It is the only Research Reserve located in the State of Alaska.²¹²

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures and soil liquefaction.²¹³ Other natural hazards that have also been identified as threats in the Kenai Peninsula Borough

²⁰⁷ Ibid.

²⁰⁸ Alaska Dept. of Natural Resources. (2011). *Kachemak Bay State Park Trails Maps*. Retrieved October 31, 2012 from <http://dnr.alaska.gov/parks/units/kbay/kbaytrs.htm>.

²⁰⁹ Alaska Dept. of Natural Resources. (2009). *Kachemak Bay State Park and State Wilderness Park*. Retrieved January 27, 2012 from <http://dnr.alaska.gov/parks/units/kbay/kbay.htm>.

²¹⁰ Anonymous. (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from <http://www.wilderness.net>.

²¹¹ Alaska Dept. of Fish and Game. (1993). *Kachemak Bay and Fox River Flats Critical Habitat Areas Management Plan*. Retrieved June 14, 2012 from http://www.adfg.alaska.gov/static/lands/protectedareas/_management_plans/kachemak_bay.pdf.

²¹² National Estuarine Research Reserve System. (n.d.). *Kachemak Bay Research Reserve website*. Retrieved June 15, 2012 from <http://www.nerrs.noaa.gov/Reserve.aspx?ResID=KBA>.

²¹³ Kenai Peninsula Borough. (2010). *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

include flooding, wildfires, snow and avalanches, seiches, severe weather, erosion, and drought.²¹⁴

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields on and off shore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.²¹⁵ With respect to oil and gas development, it is important to note that the Kachemak Bay shoreline was impacted by the 1989 *Exxon Valdez* disaster.²¹⁶

According to the Alaska Department of Environmental Conservation, there are no notable active environmental cleanup sites located in Halibut Cove as of October 2012.²¹⁷

Current Economy²¹⁸

Halibut Cove is largely an artist colony and it is a sightseeing spot for boaters from Homer. A local restaurant called The Saltry operates during the summer.²¹⁹ A high percentage of homes in Halibut Cove are used seasonally, reflecting the community's status as a vacation destination. In 2000, residents of Halibut Cove had both the highest per capita income and the highest median household income of any community in Alaska.²²⁰

Although the U.S. Decennial Census reported 68 residents age 16 or over in Halibut Cove in 2010, household surveys conducted for the 2006-2010 ACS did not collect data from local residents.²²¹ Given this, the civilian labor force was thus estimated to be zero and no earnings were reported in Halibut Cove through the 2006-2010 ACS.²²² However, income data are available for 2000. That year, the per capita income in Halibut Cove was \$89,895 and the median household income was \$127,010.²²³ Taking inflation into account by converting the 2000 values to 2010 dollars,²²⁴ the real per capita income in 2000 is shown to have been \$118,211, and the

²¹⁴ State of Alaska. (2002). *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

²¹⁵ Resource Development Council. (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

²¹⁶ City of Homer. (2008). *Comprehensive Plan 2008 (Adopted 2010)*. Retrieved October 8, 2012 from <http://www.cityofhomer-ak.gov/planning/comprehensive-plan-2008-adopted-2010>.

²¹⁷ Alaska Dept. of Environmental Conservation. (2012). *List of Contaminated Site Summaries By Region*. Retrieved October 31, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

²¹⁸ Unless otherwise noted, all monetary data are reported in nominal values.

²¹⁹ Anonymous. (2011). *The History of Halibut Cove*. and *The History of The Saltry*. Retrieved October 30, 2012 from <http://www.halibut-cove-alaska.com/>.

²²⁰ 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>.

²²¹ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

²²² See footnote 220.

²²³ Ibid.

²²⁴ 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>).

real median household income in 2000 was \$167,016. These figures are much higher than average for Alaskan communities. As noted above, Halibut Cove ranked 1st in both per capita and median household income of all communities in Alaska that reported income data that year (344 communities reported per capita income data and 341 reported household income data). In 2000, no Halibut Cove residents were below the poverty level, compared to 9.4% of Alaskan residents overall, and the local unemployment rate was 0%, compared to a statewide rate of 6.1%.

Sample data from the 2000 U.S. Census estimated that there were 60 residents aged 16 and older in Halibut Cove, of which 37 were estimated to be employed in the civilian labor force that year. Of these, a majority (31) were estimated to be self-employed, while the remaining 6 workers were estimated to be employed in the private sector. From the perspective of industry, 15 residents were estimated to be employed in arts, entertainment, recreation, accommodation, and food services (40.5%), 15 were estimated to be employed in agriculture, forestry, fishing, mining and hunting industries (40.5%), and 7 were estimated to be working in professional, scientific, management, administrative, and waste management services (18.9%). Information about employment by industry is presented in Figure 3. From the perspective of occupation, a majority of the civilian labor force (28 individuals) was estimated to work in management, professional, and related occupations (75.7%) and 9 worked in natural resources/construction/maintenance occupations (Figure 4).

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

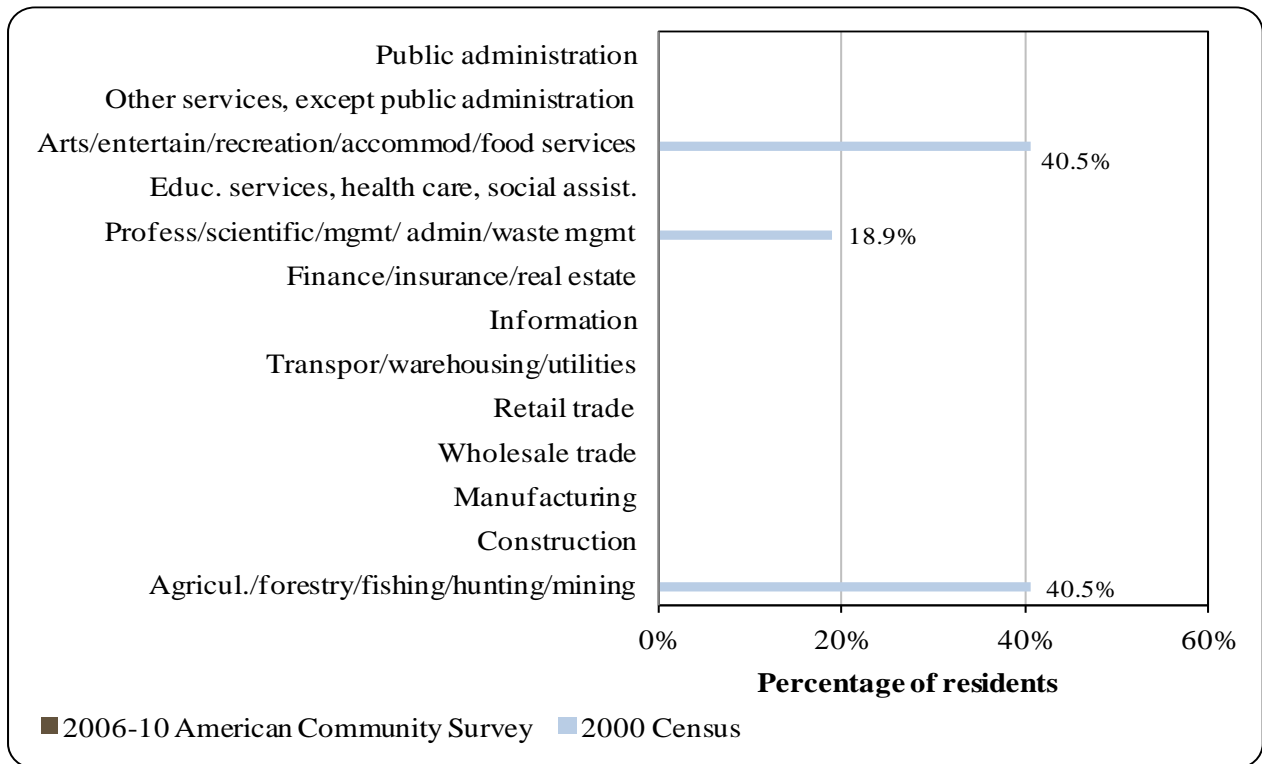
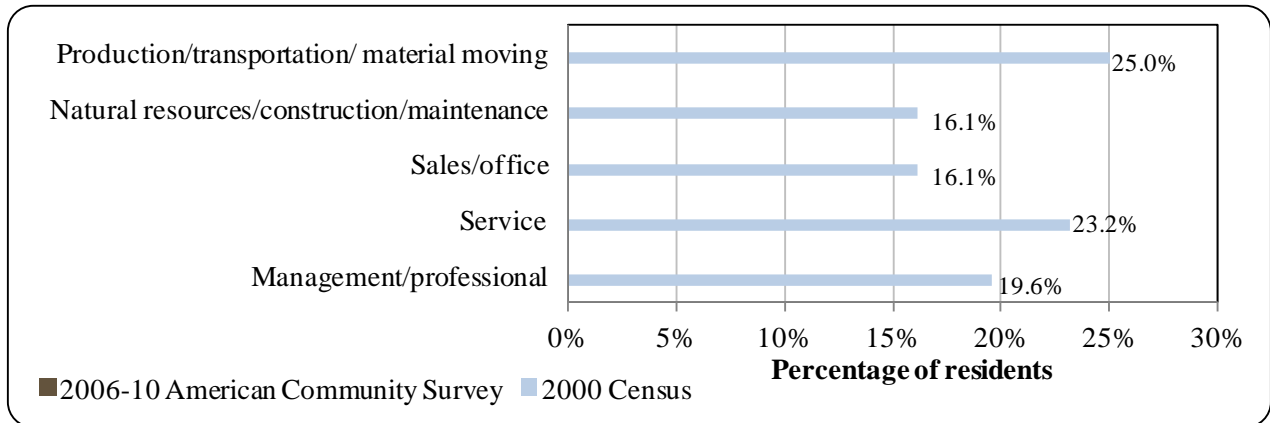


Figure 4. Local Employment by Occupation in 2000-2010, Halibut Cove (U.S. Census).



While no 2010 income or employment statistics are provided by the 2006-2010 ACS, employment by industry and an estimate of 2010 per capita income are available using economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). ALARI estimates suggest that there were 39 residents age 16 and over in the civilian labor force in 2010. Of these, eight residents were estimated to be employed that year, including two employed in construction, two in trade, transportation, and utilities, two in local government, one in leisure and hospitality, and one in professional and business services.²²⁵

Governance

Halibut Cove is an unincorporated community located in the Kenai Peninsula Borough. Because Halibut Cove is not incorporated as a municipality, there is no local taxing authority, and no information is available regarding municipal revenue (Table 2). However, the Borough does administer a 3% sales tax and a 4.5 mills property tax in the community. Halibut Cove was not included under the Alaska Native Claims Settlement Act, and is not federally recognized as a Native village. The community is represented by a local community organization.²²⁶

The nearest offices of the Alaska Department of Fish and Game (ADF&G), the Alaska Department of Natural Resources, and the National Marine Fisheries Service (NMFS) are located across Kachemak Bay in Homer. The closest offices of the Alaska Department of Commerce, Community, and Economic Development and the U.S. Bureau of Citizenship and Immigration Services are located in Anchorage.

²²⁵ Alaska Dept. of Labor and Workforce Dev. (n.d.). *Alaska Local and Regional Information*. Retrieved May 22, 2012 from: <http://live.laborstats.alaska.gov/alari/>.

²²⁶ 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.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Halibut Cove 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.

Infrastructure

Connectivity and Transportation

Halibut Cove is accessible by water only, including by boat or float plane.²²⁷ Since 1966, a local resident has provided the Kachemak Bay Ferry Service between Homer and Halibut Cove on a fishing boat called the *Danny J*. The company also offers a daily sightseeing tour. The ferry departs Homer at 5:00 pm daily, with a return trip at 10:00 pm. There is also a 12:00 departure from Homer, which includes a tour of the Gull Island Bird Sanctuary and a stop in Halibut Cove before a 4:00 pm return departure to Homer. As of summer 2012, the noon tour cost \$57.50 per person, and the 5:00 pm dinner departure was \$34.50 per person.^{228,229}

The City of Homer is the closest community with connections to other communities in the state. Homer is connected to the Alaska road system, and has a State ferry terminal, deep-

²²⁷ 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.

²²⁸ Anonymous. (2011). *Danny J Ferry*. Retrieved October 30, 2012 from <http://www.halibut-cove-alaska.com/ferry.htm>.

²²⁹ Lonely Planet. (2012). *Halibut Cove*. Retrieved October 30, 2012 from <http://www.lonelyplanet.com/usa/alaska/seldovia/sights/harbour-port/halibut-cove>.

water dock and harbor, and a state-owned and operated airport.²³⁰ As of June 2012, roundtrip airfare from Anchorage to Homer cost \$255.²³¹

Facilities

Halibut Cove residents derive water from a central water source or have water delivered. In addition, 20% of homes have individual wells. Half of the residences in Halibut Cove are fully plumbed and have individual septic systems, while the other half use outhouses. No public refuse collection services are provided in Halibut Cove, and no landfill is available. Electricity in Halibut Cove is provided from a hydroelectric facility operated by the Homer Electric Association. Police services are provided by state troopers posted in Homer, and fire and rescue services are provided by the Borough. Telephone service is available in the community, but no internet or cable providers offer service locally.²³²

Medical Services

The nearest healthcare services are in nearby Homer at the South Peninsula Hospital. Emergency Services have air and coastal access, and are provided by volunteers.²³³

Educational Opportunities

As of 2011, there were no schools located directly in Halibut Cove.²³⁴

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Halibut Cove is located in the traditional territory of the Kenaitze people, a branch of Athabascan Native Americans. Historically, the Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.²³⁵ Commercial fisheries began to develop in the Cook Inlet area soon after the United States purchased Alaska from Russia in 1867. Salmon and herring were two of the earliest commercial fisheries in Alaska, during the period when the product was salted for storing and shipment.²³⁶ The first Cook Inlet salmon cannery was built in 1882 at the mouth of the Kasilof River, in English Bay. An additional 17 salmon canneries were built in central Alaska by

²³⁰ See footnote 227.

²³¹ Airfare was calculated using lowest fare. <http://www.travelocity.com> (retrieved November 22, 2011).

²³² See footnote 227.

²³³ Ibid.

²³⁴ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

²³⁵ Kenaitze Indian Tribe. (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

²³⁶ 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>.

1890.²³⁷ In 1914, a herring fishery developed at Halibut Cove, and the industry boomed in 1918 as a result of a new curing method called scotch curing. That year, there were 36 herring plants in Alaska, of which 15 were located in Kachemak Bay. By 1926, there were 61 plants in Alaska, and 32 in Lower Cook Inlet.²³⁸ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.²³⁹

Halibut Cove's fishing economy boomed between 1911 and 1928 during the height of the herring industry.²⁴⁰ Most of the Lower Cook Inlet herring plants were located in Halibut Cove, along with facilities in Portlock, Port Graham, Seldovia, and elsewhere. However, overfishing led to a precipitous crash in the local herring industry after 1926, and by 1929, only one herring plant remained in Lower Cook Inlet. A Lower Cook Inlet herring fishery briefly started again during the 1960s with increased demand for herring and herring roe in Japan. Harvests took place for several years in Halibut Cove, but results were disappointing.²⁴¹ Today, most Cook Inlet herring fisheries are closed due to low stock abundance.^{242,243} If a sufficient biomass of herring is present in the Kamishak District, on the western side of Cook Inlet across from Kachemak Bay, some sac roe harvest may be permitted there.²⁴⁴

Today, residents of Halibut Cove are engaged in fisheries for salmon, halibut, sablefish, and other groundfish. Halibut Cove is located within the Kachemak Bay sub-district of the Lower Cook Inlet salmon management area. ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.²⁴⁵

Cook Inlet is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area. Groundfish and crab fisheries that occur within 3 nmi of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nmi in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction.

²³⁷ 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>.

²³⁸ Cook, Linda, and Frank Norris. (1998). *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

²³⁹ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

²⁴⁰ Halibut-Cove-Alaska.com. (2011). *The History of Halibut Cove*. Retrieved October 30, 2012 from <http://www.halibut-cove-alaska.com/halibut-cove-history.htm>.

²⁴¹ See footnote 238.

²⁴² See footnote 236.

²⁴³ Alaska Dept. of Fish and Game. (2012). *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

²⁴⁴ Hollowell, G., T. Otis, and E. Ford. (2012). *2011 Lower Cook Inlet Finfish Management Report*. Retrieved September 7, 2012 from <http://www.sf.adfg.state.ak.us/FedAidPDFs/FMR12-30.pdf>.

²⁴⁵ See footnote 237.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch set by NMFS applied to both fisheries. Beginning in 1997, an additional ‘state-waters fishery’ for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.²⁴⁶

Pacific halibut fisheries are managed under the International Pacific Halibut Commission, and federal sablefish fisheries are managed by NMFS. In 1995, management of Alaskan halibut and federal sablefish fisheries shifted from limited entry to a system of Individual Fishing Quotas (IFQ). Motivations for the shift included overcapitalization, short seasons, and the derby-style fishery that led to loss of product quality and safety concerns. As a result of program implementation, the number of shareholders and total vessels participating in the halibut and sablefish fisheries declined substantially, and product quality has improved. This shift to catch shares has been controversial, raising concerns about equity of catch share allocation, reduced crew employment needs, and loss of quota from coastal communities to outside investors.²⁴⁷

Halibut Cove is eligible to participate in the Community Quota Entity (CQE) program, and as of fall 2012 had established a CQE non-profit called Halibut Cove Fisheries and Mariculture Holding Company. As of Fall 2013, the non-profit had not yet purchased any commercial halibut quota shares, non-trawl groundfish License Limitation Program (LLP) permits, and/or halibut charter permits on behalf of residents of their respective communities.²⁴⁸ However, Halibut Cove Fisheries and Mariculture Holding Company had acquired seven halibut charter permits for lease to community members.^{249,250} Halibut Cove is not eligible to participate in the Community Development Quota program.

Processing Plants

According to ADF&G’s 2010 Intent to Operate list, Halibut Cove does not have a registered processing plant. Several shore-side processing facilities are located across the Bay in Homer.

²⁴⁶ See footnote 242.

²⁴⁷ Fina, M. (2011). “Evolution of Catch Share Management: Lessons from Catch Share Management in the North Pacific.” *Fisheries*, Vol. 36(4). Retrieved September 12, 2012 from http://www.fakr.noaa.gov/npfmc/PDFdocuments/catch_shares/Fina_CatchShare_411.pdf.

²⁴⁸ NOAA Fisheries. (2013). Community Quota and License Programs and Community Quota Entities. Retrieved October 30, 2013 from <http://alaskafisheries.noaa.gov/ram/cqp.htm>.

²⁴⁹ NOAA Fisheries. (2013). Name and Contact Information of Community Quota Entities. Retrieved October 30, 2013 from <http://alaskafisheries.noaa.gov/ram/daily/cqenamescontacts.pdf>.

²⁵⁰ NOAA National Marine Fisheries Service. (2013). *Permit Reports: Charter Halibut*. Retrieved October 24, 2013 from http://alaskafisheries.noaa.gov/ram/daily/chp_cqe_permits.xls.

Fisheries-Related Revenue

Between 2000 and 2010, no known fisheries-related revenue was received by the community of Halibut Cove (Table 3).

Commercial Fishing

Between 2000 and 2010, Halibut Cove residents participated in Alaskan commercial fisheries as state and federal permit holders, quota share account holders in federal catch share fisheries, vessel owners, and crew license holders. Activity levels remained relatively stable over the decade. The total number of state permit holders varied between 6 and 9, and the number of state permits held varied between 10 and 13 (Table 4). The number of vessels primarily owned by residents varied between 9 and 12, and the number of crew licenses held varied from 1 to 5. The only fisheries statistic that displayed a declining trend was the number of vessels homeported in Halibut Cove, which declined from 22 in 2000 to 14 in 2010. Characteristics of the Halibut Cove commercial fishing sector are presented in Table 5.

Of 13 state-issued Commercial Fisheries Entry Commission (CFEC) permits held in 2010, a majority (8) were held for Cook Inlet salmon fisheries, while 4 were held in the statewide halibut longline fishery and 1 was held in the statewide sablefish longline fishery (not including Southeast Alaska or Prince William Sound). Five of the salmon permits were associated with drift gillnet gear, two with purse seine gear, and one with set gillnet gear. In early years of the 2000–2010 period, salmon permits were also held in the Kodiak purse seine fishery (from 2000 to 2003). A Kodiak permit was actively fished in 2001 only. Overall, an average of 71% of salmon permits were actively fished between 2000 and 2010, with a smaller percentage actively fished in 2010, in part due to the acquisition of three additional salmon permits between 2009 and 2010. An average of 71% of salmon permits were actively fished between 2000 and 2010, with a smaller percentage actively fished in 2010. From 2007 to 2009, one CFEC permit was held in the statewide mechanical jig fishery for miscellaneous saltwater finfish (commonly targeting Pacific cod), but was not actively fished in any of these years. In addition, in 2008, one miscellaneous saltwater finfish permit was held associated with pot gear, and was actively fished that year. Further CFEC permit statistics are presented in Table 4.

In addition to CFEC permits, Halibut Cove residents held Federal Fisheries Permits (FFP) and federal License Limitation Program permits (LLP) during the 2000–2010 period. The number of FFP permit holders, and total FFPs held, increased from one to three in the middle of the decade, and then decreased to two in 2006–2010. FFPs were actively fished between 2005 and 2010. From 2003 to 2010, one groundfish LLP was held by one Halibut Cove permit holder. The groundfish LLP was actively fished in all years that it was held during this period (Table 4).

Between 2000 and 2010, Halibut Cove residents also held quota share accounts and quota shares in federal catch share fisheries for halibut and sablefish, with slightly higher participation in the halibut fishery. No Halibut Cove residents held quota share accounts in federal crab catch share fisheries between 2005 and 2010 (Table 8). The number of halibut quota share account holders in Halibut Cove increased from three in 2000 to five in 2010, which a high of six in 2003. Total quota shares held followed a similar pattern, rising from 565,660 in 2000 to 818,552 in 2010, with a high of 846,457 in 2003. The overall halibut IFQ allotment for account holders in Halibut Cove initially increased by 32% between 2000 and 2002, and then decreased to almost 30% below 2000 levels by 2010 (Table 6). During the same time period, there was one sablefish

quota share account holder in all years except 2001 and 2002, when zero Halibut Cove residents held accounts. Although the number of quota share account holders remained stable at one, the total number of quota shares held decreased dramatically, from 2,766,565 in 2000 to 707 shares held between 2003-2010 (Table 7).

No fish buyers or shore-side processors were present in Halibut Cove between 2000 and 2010, and no landings were delivered in the community during this period (Table 5). Given this, no information is reported regarding local landings or ex-vessel revenue generated in Halibut Cove (Table 9). However, some information can be reported regarding landings and revenue earned by Halibut Cove vessels owners, irrespective of delivery location. Information can only be reported regarding halibut landings from 2001 to 2003, and ‘other groundfish’ landings in 2003 only. On average between 2001 and 2003, 391,345 net pounds of halibut were landed for an average ex-vessel value of \$913,678. In 2003, 9,556 net pounds of ‘other groundfish’ were landed by Halibut Cove vessel owners, valued at \$5,433 in ex-vessel revenue. Data for other years in these fisheries, and for all years in other fisheries, is considered confidential due to the small number of participants (Table 10).

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fisheries Resource Landing Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>Total municipal revenue⁵</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>

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

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

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

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

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

⁵ Total municipal revenue represents the total revenue that the City reports each year in its 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.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Halibut Cove

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	0	0	0	1	1	1	1	1	1	1	1
	Active permits	0	0	0	1	1	1	1	1	1	1	1
	% of permits fished	-	-	-	100%	100%	100%	100%	100%	100%	100%	100%
	Total permit holders	0	0	0	1	1	1	1	1	1	1	1
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	1	1	1	3	3	3	2	2	2	2	2
	Fished permits	0	0	0	0	0	1	2	2	2	2	2
	% of permits fished	0%	0%	0%	0%	0%	33%	100%	100%	100%	100%	100%
	Total permit holders	1	1	1	3	3	3	2	2	2	2	2
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	3	3	5	5	5	5	4	3	3	3	4
	Fished permits	2	3	5	5	5	4	4	3	3	3	4
	% of permits fished	67%	100%	100%	100%	100%	80%	100%	100%	100%	100%	100%
	Total permit holders	3	3	5	5	5	5	4	3	3	3	4
Herring (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	2	1	0	1	1	1	1	1	1	1	1
	Fished permits	1	0	0	0	0	0	0	0	0	0	0
	% of permits fished	50%	0%	-	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	2	1	0	1	1	1	1	1	1	1	1
Groundfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	1	2	1	0
	Fished permits	0	0	0	0	0	0	0	0	1	0	0
	% of permits fished	-	-	-	-	-	-	-	0%	50%	0%	-
	Total permit holders	0	0	0	0	0	0	0	1	1	1	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	6	6	6	6	5	5	5	5	5	5	8
	Fished permits	4	5	4	3	4	5	4	4	4	3	3
	% of permits fished	67%	83%	67%	50%	80%	100%	80%	80%	80%	60%	38%
	Total permit holders	6	6	6	6	5	5	5	5	5	5	7
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>11</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>11</i>	<i>11</i>	<i>10</i>	<i>10</i>	<i>11</i>	<i>10</i>	<i>13</i>
	<i>Fished permits</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>8</i>	<i>9</i>	<i>9</i>	<i>8</i>	<i>7</i>	<i>8</i>	<i>6</i>	<i>7</i>
	<i>% of permits fished</i>	<i>64%</i>	<i>80%</i>	<i>82%</i>	<i>67%</i>	<i>82%</i>	<i>82%</i>	<i>80%</i>	<i>70%</i>	<i>73%</i>	<i>60%</i>	<i>54%</i>
	<i>Permit holders</i>	<i>8</i>	<i>8</i>	<i>9</i>	<i>9</i>	<i>8</i>	<i>8</i>	<i>7</i>	<i>7</i>	<i>6</i>	<i>6</i>	<i>8</i>

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Halibut Cove: 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 Halibut Cove ²	Total Net Pounds Landed In Halibut Cove ^{2,5}	Total Ex-Vessel Value Of Landings In Halibut Cove ^{2,5}
2000	1	0	0	10	22	0	0	\$0
2001	2	0	0	12	21	0	0	\$0
2002	3	0	1	11	20	0	0	\$0
2003	2	0	0	11	21	0	0	\$0
2004	1	0	0	10	20	0	0	\$0
2005	5	0	0	10	20	0	0	\$0
2006	3	0	0	10	18	0	0	\$0
2007	3	0	0	11	17	0	0	\$0
2008	5	0	0	9	15	0	0	\$0
2009	4	0	0	9	16	0	0	\$0
2010	2	0	0	12	14	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 in Halibut Cove: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	3	565,660	91,124
2001	4	567,402	103,939
2002	5	745,136	159,118
2003	6	846,457	142,957
2004	5	819,284	141,985
2005	4	735,734	122,609
2006	4	716,656	110,650
2007	3	701,568	105,181
2008	4	759,055	104,855
2009	4	759,055	95,567
2010	5	818,552	94,267

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 Halibut Cove: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (pounds)
2000	1	2,766,565	251,087
2001	0	0	0
2002	0	0	0
2003	1	707	71
2004	1	707	81
2005	1	707	80
2006	1	707	71
2007	1	707	69
2008	1	707	61
2009	1	707	55
2010	1	707	50

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 Halibut Cove: 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 Halibut Cove: 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 Halibut Cove 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	-	405,525	\$440,088	328,423	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	9,556	-	-	-	-	-	-	-
Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	-	-	-	-	-	-	-	-	-
<i>Total²</i>	-	405,525	440,088	337,979	-	-	-	-	-	-	-
	<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	-	\$797,609	\$983,484	\$959,942	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	\$5,433	-	-	-	-	-	-	-
Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	-	-	-	-	-	-	-	-	-
<i>Total²</i>	-	\$797,609	\$983,484	\$965,375	-	-	-	-	-	-	-

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

Kachemak Bay is one of Alaska's most popular destinations for halibut fishing, with frequent catches purportedly weighing 100 to 200 pounds. The sport halibut fishery generally runs between June and September.²⁵¹ Although no active sport fish guide businesses were registered in Halibut Cove from 2000 to 2010, one or two licensed guides were present in the community in some years during this period. It is important to note that a high number of guide businesses are based in nearby Homer, providing sportfishing opportunities for visitors to the region generally. The number of Halibut Cove residents that purchased sport fish licenses, irrespective of point of sale, was consistent over the period, varying between 18 and 23 per year. No sport fish licenses were sold in Halibut Cove, providing additional evidence that local sportfishing activity is highly tied to the sportfishing infrastructure, businesses, and services in Homer (Table 11).

According to ADF&G Statewide Harvest Survey data,²⁵² species targeted by private anglers in Halibut Cove between 2000 and 2010 included Chinook, coho, pink, and sockeye salmon, rainbow trout, Pacific halibut, Pacific cod, Tanner crab, and hardshell clams. No kept/release log book data were reported for fishing charters out of Halibut Cove between 2000 and 2010.²⁵³

Halibut Cove is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, saltwater and freshwater sportfishing at this regional level was substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska residents logged 20,292 saltwater angler days and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska resident anglers, and the opposite was true of freshwater sportfishing. For both Alaska resident and non-Alaska resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased between 2000 and 2010. Further information about regional sportfishing activity in Halibut Cove is presented in Table 11.

²⁵¹ Halibut Cove, Alaska. (2011). *Fishing Information for Halibut Cove*. Retrieved October 31, 2012 from <http://www.halibutcove.com/fishing.htm>.

²⁵² 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).

²⁵³ 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, Halibut Cove: 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 Halibut Cove ²
2000	0	1	22	0
2001	0	0	21	0
2002	0	0	20	0
2003	0	2	23	0
2004	0	1	18	0
2005	0	2	19	0
2006	0	0	19	0
2007	0	0	21	0
2008	0	0	18	0
2009	0	1	20	0
2010	0	1	19	0

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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

There is very little archival evidence of, or information on, contemporary subsistence practices in Halibut Cove. Between 2000 and 2010, no information was reported by ADF&G regarding the percentage of households using different marine resources, or per capita harvest of subsistence resources by Halibut Cove residents (Table 12). Likewise, no information was reported by management agencies regarding participation in the Subsistence Halibut Registration Certification program (Table 14) or subsistence harvest of marine invertebrates, other fish (Table 13) or marine mammals during this period (Table 15).

ADF&G did report limited participation in subsistence salmon fisheries in Halibut Cove between 2000 and 2010, with one subsistence salmon permit issued to a Halibut Cove household in 2001 and again in 2008. In both years, one permit was reported as returned, and in 2001, 21 sockeye were reportedly harvested.

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

Year	Subsistence Salmon Permits Issued ¹	Salmon Permits Returned ¹	Chinook Salmon Harvested ¹	Chum Salmon Harvested ¹	Coho Salmon Harvested ¹	Pink Salmon Harvested ¹	Sockeye Salmon Harvested ¹	Lbs of Marine Inverts ²	Lbs of Non-Salmon Fish ²
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	1	1	n/a	n/a	n/a	n/a	21	n/a	n/a
2002	n/a	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	n/a
2004	n/a	n/a	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	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.

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, Halibut Cove: 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, Halibut Cove: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Homer

People and Place

*Location*²⁵⁴



Homer is located on the north shore of Kachemak Bay on the southwestern edge of the Kenai Peninsula. The Homer Spit, a 4.5-mile long bar of gravel, extends from the Homer shoreline. It is 227 road miles south of Anchorage, at the southern-most point of the Sterling Highway. Homer is located in the Kenai Peninsula Borough and the Homer Recording District. The area encompasses 10.6 square miles of land and 14.9 square miles of water.

*Demographic Profile*²⁵⁵

In 2010, there were 5,003 residents in Homer, ranking it as the 22nd largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population increased by 13.6%. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents increased by 12.6%. The average annual growth rate over the decade was 0.80%, which was slightly higher than the statewide average of 0.75%. According to a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that an additional 4,000 seasonal workers or transients are present in Homer each year between April and October. They also indicated that population fluctuations are mostly driven by employment in fishing sectors, with an annual population peak in the month of July.

In 2010, a majority of Homer residents identified themselves as White (89.3%), along with 4.5% identifying as two or more races, 4.1% as American Indian and Alaska Native, 1% as Asian, 0.4% as Black or African American, and 0.1% as Native Hawaiian and Other Pacific Islander. Also in 2010, 2.1% of Homer residents identified themselves as Hispanic or Latino. Compared to 2000, this distribution remained relatively consistent. Changes in population from 1990 to 2010 are shown in Table 1 below, and changes in racial and ethnic composition from 2000 to 2010 are presented in Figure 1.

The increase in population in Homer between 1990 and 2010 is reflected in the rising number of households in the community, from 1,411 occupied housing units in 1990 to 1,599 in 2000, and 2,236 in 2010. A portion of this increase in total households is also due to a decrease in average household size, from 2.5 persons per households in 1990 to 2.4 in 2000, and 2.21 in 2010. Of the 2,692 housing units surveyed in 2010, 50.3% were owner-occupied, 32.7% were rented, and 17% were vacant or used only seasonally. In 2010, 71 residents lived in group quarters, compared to 106 in 2000 and 56 in 1990.

²⁵⁴ 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.

²⁵⁵ 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 Homer from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	3,660	-
2000	3,946	-
2001	-	4,070
2002	-	5,076
2003	-	5,369
2004	-	5,355
2005	-	5,402
2006	-	5,442
2007	-	5,454
2008	-	5,385
2009	-	5,551
2010	5,003	-

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

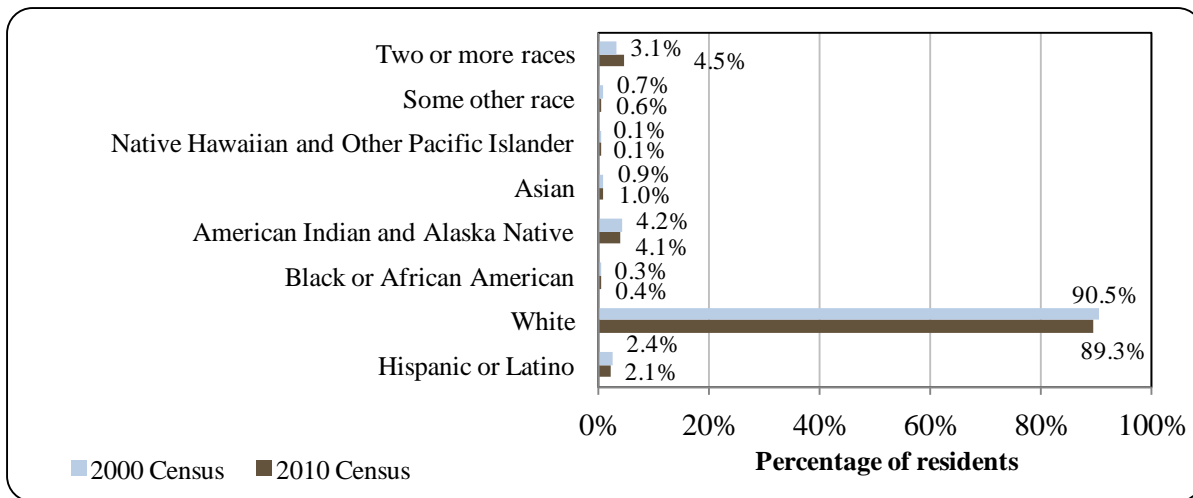
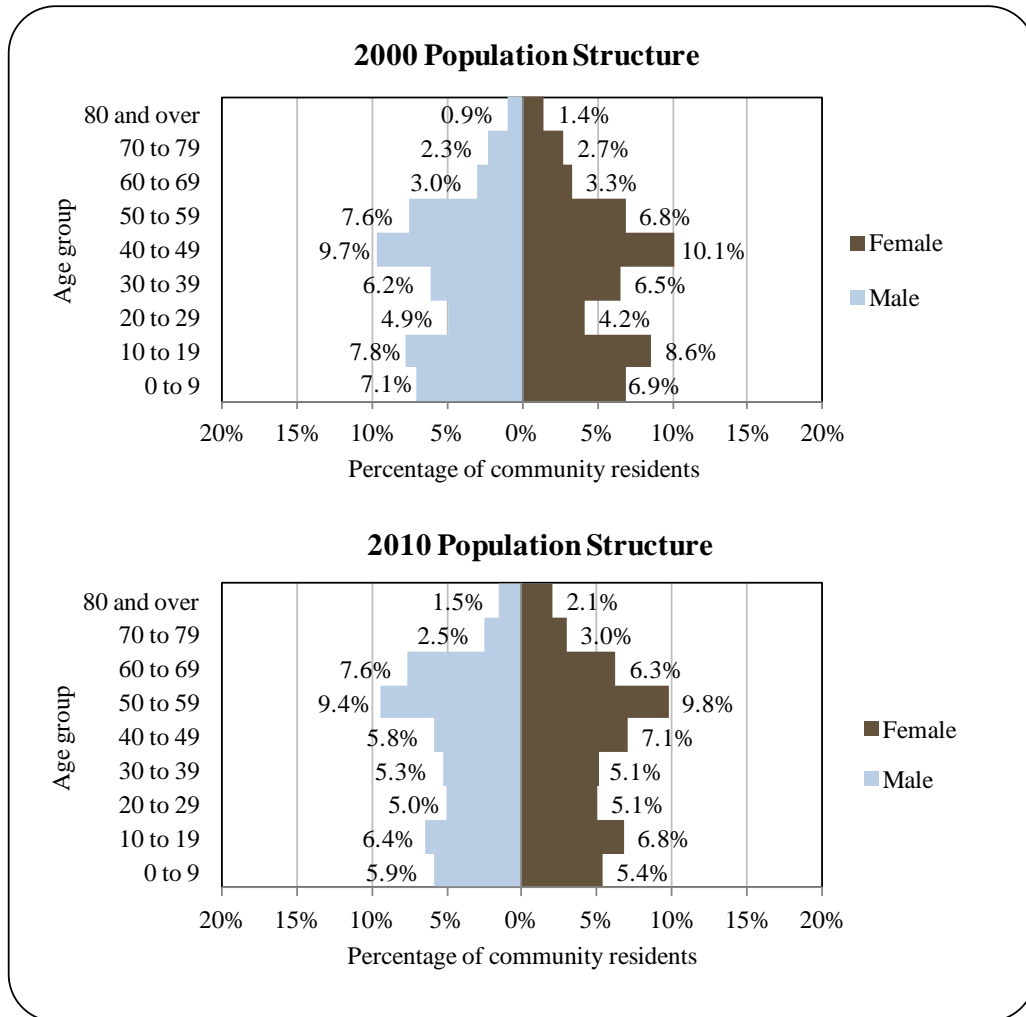


Figure 2. Population Age Structure in Homer Based on the 2000 and 2010 U.S. Decennial Census.



In 2010, the gender makeup of Homer’s population was 49.4% male and 50.5% female. The greater percentage of females than males was unusual compared to the gender balance of the state as a whole, which was 52% male and 48% female that year. Also in 2010, the median age was estimated to be 44 years, higher than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. This represents an increase from a median age of 38.8 in 2000. In 2010, 23% of the Homer population was age 60 or older, compared to 14.6% in 2000. This increase in median age of Homer’s population can be attributed to growth in the community’s popularity as a retirement community as well as the aging of Homer’s existing population.²⁵⁶ The overall population structure of Homer in 2000 and 2010 is shown in Figure 2.

²⁵⁶ City of Homer. 2008. *Comprehensive Plan 2008 (Adopted 2010)*. Retrieved October 8, 2012 from <http://www.cityofhomer-ak.gov/planning/comprehensive-plan-2008-adopted-2010>.

In terms of educational attainment, according to the U.S. Census' 2006-2010 American Community Survey (ACS),²⁵⁷ 96.1% of Homer residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to an estimated 90.7% of Alaskan residents overall. Also in that year, an estimated 0.5% of residents had less than a 9th grade education, compared to 3.5% of Alaskan residents overall; an estimated 3.4% had a 9th to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; an estimated 30.9% had some college but no degree, compared to an 28.3% of Alaskan residents overall; an estimated 21.3% held a Bachelor's degree, compared to 17.4% of Alaskan residents overall; and an estimated 12.4% held a graduate or professional degree, compared to an estimated 9.6% of Alaskan residents overall.

History, Traditional Knowledge, and Culture

The Homer area was historically home to the Kachemak Eskimo and Dena'ina Athabascan Indians, with increasing occupation of the Kenai Peninsula by the Dena'ina around 1000 A.D.²⁵⁸ Shell middens on Homer Spit, including a particularly large site at Cottonwood Creek, provide evidence that the site has been inhabited for many centuries.^{259,260} In 1895, the U.S. Geological Society sent a party to the area to explore coal and gold potential in the region. In 1896, Homer Pennock arrived with a crew of 50 gold miners and started the first settlement. The City now bears his name.²⁶¹ In 1897, a post office was opened at the site of the new settlement, which was then called "Coal Bay". In 1899, the Cook Inlet Coal Fields Company made substantial investments in the town's infrastructure, including a dock and 28 buildings on the spit, as well as a 7-mile railroad. The railroad transported coal from mines at Homer's Bluff Point, Eastland Creek, and Fritz Creek to the dock at Homer Spit, where ships were loaded.^{262,263} Coal mining continued to be an important economic driver until World War I.²⁶⁴ Homer remained a small community through the early 1900s. A new wave of homesteaders began to settle in the Homer area in 1915, and a general store was opened in 1918. Fur farming was an important industry for early homesteaders, as well as subsistence farming and harvest of local wild foods.²⁶⁵ Fishing also developed as an important industry in the early 1900s, although a

²⁵⁷ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

²⁵⁸ Fall, J. A., R. T. Stanek, B. Davis, L. Williams and R. Walker. 2004. *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Final Report for Study No. FIS 03-045. Retrieved December 27, 2011 from <http://alaska.fws.gov/asm/index.cfml>.

²⁵⁹ Reed, C., E. 1985. *The Role of Wild Resource Use in Communities of the Central Kenai Peninsula and Kachemak Bay, Alaska*. Alaska Dept. of Fish and Game, Division of Subsistence. Technical Paper No. 106. Retrieved October 8, 2012 from <http://www.subsistence.adfg.state.ak.us/TechPap/tp106.pdf>.

²⁶⁰ See footnote 256.

²⁶¹ Ibid.

²⁶² 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.

²⁶³ See footnote 259.

²⁶⁴ See footnote 256.

²⁶⁵ See footnote 259.

majority of fishing and seafood processing activity centered in nearby Seldovia. Some Homer settlers worked in Cook Inlet canneries.²⁶⁶

The Good Friday Earthquake struck in 1964, causing much of Homer to sink between 2 and 8 feet. The harbor incurred serious damage, but was rebuilt with federal funds.²⁶⁷ The quake hit nearby Seldovia even harder, destroying its waterfront. Following the loss of infrastructure in Seldovia, Homer began to fill the role of the local fishing center.²⁶⁸ The City of Homer was incorporated in March 1964. Today, commercial fishing remains an important foundation of Homer's economy, and tourism and sportfishing and hunting have become increasingly important. Homer is also a popular retirement community.²⁶⁹

Natural Resources and Environment

Homer is located in a maritime climactic zone, dominated by the moderating effects of a marine environment and characterized by high humidity, precipitation and fog cover as well as warm winters and cool summers. Winter temperatures range from 14 to 27 °F, and summer temperatures vary from 45 to 65 °F. Average annual precipitation is 24 inches, with annual winter snowfall averaging 55 inches.²⁷⁰ The landscape surrounding the City is characterized by high bluffs to the north and the gently sloping shoreline of Kachemak Bay to the south. The Kenai Mountains are visible in the distance.²⁷¹

Protected areas near Homer include Kachemak Bay State Park and Wilderness, the Kachemak Bay State Critical Habitat Area (CHA), and the Kenai Wilderness. Kachemak Bay State Park is Alaska's first and only "wilderness park". A majority of the State Park's 400,000 acres are located on the southern side of Kachemak Bay, along with a small unit on the Bay's northern shore, and its terrain includes mountains, glaciers, forests, and ocean. Visitors to the State Park enjoy fishing, boating, wildlife viewing, kayaking, hiking, camping, and mountain sports.²⁷² Portions of Kachemak Bay State Park and Wilderness overlap with the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.²⁷³

Kachemak Bay itself was designated as a State CHA in 1974, and the Fox River Flats at the mouth of the Bay were also designated as a CHA in 1972. The purpose of these CHAs is to "protect and preserve habitat areas especially crucial to the perpetuation of fish and wildlife, and to restrict all other uses not compatible with that primary purpose." Eleven species of marine mammals utilize Kachemak Bay, including sea otters, Steller sea lions, harbor seals, beluga, minke and orca whales, harbor porpoises, and Dall's porpoises, as well as a diversity of marine plants and invertebrates, birds, and fish and shellfish. The Fox River Flats and associated intertidal zone support at least 21 species of terrestrial mammals, including moose, black bear,

²⁶⁶ See footnote 262.

²⁶⁷ City of Homer. (n.d.). *Facts & Figures*. Retrieved October 8, 2012 from <http://www.cityofhomer-ak.gov/economicdevelopment/facts-figures>.

²⁶⁸ City of Homer. 2008. *Comprehensive Plan 2008 (Adopted 2010)*. Retrieved October 8, 2012 from <http://www.cityofhomer-ak.gov/planning/comprehensive-plan-2008-adopted-2010>.

²⁶⁹ See footnote 262.

²⁷⁰ Ibid.

²⁷¹ See footnote 268.

²⁷² Alaska Dept. of Natural Resources. 2009. *Kachemak Bay State Park and State Wilderness Park*. Retrieved January 27, 2012 from <http://dnr.alaska.gov/parks/units/kbay/kbay.htm>.

²⁷³ Anonymous. (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from <http://www.wilderness.net>.

brown bear, coyote, wolf, beaver, river otter, and small furbearers.²⁷⁴ In addition to their status as CHAs, Kachemak Bay and the Fox River Flats were designated as part of the National Estuarine Research Reserve System in 1999, a network of 28 estuaries around the country representing different biogeographic regions that are used for long-term research, water-quality monitoring, education, and coastal stewardship. It is the only Research Reserve located in the State of Alaska.²⁷⁵

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures and soil liquefaction.²⁷⁶ Other natural hazards that have also been identified as threats in the Kenai Peninsula Borough include flooding, wildfires, snow and avalanches, seiches, severe weather, erosion, and drought.²⁷⁷

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields on and off shore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.²⁷⁸ With respect to oil and gas development, it is important to note that Homer's shoreline was impacted by the 1989 *Exxon Valdez* disaster.²⁷⁹

According to the Alaska Department of Environmental Conservation, there are no notable active environmental cleanup sites located in Homer as of September 2012.²⁸⁰

Current Economy²⁸¹

In the 2011 AFSC survey, community leaders indicated that commercial fishing, ecotourism, and sport hunting and fishing are important economic drivers in Homer. Homer is also an important player in fish buying and processing in Alaska. In 2010, Homer ranked 17th in total fisheries landings and 6th in ex-vessel revenue generated from these landings, out of 67 Alaskan communities with landings that year. In the 2011 AFSC survey, community leaders estimated that 50 local Homer residents are employees of shore-side processing plants. In

²⁷⁴ Alaska Dept. of Fish and Game. 1993. *Kachemak Bay and Fox River Flats Critical Habitat Areas Management Plan*. Retrieved June 14, 2012 from

http://www.adfg.alaska.gov/static/lands/protectedareas/_management_plans/kachemak_bay.pdf.

²⁷⁵ National Estuarine Research Reserve System. (n.d.). *Kachemak Bay Research Reserve website*. Retrieved June 15, 2012 from <http://www.nerrs.noaa.gov/Reserve.aspx?ResID=KBA>.

²⁷⁶ Kenai Peninsula Borough. 2010. *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

²⁷⁷ State of Alaska. 2002. *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

²⁷⁸ Resource Development Council. (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

²⁷⁹ See footnote 268.

²⁸⁰ Alaska Department of Environmental Conservation. 2012. *List of Contaminated Site Summaries By Region*. Retrieved October 9, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

²⁸¹ Unless otherwise noted, all monetary data are reported in nominal values.

addition, it is important to note that Homer has also become a popular retirement community. As mentioned above, in 2010, 23% of the Homer population was age 60 or older.

Based on household surveys conducted for the 2006-2010 ACS,²⁸² in 2010, the per capita income in Homer was estimated to be \$32,035, and the median household income was estimated to be \$52,057. This represents a significant increase from the per capita and median household incomes reported in 2000 (\$21,823 and \$42,823, respectively). If inflation is taken into account by converting the 2000 values to 2010 dollars,²⁸³ the increase in per capita income remains slight even (real per capita income was \$28,697 in 2000), while median household income was shown to have decreased slightly (real median household income was \$56,309 in 2000). In 2010, Homer ranked 50th of 305 Alaskan communities with per capita income data, and 115th in median household income, out of 299 Alaskan communities with household income data that year.

However, Homer's small population size may have prevented the ACS from accurately portraying economic conditions.²⁸⁴ An alternative estimate of per capita income is provided by economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Homer in 2010 is \$13,140.^{285,286} This estimate is much lower than the 2000 per capita income reported in by the U.S. Census, suggesting that caution is warranted when citing an increase in per capita income in Homer between 2000 and 2010. Homer did not meet the Denali Commission's 2011 criteria as a "distressed" community.²⁸⁷ 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, a slightly smaller percentage of Homer's population was estimated to be in the civilian labor force in 2010 (63.4%) than in the civilian labor force statewide (68.8%). In the same year, 7.9% of Homer residents were estimated to be living below the poverty line in 2010, compared to 9.5% of Alaskan residents overall, and the unemployment rate was estimated to be 5.4%, similar to the statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in Homer in 2010 was 9.9%, compared to a statewide unemployment rate estimate of 11.5%.²⁸⁸ Also based on the 2006-2010 ACS, the majority of Homer's workforce was estimated to be employed in the private sector (65.6%), along with 20.2% that were

²⁸² 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>.

²⁸³ 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>).

²⁸⁴ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

²⁸⁵ 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/>.

²⁸⁶ See footnote 282.

²⁸⁷ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

²⁸⁸ See footnote 285.

estimated to be self-employed, 14% in the public sector, and 0.3% estimated to be unpaid family workers.

Of the 2,337 people aged 16 and over that were estimated to be employed in the civilian labor force in Homer, the greatest number of workers were estimated to be employed in educational services, health care, and social assistance industries (22.6%), arts, entertainment, accommodation and food services (12.8%), professional, scientific, management, administration, and waste management (10.4%), transportation, warehousing, and utilities industries (10.2%), retail trade (9.4%), and construction (9.3%). In addition, 6.5% of the civilian labor force was estimated to be employed in agriculture, forestry, fishing, hunting, and mining industries in 2010. The distribution of employment by industry was fairly consistent between 2000 and 2010. The most notable shift was an increase in the percentage of the labor force employed in professional, scientific, management, administration, and waste management industries over the decade. This information about employment by industry is presented in Figure 3. It is important to note that the number of individuals employed in the fishing industry may be underestimated in census statistics; fishermen may hold another job and characterize their employment accordingly.

From the perspective of occupation, in 2010, the greatest percentage of Homer’s civilian labor force was employed in the management and professional occupations (33.3%), along with 21.3% employed in service occupations, 18.9% employed in sales and office occupations, 15.5% in natural resource, construction, and maintenance, and 11% employed in production, transportation, and material moving occupations. These percentages remained quite stable between 2000 and 2010 (Figure 4).

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

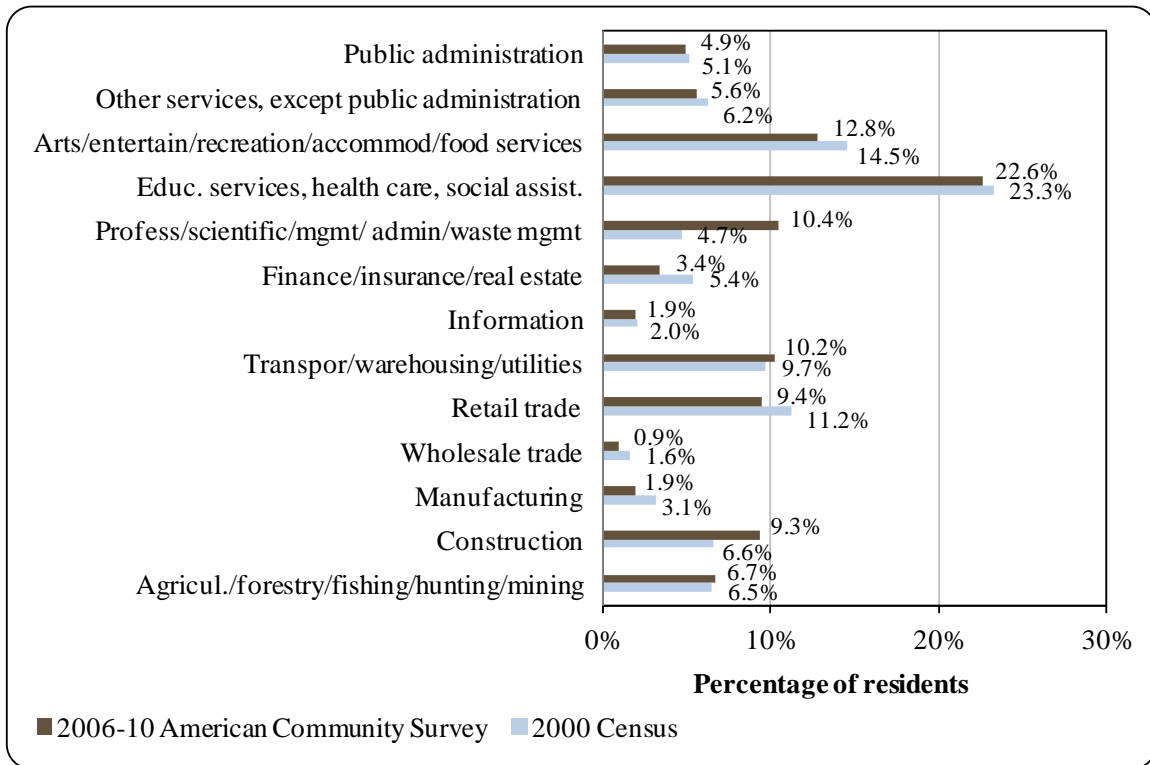
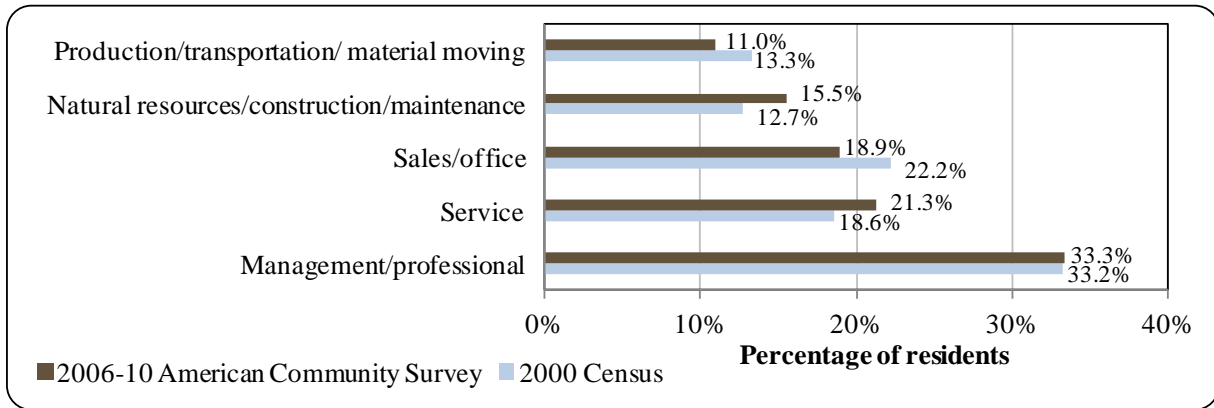


Figure 4. Local Employment by Occupation in 2000-2010, Homer (U.S. Census).



Governance

The City of Homer was incorporated in 1964 and is located within the Kenai Peninsula Borough. Homer is a 1st Class City with a Manager or “Strong Mayor” form of government, with a seven-person city council that includes the Mayor, a nine-person school board, a seven-person planning commission, and several municipal employees. The City collects a 4.5% sales tax and the Borough administers an additional 3% sales tax. Together, the City and Borough collect a combined 11.3 mills property tax.²⁸⁹

In addition to sales and property tax revenues, during the 2000-2010 period, governmental revenues came from licenses and permits, interest, fines and forfeitures, charges for services, and intergovernmental funding sources such as shared revenues and capital/special project grants. Annual municipal revenue in Homer followed an increasing trend over the last decade, rising from \$7,176,000 in 2000 to \$18,737,135 in 2010. Part of this increase can be attributed to an increase in total sales tax revenues over the period. Sources of shared funds included state funds from the State Revenue Sharing program (between \$50,000 and \$65,000 per year from 2000 to 2003) and the Community Revenue Sharing program (\$370,000 per year in 2009 and 2010), as well as shared funds from the SAFE Communities program (public safety, fire, utilities, and infrastructure projects) and the Utility cooperative. In addition, Homer received several fisheries-related grants during the 2000-2010 period. In 2000, the U.S. Economic Development Administration granted Homer \$1,300,000 toward dock demolition and new pilings, the Alaska Industrial Development and Export Authority granted \$200,000 for boat storage and warehouse, and the Alaska Department of Commerce, Community, and Economic Development’s Division of Community and Rural Affairs (DCRA) provided \$35,069 toward repair of the walking surfaces of harbor ramps 4 and 7. In 2003, \$219,375 was received from the U.S. Army Corps of Engineers for 2003-2004 maintenance harbor dredging. In 2007, the DCRA granted Homer \$10,000 for stocking of smolt in Nick Dudiak Fishing Lagoon. Finally, in 2010, the Alaska Department of Transportation and Public Facilities granted \$1,813,000 toward a feasibility study for an Intermodal Deep Water Dock facility in Homer. An overview of selected revenue streams for Homer from 2000 to 2010 is provided in Table 2.

²⁸⁹ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Homer 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	\$7,176,000	\$1,975,109	\$62,477	\$1,535,069
2001	\$7,230,316	\$2,069,920	\$57,039	n/a
2002	\$9,129,077	\$3,243,410	\$53,700	n/a
2003	\$9,034,168	\$3,506,170	\$64,060	\$219,375
2004	\$10,138,928	\$3,737,944	n/a	n/a
2005	\$14,762,482	\$5,119,528	n/a	n/a
2006	\$13,577,487	\$5,670,638	n/a	n/a
2007	\$13,362,590	\$6,173,478	n/a	\$10,000
2008	\$14,449,673	\$6,334,758	n/a	n/a
2009	\$14,207,837	\$5,361,109	\$370,967	n/a
2010	\$18,737,135	\$6,613,640	\$374,392	\$1,813,000

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.

Homer was not included under the Alaska Native Claims Settlement Act (ANCSA) and is not federally recognized as a Native village.²⁹⁰ The closest offices of the Alaska Department of Fish and Game (ADF&G), the Alaska Department of Natural Resources, and the National Marine Fisheries Service (NMFS) are located in Homer. The closest offices of the DCCED and the U.S. Bureau of Citizenship and Immigration Services are located in Anchorage.

Infrastructure

Connectivity and Transportation

Homer is accessible by road, air, and water. The City is often referred to as “The End of the Road” because it is the terminus of the Sterling Highway. Anchorage is located 222 road miles to the north. The state owns and operates the Homer Airport, with a 6,701 feet long by 150 feet wide asphalt runway, as well as a floatplane basin and seaplane base at adjacent Beluga Lake. The City is served by scheduled and chartered aircraft services.²⁹¹ As of early June 2012,

²⁹⁰ Ibid.

²⁹¹ Ibid.

roundtrip airfare between Homer and Anchorage was \$239.²⁹² There are also additional private landing strips in the vicinity.²⁹³

The Homer Spit hosts a variety of port facilities. The Pioneer Dock serves as Homer's Alaska Marine Highway ferry terminal, and also the Coast Guard dock.²⁹⁴ As of summer 2012, a one-way adult passenger fare on the Alaska State ferry from Homer to Juneau was \$380, and \$706 one-way to Bellingham.²⁹⁵ In addition to the ferry terminal, Homer's deep-water dock and harbor are located on the spit. The deep water dock can accommodate vessels with 30-foot draft of up to 340 feet in length, and the boat harbor hosts a marina with moorage for up to 920 vessels as well as a fish dock. Currently, the deep water dock is used as a disembarkation point for cruise ships. The City of Homer has identified expansion of the deep water dock and the harbor as priority development projects.²⁹⁶ Additional marine facilities on the spit include a 4-lane boat launch ramp.²⁹⁷

Facilities

Water in Homer is sourced from a dam and 35-acre reservoir at Bridge Creek. Water is filtered and chlorinated and stored in a 500,000-gallon tank before entering the City-operated piped water system. This system provides 2 million gallons of water per day to the City. Those households not connected to the piped water system use individual wells or have water delivered to home tanks. The City also operates a piped sewage system, which directs sewage to a deep shaft sewer treatment plant with a capacity of 880,000 gallons per day. Some individual septic tanks are also in use in Homer.²⁹⁸ According to the 2011 AFSC survey, community leaders indicated that improvements to water and sewer pipelines are currently in progress, and a sewage treatment plan upgrade is scheduled to be completed within the next 10 years. Peninsula Sanitation, a private firm, provides refuse collection services locally. Trash is hauled to the Borough-operated landfill and balefill located in Homer. The Homer Electric Association, Inc. provides electricity, which comes from several sources. Homer Electric operates the Bradley Lake Hydroelectric Plant, is part-owner of Alaska Electric Generation & Transmission Cooperative, which operates a gas turbine plant in Soldotna, and also purchased additional electricity from Chugach Electric.²⁹⁹ According to the 2011 AFSC survey, community leaders indicated that a natural gas pipeline was scheduled to be completed in 2012.

Police services are provided by the City Police Department and a state troopers post located in Homer. A State District Court and State Jail are also located there. Fire and rescue services are provided by the City Fire Department, the Homer Volunteer Fire Department, the Eastland Volunteer Fire Department, and the City Search and Rescue team.³⁰⁰ In the 2011 AFSC survey, community leaders reported that an additional satellite fire department is slated to be

²⁹² This price was calculated on November 21, 2011 using kayak.com.

²⁹³ See footnote 289.

²⁹⁴ City of Homer. 2011. *Homer Spit Comprehensive Plan*. Retrieved October 10, 2012 from <http://www.cityofhomer-ak.gov/planning/spit-comprehensive-plan-2011>

²⁹⁵ Prices retrieved March 7, 2012 from <http://www.dot.state.ak.us/amhs/doc/fares/XGTariffs.pdf>.

²⁹⁶ See footnote 294.

²⁹⁷ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/comddb/CF_BLOCK.htm.

²⁹⁸ Ibid.

²⁹⁹ Ibid.

³⁰⁰ Ibid.

built by 2013. Additional community facilities in Homer include a variety of libraries (one public, one academic, and five school libraries), a movie theater, the Pratt Museum, the Alaska Islands and Ocean Visitor Center, a fitness center and high school pool, and a boys and girls club. Telephone, internet, and cable services are all provided locally.³⁰¹

In the 2011 AFSC survey, community leaders reported that a variety of social services are provided locally, including a food bank, job placement services, publicly subsidized housing, mental/behavioral services, and a women's shelter. Senior services are provided by Homer Senior Center, the Friendship Center Adult Day Care, Friendship Terrace Assisted Living, Senior Housing, and Homer Senior Citizens, Inc.³⁰²

With regard to fisheries-related infrastructure, community leaders reported in the 2011 AFSC survey that 29,228 feet of dock space is available for permanent vessel moorage, as well as 6,000 feet of dock space for transient vessel moorage. They indicated that vessels of up to 170 feet in length can use moorage within the Homer boat harbor, and that boats up to 800 feet in length can use outside docking facilities. They reported that the Port of Homer is capable of handling all types of regulated vessels, including the U.S. Coast Guard, cruise ships, ferries, fuel barges, and HAZMAT vessels. In the survey, community leaders indicated that new dock space was constructed in 2002, a fish cleaning station was added in 2006, and upgrades to roads serving dock space were completed in 2009. Current developments include improvements to electricity and water serving dock facilities and addition of new pilings. By 2014, they indicated that a new barge landing area will be finished. By 2017, a variety of projects are expected to be completed, including improvements to the existing dock structure, improvements to haul out facilities, and an Environmental Protection Agency-certified boat cleaning station.

Community leaders also reported that a full range of fisheries-related services are available in Homer. These include fish processing plants and cold storage facilities, fishing gear manufacture, sales, repair, and storage, boat repair services (electrical, welding, mechanical, machine shop, and hydraulics), marine refrigeration, sales of boat fuel, ice, bait, and tackle, haul-out facilities and tidal grids for small boats (less than 60 tons) and large boats (more than 60 tons), dry dock storage, commercial and recreational vessel moorage, fishing-related attorneys and bookkeeping, and fish lodges.

Medical Services

Medical services are provided at several facilities in Homer, including the Homer Medical Clinic, the Kachemak Bay Medical Clinic, the Seldovia Village Tribe Health Center, and the South Peninsula Hospital. The hospital is a qualified Acute Care facility.³⁰³ In addition to acute care, the South Peninsula Hospital offers long-term care, a birthing center, laboratory and imaging services, rehabilitation services, surgery, orthopedics, a sleep center, and other specialty services.³⁰⁴ Homer also has a mental health center. Emergency Services have highway, marine, airport, and floatplane access. Emergency service is provided by 911 Telephone Service and volunteers.³⁰⁵

³⁰¹ Ibid.

³⁰² Ibid.

³⁰³ Ibid.

³⁰⁴ South Peninsula Hospital. 2010. *Homepage*. Retrieved October 9, 2012 from <http://www.sphosp.com/joomla2/home>.

³⁰⁵ See footnote 297.

Educational Opportunities

There are eight schools in Homer, all of which are part of the Kenai Peninsula Borough School District. One school – the Razdolna School – provides a preschool through 12th grade education. As of 2011, the Razdolna School had 63 students and 10 teachers. Two additional schools provide high school education. As of 2011, Homer High School had 399 students and 29 teachers and Homer Flex School had 27 students and 4 teachers. Homer Middle School instructs 7th and 8th grade students, and had 227 students and 17 teachers in 2011. The remaining four schools offer some combination of elementary and intermediate education, including McNeil Canyon Elementary (Kindergarten through 6th grade, 119 students and 12 teachers in 2011), Paul Banks Elementary School (preschool through 2nd grade, 188 students and 17 teachers in 2011), Fireweed Academy (3rd through 6th grade, 116 students and 7 teachers in 2011), and West Homer Elementary School (3rd through 6th grade, 242 students and 20 teachers in 2011).³⁰⁶

In addition to K-12 education, the Kachemak Bay branch of Kenai Peninsula College, University of Alaska, Anchorage is located in Homer. The campus offers continuing and professional development, elder hostel and environmental education programs, adult basic education, family literacy and GED programs, youth job training, career planning and development services, and academic advising.³⁰⁷

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Homer is located in the traditional territory of the Kenaitze people, a branch of Athabaskan Native Americans. Historically, the Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.³⁰⁸ Commercial fisheries began to develop in the Cook Inlet area soon after the United States purchased Alaska from Russia in 1867. Salmon and herring were two of the earliest commercial fisheries in Alaska, during the period when the product was salted for storing and shipment.³⁰⁹ The first Cook Inlet salmon cannery was built in 1882 at the mouth of the Kasilof River, in English Bay. An additional 17 canneries had been built in central Alaska by 1890.³¹⁰ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to

³⁰⁶ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

³⁰⁷ Partners on the Peninsula website. (n.d.). *Kachemak Bay Campus – Kenai Peninsula College – UAA*. Retrieved October 10, 2012 from <http://pop411.org/category-listings/educationtraining/kachemak-bay-campus-kenai-peninsula-college-uaa.html>.

³⁰⁸ Kenaitze Indian Tribe. (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

³⁰⁹ 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>.

³¹⁰ 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>.

undertake longer trips.³¹¹ Commercial crab fisheries began to develop in the GOA in the 1930s.³¹²

The community of Homer initially developed as a result of coal mining activity. Commercial fishing did not develop into a primary industry in the community until the late 1950s, when adequate docking facilities were constructed.³¹³ Prior to this time, small processing facilities had opened and closed on Homer Spit. The first year-round processing facility in Homer (Alaskan Seafoods) was built in 1954 by Gene Browning. Alaskan Seafoods specialized in frozen king crab and shrimp.³¹⁴ In 1964, several crab processors were active in Homer, including Homer Brand Seafoods, Inc., which processed Dungeness crab, and Pacific Alaska Seafoods, which processed both Dungeness and king crab.³¹⁵

Until the early 1960s, Seldovia had served as a regional center for seafood processing and fishing activity. However, after the Good Friday earthquake of 1964 destroyed Seldovia's waterfront, Homer began to take over this role.³¹⁶ In 1976, Icicle Seafoods, Inc. built its Homer processing plant, which processed crab, shrimp, halibut, sablefish, herring, and salmon. By the mid-1980s, the Icicle facility reduced operations to approximately six months per year, and focused on salmon and herring processing until the plant burned down in 1998. As of 2012, Icicle Seafoods, Inc. still maintained a fish buying station in Homer, and purchases a large portion of halibut and sablefish delivered to the Homer dock.³¹⁷ See the *Processing Plants* section of this profile for information about current processing facilities in Homer.

In recent decades, charter fishing has grown as an industry in Homer, with focus on halibut and salmon. As the charter industry grew in the late 1980s and early 1990s, conflicts arose between the charter halibut industry and commercial halibut interests regarding allocation of the halibut resource.³¹⁸ Due to these allocation concerns, as well as localized overfishing of the resource, the Alaska Board of Fish (BOF) and North Pacific Fishery Management Council (NPFMC) began discussing a moratorium on new charter licenses in Southeast and Southcentral Alaska in the 1990s.³¹⁹ In 2007, the NPFMC approved a motion to implement a limited entry program for halibut charter fleets in Areas 2C and 3A (Southeast and Southcentral Alaska) and a daily halibut bag limit for each charter vessel angler of two halibut of any size per day per

³¹¹ Thompson, W. F. and N. L. Freeman. 1930. *History of the Pacific Halibut Fishery*. Report of the International Fisheries Commission. Number 5. Retrieved June 1, 2012 from <http://www.iphc.int/publications/scirep/Report0005.pdf>.

³¹² See footnote 309.

³¹³ Reed, C., E. 1985. *The Role of Wild Resource Use in Communities of the Central Kenai Peninsula and Kachemak Bay, Alaska*. Alaska Dept. of Fish and Game, Division of Subsistence. Technical Paper No. 106. Retrieved October 8, 2012 from <http://www.subsistence.adfg.state.ak.us/TechPap/tp106.pdf>.

³¹⁴ Klein, J. 2000. *Historical Perspectives: Commercial Fishing*. Alaska Dept. of Fish and Game. Retrieved October 9, 2012 from <http://svp.soic.indiana.edu/svp/4970813/FID1/html/human/histuse/histfish.htm>.

³¹⁵ State of Alaska, Dept. of Fish and Game. 1966. *1964 Alaska Commercial Fishery Operators. Statistical Leaflet No. 8*. Retrieved October 9, 2012 from <http://www.sf.adfg.state.ak.us/FedAidPDFs/CSL.08.pdf>.

³¹⁶ City of Homer. 2008. *Comprehensive Plan 2008 (Adopted 2010)*. Retrieved October 8, 2012 from <http://www.cityofhomer-ak.gov/planning/comprehensive-plan-2008-adopted-2010>.

³¹⁷ Icicle Seafoods, Inc. website. (n.d.). *Homer: About*. Retrieved October 8, 2012 from <http://www.icicleseafoods.com/locations/hom/about.aspx>.

³¹⁸ Meyer, S. October 2010. "Changes Coming for Alaska's Charter Halibut Fishery." Alaska Dept. of Fish and Game website. Retrieved October 8, 2012 from http://www.adfg.alaska.gov/index.cfm?ADFG=wildlifeneews.view_article&articles_id=482&issue_id=91.

³¹⁹ Dean, M. R. and A. L. Howe. 1999. *Alaska Dept. of Fish and Game Sportfishing Guide and Business Registration and Saltwater Sportfishing Charter Vessel Logbook Program, 1998*. ADF&G Special Publication No. 99-1. Retrieved May 2, 2012 from <http://www.sf.adfg.state.ak.us/fedaidpdfs/Sp99-01.pdf>.

person.^{320,321} Allocation decisions between the charter halibut industry and commercial halibut interests remain extremely controversial.³²²

Homer is located in the Lower Cook Inlet state fishery management area, Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area. ADF&G manages Cook Inlet salmon, herring, and Dungeness crab fisheries. The Lower Cook Inlet management area is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts. Upper Cook Inlet is divided into the Central and Northern fishing districts. With regard to salmon fisheries, set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, salmon seine gear use is limited to the Chinita Bay sub-district, which is open only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.³²³ Historically, a sizable spawning biomass of herring was found in western Cook Inlet, and Lower Cook Inlet also supported commercial fisheries for Dungeness, king, and Tanner crab. However, most Cook Inlet crab and herring fisheries are currently closed due to low stock abundance.^{324,325} Minor commercial fisheries for Tanner and Dungeness crab take place in several areas of western Cook Inlet,³²⁶ and if a sufficient biomass of herring is present in the Kamishak District, some sac roe harvest may be permitted.³²⁷

Groundfish and crab fisheries that occur more than 3 nautical miles (nm) off in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch (TAC) set by NMFS applied to both fisheries. Beginning in 1997, an additional ‘state-waters fishery’ for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.³²⁸

³²⁰ North Pacific Fishery Management Council. April 2007. *News and Notes* Volume 2-07. Retrieved May 2, 2012 from <http://www.alaskafisheries.noaa.gov/npfmc/PDFdocuments/newsletters/NEWS407.pdf>.

³²¹ Federal Register. March 22, 2012. Dept. of Commerce, NOAA, 50 CFR Part 300, Pacific Halibut Fisheries; Catch Sharing Plan. Retrieved May 2, 2012 from <http://www.fakr.noaa.gov/frules/77fr16740.pdf>.

³²² See footnote 318.

³²³ 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>.

³²⁴ 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>.

³²⁵ Alaska Dept. of Fish and Game. 2012. *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

³²⁶ Alaska Dept. of Fish and Game. 2012. *Northern Cook Inlet Management Area*. Retrieved October 9, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=ByAreaSouthcentralNorthCookInlet.main>.

³²⁷ Hollowell, G., T. Otis, and E. Ford. July 2012. *2011 Lower Cook Inlet Finfish Management Report*. Retrieved September 7, 2012 from <http://www.sf.adfg.state.ak.us/FedAidPDFs/FMR12-30.pdf>.

³²⁸ See footnote 324.

Pacific halibut fisheries are managed under the International Pacific Halibut Commission, and federal sablefish fisheries are managed by NMFS. In 1995, management of Alaskan halibut and federal sablefish fisheries shifted from limited entry to a system of Individual Fishing Quotas (IFQ). Motivations for the shift included overcapitalization, short seasons, and the derby-style fishery that led to loss of product quality and safety concerns. As a result of program implementation, the number of shareholders and total vessels participating in the halibut and sablefish fisheries declined substantially, and product quality has improved. This shift to catch shares has been controversial, raising concerns about equity of catch share allocation, reduced crew employment needs, and loss of quota from coastal communities to outside investors.³²⁹

According to a survey conducted by the AFSC in 2011, community leaders noted the following challenges facing the local fishing economy: 1) fuel prices that are causing high inflation, 2) state-run loan programs that drive up the price of permits, and 3) difficulty responding to shifts in fishery regulations such as the shift to catch share management, changing Individual Fishing Quota (IFQ) allotments, and changes to fishing area boundaries. For example, one community leader pointed to a 2010-2011 boundary change in the cod fishery that had a large impact on Homer's cod fleet coast-wide. When asked to describe the effect of fisheries policies or management actions on Homer, one community leader expressed the view that allocation of fishing rights to one group over another group creates a 'class system', disrupts the natural competitive balance of business, and leads to a dynamic of large corporation-owned business at odds with the small town businesses that support Alaskan communities. The same community leader indicated that potential future management actions of concern in Homer include further regulation of the halibut charter fleet in Kachemak Bay and changes in groundfish IFQ allotments.

Homer is not eligible to participate in the Community Quota Entity program or the Community Development Quota program.

Processing Plants

According to ADF&G's 2010 Intent to Operate list, a number of processing facilities were located in Homer that year, including Auction Block Company, Coal Point Seafood Company, Fish Factory LLC, Homer Fish Processing, Kachemak Bay Seafoods, and the Kachemak Shellfish Growers Coop, Inc. More information about each of these facilities is provided below. It is important to note that, based on data reported by NMFS in Alaska processors' Weekly Production Reports, the total number of shore-side processing facilities in Homer declined from 12 in 2000 to 5 in 2010 (Table 5).

The Auction Block Co. has been buying and selling seafood in Homer since 1997, and in 2010 opened a 5,600 square foot processing facility to offer additional value-added products to their wholesaler and distributor customers. Auction Block handles halibut, lingcod, yelloweye rockfish, sockeye and coho salmon, sablefish, king crab, sidestripe shrimp, Pacific cod, scallops, and more.³³⁰ According to a survey of plant managers conducted by the AFSC in 2011, the

³²⁹ Fina, M. 2011. "Evolution of Catch Share Management: Lessons from Catch Share Management in the North Pacific." *Fisheries*, Vol. 36(4). Retrieved September 12, 2012 from http://www.fakr.noaa.gov/npfmc/PDFdocuments/catch_shares/Fina_CatchShare_411.pdf.

³³⁰ The Auction Block Co. (n.d.). *Homepage and Processing Plant*. Retrieved October 9, 2012 from <http://www.auctionblockseafood.com/>.

Auction Block Co. plant employs a maximum of 28 workers each year, and has relied on J-1 workers from Ukraine during recent summer seasons.³³¹

Coal Point Seafood co. is located on the docks of the Homer Harbor. According to the 2011 AFSC survey of plant managers, Coal Point Seafoods began its Homer operations in 1992. The company buys directly from fishermen, and sells a wide variety of Alaskan seafood online, including salmon, halibut, rockfish, sablefish, razor clams, oysters, shrimp, and king, Tanner, and Dungeness crab. Coal Point also offers value-added products such as smoked fish and salmon burgers. The facility also offers custom processing for sport fishermen.³³² The 2011 AFSC plant manager survey found that the Coal Point Seafood plant employed a maximum of 80 workers and provided housing for a maximum of 10 workers from May to August. In addition, a maximum of 40 workers received company-provided meals from June through September.³³³

The Fish Factory LLC operates a seafood processing facility in Homer. This facility is located on the Homer spit.³³⁴ According to the 2011 AFSC survey of plant managers, the facility began operations in 2000, and in 2010 employed a maximum of 40 workers. In addition, the Fish Factory provided lunch to employees during busy workdays.³³⁵

According to the 2010 Intent to Operate list, two separate companies were registered under the name “Homer Fish Processing.” One company, with processor code F8488, is Wild Kenai Salmon. This company purchases sockeye salmon from a partner company in Naknek called Naknek Family Fisheries. The sockeye are caught using set gillnets, and are shipped to Homer for processing in the company’s Homer processing facility, known as “A Fisherman’s Resort”. The official port location code for this company was Anchorage, despite the use of a processing facility located in Homer.³³⁶

The second company registered under the name of Homer Fish Processing had processor code F8553, and a port location code of Homer. Homer Fish Processing also uses the processing facility at “A Fisherman’s Resort” to process halibut, salmon, scallops, king crab, and lingcod.³³⁷ According to the 2011 AFSC survey of plant managers, the company provides custom processing to the charter industry, and employs a maximum of 20 workers each year, especially from June through August. The survey also found that the company provides living accommodations to summer employees.³³⁸

Finally, according to the 2011 AFSC survey of plant managers, since 1992, Kachemak Bay Seafoods has operated a small seafood processing facility in Homer, with a maximum of 2-4 employees each year. In addition, results of the plant manager survey indicate that the Kachemak

³³¹ This information is based on the results of a survey of processing plant managers conducted by the Alaska Fisheries Science Center in 2011.

³³² Coal Point Seafood Company. 1999. *Home, Seafood Selection, and Custom Processing*. Retrieved October 9, 2012 from http://www.welovefish.com/alaska_seafood.htm.

³³³ This information is based on the results of a survey of processing plant managers conducted by the Alaska Fisheries Science Center in 2011.

³³⁴ The Fish Factory. (n.d.). *Address*. Retrieved October 9, 2012 from <http://www.thefishfactory.net/>.

³³⁵ This information is based on the results of a survey of processing plant managers conducted by the Alaska Fisheries Science Center in 2011.

³³⁶ Wild Kenai Red Salmon. 2009. *Home, Our Story, Our Fish, and Contact*. Retrieved October 9, 2012 from <http://wildkenaisalmon.com/>.

³³⁷ Homer Fish Processing. 2012. *Homepage*. Retrieved October 9, 2012 from <http://www.myalaskafish.com/>.

³³⁸ This information is based on the results of a survey of processing plant managers conducted by the Alaska Fisheries Science Center in 2011.

Shellfish Growers Coop Inc. began operations via the Kachemak Shellfish Mariculture Association (KSMA) in 1996, employing a maximum of six workers per year.³³⁹

Fisheries-Related Revenue

In 2010, the City of Homer received \$2,118,636 from fisheries-related taxes and fees. Revenue sources include the Shared Fisheries Business Tax, fees for harbor and port/dock usage, as well as leasing of public land to members of the fishing industry, and seafood, fuel, and other wharfage fees. Table 3 presents details of selected aspects of community finances between 2000 and 2010.³⁴⁰

In a survey conducted by the AFSC in 2011, community leaders indicated that harbor maintenance is at least partially funded by these fisheries-related revenue sources. They indicated that harbor fees support the Harbor Enterprise Fund, which in turn covers harbor operation costs.

Commercial Fishing

Homer residents are highly involved in a majority of state and federal commercial fisheries in Alaska, including salmon, halibut, crab, groundfish (lingcod, rockfish, Pacific cod, sablefish), herring, and “other shellfish”. They were active in these fisheries as permit and quota share account holders, crew license holders, and vessel owners. In addition, the community of Homer is one of the leading processing communities in Alaska, ranking 17th in landings and 6th in ex-vessel revenue out of 67 Alaskan ports that received landings in 2010. The higher ranking in terms of ex-vessel value compared to overall landings volume can be partly attributed to the high proportion of lucrative halibut landed in Homer relative to other species. Homer is one of the leading ports for halibut deliveries in Alaska, and the community has been called, “The Halibut Capital of the World”.³⁴¹ In 2010, 27 fish buyers were present locally, and 5 shore-side processing facilities were in operation. In total, 23,546,436 net pounds were landed by Homer fish buyers in 2010, generating a total of \$69,076,590 in ex-vessel revenue (Table 5).

In 2010, 647 commercial crew licenses were held and 505 vessels were primarily owned by Homer residents. Both of these numbers represent declines from the year 2000, when 751 crew licenses were held and 576 vessels were primarily owned by residents. Also in 2010, 483 vessels were listed as homeported in Homer, and 286 vessels delivered catches in town. This information about the commercial fishing sector in Homer is presented in Table 5. According to a survey conducted by the AFSC in 2011, community leaders reported that a wide range of fishing vessel sizes and types use Homer as a base of fishing operations. Fishing vessels range in size from under 35 feet to over 125 feet in length, and use longline, gillnet, purse seine, troll, pot, and jig gear. Community leaders did not note a substantial shift in the number of fishing vessels present in Homer over the past 5 years.

In 2010, 646 Homer residents held a total of 1,113 state Commercial Fisheries Entry Commission (CFEC) permits. Of these, 540 were held for salmon fisheries, 186 were held for

³³⁹ Ibid.

³⁴⁰ A direct comparison between fisheries-related revenue and total municipal revenue cannot reliably be made as not all fisheries-related revenue sources are included in the municipal budget.

³⁴¹ City of Homer. (n.d.). *Snapshot of Homer*. Retrieved October 10, 2012 from <http://www.cityofhomer-ak.gov/community/snapshot-homer>.

halibut, 123 were held for groundfish, 122 for herring, 63 for sablefish, 56 for crab, and 23 were held for “other shellfish”. Information about CFEC permits is presented in Table 4, and further details regarding these permits are presented below.

Of 540 salmon CFEC permits, 335 were held in drift gillnet fisheries (142 for Cook Inlet, 94 in Bristol Bay, 70 in Prince William Sound, and 29 in the Peninsula-Aleutian gillnet fishery), 58 were held in set gillnet fisheries (25 in Cook Inlet, 25 in Bristol Bay, 3 in Prince William Sound, 3 in Kodiak, and 2 in the Peninsula-Aleutian management area), 130 were held in purse seine fisheries (42 in Prince William Sound, 41 in Cook Inlet, 32 in Kodiak, 6 in Southeast, 5 in Chignik, and 4 in Peninsula-Aleutians), 6 permits were held in the statewide power gurdy troll fishery, 5 in the statewide hand troll fishery, 3 in the Lower Yukon gillnet fishery, 1 in the Kotzebue gillnet fishery, and 3 in the Kodiak beach seine fishery. Of all regions and permit types, the greatest percentages of actively fished permits were in the Prince William Sound set gillnet fishery (100% actively fished in 2010), Kodiak set gillnet (100%), Prince William Sound drift gillnet (98.6%), Peninsula-Aleutians drift gillnet (93.1%), Bristol Bay drift gillnet (81.2%), and Bristol Bay set gillnet (76%). Overall, 67% of salmon permits held in Homer were actively fished in 2010. The number of salmon permit holders and the total salmon permits held increased substantially between 2000 and 2010, while the overall percentage actively fished remained relatively stable over the period.

Of 186 halibut CFEC permits, a majority (166) was held in the statewide longline fishery using vessels under 60 feet in length, while 7 were held for the statewide longline fishery for vessels 60 feet or over, 7 were held in the statewide mechanical jig fishery, and 6 were held for statewide hand troll. Overall, 85% were actively fished in 2010. Both the number of halibut permits held and the number of permit holders decreased slightly between 2000 and 2010, while the percentage of permits actively fished remained relatively stable over the period.

The number of groundfish CFEC permits held by Homer residents decreased by over 50% between 2000 and 2010, and the total number of permit holders also decreased by 43% over this period. Of 123 groundfish CFEC permits held in 2010, a majority (109) were held in miscellaneous saltwater finfish fisheries (including Pacific cod and pollock). Most of these permits were associated with longline gear, while some were also associated with mechanical jig, pot gear, hand troll, and otter trawl gear types. In addition, 13 groundfish permits were held in statewide lingcod fisheries, including 7 associated with mechanical jig gear, 3 with hand troll, and 3 with longline gear. Finally one groundfish permit was held in the Southeast Alaska demersal shelf rockfish fishery, for use on a longline vessel under 60 feet in length. In 2010, 56% of all state groundfish permits held by Homer residents were actively fished, a slight increase from 41% of all permits held in 2000.

Of 122 total herring CFEC permits, the greatest numbers were held in purse seine fisheries, including 23 held in the Cook Inlet herring roe and bait fishery, 19 held in the Prince William Sound roe herring fishery, and 16 in the Peninsula-Aleutians roe herring fishery, as well as several each in the Bristol Bay and Southeastern roe herring purse seine fisheries. In addition, 15 permits were held in the Prince William Sound herring spawn on kelp hand-picking fishery and 12 were held in the Kodiak roe herring gillnet fishery, while one or more permits were held in each of the following herring fisheries: Bristol Bay spawn on kelp hand-picking fishery, Norton Sound, Nunivak Island, and Nelson Island herring gillnet fisheries, Security Cove and Bristol Bay roe herring gillnet fisheries, and the Peninsula-Aleutians herring for bait/food purse seine fishery. Of these, 100% of Bristol Bay and Southeast purse seine permits were actively fished in 2010, 100% of Bristol Bay roe herring gillnet permits were actively fished, and the

Peninsula-Aleutians herring for food/bait purse seine permit was actively fished. No herring permits were actively fished in Prince William Sound or Cook Inlet herring fisheries in 2010. The number of Homer residents holding herring permits decreased between 2000 and 2010, as did the total number of permits held. The overall percentage of permits that were actively fished remained relatively stable over the period.

Of the 63 sablefish CFEC permits held in 2010, a majority (53) were held for the statewide fishery (not including Prince William Sound or Southeast Alaska) using longline gear on vessels under 60 feet in length. In addition, one longline permit was held for the Northern Southeast sablefish fishery, one longline permit was held for use statewide, and eight permits were held for the Prince William Sound fixed gear sablefish fishery. Overall, 87% of sablefish permits were actively fished in 2010. The number of Homer permit holders decreased by 17% and the number of permits held decreased by 23% between 2000 and 2010, while the percentage of permits actively fished increased slightly over time.

Of 56 crab CFEC permits held in 2010, a majority were held in the Cook Inlet Dungeness crab fishery (37), although none of these permits were actively fished in 2010. Homer residents also held king crab permits in Bering Sea and Bristol Bay fisheries, Tanner crab permits in Kodiak, Bering Sea, and Peninsula-Aleutians management areas, and a Korean hair crab permit in the Bering Sea. In 2010, 100% of king crab permits were actively fished (4 held in the Bristol Bay fishery, 1 held in the Bering Sea fishery), 5 of 13 Tanner crab permits were actively fished, and the Korean hair crab permit was not active that year. Overall, 18% of state crab permits were actively fished by Homer residents in 2010. The number of crab permits holders remained relatively stable between 2000 and 2010, while the total number of permits held decreased by more than 25%. Between 2000 and 2010, all state crab permits held in Homer were associated with pot gear.

“Other shellfish” CFEC permits were held for shrimp, sea cucumber, and octopi/squid fisheries in 2010. The greatest number (16) was held for Prince William Sound shrimp pot gear fisheries. In addition, five permits were held for the Kodiak sea cucumber dive fishery, one for the Southeast sea cucumber dive fishery, and one for the statewide octopi/squid pot gear fishery. Only two of the shrimp permits were actively fished that year, while all of the sea cucumber and octopi/squid permits were actively fished. It is important to note that, earlier in the 2000-2010 period, “other shellfish” permits were also held in the statewide clam shovel fishery (held from 2000 to 2007), the statewide sea urchin dive fishery excluding southeast (2000 and 2001), the statewide scallop dredge fishery (2000 to 2009), and the weathervane scallop dredge fishery (2005 to 2009). Fluctuations in these diverse fisheries over the 2000-2010 period are reflected in inconsistent numbers of total “other shellfish” permits held by Homer residents between 2000 and 2010, with total permits held ranging between 6 and 28 per year.

In addition to CFEC permits, Homer residents also held federal License Limitation Program (LLP) permits and Federal Fisheries Permits (FFP). Between 2000 and 2010, the number of Homer residents holding groundfish LLPs varied between 141 and 157 per year, and the total number of groundfish LLPs held varied from 160 to 176. The percentage of groundfish LLP permits that were actively fished remained relatively stable over the period. During the same period, the number of crab LLP holders varied between 12 and 17 per year, total crab LLPs held varied between 13 and 18 per year, and the percentage actively fished appears to have declined slightly, from 44% in 2000 to 31% in 2010. In addition, a large number of Federal Fisheries Permits (FFP) was held by Homer residents. In 2010, 120 FFPs were held by a total of

114 residents, a slight decline from 166 FFPs held by 145 residents in 2000. Further information about federal permits is presented in Table 4.

Between 2000 and 2010, Homer residents also held quota share accounts and quota shares in federal fisheries for halibut, sablefish, and crab, with the highest level of participation in the halibut fishery. The number of halibut quota share account holders in Homer was 256 in the year 2000, falling to 199 by 2010, a decline of 22.3%. In comparison, the total number of quota shares held stayed relatively stable, declining by only 5% between 2000 and 2010. The overall halibut IFQ allotment for account holders in Homer decreased by approximately 20% between 2000 and 2010. Further information about halibut catch share participation is presented in Table 6.

The number of sablefish quota share account holders remained relatively stable between 2000 and 2010, with a high of 67 in 2000 and a low of 55 in 2003. In 2010, 60 Homer residents held sablefish quota share accounts, and a total of 9,611,888 quota shares were held that year. The overall halibut IFQ allotment for account holders in Homer increased to approximately 35% above 2000 levels in 2004, and then fell back to close to 2000 levels by 2010. Further information about federal sablefish quota is presented in Table 7.

Between 2005 and 2010, the number of Homer residents holding quota share accounts in the federal crab fishery increased slightly, from 8 quota share accounts in 2005 to 11 in 2010. The total number of quota shares also increased, from 28,276,099 in 2005 to 47,400,206 in 2010. The overall crab IFQ allotment increased by almost 38% by 2007, and remained higher than 2005 levels through 2010. Further information about federal crab catch share participation is presented in Table 8.

Of the landings that were reported between 2000 and 2010, the species landed in the greatest volume in Homer were halibut, salmon, Pacific cod, and sablefish. On average between 2000 and 2010, 11,375,836 net pounds of halibut were landed in Homer, valued on average at \$37,197,035 in ex-vessel revenue. Over the same period, an average of 5,376,463 net pounds of salmon were landed, valued on average at \$2,623,563 in ex-vessel revenue; almost 3.5 million net pounds of Pacific cod and were landed on average; over 1.3 million net pound of sablefish were landed on average. Smaller volumes of ‘other groundfish’, ‘other shellfish’, and pollock were also landed in Homer between 2000 and 2010. Information about pollock was only reported in one year during the period (2001), while data for all other years were considered confidential due to the small number of participants. Information about herring and finfish landings and revenue was also considered confidential for all years during the period. Further information about landings and ex-vessel revenue generated in Homer is presented in Table 9.

It is important to note that Homer ranked much higher compared to other Alaskan processing communities with regard to ex-vessel value of landings (6th) than total volume of landings (17th). This may be explained by the fact that halibut was the leading species landed by volume in Homer, while salmon makes up the bulk of landings in many top processing ports. Halibut was valued at over \$3 per pound on average over the 2000-2010 period, while salmon landed in Homer were valued at just under \$0.50 per pound overall during the period. Sablefish was also lucrative species, with an average price per pound of over \$3.50 for sablefish landings in Homer during the period.

In addition to the landings delivered in Homer by fishermen from many communities, landings and ex-vessel revenue earned by Homer vessel owners is of note. Homer vessel owners made deliveries in many locations around Alaska between 2000 and 2010. Information was reported regarding their landings in all fisheries, with the exception of finfish, in which

information was considered confidential in all years due to the small number of participants. Data regarding crab landings and ex-vessel revenue were also considered confidential in one year during the period (2008). The fisheries with the greatest landings volume by Homer vessel owners were for salmon, herring, Pacific cod, halibut, and crab. On average between 2000 and 2010, Homer vessel owners landed 48,763,166 net pounds of salmon, valued at \$19,539,450 in ex-vessel revenue on average over the period; herring landings averaged 16,157,112 net pounds per year, with average ex-vessel revenue of \$2,060,884; Pacific cod landings averaged 8,265,945 net pounds per year, with average ex-vessel revenue of \$3,044,888; halibut landings averaged 4,985,360 net pounds per year, with average ex-vessel revenue of \$16,494,307; and crab landings averaged 1,522,272 net pounds (for those years in which data were reported), with average ex-vessel revenue of \$3,711,026. Homer vessel owners also landed smaller volumes in fisheries for sablefish, pollock, ‘other groundfish’, and ‘other shellfish’. Further information is presented in Table 10. As in the case of landings delivered in Homer, sablefish and halibut were the most valuable species delivered by Homer vessel owners, as well as crab. On average, Homer vessel owners received just over \$4 per pound for sablefish, \$3.30 per pound for halibut, and \$2.40 per pound for crab.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	\$21,615	\$27,269	\$3,989	\$50,171	\$92,368	\$162,825	\$70,793	\$93,067	\$92,490	\$103,185	\$97,190
Fisheries Resource Landing Tax ¹	n/a	\$87	\$5,271	\$390	\$59	\$351	\$120	\$91	\$138	\$66	\$735
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ^{2,3}	\$21,699,332 ²	\$2,409,482 ²	\$2,454,846 ²	\$2,968,606 ²	\$2,768,504 ²	\$2,905,274 ²	\$2,944,874 ²	\$3,121,160 ²	\$3,253,737 ²	\$2,960,550 ²	\$1,536,887 ³
Port/dock usage ^{2,3}	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$100,730 ³
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$12,953
Seafood wharfage ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$49,300
Fuel wharfage ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$128,048
Other wharfage ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$78,359
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>\$21,720,947</i>	<i>\$2,436,838</i>	<i>\$2,464,106</i>	<i>\$3,019,167</i>	<i>\$2,860,931</i>	<i>\$3,068,450</i>	<i>\$3,015,788</i>	<i>\$3,214,319</i>	<i>\$3,346,365</i>	<i>\$3,063,801</i>	<i>\$2,118,636</i>
<i>Total municipal revenue⁵</i>	<i>\$7,176,000</i>	<i>\$7,230,316</i>	<i>\$9,129,077</i>	<i>\$9,034,168</i>	<i>\$10,138,928</i>	<i>\$14,762,482</i>	<i>\$13,577,487</i>	<i>\$13,362,590</i>	<i>\$14,449,673</i>	<i>\$14,207,837</i>	<i>\$18,737,135</i>

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

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

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

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

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

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

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	176	164	160	162	163	164	170	167	171	170	176
	Active permits	73	72	73	66	67	69	74	76	70	76	83
	% of permits fished	41%	43%	45%	40%	41%	42%	43%	45%	40%	44%	47%
	Total permit holders	157	144	142	142	141	142	147	144	145	143	149
Crab (LLP) ¹	Total permits	18	17	16	16	14	13	14	13	13	13	16
	Active permits	8	8	9	8	8	5	4	4	4	5	5
	% of permits fished	44%	47%	56%	50%	57%	38%	28%	30%	30%	38%	31%
	Total permit holders	17	17	16	16	14	13	14	12	12	13	14
Federal Fisheries Permits ¹	Total permits	166	170	172	140	145	147	111	118	126	114	120
	Fished permits	2	3	1	68	72	71	72	78	78	85	90
	% of permits fished	1%	2%	1%	49%	50%	48%	65%	66%	62%	75%	75%
	Total permit holders	145	147	149	133	138	139	109	115	122	109	114
Crab (CFEC) ²	Total permits	76	81	77	72	64	60	60	55	55	54	56
	Fished permits	27	32	29	29	19	15	10	9	8	8	10
	% of permits fished	36%	40%	38%	40%	30%	25%	17%	16%	15%	15%	18%
	Total permit holders	59	69	66	60	52	55	56	52	56	53	54
Other shellfish (CFEC) ²	Total permits	28	21	14	8	9	11	9	7	6	6	23
	Fished permits	11	8	7	4	5	6	6	3	3	4	9
	% of permits fished	39%	38%	50%	50%	55%	54%	66%	42%	50%	66%	39%
	Total permit holders	24	20	14	8	9	10	9	7	6	6	22
Halibut (CFEC) ²	Total permits	213	211	205	203	207	195	200	190	179	180	186
	Fished permits	171	169	176	175	182	171	177	168	157	161	159
	% of permits fished	80%	80%	86%	86%	88%	88%	89%	88%	88%	89%	85%
	Total permit holders	200	201	198	196	198	189	192	185	173	172	177
Herring (CFEC) ²	Total permits	143	126	114	118	111	115	115	107	110	119	122
	Fished permits	44	36	27	23	24	30	24	19	18	28	27
	% of permits fished	31%	29%	24%	19%	22%	26%	21%	18%	16%	24%	22%
	Total permit holders	89	81	73	77	77	76	75	72	72	74	72

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	82	83	75	62	67	63	67	65	65	71	63
	Fished permits	58	62	64	54	56	57	56	60	56	64	55
	% of permits fished	71%	75%	85%	87%	84%	90%	84%	92%	86%	90%	87%
	Total permit holders	71	71	65	56	60	56	60	59	58	64	59
Groundfish (CFEC) ²	Total permits	269	208	150	135	154	132	110	119	134	139	123
	Fished permits	111	87	60	65	68	65	55	66	65	73	69
	% of permits fished	41%	42%	40%	48%	44%	49%	50%	55%	49%	53%	56%
	Total permit holders	179	148	114	104	111	101	89	101	108	111	102
Other Finfish (CFEC) ²	Total permits	1	1	1	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	0%	-	-	-	-	-	-	-	-
	Total permit holders	1	1	1	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	392	369	369	385	403	410	414	441	489	507	540
	Fished permits	307	272	218	261	272	291	282	292	320	335	363
	% of permits fished	78%	74%	59%	68%	67%	71%	68%	66%	65%	66%	67%
	Total permit holders	390	375	368	372	398	400	394	405	461	477	507
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>1,204</i>	<i>1,100</i>	<i>1,005</i>	<i>983</i>	<i>1,015</i>	<i>986</i>	<i>975</i>	<i>984</i>	<i>1,038</i>	<i>1,076</i>	<i>1,113</i>
	<i>Fished permits</i>	<i>729</i>	<i>666</i>	<i>581</i>	<i>611</i>	<i>626</i>	<i>635</i>	<i>610</i>	<i>617</i>	<i>627</i>	<i>673</i>	<i>692</i>
	<i>% of permits fished</i>	<i>61%</i>	<i>61%</i>	<i>58%</i>	<i>62%</i>	<i>62%</i>	<i>64%</i>	<i>63%</i>	<i>63%</i>	<i>60%</i>	<i>63%</i>	<i>62%</i>
	<i>Permit holders</i>	<i>577</i>	<i>553</i>	<i>537</i>	<i>538</i>	<i>559</i>	<i>547</i>	<i>555</i>	<i>560</i>	<i>601</i>	<i>611</i>	<i>646</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 Homer: 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 Homer ²	Total Net Pounds Landed in Homer ^{2,5}	Total Ex-Vessel Value of Landings in Homer ^{2,5}
2000	751	37	12	576	598	356	20,728,861	\$32,999,514
2001	684	37	7	545	570	387	22,952,129	\$34,124,348
2002	574	41	6	503	512	373	30,271,052	\$41,072,239
2003	587	33	3	514	520	306	21,378,243	\$44,471,809
2004	609	34	3	521	520	287	26,327,290	\$40,284,107
2005	612	33	3	440	413	271	22,935,518	\$41,493,351
2006	591	34	3	439	407	244	16,584,764	\$45,277,403
2007	677	27	3	453	424	219	17,419,245	\$53,472,884
2008	648	22	3	464	427	235	16,481,280	\$52,013,369
2009	643	20	4	487	451	296	22,521,701	\$54,012,378
2010	647	27	5	505	483	286	23,546,436	\$69,076,590

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 Homer: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Pounds)
2000	256	23,729,260	3,881,334
2001	242	23,023,092	4,278,682
2002	245	22,924,656	4,182,600
2003	238	22,364,255	4,070,244
2004	231	21,994,866	3,827,038
2005	218	21,333,328	3,570,888
2006	223	23,069,022	3,609,467
2007	211	21,351,007	3,245,908
2008	197	21,158,341	3,229,729
2009	195	21,510,003	3,018,851
2010	199	22,477,522	2,906,081

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 Homer: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Pounds)
2000	67	14,348,725	1,303,948
2001	63	15,087,837	1,359,338
2002	56	13,584,077	1,275,608
2003	55	12,934,894	1,463,865
2004	57	12,389,208	1,527,406
2005	56	12,334,932	1,393,495
2006	60	12,951,338	1,468,729
2007	57	12,355,057	1,361,555
2008	57	7,756,784	757,015
2009	57	8,356,510	767,758
2010	60	9,611,888	917,114

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 Homer: 2000-2010.

Year	Number of Crab Quota Share Account Holders	Crab Quota Shares Held	Crab IFQ Allotment (Pounds)
2005	8	28,276,099	838,857
2006	8	36,953,670	937,202
2007	9	34,869,233	1,426,080
2008	9	34,869,233	1,331,000
2009	11	47,440,206	1,538,349
2010	11	47,440,206	1,641,051

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.]

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Homer

Table 9. Landed Pounds and Ex-vessel Revenue, by Species, in Homer: 2000-2010.

	<i>Total Net Pounds¹</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	0	0	0	0	0	0	0	0	0	0	0
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	10,108,098	13,479,243	13,744,859	12,102,755	10,715,630	10,824,249	9,657,235	9,938,276	9,214,616	13,472,212	11,877,018
Herring	-	-	-	-	-	-	-	-	-	-	-
Other	202,755	241,211	280,252	398,904	287,725	185,207	244,212	166,497	213,078	204,252	224,108
Groundfish											
Other Shellfish	49,794	50,503	62,652	43,073	49,975	61,118	54,782	54,621	37,027	41,341	38,575
Pacific Cod	5,412,567	3,381,294	3,113,115	1,977,215	2,807,256	2,852,454	3,197,366	4,122,477	3,244,509	3,603,361	4,555,203
Pollock	-	3,337	-	-	-	-	-	-	-	-	-
Sablefish	922,472	1,220,666	1,663,628	1,602,709	1,779,605	1,439,567	1,416,922	1,214,625	1,290,089	1,253,760	835,408
Salmon	4,012,651	4,555,778	11,385,489	5,237,773	10,680,807	7,534,692	2,006,174	1,905,197	2,481,961	3,945,492	5,395,080
<i>Total²</i>	<i>20,708,345</i>	<i>22,932,032</i>	<i>30,253,930</i>	<i>21,362,563</i>	<i>26,321,173</i>	<i>22,897,287</i>	<i>16,576,892</i>	<i>17,401,827</i>	<i>16,481,280</i>	<i>22,521,701</i>	<i>23,537,324</i>
	<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	\$0
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	\$26,182,806	\$26,892,821	\$31,085,677	\$35,467,013	\$32,783,244	\$34,310,087	\$37,814,594	\$45,307,587	\$42,001,027	\$42,224,192	\$55,098,333
Herring	-	-	-	-	-	-	-	-	-	-	-
Other	\$115,873	\$126,194	\$183,419	\$162,832	\$157,669	\$102,501	\$111,180	\$92,831	\$105,398	\$98,176	\$105,357
Groundfish											
Other Shellfish	\$49,939	\$62,986	\$79,233	\$67,102	\$39,390	\$36,176	\$53,058	\$44,571	\$24,281	\$14,575	\$6,448
Pacific Cod	\$1,903,107	\$1,136,886	\$903,141	\$763,584	\$800,340	\$909,294	\$1,384,422	\$2,126,934	\$1,879,617	\$1,169,301	\$1,289,850
Pollock	-	\$219	-	-	-	-	-	-	-	-	-
Sablefish	\$3,355,103	\$3,811,617	\$5,309,473	\$5,747,403	\$5,354,724	\$4,515,057	\$4,933,522	\$4,506,971	\$5,413,045	\$5,889,967	\$4,218,699
Salmon	\$1,314,013	\$1,940,070	\$3,403,459	\$2,123,342	\$1,093,124	\$1,487,854	\$905,649	\$1,221,517	\$2,590,001	\$4,615,904	\$8,164,256
<i>Total²</i>	<i>\$32,920,843</i>	<i>\$33,970,793</i>	<i>\$40,964,592</i>	<i>\$44,331,276</i>	<i>\$40,228,491</i>	<i>\$41,360,969</i>	<i>\$45,202,427</i>	<i>\$53,300,437</i>	<i>\$52,013,369</i>	<i>\$54,012,377</i>	<i>\$68,989,434</i>

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

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

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

² Totals only represent non-confidential data.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Homer

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

	<i>Total Net Pounds¹</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	1,627,874	901,271	1,172,724	979,885	1,170,121	947,504	939,132	1,088,127	-	3,477,134	2,918,944
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	4,540,982	4,456,614	4,842,826	5,342,653	5,301,722	5,019,283	4,977,366	4,937,060	4,958,221	5,175,256	5,286,979
Herring	8,646,410	13,416,602	10,855,833	11,529,020	14,518,946	16,141,467	16,403,957	17,520,338	20,355,317	22,858,995	25,481,348
Other	279,937	441,555	191,977	1,229,755	716,575	753,686	786,252	453,839	500,535	880,441	803,470
Groundfish											
Other	27,348	38,594	42,226	25,449	26,032	31,193	42,419	36,503	35,521	33,335	27,202
Shellfish											
Pacific Cod	10,106,491	8,033,963	9,866,602	5,166,905	7,142,667	6,258,526	7,500,504	9,307,751	6,782,800	9,535,153	11,224,036
Pollock	1,373,561	1,785,524	966,515	988,255	16,376	524,016	1,436,464	141,691	100,057	129,392	73,955
Sablefish	708,232	829,038	820,443	919,942	1,102,549	916,217	905,777	992,652	1,058,420	737,129	826,426
Salmon	33,105,642	31,491,789	31,306,698	35,547,660	38,723,497	71,354,266	54,282,214	66,370,450	56,248,109	44,139,165	73,825,341
<i>Total²</i>	<i>60,416,477</i>	<i>61,394,950</i>	<i>60,065,844</i>	<i>61,729,524</i>	<i>68,718,485</i>	<i>101,946,158</i>	<i>87,274,085</i>	<i>100,848,412</i>	<i>90,038,980</i>	<i>86,966,000</i>	<i>120,467,701</i>
	<i>Ex-vessel Value (Nominal U.S. dollars)</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	\$4,179,190	\$2,263,755	\$3,144,271	\$2,895,416	\$3,563,434	\$2,917,280	\$1,636,376	\$3,247,154	-	\$6,586,124	\$6,677,257
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	\$11,466,849	\$8,786,454	\$10,862,313	\$15,482,193	\$15,982,109	\$15,472,947	\$19,282,085	\$21,924,049	\$21,985,354	\$15,894,526	\$24,298,496
Herring	\$1,060,228	\$1,630,127	\$1,360,342	\$1,013,368	\$1,751,384	\$1,957,636	\$1,446,622	\$1,929,275	\$3,288,083	\$3,457,736	\$3,774,921
Other	\$182,473	\$202,892	\$147,331	\$396,342	\$245,358	\$203,022	\$251,639	\$193,269	\$271,228	\$312,584	\$278,322
Groundfish											
Other	\$18,376	\$36,388	\$28,268	\$22,949	\$19,734	\$15,391	\$41,495	\$35,363	\$14,859	\$15,306	\$7,891
Shellfish											
Pacific Cod	\$3,820,305	\$2,620,418	\$2,769,025	\$1,772,330	\$2,122,638	\$1,985,612	\$3,142,387	\$4,803,781	\$4,143,457	\$3,098,392	\$3,215,427
Pollock	\$171,721	\$216,073	\$99,927	\$105,821	\$982	\$54,185	\$173,020	\$11,536	\$10,706	\$14,139	\$6,779
Sablefish	\$3,108,753	\$3,069,142	\$3,235,723	\$3,829,846	\$3,961,262	\$3,523,132	\$3,679,222	\$3,774,832	\$4,415,428	\$3,175,538	\$4,092,485
Salmon	\$12,446,671	\$9,008,231	\$7,365,921	\$11,535,917	\$11,932,431	\$19,314,843	\$19,409,568	\$25,284,396	\$31,208,789	\$24,146,945	\$43,280,236
<i>Total²</i>	<i>\$36,454,565</i>	<i>\$27,833,479</i>	<i>\$29,013,121</i>	<i>\$37,054,181</i>	<i>\$39,579,332</i>	<i>\$45,444,048</i>	<i>\$49,062,414</i>	<i>\$61,203,655</i>	<i>\$65,337,904</i>	<i>\$56,701,290</i>	<i>\$85,631,812</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

Sportfishing is one of the primary activities that draw visitors to Homer.³⁴² Between 2000 and 2010, an average of 18,081 sportfishing licenses was sold per year in Homer. On average during this period, 3,884 Homer residents purchased sportfishing licenses (including purchases in Homer and other points of sale). The higher number of licenses sold locally compared to purchases by residents is evidence of the importance of the sportfishing industry as a visitor attraction. In 2010, there were 68 active sport fish guide businesses and 101 licensed sport fish guides located in Homer. The number of active guide businesses remained stable between 2000 and 2010, while the number of licensed guides decreased over time (Table 11).

The declining trend in sport fish guide numbers may be related to rule changes in the Southcentral Alaska halibut charter industry. Due to concerns related to allocation between the commercial and sport halibut fisheries as well as localized overfishing of the resource, the Alaska Board of Fish (BOF) and North Pacific Fishery Management Council (NPFMC) began discussing a moratorium on new charter licenses in Southeast and Southcentral Alaska in the 1990s.³⁴³ In 2007, the NPFMC approved a motion to implement a limited entry program for halibut charter fleets in Areas 2C and 3A (Southeast and Southcentral Alaska) and a daily halibut bag limit for each charter vessel angler of two halibut of any size per day per person.^{344,345} Allocation decisions between the charter halibut industry and commercial halibut interests remain extremely controversial.³⁴⁶

Kept/released statistics from charter logbook data reported by ADF&G³⁴⁷ show that halibut was by far the most important species caught by volume during fishing charter trips out of Homer between 2000 and 2010. For those years in which data were reported regarding charter halibut catch during the 2000-2010 period, an average of 86,680 halibut were kept per year. An even higher number were released (118,396 per year on average). Other important species targeted by Homer charters were coho and Chinook salmon, pelagic rockfish, and lingcod. On average, 6,330 coho, 5,895 pelagic rockfish, 2,384 lingcod, and 2,060 Chinook were kept per year during the 2000-2010 period. Lingcod and pelagic rockfish both had relatively high release rates, averaging 1,550 and 1,426 released per year. Other species caught in smaller numbers during Homer charter trips included yelloweye rockfish, pink, sockeye, and chum salmon, and shark, although a majority of the sharks caught were released. A small number of sablefish were also reportedly caught in 2010 only.

³⁴² City of Homer. 2011. *Homer Comprehensive Economic Development Strategy*. Retrieved October 8, 2012 from http://www.cityofhomer-ak.gov/sites/default/files/fileattachments/ceds_fed_2011_final.pdf.

³⁴³ Dean, M. R. and A. L. Howe. 1999. *Alaska Dept. of Fish and Game Sportfishing Guide and Business Registration and Saltwater Sportfishing Charter Vessel Logbook Program, 1998*. ADF&G Special Publication No. 99-1. Retrieved May 2, 2012 from <http://www.sf.adfg.state.ak.us/fedaidpdfs/Sp99-01.pdf>.

³⁴⁴ North Pacific Fishery Management Council. April 2007. *News and Notes* Volume 2-07. Retrieved May 2, 2012 from <http://www.alaskafisheries.noaa.gov/npfmc/PDFdocuments/newsletters/NEWS407.pdf>.

³⁴⁵ Federal Register. March 22, 2012. Dept. of Commerce, NOAA, 50 CFR Part 300, Pacific Halibut Fisheries; Catch Sharing Plan. Retrieved May 2, 2012 from <http://www.fakr.noaa.gov/frules/77fr16740.pdf>.

³⁴⁶ Meyer, S. October 2010. "Changes Coming for Alaska's Charter Halibut Fishery." Alaska Dept. of Fish and Game website. Retrieved October 8, 2012 from http://www.adfg.alaska.gov/index.cfm?ADFG=wildlifeneews.view_article&articles_id=482&issue_id=91.

³⁴⁷ 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, Homer: 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 Homer ²
2000	69	146	3,725	13,646
2001	62	146	3,692	14,194
2002	64	138	3,731	17,064
2003	61	143	3,880	17,455
2004	66	142	3,959	19,510
2005	70	114	4,037	20,117
2006	75	131	3,841	19,116
2007	78	124	3,999	20,569
2008	80	110	3,950	20,477
2009	72	108	4,015	17,528
2010	68	101	3,900	19,211

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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).

According to ADF&G Statewide Harvest Survey data,³⁴⁸ species targeted by private anglers in Homer between 2000 and 2010 included all five species of Pacific salmon, rainbow trout, Dolly Varden char, whitefish, Arctic grayling, northern pike, Pacific halibut, rockfish, lingcod, Pacific cod, shark, smelt, Dungeness crab, Tanner crab, razor clams, hardshell clams, and shrimp.

Homer is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, saltwater and freshwater sportfishing at this regional level was substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska residents logged 20,292 saltwater angler days and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska resident anglers, and the opposite was true of freshwater sportfishing. For both Alaska resident and non-Alaska resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased between 2000 and 2010. Further information about regional sportfishing activity in Homer is presented in Table 11.

Subsistence Fishing

According to a survey conducted by the AFSC in 2011, community leaders indicated that salmon, halibut, and crab are some of the most important subsistence resources utilized by Homer residents. Between 2000 and 2010, no information was reported by ADF&G regarding the percentage of households using different marine resources, or per capita harvest of subsistence resources by Homer residents (Table 12). However, earlier information about household-level subsistence is available from a 1982 ADF&G study. The survey identified species of marine invertebrates, non-salmon fish (not including halibut), and marine mammals harvested by Homer households that year. The species of marine invertebrates harvested by the greatest percentage of Homer households in 1982 included clams (41% of households reported harvest), crab (20%), shrimp (10%), and mussels (8%). The species of non-salmon fish harvested by the greatest percentage of Homer households included steelhead (6% of households reported harvest), Arctic grayling (5%), herring (3%), smelt (3%), as well as trout and whitefish. In addition, a small percentage of Homer households participated in the harvest of seal in 1982.³⁴⁹ It is important to note that in many cases, the number of households reporting use of these subsistence resources was greater than the number involved in harvest, indicating the presence of sharing networks in Homer.

Data are also available regarding salmon and halibut permits issued between 2000 and 2010. The number of subsistence salmon permits issued per year to Homer households increased between 2000 and 2008, from 40 in the year 2000 to 72 in 2008. Sockeye was the most heavily utilized salmon species during this period, averaging 1,017 harvested per year. Smaller numbers of coho, pink, chum, and Chinook salmon were also reported harvested in most years. This information about subsistence harvest of salmon is presented in Table 13. Between 2003 and

³⁴⁸ 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).

³⁴⁹ 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).

2010, the number of Homer residents that participated in the Subsistence Halibut Registration Certificate (SHARC) program varied between 25 and 33, and the number of SHARC cards returned each year varied between 7 and 20. The greatest subsistence harvest of halibut was reported in 2009, when 7,561 pounds of halibut were harvested on 19 SHARC cards. Further information about the subsistence halibut fishery is presented in Table 14.

Information is also available regarding marine mammal harvest by residents of Homer between 2000 and 2010. According to data reported by the U.S. Fish and Wildlife Service (FWS) and ADF&G, this harvest focused primarily on sea otter and harbor seal. In addition, harvest of one walrus was reported by the FWS in 2000. No information was reported by management agencies regarding harvest of beluga whale, Steller sea lion, or spotted seal between 2000 and 2010. Further information about subsistence harvest of marine mammals by Homer residents is presented in Table 15.

Table 12. Subsistence Participation by Household and Species, Homer: 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, Homer: 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	40	37	25	60	98	61	1,519	n/a	n/a
2001	28	39	39	209	32	156	948	n/a	n/a
2002	10	32	11	1	n/a	n/a	430	n/a	n/a
2003	57	68	68	3	3	49	345	n/a	n/a
2004	76	73	68	26	30	22	1,069	n/a	n/a
2005	46	45	44	29	97	19	849	n/a	n/a
2006	40	36	51	34	14	32	1,024	n/a	n/a
2007	39	32	138	107	n/a	77	1,412	n/a	n/a
2008	72	68	58	50	21	71	1,555	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, Homer: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	26	7	1,455
2004	28	10	1,512
2005	28	11	2,343
2006	27	15	820
2007	33	7	462
2008	25	20	1,948
2009	25	19	7,561
2010	25	7	1,922

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, Homer: 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	5	1	n/a	n/a	23	n/a
2001	n/a	5	n/a	n/a	n/a	21	n/a
2002	n/a	n/a	n/a	n/a	n/a	24	n/a
2003	n/a	12	n/a	n/a	n/a	11	n/a
2004	n/a	1	n/a	n/a	n/a	4	n/a
2005	n/a	4	n/a	n/a	n/a	6	n/a
2006	n/a	27	n/a	n/a	n/a	6	n/a
2007	n/a	6	n/a	n/a	n/a	n/a	n/a
2008	n/a	28	n/a	n/a	n/a	n/a	n/a
2009	n/a	8	n/a	n/a	n/a	n/a	n/a
2010	n/a	2	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.

Kasilof (kuh-SEE-loff)



People and Place

*Location*³⁵⁰

Kasilof is located on the east shore of Cook Inlet on the Kenai Peninsula. It lies on the Sterling Highway, 15 miles (20 road miles) south of the City of Kenai, 13 miles (15 road miles) southwest of Soldotna, and approximately 70 miles (162 road miles) southwest of Anchorage. Kasilof is located in the Kenai Peninsula Borough and the Kenai Recording District.

*Demographic Profile*³⁵¹

In 2010, there were 549 residents in Kasilof, ranking it as the 111th largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population increased by 43.3% (Table 1). According to Alaska Department of Labor estimates, between 2000 and 2009, the population increased by 13.8%. The average annual growth rate during this period was -0.42%, reflecting declines in some years despite an overall increasing trend.³⁵² In 2010, the majority of Kasilof residents identified themselves as White (87.8%), along with 6.2% identifying as two or more races, and 4.2% as American Indian and Alaska Native. In addition, 2.4% of Kasilof residents identified themselves as Hispanic or Latino in 2010 (Figure 1).

Based on household surveys conducted for the U.S. Census, in 2010, the average household size in Kasilof was 2.37, a decrease from 3 persons per household in 1990 and 2.62 persons per household in 2000. The opposite trend was observed in total number of occupied housing units, which increased from 125 in 1990 to 180 in 2000, and continued increasing to 232 households by 2010. Of the 271 housing units surveyed in 2010, 72% were owner-occupied, 13.7% were rented, and 14.4% were vacant. A majority of the unoccupied housing units were vacant due to seasonal use (61.5%). In 1990, two individuals were reported to be living in group quarters in Kasilof. No residents of group quarters were reported in 2000 or 2010.

In 2010, the gender makeup in Kasilof was 53.2% male and 46.8% female, more weighted toward males than the population of the state as a whole, which was 52% male and 48% female. That year, the median age was estimated to be 44.5 years, higher than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. Also in 2010, 8.9% of the Kasilof population was age 60 or older. The overall population structure of Kasilof in 2000 and 2010 is shown in Figure 2.

³⁵⁰ 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.

³⁵¹ 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>.

³⁵² Alaska Department of Labor. 2011. Current population estimates for Alaskan Communities. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

In terms of educational attainment, the U.S. Census' 2006-2010 American Community Survey (ACS)³⁵³ estimated that 100% 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; no resident had a 9th to 12th grade education but no diploma, compared to an estimated 5.8% of Alaskan residents overall; an estimated 52% had some college but no degree, compared to an estimated 28.3% of Alaskan residents overall; 3.1% of resident held a Bachelor's degree, compared to an estimated 17.4% of Alaskan residents overall; and an estimated 11.7% held a graduate or professional degree, compared to an estimated 9.6% of Alaskan residents overall.

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

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	383	-
2000	471	-
2001	-	451
2002	-	501
2003	-	560
2004	-	474
2005	-	510
2006	-	533
2007	-	577
2008	-	504
2009	-	536
2010	549	-

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>.

³⁵³ 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.

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

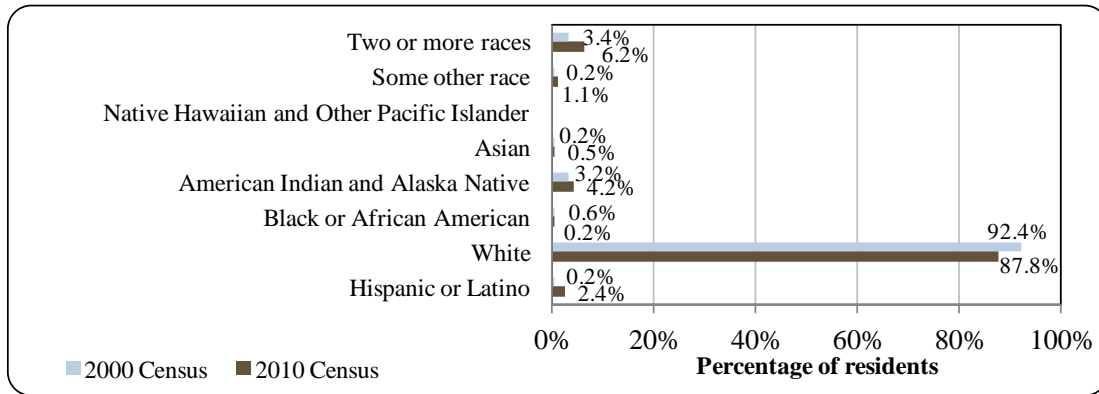
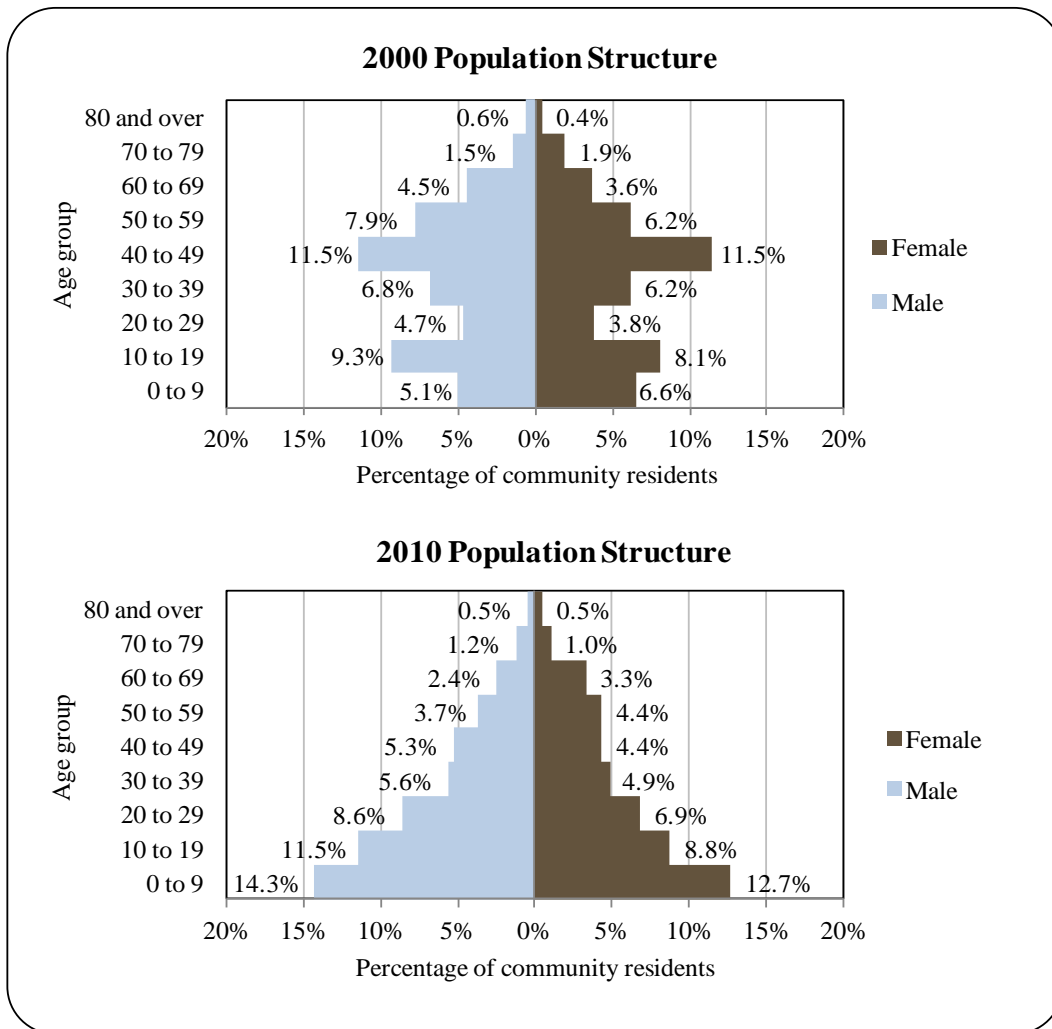


Figure 2. Population Age Structure in Kasilof Based on the 2000 and 2010 U.S. Decennial Census.



History, Traditional Knowledge, and Culture

According to archaeological evidence, the oldest aboriginal inhabitants of the Cook Inlet region were Riverine Kachemak Eskimos from approximately 1000 B.C. to 1000 A.D. At that time, there appears to have been a shift to inhabitation by Dena'ina Athabascan Indians throughout most of the inlet. This shift may have resulted from changes in climate that altered salmon abundance patterns. At the time of European contact, a Dena'ina settlement was located at Kasilof, and additional small seasonal camps were located along the Kasilof River and its tributaries.³⁵⁴ Kasilof itself is believed to have been an agricultural settlement of the Dena'ina. A partial excavation in 1937 found 31 well-preserved houses.³⁵⁵

Between 1786 and 1791, Russian fur traders came to the Kenai area and established settlements. The settlement at Kasilof grew after 1786, when a stockade was built at the mouth of the Kasilof River by one of the Russian trading companies, the Pavel S. Lebedev-Lastochkin Company.³⁵⁶ The fort was originally called Saint George after one of the ships in the company, and the area later came to be known as Kasilof after the name of the river.³⁵⁷ The Russians called the Dena'ina *Kenaitze*, which meant 'the people who live along the Kenai River', although the Kenaitze called themselves *Kahthuht'ana*, an Athabascan word meaning 'the people of the Kenai'.³⁵⁸

Commercial fisheries developed in the region after the 1867 purchase of Alaska by the U.S. Commercial harvest of salmon in Cook Inlet began in 1882,³⁵⁹ with the development of a cannery at the mouth of the Kasilof River.³⁶⁰ Around 1920 the fox farming industry arrived in Kasilof. Fashion and economic prosperity had created a great demand for fox fur and eight farms were built along the river. The river provided fish to feed the fox and transportation. During the dozen years of the fox farming boom the local families and bachelor farmers persuaded the Territorial government to help them build seven miles of road connecting their farms with the cannery. To go anywhere else required a boat ride in the warmer half of the year and a dogsled ride or long snowshoe hike in the winter. The fox farming industry waned with the onset of the Great Depression, and salmon fishing remained the foundation of the local economy. Homesteaders also relied on subsistence hunting, fishing, and gardening to supplement annual shipments of supplies from Seattle.³⁶¹

³⁵⁴ Fall, J.A., R.T. Stanek, B. Davis, L. Williams, and R. Walker. 2004. *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Final Report for Study No. FIS 03-045.

³⁵⁵ 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.

³⁵⁶ Cook, L., and F. Norris. 1998. *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

³⁵⁷ Kenai Peninsula Economic Development District. 2010. *Kenai Peninsula Borough Comprehensive Development Strategy*. Retrieved January 25, 2012 from <http://commerce.alaska.gov/ded/home.htm>.

³⁵⁸ Halliday, Jan. 1998. *Native Peoples of Alaska: A Traveler's Guide to Land, Art, and Culture*. Sasquatch Books, Seattle.

³⁵⁹ 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>.

³⁶⁰ See footnote 354.

³⁶¹ Visit Kasilof Alaska. 2012. *Kasilof History*. Retrieved August 28, 2012 from http://www.visitkasilofalaska.com/kasilof/Articles_,038_Stories/Kasilof/.

The Native population of the Kasilof area was hard hit by a smallpox epidemic in 1838, when approximately 50% of Dena'ina people died from the disease. The Native population was hit again in the years 1918 and 1920 during the worldwide influenza epidemic.³⁶² Today, most Kasilof-area residents are non-Native.³⁶³

Natural Resources and Environment

Kasilof is located in a maritime climatic zone, dominated by the moderating effects of a marine environment and characterized by high humidity, precipitation and fog cover as well as warm winters and cool summers. Winter temperatures range from 14 to 27 °F and summer temperatures vary from 45 to 65 °F. Average annual precipitation is 24 inches.³⁶⁴

The Kasilof River drains 738 square miles of the Kenai Peninsula, from the steep Kenai Mountains and foothills through the lowlands past Tustumena Lake.³⁶⁵ Kasilof is located on coastal outwash plains dominated by low-lying wetlands. Lowland areas are generally poorly drained and support patches of black spruce and muskeg. Coastal areas consist of mudflats, sandy beaches, and steep bluffs.³⁶⁶

Recreation resources are abundant in the area and include sportfishing, camping, and clam digging. The Kasilof River, Crooked Creek, Johnson Lake, and Clam Gulch State Recreation Areas are valuable recreational resources. Fishermen use the Kasilof River and the adjacent shores of Cook Inlet intensively for sport and personal use. Much of the coastline in the area is lined with Shore Fishery Leases, along with sportfishing and personal-use setnetting and dipnetting. Salmon return to the Kasilof River and other area rivers, and additional freshwater fish species include rainbow trout and Dolly Varden. Razor clam digging is also popular along the coast. Moose, caribou, ducks, geese, and trumpeter swans all provide hunting opportunities. Demand for recreational use continues to grow, including a demand for more campgrounds and private lodging in the region.³⁶⁷ One boat launch near Kasilof, at the Kasilof River State Recreation Site, currently provides access to sportfishing in the Kasilof River. The Alaska Department of Natural Resources (DNR) Division of Parks and Outdoor Recreation, in cooperation with the Alaska Department of Fish and Game (ADF&G), is considering the addition of a second public boat launch ramp on the Lower Kasilof River to provide an exit point downriver and additional access to fishermen to fish the lower section of river.³⁶⁸ Also due to high demand for multiple uses of the Kasilof River corridor, state agencies are considering creation of a Kasilof River Special Use Area, which would provide protection for important natural resource values and enhance the opportunity for Alaskans to participate in available fishery programs and other forms of recreation.³⁶⁹

³⁶² See footnote 357.

³⁶³ See footnote 355.

³⁶⁴ Ibid.

³⁶⁵ HDR Alaska, Inc. 2008. *Lower Kasilof River Boat Launch Site Investigations. Final Report*. Prepared for Alaska Dept. of Natural Resources. Retrieved August 28, 2012 from <http://dnr.alaska.gov/parks/units/kasilof/lowerkasilofboatlaunchinvestigation.pdf>.

³⁶⁶ Alaska Dept. of Natural Resources. 2001. *Kenai Area Plan*. Retrieved February 7, 2012 from http://dnr.alaska.gov/mlw/planning/areaplans/kenai/pdfs/master_KAP.pdf.

³⁶⁷ Ibid.

³⁶⁸ See footnote 365.

³⁶⁹ Alaska Dept. of Natural Resources. 2010. *Kasilof River Special Use Area, Draft Decision*. Retrieved August 30, 2012 from http://dnr.alaska.gov/mlw/kasilof/pdf/kas_sua_decision_draftm.pdf.

Protected areas near Kasilof currently include the Clam Gulch State Critical Habitat Area (CGSCHA), and Kenai National Wildlife Refuge (NWR). The mouth of the Kasilof River is located just north of the northern portion of the CGSCHA. The CGSCHA extends along the eastern shores of the Cook Inlet from Cape Kasilof to Happy Valley and is intended to protect the opportunity for the public to utilize the prolific razor clam beds along this section of coastline. In addition to razor clams, the area also serves as a critical habitat for many migratory waterfowl and shorebirds.³⁷⁰ The Kenai NWR covers 1.92 million acres of the Kenai Peninsula, half of which was designated as the Kenai Wilderness. The NWR was originally established by President Roosevelt in 1941 as the Kenai National Moose Range. In 1980, with the Alaska National Interest Lands Conservation Act (ANILCA), the name and purpose of the area were changed to manage all animal species as a NWR. All five salmon species return to rivers and lakes to spawn, and a full spectrum of sub-Arctic freshwater fish species are found in the NWR. In addition, terrestrial animals living in the NWR include moose, caribou, Dall sheep, mountain goat, black and brown bear, wolf, coyote, red fox, lynx, and many small mammals. The wood frog is the only amphibian found in the Kenai NWR.³⁷¹

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt, and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures, and soil liquefaction.³⁷² Other natural hazards that have also been identified as threats in the Kenai Peninsula Borough include flooding, wildfire, snow and avalanche, seiche, severe weather, erosion and drought.³⁷³

There are no active or proposed mineral development sites in the area, although coal beds exist throughout most of the western Kenai Peninsula.³⁷⁴ The oil and gas industry is active in the region, with a number of new wells being drilled each year both on the Kenai Peninsula and offshore in Cook Inlet. As of 2010, there were 28 producing oil and gas fields both on- and offshore. Cook Inlet oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.³⁷⁵

According to the Alaska Department of Environmental Conservation (DEC), no active environmental cleanup sites was located near Kasilof as of August 2012.³⁷⁶

³⁷⁰ Alaska Dept. of Fish and Game. 2012. *Clam Gulch – Critical Habitat Area*. Retrieved August 28, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=clamgulch.main>.

³⁷¹ U.S. Fish and Wildlife Service. 2011. *Kenai National Wildlife Refuge*. Retrieved January 26, 2012 from <http://kenai.fws.gov/>.

³⁷² Kenai Peninsula Borough. 2010. *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

³⁷³ State of Alaska. 2002. *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

³⁷⁴ Alaska Dept. of Commerce. (n.d.). *Mineral Resources of Alaska*. Retrieved February 8, 2012 from: <http://commerce.alaska.gov/ded/dev/minerals/mining.htm>.

³⁷⁵ Resource Development Council. (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

³⁷⁶ 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>.

Current Economy³⁷⁷

Top employers in Kasilof in 2010 included the school district, Central Peninsula Hospital (located 15 road miles away in Soldotna), and the State of Alaska.³⁷⁸ The surrounding Kenai area offers employment in diverse industries and services, including oil and gas processing, commercial and sportfishing, government, health care, retail business, and tourism.³⁷⁹

A large percentage of the local population is involved in commercial fishing activities. Between 2000 and 2010, the number of Kasilof residents with commercial crew licenses varied between 81 and 142 per year, equivalent to between 16% and 30% of the total local population. In 2000, 172 Kasilof residents held state Commercial Fisheries Entry Commission (CFEC) permits, equivalent to 36.5% of the total local population that year. The number of permit holders declined consistently during the 2000-2010 period, and by 2010 there were 137 permit holders, equivalent to 25% of the local population. A number of Kasilof residents also held federal permits and quota share accounts in the federal catch share halibut and sablefish fisheries (see *Commercial Fishing* section).

Based on household surveys conducted for the 2006-2010 ACS,³⁸⁰ in 2010, the per capita income in Kasilof was estimated to be \$40,307 and the median household income was estimated to be \$49,659. This high per capita income ranked Kasilof 10th of 305 Alaskan communities with per capita income data that year, while median household income ranked lower, at 133rd of 299 Alaskan communities with household income data. The 2010 per capita income estimate represents an increase from the per capita income reported in 2000 (\$21,211), with a smaller increase in median household income from the reported 2000 figure (\$43,929). If inflation is taken into account by converting the 2000 values to 2010 dollars,³⁸¹ a real increase in per capita income remains, from a real per capita income of \$27,892 in 2000. In contrast, a real decrease in median household income is revealed, from a real household income of \$57,766 in 2000.

However, Kasilof's small population size may have prevented the ACS from accurately portraying economic conditions.³⁸² An alternative estimate of per capita income is provided by economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Kasilof in 2010 is \$18,659.^{383,384}

³⁷⁷ Unless otherwise noted, all monetary data are reported in nominal values.

³⁷⁸ Kenai Peninsula Economic Development District. 2010. *Kenai Peninsula Borough Comprehensive Development Strategy*. Retrieved January 25, 2012 from <http://commerce.alaska.gov/ded/home.htm>.

³⁷⁹ 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.

³⁸⁰ 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>.

³⁸¹ 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>).

³⁸² 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.

³⁸³ See footnote 380.

This estimate is lower than the 2000 per capita income reported in by the U.S. Census, suggesting that caution is warranted when citing an increase in per capita income in Kasilof between 2000 and 2010. However, this per capita income estimate is confirmed given that as of 2010, the Denali Commission did not consider Kasilof a “distressed” community.³⁸⁵ 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, a larger percentage of Kasilof’s population (78.3%) was estimated to be in the civilian labor force in 2010 compared to the percentage of the statewide population in the civilian labor force (68.8%). In the same year, 2.7% of Kasilof residents were estimated to be living below the poverty line in 2010, well below the percentage of Alaskan residents overall (9.5%). The unemployment rate was estimated to be 15.7% that year, over twice the statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in Kasilof in 2010 was 11.1%, close to a statewide unemployment rate estimate of 11.5%.³⁸⁶

Also based on the 2006-2010 ACS, a majority of the Kasilof workforce was estimated to work in the private sector (85.5%), along with 14.5% in the public sector. Of the 179 people aged 16 and over that were estimated to be employed in the civilian labor force, the greatest number of workers were estimated to be employed in agriculture, forestry, fishing and hunting, and mining (31.8%), educational services, health care, and social assistance (22.9%), and construction (12.8%). Since 2000, the largest changes in employment were seen as increases in educational services/health care/social assistance (11.3% increase) and agriculture/forestry/fishing/hunting/mining (20.2%) increase. There was also a significant decrease in manufacturing jobs to zero and large decreases in arts/entertainment/recreation and retail trade. Further information about employment by industry and occupation is provided in Figures 3 and 4.

An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 248 employed residents in Kasilof in 2010, of which 20.2% were employed in trade, transportation, and utilities, 18.5% in natural resources and mining, 12.5% in education and health services, 10.1% in local government, 8.1% in construction, 6% in professional and business services, 5.6% in leisure and hospitality, 5.6% in state government, 4.4% in manufacturing, 4% in financial activities, 0.8% in information, 0.4% in unknown industries, and 3.6% in other industries.³⁸⁷ As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents’ activity in the subsistence economy.

³⁸⁴ 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/>.

³⁸⁵ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

³⁸⁶ 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/>.

³⁸⁷ Ibid.

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

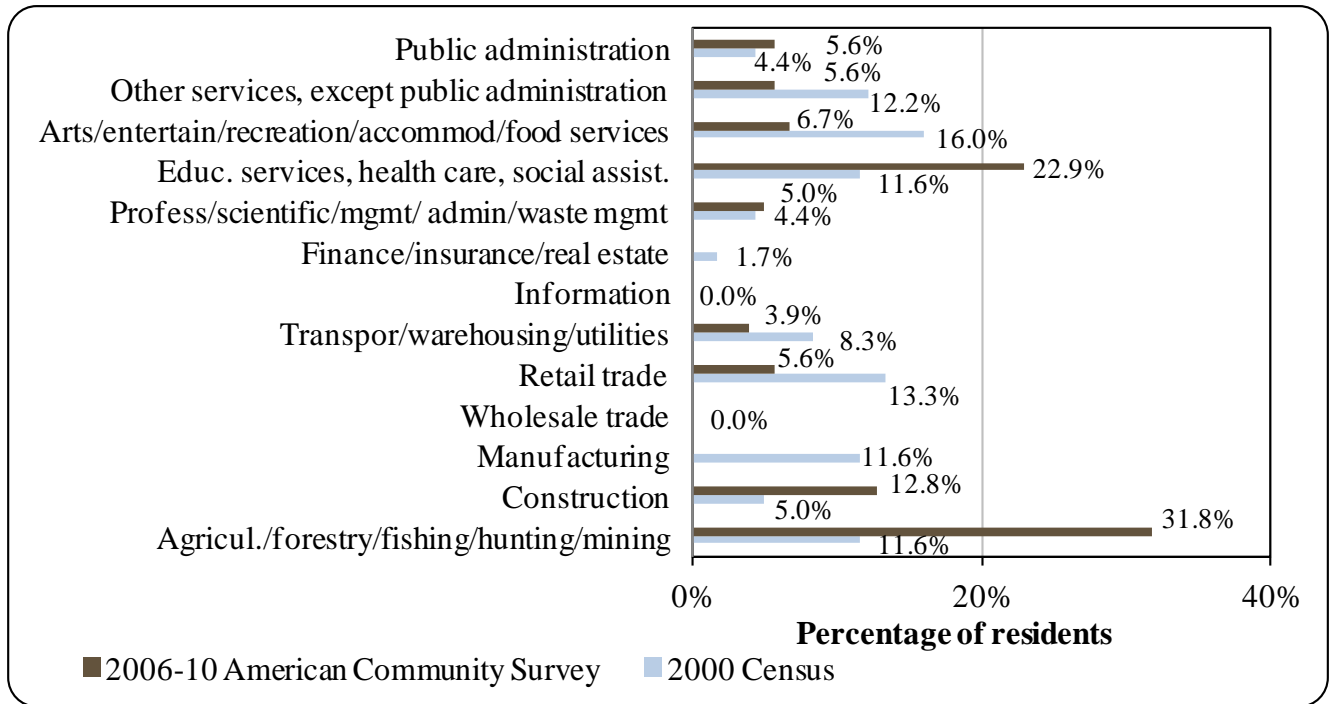
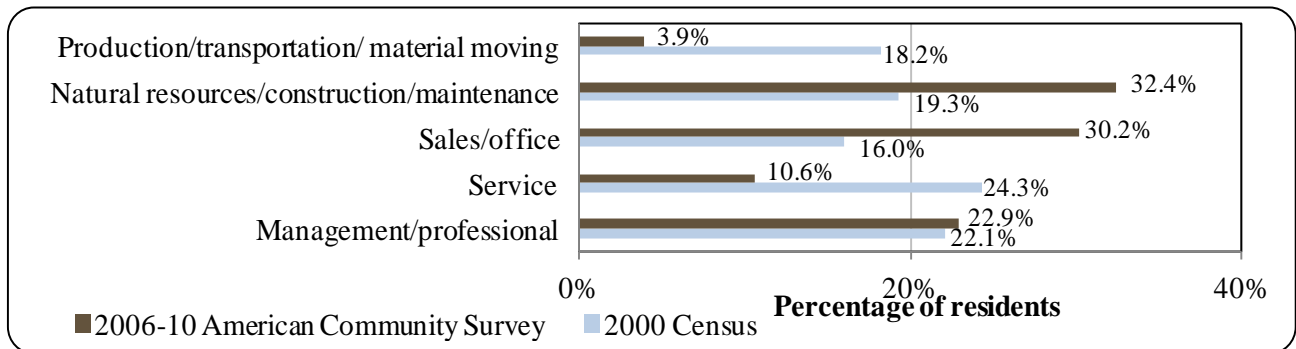


Figure 4. Local Employment by Occupation in 2000-2010, Kasilof (U.S. Census).



Governance

Kasilof is an unincorporated community located under the jurisdiction of the Kenai Peninsula Borough. The Borough administers a 3% sales tax and a 4.5 mills property tax locally.³⁸⁸ Given the lack of municipal government, no information is reported regarding municipal revenue sources (Table 2).

³⁸⁸ 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.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Kasilof 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.

Kasilof was not included in the Alaska Native Claims Settlement Act and is not federally recognized as a Native village.³⁸⁹ The nearest offices of the ADF&G and DNR are located in Soldotna. The closest offices of the National Marine Fisheries Service (NMFS) are located in Homer and Anchorage. Anchorage also has the closest offices of the Alaska Department of Commerce, Community, and Economic Development and the U.S. Bureau of Citizenship and Immigration Services.

Infrastructure

Connectivity and Transportation

Kasilof lies on the Sterling Highway, which provides road access to Anchorage, 162 road miles to the north. The state owns and operates the 2,165 feet long by 40 feet wide gravel airstrip, and there are three additional private airstrips in the vicinity.³⁹⁰ The nearest airport with scheduled commercial service is approximately 20 road miles north in the City of Kenai. As of June 2012, roundtrip airfare from Anchorage to Kenai was \$171.³⁹¹ Kenai also offers docking

³⁸⁹ See footnote 388.

³⁹⁰ Ibid.

³⁹¹ Airfare was calculated using lowest fare. <http://www.travelocity.com> (retrieved November 22, 2011).

facilities. At Kasilof, there is a boat launch on the Kasilof River,³⁹² and DNR is considering the addition of a second boat launch to facilitate sportfishing on the lower Kasilof River.³⁹³

Facilities

Centralized water and sewer services are not provided in Kasilof. A majority of homes use individual water wells and septic tanks and are fully plumbed. The school operates its own well water and treatment system. The community receives electricity from a hydroelectric facility operated by the Homer Electric Association, Incorporated. The Borough operates a refuse transfer site at mile 110.4 Sterling Highway near Kasilof, and a private company contracted by the Borough provides refuse collection services. Police services are provided by state troopers stationed in nearby Soldotna, and fire and rescue services are provided by Central Emergency Services, based in Soldotna.³⁹⁴ One of Central Emergency Services' six fire stations (Station 6) is located in Kasilof.³⁹⁵ Telephone service is available in Kasilof, but no internet or cable providers offered local service as of August 2012.³⁹⁶

With regard to sportfishing infrastructure, one public boat launch is located on the Kasilof River near the community of Kasilof, and the Alaska DNR is considering adding a second public ramp downriver to meet high demand for river access.³⁹⁷ Local commercial fisheries-related infrastructure consists of several seafood processing facilities are located in and near the community (see *Processing Plants* section).

Medical Services

The nearest medical facility is the Central Peninsula General Hospital, located 15 road miles from Kasilof in Soldotna. Emergency Services have highway and air access.³⁹⁸

Educational Opportunities

One elementary school (Kindergarten through 6th grade) is located in Kasilof. As of 2011, the Tustumena Elementary School had 163 students and 16 teachers.³⁹⁹

³⁹² See footnote 388.

³⁹³ HDR Alaska, Inc. October 2008. *Lower Kasilof River Boat Launch Site Investigations. Final Report*. Prepared for Alaska Dept. of Natural Resources. Retrieved August 28, 2012 from <http://dnr.alaska.gov/parks/units/kasilof/lowerkasilofboatlaunchinvestigation.pdf>.

³⁹⁴ See footnote 388.

³⁹⁵ Central Emergency Services website. 2011. *Fire Stations & Response Districts*. Retrieved August 29, 2012 from <http://www.cesfire.org/>.

³⁹⁶ See footnote 388.

³⁹⁷ See footnote 393.

³⁹⁸ See footnote 388.

³⁹⁹ 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

Archaeological excavation at sites along the Kasilof River has provided evidence of salmon fishing by the Riverine Kachemak culture using a drift net technology used to harvest sockeye salmon runs. Closer to the time of the arrival of Europeans in Cook Inlet, the Dena'ina living along the River utilized a variety of subsistence foods from the land and the sea. Of these, salmon was the most critical resource, and all five species of Pacific salmon were used. In addition, freshwater species such as Dolly Varden were harvested using alder drag nets.⁴⁰⁰

Commercial fisheries developed in the region after the U.S. purchase of Alaska from Russia in 1867. Commercial harvest of salmon in Cook Inlet began in 1882,⁴⁰¹ with the development of a cannery at the mouth of the Kasilof River. An additional 17 canneries had been built in central Alaska by 1890.⁴⁰² Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.⁴⁰³ In the 1920s, herring had become increasingly valued for oil and meal, and a number of reduction plants were built. Commercial crab fisheries began to develop in the GOA in the 1930s. Historically, a sizable spawning biomass of herring was found in western Cook Inlet, and Lower Cook Inlet also supported commercial fisheries for Dungeness, king, and Tanner crab. However, these local crab and a majority of herring fisheries are currently closed due to low stock abundance.^{404,405} If a sufficient biomass of herring is present in the Kamishak District of Cook Inlet, some sac roe harvest may be permitted.⁴⁰⁶

Today, ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, purse seine gear use is limited to the Chinita Bay sub-district, which is open

⁴⁰⁰ Fall, J.A., R.T. Stanek, B. Davis, L. Williams, and R. Walker. 2004. *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Final Report for Study No. FIS 03-045.

⁴⁰¹ 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>.

⁴⁰² Cook, Linda, and Frank Norris. 1998. *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

⁴⁰³ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

⁴⁰⁴ Woodby, D., D. Carlile, S. Siddeek, F. Funk, J.H. Clark, and L. 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>.

⁴⁰⁵ Alaska Dept. of Fish and Game. 2012. *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

⁴⁰⁶ Hollowell, G., T. Otis, and E. Ford. July 2012. *2011 Lower Cook Inlet Finfish Management Report*. Retrieved September 7, 2012 from <http://www.sf.adfg.state.ak.us/FedAidPDFs/FMR12-30.pdf>.

only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.⁴⁰⁷

Groundfish and crab fisheries that occur within 3 nautical miles (nmi) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nmi in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission. Cook Inlet is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch set by NMFS applied to both fisheries. Beginning in 1997, an additional “state-waters fishery” for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.⁴⁰⁸

The sandy beaches of lower Cook Inlet are one historical and current commercial clam harvest area. Littleneck and other hardshell clams (cockles and butter clams) are dug by hand shovel, and razor clams are dug with shovels and “guns”.⁴⁰⁹ Although Cook Inlet hosted shrimp fisheries in the past, beginning in 1997, commercial, sport and personal use fisheries for shrimp in Cook Inlet and adjacent coastal waters of the GOA were closed due to low abundance.⁴¹⁰ Shrimp permits held by Kasilof residents and actively fished in 2010 were held in the Prince William Sound pot fishery. The Prince William Sound spot shrimp (*Pandalus platyceros*) pot fisheries reopened that year after almost two decades of closure due to low abundance.⁴¹¹

Kasilof is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA Sablefish Regulatory District. The community is not eligible for the Community Quota Entity program. Kasilof is also not eligible to participate in the Community Development Quota program.

Processing Plants

According to ADF&G’s Intent to Operate list, between 2000 and 2010 a number of seafood processors were registered in Kasilof during at least some years of the period. These included a number of private fishing vessels and set net operations that marketed fish direct to consumers, and companies, including Ed’s Kasilof Seafoods, Inlet Fish Producers, Inc., and R&J Seafoods.

⁴⁰⁷ See footnote 401.

⁴⁰⁸ See footnote 404.

⁴⁰⁹ Ibid.

⁴¹⁰ Trowbridge, C. and K. Goldman. 2006. *2006 Review of Cook Inlet Area Commercial Fisheries for Dungeness Crab, Shrimp, and Misc. Shellfish Fisheries: Report to the Board of Fisheries*. Alaska Dept. of Fish and Game Special Pub. No. 06-09. Retrieved August 30, 2012 from www.adfg.alaska.gov/FedAidPDFs/sp06-09.pdf.

⁴¹¹ Alaska Dept. of Fish and Game. 2012. *Spot Shrimp Species Profile: Status, Trends and Threats*. Retrieved April 30, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=spotshrimp.main>.

Ed's Kasilof Seafoods is a family-owned and operated gourmet seafood company. The company purchases, processes and markets wild Alaska salmon, halibut, king crab, Dungeness crab, scallops, razor clams, and shrimp through the internet. In addition, the company offers custom processing.⁴¹²

Inlet Fish Producers, Inc. processes all five species of salmon in both its facilities (on the Kenai and Kasilof Rivers). The facilities operate from June to early September each year, with combined employment of 200 people each summer. Its Kasilof facility houses 60 fish processing workers.⁴¹³ According to a processor plant survey conducted by the AFSC in 2011, the plant on the Kasilof River began operations in 2003 and employed a maximum of 105 workers in 2010. From June through August a plant manager indicated that a large number of Inlet Fish Producer's employees are international students on J-1 visas.

Between 1979 and 2010, R&J Seafoods LLC was a small family run and operated fish processing company in Kasilof. It sold halibut, king crab, salmon (Chinook, sockeye, coho), prawns, and scallops on the internet. The company began in 1979 and assumed the name R&J Seafoods in 1983. As of 2012, the company is no longer in operation.⁴¹⁴

Fisheries-Related Revenue

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

Commercial Fishing

Commercial fishing is an important industry within Kasilof's diversified economy. In 2010, 105 Kasilof residents held commercial fishing crew permits, 90 fishing vessels were primarily owned by residents, 105 vessels were registered as homeported in Kasilof, and 56 vessels landed catch in the community. These numbers represent declines from the year 2000, when 142 residents held crew licenses, 132 vessels were primarily owned by residents, and 122 vessels were registered as homeported in Kasilof. The number of fish buyers present in the community fluctuated between 1 and 16 per year between 2000 and 2010, while the number of shore-side processors varied between 2 and 5. In 2010, fisheries landings totaled 1,475,562 net pounds for a total ex-vessel revenue of \$2,281,591, a sizeable increase from landings and revenues reported in earlier years during the 2000-2010 period. Total landings and ex-vessel revenue are considered confidential in some years due to the small number of fish buyers (Table 5). In 2010, Kasilof ranked 36th in total landings volume of 67 Alaskan ports that received commercial fisheries landings that year, and 34th in total ex-vessel revenue.

Between 2000 and 2010, the number of Kasilof residents holding state-issued CFEC permits declined from 172 to 137, and the total number of CFEC permits held fell from 223 to 186. In 2010, the greatest number of permits was held in fisheries for salmon (138 permits; 74%

⁴¹² Ed's Kasilof Seafoods. 2008. *Home and Seafood*. Retrieved August 29, 2012 from <http://www.kasilofseafoods.com/>.

⁴¹³ Inlet Fish Producers, Inc. 2008. *Home and Jobs*. Retrieved August 29, 2012 from <http://inletfish.com/>.

⁴¹⁴ According to a personal communication with an employee at Tanner's Fresh Fish Processing on August 29, 2012, R&J Seafoods operated until 2010. After that time, Tanner's Fresh Fish Processing, based in Ninilchik, AK, purchased the old R&J Seafoods website: <http://www.rjseafoods.com/profile.htm>. See Ninilchik's community profile for more information about Tanner's Fresh Fish Processing.

of total CFEC permits in 2010), herring (27 permits; 14.5%), and halibut (14 permits; 7.5%). CFEC permits were also held in fisheries for ‘other shellfish’ and groundfish in 2010, and permits were held in earlier years of the 2000-2010 period in sablefish and crab fisheries. Information about CFEC permits is presented in Table 4, and further details regarding these permits are included below.

Of the 138 salmon CFEC permits held in 2010, a majority were held for the Cook Inlet set gillnet fishery (85 permits; 60% of all salmon permits in 2010) and the Cook Inlet drift gillnet fishery (30 permits; 24.5%). In addition, 4 permits were held in the Bristol Bay set gillnet fishery, 3 in the Prince William Sound set gillnet fishery, and 1 or 2 permits each were held in purse seine fisheries in Cook Inlet, Kodiak, Prince William Sound, and Chignik, the beach seine fishery in Kodiak, the drift gillnet fishery in Bristol Bay, and the Kotzebue gillnet fishery. Of all salmon permits, 94 (68%) were actively fished in 2010. The number of salmon permit holders and total salmon permits held decreased between 2000 and 2010, while the percentage of salmon permits that were actively fished remained relatively stable over the period.

Of the 27 herring CFEC permits held in Kasilof in 2010, the greatest number (13) were held in the Cook Inlet roe herring gillnet fishery, while 5 were held in the Kodiak roe herring gillnet fishery, and 1 or 2 permits were each held in roe herring purse seine fisheries in Prince William Sound, Bristol Bay, Kodiak, and Southeast Alaska, as well as Norton Sound herring gillnet and the Cook Inlet herring roe and food/bait purse seine fishery. That year, the three herring fisheries in which at least one permit was actively fished included the Bristol Bay and Southeast Alaska roe herring purse seine fisheries (1 permit actively fished in each) and the Cook Inlet roe herring fishery (7 permits actively fished in 2010). The number of herring permit holders and total herring permits decreased slightly between 2000 and 2004, and then rebounded to close to 2000 levels by 2010. The percentage of herring permits that were actively fished each year followed a similar pattern.

Of the 14 halibut CFEC permits held in Kasilof in 2010, all but 1 were held in the statewide long line fishery, using vessels under 60 feet in length, and the additional permit was held in the statewide halibut hand troll fishery. The hand troll permit was not actively fished in 2010, while 10 of 13 longline permits were actively fished. The number of halibut permit holders and the total number of halibut permits held per year decreased by almost half between 2000 and 2010, while the percentage of halibut permits actively fished each year remained relatively stable, varying between 59% and 81% per year, and not following a consistent trend over time.

Other CFEC permits held in 2010 included five ‘other shellfish’ permits and two groundfish permits. Activity in ‘other shellfish’ fisheries increased over the 2000-2010 period and shifted in species focus. One clam shovel permit was held in 2000 only, and one shrimp beam trawl permit was held in 2002, 2003, and 2005. Southeast geoduck and sea cucumber permits were first held by a Kasilof resident in 2007, and in 2010 three Prince William Sound shrimp permits were acquired, for use with pot gear fisheries. The number of groundfish permits decreased substantially from 2000 to 2010. In 2000, nine permits were held in fisheries including lingcod longline and miscellaneous saltwater finfish using a variety of gear, such as gillnet, longline, mechanical jig, and pot gear. By 2010, the two remaining groundfish CFEC permits were held for miscellaneous saltwater finfish using mechanical jig gear.

Although no crab or sablefish CFEC permits were held by Kasilof residents in 2010, it is important to note that a permit was held for king crab in 2000, 2001, and 2002, and a Tanner crab permit was held in 2005 and 2006. The king crab permit was not fished in any of the three years, and the Tanner crab was actively fished in 2005 only. At least one sablefish permit was

held by a Kasilof resident in 2000, 2001, 2002, and 2006, and one sablefish permit was actively fished from 2000-2002.

In addition to CFEC permits, in 2010, Kasilof residents held 14 federal License Limitation Program (LLP) permits (12 held for groundfish and 2 held for crab) and 6 Federal Fisheries Permits (FFP). Two groundfish LLPs and one FFP were actively fished in 2010, and no crab LLPs were actively fished that year. Numbers of groundfish and crab LLP permits remained relatively stable between 2000 and 2010, while the number of FFPs declined substantially over the period. Interestingly however, a larger number of FFPs was actively fished later in the 2000-2010 period despite the smaller overall number of FFPs held. This information about federal permits is also presented in Table 4.

In 2000, there were 28 halibut quota share account holders residing in Kasilof, declining to 16 by 2010. Total quota shares held decreased from 1,117,228 to 865,694 over the same period. The annual halibut individual fishing quota (IFQ) allotment fluctuated from year to year, rising to a value 42% higher than the 2000 level in 2007, and falling to only 8% above the 2000 share value by 2010. In 2000, three sablefish quota share account holders resided in Kasilof, increasing to four per year between 2001 and 2010. The total quota shares held remained constant throughout the 2000-2010 period at 2,422. Sablefish IFQ allotment increased from 2000 to 2004 to 27.5% higher than the 2000 level, and then decreased to approximately 21% below 2000 levels by 2010. No quota share accounts or quota shares were held by Kasilof residents in federal crab catch share fisheries between 2005 and 2010. This information about federal catch share participation is presented in Tables 6 through 8.

Total landings and ex-vessel revenue generated in Kasilof are reported between 2000-2010 in Table 5. However, when considering landings in Kasilof in individual fisheries, much of the information is considered confidential due to the small number of participants. Salmon landings can be reported for 2001-2003, 2007-2008, and 2010 only. On average for these years in which landings were reported (not including 2003 and 2007 in which no salmon were delivered in Kasilof), 1,071,131 net pounds of salmon were landed, valued on average at \$1,109,939 per year (Table 9).

In addition to landings delivered in Kasilof, data are reported regarding total landings and revenue generated by Kasilof vessel owners, including all delivery locations. Again, much of the data is considered confidential due to the small number of participants in each individual fishery. Data can be reported in all years of the 2000-2010 period for salmon, and in some years for halibut, herring, 'other shellfish' and Pacific cod. Between 2000 and 2010, Kasilof vessel owners landed an average of 4,019,899 net pounds of salmon, valued at an average of \$1,547,398 in ex-vessel revenue. For those years in which data can be reported, Kasilof vessel owners also landed 1,408,948 net pounds of herring, 126,945 net pounds of halibut, 31,094 net pounds of Pacific cod, and 9,895 net pounds of groundfish, valued on average at \$192,951, \$343,236, \$7,688, and \$5,330, respectively. Landings and revenue by Kasilof vessel owners in 'other shellfish' fisheries were reported in 2010 only, when 47,367 net pounds were landed for an ex-vessel value of \$276,394. Information about landings and ex-vessel revenue generated by Kasilof vessel owners, irrespective of delivery location, is presented in Table 10.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fisheries Resource Landing Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>Total municipal revenue⁵</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>

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

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

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

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

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

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

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	12	12	15	15	15	15	15	14	13	13	13
	Active permits	4	4	3	1	3	3	3	2	2	2	2
	% of permits fished	33%	33%	20%	6%	20%	20%	20%	14%	15%	15%	15%
	Total permit holders	11	11	14	14	14	14	14	13	12	12	12
Crab (LLP) ¹	Total permits	1	1	2	2	2	2	2	2	2	2	2
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	1	1	2	2	2	2	2	2	2	2	2
Federal Fisheries Permits ¹	Total permits	21	21	21	11	11	11	9	9	9	6	6
	Fished permits	0	0	0	1	0	0	2	2	2	1	1
	% of permits fished	0%	0%	0%	9	0%	0%	22	22	22	17	17
	Total permit holders	20	20	20	10	10	10	8	8	8	6	6
Crab (CFEC) ²	Total permits	1	1	1	0	0	1	1	0	0	0	0
	Fished permits	0	0	0	0	0	1	0	0	0	0	0
	% of permits fished	0%	0%	0%	-	-	100%	0%	-	-	-	-
	Total permit holders	1	1	1	0	0	1	1	0	0	0	0
Other shellfish (CFEC) ²	Total permits	1	0	1	1	0	1	1	2	2	2	5
	Fished permits	0	0	1	1	0	1	1	2	2	2	4
	% of permits fished	0%	0%	100%	100%	-	100%	100%	100%	100%	100%	80%
	Total permit holders	1	0	1	1	0	1	1	1	1	1	4
Halibut (CFEC) ²	Total permits	22	21	20	18	21	20	20	19	16	17	14
	Fished permits	14	12	12	13	16	12	16	14	13	10	10
	% of permits fished	64%	57%	60%	72%	76%	60%	80%	74%	81%	59%	71%
	Total permit holders	22	19	19	17	20	19	19	18	15	16	13
Herring (CFEC) ²	Total permits	31	26	30	23	20	21	23	26	26	24	27
	Fished permits	13	11	12	4	5	9	9	9	7	7	9
	% of permits fished	42%	42%	40%	17%	25%	43%	39%	35%	27%	29%	33%
	Total permit holders	25	22	24	18	16	17	19	21	20	18	21

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	1	1	2	0	0	0	1	0	0	0	0
	Fished permits	1	1	1	0	0	0	0	0	0	0	0
	% of permits fished	100%	100%	50%	-	-	-	0%	-	-	-	-
	Total permit holders	1	1	2	0	0	0	1	0	0	0	0
Groundfish (CFEC) ²	Total permits	9	9	8	5	4	8	4	4	4	2	2
	Fished permits	2	2	2	1	1	0	1	0	1	1	0
	% of permits fished	22%	22%	25%	20%	25%	0%	25%	0%	25%	50%	0%
	Total permit holders	9	9	7	5	4	8	4	4	4	2	2
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	163	162	162	155	162	155	144	141	132	128	138
	Fished permits	122	116	116	117	121	117	108	98	97	90	94
	% of permits fished	75%	72%	72%	75%	75%	75%	75%	70%	73%	70%	68%
	Total permit holders	162	167	165	153	159	147	139	137	129	123	130
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>228</i>	<i>220</i>	<i>224</i>	<i>202</i>	<i>207</i>	<i>206</i>	<i>194</i>	<i>192</i>	<i>180</i>	<i>173</i>	<i>186</i>
	<i>Fished permits</i>	<i>152</i>	<i>142</i>	<i>144</i>	<i>136</i>	<i>143</i>	<i>140</i>	<i>135</i>	<i>123</i>	<i>120</i>	<i>110</i>	<i>117</i>
	<i>% of permits fished</i>	<i>67%</i>	<i>65%</i>	<i>64%</i>	<i>67%</i>	<i>69%</i>	<i>68%</i>	<i>70%</i>	<i>64%</i>	<i>67%</i>	<i>64%</i>	<i>63%</i>
	<i>Permit holders</i>	<i>172</i>	<i>178</i>	<i>174</i>	<i>161</i>	<i>168</i>	<i>160</i>	<i>148</i>	<i>148</i>	<i>140</i>	<i>131</i>	<i>137</i>

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Kasilof: 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 Kasilof ²	Total Net Pounds Landed in Kasilof ^{2,5}	Total Ex-Vessel Value of Landings in Kasilof ^{2,5}
2000	142	3	4	132	122	26	-	-
2001	106	8	4	126	122	45	844,654	\$521,986
2002	81	16	3	122	113	23	1,050,463	\$519,280
2003	112	0	3	113	114	0	-	-
2004	122	6	5	110	114	17	264,636	\$192,838
2005	105	1	3	86	97	0	-	-
2006	110	1	3	88	100	0	-	-
2007	105	0	3	86	100	0	-	-
2008	113	13	3	85	101	70	960,990	\$1,130,941
2009	99	3	2	85	101	126	-	-
2010	105	14	2	90	105	56	1,475,562	\$2,281,591

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

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

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

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

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

⁵ Totals only represent non-confidential data.

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

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Pounds)
2000	28	1,117,288	111,407
2001	23	1,034,412	122,549
2002	22	1,034,839	126,734
2003	21	1,077,419	131,906
2004	23	983,038	133,337
2005	23	985,176	135,842
2006	23	959,048	130,800
2007	21	958,316	135,785
2008	18	1,027,739	134,550
2009	17	1,007,346	118,135
2010	16	865,694	93,504

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 Kasilof: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Pounds)
2000	3	2,422	219
2001	4	2,472	211
2002	4	2,472	212
2003	4	2,472	251
2004	4	2,472	285
2005	4	2,472	283
2006	4	2,472	248
2007	4	2,472	241
2008	4	2,472	214
2009	4	2,472	194
2010	4	2,472	176

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 Kasilof: 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 Kasilof: 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	-	823,774	1,024,388	-	-	-	-	-	960,799	-	1,475,562
<i>Total²</i>	-	823,774	1,024,388	-	264,636	-	-	-	960,799	-	1,475,562
	<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	-	\$509,061	\$518,178	-	-	-	-	-	\$1,130,927	-	\$2,281,591
<i>Total²</i>	-	\$509,061	\$518,178	-	\$192,838	-	-	-	\$1,130,927	-	\$2,281,591

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

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

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

² Totals only represent non-confidential data.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Kasilof

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Kasilof 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	140,660	116,176	165,152	135,443	108,125	-	96,114	-	-	-	-
Herring	573,005	1,526,601	865,387	-	-	1,333,874	-	1,556,738	1,848,174	1,962,657	1,605,151
Other Groundfish	3,117	2,567	27,769	6,127	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	46,367
Pacific Cod	10,284	65,668	46,565	-	1,860	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	2,641,616	2,886,700	3,758,694	3,933,029	3,726,063	5,851,913	3,308,504	6,916,108	3,784,205	2,220,262	5,191,795
<i>Total²</i>	<i>3,368,682</i>	<i>4,597,712</i>	<i>4,863,567</i>	<i>4,074,599</i>	<i>3,836,048</i>	<i>7,185,787</i>	<i>3,404,618</i>	<i>8,472,846</i>	<i>5,632,379</i>	<i>4,182,919</i>	<i>6,844,313</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	\$360,457	\$232,328	\$369,226	\$394,374	\$329,929	-	\$373,101	-	-	-	-
Herring	\$85,127	\$224,583	\$114,667	\$85,127	-	\$134,848	-	\$184,053	\$172,339	\$444,881	\$183,113
Other Groundfish	\$2,059	\$1,172	\$13,900	\$4,188	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	\$276,394
Pacific Cod	\$4,247	\$16,432	\$9,852	-	\$221	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	\$1,083,930	\$851,276	\$988,538	\$943,783	\$1,399,561	\$1,900,846	\$1,255,147	\$2,249,549	\$1,982,463	\$1,267,388	\$3,098,895
<i>Total²</i>	<i>\$1,535,820</i>	<i>\$1,325,791</i>	<i>\$1,496,184</i>	<i>\$1,342,345</i>	<i>\$1,729,710</i>	<i>\$2,035,694</i>	<i>\$1,628,248</i>	<i>\$2,433,602</i>	<i>\$2,154,802</i>	<i>\$1,712,268</i>	<i>\$3,558,402</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 Kasilof River provides excellent sportfishing opportunities near Kasilof, as well as other area rivers such as the Kenai, Russian, and Ninilchik Rivers, and Crooked Creek. The tideland and lower units of the Kasilof River are heavily used for sportfishing. Razor clam digging is also popular along the coast. There is limited access for boats to launch along the Kasilof River, with only one public ramp near Kasilof. Increasing demand for additional access has led the Alaska DNR to consider addition of a second boat launch/take-out downriver.^{415,416,417}

A large number of licensed sport fish guides were present in Kasilof between 2000 and 2010, varying between 29 and 33 guides per year registered in the community. In addition, there were between 4 and 10 active guide businesses per year in Kasilof over the decade. Kasilof residents participated heavily in sportfishing activity, purchasing between 984 and 1,233 licenses per year (irrespective of point of sale). The number of sport fish licenses purchased in Kasilof was lower than the number sold to residents in some years and higher in others, varying between 692 and 2,078 per year. The fact that a greater number of licenses was sold in Kasilof than to Kasilof residents in some years supports the fact that sportfishing is a local tourism draw to the region.

Kasilof is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, saltwater and freshwater sportfishing at this regional level was substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska resident logged 20,292 saltwater angler days and 71,555 freshwater angler days.

The Alaska Statewide Harvest Survey,⁴¹⁸ conducted by ADF&G between 2000 and 2010, noted the species known to be targeted by private anglers in Kasilof. In freshwater, anglers targeted Chinook, coho, sockeye, and pink salmon, rainbow trout, Dolly Varden, Arctic grayling, and northern pike. In saltwater, anglers pursued the same salmon species listed above, as well as Dolly Varden, Pacific halibut, rockfish, lingcod, and Pacific cod. The survey also noted sport harvest of Tanner crab, razor clams, hardshell clams, and shrimp by Kasilof residents.⁴¹⁹

Despite the high number of sport fish guide businesses located in Kasilof, no kept/release log book data were reported for fishing charters out of Kasilof between 2000 and 2010.⁴²⁰

⁴¹⁵ Alaska Dept. of Natural Resources. Sept. 2010. *Kasilof River Special Use Area, Draft Decision*. Retrieved August 30, 2012 from http://dnr.alaska.gov/mlw/kasilof/pdf/kas_sua_decision_draftm.pdf.

⁴¹⁶ HDR Alaska, Inc. October 2008. *Lower Kasilof River Boat Launch Site Investigations. Final Report*. Prepared for Alaska Dept. of Natural Resources. Retrieved August 28, 2012 from <http://dnr.alaska.gov/parks/units/kasilof/lowerkasilofboatlaunchinvestigation.pdf>.

⁴¹⁷ Alaska Dept. of Natural Resources. 2001. *Kenai Area Plan*. Retrieved February 7, 2012 from http://dnr.alaska.gov/mlw/planning/areaplans/kenai/pdfs/master_KAP.pdf.

⁴¹⁸ 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).

⁴¹⁹ The Alaska Statewide Harvest Survey includes separate categories for Dungeness crab, Tanner crab, razor clams, hardshell clams and shrimp. Remaining species fall into the ‘other shellfish’ category.

⁴²⁰ 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, Kasilof: 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 Kasilof ²
2000	4	31	1,000	692
2001	5	33	984	820
2002	4	31	1,038	802
2003	4	32	1,016	824
2004	3	30	1,036	848
2005	8	29	1,049	793
2006	6	30	1,118	1,988
2007	9	33	1,116	2,078
2008	10	31	1,148	2,009
2009	6	29	1,233	1,902
2010	6	31	1,134	1,746

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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

Kasilof is located in the historic territory of the Kenaitze people, a branch of Athabascan Dena'ina Indians. The Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.⁴²¹ Today, a majority of Kasilof residents are non-Native. Many residents participate in personal use set net and dip net fisheries at the mouth of the Kasilof River. These fisheries, managed by ADF&G, are only available to Alaskan residents and were initiated as an alternative to subsistence fishing and originally used as a management tool to harvest the surplus of salmon stocks not harvested by the commercial or sport fisheries. Sockeye salmon is the primary harvest for both of the personal use fisheries, with a limited number of Chinook salmon taken from the personal use set gillnet fishery.⁴²²

No information was reported by ADF&G regarding per capita subsistence harvest or the percentage of households in Kasilof utilizing various marine resources for subsistence purposes between 2000 and 2010 (Table 12). However, information was reported during the 2000-2010 period regarding subsistence harvest of salmon and halibut. Between 2000 and 2008, the number of subsistence salmon permits issued to Kasilof households varied between 3 and 11. Based on reported harvests, on average, sockeye was the most heavily harvested salmon species. Smaller harvest of other salmon species were also reported in some years. Information about subsistence salmon harvest is presented in Table 13.

Between 2003 and 2010, an average of 10 Subsistence Halibut Registration Certificates (SHARC) were issued to residents of Kasilof. Of these, an average of 5 SHARC cards were fished, with an average subsistence halibut harvest of 2,015 pounds per year. The highest reported harvest of halibut during the period occurred in 2004, when 5 SHARC cards were fished and a total of 4,140 pounds of halibut were harvested. Information about subsistence harvest of halibut is presented in Table 14.

No information was reported regarding total harvest of marine invertebrates and non-salmon fish in Kasilof between 2000 and 2010 (Table 13), and no information was reported about subsistence harvest of marine mammals during the period (Table 15).

⁴²¹ Kenaitze Indian Tribe. (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

⁴²² Alaska Dept. of Natural Resources. Sept. 2010. *Kasilof River Special Use Area, Draft Decision*. Retrieved August 30, 2012 from http://dnr.alaska.gov/mlw/kasilof/pdf/kas_sua_decision_draftm.pdf.

Table 12. Subsistence Participation by Household and Species, Kasilof: 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, Kasilof: 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	7	6	4	7	n/a	27	33	n/a	n/a
2001	3	6	6	n/a	n/a	n/a	24	n/a	n/a
2002	3	7	n/a	n/a	n/a	n/a	70	n/a	n/a
2003	3	3	n/a	n/a	n/a	n/a	25	n/a	n/a
2004	7	7	3	n/a	22	n/a	29	n/a	n/a
2005	5	5	n/a	n/a	10	n/a	26	n/a	n/a
2006	10	10	15	n/a	n/a	n/a	351	n/a	n/a
2007	11	11	11	n/a	n/a	n/a	387	n/a	n/a
2008	7	7	6	7	9	35	46	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, Kasilof: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	8	n/a	n/a
2004	9	5	4,140
2005	7	1	1,097
2006	9	2	605
2007	11	10	2,797
2008	12	9	2,772
2009	13	3	629
2010	13	6	2,065

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, Kasilof: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Kenai (KEY-nigh)



People and Place

*Location*⁴²³

Kenai is located on the west coast of the Kenai Peninsula, on the eastern shore of Cook Inlet at the mouth of the Kenai River. It lies approximately 11 miles off the Sterling Highway on the Kenai Spur Highway, approximately 155 highway miles (65 air miles) southwest of Anchorage. The City is near the western boundary of the Kenai National Wildlife Refuge. It is located in the Kenai Peninsula Borough and the Kenai Recording District. The area encompasses 29.9 square miles of land and 5.6 square miles of water.

*Demographic Profile*⁴²⁴

In 2010, there were 7,100 residents in Kenai, ranking it as the 14th largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population increased by 12.2%. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents increased by 2.5%, with an average annual growth rate of -0.08%.⁴²⁵ The negative average annual growth rate indicates that, despite a slow overall increase in population, there were declines in population in some years during this period.

In 2010, a majority of Kenai residents identified themselves as White (79.9%), while 8.9% identified themselves as American Indian and Alaska Native, 7.9% identified as two or more races, and smaller percentages of residents identified as Black or African American, Asian, Native Hawaiian and Other Pacific Islander, and individuals of ‘some other race’. In addition, 4.5% of Kenai residents identified themselves as Hispanic or Latino in 2010. The change in population from 1990 to 2010 is provided in Table 1 below, and changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

The average household size in Kenai decreased very slightly between 1990 and 2010, from 2.7 in 1990 to 2.64 in 2000, to 2.51 by 2010. The opposite was true of total households, with 2,329 occupied housing units in 1990, increasing to 2,622 in 2000 and 2,809 in 2010. Of the 3,166 housing units surveyed for the 2010 U.S. Census, 53.2% were owner-occupied, 35.6% were rented, and 11.3% were vacant. Of these vacant housing units, 29.1% were vacant due to seasonal use. The population of individuals living in group quarters in Kenai increased from 25 in 1990 to 54 in 2010.

⁴²³ 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.

⁴²⁴ 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>.

⁴²⁵ Alaska Department of Labor. 2011. Current population estimates for Alaskan Communities. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

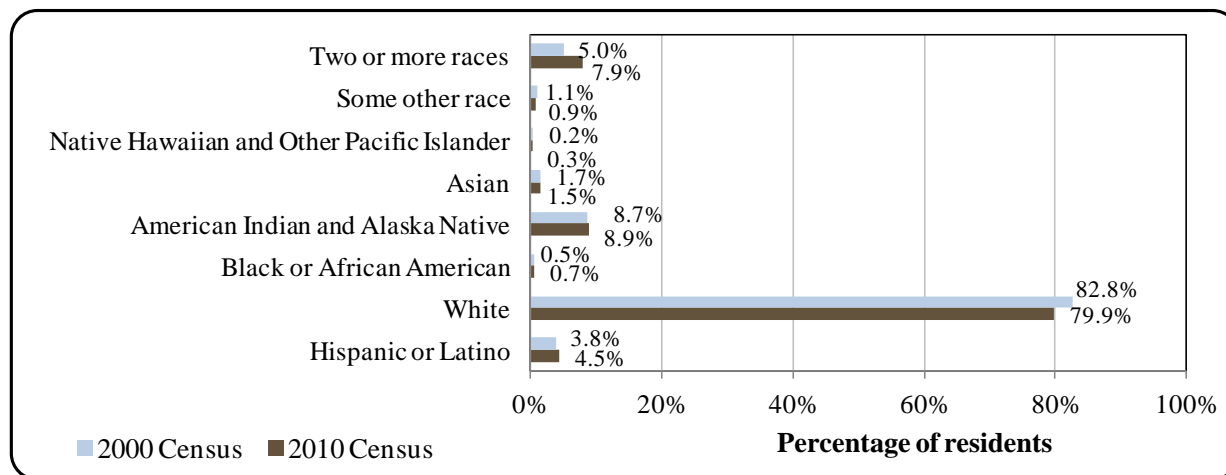
Table 1. Population in Kenai from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	6,327	-
2000	6,942	-
2001	-	6,888
2002	-	7,077
2003	-	7,130
2004	-	6,845
2005	-	6,779
2006	-	6,797
2007	-	6,913
2008	-	7,068
2009	-	7,115
2010	7,100	-

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>.

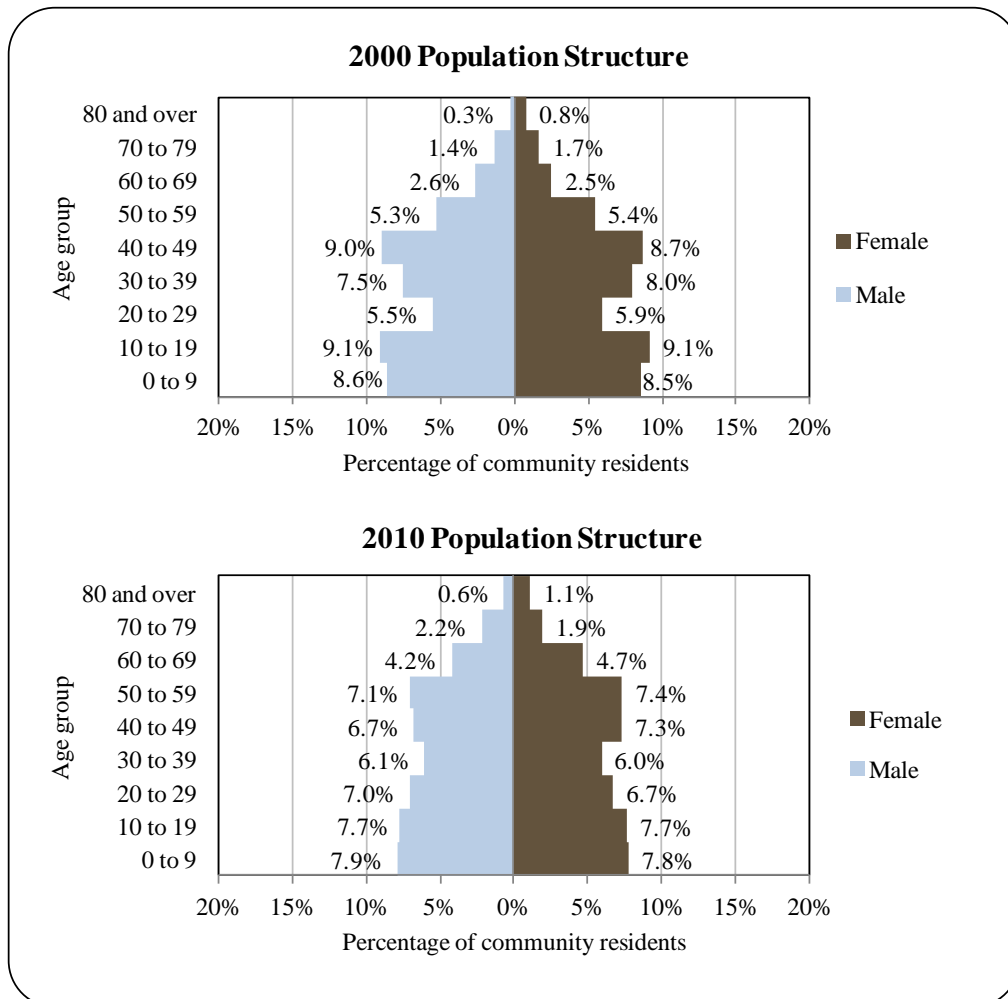
² Alaska Department of Labor. (2011). *Current population estimates for Alaskan Communities*. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

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



In terms of educational attainment, the U.S. Census’ 2006-2010 American Community Survey (ACS)⁴²⁶ estimated that 91.6% 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, an estimated 1.3% of residents had less than a 9th grade education, compared to an estimated 3.5% of Alaskan residents overall; an estimated 7.1% had a 9th to 12th grade education but no diploma, compared to an estimated 5.8% of Alaskan residents overall; an estimated 28.1% had some college but no degree, compared to an estimated 28.3% of Alaskan residents overall; 11.9% of resident held a Bachelor’s degree, compared to an estimated 17.4% of Alaskan residents overall; and an estimated 6.1% held a graduate or professional degree, compared to an estimated 9.6% of Alaskan residents overall.

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



⁴²⁶ 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.

History, Traditional Knowledge, and Culture

According to archaeological evidence, the oldest aboriginal inhabitants of the Cook Inlet region were Riverine Kachemak Eskimos from approximately 1000 B.C. to 1000 A.D. At that time, there appears to have been a shift to inhabitation by Dena'ina Athabascan Indians throughout most of the inlet. This shift may have resulted from changes in climate that altered salmon abundance patterns.⁴²⁷ When Russian fur traders arrived in the region in 1741, approximately 1,000 Dena'ina people lived in a village at the site of Kenai known as Shk'ituk't,⁴²⁸ and many small seasonal camps were located along the Kenai River and its tributaries.⁴²⁹ The Russians called the Dena'ina *Kenaitze*, which meant 'the people who live along the Kenai River', although the Kenaitze called themselves *Kahthuht'ana*, an Athabascan word meaning 'the people of the Kenai'.⁴³⁰ Early hostilities between the Russian settlers and the Native inhabitants led the Dena'ina to attack the Fort in 1797 in the Battle of Kenai, resulting in 100 deaths.⁴³¹

The Dena'ina population was decimated by disease in the 1800s and 1900s, and after the flu epidemic of 1919, much of the remaining population consolidated in what was then the village of Kenai. Natives living in the village of Kenai maintained ties to historical village sites, camps, and traplines in the interior through the 1930s and 1940s. Many had summer residences in Kenai and during winter moved to homes along the upper Kenai River.⁴³²

In 1791, Russian fur traders built a fortified trading post at Kenai called Fort St. Nicholas. Soon after the U.S. purchased Alaska from Russia in 1867, the U.S. Military took over the fort, calling it Fort Kenay. A U.S. post office was established in Kenai in 1899. The commercial fishing industry provided an early economy in the region, and continued to be important as other industries grew. Opportunities for homesteading were opened in the 1940s, and the population of the area began to grow. The first dirt road connecting Kenai to Anchorage was completed in 1951. The first oil strike took place in 1957 at Swanson River, 20 miles northeast of Kenai, and the first discovery of offshore oil took place in 1965. The City of Kenai was incorporated in 1960.^{433,434}

Natural Resources and Environment

The City of Kenai is located at the mouth of the Kenai River, which empties into Cook Inlet. The Kenai River drains more than 2,000 square miles, from the glaciers and icefields of the

⁴²⁷ Fall, J.A., R.T. Stanek, B. Davis, L. Williams, and R. Walker. 2004. *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Final Report for Study No. FIS 03-045.

⁴²⁸ 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.

⁴²⁹ See footnote 427.

⁴³⁰ Halliday, Jan. 1998. *Native Peoples of Alaska: A Traveler's Guide to Land, Art, and Culture*. Sasquatch Books, Seattle.

⁴³¹ Kenai Peninsula Economic Development District. 2010. *Kenai Peninsula Borough Comprehensive Economic Development Strategy*. Retrieved September 7, 2012 from <http://commerce.alaska.gov/ded/dev/oedp/pubs/KPEDD%20CEDS%20&%20Gap%20Analysis%20Study%202010.pdf>.

⁴³² See footnote 427.

⁴³³ Kevin Waring Associates. 2003. *City of Kenai Comprehensive Plan*. Retrieved September 4, 2012 from <http://www.ci.kenai.ak.us/City-approved%20Kenai%20Plan.pdf>.

⁴³⁴ See footnote 428.

Kenai Mountains to the extensive lowlands of the Kenai Peninsula.⁴³⁵ Coastal bluffs overlooking Cook Inlet are subject to erosion, and Kenai settlement patterns have also been affected by the river floodplain. A majority of lowland area is made up of wetlands.⁴³⁶ Areas further from the river are characterized by boreal forest and numerous lakes.⁴³⁷ The Cook Inlet basin is located in a transitional climate zone, in the rain shadow of the Kenai Mountains. Temperatures are more extreme because the area is somewhat sheltered from the moderating effects of the Gulf of Alaska, and cold air occasionally pushes south from interior Alaska in winter months.⁴³⁸ Winter temperatures range from 4 to 22 °F, and summer temperatures vary from 46 to 65 °F. Average annual precipitation is 20 inches.⁴³⁹

In 1986, much of the Kenai River watershed was designated as the Kenai River Special Management Area. The area was identified for special attention in order to balance habitat and recreation values with residential and industrial needs in the area.^{440,441} Fish species found in the Kenai River watershed include all five species of Pacific salmon, lake trout, Arctic grayling,⁴⁴² round whitefish, Bering cisco, Alaska blackfish, northern pike, and burbot. Steelhead are not known to return to the Kenai River. In addition, as many as 200 species of birds and mammals are found in the Kenai River watershed, including bald eagles, trumpeter swans, variety of waterfowl and shorebirds, black and brown bears, moose, caribou, mountain goat, Dall sheep, wolves, wolverines, lynx, coyotes, beavers and other furbearers.⁴⁴³

The Kenai River hosts the largest freshwater sport fishery in Alaska, with emphasis on the large Chinook salmon, as well as large fisheries for coho and sockeye salmon. With the expansion of the recreational fishery in recent decades, rainbow trout and Dolly Varden have also increasing in importance as target species. To a lesser degree, Arctic grayling and northern pike are targeted by Kenai River sport fishermen. In addition to sportfishing, many other recreational opportunities exist near Kenai, including camping, hunting, and clam digging. The Kenai River Flats, Morgans Landing, Scout Lake, and Captain Cook State Recreation Areas are valuable recreational resources.⁴⁴⁴ The wood frog is the only known amphibian on the Kenai Peninsula.^{445,446}

It is important to note that 2012 saw unusually low returns of Chinook salmon to the Kenai River and other northern Cook Inlet river systems. This led to extensive closures of both commercial and sport fisheries in Cook Inlet. In the Kenai River, the in-river sport fishery for Chinook salmon was tightly constrained, along with the Eastside commercial set net fishery at

⁴³⁵ Alaska Dept. of Natural Resources. 1998. *Kenai River Comprehensive Management Plan*. Retrieved September 3, 2012 from <http://dnr.alaska.gov/parks/plans/krsmapl/krsmamp3.pdf>.

⁴³⁶ See footnote 433.

⁴³⁷ U.S. Fish and Wildlife Service. 2011. *Kenai National Wildlife Refuge*. Retrieved January 26, 2012 from <http://kenai.fws.gov/>.

⁴³⁸ Kenai Peninsula Borough Coastal Management Program. 1990. *Final Coastal Management Plan*. Retrieved September 7, 2012 from <http://www2.borough.kenai.ak.us/coastal/CMP-Final.htm>.

⁴³⁹ See footnote 428.

⁴⁴⁰ Alaska Dept. of Natural Resources. 2001. *Kenai Area Plan*. Retrieved February 7, 2012 from http://dnr.alaska.gov/mlw/planning/areaplans/kenai/pdfs/master_KAP.pdf.

⁴⁴¹ See footnote 435.

⁴⁴² Arctic grayling were introduced to Crescent Lake in the Kenai River watershed in 1950 and have now become established in the upper Kenai River. (See footnote 435.)

⁴⁴³ See footnote 435.

⁴⁴⁴ See footnote 435.

⁴⁴⁵ Ibid.

⁴⁴⁶ See footnote 437.

the mouth of the River. These closures represent a significant impact on the local economy in Kenai and surrounding Peninsula communities. The Eastside set net fishery earned only 10% of the most recent 5-year average value of that fishery in 2012, while total in-river harvest of Chinook salmon was only 1% of the most recent 5-year average. In September 2012 the U.S. Secretary of Commerce declared a Chinook fishery disaster for Cook Inlet, along with the Yukon and Kuskokwim Rivers that year.⁴⁴⁷

In addition to local sportfishing activity, each summer the City of Kenai hosts a large personal use dip net fishery that is open to all Alaska residents. According to ADF&G, the annual harvest of sockeye salmon in this fishery is 100,000. The fishery is opened from late June or early July through the end of July to target sockeye salmon and avoid harvests of Northern District coho salmon, late-run Kenai River Chinook and Kenai River coho. The fishery is managed by ADF&G, and the City of Kenai provides access and support services to the tens of thousands of people who participate each year. Dipnetting takes place both along the shoreline and from boats. In order to protect water quality during periods of high traffic, the use of two-stroke motors on the Kenai River was prohibited starting in 2008.⁴⁴⁸ Local Kenai residents have mixed feelings about the growth of the dip net fishery. The high volume of people that participate each year creates concerns about river access, high costs to the City of Kenai, and problems with high volumes of fish waste along Kenai beaches. As of early 2013, the local community was in the process of exploring alternatives to address these concerns.⁴⁴⁹

Protected areas near Kenai currently include Kenai National Wildlife Refuge (NWR) and the Clam Gulch State Critical Habitat Area (CHA). The Kenai NWR covers 1.92 million acres of the Kenai Peninsula, half of which was designated as the Kenai Wilderness. The NWR was originally established by President Roosevelt in 1941 as the Kenai National Moose Range. In 1980, with the Alaska National Interest Lands Conservation Act (ANILCA), the name and purpose of the area were changed to manage all animal species as a NWR.⁴⁵⁰ South of the Kenai River mouth, the Clam Gulch State CHA extends along the eastern shores of the Cook Inlet from Cape Kasilof to Happy Valley. The Clam Gulch State CHA is intended to protect the opportunity for the public to utilize the prolific razor clam beds along this section of coastline. In addition to razor clams, the area also serves as important habitat for many migratory waterfowl and shorebirds.⁴⁵¹

There is limited timber value in the Kenai area due to poor soil drainage.⁴⁵² Some logging takes place to remove timber killed by spruce bark beetle.⁴⁵³ Tidelands in the area are valuable for commercial inshore fisheries. Wetlands north of Kenai provide valuable habitat for caribou as calving grounds. Moose and a variety of waterfowl utilize the wetland area as well.⁴⁵⁴ There are no active or proposed mineral development sites in the area, although coal beds exist throughout

⁴⁴⁷ Alaska Dept. of Fish and Game. (2012). *2012 Alaska Chinook Salmon Fishery Disaster FAQ*. Retrieved June 5, 2013 from <http://www.adfg.alaska.gov/index.cfm?adfg=hottopics.federalchinookdisaster>.

⁴⁴⁸ Alaska Dept. of Fish and Game. 2012. *Kenai River Salmon Fisheries*. Retrieved September 7, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=PersonalUsebyAreaSouthcentralkenaiSalmon.main>.

⁴⁴⁹ Shedlock, J. (2013). "Kenai City Council discusses dipnet fishery report." *Peninsula Clarion*. Retrieved June 5, 2013 from <http://peninsulaclarion.com/news/2013-01-08/annual-dipnet-fishery-report-discussed-by-council>.

⁴⁵⁰ Ibid.

⁴⁵¹ Alaska Dept. of Fish and Game. 2012. *Clam Gulch – Critical Habitat Area*. Retrieved August 28, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=clamgulch.main>.

⁴⁵² See footnote 440.

⁴⁵³ 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.

⁴⁵⁴ See footnote 440.

most of the western Kenai Peninsula.⁴⁵⁵ The oil and gas industry is active in the region, with a number of new wells being drilled each year both on the Kenai Peninsula and offshore in Cook Inlet. As of 2010, there were 28 producing oil and gas fields both on and off shore. Cook Inlet oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.⁴⁵⁶

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt, and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures, and soil liquefaction.⁴⁵⁷ Other natural hazards threats in the Kenai Peninsula Borough include flooding, wildfire, snow and avalanche, tsunami and seiche, severe weather, landslides, erosion, and drought.⁴⁵⁸

According to the Alaska Department of Environmental Conservation, no active environmental cleanup sites were located directly within the City of Kenai as of August 2012. However, several active sites were located at sites along the Kenai River, as well as just north at the Tesoro Alaska Refinery near Nikiski. Sites along the Kenai River included varying levels of soil and/or groundwater contamination at River Terrace (a mobile home park), the Alaska Department of Transportation and Public Facilities' maintenance station in Soldotna, the ZipMart store and Cook's Corner Tesoro gas station in Sterling, and Hamilton's Place Service Station in Cooper's Landing. At the Tesoro Alaska Refinery 11 miles north of Kenai, both soil and groundwater in the area is contaminated. The contamination plume has traveled through neighboring industrial properties and is approaching a bluff over Cook Inlet. Tesoro is currently engaged in groundwater monitoring and product recovery to prevent seepage into Cook Inlet. Following successful removal of product from groundwater, Tesoro will be required to develop a plan to address soil contamination.⁴⁵⁹

Current Economy⁴⁶⁰

Oil and gas is an important industry for Kenai residents. The City of Kenai, as well as nearby Nikiski, provides servicing and supplies for Cook Inlet's oil and gas drilling platforms. Tesoro Alaska's oil refinery is located 11 miles north of Kenai along North Kenai Road. Other important industries in Kenai include tourism and fishing, including recreational, commercial, and subsistence fishing, as well as fish processing. Additional economic sectors are timber and

⁴⁵⁵ Alaska Dept. of Commerce. (n.d.). *Mineral Resources of Alaska*. Retrieved February 8, 2012 from: <http://commerce.alaska.gov/ded/dev/minerals/mining.htm>.

⁴⁵⁶ Resource Development Council. (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

⁴⁵⁷ Kenai Peninsula Borough. 2010. *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

⁴⁵⁸ State of Alaska. 2002. *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

⁴⁵⁹ Alaska Dept. of Environmental Conservation. 2012. *List of Contaminated Site Summaries By Region*. Retrieved April 17, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

⁴⁶⁰ Unless otherwise noted, all monetary data are reported in nominal values.

lumber, agriculture, transportation services, construction, and retail trade. The largest employers in Kenai are the school district, Unocal, Peak Oilfield Services, the Kenai Peninsula Borough, and Central Peninsula General Hospital.⁴⁶¹ In 2010, the number of Kenai residents that owned state commercial fishing permits was equivalent to between 3.7% of the population, the number holding crew licenses was equivalent to 4.1%, and the number that were the primary owner of a fishing vessel was equivalent to 1.4% of the local population (see *Commercial Fishing* section).

Based on household surveys conducted for the 2006-2010 ACS,⁴⁶² in 2010, the per capita income in Kenai was estimated to be \$27,921 and the median household income was estimated to be \$52,701. This represents an increase from the per capita and median household incomes reported in the year 2000 (\$20,789 and \$45,962, respectively). If inflation is taken into account by converting the 2000 values to 2010 dollars,⁴⁶³ the increase in per capita income is shown to be very slight, from a real per capita income of \$27,337 in 2000. In the case of median household income, accounting for inflation shows a real decrease in income over the decade, from a real median household income of \$60,439 in 2000. In 2010, Kenai ranked 80th of 305 Alaskan communities with per capita income data that year, and 112th in median household income, out of 299 Alaskan communities with household income data.

However, Kenai's small population size may have prevented the ACS from accurately portraying economic conditions.⁴⁶⁴ An alternative estimate of per capita income is provided by economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Kenai in 2010 is \$18,796.^{465,466} This estimate is slightly lower than the 2000 per capita income reported in by the U.S. Census, suggesting that caution is warranted when citing an increase in per capita income in Kenai between 2000 and 2010. As of 2010, the Denali Commission did not consider Kenai a "distressed" community.⁴⁶⁷ 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, a slightly higher percentage of Kenai's population (70.5%) was estimated to be in the civilian labor force than was estimated to be in the statewide civilian labor force that year (68.8%). Also in 2010, 10.3% of Kenai residents were

⁴⁶¹ 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.

⁴⁶² 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>.

⁴⁶³ 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>).

⁴⁶⁴ While ACS estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁴⁶⁵ 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/>.

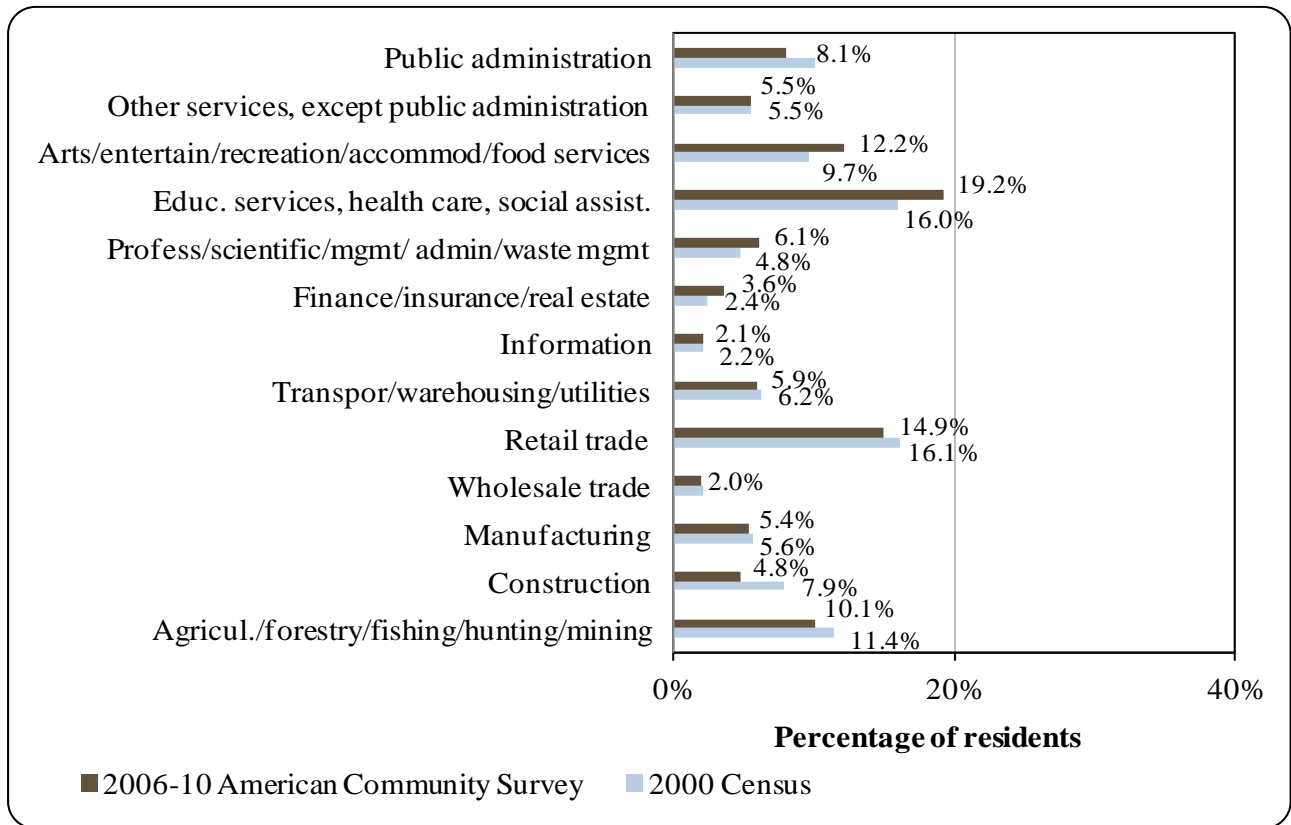
⁴⁶⁶ See footnote 462.

⁴⁶⁷ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

estimated to be living below the poverty line, compared to 9.5% of Alaskan residents overall, and the unemployment rate was estimated to be 7.7%, compared to a statewide unemployment rate of 5.9%. This unemployment rate estimate is echoed by an alternative unemployment estimate based on the ALARI database, which indicates that the unemployment rate in Kenai in 2010 was 13.8%, slightly higher than a statewide rate estimate of 11.5%.⁴⁶⁸

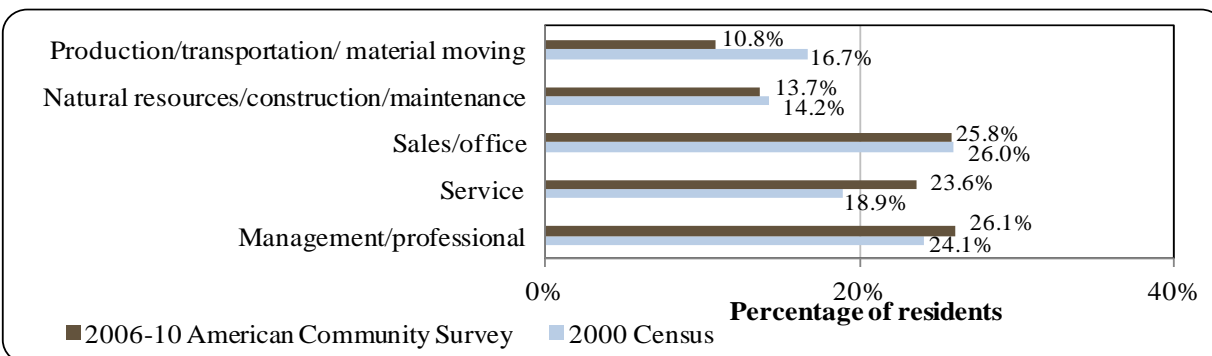
Also based on the 2006-2010 ACS, the majority of Kenai’s workforce was estimated to be employed in the private sector (73.3%), along with 18.2% in the public sector, 8.2% that was self-employed, and 0.3% estimated to be unpaid family workers. Of the 3,315 people aged 16 and over that were estimated to be employed in the civilian labor force, the greatest number of workers were estimated to be employed in educational services, health care, and social assistance (19.2%), retail trade (14.9%), arts, entertainment, recreation, and accommodation and food services (12.2%), and agriculture, forestry, fishing, hunting, and mining (10.1%). Information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

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



⁴⁶⁸ See footnote 465.

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



An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 3,479 employed residents in Kenai in 2010, of which 19.1% were employed in trade, transportation, and utilities, 15.2% in education and health services, 14.9% were employed in natural resources and mining, 11.9% in local government, 10.8% in leisure and hospitality, 5% in state government, 4.8% in construction, 4.8% in professional and business services, 4.6% in manufacturing, 3.2% in financial activities, 1.6% in information, 0.1% in unknown industries, and 3.9% in other industries.⁴⁶⁹ As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents’ activity in the subsistence economy.

Governance

Kenai is a Home Rule City located in the Kenai Peninsula Borough. Incorporated in 1960, Kenai has a manager, or “Strong Mayor”, form of government, with a seven-person city council including the Mayor, a nine-person school board, seven-person planning and zoning commission, and various municipal employees. The City collects a 3% sales tax; the Borough collects a 3% sales tax, and an 8.37 mills property tax is administered.⁴⁷⁰

Annual municipal revenue totals followed an increasing trend over the 2000-2010 period, driven in large part by an increase in total intergovernmental funding received by the City in the later years of the decade. State and federal grant funding were received for projects such as airport improvement, water and sewer upgrades, and library expansion. In addition, shared revenues were received from the state, including State Revenue Sharing contributions from 2000 to 2003 Community Revenue Sharing contributions in 2009 and 2010, tax refunds from the electric utility tax and raw fish tax, and other sources. Sales tax revenues made up an average of 26% of total municipal revenue during the 2000-2010 period. Several fisheries-related grants were received from the Alaska Department of Commerce, Community, and Economic Development in 2004, totaling \$197,171. These grants included \$63,400 to Salamatof Seafoods and \$69,833 to Pacific Star Seafoods for value-added fisheries equipment, and \$63,938 to Alaska Salmon Purchasers for totes, ice machines, packaging, and marketing. This information about selected municipal revenue sources is presented in Table 2.

⁴⁶⁹ Ibid.

⁴⁷⁰ 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.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Kenai 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	\$12,455,040	\$3,700,743	\$111,142	n/a
2001	\$12,669,520	\$3,809,239	\$96,923	n/a
2002	\$15,210,856	\$4,180,190	\$97,483	n/a
2003	\$12,408,103	\$3,953,561	\$98,264	n/a
2004	\$12,086,654	\$3,790,644	n/a	\$197,171
2005	\$14,585,321	\$4,090,468	n/a	n/a
2006	\$16,434,531	\$4,404,148	n/a	n/a
2007	\$23,312,008	\$4,631,812	n/a	n/a
2008	\$30,178,714	\$5,196,046	n/a	n/a
2009	\$22,146,487	\$5,372,499	\$459,935	n/a
2010	\$28,514,571	\$5,561,970	\$452,828	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.

The office of the Kenaize Indian Tribe is located in the City of Kenai, near the original village site in Old Kenai. The Salamatof Tribe, whose village is located just to the north between Kenai and Nikiski, also has its office in Kenai. Both the Kenaitze and Salamatof Tribes were included under the Alaska Native Claims Settlement Act (ANCSA), and are federally recognized as Native villages. Their authorized traditional entities, recognized by the Bureau of Indian Affairs (BIA), are the Kenaitze Indian Tribe and the Village of Salamatoff. The Native corporation of the Kenaitze Indian Tribe is Kenai Native Association, Inc., an Urban Corporation⁴⁷¹ which manages 23,040 acres of surface land.⁴⁷² The Native village corporation of the Salamatof Tribe is the Salamatof Native Association, Inc, which manages 109,571 acres of land. The regional Native corporation to which both tribes belong is Cook Inlet Regional, Inc. (CIRI).⁴⁷³

The Kenaitze and Salamatof Tribes are also members of the Cook Inlet Tribal Council (CITC), a tribal non-profit organization headquartered in Anchorage. CITC strives to work together with Native people of the Cook Inlet region, and all Natives living in Anchorage, to help

⁴⁷¹ 16 U.S.C. § 3102 (9): The term “Urban Corporation” means those Native entities which have incorporated pursuant to section 14(h)(3) of the Alaska Native Claims Settlement Act.

⁴⁷² ANCSA 43 U.S.C. § 1613 (h)(3): “The Secretary may withdraw and convey to the Natives residing in Sitka, Kenai, Juneau, and Kodiak, if they incorporate under the laws of Alaska, the surface estate of lands of a similar character in not more than 23,040 acres of land, which shall be located in reasonable proximity to the municipalities...”

⁴⁷³ See footnote 470.

them develop talents and strengths, and become successful and self-sufficient individuals, families, and communities, with the goal of advancing the overall economic, social and cultural development of the people of the Chugach Region.⁴⁷⁴ CITC is one of the 12 regional Alaska Native 501(c)(3) non-profit organizations that were identified under ANCSA and charged with naming incorporators to create regional for-profit corporations. Today, these regional Native associations receive federal funding to administer a broad range of services to villages in their regions.⁴⁷⁵ CITC offers educational programs, job training, business assistance, youth programs, drug and alcohol treatment, and other assistance to families and individuals.⁴⁷⁶

The nearest offices of the Alaska Department of Fish and Game (ADF&G) and Alaska Department of Natural Resources (DNR) are located in Soldotna. The closest offices of the National Marine Fisheries Service (NMFS) are located in Homer and Anchorage. Anchorage also has the closest offices of the Alaska Department of Commerce, Community, and Economic Development and the U.S. Bureau of Citizenship and Immigration Services.

Infrastructure

Connectivity and Transportation

The Sterling Highway, the Kenai Spur Highway, and their network of secondary roads provide access to and within the region. There are also numerous trails in the region, and many of them follow old seismic lines, oil and gas exploration routes, and pipeline and transmission line rights-of-way.⁴⁷⁷ The city-owned Kenai Municipal Airport provides a 7,830 foot by 150 foot asphalt runway, a 2,000 foot by 60 foot gravel strip, a float plane strip, and helicopter service. A flight service station is available. Float plane facilities are also available at Island Lake and Arness Lake. There are five additional privately-owned airstrips in the vicinity.⁴⁷⁸ As of June 2012, roundtrip airfare from Anchorage to Kenai costs \$171.⁴⁷⁹

The Kenai City Dock and boat ramp are located near the mouth of the Kenai River. Moorage is by buoys anchored in the Kenai River.⁴⁸⁰ Powerboats and float boats are in use on the Kenai River and many lakes and creeks in the region. A significant port facility is located in Nikiski associated with petroleum shipping and processing. Canneries also have docks along the lower Kenai River.⁴⁸¹

Facilities

Water and sewer systems in Kenai are operated by the City. Water is supplied by three deep wells. The water is chlorinated and distributed via a piped water system to approximately

⁴⁷⁴ Cook Inlet Tribal Council. (n.d.). *What We Do*. Retrieved February 23, 2012 from <http://www.citci.com/>.

⁴⁷⁵ 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>.

⁴⁷⁶ See footnote 474.

⁴⁷⁷ Alaska Dept. of Natural Resources. 2001. *Kenai Area Plan*. Retrieved February 7, 2012 from http://dnr.alaska.gov/mlw/planning/areaplans/kenai/pdfs/master_KAP.pdf.

⁴⁷⁸ 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.

⁴⁷⁹ This price was calculated on November 21, 2011 using kayak.com.

⁴⁸⁰ See footnote 478.

⁴⁸¹ See footnote 477.

75% of Kenai households. Construction of a fourth well is planned. A piped sewage system also serves 75% of households, and sewage is treated in a sewage lagoon. The remaining homes use individual water wells and septic systems. Refuse collection is provided by a private company contracted by the Borough. The Borough operates a transfer facility on Redoubt Avenue in Kenai, and the Borough landfill is located in nearby Soldotna, at mile 110.4 Sterling Highway. Natural gas from Enstar is primarily used for home heating purposes. Homer Electric Association operates the Bradley Lake Hydroelectric Project and is part owner of the Alaska Electric Generation & Transmission Cooperative. It also purchases electricity from Chugach Electric.⁴⁸²

Police services are provided by the City Police Department as well as a state trooper post in Kenai. A State Superior Court Magistrate is present in Kenai, along with the Wildwood Correctional Center and Wildwood Pretrial Facility. Fire and rescue services are provided by the Kenai Fire Department and the Civil Air Patrol Central Emergency Services. Additional community facilities include a recreation center, Boys and Girls Club, a senior center and independent living facility, a high school pool, movie theater, several museums, five school libraries, one community library, and one special library. Telephone, cable, and broadband internet services are all available in Kenai.⁴⁸³

With regard to fisheries-related infrastructure, the City of Kenai operates the Kenai Boating Facility with a dock and boat ramp. The facility is used by fish processors, commercial, recreational, and dip net fishermen, and the general public. The growing Kenai River dip net fishery has led to a need for additional boat ramps to accommodate traffic.⁴⁸⁴ In 2012, the City of Kenai planned to construct four additional boat ramps.⁴⁸⁵ A number of private commercial fish processing docks are also present along the lower Kenai River, and moorage is available using buoys anchored in the Kenai River.⁴⁸⁶ A variety of fisheries-related businesses and services are available in Kenai and nearby Central Kenai Peninsula communities.

Medical Services

The Kenai Health Center is a qualified Emergency Care Center.⁴⁸⁷ In partnership with the Central Peninsula Hospital, located nearby in Soldotna, the Kenai Health Center provides a variety of diagnostic imaging and lab services in addition to basic medical services.⁴⁸⁸ Mental health services are also available locally in Kenai. Emergency Services have highway, coastal, airport, and floatplane access. Emergency service is provided by 911 Telephone Service and paid Emergency Medical Service.⁴⁸⁹

⁴⁸² See footnote 478.

⁴⁸³ Ibid.

⁴⁸⁴ Kevin Waring Associates. 2003. *City of Kenai Comprehensive Plan*. Retrieved September 4, 2012 from <http://www.ci.kenai.ak.us/City-approved%20Kenai%20Plan.pdf>.

⁴⁸⁵ City of Kenai. 2012. *Advertisement for Bid: Kenai Boating Facility Launch Ramp Floats 2012*. Retrieved September 7, 2012 from <http://www.ci.kenai.ak.us/publicworks/Boating%20Facility%20Launch%20Ramp%20Floats%202012.pdf>.

⁴⁸⁶ See footnote 482.

⁴⁸⁷ Ibid.

⁴⁸⁸ Central Peninsula Hospital. (n.d.) *Kenai Health Center*. Retrieved September 5, 2012 from <http://www.cpg.org/body.cfm?id=65>.

⁴⁸⁹ See footnote 482.

Educational Opportunities

As of 2011, there were six schools in Kenai with active enrollment. That year, Mountain View Elementary School (preschool through 5th grade) had 470 students and 33 teachers; the Kaleidoscope School of Arts and Sciences (Kindergarten through 6th grade) had 246 students and 18 teachers; Kenai Middle School (6th through 8th grade) had 375 students and 22 teachers; Kenai Peninsula Youth Facility (6th through 12th grade) had 7 students and 1 teacher; Kenai Central High School (9th through 12th grade) had 524 students and 40 teachers; and Kenai Alternative High School (9th through 12th grade, and preschool) had 103 students and 6 teachers.⁴⁹⁰ In addition, Kenai hosts the Challenger Learning Center of Alaska, an educational center created to enhance education through simulation of space and earth science missions, workshops, and distance education.⁴⁹¹

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Archaeological excavation at sites along the Kenai River has provided evidence of salmon fishing by the Riverine Kachemak culture using a drift net technology used to harvest sockeye salmon runs. Closer to the time of the arrival of Europeans in Cook Inlet, the Dena'ina living along the River utilized a variety of subsistence foods from the land and the sea. Of these, salmon was the most critical resource, and all five species of Pacific salmon were used. In addition, freshwater species such as Dolly Varden were harvested using alder drag nets.⁴⁹² Commercial fisheries began in the Cook Inlet region soon after the U.S. purchase of Alaska from Russia in 1867. Commercial salmon harvest began in Cook Inlet began in 1882⁴⁹³ with the development of a cannery at the mouth of the Kasilof River. An additional 17 canneries had been built in central Alaska by 1890.⁴⁹⁴ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.⁴⁹⁵ In the 1920s, herring had become increasingly valued for oil and meal, and a number of reduction plants were built. Commercial crab fisheries began to develop in the GOA in the 1930s. Historically, a sizable spawning biomass of herring was found in western Cook Inlet, and Lower Cook Inlet also supported commercial fisheries for Dungeness, king, and Tanner crab. However, Cook Inlet crab and a

⁴⁹⁰ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

⁴⁹¹ Challenger Learning Center of Alaska. 2009. *About Us*. Retrieved September 7, 2012 from <http://akchallenger.org/AboutUs/CLCA/tabid/71/Default.aspx>.

⁴⁹² Fall, J.A., R.T. Stanek, B. Davis, L. Williams, and R. Walker. 2004. *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Final Report for Study No. FIS 03-045.

⁴⁹³ 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>.

⁴⁹⁴ Cook, Linda, and Frank Norris. 1998. *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

⁴⁹⁵ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

majority of Cook Inlet herring fisheries are currently closed due to low stock abundance.^{496,497} If a sufficient biomass of herring is present in the Kamishak District of Cook Inlet, some sac roe harvest may be permitted.⁴⁹⁸

Commercial fishing and seafood processing continue to be an important economic driver in Kenai.⁴⁹⁹ However, according to the City of Kenai's 2003 Comprehensive Plan, declining harvests, weak markets, depressed product prices, and seasonal labor shortages have contributed to a decline in profits and employment in this industry in recent decades.⁵⁰⁰ Nevertheless, Kenai residents' were highly involved in Alaskan fisheries between 2000 and 2010, with the highest levels of participation in fisheries for salmon and halibut. A number of residents were also involved in fisheries for herring, groundfish, sablefish, and various crab and other shellfish species, including king, Tanner, and Dungeness crab, shrimp, scallops, geoduck and other clams, sea cucumbers and sea urchins (see the *Commercial Fishing* section for more details).

ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.⁵⁰¹

Cook Inlet is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area. Groundfish and crab fisheries that occur within 3 nautical miles (nm) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nm in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch set by NMFS applied to both fisheries. Beginning in 1997, an additional 'state-waters fishery' for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL,

⁴⁹⁶ 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>.

⁴⁹⁷ Alaska Dept. of Fish and Game. 2012. *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

⁴⁹⁸ Hollowell, Glen, Otis, Todd, and Ethan Ford. July 2012. *2011 Lower Cook Inlet Finfish Management Report*. Retrieved September 7, 2012 from <http://www.sf.adfg.state.ak.us/FedAidPDFs/FMR12-30.pdf>.

⁴⁹⁹ 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.

⁵⁰⁰ Kevin Waring Associates. 2003. *City of Kenai Comprehensive Plan*. Retrieved September 4, 2012 from <http://www.ci.kenai.ak.us/City-approved%20Kenai%20Plan.pdf>

⁵⁰¹ See footnote 493.

and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.⁵⁰²

The sandy beaches of lower Cook Inlet are one historical and current commercial clam harvest area. Littleneck and other hardshell clams (cockles and butter clams) are dug by hand shovel, and razor clams are dug with shovels and ‘guns’.⁵⁰³ Although Cook Inlet hosted shrimp fisheries in the past, beginning in 1997, commercial, sport and personal use fisheries for shrimp in Cook Inlet and adjacent coastal waters of the GOA were closed due to low abundance.⁵⁰⁴

In addition to Cook Inlet and Central GOA fisheries, Kenai residents hold permits in fisheries around the state (see *Commercial Fishing* section for details). Kenai is not eligible to participate in the Community Quota Entity program or the Community Development Quota program.

Processing Plants

ADF&G’s 2010 Intent to Operate list indicates that at least seven shoreside processing facilities were in operation in Kenai that year. Details about these processors are included below.

Inlet Fish Producers, Inc. processes all five species of salmon in both its facilities (on the Kenai and Kasilof Rivers). The facilities operate from June to early September each year, with combined employment of 200 people each summer. The Kenai facility provides living accommodations for up to 90 fish processing workers.⁵⁰⁵ According to a processor plant survey conducted by the AFSC in 2011, the plant manager indicated that, from June through August, a large number of Inlet Fish Producer’s employees are international students on J-1 visas.

Pacific Star Seafoods is owned by Double E Foods LLC. Pacific Star Seafoods purchased its present Kenai processing facility from Kenai Packers in 1994. The first cannery was built in 1946 at the present site. Pacific Star Seafood purchases all five salmon species from over 50 independently owned fishing vessels to be processed at the Kenai facility. Halibut and sablefish are also processed at the plant.⁵⁰⁶ According to the 2011 AFSC plant managers survey, Pacific Star Seafoods owns 3 docks in Kenai and in 2010 employed a maximum of 180 workers.

Snug Harbor Seafoods also owns a large processing facility in Kenai, as well as several satellite docks and buying stations in the area. Plant managers indicated that the Snug Harbor Seafoods plant began operations in 1983. The facility processes Chinook, sockeye, and coho salmon from June through September. Halibut and sablefish make up a large volume of the product processed during this time. The facility also processes razor clam, yelloweye rockfish, and lingcod.⁵⁰⁷ According to the 2011 AFSC survey of plant managers, the facility employs a maximum of 140 workers each year, with approximately 100 J-1 workers hired during the

⁵⁰² See footnote 496.

⁵⁰³ Ibid.

⁵⁰⁴ Trowbridge, C. and K. Goldman. 2006. *2006 Review of Cook Inlet Area Commercial Fisheries for Dungeness Crab, Shrimp, and Misc. Shellfish Fisheries: Report to the Board of Fisheries*. Alaska Dept. of Fish and Game Special Pub. No. 06-09. Retrieved August 30, 2012 from www.adfg.alaska.gov/FedAidPDFs/sp06-09.pdf.

⁵⁰⁵ Inlet Fish Producers, Inc. 2008. *Home and Jobs*. Retrieved August 29, 2012 from <http://inletfish.com/>.

⁵⁰⁶ Pacific Star Seafoods. 1998. *Welcome to Pacific Star Seafoods and About Pacific Star*. Retrieved September 6, 2012 from <http://www.pacificstarseafoods.com/index.htm>.

⁵⁰⁷ Snug Harbor Seafoods. 2010. *About, Products, and Employment* pages. Retrieved September 6, 2012 from <http://snugharborseafoods.com>.

summer season. The facility's overall employment period is approximately March until October.⁵⁰⁸

Alaska Salmon Purchasers Inc., Fishhawk Fisheries of Alaska, Inc., and Salamatof Seafoods also operate seafood processing facilities in Kenai. Alaska Salmon Purchasers Inc. processes all five species of salmon. Fishhawk Fisheries processes Dungeness crab, halibut, salmon (Chinook, chum, coho, and sockeye), shrimp, and prawns. Salamatof Seafoods, Inc. processes halibut and all five species of salmon.⁵⁰⁹ According to the 2011 AFSC survey of plant managers, the Salamatof Seafoods plant began operations in 1979 and in 2010 the plant employed a maximum of 65 workers.

In addition to the facilities described above, Sought Out Salmon is a family-owned business that has processed salmon in Kenai for five generations. The company focuses primarily on sockeye salmon, but also processes coho and Chinook.⁵¹⁰

Fisheries-Related Revenue

In 2010, known fisheries-related revenue received by the City of Kenai totaled \$388,198. The majority of revenue came from shared fisheries business tax collections, raw fish tax collections, and collections from port/dock usage. A smaller portion came from a Fisheries Resource Landing Tax. For more information on known fisheries-related revenues for Kenai between 2000 and 2010, see Table 3.⁵¹¹

Commercial Fishing

Kenai residents are highly involved in a number of Alaskan commercial fisheries, with the highest participation in fisheries for salmon and halibut, herring, and groundfish, as well as involvement in fisheries for sablefish and some crab and other shellfish species. Between 2000 and 2010, Kenai residents were active as permit and quota share account holders, crew license holders, and vessel owners. In addition, in 2010 the community of Kenai was within the top 20 cities in Alaska with regard to processing, ranking 19th in both landings and ex-vessel revenue out of 67 Alaskan ports that received landings that year. That year, 43 fish buyers were present locally, and 8 shore-side processing facilities were in operation. In total, 17,500,691 net pounds were landed at Kenai processing facilities in 2010, generating a total of \$18,988,645 in ex-vessel revenue (Table 5).

In 2010, 293 commercial crew licenses were held, 100 vessels were primarily owned by Kenai residents, and 161 vessels were reported as homeported in the community. Vessel ownership and the number of vessels homeported in Kenai both declined over the 2000-2010 period, from a high of 192 vessel owners and 334 homeported vessels in 2000. In contrast, the number of crew licenses held by Kenai residents varied from year to year without a consistent trend. The number of fish buyers, shore-side processing facilities, and vessels landing catch in

⁵⁰⁸ Ibid.

⁵⁰⁹ Alaska Seafood Marketing Institute. 2012. *Suppliers Directory*. Retrieved September 6, 2012 from <http://alaskaseafood.org/industry/suppliers/>.

⁵¹⁰ Sought Out Salmon. (n.d.). *Home and About Us*. Retrieved September 6, 2012 from <http://soughtoutsalmon.com/>.

⁵¹¹ A direct comparison between fisheries-related revenue and total municipal revenue cannot reliably be made as not all fisheries-related revenue sources are included in the municipal budget.

Kenai also varied from year to year, but did not show declining trends. Further information about the commercial fishing sector in Kenai is presented in Table 5.

In 2010, 260 Kenai residents held a total of 311 state Commercial Fisheries Entry Commission (CFEC) permits. Of these, 246 were held for salmon fisheries, 32 were held for halibut, 21 were held for herring, 4 were held for groundfish, 4 for ‘other shellfish’ fisheries, 2 for sablefish, and 2 for crab fisheries. Additional information about CFEC permits is presented in Table 4, and further details regarding these permits are included below.

Of 246 salmon CFEC permits held in 2010, 129 were held in the Cook Inlet set gillnet fishery, 69 were held in the Cook Inlet drift gillnet fishery, 20 were held in the Bristol Bay drift gillnet fishery, 9 were held in the Bristol Bay set gillnet fishery, 5 were held in the Kodiak purse seine fishery, and a small number were held in various other salmon fisheries around the state (1 to 2 permits per fishery). These included Prince William Sound and Cook Inlet purse seine fisheries, Prince William Sound, Southeastern, and Peninsula-Aleutian drift gillnet fisheries, the Kodiak set gillnet fishery, the Lower Yukon gillnet fishery, the statewide hand troll fishery, the Upper Yukon fishweel fishery, and a permit in the Cook Inlet ‘special harvest area’ (hatchery) salmon fishery. Overall, 67% of salmon permits held in Kenai were actively fished in 2010. The number of salmon permit holders and the total salmon permits held increased slightly between 2000 and 2010, while the percentage actively fished remained relatively stable over the period.

Of 32 halibut CFEC permits, a majority (30) were held in the statewide longline fishery using vessels under 60 feet in length, while 1 was held for the statewide longline fishery for vessels 60 feet or over, and 1 was held for statewide hand troll. Overall, 88% were actively fished in 2010. Both the number of halibut permits held and the number of permit holders decreased by over one-third between 2000 and 2010, and the percentage of permits that were actively fished increased during this period.

Of 21 total herring CFEC permits, only 2 were actively fished (approximately 10%). Both of these active permits were held in the Cook Inlet roe herring gillnet fishery. A total of eight permits were held in this fishery in 2010, along with six permits held in the Kodiak roe herring gillnet fishery, three held in the Cook Inlet roe and food/bait purse seine fishery, and one permit each in the Prince William Sound and Kodiak roe herring purse seine, Norton Sound gillnet, and Bristol Bay spawn on kelp hand-picking fisheries. The number of Kenai residents holding herring permits remained relatively stable between 2000 and 2010, while the total number of permits held increased very slightly. The total number of permits actively fished was low throughout the 2000-2010 period, varying between one and five. At least one permit was actively fished in the Cook Inlet roe herring gillnet fishery from 2001 to 2010. Permits were actively fished in other herring fisheries in some years during the 2000-2010 period. In 2000, one Bristol Bay roe herring gillnet permit was actively fished. From 2001 to 2005, one Bristol Bay roe herring purse seine permit was actively fished. In 2006, one permit was actively fished in the Kodiak roe herring gillnet fishery.

With regard to state groundfish fisheries, it is important to note the substantial decline in permit holders and permits held in Kenai from 2000 to 2010. In 2000, 16 Kenai residents held a total of 21 groundfish CFEC permits, while there were only 2 permit holders and 4 total groundfish permits held in Kenai in 2010. All four groundfish CFEC permits held in 2010 were for ‘miscellaneous saltwater finfish’ fisheries, including one statewide permit associated with longline gear, one statewide permit associated with pot gear, one statewide permit associated with mechanical jig gear, and one GOA permit associated with mechanical jig gear. That year, only the statewide pot gear permit was actively fished. Earlier in the 2000-2010 period, permits

had also been held for lingcod (2000 to 2004), demersal shelf rockfish (2000 to 2002), and a wider variety of miscellaneous saltwater finfish fisheries. The percentage of groundfish permits actively fished by Kenai permit holders also decreased over the period.

In 2010, two Kenai residents held two sablefish CFEC permits for use statewide on vessels under 60 feet in length, not including Prince William Sound or Southeast Alaska. Both of the permits were actively fished that year. From 2000 to 2002, permits were also held in the statewide hand troll and mechanical jig sablefish fisheries. Also in 2010, two Kenai permit holders held two crab CFEC permits, one in the Cook Inlet Dungeness crab pot fishery, and the other in the Kodiak Tanner crab pot gear fishery. Neither of these two crab permits were actively fished that year. A permit was also held in the Bristol Bay king crab pot gear fishery from 2000 and 2002, and was actively fished in 2000 and 2001.

In 2010, ‘other shellfish’ CFEC permits were held in shrimp, sea urchin, scallop, and clam fisheries. The shrimp permit was held in the Prince William Sound pot gear fishery, the sea urchin permit was for the Southeast dive fishery, the scallop permit was statewide with dredge gear, and the clam permit was also statewide using shovel. None of these shellfish permits were actively fished by Kenai permit holders in 2010. In previous years of the 2000-2010 period, Kenai residents also held ‘other shellfish’ permits in Prince William Sound and ‘Westward’ shrimp beam trawl fisheries, the Westward and Southeast shrimp pot gear fisheries, Southeast geoduck and sea cucumber dive gear fisheries. The total number of ‘other shellfish’ permits held decreased between 2000 and 2010, and from 2006 to 2010, none of the permits were actively fished.

In addition to CFEC permits, Kenai residents also held federal License Limitation Program (LLP) permits and Federal Fisheries Permits (FFP). From 2000 to 2010, the number of Kenai residents holding FFPs and total FFPs held decreased from 24 to 12. Over the same period, the number of groundfish LLPs decreased from 12 to 9 per year, and the total number of groundfish LLPs held varied between 9 to 12, with 10 held in 2010. During the same period, the number of crab LLP holders and total crab LLPs held varied between zero and one per year. This information about federal permits is presented in Table 4 along with CFEC permit information.

Between 2000 and 2010, Kenai residents held quota share accounts and quota shares in federal fisheries for halibut, sablefish, and crab, with the highest level of participation in the halibut fishery. The number of halibut quota share account holders in Kenai was 58 in the year 2000, declining to 41 by 2010. However, the total number of quota shares held increased over the period, from 2,112,762 in 2000 to 3,167,541 in 2010. The overall halibut Individual Fishing Quota (IFQ) allotment for account holders in Kenai increased to 42% higher than 2000 levels in 2007, and by 2010 was still 19% higher than the allotment in 2000. Information about federal halibut catch share participation is presented in Table 6.

The number of sablefish quota share account holders varied between five and six during the 2000-2010 period. In 2010, 5 Kenai residents held sablefish quota share accounts, and a total of 1,298,274 quota shares were held that year. The overall sablefish IFQ allotment increased to 27% above 2000 levels in 2004, before decreasing to approximately 24% below 2000 levels in 2010. Information about federal sablefish catch share participation is presented in Table 7.

Between 2005 and 2010, the number of Kenai residents holding quota share accounts in the federal crab fisheries varied between one and two, and the total number of quota shares increased over time, from 192,218 in 2000 to 457,956 in 2010. Kenai quota share holders were issued crab IFQ allotments from 2005 to 2007, but from 2008 to 2010 no pounds were allotted to these quota share holders. This information is presented in Table 8.

Of the landings that can be reported between 2000 and 2010, the species with the greatest landed volume in Kenai were salmon and halibut, and landings were also reported in some years for herring and ‘other groundfish’. Landings and revenue information in some years for halibut, herring, and ‘other groundfish’ are considered confidential due to the small number of participants. On average between 2000 and 2010, 19,334,046 net pounds of salmon were landed in Kenai, valued on average at \$15,367,936 in ex-vessel revenue. For the 8 years in which halibut landings and revenue can be reported, landings averaged 147,539 net pounds, valued on average at \$421,241 in ex-vessel revenue. For the 4 years in which ‘other groundfish’ landings can be reported, an average of 58,566 net pounds were landed, valued on average at \$15,730. Finally, for the 3 years in which herring landings can be reported, an average of 19,855 net pounds were landed in Kenai, valued on average at \$18,155. Information about other species landed in Kenai is confidential in all years. Information about landings and ex-vessel revenue in Kenai is presented in Table 9.

In addition to the landings delivered in Kenai by fishermen from many communities, landings and ex-vessel revenue earned by Kenai vessel owners is of note. Kenai vessel owners made deliveries in many locations around Alaska between 2000 and 2010. Information can be reported for all years regarding their landings of salmon and halibut, for most years regarding ‘other groundfish’ and Pacific cod landings, and for one year regarding herring landings. Information about other years in these fisheries and fisheries for other species is considered confidential due to the small number of participants. Based on the information that can be reported, the fisheries with the greatest landings volume by Kenai vessel owners were for salmon, herring, and Pacific cod. On average between 2000 and 2010, Kenai vessel owners landed 3,387,994 net pounds of salmon, valued at \$1,954,679 in ex-vessel revenue on average over the period. The next greatest volume of deliveries was reported for herring in one year only (2005). That year, 498,592 net pounds of herring were landed by Kenai vessel owners, valued at \$39,599 in ex-vessel revenue. Pacific cod deliveries by Kenai vessel owners averaged 462,722 net pounds per year, with average ex-vessel revenue of \$6,786. This information is presented in Table 10.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	\$111,369	\$96,839	\$79,134	\$90,117	\$58,132	\$130,950	\$103,929	\$42,634	\$132,050	\$110,000	\$110,000
Shared Fisheries Business Tax ¹	\$101,435	\$155,785	\$50,600	\$88,704	\$57,044	\$81,144	\$130,506	\$142,540	\$131,909	\$147,599	\$213,188
Fisheries Resource Landing Tax ¹	\$309	\$279	\$534	\$413	\$62	\$131	\$124	\$94	\$142	\$68	\$123
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	\$114,500	\$55,932	\$162,500	\$109,000	\$102,086	\$109,455	\$57,841	\$62,729	\$60,496	\$62,464	\$64,887
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>\$327,612</i>	<i>\$308,836</i>	<i>\$292,768</i>	<i>\$288,234</i>	<i>\$217,324</i>	<i>\$321,680</i>	<i>\$292,400</i>	<i>\$247,997</i>	<i>\$324,597</i>	<i>\$320,130</i>	<i>\$388,198</i>
<i>Total municipal revenue⁵</i>	<i>\$12,455,040</i>	<i>\$12,669,520</i>	<i>\$15,210,856</i>	<i>\$12,408,103</i>	<i>\$12,086,654</i>	<i>\$14,585,321</i>	<i>\$16,434,531</i>	<i>\$23,312,008</i>	<i>\$30,178,714</i>	<i>\$22,146,487</i>	<i>\$28,514,571</i>

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

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

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

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

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

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

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Kenai

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	12	12	11	10	10	9	9	9	9	10	10
	Active permits	2	1	3	3	3	1	1	2	2	2	2
	% of permits fished	16%	8%	27%	30%	30%	11%	11%	22%	22%	20%	20%
	Total permit holders	12	12	11	10	10	9	9	9	9	9	9
Crab (LLP) ¹	Total permits	1	1	1	0	0	0	0	0	0	1	1
	Active permits	1	1	1	0	0	0	0	0	0	1	1
	% of permits fished	100%	100%	100%	-	-	-	-	-	-	100%	100%
	Total permit holders	1	1	1	0	0	0	0	0	0	1	1
Federal Fisheries Permits ¹	Total permits	24	24	24	18	19	19	12	12	13	11	12
	Fished permits	0	0	0	2	1	0	4	2	3	5	4
	% of permits fished	0%	0%	0%	11%	5%	0%	33%	17%	23%	45%	33%
	Total permit holders	24	24	24	17	18	18	12	12	13	11	12
Crab (CFEC) ²	Total permits	4	4	4	1	3	2	2	1	2	2	2
	Fished permits	3	3	1	0	1	1	1	0	0	0	0
	% of permits fished	75%	75%	25%	0%	33%	50%	50%	0%	0%	0%	0%
	Total permit holders	3	3	3	1	2	3	2	1	2	2	2
Other shellfish (CFEC) ²	Total permits	9	9	9	7	6	6	1	2	2	3	4
	Fished permits	7	5	7	7	6	5	0	0	0	0	0
	% of permits fished	77%	55%	77%	100%	100%	83%	0%	0%	0%	0%	0%
	Total permit holders	4	4	4	4	2	3	1	2	2	3	4
Halibut (CFEC) ²	Total permits	55	48	42	40	35	31	30	37	37	35	32
	Fished permits	35	35	29	31	26	23	27	32	31	29	28
	% of permits fished	64%	73%	69%	78%	74%	74%	90%	86%	84%	83%	88%
	Total permit holders	52	45	39	38	33	30	30	36	36	35	32
Herring (CFEC) ²	Total permits	19	18	19	20	18	22	17	19	18	19	21
	Fished permits	1	3	2	3	2	5	3	1	1	1	2
	% of permits fished	5%	17%	11%	15%	11%	23%	18%	5%	6%	5%	10%
	Total permit holders	13	15	16	17	15	19	14	16	15	16	19

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	4	5	4	0	0	0	0	0	1	2	2
	Fished permits	3	3	4	0	0	0	0	0	1	2	2
	% of permits fished	75%	60%	100%	-	-	-	-	-	100%	100%	100%
	Total permit holders	3	4	3	0	0	0	0	0	1	2	2
Groundfish (CFEC) ²	Total permits	21	19	19	13	12	10	8	7	8	8	4
	Fished permits	10	3	3	4	4	2	1	2	2	3	1
	% of permits fished	48%	16%	16%	31%	33%	20%	13%	29%	25%	38%	25%
	Total permit holders	16	14	14	10	7	8	7	6	5	4	2
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	228	237	236	235	239	252	235	240	237	229	246
	Fished permits	172	176	165	159	160	180	165	173	168	167	166
	% of permits fished	75%	74%	70%	68%	67%	71%	70%	72%	71%	73%	67%
	Total permit holders	237	245	240	239	244	259	239	247	247	231	244
<i>Total CFEC Permits</i> ²	<i>Permits</i>	<i>340</i>	<i>340</i>	<i>333</i>	<i>316</i>	<i>313</i>	<i>323</i>	<i>293</i>	<i>306</i>	<i>305</i>	<i>298</i>	<i>311</i>
	<i>Fished permits</i>	<i>231</i>	<i>228</i>	<i>211</i>	<i>204</i>	<i>199</i>	<i>216</i>	<i>197</i>	<i>208</i>	<i>203</i>	<i>202</i>	<i>199</i>
	<i>% of permits fished</i>	<i>68%</i>	<i>67%</i>	<i>63%</i>	<i>65%</i>	<i>64%</i>	<i>67%</i>	<i>67%</i>	<i>68%</i>	<i>67%</i>	<i>68%</i>	<i>64%</i>
	<i>Permit holders</i>	<i>261</i>	<i>263</i>	<i>259</i>	<i>260</i>	<i>260</i>	<i>277</i>	<i>255</i>	<i>262</i>	<i>262</i>	<i>249</i>	<i>260</i>

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Kenai: 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 Kenai ²	Total Net Pounds Landed in Kenai ^{2,5}	Total Ex-Vessel Value of Landings in Kenai ^{2,5}
2000	270	11	11	192	334	474	8,300,063	\$6,138,096
2001	244	29	9	185	321	494	11,354,417	\$6,048,288
2002	204	13	9	180	316	361	14,626,318	\$7,285,379
2003	271	56	7	170	301	529	24,637,003	\$15,140,322
2004	337	63	6	173	296	555	35,218,788	\$23,489,827
2005	343	63	8	113	208	549	37,297,744	\$31,859,946
2006	270	67	7	114	197	478	15,778,709	\$14,542,452
2007	277	76	8	109	193	430	24,192,541	\$23,373,362
2008	233	57	10	103	190	509	15,518,747	\$16,499,738
2009	265	51	9	111	179	526	10,998,537	\$10,923,764
2010	293	43	8	100	161	488	17,500,691	\$18,988,645

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

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

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

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

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

⁵ Totals only represent non-confidential data.

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

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Pounds)
2000	58	2,112,762	209,692
2001	59	2,072,952	245,919
2002	61	2,216,193	271,797
2003	62	2,209,329	270,870
2004	55	2,144,047	290,971
2005	55	2,332,633	321,618
2006	55	2,342,345	319,260
2007	46	2,318,825	328,482
2008	45	2,342,291	306,705
2009	45	3,178,012	407,563
2010	41	3,167,541	373,229

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 Kenai: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Pounds)
2000	5	390,432	35,349
2001	6	390,432	33,331
2002	5	3,857	330
2003	5	3,857	392
2004	5	3,857	444
2005	6	4,025	460
2006	6	4,025	404
2007	5	2,935	286
2008	5	2,935	254
2009	6	1,498,362	120,683
2010	5	1,498,274	113,695

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 Kenai: 2000-2010.

Year	Number of Crab Quota Share Account Holders	Crab Quota Shares Held	Crab IFQ Allotment (Pounds)
2005	2	192,218	6,112
2006	2	192,218	5,766
2007	2	192,218	9,401
2008	1	18,207	0
2009	2	457,956	0
2010	2	457,956	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.]

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Kenai

Table 9. Landed Pounds and Ex-vessel Revenue, by Species, in Kenai: 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	142,945	164,563	184,728	241,160	269,534	-	-	63,148	70,822	43,413	-
Herring	-	-	-	7,423	-	-	-	25,209	26,932	-	-
Other Groundfish	-	-	-	-	2,731	9,955	93,865	-	127,712	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	8,152,472	11,188,370	14,439,475	24,383,729	34,943,450	37,100,769	15,467,072	23,694,192	14,900,164	10,953,203	17,451,609
<i>Total²</i>	<i>8,295,417</i>	<i>11,352,933</i>	<i>14,624,203</i>	<i>24,632,312</i>	<i>35,215,715</i>	<i>37,110,724</i>	<i>15,560,937</i>	<i>23,782,549</i>	<i>15,125,630</i>	<i>10,996,616</i>	<i>17,451,609</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	\$373,724	\$330,959	\$398,665	\$689,908	\$835,137	-	-	\$284,658	\$324,528	\$132,352	-
Herring	-	-	-	\$4,213	-	-	-	\$23,318	\$26,932	-	-
Other Groundfish	-	-	-	-	\$1,099	\$4,391	\$45,890	-	\$11,541	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	\$5,762,352	\$5,716,754	\$6,885,991	\$14,444,990	\$22,653,020	\$31,313,122	\$13,971,408	\$22,841,523	\$15,897,209	\$10,791,379	\$18,769,544
<i>Total²</i>	<i>\$6,136,076</i>	<i>\$6,047,713</i>	<i>\$7,284,656</i>	<i>\$15,139,112</i>	<i>\$23,489,255</i>	<i>\$31,317,513</i>	<i>\$14,017,298</i>	<i>\$23,149,499</i>	<i>\$16,260,210</i>	<i>\$10,923,731</i>	<i>\$18,769,544</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 Alaska for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

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

² Totals only represent non-confidential data.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Kenai

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Kenai 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	257,567	273,606	253,361	244,504	244,998	221,696	226,393	267,677	354,151	290,989	205,412
Herring	-	-	-	-	-	498,592	-	-	-	-	-
Other	20,177	9,960	10,920	6,978	6,633	7,761	9,225	7,647	14,869	-	-
Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-
Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific	497,878	12,025	73,964	28,944	100,499	13,557	1,753	11,383	1,918,055	1,969,165	-
Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	2,321,814	3,084,107	2,157,461	3,111,346	4,899,443	4,840,610	2,255,011	4,015,124	2,753,557	2,996,586	4,832,875
<i>Total²</i>	<i>3,097,436</i>	<i>3,379,698</i>	<i>2,495,706</i>	<i>3,391,772</i>	<i>5,251,573</i>	<i>5,582,216</i>	<i>2,492,382</i>	<i>4,301,831</i>	<i>5,040,632</i>	<i>5,256,740</i>	<i>5,038,287</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	\$676,512	\$523,310	\$554,119	\$723,929	\$756,886	\$677,144	\$842,331	\$1,157,284	\$1,576,697	\$900,727	\$961,453
Herring	-	-	-	-	-	\$39,599	-	-	-	-	-
Other	\$11,142	\$5,412	\$7,740	\$3,345	\$6,191	\$5,654	\$7,322	\$5,008	\$9,263	-	-
Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-
Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific	\$162,720	\$4,961	\$25,527	\$7,890	\$25,744	\$4,123	\$898	5,264	\$1,159,789	\$563,481	-
Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	\$1,198,676	\$1,059,535	\$952,589	\$1,439,482	\$2,406,652	\$2,618,459	\$1,346,555	\$2,421,642	\$2,041,870	\$1,992,128	\$4,023,885
<i>Total²</i>	<i>\$2,049,049</i>	<i>\$1,593,218</i>	<i>\$1,539,976</i>	<i>\$2,174,646</i>	<i>\$3,195,473</i>	<i>\$3,344,979</i>	<i>\$2,197,106</i>	<i>\$3,589,197</i>	<i>\$4,787,619</i>	<i>\$3,456,336</i>	<i>\$4,985,338</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 Kenai River hosts world famous sport fisheries for Chinook salmon and other species. According to the City of Kenai Comprehensive Plan, sportfishing is one of the primary visitor activities in Kenai.⁵¹² The lower reach of the river, particularly between Cunningham Park and Eagle Rock, is heavily used by sport fishermen during the Chinook, sockeye, and coho salmon seasons. The Warren Ames Bridge just south of the City of Kenai is a primary access point in this stretch of the river. Upriver, closer to Soldotna, sportfishing from the bank is popular in several locations, and boat fishing is heavy throughout this stretch as well as upriver of the Soldotna Bridge. Razor clam digging is also popular along the coast near Kenai.⁵¹³

It is important to note that 2012 saw unusually low returns of Chinook salmon to the Kenai River and other northern Cook Inlet river systems. This led to extensive closures of both commercial and sport fisheries in Cook Inlet. In the Kenai River, the in-river sport fishery for Chinook salmon was tightly constrained, along with the Eastside commercial set net fishery at the mouth of the River. Total in-river harvest of Chinook salmon in the Kenai River sportfishing was only 1% of the most recent 5-year average.⁵¹⁴

Between 2000 and 2010, a large number of licensed sport fish guides were present in Kenai, varying between 47 and 69 registered in the community each year. In addition, there were between 7 and 14 active sport fish guide businesses in operation per year. During the same period, the number of sportfishing licenses sold to Kenai residents remained relatively stable, varying between 4,497 and 5,054 per year. The number of sport fish licenses sold in Kenai was lower than the number sold to residents in some years and higher in others, varying between 3,126 and 8,080 per year (Table 11). Given the number sold in Kenai was lower than the number sold to residents in some years suggests that residents may undertake their sportfishing activity in other communities, and the higher number of licenses sold to non-local residents in some years indicates that sportfishing draws visitors to Kenai.

Kenai is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, saltwater and freshwater sportfishing at this regional level was substantial (Table 11). In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska residents logged 20,292 saltwater and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska resident anglers, and the opposite was true of freshwater sportfishing. For both Alaska resident and non-Alaska resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased over the period.

⁵¹² Kevin Waring Associates. 2003. *City of Kenai Comprehensive Plan*. Retrieved September 4, 2012 from <http://www.ci.kenai.ak.us/City-approved%20Kenai%20Plan.pdf>.

⁵¹³ Alaska Dept. of Natural Resources. 1998. *Kenai River Comprehensive Management Plan*. Retrieved September 3, 2012 from <http://dnr.alaska.gov/parks/plans/krsmapl/krsmamp3.pdf>.

⁵¹⁴ Alaska Dept. of Fish and Game. (2012). *2012 Alaska Chinook Salmon Fishery Disaster FAQ*. Retrieved June 5, 2013 from <http://www.adfg.alaska.gov/index.cfm?adfg=hottopics.federalchinookdisaster>.

Table 11. Sport Fishing Trends, Kenai: 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 Kenai ²
2000	11	50	4,497	3,126
2001	12	47	4,756	3,567
2002	8	56	4,612	3,320
2003	9	65	4,738	4,979
2004	7	67	4,759	6,610
2005	17	69	4,657	7,181
2006	11	64	4,511	7,030
2007	14	69	4,753	7,389
2008	14	67	4,760	8,080
2009	10	63	5,054	7,737
2010	11	59	5,043	7,278

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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).

The Alaska Statewide Harvest Survey,⁵¹⁵ conducted by ADF&G between 2000 and 2010, noted the species that are known to be targeted by private anglers in Kenai. In freshwater, anglers targeted all five species of Pacific salmon as well as landlocked salmon, steelhead, rainbow trout, Dolly Varden, northern pike, Arctic grayling, burbot, smelt, and whitefish. In saltwater, anglers pursued all five species of Pacific salmon, Dolly Varden, lingcod, Pacific halibut, rockfish, Pacific cod, smelt, and shark. The survey also noted sport harvest of razor clams, hardshell clams, Tanner crab, and shrimp by Kenai residents. No kept/release log book data were reported for fishing charters out of Kenai between 2000 and 2010.⁵¹⁶

Subsistence Fishing

Kenai is located in the traditional territory of the Kenaitze people, a branch of Athabascan Indians. Historically, the Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.⁵¹⁷

Today, a majority of Kenai residents are non-Native.⁵¹⁸ Many residents participate in the personal use dip net fishery at the mouth of the Kenai River. The fishery is managed by ADF&G to minimize harvest of coho salmon from the Northern District of the Cook Inlet salmon management area, as well as late-run Kenai River Chinook and coho. In order to avoid these runs, the fishery takes place from late June through July. According to ADF&G, Alaskans harvest 100,000 sockeye per year in the Kenai River dip net fishery.⁵¹⁹

The Kenaitze Indian Tribe has implemented an Educational Fishery Plan in Kenai. Each year, tribal members prepare nets and oversee harvests of sockeye and king salmon as well as eulachon (hooligan candlefish) at several set net sites along the Kenai River and Cook Inlet. Tribal members run educational programs for school groups and other cultural groups, and harvests are donated to Tribal Elders Program and Tribal Food Bank as well as other service organizations. Although not a subsistence fishery, the Educational Fishery allows tribal members to engage in traditional fishing practices and share this cultural heritage with tribal and non-tribal members alike.⁵²⁰

According to data reported by ADF&G, between 2000 and 2008, an average of 12 subsistence salmon permits per year was issued to Kenai households. Based on those permits that were returned, sockeye salmon constituted a majority of the salmon harvested, with an average of 291 sockeye harvested per year by Kenai households. A smaller number of Chinook were also

⁵¹⁵ ADF&G. 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).

⁵¹⁶ 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.]

⁵¹⁷ Kenaitze Indian Tribe. (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

⁵¹⁸ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 1990 and 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

⁵¹⁹ Alaska Dept. of Fish and Game. 2012. *Kenai River Salmon Fisheries*. Retrieved September 7, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=PersonalUsebyAreaSouthcentralkenaiSalmon.main>.

⁵²⁰ Kenaitze Indian Tribe. (2013). *Tribal Fisheries 2013 Brochure*.

harvested each year, averaging 41 per year, and some chum, coho, and pink salmon were also reported harvested in some years. This information about subsistence salmon permits is presented in Table 13.

In addition to salmon, Kenai residents participate in subsistence harvest of a variety of other aquatic species. No information was reported by ADF&G between 2000 and 2010 regarding per capita subsistence harvest or the percentage of households in Kenai participating in subsistence harvest activities (Table 12). However, information was available during the 2000-2010 period about subsistence harvest levels of halibut and some species of marine mammals.

Between 2003 and 2010, the number of Subsistence Halibut Registration Certificates (SHARC) issued to Kenai residents fluctuated between 50 and 108, while a much smaller number were returned each year (varying between 10 and 27 per year). In 2010, 108 cards were issued, 10 were returned, and a total of 5,453 pounds of halibut were reported harvested for subsistence purposes. Information about subsistence harvest of halibut is presented in Table 14. According to results of an interview with a Kenaitze tribal leader in May 2013, the small percentage of active SHARC cards can be explained in part by the long distance from the community of Kenai to subsistence halibut fishing grounds at the southern mouth of Cook Inlet.

Information was reported by several management agencies regarding marine mammal harvest by Kenai residents between 2000 and 2010. According to the U.S. Fish and Wildlife Service, from 2003 to 2010, the number of sea otters harvested for subsistence purposes varied from 2 to 11 per year, and several walrus were also reported as harvested in 2000 and 2002. Data from ADF&G show that a number of harbor seals were also harvested in Kenai between 2000 and 2006, varying from 6 to 20 per year. No information was reported by management agencies regarding harvest of beluga whale, Steller sea lion, or spotted seal. Information about marine mammal harvest during the 2000-2010 period is presented in Table 15.

No information was reported by ADF&G regarding total pounds of marine invertebrates or non-salmon fish harvested in Kenai between 2000 and 2010 (Table 13). However, a 1993 ADF&G study of subsistence harvest in Kenai provides information about species of marine invertebrates and non-salmon fish utilized by Kenai households, as well as additional information about marine mammal harvest. The survey indicated that Kenai households harvested the following species of marine invertebrates in 1993: butter, horse, Pacific littleneck, pinkneck, softshell, and razor clams, abalone, black and red chitons, cockles, mussels, oysters, scallops, limpets, snails, whelks, sea urchin, Dungeness and Tanner crab, octopus, and shrimp. Of these species, the greatest percentage of households reported harvesting razor clams (33%), Pacific littleneck clams (6%), and mussels (4%). The percentage of households using these resources was greater than the percentage harvesting, indicating the presence of sharing networks.⁵²¹

Species of non-salmon fish (not including halibut) harvested by Kenai residents in 1993 included Dolly Varden, Arctic char, steelhead, rainbow trout, lake trout, pike, whitefish, sturgeon, grayling, eulachon (hooligan candlefish), black and red rockfish, sea bass, lingcod, sablefish, Pacific cod, whiting, Pacific tomcod, sea bass, greenling, Irish lord, unknown sculpin, smelt, flounder, sole, wolf fish, skate, shark, and herring. The survey also noted harvest of

⁵²¹ 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).

herring sac roe and herring spawn on kelp. Of these species, the greatest percentage of households reported harvest of rainbow trout (26%) and Dolly Varden (18%).⁵²²

In addition, the survey found that Kenai households harvested the following marine mammal species in 1993: harbor seal, Steller sea lion, and unknown whale.⁵²³

Table 12. Subsistence Participation by Household and Species, Kenai: 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).

⁵²² Ibid.

⁵²³ Ibid.

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Kenai: 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	8	8	3	n/a	n/a	n/a	146	n/a	n/a
2001	7	10	2	n/a	8	n/a	407	n/a	n/a
2002	6	15	2	n/a	n/a	n/a	82	n/a	n/a
2003	7	18	33	n/a	n/a	n/a	194	n/a	n/a
2004	25	21	66	n/a	3	n/a	350	n/a	n/a
2005	16	15	36	7	n/a	1	491	n/a	n/a
2006	7	6	34	2	17	6	186	n/a	n/a
2007	8	8	59	n/a	11	n/a	68	n/a	n/a
2008	20	19	131	5	11	1	695	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, Kenai: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	50	11	1,933
2004	57	12	3,660
2005	57	13	2,582
2006	72	12	2,166
2007	80	27	3,696
2008	76	19	5,150
2009	105	16	7,444
2010	108	10	5,453

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, Kenai: 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	3	n/a	n/a	12	n/a
2001	n/a	n/a	n/a	n/a	n/a	24	n/a
2002	n/a	n/a	1	n/a	n/a	9	n/a
2003	n/a	11	n/a	n/a	n/a	20	n/a
2004	n/a	2	n/a	n/a	n/a	6	n/a
2005	n/a	2	n/a	n/a	n/a	6	n/a
2006	n/a	2	n/a	n/a	n/a	6	n/a
2007	n/a	2	n/a	n/a	n/a	n/a	n/a
2008	n/a	2	n/a	n/a	n/a	n/a	n/a
2009	n/a	2	n/a	n/a	n/a	n/a	n/a
2010	n/a	6	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.

Moose Pass

People and Place

*Location*⁵²⁴



Moose Pass is a Census Designated Place (CDP) located 26 miles north of Seward on the Kenai Peninsula. It is on the southwest shore of Upper Trail Lake, off the Seward Highway, at mile 29.3 of the Alaska Railroad. Moose Pass is located in the Kenai Peninsula Borough Census Area and the Seward Recording District.

The demographic and fisheries statistics presented in this profile are specific to Moose Pass CDP. However, it is important to note that residents of nearby Crown Point and Primrose CDPs are considered to be part of the Moose Pass community as well.⁵²⁵

*Demographic Profile*⁵²⁶

In 2010, there were 219 residents in Moose Pass, making it the 187th largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population of Moose Pass increased by 170%. The majority of this growth occurred between 1990 and 2000, with a population increase from 81 to 206. According to estimates by the Alaska Department of Labor, the population of permanent residents in Moose Pass decreased by 8.3% between 2000 and 2009, with an average annual growth rate of -1.41%. The change in population from 1990 to 2010 is provided in Table 1. It is useful to note that the population of Primrose CDP declined from 93 in 2000 to 78 in 2010, while the population of Crown Point was 75 in 2000 and 74 in 2010.

In 2010, a majority of the population of Moose Pass identified themselves as White (94.1%), along with 1.4% that identified as American Indian and Alaska Native, 1.4% as Black or African American, 0.9% as Native Hawaiian and Other Pacific Islander, 0.5% as Asian, and 1.8% that identified with two or more races. In addition, 2.3% of Moose Pass's population identified themselves as Hispanic in 2010. The percentage of the population made up of individuals identifying as White increased slightly over time, from 88.9% in 1990 and 87.3% in 2000, to 94.1% in 2010. At the same time, the percentage of the population identifying as American Indian and Alaska Native decreased from 11.1% in 1990 and 10.7% in 2000, to 1.4% in 2010. Other than the decrease in Native residents, the population of Moose Pass appeared to be more diverse in 2010 than in previous years, with several new ethnic groups present in the community. Changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

⁵²⁴ 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.

⁵²⁵ Personal communication with a Moose Pass resident.

⁵²⁶ 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 Moose Pass from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	81	-
2000	206	-
2001	-	206
2002	-	217
2003	-	219
2004	-	220
2005	-	218
2006	-	203
2007	-	199
2008	-	185
2009	-	189
2010	219	-

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>.

In 2010, the average household size in Moose Pass was 2.35, a slight decrease from the average household size in 2000 (2.45 persons per household) and 1990 (2.4 persons per household). The number of households in Moose Pass has increased over time, from 33 households in 1990 to 84 in 2000, and 93 in 2010. Of the 137 housing units surveyed for the 2010 Decennial Census, 47.4% were owner-occupied, 20.4% were rented, and 32.1% were vacant or used only seasonally. In 2010, no residents of Moose Pass lived in group quarters. In a survey conducted by NOAA’s Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that the population of Moose Pass reaches its peak during summer months, in June, July, and August, and approximately 100 seasonal workers are present in the town during these months. They indicated that population fluctuations are somewhat driven by employment in the commercial fishing sector.

In 2010, the gender makeup of Moose Pass’s population (53.4% male and 47.3% female) was more weighted toward males than the population of the state as a whole, which was 52% male and 48% female. The median age of Moose Pass residents was 41.5 years, older than the national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, the age group most heavily skewed toward males was 50 to 59 years, while there was a relatively even spread of males and females across other age categories in Moose Pass. In 2010, 17.9% of Moose Pass’s population was age 60 or older. The overall population structure of Moose Pass in 2000 and 2010 is shown in Figure 2.

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

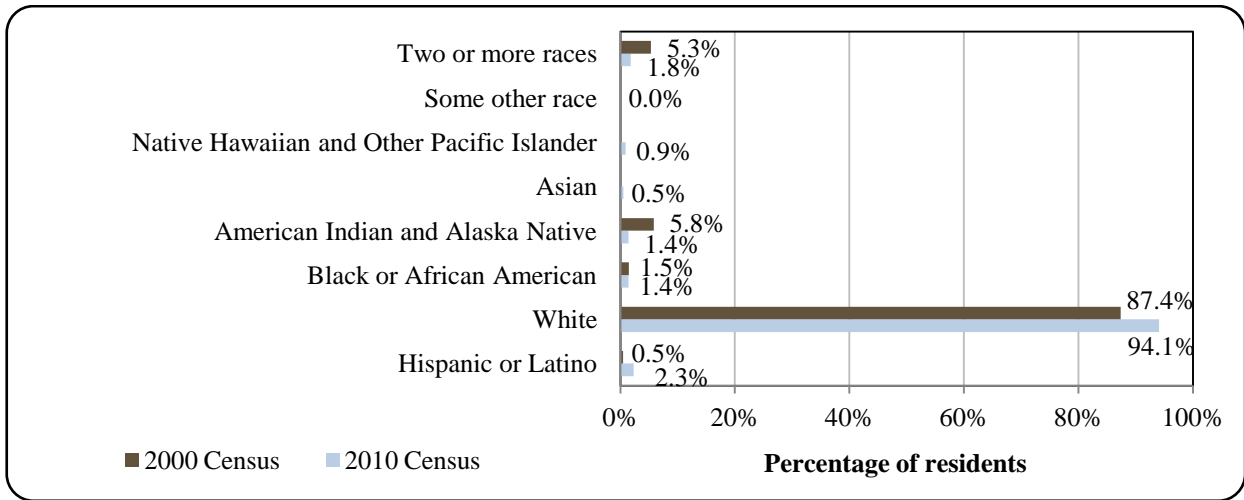
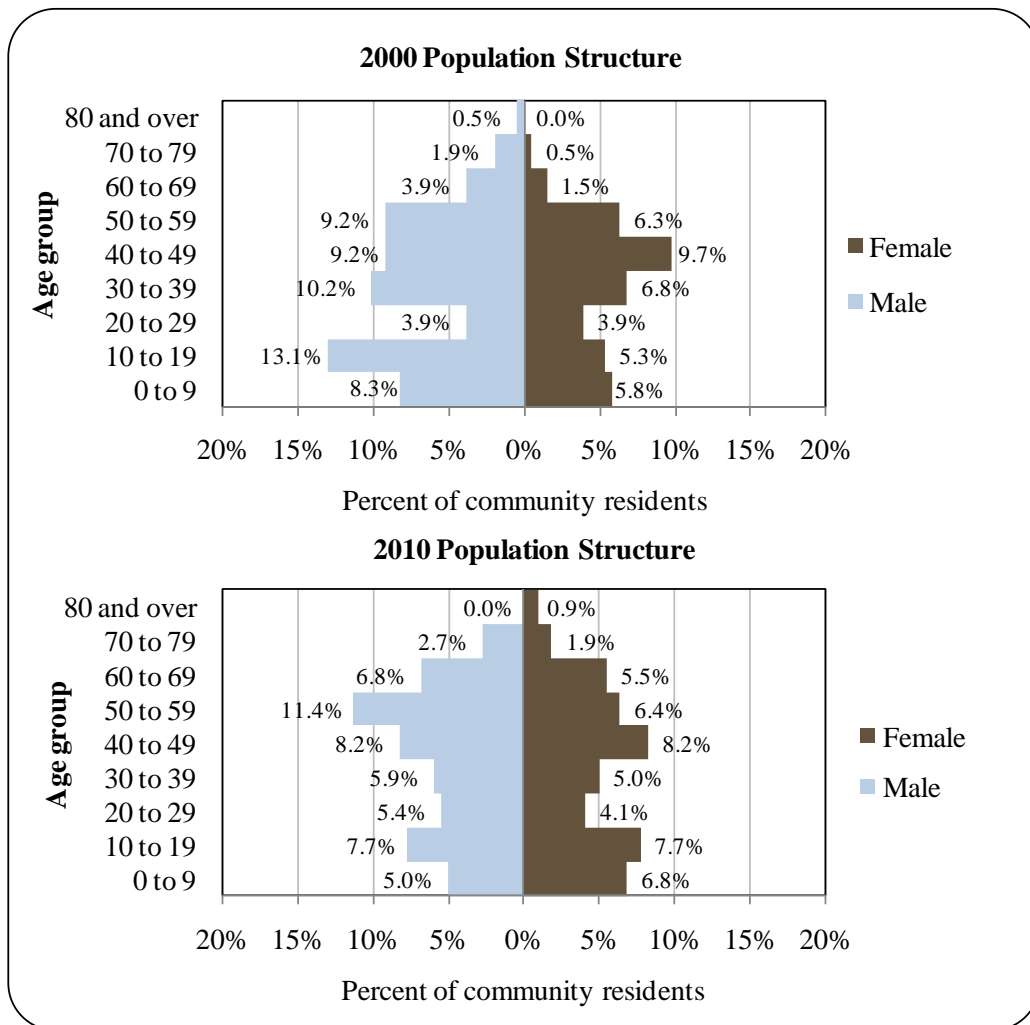


Figure 2. Population Age Structure in Moose Pass Based on the 2000 and 2010 U.S. Decennial Census.



In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),⁵²⁷ 95.3% of Moose Pass residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaska residents overall. Also in 2010, 0% of the population was estimated to have less than a 9th grade education, compared to 3.5% of Alaska residents overall; 4.7% were estimated to have a 9th to 12th grade education but no diploma, compared to 5.8% of Alaska residents overall; 16.7% were estimated to have some college but no degree, compared to 28.3% of Alaska residents overall; 22.6% were estimated to have an Associate's degree, compared to 7.9% of Alaska residents overall; 42.3% were estimated to have a Bachelor's degree, compared to 17.4% of Alaska residents overall; and 6.5% were estimated to have a graduate or professional degree, compared to 9.6% of Alaska residents overall.

History, Traditional Knowledge, and Culture

The history of the name “Moose Pass” began prior to the town's settlement. A mail carrier and his dog team reportedly had difficulty gaining the right-of-way from a moose in 1903.⁵²⁸ That same year, the Alaska Railroad Company constructed its first 50 miles of railroad from Seward north, passing close to Moose Pass.⁵²⁹ The site gained importance as a crossroads on the Iditarod Trail, a dogsled route between Seward and Nome that was blazed in 1908 to service mining camps in Nome and the Yukon-Kuskokwim Delta. By 1910, after a series of gold rushes starting in the late 1800s, the non-Native population of Alaska had swelled to over 30,000, and the Iditarod and several other dogsled routes were the only form of winter communication with isolated communities.⁵³⁰

The first residents of Moose Pass, Oscar Christensen and Mickey Natt, arrived by horse and dogsled in 1909 and built a log cabin at the crossroads. They soon built a log roadhouse, providing lodging and supplies to miners en route to mining camps further north. In 1927, the Alaska Railroad Company built a small freight shed and receiving platform for heavy equipment at the Moose Pass station. Mail service involved sacks of mail being tossed off the train as it passed. Desire for a more efficient mail system prompted establishment of a post office in 1928.⁵³¹

Leora Roycroft, the first postmaster of Moose Pass, also started a school in the town in 1928. For the first few years school took place in a tent, until a schoolhouse was built in 1930. A small hydroelectric plant was installed in 1927 and provided electricity to the roadhouse, school, local stores, and homes until Chugach Electric Company began provided electric service to Moose Pass in 1956. Today, Moose Pass remains a small, quiet community situated along the

⁵²⁷ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁵²⁸ 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.

⁵²⁹ Alaska Railroad Corporation website (n.d.). *Alaska Railroad History*. Retrieved December 14, 2011 from <http://alaskarailroad.com>.

⁵³⁰ Iditarod Historic Trail Alliance (n.d.). *Historic Overview*. Retrieved December 14, 2011 from <http://www.iditarodnationalhistorictail.org/>.

⁵³¹ Moose Pass, Alaska website (n.d.). *History*. Retrieved December 14, 2011 from <http://www.moosepass.net>.

Alaska Railroad. A Solstice Festival each summer attracts visitors and raises funds to maintain the community hall and support the fire department and library.⁵³²

In 2009, legislation was passed to create the Kenai Mountains-Turnagain Arm (KMTA) National Heritage Area. The purpose of the designation is to encourage preservation and conservation of the region's nationally important story about the many different people who traveled through, settled, and developed the rugged mountain valleys of the KMTA region.⁵³³

Natural Resources and Environment

Moose Pass is located in a maritime climate zone, with temperatures moderated by the ocean. Average winter temperatures in Moose Pass range from 6 to 44 °F, and average summer temperatures vary from 41 to 67 °F. The average annual precipitation is 28 inches, and average annual snowfall is 81 inches.⁵³⁴

Moose Pass is located in a lower elevation portion of the Kenai Peninsula that is covered by boreal forest and lakes.⁵³⁵ The community is within the boundary of the Chugach National Forest, the western and northern-most National Forest, comprising 5.5 million acres. The eastern portion of the Kenai Peninsula makes up 21% of the total area of this National Forest. Of the 5,000 moose living on the Kenai Peninsula, 1,000 live within the National Forest's boundary. The Russian River, located just west of Moose Pass along the Chugach National Forest border, attracts approximately 150,000 sport fishermen each year.⁵³⁶ The Kenai National Wildlife Refuge (NWR) begins approximately 40 miles southwest of Moose Pass. The NWR was established to conserve moose, bears, mountain goats, Dall sheep, wolves and other furbearers, salmonids and other fish, and waterfowl and other migratory and non-migratory birds.⁵³⁷

Natural hazards present in the Kenai Peninsula Borough include high risk of earthquake and volcanic activity, and medium risk of flooding events, wildfire, tsunami, and seiche. The area is also rated at risk of snow and avalanche, landslides, erosion, and drought.⁵³⁸ In January and February of 2000, a series of avalanches closed the Seward Highway. Moose Pass and several other communities were cut off from road, rail, and air access, and faced supply shortages. Frequent and often devastating earthquakes and volcanic activity occur in the area as a result of nearby fault lines and subduction of the Pacific plate under the North American plate. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt, and Mount Spurr.⁵³⁹

⁵³² Ibid.

⁵³³ Kenai Mountains-Turnagain Arm National Heritage Area (2011). *Draft Management Plan*. Retrieved December 14, 2011 from http://www.kmtacorridor.org/files/KMTA_plan_low_res.pdf.

⁵³⁴ Temperature, precipitation and snowfall information retrieved December 14, 2011 from www.weatherbase.com.

⁵³⁵ U.S. Fish and Wildlife Service (n.d.). *Kenai National Wildlife Refuge*. Retrieved December 14, 2011 from <http://kenai.fws.gov/>.

⁵³⁶ Chugach National Forest website (n.d.). *Forest Facts*. Retrieved December 14, 2011 from <http://www.fs.usda.gov/chugach/>.

⁵³⁷ See footnote 535.

⁵³⁸ State of Alaska (2002). *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

⁵³⁹ Kenai Peninsula Borough (2010). *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

According to the Alaska Department of Environmental Conservation, there are no notable active environmental cleanup sites located in Moose Pass as of July 2012.⁵⁴⁰

Current Economy⁵⁴¹

The economy of Moose Pass is tied to forest resources. The U.S. Forest Service's Kenai Work Station is an important employer in the community, providing approximately 40 to 45 full time positions and 35 to 40 seasonal positions. As of April 2012, approximately 25 Moose Pass residents held full time employment at the Kenai Work Station. Additional employers in the community include the Department of Transportation, U.S. Postal Service, Alaska Railroad, state troopers, and the Kenai Peninsula School District. Many local residents also work as craftsmen.^{542,543,544} According to a survey conducted by the AFSC in 2011, community leaders reported that timber harvest and management is the natural resource-based industry on which the local economy is most dependent. The community is not located along the coast, and although a number of individual residents participate in commercial fishing (see *Commercial Fishing* section of this profile), employment within the community of Moose Pass itself is not based on this fishing activity. It is important to note that two active sport fish guide businesses were registered in Moose Pass in 2010, providing some local employment opportunity (see the *Recreational Fishing* section of this profile).

Based on household surveys conducted for the 2006-2010 ACS,⁵⁴⁵ in 2010, the per capita income in Moose Pass was estimated to be \$39,543 and the median household income was estimated to be \$68,571. This represents a sizeable increase in per capita income from \$28,147 in the year 2000. In contrast, median household income declined substantially from \$87,147 in 2000. If inflation is taken into account by converting the 2000 values to 2010 dollars,⁵⁴⁶ the increase in per capita income is less substantial (real per capita income in 2000 was \$37,013), and the decline in median household income is even greater (real median household income in 2000 was \$114,786). In 2010, Moose Pass ranked 12th of 305 Alaskan communities with per capita income data that year, and 50th in median household income, out of 299 Alaskan communities with household income data. It is possible that household income estimates may be inflated, as one or more Moose Pass residents may have over-reported personal income levels.⁵⁴⁷

⁵⁴⁰ Alaska Dept. of Environmental Conservation (n.d.). *List of contaminated sites*. Retrieved April 17, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

⁵⁴¹ Unless otherwise noted, all monetary data are reported in nominal values.

⁵⁴² Moose Pass Sportsman's Club. (2012). *Moose Pass Community Facilities Development Plan*. Parts I, II, III, IV, and V.

⁵⁴³ 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.

⁵⁴⁴ Personal communication with a Moose Pass resident.

⁵⁴⁵ 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>.

⁵⁴⁶ 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>).

⁵⁴⁷ See footnote 544.

The small population size in Moose Pass may have prevented the 2006-2010 ACS from accurately portraying economic conditions.⁵⁴⁸ An alternative estimate of per capita income is obtained from 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 Moose Pass in 2010 is \$15,070.^{549, 550} This alternative estimate is lower than the 2006-2010 ACS per capita income estimate, and suggests that caution is warranted when citing a large increase in per capita income in Moose Pass between 2000 and 2010. It should be noted that both ACS and DOLWD data are based on wage earnings, and these income statistics do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS, a larger percentage of the Moose Pass population, aged 16 and older, was estimated to be in the civilian labor force (81.3%) than in the civilian labor force statewide (68.8%). No local residents were estimated to be living below the poverty line in 2010, compared to a 9.5% of Alaska residents overall, and the unemployment rate was estimated to be 7.1%, compared to a statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in 2010 was 13.8%, compared to a statewide unemployment rate estimate of 11.5%.⁵⁵¹

Also based on the 2006-2010 ACS, a majority of the Moose Pass workforce was estimated to be employed in the private sector (61.5%). Of the 179 people aged 16 and over that were estimated to be employed in the civilian labor force, the greatest number of workers was employed in agriculture, forestry, fishing and hunting, and mining (22.9%), transportation, warehousing, and utilities (22.3%), educational services, health care, and social assistance (17.3%), and construction industries (14.5%). When viewing employment in terms of occupation, the greatest numbers of workers were estimated to be employed in management/professional (49.2%) and service occupations (28.5%). Compared to 2000, there was a significant decline in census reported employment in natural resource/construction/maintenance occupations, from 40.5% in 2000 to 0% in 2010. Information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

⁵⁴⁸ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁵⁴⁹ Alaska Dept. of Labor and Workforce Development (n.d.). *Alaska Local and Regional Information*. Retrieved May 22, 2012 from: <http://live.laborstats.alaska.gov/alari/>.

⁵⁵⁰ See footnote 545.

⁵⁵¹ See footnote 549.

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

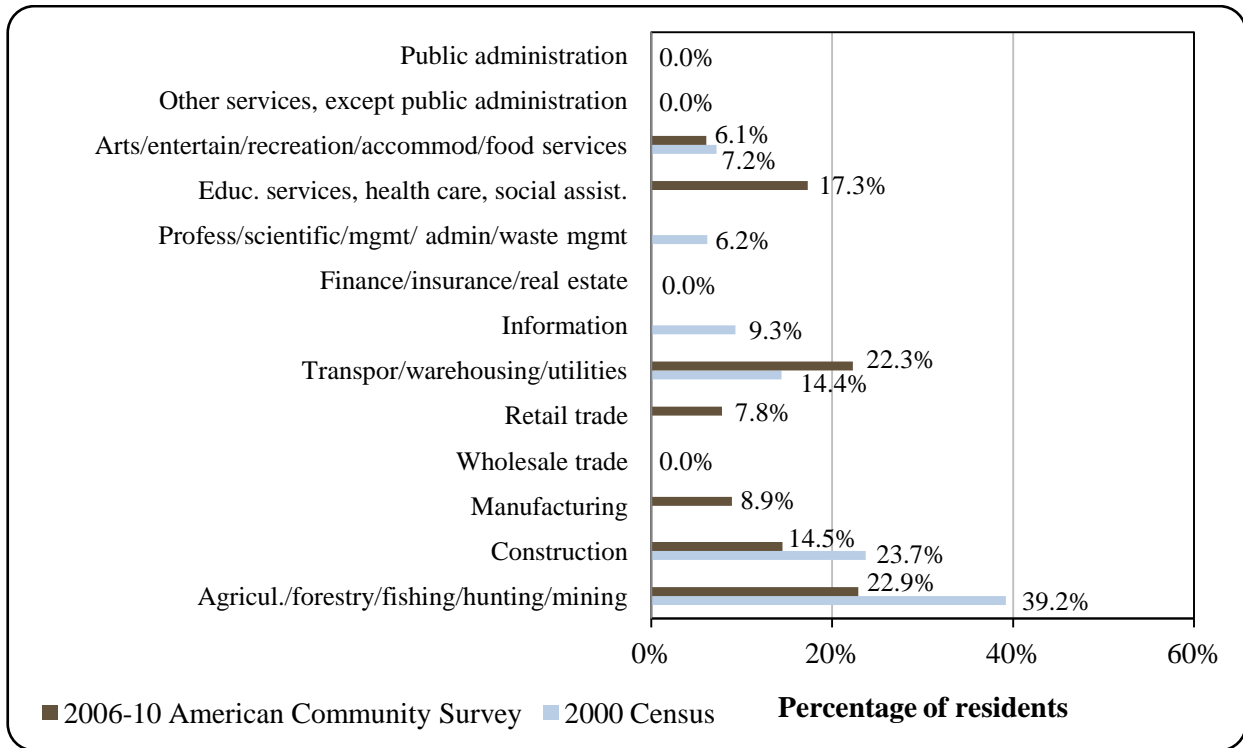
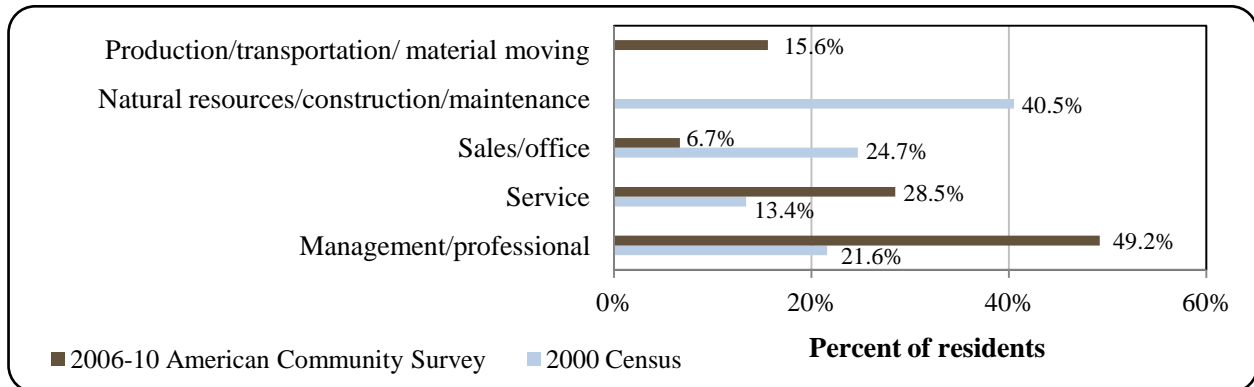


Figure 4. Local employment by occupation in 2000-2010, Moose Pass (U.S. Census).



An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 83 employed residents in Moose Pass in 2010, of which 19.3% were employed in state government, 15.7% in trade, transportation, and utilities, 15.7% in leisure and hospitality, 13.3% in local government, 12% in natural resources and mining, 8.4% in construction, 6% in manufacturing, 4.8% in professional and business services, 2.4% in education and health services, and 2.4% in other industries.⁵⁵² As with income and poverty statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents' activity in the personal use and subsistence economy.

⁵⁵² Ibid.

Governance

Moose Pass is an unincorporated community in the Kenai Peninsula Borough. The community does not administer any local taxes, although the Borough does administer a 3% sales tax and 4.5 mills property tax.⁵⁵³ Given that Moose Pass is not incorporated, there was no municipal revenue reported between 2000 and 2010. The Moose Pass Sportsman’s Club (MPSC) serves as the local representative body for Moose Pass. Organizational leadership includes a President, Vice President, Treasurer, and Secretary. The MPSC owns and manages the community hall and manages community functions. It also funds civic activities, and represents the community with other government agencies.⁵⁵⁴ In 2011, the MPSC received \$50,000 from the State of Alaska toward development of a comprehensive community land use plan.⁵⁵⁵ No fisheries-related grants were reported received by the community between 2000 and 2010. Information about selected local revenue sources in Moose Pass is presented in Table 2.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Moose Pass 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

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

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

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

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

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

⁵⁵³ 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.

⁵⁵⁴ Moose Pass Sportsman’s Club. (2012). *Moose Pass Community Facilities Development Plan*. Parts I, II, III, IV, and V.

⁵⁵⁵ Alaska Office of Management and Budget. (2011). *Total Project Snapshot Report: Moose Pass Sportsman’s Club – Community Development*. Retrieved August 8, 2013 from http://omb.alaska.gov/ombfiles/12_budget/CapBackup/proj55326.pdf.

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

Moose Pass was not included under the Alaska Native Claims Settlement Act, and is not federally recognized as a Native village.⁵⁵⁶ Offices of the Alaska Department of Fish and Game (ADF&G), Alaska Department of Natural Resources (DNR), Alaska Department of Commerce, Community, and Economic Development, the National Marine Fisheries Service (NMFS), and the U.S. Bureau of Citizenship and Immigration Services are all located in Anchorage, a 100 mile drive north from Moose Pass. Several DNR offices (Division of Forestry and a Division of Parks and Recreation office) are also located in Soldotna, a 65 mile drive west from the community. An office of ADF&G is also located in Kenai, 75 miles west of Moose Pass, and a NMFS enforcement office is located in Seward, 30 miles to the south.

Infrastructure

Connectivity and Transportation

The Seward Highway connects to Alaska's road system, with access to Anchorage located 100 miles north by road, as well as other cities on the Kenai Peninsula. Seward, 30 miles south of Moose Pass, offers access to the Alaska Railroad, harbor/dock facilities, and the Alaska State Ferry.⁵⁵⁷ Seward has a state-maintained 4533-ft-long by 100-ft-wide runway. No commercial scheduled flights service Seward, but the runway is open for air taxis and general aviation. Commercial flights serve the Kenai Municipal Airport, located 75 miles west of Moose Pass.⁵⁵⁸ The approximate cost to travel by air roundtrip to Anchorage from Kenai in early June 2012 was \$179.⁵⁵⁹ Air access to Moose Pass is also available by seaplane, with a landing site at Summit Lake, located 16 miles north of the community along the Seward Highway.⁵⁶⁰

Facilities

In Moose Pass, a majority of homes retrieve water from individual wells, and the school operates its own water system. Septic tanks and outhouses are used to manage wastewater and sewage; over 50% of households are fully plumbed. Many homes in this area are used only seasonally. A landfill is operated by the Borough. Borough refuse transfer containers are located at mile 24 on the Seward Highway. Electricity is provided to the community by Chugach Electric Association, and is generated using hydro and natural gas. Public safety services are provided by state troopers stationed in Soldotna and the Moose Pass Volunteer Fire/Emergency Medical Services.⁵⁶¹ The Moose Pass Sportsman's Club operates a community hall, a public library, and

⁵⁵⁶ 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.

⁵⁵⁷ Ibid.

⁵⁵⁸ Airport information retrieved December 14, 2011 from <http://www.airnav.com/>.

⁵⁵⁹ This price was calculated on November 21, 2011 using kayak.com.

⁵⁶⁰ See footnote 556.

⁵⁶¹ Ibid.

volunteer fire department.⁵⁶² A school library is also available. Telephone and internet service providers offer service in Moose Pass, but no cable service provider is reported.^{563, 564}

According to an AFSC survey conducted in 2011, community leaders reported that no fishing-related infrastructure was present in Moose Pass. They also said that residents travel to Seward, Cooper Landing, and Soldotna to access fishing support businesses not available in Moose Pass.

Medical Services

Health care for Moose Pass residents is available in Soldotna at Central Peninsula General Hospital (65 miles west) and in Seward at Providence Seward Medical Center (30 miles south). Emergency Services have highway and helicopter access and are within 30 minutes of a higher-level satellite health care facility. Emergency service is provided by 911 Telephone Service and volunteers.⁵⁶⁵

Educational Opportunities

There is one school in the community, which offers a Kindergarten through 12th grade education. The Moose Pass School had a total of 17 students and 1 teacher in 2011.⁵⁶⁶

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

The community of Moose Pass has historically been more connected to the mining and timber industries than the commercial fishing industry (see the *History, Traditional Knowledge, and Culture* section of this profile). Nevertheless, individual residents actively participate in commercial, sport, and subsistence fisheries.

Although Moose Pass is not located directly on the coast, it is worth noting that the marine areas surrounding the Kenai Peninsula are encompassed by Pacific Halibut Fishery Regulatory Area 3A, the Central Gulf of Alaska Sablefish Regulatory Area, and Federal Statistical and Reporting Area 630. Moose Pass is not eligible to participate in either the Community Development Quota (CDQ) program or the Community Quota Entity (CQE) program.

According to a survey conducted by the AFSC in 2011, community leaders reported that Moose Pass participates in fisheries management processes in Alaska. They indicated that the primary way in which the community is engaged is by sending a representative to sit on regional fisheries advisory and/or working groups run by ADF&G.

⁵⁶² Alaska Office of Management and Budget. (2011). *Total Project Snapshot Report: Moose Pass Sportsman's Club – Community Development*. Retrieved August 8, 2013 from http://omb.alaska.gov/ombfiles/12_budget/CapBackup/proj55326.pdf.

⁵⁶³ See footnote 556.

⁵⁶⁴ Personal communication with a Moose Pass resident.

⁵⁶⁵ See footnote 556.

⁵⁶⁶ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

Processing Plants

ADF&G's 2010 Intent to Operate list did not list a registered processing plant in Moose Pass. Processing facilities were registered in Seward, 30 miles south of Moose Pass, as well as other communities on the Kenai Peninsula.

Fisheries-Related Revenue

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

Commercial Fishing

Between 2000 and 2010, several Moose Pass residents were involved in commercial fishing activity as crew members, vessel owners, and permit and quota share account holders. In 2010, five residents held commercial crew licenses and one fishing vessel was primarily owned by a Moose Pass resident. Information about the commercial fishing sector in Moose Pass is presented in Table 5.

In 2010, two residents of Moose Pass held Bristol Bay salmon set gill net permits issued by the Commercial Fisheries Entry Commission (CFEC), and both were actively fished. One halibut CFEC permit was held between 2003 and 2006, but was actively fished only in 2003. Likewise, one sablefish permit was held between 2003 and 2006, but was only actively fished during 2003. Moose Pass residents did not hold any Federal Fisheries Permits (FFPs) or License Limitation Program permits (LLPs) during the 2000-2010 period. State and federal permit holdings in Moose Pass are displayed in Table 4.

Also in 2010, two Moose Pass residents held quota share accounts in the federal halibut catch share fishery, holding a total of 18,083 quota shares (Table 6). The annual halibut individual fishing quota (IFQ) allotment increased between 2000 and 2005, then declined again in the second half of the decade. In the same year, one resident held a quota share account in the federal sablefish catch share fishery, holding a total of 5,194 quota shares (Table 7). Sablefish allotment also declined in the second half of the decade. There were no quota share account holders in federal crab catch share fisheries in Moose Pass between 2005 and 2010 (Table 8).

Given the lack of fish buyers in Meyers Chuck (Table 5), no landings or ex-vessel revenue were generated locally between 2000 and 2010 (Table 9). Information about landings and ex-vessel revenue generated by vessel owners residing in Moose Pass is considered confidential between 2000 and 2010 due to the small number of participants (Table 10).

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

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

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

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

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

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

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

⁵ Total municipal revenue represents the total revenue that the city reports each year in its financial statements. Alaska Department of Commerce, Community, and Economic Development. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

Table 4. Permits and Permit Holders by Species, Moose Pass: 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	1	1	1	0	0	0	0	0
	Fished permits	0	0	0	1	0	0	0	0	0	0	0
	% of permits fished	-	-	-	100%	0%	0%	-	-	-	-	-
	Total permit holders	0	0	0	1	1	1	0	0	0	0	0
Herring (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	0	0	0	1	1	1	0	0	0	0	0
	Fished permits	0	0	0	1	0	0	0	0	0	0	0
	% of permits fished	-	-	-	100%	0%	0%	-	-	-	-	-
	Total permit holders	0	0	0	1	1	1	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	2	2	2	1	1	1	3	2	3	2	2
	Fished permits	2	1	1	1	1	1	2	2	3	2	2
	% of permits fished	100%	50%	50%	100%	100%	100%	67%	100%	100%	100%	100%
	Total permit holders	2	2	2	1	1	1	3	2	3	2	2
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>2</i>	<i>3</i>	<i>2</i>	<i>2</i>
	<i>Fished permits</i>	<i>2</i>	<i>1</i>	<i>1</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>2</i>	<i>3</i>	<i>2</i>	<i>2</i>
	<i>% of permits fished</i>	<i>100%</i>	<i>50%</i>	<i>100%</i>	<i>33%</i>	<i>33%</i>	<i>67%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	
	<i>Permit holders</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>3</i>	<i>2</i>	<i>3</i>	<i>2</i>	<i>2</i>

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

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Moose Pass: 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 Moose Pass ²	Total Net Lb Landed In Moose Pass ^{2,5}	Total Ex-Vessel Value Of Landings In Moose Pass ^{2,5}
2000	2	0	0	1	0	0	0	\$0
2001	5	0	0	1	0	0	0	\$0
2002	2	0	0	1	0	0	0	\$0
2003	5	0	0	1	0	0	0	\$0
2004	4	0	0	1	0	0	0	\$0
2005	5	0	0	1	0	0	0	\$0
2006	4	0	0	1	0	0	0	\$0
2007	5	0	0	1	0	0	0	\$0
2008	4	0	0	1	0	0	0	\$0
2009	5	0	0	1	0	0	0	\$0
2010	5	0	0	1	0	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 in Moose Pass: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	1	374	37
2001	1	374	44
2002	1	374	45
2003	1	374	45
2004	1	374	50
2005	1	374	51
2006	1	374	50
2007	2	18,083	2,562
2008	2	18,083	2,368
2009	2	18,083	2,122
2010	2	18,083	1,954

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 Moose Pass: 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	1	5,194	507
2008	1	5,194	451
2009	1	5,194	409
2010	1	5,194	369

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 Moose Pass: 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 Moose Pass: 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 lb refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Moose Pass 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	-	-	-	-	-	-	-	-	-	-	-
<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	-	-	-	-	-	-	-	-	-	-	-
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	-	-	-	-	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	-	-	-	-	-	-	-	-	-
<i>Total²</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>

Note: Cells showing “-” indicate that the data are considered confidential.

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

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

² Totals only represent non-confidential data.

Recreational Fishing

Starting in 2005, at least one active sport fish guide businesses was present per year in Moose Pass through 2010, and the number of licensed sport fish guides present in the community increased from one in 2000 to six by 2010. No sportfishing licenses were sold in the community, but residents purchased between 100 and 159 (irrespective of point of sale) each year during the 2000-2010 period. Information related to sportfishing businesses is presented in Table 11.

In a survey conducted by the AFSC in 2011, community leaders reported that freshwater sportfishing is accessed near Moose Pass by hiking or flying in to area lakes and streams. Nearby Russian River, a tributary of the Kenai River, draws approximately 150,000 sport fishermen per year.⁵⁶⁷ The Alaska Statewide Harvest Survey,⁵⁶⁸ conducted by ADF&G between 2000 and 2010, recorded the following species targeted by private anglers in Moose Pass between 2000 and 2010: Chinook, coho, sockeye, and pink salmon, rainbow trout, Dolly Varden char, Arctic grayling, Pacific halibut, rockfish, and lingcod. The survey also noted the harvest of razor clams Moose Pass sport fishermen. No kept/release log book data were reported for fishing charters out of Moose Pass between 2000 and 2010.⁵⁶⁹

Table 11. Sport Fishing Trends, Moose Pass: 2000-2010.

Year	Active Sport Fish Guide Businesses¹	Sport Fish Guide Licenses¹	Sport Fishing Licenses Sold to Residents²	Sport Fishing Licenses Sold in Moose Pass²
2000	0	1	100	0
2001	0	1	106	0
2002	0	1	113	0
2003	0	1	119	0
2004	0	2	137	0
2005	1	2	159	0
2006	1	4	131	0
2007	1	3	127	0
2008	1	3	128	0
2009	1	3	137	0
2010	2	6	119	0

⁵⁶⁷ Chugach National Forest website (n.d.). *Forest Facts*. Retrieved December 14, 2011 from <http://www.fs.usda.gov/chugach/>.

⁵⁶⁸ 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).

⁵⁶⁹ Alaska Department of Fish and Game (2011). *Alaska sport fish charter logbook database, 2000 – 2010*. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 11 cont'd. Sport Fishing Trends, Moose Pass: 2000-2010.

Year	Saltwater		Freshwater	
	Angler Days Fished – Non-residents ³	Angler Days Fished – Non-residents ³	Angler Days Fished – Alaska Residents ³	Angler Days Fished – Alaska Residents ³
2000	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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).

Moose Pass is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, both saltwater and freshwater sportfishing at this regional level were substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska residents logged 20,292 saltwater angler days and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska resident anglers, and the opposite was true of freshwater sportfishing. For both Alaska resident and non-Alaska resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased between 2000 and 2010. This information about regional sportfishing activity is presented in Table 11.

Subsistence Fishing

According to a survey conducted by the AFSC in 2011, community leaders indicated that residents of Moose Pass do not participate in subsistence activities. Data presented about subsistence harvest in Table 12 echoes this, with no information reported regarding per capita subsistence harvest or the percentage of households utilizing various marine resources for subsistence purposes between 2000 and 2010 (Table 12). In addition, no information was reported by management agencies regarding subsistence harvest of marine invertebrates, non-

salmon fish, halibut, or marine mammals (Table 13 through 15). However, several Moose Pass households were reported to have participated in the subsistence salmon fishery between 2000 and 2008. In 2008, the last year for which data were reported, one Moose Pass household was issued a subsistence salmon permit. No information was available about the number of salmon harvested with the permit that year. For years in which information was reported, sockeye was the primary species harvested using subsistence salmon permits in Moose Pass (Table 13).

Additional Information

According to information compiled about Moose Pass for the Kenai Mountains-Turnagain Arm National Heritage Area, the community has a resident ghost:

“The counter at the present day grocery store was at one time part of the original roadhouse bar. In *Alaska’s Kenai Peninsula: The Road We’ve Traveled*, historian Ann C. Whitmore-Painter writes, “Locals say an old-timer died at a barstool there and haunts the store today.” ‘Al’ is friendly ghost, however.”⁵⁷⁰

Table 12. Subsistence Participation by Household and Species, Moose Pass: 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).

⁵⁷⁰ Kenai Mountains-Turnagain Arm National Heritage Area website. (n.d.) *Communities within the Heritage Area*. Retrieved December 14, 2011 from <http://www.kmtacorridor.org/communities.php>.

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Moose Pass: 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	1	1	n/a	n/a	8	n/a	1	n/a	n/a
2001	3	3	n/a	n/a	n/a	n/a	30	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	1	2	n/a	n/a	n/a	n/a	30	n/a	n/a
2004	2	2	n/a	n/a	n/a	n/a	15	n/a	n/a
2005	1	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	2	2	n/a	n/a	n/a	n/a	55	n/a	n/a
2007	2	2	n/a	n/a	n/a	n/a	100	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.

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, Moose Pass: 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, Moose Pass: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Nanwalek (*nan-WAH-leck; Formerly English Bay*)



People and Place

*Location*⁵⁷¹

Nanwalek is located at the southern tip of the Kenai Peninsula, at the mouth of Cook Inlet. The community lies 10 miles southwest of Seldovia, and 3 miles east of Port Graham. The community encompasses 8.5 square miles of land and 0 square miles of water. Nanwalek is located in the Seldovia Recording District and the Kenai Peninsula Borough Census Area.

*Demographic Profile*⁵⁷²

In 2010, there were 254 residents in Nanwalek, ranking it as the 176th largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population of Nanwalek increased by 60.8%. According to Alaska Department of Labor population estimates, the population of permanent residents increased by 27.7% between 2000 and 2009. The average annual growth during this period was 0.97%, reflecting an overall positive population trend with small decreases in population in some years. The change in population from 1990 to 2010 is provided in Table 1.

In 2010, a majority of the population of Nanwalek identified themselves as American Indian and Alaska Native (80.3%), while 10.6% identified as White, and 9.1% identified with two or more races. In addition, 2.0% of Nanwalek's population identified themselves as Hispanic in 2010. The percentage of residents that identified as White decreased from 8.9% in 1990 to 6.8% in 2000, then increased to 10.6% by 2010. At the same time, the percentage of the population that identified as American Indians and Alaska Natives increased slightly, from 91.1% in 1990 to 93.2% in 2000, and then decreased to 89.4% by 2010. The percentage of individuals identifying with two or more races increased from 4% in 2000 to 9.1% in 2010. Changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

Based on the U.S. Census, in 2010, the average household size Nanwalek was 4.62 persons per household, an increase from 3.7 in 1990 and 3.93 in 2000. The number of households in Nanwalek also increased over time, from 42 households in 1990 and 45 in 2000, to 55 in 2010. Of the 73 housing units surveyed for the 2010 U.S. Census, 42.5% were owner-occupied, 32.9% were rented, and 24.7% were vacant or used only seasonally. From 1990 to 2010, no residents of Nanwalek were living in group quarters. In a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that the population of Nanwalek reaches its peak during the months of June, July, and August, and

⁵⁷¹ 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.

⁵⁷² 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>.

approximately 25 seasonal workers or transients are present in the town between May and September. They indicated that population fluctuations are mostly driven by employment in the commercial fishing sector.

In 2010, the gender makeup of Nanwalek’s population (51.2% male and 48.8% female) was more gender balanced than the state population as a whole, which had 52% males and 48% females. The median age of Nanwalek residents was 23.3 years, much younger than the national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, the age group most heavily skewed toward males was 40 to 49, while there was a relatively even spread of males and females across other age categories. In 2010, only 3.1% of Nanwalek’s population was age 60 or older. The overall population structure of Nanwalek in 2000 and 2010 is shown in Figure 2.

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

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	158	-
2000	177	-
2001	-	184
2002	-	219
2003	-	214
2004	-	204
2005	-	220
2006	-	228
2007	-	216
2008	-	228
2009	-	226
2010	254	-

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

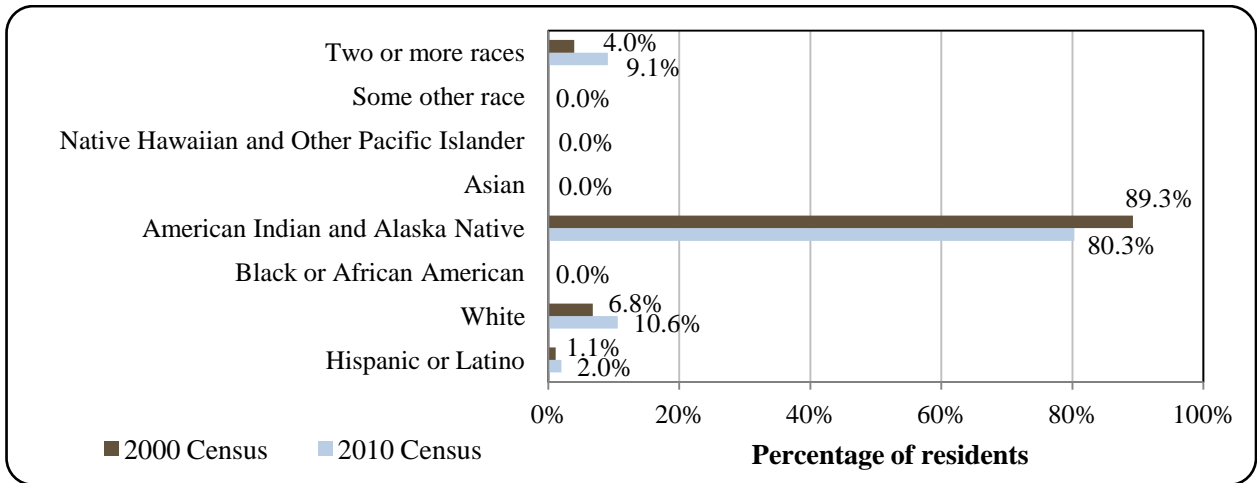
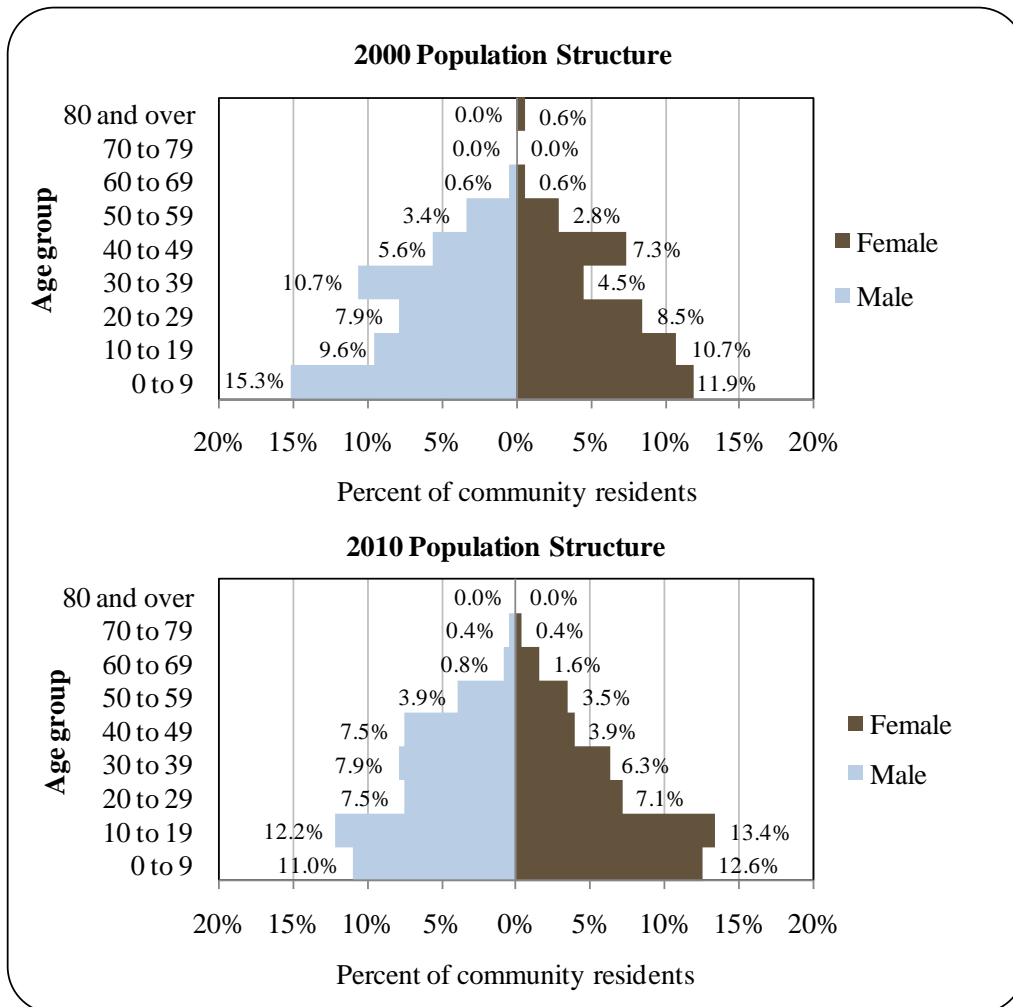


Figure 2. Population age structure in Nanwalek based on the 2000 and 2010 U.S. Decennial Census.



According to the 2006-2010 American Community Survey (ACS),⁵⁷³ 86.2% of Nanwalek residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaska residents overall. Also in 2010, 6.4% of the population was estimated to have less than a 9th grade education, compared to 3.5% of Alaska residents overall; 7.4% were estimated to have a 9th to 12th grade education but no diploma, compared to 5.8% of Alaska residents overall; 21.3% were estimated to have some college but no degree, compared to 28.3% of Alaska residents overall; 0% were estimated to have an Associate's degree, compared to 8% of Alaska residents overall; 0% were estimated to have a Bachelor's degree, compared to 17.4% of Alaska residents overall; and 0% were estimated to have a graduate or professional degree, compared to 9.6% of Alaska residents overall.

History, Traditional Knowledge, and Culture

Nanwalek is an Alutiiq village. Villagers speak Sugtestun, a dialect of Eskimo similar to Yup'ik.⁵⁷⁴ The subgroup of Alutiiq who occupied the outer Kenai coast are called the *Unegkurmiut* in ethnographic literature, meaning “down that way.” This name may have been used by the Alutiiq of Prince William Sound to refer to those other Alutiiq who lived along the outer Kenai Peninsula coast.⁵⁷⁵ The people of Nanwalek call themselves *Sugpiaq* meaning “real people.” Their heritage is strongly based in their language, subsistence lifestyle, cultural traditions, and self-government.⁵⁷⁶ Many residents of Nanwalek also have Russian, Euro-American, Asian, American Indian, and Aleut ancestry.⁵⁷⁷

Nanwalek is the site of one of the oldest villages in the North Pacific rim area, and was also used as a summer fish camp by prehistoric coastal peoples from other villages on the Kenai Peninsula and from Prince William Sound,⁵⁷⁸ including the coast of what is now Kenai Fjords National Park.⁵⁷⁹ An occupied village at the site was noted by Russian explorers in 1741. In 1781, Gregory Shelikov established a fort and trading post of the American Northeastern Fur Company at the site.⁵⁸⁰ The Russians maintained a presence at the site until the sale of Alaska to the United States in 1867. The village was initially called Alexandrovsk, and was later called Odinochka, meaning “a person living in solitude.”⁵⁸¹ In 1909, a U.S. Geological Survey (USGS) survey and mapping party called the village English Bay. The name of the village was changed to Nanwalek in 1991, an Alutiiq name meaning “place by a lagoon.” A Russian Orthodox church

⁵⁷³ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁵⁷⁴ 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.

⁵⁷⁵ Stanek, R. T. (1999). *Ethnographic Overview and Assessment for Nanwalek and Port Graham*. Draft. Division of Subsistence, Alaska Department of Fish and Game. Retrieved December 27, 2011 from <http://www.alaska.boemre.gov/>.

⁵⁷⁶ Chugachmiut (2011). *Tribes: Nanwalek Village IRA*. Retrieved December 26, 2011 from <http://www.chugachmiut.org/tribes/nanwalek.html>.

⁵⁷⁷ See footnote 575.

⁵⁷⁸ ASCG Inc. (2006). *Chugachmiut Facilitated Integrated Resources Management Plan for Nanwalek and Port Graham*. Retrieved December 26, 2011 from <ftp://200-10-178-69.static.gci.net/>.

⁵⁷⁹ See footnote 575.

⁵⁸⁰ See footnote 578.

⁵⁸¹ See footnote 574.

was built in Nanwalek in 1870. After the church burned down in 1890 it was reconstructed. Today the original church is listed on the National Register of Historic Places, and is not usable due to its unsafe condition. A second church was built in 1930 to serve the community.⁵⁸² The sale of alcohol is banned in the community.⁵⁸³

Natural Resources and Environment

Nanwalek is located in a maritime climactic zone, dominated by the moderating effects of a marine environment and characterized by high humidity, precipitation, and fog cover as well as warm winters and cool summers. In addition, Nanwalek experiences frequent winds from the inlet. Winter temperatures range from 14 to 27 °F, and summer temperatures vary from 45 to 60 °F.⁵⁸⁴ Average annual precipitation is 27 inches and average annual snowfall is 103 inches.⁵⁸⁵

The Kenai Mountains provide a dramatic backdrop to the Village of Nanwalek. The mountains rise to 3,000 ft above sea level within 1.5 miles of the coast. Lowlands are covered in a mixed forest of Sitka spruce and cottonwood with an understory of riparian willow. This area is used by moose, black bear, hawk, and bald eagle, and smaller mammals such as beaver, river otter, and mink.⁵⁸⁶ Alpine tundra meadows are found at higher elevations.⁵⁸⁷ The shoreline is rugged, abrupt, and fringed with many small islands. One of the most prominent features of the landscape is the massive glaciers, both landlocked and tidewater, and the Harding Ice Field in the central and northeastern portions of nearby Kenai Fjords National Park.⁵⁸⁸

Protected areas near Nanwalek include Kachemak Bay State Park and State Wilderness Park, Kenai Fjords National Park, and the Kenai Wilderness. Nanwalek is located less than 20 miles from the western boundary of Kachemak Bay State Park and State Wilderness Park, which are Alaska's first State Park, and only Wilderness Park, respectively. Together, they are made up of approximately 400,000 acres of mountains, glaciers, forests, and ocean. Adjacent to these land-based protections, Kachemak Bay and Fox River Flats have both been designated as Critical Habitat Areas under Alaska Statutes, Title 16,⁵⁸⁹ protecting habitat for sea otters, seals, porpoises, and whales. Visitors to the State Park and Wilderness Park enjoy fishing, boating, wildlife viewing, kayaking, hiking, camping, and mountain sports.⁵⁹⁰

The western border of Kenai Fjords National Park lies less than 35 miles east of Nanwalek. This National Park was established in 1980 to “maintain unimpaired the scenic and environmental integrity of the Harding Icefield, its outflowing glaciers, and coastal fjords and islands.” Fifty-six percent of the park is covered by ice. Animals living in the mountains, the shores, and the fjords of the National Park include black bear, brown bear, moose, mountain

⁵⁸² See footnotes 574 and 578.

⁵⁸³ Alaska Dept. of Public Safety (2011). *Local Option Restrictions*. Retrieved May 31, 2012 from <http://dps.alaska.gov/abc/restrictions.aspx>.

⁵⁸⁴ See footnote 578.

⁵⁸⁵ Precipitation and snowfall information retrieved December 27, 2011 from <http://www.weatherbase.com/>.

⁵⁸⁶ See footnote 578.

⁵⁸⁷ U.S. Environmental Protection Agency (2000). *Tribal Wetland Program Highlights*. EPA 843-R-99-002. Retrieved December 26, 2011 from <http://water.epa.gov/>.

⁵⁸⁸ See footnote 579.

⁵⁸⁹ Alaska Statutes, Title 16. *AS 16.20.590* and *AS 16.20.580*. Retrieved February 8, 2012 from <http://touchngo.com/Iglcntr/akstats/Statutes/Title16/Chapter20.htm>.

⁵⁹⁰ Alaska Dept. of Natural Resources (2009). *Kachemak Bay State Park and State Wilderness Park*. Retrieved January 27, 2012 from <http://dnr.alaska.gov/parks/units/kbay/kbay.htm>.

goat, sea otter, Steller sea lion, harbor seal, Dall’s porpoise, Pacific white-sided dolphin, orca, minke whale, humpback whale, fin whale, and birds including bald eagles, puffins, murre, Steller’s jay, black-billed magpie, peregrine falcon, and marbled murrelet.⁵⁹¹ Portions of both Kenai Fjords National Park and the Kachemak Bay State Park and State Wilderness Park are included in the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.⁵⁹²

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt, and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures, and soil liquefaction.⁵⁹³

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields on and off shore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.⁵⁹⁴

Nanwalek is one of seven Chugach Region tribes that joined to establish the Chugach Regional Resources Commission (CRRC) in 1984. CRRC was formed to “collectively address issues of mutual concern regarding stewardship of the natural resources, subsistence, the environment, and to develop culturally appropriate economic projects that promote the sustainable development of the natural resources.”⁵⁹⁵

The Port Graham/Nanwalek Watershed Council was formed in the 1990s to protect and preserve the two adjacent watersheds of English Bay River and Port Graham River and their tributaries. Because the ecosystems are largely healthy, the management approach of the Watershed Council is to prevent degradation as both communities experience growth in transportation systems, housing, and commercial resource harvests of timber and fish. The Watershed Council was formed as a result of meetings convened by the Chugachmiut Environmental Health Program to examine where funding for wetlands protection was most needed in the region.⁵⁹⁶

According to the Alaska Department of Environmental Conservation, there are no notable active environmental cleanup sites located in Nanwalek as of May 2012.⁵⁹⁷

⁵⁹¹ Kenai Fjords National Park website (2010). Retrieved December 27, 2011 from <http://www.nps.gov/kefj/>.

⁵⁹² Wilderness.net (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from <http://www.wilderness.net>.

⁵⁹³ Kenai Peninsula Borough (2010). *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

⁵⁹⁴ Resource Development Council (n.d.). *Alaska’s Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

⁵⁹⁵ Chugachmiut (2009). *Chugach Region Comprehensive Economic Development Strategy, Draft Version 5*. Retrieved December 26, 2011 from <http://www.chugachmiut.org/>.

⁵⁹⁶ See footnote 587.

⁵⁹⁷ Alaska Dept. of Environmental Conservation (n.d.). *List of Contaminated Sites*. Retrieved April 17, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

Current Economy⁵⁹⁸

The economy of Nanwalek is heavily tied to subsistence activities. According to a survey conducted by the AFSC in 2011, Nanwalek community leaders reported that commercial fishing is the most important natural resource-based industry in Nanwalek. In 2010, eight residents held commercial fishing permits (Table 4). As of 2010, additional employment was also provided by the school, the office of the Village of Nanwalek, the village Native corporation, the regional Native non-profit organization, the North Pacific Rim Housing Authority, and a private construction company.⁵⁹⁹ A cannery in nearby Port Graham has also been an important source of local employment in recent decades.⁶⁰⁰ However, in the 2011 AFSC survey, Port Graham community leaders indicated that the processing plant is not currently operating.

Based on household surveys conducted for the 2006-2010 ACS,⁶⁰¹ in 2010, the per capita income in Nanwalek was estimated to be \$7,540 and the median household income was estimated to be \$28,846. This represents a sizeable decrease in income from the per capita and median household incomes reported in 2000 (\$10,577 and \$42,500, respectively). If inflation is taken into account by converting the 2000 values to 2010 dollars,⁶⁰² the decrease is even greater, from a real per capita income of \$13,909 and real median household income of \$55,887 in 2000. In 2010, Nanwalek ranked 301st of 305 Alaskan communities with per capita income data that year, and 251st in median household income, out of 299 Alaskan communities with household income data.

Although Nanwalek's small population size may have prevented the ACS from accurately portraying economic conditions,⁶⁰³ the 2010 ACS per capita income estimate is supported by economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Mountain Village in 2010 is \$5,387.⁶⁰⁴ This is slightly lower than the 2006-2010 ACS estimate, and provides additional evidence that per capita income declined in Nanwalek from 2000 to 2010. This decline is reflected in the fact that the community was recognized as "distressed" by the Denali Commission, indicating that over 70% of residents aged 16 and older earned less than

⁵⁹⁸ Unless otherwise noted, all monetary data are reported in nominal values.

⁵⁹⁹ 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/>.

⁶⁰⁰ 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.

⁶⁰¹ 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>.

⁶⁰² 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>).

⁶⁰³ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁶⁰⁴ See footnotes 599 and 601.

\$16,120 in 2010.⁶⁰⁵ It is important to note that both ACS and DOLWD data are based on wage earnings, and do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS, in 2010, a smaller percentage of Nanwalek's population was estimated to be in the labor force (55%) compared to the percentage of Alaskans in the labor force statewide (68.8%). That year, 31.4% of local residents were estimated to be living below the poverty line, compared to 9.5% of Alaska residents overall, and the unemployment rate was estimated to be 25%, compared to a statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in Nanwalek in 2010 was 22.1%, compared to a statewide unemployment rate estimate of 11.5%.⁶⁰⁶

Also based on the 2006-2010 ACS, a majority of Nanwalek's workforce was estimated to be employed in the public sector (80.6%), and the remaining 19.4% were estimated to be employed in the private sector. The 36 people aged 16 and over that were estimated to be employed in the civilian labor force were estimated to be employed in the following industries: public administration (50%), educational services, health care, and social assistance (25%), retail trade (13.9%), and finance/real estate (11.1%). Occupations in which the greatest percentages of the workforce were estimated to be employed in 2010 were management/professional (38.9%) and service occupations (38.9%). Compared to 2000, employment estimates in Nanwalek appear to have become highly concentrated in some industries and occupations, while employment in other industries appears to have entirely ceased. These changes may be partly a result of the shift to a new sampling system with the ACS.⁶⁰⁷ In 2010, no Newhalen residents were estimated to be employed in fishing-related industries or occupations. It is important to note that the number of individuals employed by fishing is probably underestimated in census statistics, as fishermen may hold another job and characterize their employment accordingly. Information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 136 employed residents in Nanwalek in 2010, of which 55.6% were employed in local government, 7.8% in trade, transportation, and utilities, 5.6% in financial activities, 4.4% in construction, 1.1% in natural resources and mining, 1.1% in professional and business services, 1.1% in education and health services, and 23.3% in other industries.⁶⁰⁸ As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents' activity in the subsistence economy.

⁶⁰⁵ Denali Commission (2011). *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

⁶⁰⁶ See footnote 599.

⁶⁰⁷ See footnote 603.

⁶⁰⁸ Ibid.

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

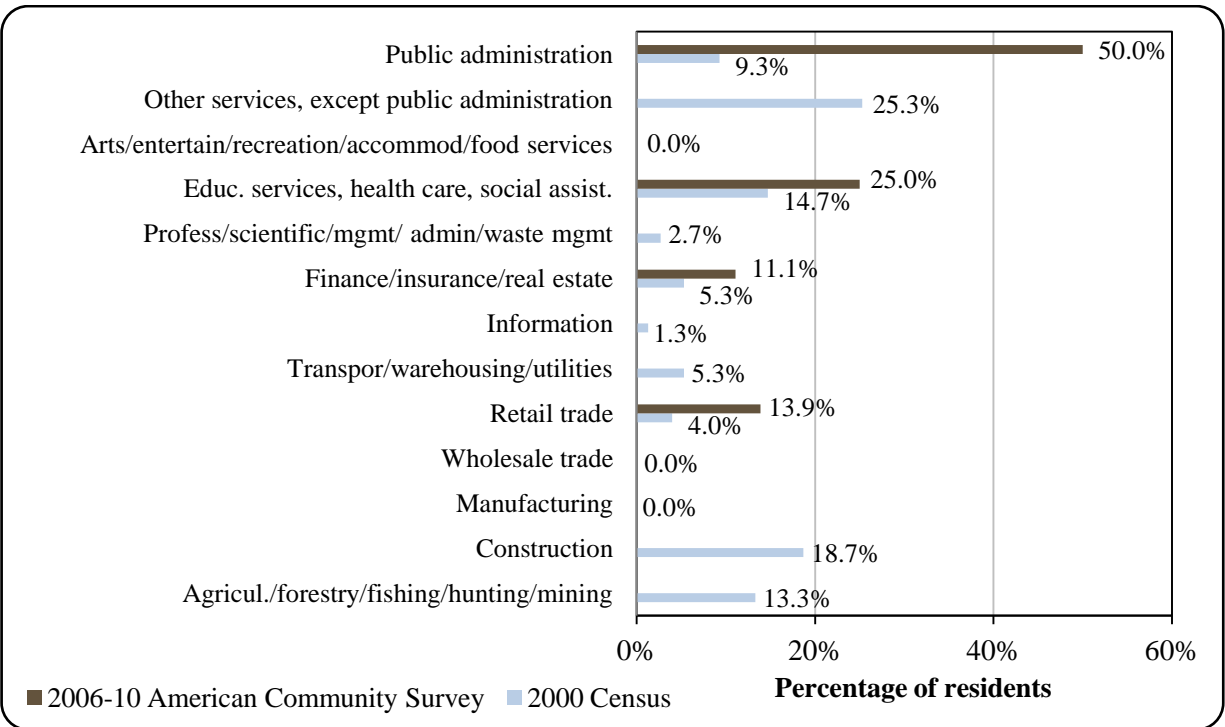
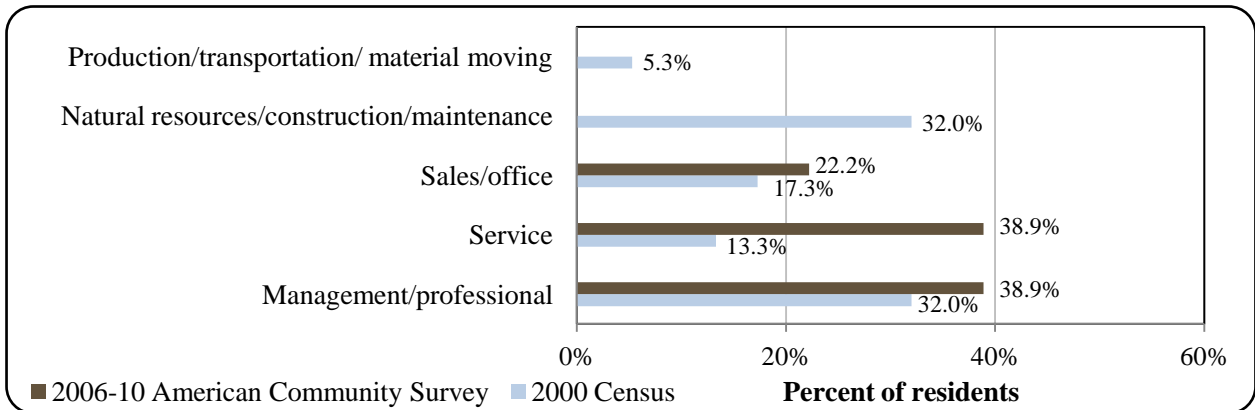


Figure 4. Local Employment by Occupation in 2000-2010, Nanwalek (U.S. Census).



Governance

Nanwalek is an unincorporated community in the Kenai Peninsula Borough. The community does not administer any local taxes, although the Borough does administer a 3% sales tax and 4.5 mills property tax.⁶⁰⁹ Given that Nanwalek is not incorporated, there was no municipal revenue or municipal sales tax revenue between 2000 and 2010. No information was reported regarding State or Community Revenue Sharing contributions or fisheries related grants received by the community between 2000 and 2010 (Table 2).

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Nanwalek 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

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

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

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

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

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

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

Nanwalek 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 Native Village of Nanwalek.⁶¹⁰ The Village is governed by the Nanwalek Indian Reorganization Act Council, consisting of an elected seven-member body. The

⁶⁰⁹ 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.

⁶¹⁰ 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.

Council consists of a First Chief, Second Chief, Secretary, Treasurer, and three Council Members.⁶¹¹ The local Native village corporation is the English Bay Corporation, which manages 76,400 acres of land. The regional Native corporation to which Nanwalek belongs is the Chugach Alaska Corporation.⁶¹²

Nanwalek is also a member of Chugachmiut, a tribal 501(c)(3) non-profit organization with the goal of advancing the overall economic, social, and cultural development of the people of the Chugach Region.⁶¹³ Chugachmiut is one of the 12 regional Alaska Native 501(c)(3) non-profit organizations that were identified under ANCSA and charged with naming incorporators to create regional for-profit corporations. Today, these regional Native associations receive federal funding to administer a broad range of services to villages in their regions.⁶¹⁴ Chugachmiut offers education, training, and community organizing opportunities, and runs programs including Community Health Aides and Practitioners, Contract Health Care, Community Health Representatives, substance abuse treatment and prevention, Cardiovascular Disease and Diabetes prevention and case management, maternal health, forestry, child care, Head Start, Elders, Indian Child Welfare Act, housing, tribal law, and more.⁶¹⁵

The office of the English Bay Corporation, along with the closest offices of ADF&G, the Alaska Department of Natural Resources, and an enforcement office of the National Marine Fisheries Service (NMFS), are located in Homer, approximately 17 air miles and 35 water miles away from Nanwalek. The office of Chugachmiut is located in Anchorage, along with the closest offices of the Alaska Department of Commerce, Community, and Economic Development and the U.S. Bureau of Citizenship and Immigration Services.

Infrastructure

Connectivity and Transportation

Nanwalek is not accessible by road. Boats are the primary means of transportation locally.⁶¹⁶ A state-owned, 1,850-ft-long by 50-ft-wide gravel airstrip is available for air taxis and general aviation. No scheduled commercial flights serve Nanwalek.⁶¹⁷ The nearest commercial airport is in Homer, 35 miles away by water. The price of a roundtrip ticket by plane from Homer to Anchorage in early June of 2012 was \$239.⁶¹⁸ The state ferry provides service from nearby Seldovia to Kodiak, Homer, Whittier, and Chenega Bay, as well as ports in Southeast Alaska, British Columbia, and Washington State. The summer 2012 passenger fare for a roundtrip ferry ticket between Seldovia and Homer was \$66, a ticket between Seldovia and Juneau was \$768, and a ticket between Seldovia and Bellingham, Washington, was \$1420.⁶¹⁹

⁶¹¹ Chugachmiut (2011). *Tribes: Nanwalek Village IRA*. Retrieved December 26, 2011 from <http://www.chugachmiut.org/tribes/nanwalek.html>.

⁶¹² See footnote 610.

⁶¹³ Chugachmiut (2011). *About Us*. Retrieved December 26, 2011 from <http://www.chugachmiut.org/about.html>.

⁶¹⁴ 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>.

⁶¹⁵ Cook Inlet Tribal Council. (n.d.). *What We Do*. Retrieved February 23, 2012 from <http://www.citci.com/>.

⁶¹⁶ See footnote 610.

⁶¹⁷ Airport information retrieved December 14, 2011 from <http://www.airnav.com/>.

⁶¹⁸ Fare calculated on November 21, 2011 using kayak.com.

⁶¹⁹ Fare information retrieved December 26, 2011 from <http://www.dot.state.ak.us/amhs/>.

Facilities

The Village of Nanwalek operates a piped water and sewer system that serves the village. Most homes are completely plumbed.⁶²⁰ Nanwalek's water source is a small dam located northeast of the Village. In periods of low precipitation this source is variable, and the community identified Switchback Creek as an option to supplement water supply.⁶²¹ Water in Nanwalek is filtered, but not chlorinated.⁶²² There is a community septic tank, and some outhouses are also in use. The Kenai Peninsula Borough operates a landfill, but does not provide refuse collection services.⁶²³ According to the Chugach Region Comprehensive Economic Development Strategy, Nanwalek is in need of a larger water storage tank, water treatment, new water and sewer mains, new fire hydrants, and a landfill expansion.⁶²⁴

Electricity is provided to the Village by the Homer Electric Association using hydroelectric and natural gas.⁶²⁵ According to a survey conducted by the AFSC in 2011, community leaders reported that a diesel powerhouse is also present in the community. There is no VPSO (Village Public Safety Officer) stationed in Nanwalek.⁶²⁶ The nearest state trooper post is in Homer.⁶²⁷ In the 2011 AFSC survey, community leaders reported that a food bank and a fire department are present in Nanwalek, and that additional public safety and emergency response services are in process. Community facilities in Nanwalek include a U.S. post office, school library, and a community building. Several guest accommodations are available in town, and broadband and telephone service are available.⁶²⁸ The English Bay Corporation runs a grocery store in the Village.⁶²⁹

With respect to fishing-related facilities, community leaders reported in the 2011 AFSC survey that no dock space is available for permanent or transient vessel moorage in Nanwalek, although there is public moorage space available for vessels up to 30 ft in length. They reported that a barge landing area and haul-out facilities are under development in the Village. They also said that residents travel to Homer to access fisheries-related businesses and services not available in Nanwalek.

Medical Services

Medical services are available from the Nanwalek Clinic, owned by the Village Council and operated by Chugachmiut, a regional non-profit organization serving Native communities in the Chugach region. The Nanwalek Clinic is a Community Health Aid Program site. Alternative health care is provided by Nanwalek First Responders. Emergency services have coastal,

⁶²⁰ 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.

⁶²¹ Chugachmiut (2009). *Chugach Region Comprehensive Economic Development Strategy, Draft Version 5*. Retrieved December 26, 2011 from <http://www.chugachmiut.org/>.

⁶²² See footnote 620.

⁶²³ Ibid.

⁶²⁴ See footnote 621.

⁶²⁵ See footnote 620.

⁶²⁶ Dept. of Public Safety (n.d.). *Active VPSO's by Village, December 2011*. Retrieved December 12, 2011 from <http://www.dps.alaska.gov/>.

⁶²⁷ See footnote 620.

⁶²⁸ Ibid.

⁶²⁹ See footnote 621.

floatplane, and air access. Emergency service is provided by volunteers and the local health aide.⁶³⁰ The nearest hospital is located in Homer.

Educational Opportunities

One school is present in Nanwalek. The Nanwalek School serves Kindergarten through 12th grade. As of 2011, 81 students attended Nanwalek School, and 8 teachers were employed.⁶³¹

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Nanwalek has been the site of subsistence harvest of marine resources for thousands of years. The site was used as a fish camp by prehistoric peoples from villages on the Kenai Peninsula and in Prince Williams Sound.⁶³² Archaeological evidence reveals that marine mammals were a primary food source for early Eskimo residents of the area, and that finfish and shellfish increased in importance over time.⁶³³

With the purchase of Alaska by the United States in 1867, the commercial fishing industry began to grow in the Cook Inlet region. In 1883, a salmon saltery was opened by the Alaska Commercial Company in Port Graham Bay. In 1911, a cannery was established at Seldovia, and the community of Port Graham was founded when a cannery was built there in 1912. The Port Graham Cannery drew Nanwalek residents for seasonal work. Salmon was the primary focus of fishing and processing effort in early years of the fishing industry, and herring was also an important early product. A cannery was built at English Bay in 1920 which was the first to can king crab, known at that time as “spider crab.”⁶³⁴

In the early years of commercial fishing, Native residents of the Cook Inlet area typically lacked the resources to purchase expensive fishing vessels. Instead, they participated in commercial fishing as cannery workers, salmon trap attendants, and setnet fishers. Native residents were also unable to work a full summer season at the cannery, since they also needed to put up subsistence resources for their winter food supply. By the 1950s, villagers were able to afford to lease or purchase commercial fishing vessels and gear.⁶³⁵

Nanwalek is located at English Bay, within the Southern district of the ADF&G-managed Lower Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts. Purse seine gear is used throughout the Lower Cook Inlet

⁶³⁰ See footnote 620.

⁶³¹ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

⁶³² ASCG Inc. (2006). *Chugachmiut Facilitated Integrated Resources Management Plan for Nanwalek and Port Graham*. Retrieved December 26, 2011 from <ftp://200-10-178-69.static.gci.net/>.

⁶³³ Stanek, R. T. (1999). *Ethnographic Overview and Assessment for Nanwalek and Port Graham*. Draft. Division of Subsistence, Alaska Department of Fish and Game. Retrieved December 27, 2011 from <http://www.alaska.boemre.gov/>.

⁶³⁴ Ibid.

⁶³⁵ Ibid.

management area, while set gill nets are limited to the Kachemak Bay sub-district.⁶³⁶ Between 2000 and 2010, all actively fished salmon permits held by Nanwalek residents were fished in the Lower Cook Inlet set gill net fishery (see *Commercial Fishing* section). Sockeye salmon escapement in the English Bay River system reached a low of 5,000 adults in 1985, from a historical high of 40,000 fish. ADF&G closed the fishing season to allow the stock to recover. To meet the needs for a local salmon resource, the Nanwalek Salmon Enhancement Project began operations in 1990 at the Port Graham hatchery facility.⁶³⁷ In 2011, the Cook Inlet Aquaculture Association coordinated cost recovery harvest of Port Graham Bay and other Cook Inlet hatchery returns.⁶³⁸

Nanwalek is also located in Pacific Halibut Fishery Regulatory Area 3A, the Central Gulf of Alaska Sablefish Regulatory Area, and Federal Statistical and Reporting Area 630. Nanwalek is eligible to participate in the Community Quota Entity (CQE) program. The community governing body that recommended CQE membership is the Village of Nanwalek, and the CQE entity is Nanwalek Natural Resources/Fisheries Board, Inc. As of Fall 2013, the Nanwalek Natural Resources/Fisheries Board had not yet purchased commercial halibut quota shares or non-trawl groundfish License Limitation Program permits for lease to eligible community members. However, the non-profit had acquired seven halibut charter permits for lease to community members.⁶³⁹ Nanwalek is not eligible to participate in the Community Development Quota (CDQ) program. According to a survey conducted by the AFSC in 2011, community leaders reported that the community of Nanwalek actively participates in fisheries management processes in Alaska.

Processing Plants

ADF&G's 2010 Intent to Operate list does not list a registered processing plant in Nanwalek. A number of plants are registered in the nearby City of Homer. In addition, a cannery in nearby Port Graham has been an important source of local employment since the early 1900s.^{640,641} However, in the 2011 AFSC survey, Port Graham community leaders indicated that the processing plant is not currently operating.

Fisheries-Related Revenue

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

⁶³⁶ 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>.

⁶³⁷ Ibid.

⁶³⁸ Cook Inlet Aquaculture Association (2011). *2011 Prospective Fish Sales*. Retrieved December 27, 2011 from <http://www.ciaonet.org/>.

⁶³⁹ NOAA Fisheries. (2013). *Community Quota and License Programs and Community Quota Entities*. Retrieved October 30, 2013 from <http://alaskafisheries.noaa.gov/ram/cqp.htm>.

⁶⁴⁰ 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.

⁶⁴¹ See footnote 633.

Commercial Fishing

In addition to high involvement in subsistence hunting and fishing (see the *Subsistence* section of this profile), Nanwalek residents are engaged in commercial fishing as vessel owners, permit holders, and crew license holders. Between 2000 and 2010, the number of Nanwalek residents holding commercial crew licenses declined from a high of 11 in 2003 to 1 crew license held in 2010. The number of vessel owners residing in Nanwalek declined from three in 2000 to one in 2010, while the number of vessels homeported in Nanwalek declined from three to zero. According to a survey conducted by the AFSC in 2011, community leaders reported that fishing boats using Nanwalek as their base of fishing operations are typically longline, gill net, and troll vessels under 35 ft in length. There were no processing facilities or fish buyers located in Nanwalek between 2000 and 2010. These characteristics of the Nanwalek commercial fishing sector are presented in Table 5.

In 2010, eight state Commercial Fisheries Entry Commission (CFEC) permits were held by a total of nine Nanwalek permit holders. All of the permits were for the Cook Inlet purse seine and set gill net salmon fisheries. Of these, the only salmon permits that were actively fished between 2000 and 2010 were set gill net permits. The number of salmon permits held stayed quite consistent between 2000 and 2010, although the percentage of permits that were actively fished varied, with 0% fished in 2001, 63% fished in 2002 and 2003, and 25% fished in 2010 (two out of eight total permits held). Between 2000 and 2010, no federal License Limitation Program permits (LLP) or Federal Fisheries Permits (FFP) were held by Nanwalek residents, and no quota shares accounts were held in the federal halibut, sablefish, or crab fisheries. Information about permits is presented in Table 4, and information about federal catch share participation is presented in Tables 6 through 8.

No landings or ex-vessel revenue were recorded in Nanwalek during the 2000-2010 period (Table 9), given the lack of fish buyers in the community (Table 5). Information about landings and ex-vessel revenue generated by vessels owned by Nanwalek residents, including all delivery locations, is considered confidential between 2000 and 2010 due to the small number of participants (Table 10).

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

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

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

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

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

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

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

⁵ Total municipal revenue represents the total revenue that the city reports each year in its financial statements. Alaska Department of Commerce, Community, and Economic Development.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Nanwalek

Table 4. Permits and Permit Holders by Species, Nanwalek: 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	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, Nanwalek: 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	8	7	8	8	8	8	8	8	8	8	8
	Fished permits	3	0	5	5	2	0	3	2	2	2	2
	% of permits fished	38%	0%	63%	63%	25%	0%	38%	25%	25%	25%	25%
	Total permit holders	8	7	8	8	9	8	9	8	8	8	9
<i>Total CFEC Permits²</i>	<i>Permits</i>	8	7	8	8	8	8	8	8	8	8	8
	<i>Fished permits</i>	3	0	5	5	2	0	3	2	2	2	2
	<i>% of permits fished</i>	38%	0%	63%	63%	25%	0%	38%	25%	25%	25%	25%
	<i>Permit holders</i>	8	7	8	8	9	8	9	8	8	8	9

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Nanwalek: 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 Nanwalek ²	Total Net Lb Landed In Nanwalek ^{2,5}	Total Ex-Vessel Value Of Landings In Nanwalek ^{2,5}
2000	3	0	0	3	3	0	0	\$0
2001	4	0	0	3	3	0	0	\$0
2002	2	0	0	2	2	0	0	\$0
2003	11	0	0	2	2	0	0	\$0
2004	2	0	0	1	1	0	0	\$0
2005	6	0	0	0	0	0	0	\$0
2006	4	0	0	1	1	0	0	\$0
2007	2	0	0	2	2	0	0	\$0
2008	3	0	0	1	1	0	0	\$0
2009	5	0	0	1	1	0	0	\$0
2010	1	0	0	1	1	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 Nanwalek: 2000-2010.

Year	Number Of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Lb)
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 the AFSC, Seattle.

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

Year	Number Of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Lb)
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 the AFSC, Seattle.

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

Year	Number Of Crab Quota Share Account Holders	Crab Quota Shares Held	Crab IFQ Allotment (Lb)
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 the AFSC, Seattle.

Table 9. Landed Pounds and Ex-vessel Revenue, by Species, in Nanwalek: 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 lb refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Nanwalek 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	-	-	-	-	-	0	-	-	-	-	-
Finfish	-	-	-	-	-	0	-	-	-	-	-
Halibut	-	-	-	-	-	0	-	-	-	-	-
Herring	-	-	-	-	-	0	-	-	-	-	-
Other Groundfish	-	-	-	-	-	0	-	-	-	-	-
Other Shellfish	-	-	-	-	-	0	-	-	-	-	-
Pacific Cod	-	-	-	-	-	0	-	-	-	-	-
Pollock	-	-	-	-	-	0	-	-	-	-	-
Sablefish	-	-	-	-	-	0	-	-	-	-	-
Salmon	-	-	-	-	-	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	-	-	-	-	-
Finfish	-	-	-	-	-	\$0	-	-	-	-	-
Halibut	-	-	-	-	-	\$0	-	-	-	-	-
Herring	-	-	-	-	-	\$0	-	-	-	-	-
Other Groundfish	-	-	-	-	-	\$0	-	-	-	-	-
Other Shellfish	-	-	-	-	-	\$0	-	-	-	-	-
Pacific Cod	-	-	-	-	-	\$0	-	-	-	-	-
Pollock	-	-	-	-	-	\$0	-	-	-	-	-
Sablefish	-	-	-	-	-	\$0	-	-	-	-	-
Salmon	-	-	-	-	-	\$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>

Note: Cells showing “-” indicate that the data are considered confidential.

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

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

² Totals only represent non-confidential data.

Recreational Fishing

Residents of Nanwalek participated in recreational fishing activities through purchase of sportfishing licenses and through the presence of licensed sport fish guides in some years between 2000 and 2010. Although there were no active sport fish guide businesses registered in Nanwalek from 2000 to 2010, one or two licensed sport fish guide were present from 2001 to 2004. Between 2000 and 2010, the number of Nanwalek residents that purchased sportfishing licenses varied between 11 and 42 per year (24 on average). No licenses were sold in Nanwalek itself. Information about sportfishing activity in Nanwalek is presented in Table 11.

In a survey conducted by the AFSC in 2011, community leaders reported that sportfishing activity in the Nanwalek area is primarily done by residents using private boats. They noted Chinook salmon, Pacific halibut, and rockfish as three target species of sportfishing activity in the area. The Alaska Statewide Harvest Survey,⁶⁴² conducted by ADF&G between 2000 and 2010, noted the following species targeted by private anglers in Nanwalek: Chinook, coho, and sockeye salmon, Dolly Varden char, and Pacific halibut. The survey also noted sport harvest of “other shellfish”⁶⁴³ by Nanwalek residents. No kept/released log book data were reported for fishing charters out of Nanwalek between 2000 and 2010.⁶⁴⁴

Nanwalek is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, saltwater and freshwater sportfishing at this regional level was substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska residents logged 20,292 saltwater angler days and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska resident anglers, and the opposite was true of freshwater sportfishing. For both resident and non-resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased between 2000 and 2010. This information about regional sportfishing activity is presented in Table 11.

⁶⁴² 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. Retrieved from <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>. (Accessed September 2011).

⁶⁴³ The Alaska Statewide Harvest Survey includes separate categories for Dungeness crab, Tanner crab, razor clams, hardshell clams, and shrimp. Remaining species fall into the ‘other shellfish’ category.

⁶⁴⁴ 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, Nanwalek: 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 Nanwalek ²
2000	0	0	11	0
2001	0	1	42	0
2002	0	2	25	0
2003	0	2	19	0
2004	0	2	20	0
2005	0	0	14	0
2006	0	0	16	0
2007	0	0	28	0
2008	0	0	26	0
2009	0	0	32	0
2010	0	0	27	0

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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

Nanwalek has been the site of subsistence harvest of marine resources for thousands of years. The site was used as a fish camp by prehistoric peoples from villages on the Kenai Peninsula and in Prince Williams Sound.⁶⁴⁵ Historically, Native people living in Nanwalek also utilized sites along the coast of the present day Kenai Fjords National Park, but under the Alaska National Interest Lands Conservation Act of 1980, the National Park was closed to all subsistence hunting and fishing.⁶⁴⁶ Archaeological evidence reveals that early Eskimo residents of the area had a highly developed technology for hunting marine mammals including seals, sea lions, sea otters, and whales. In more recent sites, there is increased evidence of use of finfish and shellfish, but marine mammals appear to have remained the primary food source for residents of the area.⁶⁴⁷

Today, subsistence harvest remains a primary focus of Nanwalek's economy and culture.⁶⁴⁸ In 2003, the only year that a subsistence survey was conducted by ADF&G in Nanwalek between 2000 and 2010, 93% of households were reported participating in salmon subsistence, 91% participated in halibut subsistence, 35% in marine mammal subsistence, 72% in marine invertebrate subsistence, and 64% in non-salmon fish subsistence (other than halibut). That year residents of Nanwalek were estimated to harvest 394 lb of land and sea-based subsistence resources per capita. Information about household participation and per capita use of subsistence resources is presented in Table 12.

For years in which data were reported, an average of 25 subsistence salmon permits were issued to Nanwalek households per year. Based on reported harvests, sockeye salmon were the most heavily harvested salmon species in all years (3,146 harvested per year on average), followed by pink (1,229 harvested on average) and coho salmon (959 harvested on average). An average of 235 chum and 36 Chinook salmon were also reported as harvested using subsistence salmon permits per year. Information about subsistence salmon harvest is presented in Table 13. In 2003, 3,580 lb of marine invertebrates and 8,655 lb of non-salmon fish (not including halibut) were also harvested for subsistence purposes (Table 13).

Between 2003 and 2010, an average of 44 Subsistence Halibut Registration Certificates (SHARC) was issued to residents of Nanwalek. Of these, an average of almost 30 cards were fished, with an average subsistence halibut harvest of 12,739 lb per year. The highest harvest of halibut during the period occurred in 2008, when 42 SHARC cards were fished and a total of 24,755 lb of halibut were harvested. Information about subsistence harvest of halibut is presented in Table 14.

Information about subsistence harvest of several species of marine mammals was reported between 2000 and 2010. According to data reported by ADF&G, between 1 and 6 Steller sea lions were harvested per year between 2000 and 2008, and harbor seal harvests varied

⁶⁴⁵ ASCG Inc. (2006). *Chugachmiut Facilitated Integrated Resources Management Plan for Nanwalek and Port Graham*. Retrieved December 26, 2011 from <ftp://200-10-178-69.static.gci.net/>.

⁶⁴⁶ Fall, James A., Ronald T. Stanek, Brian Davis, Liz Williams and Robert Walker (2004). *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Final Report for Study No. FIS 03-045. Retrieved December 27, 2011 from <http://alaska.fws.gov/asm/index.cfml>.

⁶⁴⁷ Stanek, R. T. (1999). *Ethnographic Overview and Assessment for Nanwalek and Port Graham*. Draft. Division of Subsistence, Alaska Department of Fish and Game. Retrieved December 27, 2011 from <http://www.alaska.boemre.gov/>.

⁶⁴⁸ 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.

between 20 and 53 animals per year during the same period. No information was reported by management agencies regarding harvest of beluga whale, sea otter, walrus, or spotted seal between 2000 and 2010. Information about subsistence harvest of marine mammals in Nanwalek is presented in Table 15.

Additional Information

Several decades after the Russians abandoned Alexandrovsk, the Native population was also forced to temporarily evacuate when Mount Augustine erupted in 1883. The following summary account from George Davidson of the U.S. Coast and Geodetic Survey (USCGS) and Captains Sands and Cullie of the Alaska Commercial Company, was published by geographer William Dall in 1884:

“Smoke first arose from the peak in August. On the morning of Oct. 6 the inhabitants heard a heavy report, and saw smoke and flames issuing from the summit of the island. The sky became obscured, and a few hours later there was a shower of pumice-dust. About half-past eight o’clock the same day an earthquake wave, estimated at thirty feet height, rolled in upon the shore, deluging the houses on the lowland, and washing the boats and canoes from the beach. It was followed by others of less height. The ash fell to a depth of several inches, and darkness required lamps to be lighted. At night flames were seen issuing from the summit. After the first disturbances were over, it was found that the northern slope of the summit had fallen to the level of the . . . shore, and the mountain appeared as if split in two. . . . The cleft . . . crosses the island from east to west.”⁶⁴⁹

Table 12. Subsistence Participation by Household and Species, Nanwalek: 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	93%	91%	35%	72%	64%	394
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).

⁶⁴⁹ Alaska Volcano Observatory (n.d.). *Augustine Reported Activity: Augustine – 1883*. Retrieved December 27, 2011 from <http://avo.alaska.edu/volcanoes/>.

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Nanwalek: 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	Lb Of Marine Inverts ²	Lb Of Non-Salmon Fish ²
2000	n/a	32	18	470	1,579	1,251	3,880	n/a	n/a
2001	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	56	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	35	n/a	n/a	n/a	n/a	n/a	1,179	8,655
2004	25	25	52	95	842	1,277	2,968	n/a	n/a
2005	22	22	27	128	1,142	1,259	1,934	n/a	n/a
2006	n/a	39	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	29	29	47	247	274	1,128	3,802	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, Nanwalek: 2003-2010.

Year	SHARC issued	SHARC cards fished	SHARC halibut lb harvested
2003	37	31	8,080
2004	37	28	15,928
2005	37	32	9,215
2006	31	17	6,146
2007	58	38	11,872
2008	51	42	24,701
2009	51	21	13,234
2010	48	20	12,865

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, Nanwalek: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Nikiski (nih-KISS-kee)



People and Place

*Location*⁶⁵⁰

The community of Nikiski is located on the Kenai Peninsula, nine miles north of the City of Kenai, off of the Sterling Highway. Nikiski is also known as Port Nikiski and Nikishka. Nikiski is located in the Kenai Peninsula Borough Census Area and the Kenai Recording District. The community encompasses 69.6 square miles of land and 6.6 square miles of water.

*Demographic Profile*⁶⁵¹

In 2010, there were 4,493 residents in Nikiski, ranking it as the 25th largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population of Nikiski increased by 63.8%. Most of this growth occurred between 1990 and 2000, although the population continued to grow more slowly through 2010. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents increased by 3.2% with an average annual growth of 0.35%, reflecting an overall positive population trend with small decreases in population in some years.

In 2010, the majority of the population of Nikiski identified themselves as White (85.6%), along with 7.7% that identified as American Indian or Alaska Native, 1.1% as Asian, 0.4% as Native Hawaiian and Other Pacific Islander, 0.1% as Black or African American, 0.5% as ‘some other race’, and 4.6% identified with two or more races. In addition, 2.6% of Nikiski’s population identified themselves as Hispanic in 2010. The percentage of the population made up of individuals identifying as White decreased from 93% in 1990 to 87.2% in 2000, and then to 85.6% by 2010. At the same time the percentage identifying as American Indians and Alaska Natives increased from 6.1% in 1990 to 7.6% in 2000, and remained relatively stable through 2010 (7.7%). The change in population from 1990 to 2010 is provided in Table 1, and changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

Based on the U.S. Census, in 2010 the average household size in Nikiski was 2.65 persons per household, a decrease from 3.0 in 1990 and 3.31 in 2000. The number of households in Nikiski increased over time, from 1,045 households in 1990 and 1,514 in 2000, to 1,689 in 2010. Of the 1,998 housing units surveyed for the 2010 U.S. Census, 68.4% were owner-occupied, 16.1% were rented, and 15.5% were vacant or used only seasonally. In 1990, 13 Nikiski residents lived in group quarters. This number declined to zero by 2000, but rose again to 11 residents living in group quarters in 2010.

⁶⁵⁰ 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.

⁶⁵¹ 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>.

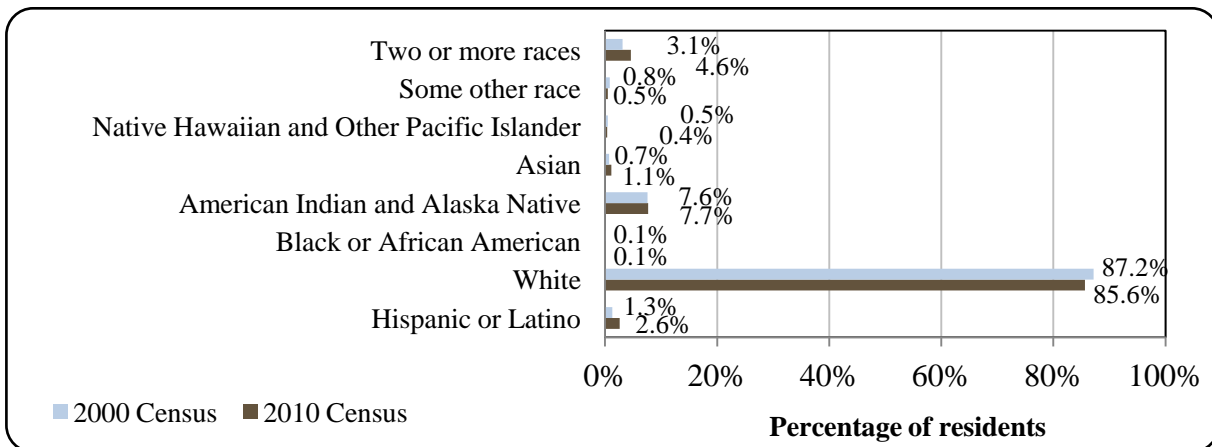
Table 1. Population in Nikiski from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	2,743	-
2000	4,327	-
2001	-	4,363
2002	-	4,362
2003	-	4,352
2004	-	4,293
2005	-	4,196
2006	-	4,212
2007	-	4,333
2008	-	4,413
2009	-	4,465
2010	4,493	-

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>.

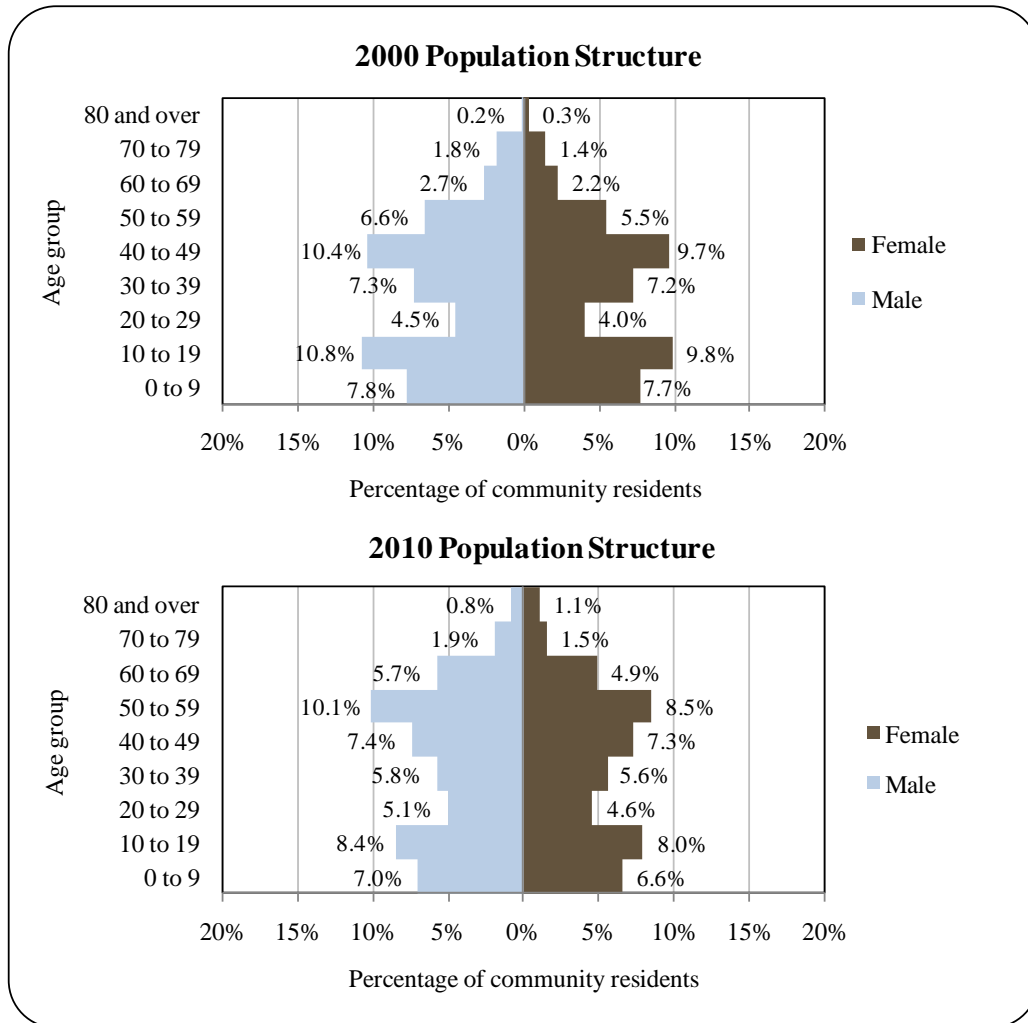
² Alaska Department of Labor. (2011). *Current population estimates for Alaskan Communities*. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

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



In 2010, the gender makeup of Nikiski’s population (52.1% male and 47.9% female) was almost the same as the gender balance of the state as a whole, which was made up of 52% males and 48% females. The median age of Nikiski residents was 39.4 years, slightly older than the national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, the age group most heavily skewed toward males was 50-59 years, while there was a relatively even spread of males and females across other age categories in Nikiski. There were relatively few people in the 20 to 39 age cohorts compared to the younger and older cohorts in both 2000 and 2010. In 2010, 15.9% of Nikiski’s population was 60 or older. The overall population structure of Nikiski in 2000 and 2010 is shown in Figure 2.

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



In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),⁶⁵² 93% of Nikiski residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaskan residents overall. Also in 2010, 0.6% of the population was estimated to have less than a 9th grade education, compared to 3.5% of Alaskan residents overall; 6.4% were estimated to have a 9th to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 35.7% were estimated to have some college but no degree, compared to 28.3% of Alaskan residents overall; 6.8% were estimated to have an Associate’s degree, compared to 8% of Alaskan residents overall; 7.6% were estimated to have a Bachelor’s degree, compared to 17.4% of Alaskan residents overall; and 6.7% were estimated to have a graduate or professional degree, compared to 9.6% of Alaskan residents overall.

⁶⁵² While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

History, Traditional Knowledge, and Culture

Nikiski is located in traditional Kenaitze Indian territory. Around 1000 A.D. these Dena'ina Athabaskan people arrived in the area and replaced the Kachemak Eskimos who had occupied the region starting around 1000 B.C. This cultural shift may have been driven by climatic changes influencing salmon abundance in the North Pacific Ocean.⁶⁵³ The Native people of the area were called Kenaitze by the Russians which meant 'the people who live along the Kenai River', although "the Kenaitze, however, called themselves *Kahthuht'ana*, an Athabaskan word meaning 'the people of the Kenai'."⁶⁵⁴ Between 1786 and 1791, Russian fur traders came to the Kenai area and established settlements. Around 1795 Russian Orthodoxy was introduced into the area by Father Juvenaly.⁶⁵⁵ In the year 1838 there was a smallpox epidemic and approximately fifty percent of the Dena'ina people died from the disease. The Native population was hit again in the years 1918 to 1920 during the worldwide influenza epidemic.⁶⁵⁶

The first cannery in Kenai was built in 1888 by the Northern Packing Company. Alaska Railroad upgrades in the region were completed in 1923.⁶⁵⁷ The area of Nikiski was homesteaded in the 1940s. The region grew with the discovery of oil on the Kenai Peninsula in 1957. Oil-related industries had located to the area by 1964, including Tesoro, Chevron, Phillips 66, and Unocal. Nikiski is located close to the City of Kenai, where many residents travel to purchase goods and services.⁶⁵⁸

Natural Resources and Environment

The Cook Inlet basin is located in a transitional climate zone, in the rain shadow of the Kenai Mountains. Temperatures are more extreme because the area is somewhat sheltered from the moderating effects of the Gulf of Alaska, and cold air occasionally pushes south from interior Alaska in winter months.⁶⁵⁹ Winter temperatures in Nikiski range from 14 to 27 °F, and summer temperatures vary from 45 to 65 °F. Average annual precipitation is 24 inches.⁶⁶⁰ The landscape in and around Nikiski is characterized by boreal forest and numerous lakes. Moving inland, the Kenai Mountains rise to mountains rise to 3,000-5,000 feet above sea level, hosting the Harding Ice Field.⁶⁶¹

⁶⁵³ Fall, J.A., R.T. Stanek, B. Davis, L. Williams and R. Walker (2004). *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Final Report for Study No. FIS 03-045.

⁶⁵⁴ Halliday, Jan. 1998. *Native Peoples of Alaska: A Traveler's Guide to Land, Art, and Culture*. Sasquatch Books, Seattle.

⁶⁵⁵ Oleksa, Father Michael (2005). *Another Culture / Another World*. Association of Alaska School Boards.

⁶⁵⁶ Kenai Peninsula Economic Development District (2010). *Kenai Peninsula Borough Comprehensive Development Strategy*. Retrieved January 25, 2012 from <http://commerce.alaska.gov/ded/home.htm>.

⁶⁵⁷ Cook, L., and F. Norris (1998). *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

⁶⁵⁸ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/comddb/CF_BLOCK.htm.

⁶⁵⁹ Kenai Peninsula Borough Coastal Management Program (1990). Final Coastal Management Plan. Retrieved September 7, 2012 from <http://www2.borough.kenai.ak.us/coastal/CMP-Final.htm>.

⁶⁶⁰ See footnote 658.

⁶⁶¹ U.S. Fish and Wildlife Service (2011). *Kenai National Wildlife Refuge*. Retrieved January 26, 2012 from <http://kenai.fws.gov/>.

Nikiski is located near the western border of the Kenai National Wildlife Refuge (NWR), and only a few miles southwest of the Captain Cook State Recreational area. The NWR covers 1.92 million acres, half of which was designated as the Kenai Wilderness. The NWR was originally established by President Roosevelt in 1941 as the Kenai National Moose Range. In 1980, with the Alaska National Interest Lands Conservation Act (ANILCA), the name and purpose of the area were changed to manage all animal species as a NWR. All five salmon species return to rivers and lakes to spawn, and a full spectrum of sub-Arctic freshwater fish species are found in the NWR. In addition, terrestrial animals living in the NWR include moose, caribou, Dall sheep, mountain goat, black and brown bear, wolf, coyote, red fox, lynx, and many small mammals. The wood frog is the only amphibian found in the Kenai NWR.⁶⁶²

The Captain Cook State Recreation Area offers visitors opportunities for beachcombing, canoeing and boating, recreational fishing (including ice fishing), and wildlife viewing. Visitors to the park are cautioned to pay attention to tides when walking on the mudflats, as they move very quickly and can be dangerous.⁶⁶³

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt, and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures, and soil liquefaction.⁶⁶⁴ Other natural hazards that have also been identified as threats in the Kenai Peninsula Borough include flooding, wildfire, snow and avalanche, tsunami and seiche, severe weather, landslides, erosion and drought.⁶⁶⁵

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields on and off shore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.⁶⁶⁶

According to the Alaska Department of Environmental Conservation (DEC), one active environmental cleanup sites was located near Nikiski as of May 2012. The Tesoro Alaska Refinery is located approximately 15 miles northeast of Nikiski along North Kenai Road. The facility has been in operation since 1970, and refines crude oil to produce fuel oil, diesel, jet fuel, gasoline, and propane. In 1980, a study found that wastes from crude oil storage tanks and separators had been buried in three pits on the Tesoro property. Both soil and groundwater in the area is contaminated. The contamination plume has traveled through neighboring industrial properties and is approaching a bluff over Cook Inlet. Tesoro is currently engaged in groundwater monitoring and product recovery to prevent seepage into Cook Inlet. Following

⁶⁶² Ibid.

⁶⁶³ Alaska Department of Natural Resources (n.d.). *Captain Cook State Recreation Area*. Retrieved January 26, 2012 from <http://dnr.alaska.gov/parks/units/captcook.htm>.

⁶⁶⁴ Kenai Peninsula Borough (2010). *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

⁶⁶⁵ State of Alaska (2002). *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

⁶⁶⁶ Resource Development Council (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

successful removal of product from groundwater, Tesoro will be required to develop a plan to address soil contamination.⁶⁶⁷

Current Economy⁶⁶⁸

The economy of Nikiski is heavily tied to the oil industry. A Tesoro Alaska oil refinery is located just north of the community, where Cook Inlet and some North Slope crude oil is processed into jet fuel, gasoline, and diesel. British Petroleum has a natural-gas-to-liquid-fuel pilot plant in Port Nikiski. Alaska Petroleum Contractors and Natchiq, Inc. are building portable modules that will be shipped to the Alpine oil field on the North Slope. In addition, several hundred Nikiski residents work in a fertilizer plant at Port Nikiski, owned by Agrium, Inc., that produces urea and ammonia.⁶⁶⁹

In addition to the oil industry, top employers in Nikiski in 2010 included the Kenai Peninsula School District, state and borough government, Wal-Mart, and the Central Peninsula General Hospital in Soldotna,⁶⁷⁰ as well as retail businesses and tourism-related services.⁶⁷¹ In addition, some local residents were involved in the commercial fishing industry between 2000 and 2010. In 2000, the number of Nikiski residents holding state Commercial Fisheries Entry Commission (CFEC) permits was equivalent to 1.4% of the total local population.

Based on household surveys conducted for the 2006-2010 ACS,⁶⁷² in 2010, the per capita income in Nikiski was estimated to be \$28,347 and the median household income was estimated to be \$66,208. This represents an increase from the per capita and median household incomes reported in the year 2000 (\$20,128 and \$51,176, respectively). If inflation is taken into account by converting the 2000 values to 2010 dollars,⁶⁷³ the increase is revealed to be very slight, from a real per capita income of \$26,468 and real median household income of \$67,296 in 2000. In 2010, Nikiski ranked 75th of 305 Alaskan communities with per capita income data that year, and 57th in median household income, out of 299 Alaskan communities with household income data.

However, Nikiski's small population size may have prevented the ACS from accurately portraying economic conditions.⁶⁷⁴ An alternative estimate of per capita income is provided by economic data compiled by the Alaska Local and Regional Information (ALARI) database

⁶⁶⁷ Alaska Dept. of Environmental Conservation (2012). *List of Contaminated Site Summaries By Region*. Retrieved April 17, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

⁶⁶⁸ Unless otherwise noted, all monetary data are reported in nominal values.

⁶⁶⁹ World Port Source website (2012). *Port of Nikiski*. Retrieved January 24, 2012 from http://www.worldportsource.com/ports/USA_AK_Port_of_Nikiski_4141.php.

⁶⁷⁰ 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/>.

⁶⁷¹ 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.

⁶⁷² 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>.

⁶⁷³ 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>).

⁶⁷⁴ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

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 Nikiski in 2010 is \$17,979.⁶⁷⁵ This estimate is slightly lower than the 2000 per capita income reported in by the U.S. Census, suggesting that caution is warranted when citing an increase in per capita income in Nikiski between 2000 and 2010. As of 2010, the Denali Commission did not consider Nikiski a “distressed” community.⁶⁷⁶ 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, a smaller percentage of Nikiski’s population (62.8%) was estimated to be in the civilian labor force than was estimated to be in the statewide civilian labor force that year (68.8%). Also in 2010, 10.2% of Nikiski residents were estimated to be living below the poverty line, compared to 9.5% of Alaskan residents overall, and the unemployment rate was estimated to be 5.6%, compared to a statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in Nikiski in 2010 was 13.2%, compared to a statewide unemployment rate estimate of 11.5%.⁶⁷⁷

Also based on the 2006-2010 ACS, the majority of Nikiski’s workforce was estimated to be employed in the private sector (69.2%), along with 20.6% in the public sector, and 10.4% that was self-employed. Of the 2,144 people aged 16 and over that were estimated to be employed in the civilian labor force, the greatest number of workers were estimated to be employed in educational services, health care, and social assistance (23.5%) and agriculture, forestry, fishing, hunting, and mining (21.8%). Information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 1,930 employed residents in Nikiski in 2010, of which 19.6% were employed in natural resources and mining, 18.5% in trade, transportation, and utilities, 13.1% in local government, 11.1% in education and health services, 9.1% in leisure and hospitality, 6.1% in construction, 6.1% in manufacturing, 6% in professional and business services, 3.8% in state government, 2.1% in financial activities, 1.1% in information, and 3.4% in other industries.⁶⁷⁸ As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents’ activity in the subsistence economy.

⁶⁷⁵ See footnotes 670 and 672.

⁶⁷⁶ Denali Commission (2011). *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

⁶⁷⁷ See footnote 670.

⁶⁷⁸ Ibid.

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

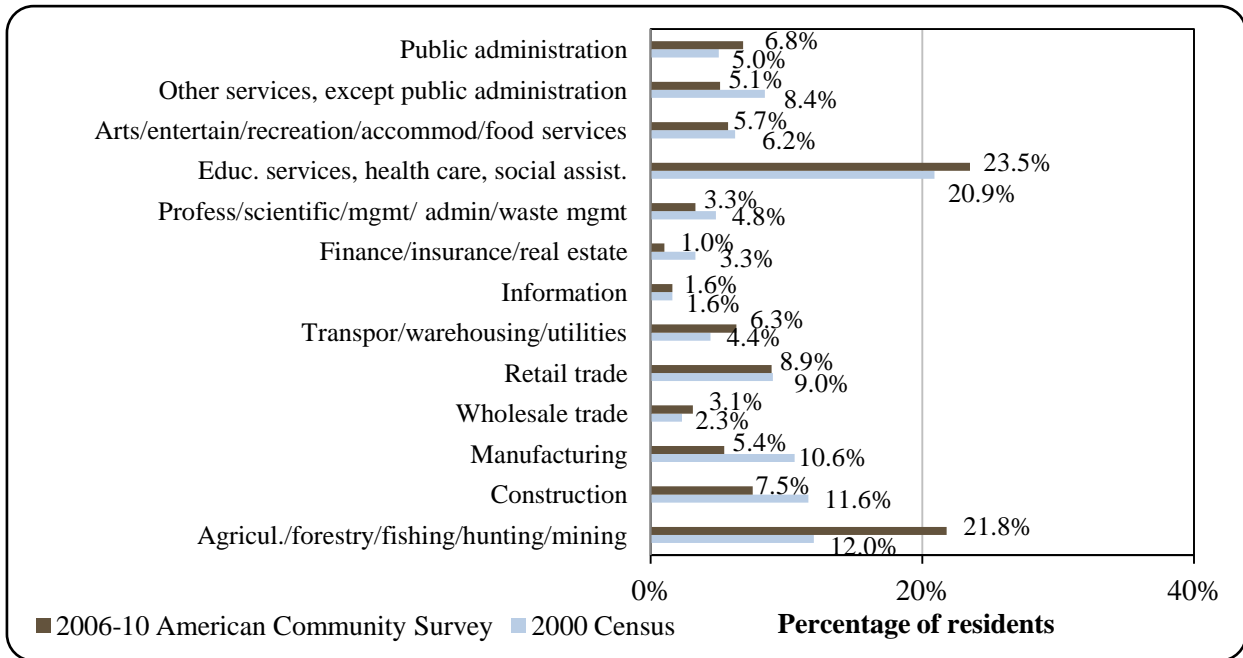
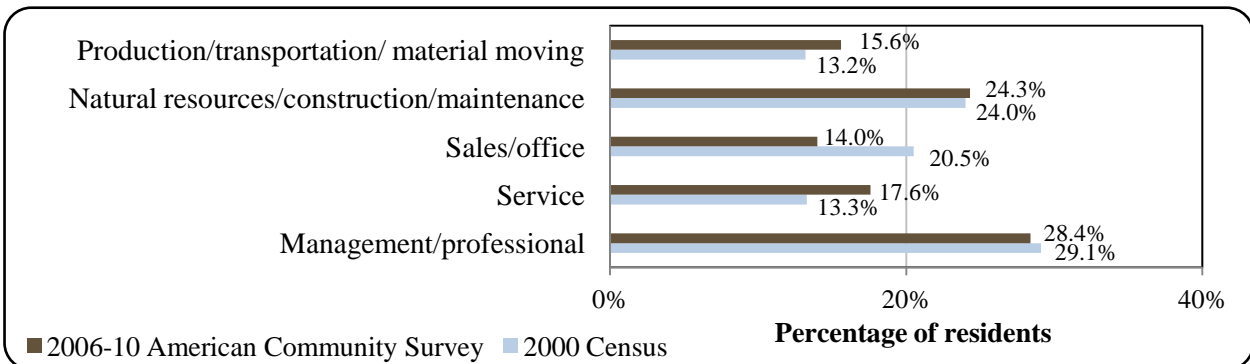


Figure 4. Local Employment by Occupation in 2000-2010, Nikiski (U.S. Census).



Governance

Nikiski is an unincorporated community in the Kenai Peninsula Borough. The community does not administer any local taxes, although the Borough does administer a 3% sales tax and 4.5 mills property tax.⁶⁷⁹ Given that Nikiski is not incorporated, there was no municipal revenue or municipal sales tax revenue between 2000 and 2010. No information was reported regarding State or Community Revenue Sharing contributions or fisheries-related grants received by the community between 2000 and 2010. This information about selected aspects of community revenue is presented in Table 2.

⁶⁷⁹ 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.

Nikiski was not included under the Alaska Native Claims Settlement Act (ANCSA), and is not federally recognized as a Native village.⁶⁸⁰ The nearest offices of the Alaska Department of Fish and Game (ADF&G) and Alaska Department of Natural Resources are located in Soldotna. The closest offices of the National Marine Fisheries Service (NMFS) are located in Homer and Anchorage. Anchorage also has the closest offices of the Alaska Department of Commerce, Community, and Economic Development and the U.S. Bureau of Citizenship and Immigration Services.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Nikiski 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.

Infrastructure

Connectivity and Transportation

Nikiski is connected to the Sterling Highway, which provides road access to Anchorage. The nearest commercial airport is located in the City of Kenai, 15 miles away by road. The price of a roundtrip ticket by plane from Kenai to Anchorage in early June of 2012 was \$179.⁶⁸¹ There are also two private airstrips in the vicinity of Nikiski,⁶⁸² one of which is owned by Shell Oil.⁶⁸³

⁶⁸⁰ 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.

⁶⁸¹ This price was calculated on November 21, 2011 using kayak.com.

⁶⁸² See footnote 680.

Facilities

Water in Nikiski is derived from wells. A majority of homes use individual wells, and a community well is also in use. Those homes without wells haul or have water delivered. Most homes are fully plumbed and use individual septic tank systems, and the remaining residences use outhouses. The Kenai Peninsula Borough operates a transfer facility on Poolside Avenue, and refuse collection services are provided by Peninsula Sanitation. Alaska Electric G&T Homer Electric Association provides electricity in Nikiski using natural gas.⁶⁸⁴

Safety services are provided by state troopers stationed in Kenai. Fire and rescue services are provided by the Nikiski Fire Department / Emergency Medical Services (EMS) and the Borough Central Emergency Services (CES) Fire / Rescue / Emergency Medical Technicians (EMT). Community facilities in Nikiski include a Boys and Girls Club, senior services, the Nikiski pool, and two school libraries. Phone, internet, and cable are available in Nikiski.⁶⁸⁵

Regarding fisheries related infrastructure, docks at Port Nikiski are privately-owned and utilized for servicing offshore drilling platforms only.⁶⁸⁶ The nearby City of Kenai has a city dock and boat ramp, as well as a number of private commercial fish processing docks. Moorage is also available using buoys anchored in the Kenai River.⁶⁸⁷

Medical Services

A full range of medical services are provided at the Central Peninsula General Hospital, located 25 miles away by road in Soldotna. A smaller range of services, including diagnostic imaging and lab services, are available at the Kenai Health Center, located 15 miles south of Nikiski in the City of Kenai.⁶⁸⁸ Alternative health care in Nikiski is provided by the Nikiski Fire Department. Emergency services have highway, coastal, and helicopter access, and are provided by 911 Telephone service and paid EMS service.⁶⁸⁹

Educational Opportunities

Two schools are present in Nikiski. The Nikiski North Star Elementary School serves pre-school through 6th grade. As of 2011, North Star Elementary had 421 students and 29 teachers. The Nikiski Middle/Senior High School serves grades 7 through 12. As of 2011, 393 students were in attendance and the school had 25 teachers.⁶⁹⁰

⁶⁸³ World Port Source website (2012). *Port of Nikiski*. Retrieved January 24, 2012 from http://www.worldportsource.com/ports/USA_AK_Port_of_Nikiski_4141.php.

⁶⁸⁴ See footnote 680.

⁶⁸⁵ Ibid.

⁶⁸⁶ World Port Source website (2012). *Port of Nikiski*. Retrieved January 24, 2012 from http://www.worldportsource.com/ports/USA_AK_Port_of_Nikiski_4141.php.

⁶⁸⁷ See footnote 680.

⁶⁸⁸ Central Peninsula Hospital (n.d.). *Kenai Health Center*. Retrieved June 14, 2012 from <http://www.cphg.org/body.cfm?id=65>.

⁶⁸⁹ See footnote 680.

⁶⁹⁰ 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

Nikiski is located in the traditional territory of the Kenaitze people, a branch of Athabascan Native Americans. Historically, the Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.⁶⁹¹ The Nikiski area was homesteaded in the 1940s and grew along with the oil industry, which continues to be the primary economic driver in the community.⁶⁹² In addition, some Nikiski residents became involved in commercial fisheries that had developed in the region following the purchase of Alaska by the U.S. in 1867. Today a significant number of Nikiski residents are engaged in the commercial and sportfishing industries, and several also participate in subsistence activities (see the *Commercial Fishing*, *Recreational Fishing*, and *Subsistence Fishing* sections of this profile below).

Commercial harvest of salmon in Cook Inlet began in 1882⁶⁹³ with the development of a cannery at the mouth of the Kasilof River, in English Bay. An additional 17 canneries had been built in central Alaska by 1890.⁶⁹⁴ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.⁶⁹⁵ In the 1920s, herring had become increasingly valued for oil and meal, and a number of reduction plants were built. Commercial crab fisheries began to develop in the GOA in the 1930s. Historically, a sizable spawning biomass of herring was found in western Cook Inlet, and Lower Cook Inlet also supported commercial fisheries for Dungeness, king, and Tanner crab. However, crab and herring fisheries are currently closed due to low stock abundance.^{696,697}

Today, ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only

⁶⁹¹ Kenaitze Indian Tribe (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

⁶⁹² 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.

⁶⁹³ 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>.

⁶⁹⁴ Cook, Linda, and Frank Norris (1998). *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

⁶⁹⁵ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

⁶⁹⁶ 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>.

⁶⁹⁷ Alaska Dept. of Fish and Game (2012). *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.⁶⁹⁸

Groundfish and crab fisheries that occur within 3 nautical miles (nm) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nm in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission. Cook Inlet is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch (TAC) set by NMFS applied to both fisheries. Beginning in 1997, an additional ‘state-waters fishery’ for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.⁶⁹⁹

Nikiski is not eligible to participate in either the Community Development Quota program or the Community Quota Entity program.

Processing Plants

According to ADF&G’s 2010 Intent to Operate list, two processing facilities were in operation in Nikiski. Information about and the history of these facilities is presented below.

Ocean Beauty Seafoods LLC was founded in 1910 as Washington Fish & Oyster in Seattle, and it began its operations in Alaska in 1930. Ocean Beauty has a freezer plant located on the Kenai Peninsula about 15 miles north of the town of Nikiski. The Nikiski plant processes fresh and frozen coho, chum, pink, sockeye, and Chinook salmon, salmon roe, halibut, and cod. Operating seasons typically run from the beginning of April thru the end of October, during which time the plant employs approximately 150 people. Ocean Beauty provides work-related clothing such as gloves, aprons, and rain gear to its seafood processing workforce.⁷⁰⁰

Pacific Alaska Shellfish originated in Portland, Oregon in 1941. Today Pacific Alaska is the “largest vertically-integrated, independently-owned seafood company in North America.” Its Nikiski facility focuses solely on processing of Alaskan razor clams, with a season that runs from May through August.⁷⁰¹ According to a survey of plant managers conducted by the AFSC in 2011, the plant began operations in 1985 and employs up to 30 workers from May through August.

⁶⁹⁸ See footnote 693.

⁶⁹⁹ See footnote 696.

⁷⁰⁰ Ocean Beauty Seafood, LLC. (n.d.). *Employment Information – Nikiski Facility*. Retrieved January 25, 2012 from http://www.oceanbeauty.com/employment/info_CIP.htm.

⁷⁰¹ Pacific Seafood (2011). *Pacific Alaska Shellfish*. Retrieved January 25, 2012 from <http://www.pacseafood.com/default.aspx?page=1>.

Fisheries-Related Revenue

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

Commercial Fishing

Although the oil industry dominates Nikiski's economy, the community is located in close proximity to abundant fishing grounds, and the commercial fishing industry has a strong presence. Between 2000 and 2010, Nikiski residents participated in state and federal fisheries as crew members, vessel owners, and permit and quota share holders. Several fish buyers and fish processors were also active in the community between 2000 and 2010.

In 2010, 51 Nikiski residents held commercial fishing crew licenses and 23 fishing vessels were primarily owned by residents (Table 5). Also in 2010, 46 Nikiski residents held a total of 49 CFEC permits. A majority of the CFEC permits (43) were held for salmon drift and set gillnet fisheries in both Cook Inlet and Bristol Bay. Of these, 77% were actively fished in 2010. The number of salmon permit holders and total salmon permits decreased by approximately 20% between 2000 and 2010, from 56 permit holders and 56 permits in 2000 to 45 permit holders and 43 permits held in 2010, while the percentage of salmon permits that were actively fished did not change substantially over this period.

Other CFEC permits held in 2010 included three herring permits held by three individuals in three different herring fisheries (Cook Inlet herring roe gillnet, Kodiak herring roe gillnet, and Norton Sound herring roe and food/bait gillnet fisheries), and three halibut permits held by three permit holders, all in the statewide halibut longline fishery using vessels under 60 feet. In 2010, the Cook Inlet herring permit and two halibut permits were actively fished. The number of halibut permits declined steadily between 2000 and 2010, from 11 to 3. The number of herring permits increased from five in 2000 to eight in 2005, and then declined again to three by 2010. Nikiski residents also held permits in federal fisheries, including three groundfish License Limitation Permits (LLP), one crab LLP, and two Federal Fisheries Permits (FFP). None of these LLPs or FFPs were actively fished in 2010. Information about CFEC, LLP, and FFP permits is presented in Table 4.

In 2000, there were 12 quota share account holders in the federal halibut catch share fishery, declining to 5 by 2010. Total quota shares held remained relatively stable between 2000 and 2010, however, increasing from 353,146 total shares in 2000 to 394,609 shares held in 2004 and 2005, then declining slightly to 325,174 shares held in 2010. The annual halibut individual fishing quota (IFQ) allotment increased by 43% between 2000 and 2007, and then declined by 2010 to a level only 9% higher than the 2000 allotment. In addition, between 2000 and 2010, one quota share account was held each year in the federal sablefish catch share fishery. The total number of sablefish quota shares held remained constant over the period (1,643). Sablefish IFQ allotment fluctuated somewhat, increasing by 28% between 2000 and 2004, and eventually declining to 21% less than the 2000 allotment by 2010. No quota share accounts or quota shares were held by Nikiski residents in federal crab catch share fisheries during this period. Information about federal catch share participation is presented in Tables 6 through 8.

It is important to note that, in the earlier and middle years of the 2000-2010 period, several Nikiski residents also held groundfish and sablefish CFEC permits. Between 2002 and 2005, one sablefish permit was held in the Prince William Sound fixed gear fishery (maximum

vessel length of 50 feet). Between 2000 and 2005, a varying number of permits were held each year in groundfish fisheries, including permits for the statewide lingcod mechanical jig fishery, and miscellaneous statewide saltwater finfish fisheries using hand troll, pot gear on vessels under 60 feet, and mechanical jig. The last year during the decade in which a groundfish CFEC permit was actively fished was 2000, and the last year a sablefish CFEC permit was actively fished was 2005. In the early years of the decade, Nikiski residents also held salmon permits for Prince William Sound purse seine and drift gillnet and Kodiak set gillnet fisheries. In 2000 and 2001, halibut permits were also held for statewide fisheries using mechanical jig and longline vessels over 60 feet. Finally, between 2004 and 2006, several herring permits were held by Nikiski in the Bristol Bay herring roe fishery (Table 4).

Nikiski ranked 27th out of 67 Alaskan ports that received commercial fisheries landings in 2010. That year, nine fish buyers operated in Nikiski. A total of 5,082,990 net pounds of salmon were landed, generating \$7,825,859 in ex-vessel revenue. In most other years there were fewer fish buyers in operation, and landings and ex-vessel revenue information in Nikiski is considered confidential due to the small number of buyers, with the exception of 2005. That year, nine fish buyers were present in Nikiski, and vessels delivered 34,629 net pounds of herring for an ex-vessel value of \$22,320. Information about landings and ex-vessel revenue generated in Nikiski is presented in Table 9, and the number of fish buyers and shore-side processors operating in the community each year is presented in Table 5.

Information about salmon harvest by Nikiski vessel owners, including all delivery locations, was reported for all years between 2000 and 2010, while halibut and ‘other groundfish’ landings were only reported for some years. Nikiski vessel owners landed an average of 580,625 net pounds of salmon per year, valued at \$424,140 in ex-vessel revenue on average. In 2000, 90,774 net pounds of halibut and 1,596 net pounds of groundfish were landed, for ex-vessel values of \$233,938 and \$843, respectively. In 2001, 100,364 net pounds of halibut were landed by Nikiski vessel owners, valued at \$206,419, reflecting a decrease in value per pound of halibut between 2000 and 2001. Finally, in 2003, 1,197 net pounds of groundfish were reported as landed by Nikiski vessel owners, for an ex-vessel revenue of \$629. Information about landings and ex-vessel revenue for other years is considered confidential due to the small number of participants. See Table 10 for landings and ex-vessel revenue generated by Nikiski vessel owners between 2000 and 2010.

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

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

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

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

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

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

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

⁵ Total municipal revenue represents the total revenue that the city reports each year in its 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, Nikiski: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	4	4	4	4	4	4	3	3	3	3	3
	Active permits	1	0	1	1	1	1	1	1	1	1	0
	% of permits fished	25%	0%	25%	25%	25%	25%	33%	33%	33%	33%	0
	Total permit holders	4	4	4	4	4	4	3	3	3	3	3
Crab (LLP) ¹	Total permits	1	1	1	1	1	1	1	1	1	1	1
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	1	1	1	1	1	1	1	1	1	1	1
Federal Fisheries Permits ¹	Total permits	3	3	3	2	2	2	2	2	3	2	2
	Fished permits	0	0	0	0	0	1	2	2	1	1	0
	% of permits fished	0%	0%	0%	0%	0%	50%	100%	100%	33%	50%	0%
	Total permit holders	3	3	3	2	2	2	2	2	3	2	2
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	11	9	7	6	7	5	5	5	4	4	3
	Fished permits	6	5	5	4	5	4	4	4	3	3	2
	% of permits fished	55%	56%	71%	67%	71%	80%	80%	80%	75%	75%	67%
	Total permit holders	9	8	7	6	7	5	5	5	4	4	3
Herring (CFEC) ²	Total permits	5	5	4	4	6	8	7	5	5	4	3
	Fished permits	0	0	0	0	0	1	1	1	1	1	1
	% of permits fished	0%	0%	0%	0%	0%	13%	14%	20%	20%	25%	33%
	Total permit holders	5	5	4	4	6	8	7	5	5	4	3

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	0	0	1	1	1	1	0	0	0	0	0
	Fished permits	0	0	1	1	0	1	0	0	0	0	0
	% of permits fished	-	-	100%	100%	0%	100%	-	-	-	-	-
	Total permit holders	0	0	1	1	1	1	0	0	0	0	0
Groundfish (CFEC) ²	Total permits	5	4	1	1	2	1	0	0	0	0	0
	Fished permits	2	0	0	0	0	0	0	0	0	0	0
	% of permits fished	40%	0%	0%	0%	0%	0%	-	-	-	-	-
	Total permit holders	4	3	1	1	2	1	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	56	57	58	52	55	53	55	52	51	44	43
	Fished permits	45	44	48	41	43	45	42	41	39	34	33
	% of permits fished	80%	77%	83%	79%	78%	85%	76%	79%	76%	77%	77%
	Total permit holders	56	60	61	53	57	55	54	53	50	46	45
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>77</i>	<i>75</i>	<i>71</i>	<i>64</i>	<i>71</i>	<i>68</i>	<i>67</i>	<i>62</i>	<i>60</i>	<i>52</i>	<i>49</i>
	<i>Fished permits</i>	<i>53</i>	<i>49</i>	<i>54</i>	<i>46</i>	<i>48</i>	<i>51</i>	<i>47</i>	<i>46</i>	<i>43</i>	<i>38</i>	<i>36</i>
	<i>% of permits fished</i>	<i>69%</i>	<i>65%</i>	<i>76%</i>	<i>72%</i>	<i>68%</i>	<i>75%</i>	<i>70%</i>	<i>74%</i>	<i>72%</i>	<i>73%</i>	<i>73%</i>
	<i>Permit holders</i>	<i>62</i>	<i>64</i>	<i>64</i>	<i>56</i>	<i>63</i>	<i>60</i>	<i>57</i>	<i>55</i>	<i>52</i>	<i>47</i>	<i>46</i>

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Nikiski: 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 Nikiski ²	Total Net Pounds Landed In Nikiski ^{2,5}	Total Ex-Vessel Value Of Landings In Nikiski ^{2,5}
2000	92	1	1	37	14	0	-	-
2001	63	2	1	40	15	84	-	-
2002	56	3	2	44	23	79	-	-
2003	59	1	2	46	24	0	-	-
2004	59	3	2	48	23	74	-	-
2005	60	9	2	28	8	13	406,024	\$250,668
2006	55	2	2	29	11	0	-	-
2007	59	0	3	27	9	0	0	\$0
2008	53	0	2	28	13	0	0	\$0
2009	55	3	2	25	14	148	-	-
2010	51	9	2	23	13	231	5,164,599	\$7,876,457

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

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

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

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

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

⁵ Totals only represent non-confidential data.

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

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	12	353,146	34,967
2001	11	335,301	39,695
2002	11	316,424	38,732
2003	10	387,080	47,367
2004	10	394,609	53,473
2005	10	394,609	54,354
2006	9	375,121	51,121
2007	8	367,592	52,083
2008	8	375,346	49,163
2009	6	367,168	43,088
2010	5	325,174	35,153

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 Nikiski: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (pounds)
2000	1	1,643	148
2001	1	1,643	140
2002	1	1,643	140
2003	1	1,643	167
2004	1	1,643	189
2005	1	1,643	188
2006	1	1,643	165
2007	1	1,643	160
2008	1	1,643	142
2009	1	1,643	129
2010	1	1,643	117

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 Nikiski: 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 Nikiski: 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
Finfish	-	-	-	-	-	-	-	0	0	-	-
Halibut	-	-	-	-	-	-	-	0	0	-	-
Herring	-	-	-	-	-	34,629	-	0	0	-	-
Other Groundfish	-	-	-	-	-	-	-	0	0	-	-
Other Shellfish	-	-	-	-	-	-	-	0	0	-	-
Pacific Cod	-	-	-	-	-	-	-	0	0	-	-
Pollock	-	-	-	-	-	-	-	0	0	-	-
Sablefish	-	-	-	-	-	-	-	0	0	-	-
Salmon	-	-	-	-	-	-	-	0	0	-	5,082,990
<i>Total²</i>	-	-	-	-	-	34,629	-	0	0	-	5,082,990
	<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
Finfish	-	-	-	-	-	-	-	\$0	\$0	-	-
Halibut	-	-	-	-	-	-	-	\$0	\$0	-	-
Herring	-	-	-	-	-	\$22,320	-	\$0	\$0	-	-
Other Groundfish	-	-	-	-	-	-	-	\$0	\$0	-	-
Other Shellfish	-	-	-	-	-	-	-	\$0	\$0	-	-
Pacific Cod	-	-	-	-	-	-	-	\$0	\$0	-	-
Pollock	-	-	-	-	-	-	-	\$0	\$0	-	-
Sablefish	-	-	-	-	-	-	-	\$0	\$0	-	-
Salmon	-	-	-	-	-	-	-	\$0	\$0	-	\$7,825,859
<i>Total²</i>	-	-	-	-	-	\$22,320	-	\$0	\$0	-	\$7,825,859

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.

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Nikiski 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	90,774	100,364	-	-	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	1,596	-	-	1,197	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	352,514	501,967	750,465	507,363	907,972	916,775	583,951	633,586	429,454	473,452	329,376
<i>Total²</i>	<i>444,884</i>	<i>602,331</i>	<i>750,465</i>	<i>508,560</i>	<i>907,972</i>	<i>916,775</i>	<i>583,951</i>	<i>633,586</i>	<i>429,454</i>	<i>473,452</i>	<i>329,376</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	\$233,938	\$206,419	-	-	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	\$843	-	-	\$629	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	\$242,646	\$303,165	\$360,468	\$338,738	\$572,369	\$725,220	\$395,972	\$526,936	\$359,440	\$430,779	\$409,802
<i>Total²</i>	<i>\$477,427</i>	<i>\$509,584</i>	<i>\$360,468</i>	<i>\$339,367</i>	<i>\$572,369</i>	<i>\$725,220</i>	<i>\$395,972</i>	<i>\$526,936</i>	<i>\$359,440</i>	<i>\$430,779</i>	<i>\$409,802</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

There is a high level of recreational fishing activity on the Kenai Peninsula overall. The recreational fishing industry is a large employer in Nikiski, along with tourism-related services in general.⁷⁰² Although few sport fish guide businesses were active in Nikiski during the 2000-2010 period, there were between 4 and 11 licensed sport fish guides present in the community each year from 2000 to 2008. Between 2000 and 2010, the number of Nikiski residents that purchased sportfishing licenses (irrespective of point of sale) varied between 732 and 922 per year. The number of fishing licenses sold in Nikiski was much smaller, varying between 100 and 302 per year. Many residents likely travel to nearby Kenai and other larger communities in the area to purchase licenses and fishing gear. Information about sportfishing activity in Nikiski is presented in Table 11.

The Alaska Statewide Harvest Survey,⁷⁰³ conducted by ADF&G between 2000 and 2010, noted the species that are known to be targeted by private anglers in Nikiski. In freshwater, anglers targeted Chinook, coho, sockeye, pink, and chum salmon, rainbow trout, Dolly Varden, and northern pike. In saltwater, anglers pursued Chinook, coho, and sockeye salmon, Pacific halibut, rockfish, lingcod, Pacific cod, and sablefish. The survey also noted sport harvest of razor clams, hardshell clams, and shrimp by Nikiski residents. No kept/release log book data were reported for fishing charters out of Nikiski in 2010.⁷⁰⁴

Nikiski is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, saltwater and freshwater sportfishing at this regional level was substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska residents logged 20,292 saltwater angler days and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska resident anglers, and the opposite was true of freshwater sportfishing. For both Alaska resident and non-Alaska resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased between 2000 and 2010. This information about regional sportfishing activity in Nikiski is presented in Table 11.

⁷⁰² 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.

⁷⁰³ 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).

⁷⁰⁴ 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, Nikiski: 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 Nikiski ²
2000	0	4	932	302
2001	0	7	976	218
2002	0	9	964	183
2003	0	11	922	169
2004	0	11	869	252
2005	1	10	770	150
2006	1	6	763	100
2007	1	9	793	100
2008	0	4	732	177
2009	0	0	791	107
2010	0	0	756	139

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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

Nikiski is located in the traditional territory of the Kenaitze people, a branch of Athabascan Indians. Historically, the Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.⁷⁰⁵ Today, the economy of Nikiski is driven by the oil industry. Subsistence activity is not a primary economic driver, although a number of Nikiski residents engage in subsistence harvest.⁷⁰⁶

No information was reported by ADF&G between 2000 and 2010 regarding per capita subsistence harvest or the percentage of households in Nikiski participating in subsistence harvest activities (Table 12). However, information was available about subsistence harvest levels of salmon and halibut. Between 2000 and 2008, the number of subsistence salmon permits issued to Nikiski households varied between one and eight. In some years, several hundred sockeye and coho salmon were harvested for subsistence purposes by Nikiski households (Table 13). Between 2003 and 2009, the number of Subsistence Halibut Registration Certificates (SHARC) issued to Nikiski residents fluctuated between 3 and 12. In 2009, 10 SHARC cards were issued, 5 were returned, and a total of 2,007 pounds of halibut were reported harvested for subsistence purposes. Nine SHARC cards were issued in 2010, but no information was reported regarding the number returned or pounds harvested. Information about subsistence harvest of halibut is presented in Table 14.

No information was reported by ADF&G regarding total pounds of marine invertebrates or non-salmon fish harvested in Nikiski between 2000 and 2010 (Table 13). In addition, no information was reported by management agencies regarding subsistence harvest of marine mammals by residents of Nikiski during this period (Table 15).

⁷⁰⁵ Kenaitze Indian Tribe (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

⁷⁰⁶ 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.

Table 12. Subsistence Participation by Household and Species, Nikiski: 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, Nikiski: 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	1	1	n/a	n/a	12	n/a	26	n/a	n/a
2001	4	4	n/a	n/a	n/a	n/a	1	n/a	n/a
2002	1	4	1	n/a	n/a	n/a	20	n/a	n/a
2003	1	5	5	n/a	n/a	n/a	5	n/a	n/a
2004	8	6	6	4	12	n/a	161	n/a	n/a
2005	6	6	6	1	22	1	135	n/a	n/a
2006	4	4	3	3	100	6	67	n/a	n/a
2007	7	7	62	15	55	2	399	n/a	n/a
2008	4	4	n/a	2	28	n/a	93	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, Nikiski: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	3	n/a	n/a
2004	7	5	499
2005	7	1	464
2006	8	4	1,556
2007	10	5	2,290
2008	12	5	1,401
2009	10	5	2,007
2010	9	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, Nikiski: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Nikolaevsk (NICK-oh-lyvsk)



People and Place

Location

Nikolaevsk is located on the Kenai Peninsula, several miles inland from Anchor Point. It lies several miles from the Sterling Highway.⁷⁰⁷ The unincorporated area covers 40.7 square miles of land.⁷⁰⁸ The town is approximately 115 miles southwest of Anchorage and 10 miles north of Homer. Nikolaevsk is located in the Homer Recording District and the Kenai Peninsula Borough Census Area.

*Demographic Profile*⁷⁰⁹

In 2010, there were 318 residents in Nikolaevsk, ranking it as the 159th largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population of Nikolaevsk decreased by 14.3%. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents declined by 8.7%. Despite the overall decline, the average annual growth rate was close to zero during this period (0.05%). This is explained by a dip in population to 297 in 2006, followed by a rebound to 315 residents by 2009.

In 2010, the majority of the population of Nikolaevsk identified themselves as White (95.2%), along with 3.5% who identified as American Indian or Alaska Native, 0.3% as Asian, 0.3% as “some other race,” and 3.5% who identified with two or more races. In addition, 4.4% of Nikolaevsk’s population identified themselves as Hispanic in 2010. The percentage of the population that identified as White increased between 2000 and 2010, from 81.7% to 92.5%, although this was an overall decrease from the percentage of the population that identified as White in 1990 (96.8%). The percentage of the population that identified as American Indians and Alaska Natives increased from 1.3% in 1990 to 1.7% in 2000, and 3.5% in 2010. The change in population from 1990 to 2010 is provided in Table 1, and changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

In a survey conducted by NOAA’s Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that approximately 120 people come to Nikolaevsk as seasonal workers between May and August each year, and the community’s population peaks in July. They indicated that these population fluctuations are mostly driven by employment in fishing sectors. In addition to seasonal workers, community leaders noted that approximately 20 year-round residents of Nikolaevsk work for local shore-side processors.

⁷⁰⁷ 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.

⁷⁰⁸ Nikolaevsk Community Council (1999). *Community Action Plan for Nikolaevsk, Alaska*. Retrieved January 27, 2012 from <http://www.commerce.state.ak.us/dca/plans/Nikolaevsk-GCP-1999.pdf>.

⁷⁰⁹ 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>.

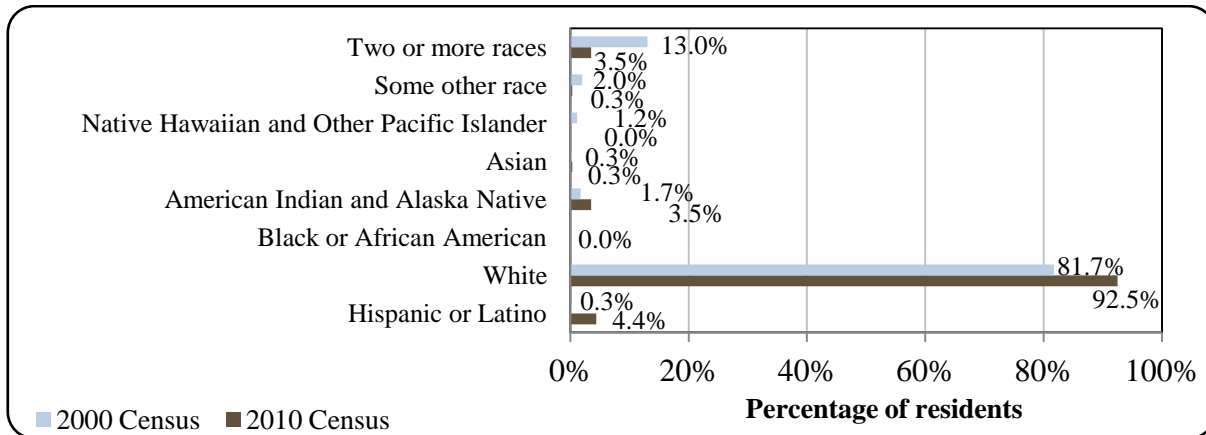
Table 1. Population in Nikolaevsk from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	371	-
2000	345	-
2001	-	345
2002	-	335
2003	-	315
2004	-	309
2005	-	306
2006	-	297
2007	-	304
2008	-	295
2009	-	315
2010	318	-

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

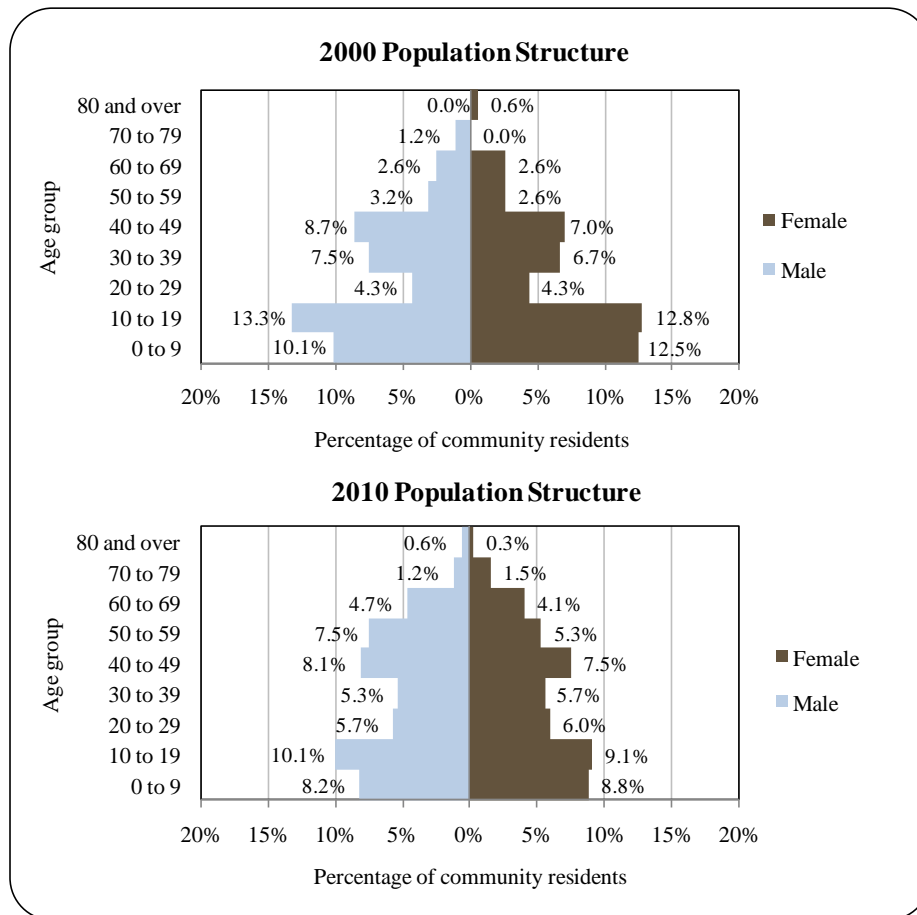


In 2010, the average household size in Nikolaevsk was 2.97, a decrease from 4.6 in 1990 and 3.59 in 2000. The number of households in Nikolaevsk has increased over the same period, from 80 households in 1990 and 96 in 2000, to 107 in 2010. Of the 150 housing units surveyed for the 2010 U.S. Census, 57.3% were owner-occupied, 14% were rented, and 28.7% were vacant or used only seasonally. Between 1990 and 2010, no Nikolaevsk residents were recorded as living in group quarters.

In 2010, the gender makeup of Nikolaevsk’s population (51.6% male and 48.4% female) was slightly more gender balanced than the state population as a whole, which was made up of

52% males and 48% females. The median age of Nikolaevsk residents was 32.3 years, slightly younger than the national average of 36.8 years and the median age for Alaska, 33.8 years. There were disproportionately fewer people in the 20 to 39 age cohorts in both 2000 and 2010. In 2010, there was a relatively even spread of males and females across age categories in Nikolaevsk. That same year, 12.5% of the population was 60 or older. The overall population structure of Nikolaevsk in 2000 and 2010 is shown in Figure 2.

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



In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),⁷¹⁰ 79.1% of Nikolaevsk residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaskan residents overall. Also in 2010, 16.3% of the population was estimated to have less than a 9th grade education, compared to 3.5% of Alaskan residents overall; 4.7% were estimated to have a 9th to 12th grade education

⁷¹⁰ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

but no diploma, compared to 5.8% of Alaskan residents overall; 34.1% were estimated to have some college but no degree, compared to 28.3% of Alaskan residents overall; 10.1% were estimated to have an Associate's degree, compared to 8% of Alaskan residents overall; 6.2% were estimated to have a Bachelor's degree, compared to 17.4% of Alaskan residents overall; and 3.1% were estimated to have a graduate or professional degree, compared to 9.6% of Alaskan residents overall.

History, Traditional Knowledge, and Culture

Nikolaevsk is the location of a settlement of *Staroveri*, or “Russian Old Believers.”⁷¹¹ The predecessors of current Nikolaevsk residents came to the Kenai Peninsula in the 1960s by way of Woodburn, Oregon, after time spent in China and Turkey and various other intermediary countries (see the *Additional Information* section for more history).⁷¹² The first Old Believer settlers on the Kenai Peninsula received a grant from the Tolstoy Foundation in New York and purchased land there in 1967.⁷¹³ In 1968, 5 Old Believer families settled in Nikolaevsk, and by 1970 there were 70 residences and 20 families there. In addition to the main village, several areas located in the hills to the east were also settled as satellite communities.⁷¹⁴ The first school opened in an 8-by-20-foot trailer in 1972. Until 1980, students attended classes through the 9th grade, and then began their adult lives. The town was named to honor St. Nicholas, the patron saint of the town's church. Nikolaevsk did not appear in U.S. Census records until 1990.⁷¹⁵

Today, the population of Nikolaevsk continues to be made up primarily of Russian Old Believers, along with some non-Russians, living in three distinct settlements within the land purchase area. The Old Believers in this area lead a family-oriented, self-sufficient lifestyle. Their primary food sources are from gardening, small livestock, fishing, and hunting. They use modern utilities. Families are typically very large (8 to 12 children). Traditional clothing is worn, Russian is the first language, and the church dictates that males do not shave. Residents typically marry at a young age.⁷¹⁶

Natural Resources and Environment

Nikolaevsk is located in a maritime climactic zone, dominated by the moderating effects of a marine environment and characterized by high humidity, precipitation and fog cover as well as warm winters and cool summers. Winter temperatures range from 14 to 27 °F, and summer temperatures vary from 45 to 65 °F. Average annual precipitation is 24 inches.⁷¹⁷ Average annual precipitation is 27 inches and average annual snowfall is 103 inches.⁷¹⁸

⁷¹¹ Lee Silva, A. (2009). *Unsettling Diaspora: The Old Believers of Alaska*. Masters Thesis, McGill University, Montreal. Retrieved January 26, 2012 from

http://digitool.library.mcgill.ca/webclient/StreamGate?folder_id=0&dvs=1328564311584~157.

⁷¹² Johnson, P. W. (1982). *Dress and Acculturation among Russian Old Believers in Oregon*. Masters Thesis, Oregon State University. Retrieved January 30, 2012 from <http://ir.library.oregonstate.edu/xmlui/handle/1957/7891>.

⁷¹³ 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.

⁷¹⁴ See footnote 711.

⁷¹⁵ See footnote 713.

⁷¹⁶ Ibid.

⁷¹⁷ Ibid.

⁷¹⁸ Precipitation and snowfall information retrieved December 27, 2011 from <http://www.weatherbase.com/>.

Protected areas near Nikolaevsk include Kachemak Bay State Park and Wilderness, the Kachemak Bay State Critical Habitat Area, and the Kenai Wilderness. Nikolaevsk is located approximately 15 miles from a northern segment of Kachemak Bay State Park and Wilderness, located along the northern shore of Kachemak Bay. This State Park is Alaska's first and only 'wilderness park.' A majority of the State Park's 400,000 acres are located on the southern side of Kachemak Bay, and its terrain includes mountains, glaciers, forests, and ocean. Visitors to the State Park enjoy fishing, boating, wildlife viewing, kayaking, hiking, camping, and mountain sports.⁷¹⁹ Portions of Kachemak Bay State Park and Wilderness overlap with the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.⁷²⁰

Kachemak Bay itself was designated as a State Critical Habitat Area (CHA) in 1974, and the Fox River Flats at the mouth of the Bay were also designated as a CHA in 1972. The purpose of these CHAs is to "protect and preserve habitat areas especially crucial to the perpetuation of fish and wildlife, and to restrict all other uses not compatible with that primary purpose." Eleven species of marine mammals utilize Kachemak Bay, including sea otter, Steller sea lion, harbor seal, beluga, minke, and orca whale, harbor porpoise, and Dall's porpoise, as well as a diversity of marine plants and invertebrates, birds, and fish and shellfish. The Fox River Flats and associated intertidal zone support at least 21 species of terrestrial mammals, including moose, black bear, brown bear, coyote, wolf, beaver, river otter, and small furbearers.⁷²¹ In addition to their status as CHAs, Kachemak Bay and the Fox River Flats were designated as part of the National Estuarine Research Reserve System in 1999, a network of 28 estuaries around the U.S. representing different biogeographic regions that are used for long-term research, water-quality monitoring, education, and coastal stewardship. It is the only Research Reserve located in the State of Alaska.⁷²²

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures and soil liquefaction.⁷²³ Other natural hazards that have also been identified as threats in the Kenai Peninsula Borough include flooding, wildfires, snow and avalanches, seiches, severe weather, erosion, and drought.⁷²⁴

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

⁷¹⁹ Alaska Dept. of Natural Resources (2009). *Kachemak Bay State Park and State Wilderness Park*. Retrieved January 27, 2012 from <http://dnr.alaska.gov/parks/units/kbay/kbay.htm>.

⁷²⁰ Wilderness.net website (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from <http://www.wilderness.net>.

⁷²¹ Alaska Dept. of Fish and Game (1993). *Kachemak Bay and Fox River Flats Critical Habitat Areas Management Plan*. Retrieved June 14, 2012 from http://www.adfg.alaska.gov/static/lands/protectedareas/_management_plans/kachemak_bay.pdf.

⁷²² National Estuarine Research Reserve System (n.d.). *Kachemak Bay Research Reserve website*. Retrieved June 15, 2012 from <http://www.nerrs.noaa.gov/Reserve.aspx?ResID=KBA>.

⁷²³ Kenai Peninsula Borough (2010). *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

⁷²⁴ State of Alaska (2002). *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.⁷²⁵

According to the Alaska Department of Environmental Conservation, there are no notable active environmental cleanup sites located in Nikolaevsk as of May 2012.⁷²⁶

Current Economy⁷²⁷

Although Old Believers strive to attain village self-sufficiency,⁷²⁸ emphasizing food production from subsistence fishing, hunting, and gardening,⁷²⁹ complete independence is difficult to achieve in the harsh Alaskan climate. Many Nikolaevsk residents travel to the Anchor Point and Homer areas for employment.⁷³⁰ Men find employment primarily in the fishing industry, as well as on construction crews. Women often work in fish processing plants, and cleaning, and health care services.⁷³¹ The Fefelov Mercantile, a general store and post office, is the only year-round business in Nikolaevsk, and provides groceries, fabric, and other items in town. Some boat building activity also takes place in Nikolaevsk.⁷³² Other top employers of Nikolaevsk residents in 2010 included the Kenai Peninsula Borough School, Aleutian Housing Authority, and private companies focused on auto repair and machinery and hardware sales.⁷³³

In 2000, the number of Nikolaevsk residents with commercial crew licenses was equivalent to 12.5% of the total local population, and the number of state Commercial Fisheries Entry Commission (CFEC) permit holders was equal to 5.8% of the total population. The number of Crew License Holders decreased to the equivalent of 10.4% of the population by 2010, while the percentage of residents holding CFEC permits increased to 6.6%. A number of Nikolaevsk residents also held federal permits and quota share accounts in the federal catch share halibut fishery (see *Commercial Fishing* section).

Based on household surveys conducted for the 2006-2010 ACS,⁷³⁴ in 2010, the per capita income in Nikolaevsk was estimated to be \$19,049 and the median household income was estimated to be \$43,194. This represents a significant increase from the per capita and median household incomes reported in 2000 (\$10,390 and \$37,500, respectively). The increase in per capita income remains substantial even if inflation is taken into account by converting the 2000

⁷²⁵ Resource Development Council (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

⁷²⁶ Alaska Dept. of Environmental Conservation (n.d.). *List of Contaminated Sites by Region*. Retrieved April 17, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

⁷²⁷ Unless otherwise noted, all monetary data are reported in nominal values.

⁷²⁸ Lee Silva, A. (2009). *Unsettling Diaspora: The Old Believers of Alaska*. Masters Thesis, McGill University, Montreal. Retrieved January 26, 2012 from http://digitool.library.mcgill.ca/webclient/StreamGate?folder_id=0&dvs=1328564311584~157.

⁷²⁹ Nikolaevsk Community Council (1999). *Community Action Plan for Nikolaevsk, Alaska*. Retrieved January 27, 2012 from <http://www.commerce.state.ak.us/dca/plans/Nikolaevsk-GCP-1999.pdf>.

⁷³⁰ 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.

⁷³¹ See footnote 728.

⁷³² See footnote 730.

⁷³³ 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/>.

⁷³⁴ 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>.

values to 2010 dollars,⁷³⁵ revealing a real per capita income of \$13,663 in 2000. In contrast, median household income in 2010 is shown to have decreased slightly when compared to the real median household income in 2000 of \$49,312. In 2010, Nikolaevsk ranked 162nd of 305 Alaskan communities with per capita income data, and 173rd in median household income, out of 299 Alaskan communities with household income data that year.

However, Nikolaevsk's small population size may have prevented the ACS from accurately portraying economic conditions.⁷³⁶ An alternative estimate of per capita income is provided by economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Nikolaevsk in 2010 is \$7,724.⁷³⁷ This estimate is lower than the 2000 per capita income reported in by the U.S. Census, suggesting that caution is warranted when citing an increase in per capita income in Nikolaevsk between 2000 and 2010. The lower per capita income estimate derived from the ALARI database is reflected in the fact that the community was recognized as "distressed" by the Denali Commission in 2011,⁷³⁸ indicating that over 70% of residents aged 16 and older earned less than \$16,120 in 2010. It should be noted that both ACS and DOLWD data are based on wage earnings, and these income statistics do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS, in 2010, a smaller percentage of Nikolaevsk's population (56.9%) was estimated to be in the civilian labor force in 2010 compared to the percentage of the statewide population in the civilian labor force (68.8%). In the same year, 12.3% of Nikolaevsk residents were estimated to be living below the poverty line in 2010, compared to 9.5% of Alaskan residents overall, and the unemployment rate was estimated to be 10.6%, compared to a statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in Nikolaevsk in 2010 was 10.8%, compared to a statewide unemployment rate estimate of 11.5%.⁷³⁹

Also based on the 2006-2010 ACS, the majority of Nikolaevsk's workforce was estimated to be employed in the private sector (69%), along with 19.5% that were estimated to be self-employed, 5.7% in the public sector, and 5.7% estimated to be unpaid family workers. Of the 87 people aged 16 and over that were estimated to be employed in the civilian labor force, the greatest number of workers were estimated to be employed in agriculture, forestry, fishing, hunting, and mining (25.3%), retail trade (20.7%), educational services, health care, and social assistance (14.9%), transportation, warehousing, and utilities (14.9%), and arts, entertainment, and accommodation and food services (11.5%). The number of individuals employed in farming, fishing, and forestry occupations and industries may be underestimated in census statistics as fishermen may hold another job and characterize their employment accordingly. This

⁷³⁵ 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>).

⁷³⁶ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁷³⁷ See footnotes 733 and 734.

⁷³⁸ Denali Commission (2011) *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

⁷³⁹ See footnote 733.

information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 378 employed residents in Nikolaevsk in 2010, of which 20.2% were employed in educational and health services, 18.2% in local government, 17.2% in trade, transportation, and utilities, 16.2% in leisure and hospitality, 9.1% in construction, 5.1% in financial activities, 5.1% in professional and business services, 3% in natural resources and mining, 1% in manufacturing, 1% in information, 1% in state government, and 3% in other industries.⁷⁴⁰ As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents' activity in the subsistence economy.

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

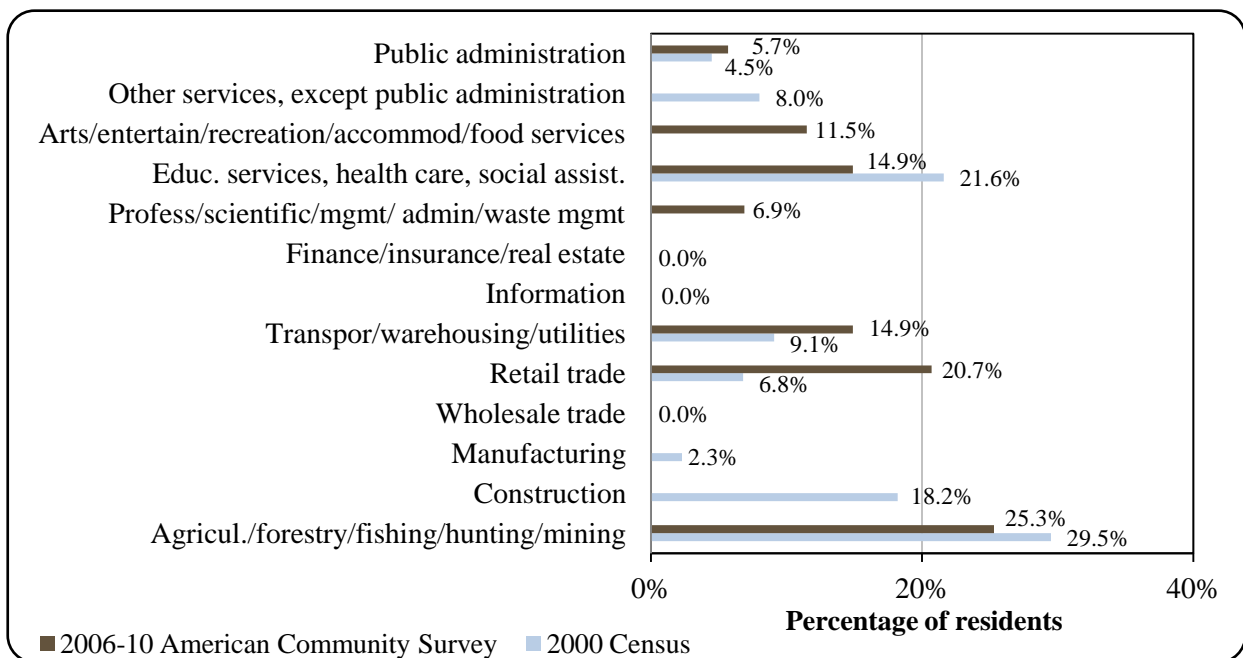
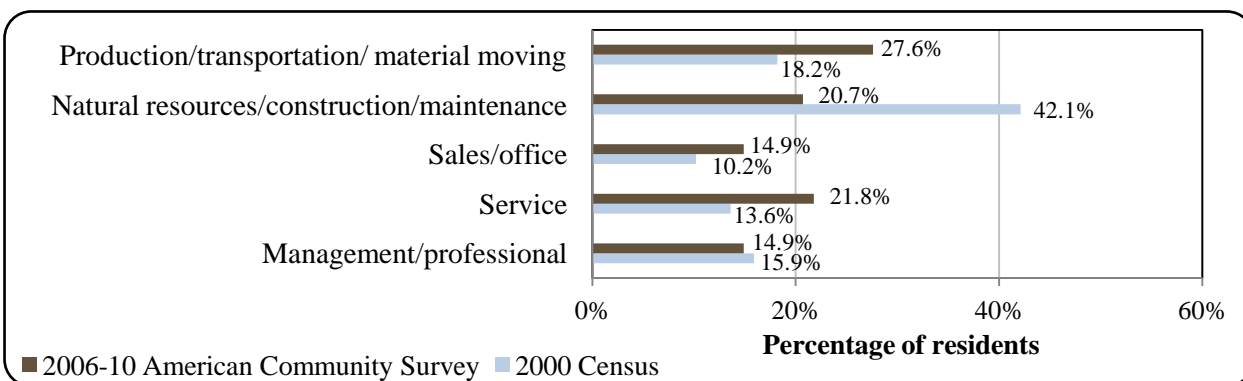


Figure 4. Local Employment by Occupation in 2000-2010, Nikolaevsk (U.S. Census).



⁷⁴⁰ Ibid.

Governance

Nikolaevsk is an unincorporated community in the Kenai Peninsula Borough. The community does not administer any local taxes, although the Borough does administer a 3% sales tax and 4.5 mills property tax.⁷⁴¹ Given that Nikolaevsk is not incorporated, there was no municipal revenue or municipal sales tax revenue between 2000 and 2010. Additionally, no information was reported regarding State and Community Revenue Sharing contributions or fisheries-related grants received by the community between 2000 and 2010. Information about selected aspects of community revenue is presented in Table 2.

Nikolaevsk was not included under the Alaska Native Claims Settlement Act (ANCSA) and is not federally recognized as a Native village. The Nikolaevsk Community Council Inc. has an office in the town.⁷⁴² The closest offices of the Alaska Department of Fish and Game (ADF&G), the Alaska Department of Natural Resources (DNR), and the National Marine Fisheries Service (NMFS) are located in Homer and Anchorage. The closest offices of the Alaska Department of Commerce, Community, and Economic Development (DCCED) and the U.S. Bureau of Citizenship and Immigration Services (BCIS) are located in Anchorage.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Nikolaevsk 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.

⁷⁴¹ 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.

⁷⁴² 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.

Infrastructure

Connectivity and Transportation

The Sterling Highway provides access to Anchorage, 220 miles away by road. Nearby Homer offers an airport, harbor, and docking facilities, as well as a state ferry landing.⁷⁴³ As of early June 2012, roundtrip airfare between Homer and Anchorage was \$239.⁷⁴⁴ As of summer 2012, a one-way adult passenger fare on the Alaska State ferry from Homer to Juneau was \$380, and \$706 to Bellingham.⁷⁴⁵

Facilities

Water in Nikolaevsk is derived from spring-fed creeks and drainages east of the community. Water is provided to homes and facilities through a piped water system. A water treatment facility, storage tank, water mains, service lines, and fire hydrants are available. Water is filtered and chlorinated. Some individual wells exist, but the quality of their water is poor and they are currently not used as a household water source. There is no piped sewer system. Both individual septic tanks and outhouses are used in the community. Nikolaevsk does not operate its own landfill. A Borough-operated refuse transfer site is located in Anchor Point at mile 157 Sterling Highway. Electricity is provided through the Homer Electric Association using hydroelectric and natural gas power sources. Telephone and internet service is available in the community, but no cable provider offers service locally.⁷⁴⁶

Public safety services are provided by the state troopers stationed in Homer. Fire fighting and rescue services are provided by Certified Community Volunteers and Fire Truck Borough Rescue / Emergency Medical Technicians based in Anchor Point. Community facilities include a community building.⁷⁴⁷ According to a survey conducted by the AFSC in 2011, community leaders reported that Nikolaevsk has a post office. They also indicated that improvements in broadband internet access are expected to be in place in the next few years, and construction of a community center and library is slated to be completed in the next 10 years.

Since Nikolaevsk is not located directly on the coast, limited fisheries-related infrastructure is available in town. As stated above, harbor and docking facilities are located in Homer, approximately 20 miles away by road.⁷⁴⁸ However, according to the 2011 AFSC survey, fishing-related services available in Nikolaevsk include boat repair (welding), fishing gear repair, and fishing gear storage. Community leaders noted in the survey that residents travel primarily to Homer to access fisheries-related businesses and services not available in Nikolaevsk.

⁷⁴³ Ibid.

⁷⁴⁴ This price was calculated on November 21, 2011 using kayak.com.

⁷⁴⁵ Prices retrieved March 7, 2012 from <http://www.dot.state.ak.us/amhs/doc/fares/XGTariffs.pdf>.

⁷⁴⁶ See footnote 742.

⁷⁴⁷ Ibid.

⁷⁴⁸ Ibid.

Medical Services

Medical services are provided in Homer, located 20 miles away by road, at the South Peninsula Hospital. Alternative health care is provided by Anchor Point Fire / Emergency Medical Services. Emergency services have highway and helicopter access.⁷⁴⁹

Educational Opportunities

One school is present in Nikolaevsk. The Nikolaevsk School serves Kindergarten through 12th grade. As of 2011, the school had 73 students and 8 teachers.⁷⁵⁰

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Nikolaevsk is located in the traditional territory of the Kenaitze people, a branch of Athabascan Native Americans. Historically, the Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.⁷⁵¹ The community of Nikolaevsk did not exist prior to its settlement by Russian Old Believers in 1968. After their arrival, these new residents soon became involved in commercial fisheries that had developed in the region following the purchase of Alaska by the U.S. in 1867, in addition to subsistence fishing, hunting, and gardening activities.⁷⁵²

Commercial harvest of salmon in Cook Inlet began in 1882,⁷⁵³ with the development of a cannery at the mouth of the Kasilof River, in English Bay. An additional 17 canneries had been built in central Alaska by 1890.⁷⁵⁴ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.⁷⁵⁵

Today, ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only

⁷⁴⁹ Ibid.

⁷⁵⁰ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

⁷⁵¹ Kenaitze Indian Tribe (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

⁷⁵² 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.

⁷⁵³ 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>.

⁷⁵⁴ Cook, Linda, and Frank Norris (1998). *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

⁷⁵⁵ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.⁷⁵⁶

Groundfish and crab fisheries that occur within 3 nautical miles (nm) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nm in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission. Cook Inlet is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch (TAC) set by NMFS applied to both fisheries. Beginning in 1997, an additional ‘state-waters fishery’ for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.⁷⁵⁷

Nikolaevsk is not eligible to participate in either the Community Development Quota (CDQ) program or the Community Quota Entity (CQE) program. According to a survey conducted by the AFSC in 2011, the community of Nikolaevsk participates actively in fisheries management processes in Alaska. They indicated that a representative from Nikolaevsk participates in North Pacific Fishery Management Council committees or advisory groups.

Processing Plants

ADF&G’s 2010 Intent to Operate list does not list a registered processing plant in Nikolaevsk. However, it did list several processing facilities located in nearby communities on the Kenai Peninsula, including Homer, Kasilof, Kenai, Nikiski, and Soldotna.

Fisheries-Related Revenue

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

Commercial Fishing

According to a survey conducted by the AFSC in 2011, community leaders stated that fishing is the natural resource-based industries upon which the Nikolaevsk economy most depends. Between 2000 and 2010, Nikolaevsk residents participated in both state and federal fisheries as vessel owners, crew license holders, and permit and quota share account holders. In

⁷⁵⁶ See footnote 753.

⁷⁵⁷ 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>.

the 2011 AFSC survey, community leaders indicated that the two primary fisheries operating out of Nikolaevsk each year are fisheries for halibut and salmon. The halibut season runs between May and November, while the salmon season runs between June and August. ADF&G permit data indicate that Nikolaevsk residents were also active in fisheries for groundfish and sablefish between 2000 and 2010 (Table 4).

In 2010, 33 Nikolaevsk residents held commercial fishing crew permits and 12 fishing vessels were primarily owned by residents. The number of vessel owners residing in Nikolaevsk stayed relatively stable between 2000 and 2010, fluctuating between 9 and 13. Between 2001 and 2010, one vessel was reported as homeported in Nikolaevsk. According to the 2011 AFSC survey, community leaders reported that, although Nikolaevsk does not have port facilities, fishing vessel owners using the community as their base of fishing operations are typically longline and gillnet vessels. No processing facilities or fish buyers were present in Nikolaevsk between 2000 and 2010. These characteristics of the Nikolaevsk commercial fishing sector are presented in Table 5.

In 2010, 21 Nikolaevsk residents held a total of 30 state-issued Commercial Fisheries Entry Commission (CFEC) permits. Ten Federal Fisheries Permits (FFP) and 25 federal License Limitation Program (LLP) permits were also held by Nikolaevsk residents. Over half of the CFEC permits (16) were held in salmon fisheries, including Prince William Sound purse seine, Cook Inlet drift gillnet, and Alaska Peninsula drift gillnet fisheries. Of these, 81% were actively fished in 2010. The number of salmon permit holders fluctuated between 8 and 17 during the 2000-2010 period. Other CFEC permits held in 2010 included eight halibut permits held by eight individuals (statewide longline; vessels under 60 feet), four groundfish permits held by four individuals (miscellaneous saltwater finfish, statewide longline vessels under 60 feet, statewide mechanical jig, and Gulf of Alaska longline vessels under 60 feet), and two sablefish permits held by two permit holders (statewide longline vessels under 60 feet). Also in 2010, 5 out of 24 groundfish LLP permits and 6 out of 10 FFPs were actively fished by Nikolaevsk residents. One federal crab LLP permit was also held, but was not fished in any year between 2000 and 2010. CFEC and federal permit information is presented in Table 4.

In 2000, 13 Nikolaevsk residents held quota share accounts in the federal halibut catch share fishery. This number increased to 16 in 2005, then declined to 12 by 2010. Total quota shares held followed a similar pattern, increasing from 1,374,667 in 2000 to 1,750,742 held in 2005, then declining to 865,447 by 2010. The annual halibut individual fishing quota (IFQ) allotment increased by 21% between 2000 and 2005, and then declined by 2010 to a level 15% lower than the 2000 allotment. In 2000, seven Nikolaevsk residents held quota share accounts in the federal sablefish catch share fishery. This number declined to two by 2010, while total shares held declined from 271,934 in 2000 to 48,923 in 2010. Annual sablefish IFQ allotment fluctuated over the period, increasing by 51% between 2000 and 2004, and eventually declining to 14% lower value than the 2000 allotment by 2010. No quota share accounts were held by Nikolaevsk residents in federal crab catch share fisheries during the 2000-2010 period. Information about federal catch share participation is presented in Tables 6 through 8.

No landings or ex-vessel revenue were recorded in Nikolaevsk (Table 9), given the lack of fish buyers in the community (Table 5). However, Nikolaevsk vessel owners made deliveries in other ports. In 2010, they landed 1,397,324 net pounds of salmon, valued at \$931,496 in ex-vessel revenue. Other landings and ex-vessel revenue are considered confidential for that year due to the small number of participants. Information about salmon harvest by Nikolaevsk residents was reported for all years, while Pacific halibut, Pacific cod, and sablefish landings

were only reported for some years. In 2000, 2001, 2002, 2003, and 2006, Nikolaevsk vessel owners landed an average of 356,528 net pounds of halibut, earning an average of \$1,042,953 in ex-vessel revenue. In 2000, 2001, 2002, and 2006, Nikolaevsk vessel owners landed an average of 509,375 net pounds of Pacific cod, earning \$182,680 in ex-vessel revenue. In 2001, the only year for which sablefish information is not considered confidential during the period, Nikolaevsk vessel owners landed 10,893 net pounds of sablefish, valued at \$34,000. Landings and ex-vessel revenue earned by Nikolaevsk vessel owners are presented in Table 10.

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

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

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

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

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

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

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

⁵ Total municipal revenue represents the total revenue that the city reports each year in its 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, Nikolaevsk: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	22	23	24	26	28	27	23	24	23	24	24
	Active permits	8	7	6	8	10	10	6	6	5	5	5
	% of permits fished	36%	30%	25%	30%	35%	37%	26%	25%	21%	20%	20%
	Total permit holders	16	17	18	19	19	19	18	19	18	19	19
Crab (LLP) ¹	Total permits	1	1	1	1	1	1	1	1	1	1	1
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	1	1	1	1	1	1	1	1	1	1	1
Federal Fisheries Permits ¹	Total permits	10	10	10	8	9	9	10	10	10	10	10
	Fished permits	0	0	0	5	6	5	4	4	5	6	6
	% of permits fished	0%	0%	0%	63%	67%	56%	40%	40%	50%	60%	60%
	Total permit holders	10	10	10	8	9	9	9	9	9	10	10
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	10	11	9	9	9	10	11	11	11	8	8
	Fished permits	8	10	9	9	8	10	10	11	11	8	8
	% of permits fished	80%	91%	100%	100%	89%	100%	91%	100%	100%	100%	100%
	Total permit holders	10	11	9	9	9	10	11	11	11	8	8
Herring (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	5	7	6	4	3	4	4	4	4	4	2
	Fished permits	4	7	4	4	3	4	4	4	4	4	2
	% of permits fished	80%	100%	67%	100%	100%	100%	100%	100%	100%	100%	100%
	Total permit holders	5	7	6	4	3	4	4	4	4	3	2
Groundfish (CFEC) ²	Total permits	7	10	9	10	10	6	5	5	6	7	4
	Fished permits	4	4	3	6	3	3	1	2	3	4	2
	% of permits fished	57%	40%	33%	60%	30%	50%	20%	40%	50%	57%	50%
	Total permit holders	6	8	7	9	8	6	5	5	5	5	4
Other Finfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	15	12	13	13	11	11	8	12	13	15	16
	Fished permits	12	11	11	9	9	9	7	9	8	13	13
	% of permits fished	80%	92%	85%	69%	82%	82%	88%	75%	62%	87%	81%
	Total permit holders	14	14	14	12	11	11	8	11	11	14	17
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>37</i>	<i>40</i>	<i>37</i>	<i>36</i>	<i>33</i>	<i>31</i>	<i>28</i>	<i>32</i>	<i>34</i>	<i>34</i>	<i>30</i>
	<i>Fished permits</i>	<i>28</i>	<i>32</i>	<i>27</i>	<i>28</i>	<i>23</i>	<i>26</i>	<i>22</i>	<i>26</i>	<i>26</i>	<i>29</i>	<i>25</i>
	<i>% of permits fished</i>	<i>76%</i>	<i>80%</i>	<i>73%</i>	<i>78%</i>	<i>70%</i>	<i>84%</i>	<i>79%</i>	<i>81%</i>	<i>76%</i>	<i>85%</i>	<i>83%</i>
	<i>Permit holders</i>	<i>20</i>	<i>20</i>	<i>21</i>	<i>19</i>	<i>18</i>	<i>17</i>	<i>14</i>	<i>20</i>	<i>20</i>	<i>20</i>	<i>21</i>

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

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 Nikolaevsk: 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 Nikolaevsk ²	Total Net Pounds Landed In Nikolaevsk ^{2,5}	Total Ex-Vessel Value Of Landings In Nikolaevsk ^{2,5}
2000	43	0	0	10	0	0	0	\$0
2001	30	0	0	11	1	0	0	\$0
2002	18	0	0	11	1	0	0	\$0
2003	20	0	0	13	1	0	0	\$0
2004	22	0	0	9	1	0	0	\$0
2005	25	0	0	9	1	0	0	\$0
2006	18	0	0	10	1	0	0	\$0
2007	24	0	0	11	1	0	0	\$0
2008	24	0	0	10	1	0	0	\$0
2009	30	0	0	12	1	0	0	\$0
2010	33	0	0	12	1	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 National Marine Fisheries Service (2011. Alaska processors' Weekly Production Reports (WPR) 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.]

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 Nikolaevsk: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	13	1,374,667	194,597
2001	13	1,084,448	159,786
2002	12	1,102,852	171,518
2003	13	1,283,577	219,543
2004	14	1,362,647	225,299
2005	16	1,750,742	288,877
2006	14	1,146,954	176,561
2007	13	1,032,506	152,014
2008	13	884,995	125,996
2009	12	865,447	113,601
2010	12	865,447	104,275

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 Nikolaevsk: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (pounds)
2000	7	271,934	23,563
2001	6	172,215	14,403
2002	6	279,995	24,903
2003	5	215,562	27,257
2004	5	215,562	28,293
2005	6	437,729	53,350
2006	3	115,641	13,529
2007	2	94,357	9,574
2008	3	94,357	8,280
2009	2	94,357	7,457
2010	2	48,923	3,636

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 Nikolaevsk: 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 Nikolaevsk: 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 Nikolaevsk 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	259,161	261,364	335,209	274,483	-	-	652,425	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	204,391	750,291	583,463	-	-	-	499,356	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	10,893	-	-	-	-	-	-	-	-	-
Salmon	381,203	223,842	304,940	226,646	568,536	445,589	342,325	578,192	372,210	344,323	1,397,324
<i>Total²</i>	<i>844,755</i>	<i>1,246,390</i>	<i>1,223,612</i>	<i>501,129</i>	<i>568,536</i>	<i>445,589</i>	<i>1,494,106</i>	<i>578,192</i>	<i>372,210</i>	<i>344,323</i>	<i>1,397,324</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	\$663,024	\$519,288	\$752,088	\$790,524	-	-	\$2,489,841	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	\$83,373	\$249,422	\$177,000	-	-	-	\$220,923	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	\$34,000	-	-	-	-	-	-	-	-	-
Salmon	\$289,018	\$109,876	\$133,874	\$116,879	\$314,266	\$319,334	\$230,902	\$436,037	\$308,060	\$295,412	\$931,496
<i>Total²</i>	<i>\$1,035,415</i>	<i>\$912,586</i>	<i>\$1,062,962</i>	<i>\$907,403</i>	<i>\$314,266</i>	<i>\$319,334</i>	<i>\$2,941,666</i>	<i>\$436,037</i>	<i>\$308,060</i>	<i>\$295,412</i>	<i>\$931,496</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

In a survey conducted by the AFSC in 2011, community leaders reported that sport hunting and fishing, along with commercial fishing, was one of the natural resource-based industries upon which the economy Nikolaevsk most depends. They also indicated that a majority of recreational fishing activity in Nikolaevsk is done by local residents, using their own private boats, and that recreational fishermen in and near Nikolaevsk primarily target Chinook salmon, Pacific halibut, and rockfish. According to ADF&G, between 2000 and 2010, no sport fish guide businesses or licensed sport fish guides were present in Nikolaevsk. Sportfishing licenses were not sold in the community, but Nikolaevsk residents purchased a total of 65 sportfishing licenses (irrespective of point of sale). This information about the sportfishing sector in Nikolaevsk is presented in Table 11.

The Alaska Statewide Harvest Survey,⁷⁵⁸ conducted by ADF&G between 2000 and 2010, noted the species known to be targeted by private anglers in Nikiski. In freshwater, anglers targeted sockeye salmon, rainbow trout, Dolly Varden, and smelt. In saltwater, private anglers targeted Chinook, Pacific halibut, lingcod, and Pacific cod. The survey also noted sport harvest of Tanner crab and razor clams by Nikolaevsk residents.⁷⁵⁹ No kept/release log book data were reported for fishing charters out of Nikolaevsk in 2010.⁷⁶⁰

Nikolaevsk is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, saltwater and freshwater sportfishing at this regional level was substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska residents logged 20,292 saltwater angler days and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska resident anglers, and the opposite was true of freshwater sportfishing. For both Alaska resident and non-Alaska resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased between 2000 and 2010. This information about regional sportfishing activity in Nikolaevsk is presented in Table 11.

⁷⁵⁸ 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).

⁷⁵⁹ The Alaska Statewide Harvest Survey includes separate categories for Dungeness crab, Tanner crab, razor clams, hardshell clams, and shrimp. Remaining species fall into the ‘other shellfish’ category.

⁷⁶⁰ 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, Nikolaevsk: 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 Nikolaevsk ²
2000	0	0	57	0
2001	0	0	61	0
2002	0	0	51	0
2003	0	0	47	0
2004	0	0	56	0
2005	0	0	70	0
2006	0	0	64	0
2007	0	0	55	0
2008	0	0	56	0
2009	0	0	65	0
2010	0	0	65	0

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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

Nikolaevsk is located in the historic territory of the Kenaitze people, a branch of Athabascan Indians. The Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.⁷⁶¹ Although residents of Nikolaevsk come from a different cultural tradition, they also pursue a self-sufficient lifestyle. They focus on subsistence fishing, hunting and gardening activities, in combination with employment in commercial fishing and other industries in nearby cities.⁷⁶² According to a survey conducted by the AFSC in 2011, community leaders reported that salmon are the most important subsistence resource utilized by residents of Nikolaevsk.

No information was reported by ADF&G between 2000 and 2010 regarding per capita subsistence harvest or the percentage of households in Nikolaevsk utilizing various marine resources for subsistence purposes (Table 12). In addition, no information was reported by management agencies between 2000 and 2010 regarding subsistence harvest of halibut or marine mammals by residents of Nikolaevsk (Tables 14, and 15). However, a 1998 subsistence survey conducted by ADF&G provides information about subsistence harvest of marine invertebrates, non-salmon fish (not including halibut), and marine mammals in the community.

According to this survey, species of marine invertebrates harvested by Nikolaevsk residents in 1998 included butter, horse, Pacific littleneck, pinkneck, razor, and unknown clams, cockles, mussels, oyster, scallops, black and red chitons, limpets, unknown sea urchin, whelk, Dungeness, Tanner crab, snow crab, king crab, octopus, and shrimp. Of these species, the highest percentage of households harvested Tanner crab (22%), razor clams (5%), Dungeness crab (5%), king crab (3%), mussels (3%), and octopus (3%). In the case of Dungeness crab, razor clams, Tanner Bairdi crab, and king crab, a greater percentage of households used these subsistence resources than harvested them, indicating that these resources were distributed through sharing networks. Species of non-salmon fish (not including halibut) harvested by Nikolaevsk residents in 1998 included cutthroat, rainbow and lake trout, steelhead, Arctic char, Dolly Varden, grayling, whitefish, sheefish, sturgeon, pike, Irish lord, greenling, black and red rockfish, lingcod, Pacific cod, sablefish, sea bass, flounder, sole, Pacific tom cod, sculpin, smelt, eel, skates, shark, wolfish, euchalon (hooligan candlefish), and herring. The survey also noted subsistence harvest of herring sac roe. Of these species, the greatest percentage of households harvested euchalon (43%), red rockfish (35%), sablefish (22%), Dolly Varden (16%), and black rockfish (14%). The percentage of households using black rockfish, Dolly Varden, euchalon, herring, herring sac roe, lingcod, Pacific cod, red rockfish, and sablefish were higher than the percentage engaged in harvesting, suggesting that these species are also distributed through sharing networks in Nikolaevsk. In addition, the survey found that Nikolaevsk residents harvested the following marine mammal species in 1998: bowhead whale, Steller sea lion, and unknown whale.⁷⁶³

Information was available from ADF&G for the 2000-2010 period regarding subsistence salmon permits. The number of subsistence salmon permits issued to Nikolaevsk households

⁷⁶¹ Kenaitze Indian Tribe (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

⁷⁶² 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.

⁷⁶³ 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).

varied between one and four during this period. Reported subsistence harvest was relatively low, with generally fewer than 100 salmon reported harvested per year. An exception was 2002, when 177 sockeye salmon were harvested. No information was reported regarding subsistence harvest of marine invertebrates or non-salmon fish between 2000 and 2010 (Table 13).

Additional Information

The history of the Russian Old Believers movement began in the mid-1600s, when reforms introduced by Nikon, the Patriarch of the Russian Orthodox Church from 1652-1658, were upheld by the Church Councils of 1666-1667. These reforms included the number of times “alleluia” is said during prayers, the number of fingers used to perform the sign of the cross, leading processions counter-clockwise rather than clockwise, and spelling the name of Jesus with two i's instead of one (“Iisus”).⁷⁶⁴ Those who disagreed with these reforms were anathematized by the Church. These dissenters, and those that have followed them, are collectively known as “Old Believers.”⁷⁶⁵

Persecution followed for those who resisted the reforms. Many Old Believers were burned at the stake, or chose to burn themselves to escape capture by government troops. In addition to resisting church reforms, the Old Believers were in opposition to forms of Westernization that began to appear in Russia under Peter the Great in the late 1600s and early 1700s. Peter required women to participate in social activities, such as dances and parties, in the style of the West. He mandated use of Western clothing and required all male members of the ruling class to shave their beards. Those choosing to wear beards were forced to pay a tax of 100 rubles per year, and peasants entering town to sell produce had to pay a fee of one kopek for the right to wear their beard in town for one day. The Old Believers viewed Peter as the “Antichrist,” and many fled to northern Russia, Siberia, the Cossack lands and the Ural Mountains, far from the power of the central government, where they could practice their traditional customs and rituals undisturbed.⁷⁶⁶

The Old Believers dispersed further through the ensuing centuries. The ancestors of those who founded Nikolaevsk initially settled in Turkey and several areas of China. In the 1900s, they were resettled to countries including Brazil, Australia, Argentina, New Zealand, Paraguay, Uruguay, Canada, and the U.S. The first Old Believers in Woodburn, Oregon, came by way of Brazil, moving from Brazil to Oregon starting in 1962. Other Old Believers who had come to U.S. joined them in Oregon in the years that followed. A group of Old Believers left Woodburn and traveled to the Kenai Peninsula to become the original settlers of Nikolaevsk in 1968.⁷⁶⁷

⁷⁶⁴ Johnson, P.W. 1982. *Dress and Acculturation among Russian Old Believers in Oregon*. Masters Thesis, Oregon State University. Retrieved January 30, 2012 from <http://ir.library.oregonstate.edu/xmlui/handle/1957/7891>.

⁷⁶⁵ Lee Silva, A. 2009. *Unsettling Diaspora: The Old Believers of Alaska*. Masters Thesis, McGill University, Montreal. Retrieved January 26, 2012 from http://digitool.library.mcgill.ca/webclient/StreamGate?folder_id=0&dvs=1328564311584~157.

⁷⁶⁶ See footnote 764.

⁷⁶⁷ Ibid.

Table 12. Subsistence Participation by Household and Species, Nikolaevsk: 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, Nikolaevsk: 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	1	1	1	n/a	n/a	n/a	24	n/a	n/a
2001	1	1	1	n/a	n/a	n/a	14	n/a	n/a
2002	1	1	n/a	n/a	3	n/a	177	n/a	n/a
2003	n/a	n/a	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	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	1	1	1	n/a	n/a	n/a	13	n/a	n/a
2007	4	3	2	n/a	n/a	n/a	63	n/a	n/a
2008	2	2	n/a	n/a	n/a	n/a	41	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, Nikolaevsk: 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, Nikolaevsk: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Ninilchik (nuh-NIL-chick)



People and Place

*Location*⁷⁶⁸

Ninilchik is located on the west coast of the Kenai Peninsula, 38 miles southwest of the City of Kenai and 188 road miles from Anchorage. The community lies between mileposts 199 and 144 of the Sterling Highway. Ninilchik is located in the Homer Recording District and the Kenai Peninsula Borough Census Area.

*Demographic Profile*⁷⁶⁹

In 2010, there were 883 residents in Ninilchik, ranking it as the 72nd largest of 352 communities in Alaska with recorded populations that year. Overall between 1990 and 2010, the population of Ninilchik increased by 93.6%. Most of this growth occurred between 1990 and 2000, although the population continued to increase until 2010. According to Alaska Department of Labor estimates, between 2000 and 2009, the population increased by 14.4%. The average annual growth rate during this period was 0.51%, reflecting slow, consistent growth over the decade with small decreases in several years.

In 2010, the majority of the population of Ninilchik identified themselves as White (78.1%), along with 15.4% that identified as American Indian or Alaska Native, 0.3% as Asian, 0.2% as Black or African American, 0.1% as Native Hawaiian and Other Pacific Islander, 0.5% as “some other race,” and 5.3% that identified with two or more races. In addition, 2.6% of Ninilchik’s population identified themselves as Hispanic in 2010. The percentage of the population identifying as White increased slightly between 1990 and 2000, from 80.5% to 82.3%, before declining again to 78.1% in 2010. At the same time the percentage of the population identifying as American Indians and Alaska Natives decreased from 19.5% in 1990 to 14% in 2000, and then rebounded slightly to 15.4% in 2010. The change in population from 1990 to 2010 is provided in Table 1, and changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

Based on household surveys conducted for the U.S. Census, in 2010, the average household size in Ninilchik was 2.14, a decrease from 2.4 in 1990 and 2.87 in 2000. The number of households in Ninilchik increased over time, from 185 in 1990 to 265 in 2000, and 412 in 2010. Of the 967 housing units surveyed for the 2010 U.S. Census, 34.6% were owner-occupied, 8% were rented, and 57.4% were vacant. A majority of the unoccupied housing units were vacant due to seasonal use (91%). Between 1990 and 2010, no residents of Ninilchik were reported to be living in group quarters.

⁷⁶⁸ 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.

⁷⁶⁹ 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>.

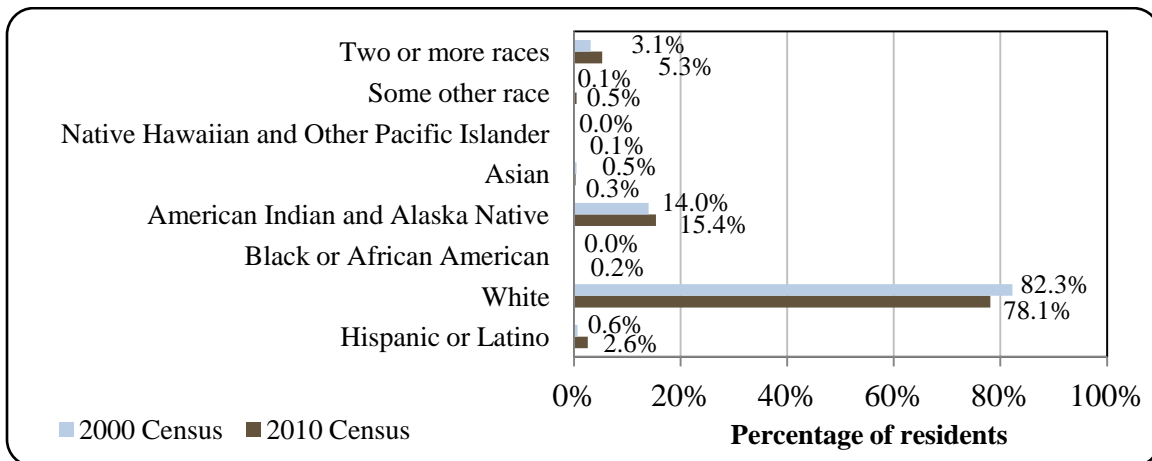
Table 1. Population in Ninilchik from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	456	-
2000	772	-
2001	-	760
2002	-	762
2003	-	774
2004	-	787
2005	-	788
2006	-	772
2007	-	769
2008	-	836
2009	-	824
2010	883	-

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

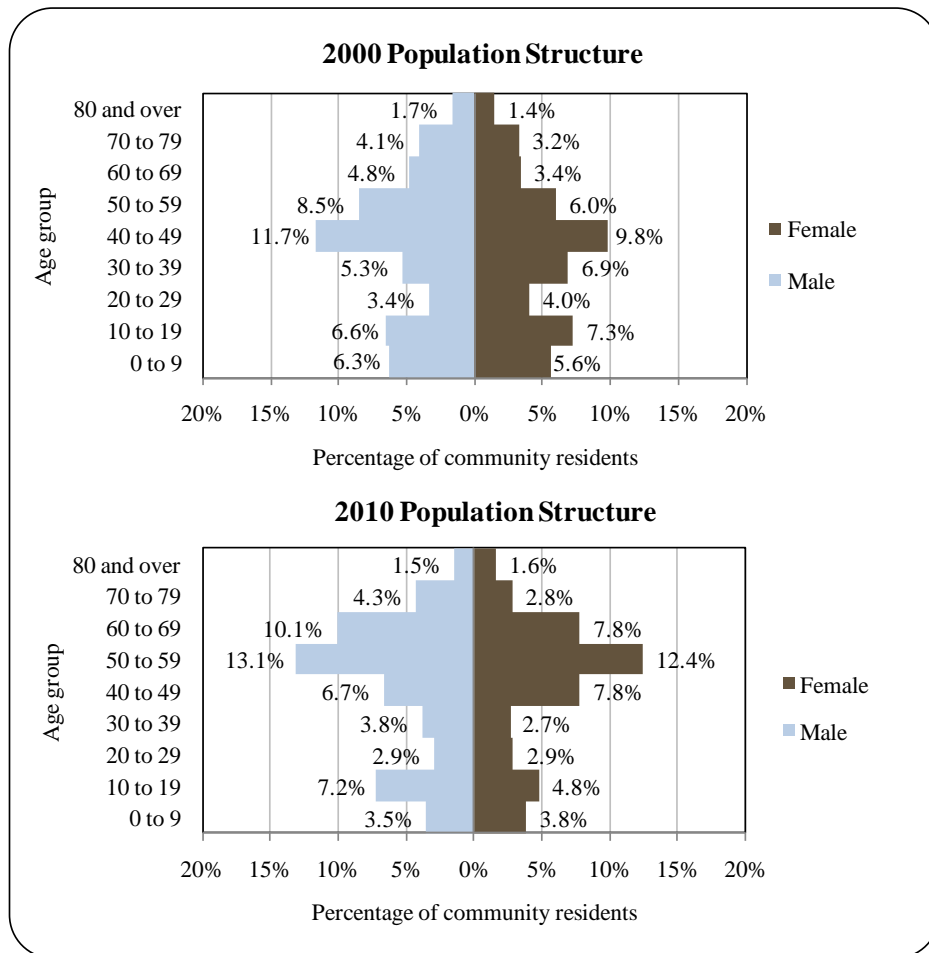


In 2010, the gender makeup of Ninilchik’s population (53.2% male and 46.8% female) was slightly less gender balanced compared to the population of the state as a whole, which was made up of 52% males and 48% females. That year, the median age of Ninilchik residents was 52.2 years, significantly older than both the national average of 36.8 years and the median age for Alaska, 33.8 years. Further, 28.1% of the Ninilchik population was age 60 or older in 2010, a higher percentage than in most other Alaskan communities. In 2010, the age groups most heavily skewed toward males were the 10-19, 50-59, and 60-69 age cohorts, while there was a relatively

even spread of males and females across other age categories in Ninilchik. The overall population structure of Ninilchik in 2000 and 2010 is shown in Figure 2.

In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),⁷⁷⁰ 94% of Ninilchik residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaskan residents overall. Also in 2010, 2.3% of the population was estimated to have less than a 9th grade education, compared to 3.5% of Alaskan residents overall; 3.6% were estimated to have a 9th to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 31% were estimated to have some college but no degree, compared to 28.3% of Alaskan residents overall; 13.5% were estimated to have an Associate’s degree, compared to 8% of Alaskan residents overall; 6.5% were estimated to have a Bachelor’s degree, compared to 17.4% of Alaskan residents overall; and 3.1% were estimated to have a graduate or professional degree, compared to 9.6% of Alaskan residents overall.

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



⁷⁷⁰ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

History, Traditional Knowledge, and Culture

The Ninilchik area was historically used for fur-farming and fishing by the Kenaitze, the local group of Dena'ina people, a branch of Athabascan Indians.^{771,772} The word “Niqnilchint” means “lodge by the river.” Ninilchik was established in the 1840s as a retirement community for pensioners of the Russian American Company. A number of elderly, disabled, and sick employees of the Russian American Company preferred to remain in Alaska or could not travel safely home to Russia. Five families initially moved to Ninilchik.^{773,774}

The Kvasnikoffs and the Oskoloffs were early Ninilchik settlers. Grigorii and Mavra Kvasnikoff moved their large family from Kodiak to Ninilchik in 1847. Grigorii was a Russian Orthodox missionary from Moscow, and Mavra was a Russian-Sugpiaq from Kodiak. All nine of the original Native founding families of Ninilchik are descended from the Kvasnikoffs. Iakov and Anna Oskolkoff were two other Russian settlers who moved to Ninilchik in the early years. These settlers lived a subsistence lifestyle based on fishing, hunting, trapping, and gardening.⁷⁷⁵

The population of Ninilchik grew quickly. By 1880, the U.S. Census counted 53 “Creoles” living in Ninilchik, and the population had grown to 81 by 1890. At that time, and until the first decades of the 1900s, Ninilchik was apparently still a fully Russian-speaking community.⁷⁷⁶ In 1896, a Russian village school was built, and in 1901 the Russian Orthodox Church was constructed and dedicated at its current site. A post office was established in 1925.⁷⁷⁷ By the 1930s, a greater number of Americans had begun to settle in the area, and an English-language school was opened in Ninilchik. Use of the Russian language was not welcome at the school, and children in the community no longer received Russian as their first language.⁷⁷⁸ The Berman Packing Company began canning operations in Ninilchik in 1949, and the Sterling Highway was completed through Ninilchik by 1950. The current Ninilchik School was also built in 1950.⁷⁷⁹

Natural Resources and Environment

Ninilchik is located in a maritime climatic zone, dominated by the moderating effects of a marine environment and characterized by high humidity, precipitation and fog cover as well as warm winters and cool summers. Winter temperatures in Ninilchik range from 14 to 27 °F, and summer temperatures vary from 45 to 65 °F. Average annual precipitation is 24 inches.⁷⁸⁰

⁷⁷¹ 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.

⁷⁷² Kenaitze Indian Tribe (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

⁷⁷³ See footnote 771.

⁷⁷⁴ Bergelson, M.B., and A.A. Kibrik (2010). The Ninilchik Variety of Russian: Linguistic Heritage of Alaska. In *Sociolinguistic Approaches to Non-Standard Russian*. Eds. Mustajoki, A., Protassova, N. and Vakhtin. Helsinki. Retrieved February 1, 2012 from <http://www.helsinki.fi/slavicahelsingiensia/preview/sh40/pdf/20-sh40.pdf>.

⁷⁷⁵ See footnotes 771 and 774.

⁷⁷⁶ Ibid.

⁷⁷⁷ See footnote 771.

⁷⁷⁸ See footnote 774.

⁷⁷⁹ See footnote 771.

⁷⁸⁰ Ibid.

Protected areas near Ninilchik include Kachemak Bay State Wilderness Park, the Kachemak Bay State Critical Habitat Area, Kenai Fjords National Park, and the Kenai Wilderness. To the south of Ninilchik, the Kachemak Bay State Wilderness Park was Alaska's first and only 'wilderness park.' A majority of the State Park's 400,000 acres are located on the southern side of Kachemak Bay, along with a small unit north of the Bay, and its terrain includes mountains, glaciers, forests, and ocean. Visitors to the State Park enjoy fishing, boating, wildlife viewing, kayaking, hiking, camping, and mountain sports.⁷⁸¹

Kachemak Bay itself was designated as a State Critical Habitat Area (CHA) in 1974, and the Fox River Flats at the mouth of the Bay were also designated as a CHA in 1972. The purpose of these CHAs is to "protect and preserve habitat areas especially crucial to the perpetuation of fish and wildlife, and to restrict all other uses not compatible with that primary purpose." Eleven species of marine mammals utilize Kachemak Bay, including sea otter, Steller sea lion, harbor seal, beluga, minke, and orca whale, harbor porpoise, and Dall's porpoise, as well as a diversity of marine plants and invertebrates, birds, and fish and shellfish. The Fox River Flats and associated intertidal zone support at least 21 species of terrestrial mammals, including moose, black bear, brown bear, coyote, wolf, beaver, river otter, and small furbearers.⁷⁸² In addition to their status as CHAs, Kachemak Bay and the Fox River Flats were designated as part of the National Estuarine Research Reserve System (NERRS) in 1999, a network of 28 estuaries around the U.S. representing different biogeographic regions that are used for long-term research, water-quality monitoring, education, and coastal stewardship. It is the only Research Reserve located in the State of Alaska.⁷⁸³

Kenai Fjords National Park is located along the southeastern edge of the Kenai Peninsula, to the east of Ninilchik. This National Park was established in 1980 to "maintain unimpaired the scenic and environmental integrity of the Harding Icefield, its outflowing glaciers and coastal fjords and islands." Fifty-six percent of the park is covered by ice.⁷⁸⁴ Portions of both the Kachemak Bay State Wilderness Park and Kenai Fjords National Park are included in the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.⁷⁸⁵

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt, and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures, and soil liquefaction.⁷⁸⁶ Other natural hazards that have also been identified as threats in the Kenai Peninsula Borough

⁷⁸¹ Alaska Dept. of Natural Resources (2009). *Kachemak Bay State Park and State Wilderness Park*. Retrieved January 27, 2012 from <http://dnr.alaska.gov/parks/units/kbay/kbay.htm>.

⁷⁸² Alaska Dept. of Fish and Game (1993). *Kachemak Bay and Fox River Flats Critical Habitat Areas Management Plan*. Retrieved June 14, 2012 from http://www.adfg.alaska.gov/static/lands/protectedareas/_management_plans/kachemak_bay.pdf.

⁷⁸³ National Estuarine Research Reserve System (n.d.). *Kachemak Bay Research Reserve website*. Retrieved June 15, 2012 from <http://www.nerrs.noaa.gov/Reserve.aspx?ResID=KBA>.

⁷⁸⁴ Kenai Fjords National Park website (2010). Retrieved December 27, 2011 from <http://www.nps.gov/kefj/>.

⁷⁸⁵ Wilderness.net website (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from <http://www.wilderness.net>.

⁷⁸⁶ Kenai Peninsula Borough (2010). *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

include flooding, wildfires, snow and avalanches, seiches, severe weather, erosion, and drought.⁷⁸⁷

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields on and off shore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.⁷⁸⁸

According to the Alaska Department of Environmental Conservation (DEC), there are no notable active environmental cleanup sites located in Ninilchik as of May 2012.⁷⁸⁹

Current Economy⁷⁹⁰

The private sector in Ninilchik is based primarily on fishing, retail businesses, and tourism. The surrounding Kenai area offers employment in diverse industries and services, including oil and gas processing, commercial and sportfishing, government, health care, retail business and tourism.⁷⁹¹ In 2010, top employers of local Ninilchik residents included the Kenai Peninsula Borough school, the Ninilchik Traditional Council, the State of Alaska, the Central Peninsula General Hospital, and various private businesses, including a grocery, restaurant and bar, dentist office, construction company, seafood processor, and an oil development company.⁷⁹²

Based on household surveys conducted for the 2006-2010 ACS,⁷⁹³ in 2010, the per capita income in Ninilchik was estimated to be \$25,271 and the median household income was estimated to be \$48,958. Compared to 2000, this represents an increase in income, from a per capita income of \$18,463 and median household income of \$36,250 in the year 2000. If inflation is taken into account by converting the 2000 values to 2010 dollars,⁷⁹⁴ the increase is revealed to be very slight, from a real per capita income of \$24,279 and real median household income of \$47,668 in 2000. In 2010, Ninilchik ranked 104th of 305 Alaskan communities with per capita income data that year, and 138th in median household income, out of 299 Alaskan communities with household income data.

⁷⁸⁷ State of Alaska (2002). *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

⁷⁸⁸ Resource Development Council (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

⁷⁸⁹ Alaska Dept. of Environmental Conservation (n.d.). *List of Contaminated Sites*. Retrieved April 17, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

⁷⁹⁰ Unless otherwise noted, all monetary data are reported in nominal values.

⁷⁹¹ 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.

⁷⁹² 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/>.

⁷⁹³ 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>.

⁷⁹⁴ 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>).

However, Ninilchik’s small population size may have prevented the ACS from accurately portraying economic conditions.⁷⁹⁵ An alternative estimate of per capita income is provided by economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Ninilchik in 2010 is \$12,335.⁷⁹⁶ This estimate is lower than the 2000 per capita income reported in by the U.S. Census, suggesting that caution is warranted when citing an increase in per capita income in Ninilchik between 2000 and 2010. The lower per capita income estimate derived from the ALARI database is reflected in the fact that the community was recognized as “distressed” by the Denali Commission in 2011,⁷⁹⁷ indicating that over 70% of residents aged 16 and older earned less than \$16,120 in 2010. It should be noted that both ACS and DOLWD data are based on wage earnings, and these income statistics do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS, in 2010, a smaller percentage of Ninilchik’s population (59.8%) was estimated to be in the civilian labor force in 2010 compared to the percentage of the statewide population in the civilian labor force (68.8%). In the same year, 18.6% of Ninilchik residents were estimated to be living below the poverty line in 2010, compared to 9.5% of Alaskan residents overall, and the unemployment rate was estimated to be 4.3%, compared to a statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in Ninilchik in 2010 was 12.3%, compared to a statewide unemployment rate estimate of 11.5%.⁷⁹⁸

Also based on the 2006-2010 ACS, Ninilchik’s workforce was split relatively evenly across sectors, with 37.8% of workers estimated to be self-employed, 31.2% estimated to be employed in the private sector, and 29.4% in the public sector. In addition, 2.3% of the workforce was estimated to be unpaid family workers. Of the 221 people aged 16 and over that were estimated to be employed in the civilian labor force, the greatest number of workers were estimated to be employed in construction (20.4%), educational services, health care, and social assistance (19.5%), public administration (17.2%), and agriculture, forestry, fishing and hunting, and mining (14.5%). The number of individuals employed in farming, fishing, and forestry occupations and industries may be underestimated in census statistics as fishermen may hold another job and characterize their employment accordingly. This information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 332 employed residents in Ninilchik in 2010, of which 20.2% were employed in local government, 16.6% in trade, transportation, and utilities, 12.3% in education and health services, 12% in natural resources and mining, 10.8% in leisure and hospitality, 9% in construction, 5.1% in state government, 4.8% in manufacturing, 3.6% in professional and business services, 2.1% in financial activities, 1.5% in information, and 1.8% in

⁷⁹⁵ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁷⁹⁶ See footnotes 792 and 793.

⁷⁹⁷ Denali Commission (2011). *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

⁷⁹⁸ See footnote 792.

other industries.⁷⁹⁹ As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents' activity in the subsistence economy.

⁷⁹⁹ Ibid.

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

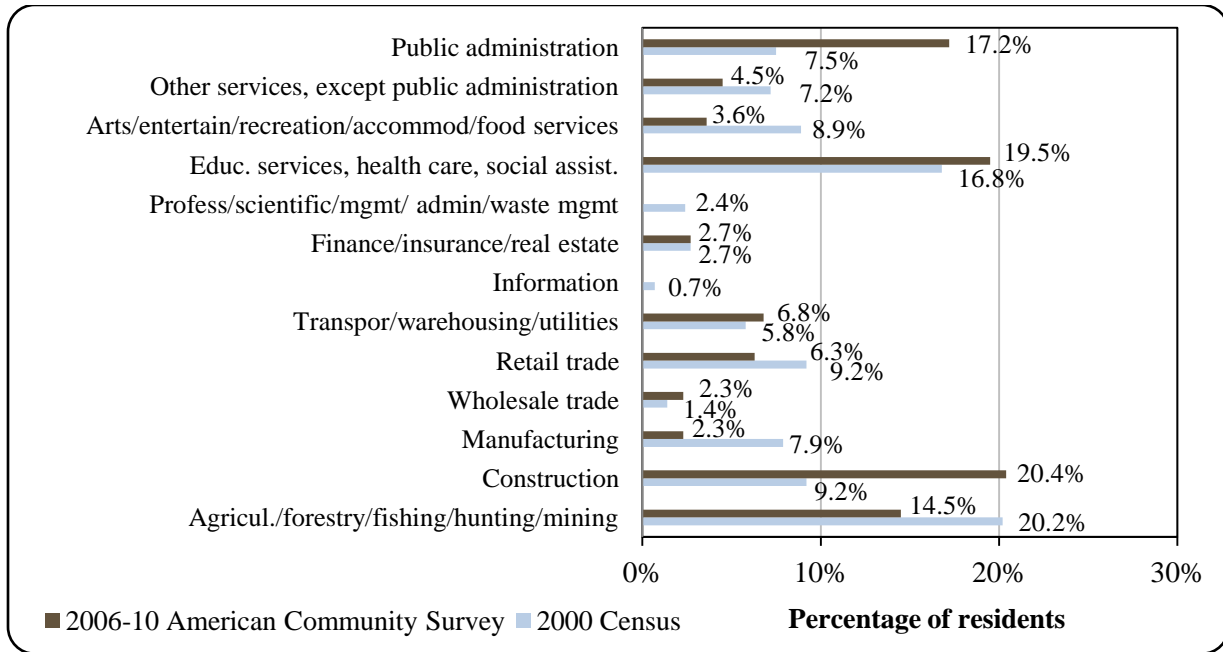
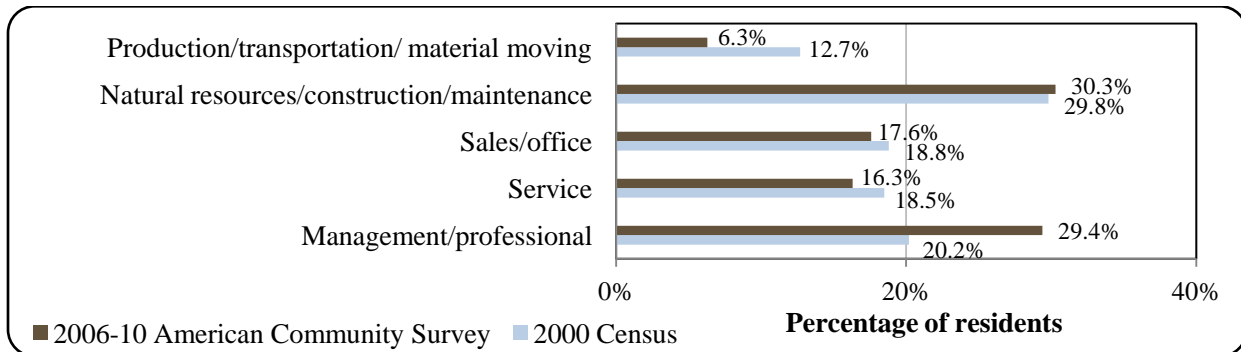


Figure 4. Local Employment by Occupation in 2000-2010, Ninilchik (U.S. Census).



Governance

Ninilchik is an unincorporated community in the Kenai Peninsula Borough. The community does not administer any local taxes, although the Borough does administer a 3% sales tax and 4.5 mills property tax.⁸⁰⁰ Given that Ninilchik is not incorporated, there was no municipal revenue or municipal sales tax revenue between 2000 and 2010. No information was reported regarding State or Community Revenue Sharing contributions or fisheries-related grants received by the community between 2000 and 2010. Information about selected aspects of community revenue is presented in Table 2.

⁸⁰⁰ 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.

Ninilchik was included under the Alaska Native Claims Settlement Act (ANCSA), and is federally recognized as a Native village. The authorized traditional entity, recognized by the Bureau of Indian Affairs (BIA), is the Ninilchik Traditional Council. The local village Native corporation is Ninilchik Native Association, Inc., which manages 168,802 acres of land. The regional Native corporation to which Ninilchik belongs is Cook Inlet Regional, Inc.⁸⁰¹

Ninilchik is also a member of the Cook Inlet Tribal Council (CITI), a tribal non-profit organization headquartered in Anchorage. CITI strives to work together with Native people of the Cook Inlet region, and all Natives living in Anchorage, to help them develop talents and strengths, and become successful and self-sufficient individuals, families, and communities, with the goal of advancing the overall economic, social and cultural development of the people of the Chugach Region.⁸⁰² CITI 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.⁸⁰³ CITI offers educational programs, job training, business assistance, youth programs, drug and alcohol treatment, and other assistance to families and individuals.⁸⁰⁴

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Ninilchik 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

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

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.

⁸⁰¹ 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.

⁸⁰² Cook Inlet Tribal Council (n.d.). *Homepage*. Retrieved February 23, 2012 from <http://www.citci.com/>.

⁸⁰³ 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>.

⁸⁰⁴ Cook Inlet Tribal Council. (n.d.). *What We Do*. Retrieved February 23, 2012 from <http://www.citci.com/>.

The closest offices of the Alaska Department of Fish and Game (ADF&G), the Alaska Department of Natural Resources (DNR), and the National Marine Fisheries Service (NMFS) are located in Homer and Anchorage. The closest offices of the Alaska Department of Commerce, Community, and Economic Development (DCCED) and the U.S. Bureau of Citizenship and Immigration Services (BCIS) are located in Anchorage.

Infrastructure

Connectivity and Transportation

Ninilchik is easily accessible via the Sterling Highway.⁸⁰⁵ A state-owned 2,400-foot by 60-foot airstrip is present in the community, but is not served by schedule commercial flights. The nearest commercial flights to Anchorage leave from airports in Homer (39 miles away by road) and the City of Kenai (48 road miles away).⁸⁰⁶ The price of a roundtrip ticket by plane from Kenai to Anchorage in early June of 2012 was \$179, and from Homer to Anchorage was \$239.⁸⁰⁷ A small boat harbor is available in Ninilchik, serving charter and recreational boats. Larger harbor and docking facilities are available in Homer, along with access to the Alaska State Ferry system.⁸⁰⁸

Facilities

Water in Ninilchik is derived from individual wells or delivered to homes. A community well and central hauling point are maintained by the Village Council. Two-thirds of residences in Ninilchik have individual septic tanks, and others use outhouses. The school operates its own well and water treatment facility. A Borough refuse transfer site is available in Ninilchik, located at mile 138.5 on the Sterling Highway. Peninsula Sanitation provides refuse collection services. The Homer Electric Association provides electricity in Ninilchik using both hydro power and natural gas.⁸⁰⁹

Police services are provided by state troopers stationed in Ninilchik. Emergency services are provided by Ninilchik Emergency Services. Community facilities in Ninilchik include a washeteria, operated by a private company, as well as a senior center, high school swimming pool, and two libraries, one public and one operated by the school. Phone and internet are available in Ninilchik, but no cable providers offers service locally.⁸¹⁰

Regarding fisheries-related infrastructure, the harbor in Ninilchik is oriented to small boats, including charter and recreational vessels. Harbor and dock infrastructure sufficient for larger vessels are located in Homer.⁸¹¹

⁸⁰⁵ See footnote 801.

⁸⁰⁶ Airport information retrieved January 31, 2012 from www.airnav.com.

⁸⁰⁷ This price was calculated on November 21, 2011 using kayak.com.

⁸⁰⁸ See footnote 801.

⁸⁰⁹ Ibid.

⁸¹⁰ Ibid.

⁸¹¹ Ibid.

Medical Services

Medical services are provided by the Ninilchik Community Clinic, owned and operated by the Village Council. Ninilchik is a Community Health Aid Program site. Alternative health care is provided by Ninilchik Emergency Services. Emergency services have highway, coastal, and helicopter access, and are provided by 911 Telephone service and a health aide.⁸¹² The nearest hospitals are located in Soldotna and Homer.

Educational Opportunities

One school is present in Ninilchik. The Ninilchik School serves preschool through 12th grade. As of 2011, the school had 185 students and 14 teachers.⁸¹³

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Ninilchik is located in the traditional territory of the Kenaitze people, a branch of Athabascan Indians. Historically, the Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.⁸¹⁴ Russian settlers living in the area in the mid-1800s also maintained a subsistence lifestyle, including fishing, hunting, trapping, and gardening.⁸¹⁵ Today, the economy of Ninilchik is diverse, and includes a significant number of residents engaged in the commercial and sportfishing industries. Between 2000 and 2010, Ninilchik residents held the greatest number of fishing permits in fisheries for salmon, halibut, and groundfish, as well as some permits in fisheries for herring and crab.

Commercial fisheries developed in the region after the 1867 purchase of Alaska by the U.S. Commercial harvest of salmon in Cook Inlet began in 1882,⁸¹⁶ with the development of a cannery at the mouth of the Kasilof River. An additional 17 canneries had been built in central Alaska by 1890.⁸¹⁷ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.⁸¹⁸ In the 1920s, herring had become increasingly valued for oil

⁸¹² 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.

⁸¹³ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

⁸¹⁴ Kenaitze Indian Tribe (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

⁸¹⁵ See footnote 812.

⁸¹⁶ 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>.

⁸¹⁷ Cook, Linda, and Frank Norris (1998). *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

⁸¹⁸ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

and meal, and a number of reduction plants were built. Commercial crab fisheries began to develop in the GOA in the 1930s. Historically, a sizable spawning biomass of herring was found in western Cook Inlet, and Lower Cook Inlet also supported commercial fisheries for Dungeness, king, and Tanner crab. However, crab and herring fisheries are currently closed due to low stock abundance.^{819,820}

Today, ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.⁸²¹

Groundfish and crab fisheries that occur within 3 nautical miles (nm) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nm in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission. Cook Inlet is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch (TAC) set by NMFS applied to both fisheries. Beginning in 1997, an additional ‘state-waters fishery’ for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.⁸²²

Ninilchik is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central Gulf of Alaska (GOA) Sablefish Regulatory District. Ninilchik is not eligible to participate in either the Community Development Quota (CDQ) program or the Community Quota Entity (CQE) program.

Processing Plants

Between 2000 and 2010, ADF&G’s Intent to Operate list noted two processing plants in Ninilchik, although neither was listed as registered in 2010. Data reported by NMFS also indicates that several shore-side processing facilities were in operation in Ninilchik between

⁸¹⁹ 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>.

⁸²⁰ Alaska Dept. of Fish and Game (2012). *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

⁸²¹ See footnote 816.

⁸²² See footnote 819.

2000 and 2009.⁸²³ These facilities included Deep Creek Custom Processing and Anchor Point Seafoods, Inc. In addition, Tanner’s Fresh Fish Processing began processing seafood in Ninilchik in 2006.⁸²⁴

Deep Creek Custom Packing Inc. has been producing gourmet seafood products since 1961. The company processes Chinook, coho, and sockeye salmon, producing smoked, fresh, and canned offerings. In addition, Deep Creek Custom Packing offers fresh frozen and smoked halibut as well as fresh king crab, scallops, and black tiger shrimp.⁸²⁵ Deep Creek Custom Packing has downsized considerably in recent years and now primarily caters to the sportfishing community. As of the 2012 season, the processor employed approximately five individuals year-round.⁸²⁶

Anchor Point Seafoods was listed on ADF&G’s Intent to Operate list between 2005 and 2008. The company offered Chinook, coho, and sockeye salmon products, including fresh, frozen, and smoked options. Anchor Point also offered smoked halibut, fresh, frozen, or smoked scallops, and fresh or frozen king crab.⁸²⁷ In May 2012, the business was sold to Tanner’s Fresh Fish Processing.⁸²⁸ As of the 2012 season, the business was still operated under the name Anchor Point Seafood, but the new owners planned to transition the business name to Tanner’s Incorporated beginning in 2013.⁸²⁹

Tanner’s Fresh Fish Processing has been processing seafood in Ninilchik since 2006. The company specializes in fresh and smoked salmon and king crab, and also offers halibut, cod, yelloweye rockfish, scallops, razor clams, and spotted shrimp. The company primarily caters to sport fishermen.^{830,831}

In addition, ADF&G’s 2010 Intent to Operate List noted a number of registered processing facilities in nearby communities of Homer, Kenai, and Nikiski.

Fisheries-Related Revenue

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

Commercial Fishing

Commercial fishing is an important industry within Ninilchik’s diversified economy. Between 2000 and 2010, residents participated in state and federal fisheries as crew members, vessel owners, and permit and quota share account holders. A number of fish buyers and fish processors were also active in the community during some years in the 2000-2010 period.

⁸²³ National Marine Fisheries Service (2011). Alaska processors’ Weekly Production Reports (WPR) 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.]

⁸²⁴ Personal communication, Tanner’s Fresh Fish Processing employee, June 27, 2012.

⁸²⁵ Deep Creek Custom Packing, Inc. (n.d.). *Homepage*. Retrieved June 19, 2012 from <http://www.deepcreekcustompacking.com/>.

⁸²⁶ Personal communication, Deep Creek Custom Packing, Inc. employee, June 19, 2012.

⁸²⁷ Anchor Point Seafood (n.d.). *Homepage*. Retrieved June 19, 2012 from <http://www.anchorpointseafood.com/>.

⁸²⁸ Personal communication with Paul Warner, previous owner of Anchor Point Seafoods, June 20, 2012.

⁸²⁹ See footnote 824.

⁸³⁰ *Ibid*.

⁸³¹ Tanner’s Fresh Fish Processing (n.d.). *Homepage*. Retrieved June 27, 2012 from <http://www.tannersfish.com/>.

In 2010, 42 Ninilchik residents held commercial fishing crew permits and 26 fishing vessels were primarily owned by residents (Table 5). Also in 2010, 56 Ninilchik residents held a total of 67 state-issued Commercial Fisheries Entry Commission (CFEC) permits. Six federal License Limitation Program (LLP) permits and three Federal Fisheries Permits (FFP) were also held by Ninilchik residents that year (Table 4).

A majority of the CFEC permits (46) were held in salmon fishery. Of these, 28 (61%) were held in the Cook Inlet set gillnet fishery, 7 (15%) in the Cook Inlet drift gillnet fishery, and 1 or 2 permits each were held in purse seine fisheries in Cook Inlet, Kodiak, and Prince William Sound, drift gillnet fisheries in Prince William Sound and Bristol Bay, the set gillnet fishery in Bristol Bay, and the statewide power troll fishery. Of all salmon permits, 26 (59%) were actively fished in 2010. The number of salmon permit holders and total salmon permits increased between 2000 and 2005, before falling to just under 2000 levels by 2010. The percentage of salmon permits fished decreased slightly over the period (Table 4).

Other CFEC permits held in 2010 included seven herring permits, held by six individuals, for Cook Inlet and Kodiak herring roe fisheries, six groundfish permits/permit holders in the statewide miscellaneous saltwater finfish fishery, five halibut permits/permit holders in statewide hand troll and longline fisheries, two crab permits/permit holders in Cook Inlet Dungeness crab pot gear fishery, and one ‘other shellfish’ permit/permit holder in the Prince Williams Sound shrimp fishery using pot gear. Of these additional CFEC permits, only halibut and groundfish permits were actively fished in 2010. The last year between 2000 and 2010 in which a herring permit was actively fished was 2006, and crab CFEC permits were not actively fished at any time during this period. In the case of halibut, the number of permits and permit holders decreased by approximately half between 2000 and 2010. In the case of groundfish, the number of permit holders remained stable over the period, but the total number of permits held decreased by 40%. Information about CFEC permits held by Ninilchik residents is presented in Table 4.

Federal fishery permits held by Ninilchik residents in 2010 included five groundfish License Limitation Permits (LLP), one crab LLP, and three Federal Fisheries Permits (FFP). One FFP was actively fished in 2010, while none of the LLP permits were active that year. The most recent year in which a federal groundfish LLP was actively fished by a Ninilchik resident was 2004, while federal crab LLPs were not active in any year between 2000 and 2010. Federal permit information is also presented in Table 4.

In 2000, there were 18 halibut quota share account holders residing in Ninilchik, declining to 8 by 2010. Total quota shares held decreased from 653,000 to 427,983 over the same period. The annual halibut individual fishing quota (IFQ) allotment fluctuated from year to year, rising to a value 38% higher than the 2000 level in 2006, and falling to 36% lower than the 2000 level by 2010. Between 2000 and 2004, one sablefish quota share account holder was present in Ninilchik, and 1,103 sablefish quota shares were held. Sablefish IFQ allotment increased over this 5-year period, rising to a level 28% higher than 2000 by 2004. No quota share accounts or quota shares were held by Ninilchik residents in the federal crab fisheries between 2000 and 2010. Further information about federal catch share participation is presented in Tables 6 through 8.

In 2010, Ninilchik ranked 50th out of 67 Alaskan ports that received commercial fisheries landings. That year, there were 12 fish buyers operating in Ninilchik, while no shoreside processors were registered as operating in the community that year (see the *Processing Plants* section). Landings and ex-vessel revenue information about individual fisheries is largely considered confidential between 2000 and 2010 due to the small number of participants,

although net pounds of salmon and herring landed were each reported during 2 years (Table 9). Total landings and revenue, including all fisheries, are reported for 5 years during the period. In 2010, a total of 95,742 net pounds of fish were purchased by fish buyers in Ninilchik, generating \$224,348 in ex-vessel revenue. Of those years in which total landings and ex-vessel revenue were reported, 2010 had the lowest numbers, despite the presence of a greater number of fish buyers than in any other year between 2000 and 2010 (Table 5).

Ninilchik vessel owners delivered landings in many locations throughout the 2000-2010 period. Information about salmon harvest by Ninilchik residents was reported for all years between 2000 and 2010. During this period, Ninilchik vessel owners landed an average of 658,544 net pounds of salmon per year, valued at \$395,842 in ex-vessel revenue on average. The highest volume of salmon was landed by Ninilchik residents in 2010 (1,396,938), valued at \$801,621. Halibut and Pacific cod landings are only reported for some years, while landings in other years are considered confidential due to the small number of participants. In 2003, Ninilchik vessel owners landed 75,387 net pounds of halibut for total ex-vessel revenue of \$228,981. In 2001, Ninilchik vessel owners landed 12,138 net pounds of Pacific cod, valued at \$4,146 in ex-vessel revenue. Landings of all other species are considered confidential for all years between 2000 and 2010. Information about landings and ex-vessel revenue generated by Ninilchik vessel owners, irrespective of delivery location, is presented in Table 10.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fisheries Resource Landing Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>Total municipal revenue⁵</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>

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

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

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

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

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

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

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Ninilchik

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	6	6	6	6	6	5	5	5	5	5	5
	Active permits	3	1	1	2	1	0	0	0	0	0	0
	% of permits fished	50%	16%	16%	33%	16%	-	-	-	-	-	-
	Total permit holders	5	5	5	5	5	5	5	5	5	5	5
Crab (LLP) ¹	Total permits	1	1	1	1	1	1	1	1	1	1	1
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	1	1	1	1	1	1	1	1	1	1	1
Federal Fisheries Permits ¹	Total permits	8	8	8	7	7	7	6	6	6	3	3
	Fished permits	0	0	0	3	3	2	2	3	2	1	1
	% of permits fished	-	-	-	43%	43%	29%	33%	50%	33%	33%	33%
	Total permit holders	8	8	8	6	6	6	5	5	5	2	2
Crab (CFEC) ²	Total permits	2	2	2	2	2	2	2	2	2	2	2
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	2	2	2	2	2	2	2	2	2	2	2
Other shellfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	1
	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	1
Halibut (CFEC) ²	Total permits	10	9	10	12	10	8	7	4	4	5	5
	Fished permits	8	6	8	11	9	7	7	4	4	5	4
	% of permits fished	80%	67%	80%	92%	90%	88%	100%	100%	100%	100%	80%
	Total permit holders	9	8	9	11	10	8	7	4	4	5	5
Herring (CFEC) ²	Total permits	7	3	2	2	1	4	6	4	4	5	7
	Fished permits	2	1	0	0	0	2	1	0	0	0	0
	% of permits fished	29%	33%	-	-	-	50%	17%	-	-	-	-
	Total permit holders	7	3	2	2	1	3	5	4	3	4	6

Table 4 cont'd. Permits and Permit Holders by Species, Ninilchik: 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	10	8	5	4	3	1	4	5	5	6	6
	Fished permits	3	1	2	1	2	1	3	4	4	5	2
	% of permits fished	30%	13%	40%	25%	67%	100%	75%	80%	80%	83%	33%
	Total permit holders	6	5	3	3	2	1	3	5	5	6	6
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	48	48	52	59	63	65	58	56	53	50	46
	Fished permits	36	38	33	41	40	36	32	31	30	29	27
	% of permits fished	75%	79%	63%	69%	63%	55%	55%	55%	57%	58%	59%
	Total permit holders	50	47	50	56	57	57	58	58	52	48	47
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>77</i>	<i>70</i>	<i>71</i>	<i>79</i>	<i>79</i>	<i>80</i>	<i>77</i>	<i>71</i>	<i>68</i>	<i>68</i>	<i>67</i>
	<i>Fished permits</i>	<i>49</i>	<i>46</i>	<i>43</i>	<i>53</i>	<i>51</i>	<i>46</i>	<i>43</i>	<i>39</i>	<i>38</i>	<i>39</i>	<i>33</i>
	<i>% of permits fished</i>	<i>64%</i>	<i>66%</i>	<i>61%</i>	<i>67%</i>	<i>65%</i>	<i>58%</i>	<i>56%</i>	<i>55%</i>	<i>56%</i>	<i>57%</i>	<i>49%</i>
	<i>Permit holders</i>	<i>57</i>	<i>54</i>	<i>54</i>	<i>63</i>	<i>62</i>	<i>60</i>	<i>61</i>	<i>64</i>	<i>57</i>	<i>56</i>	<i>56</i>

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Ninilchik: 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 Ninilchik ²	Total Net Pounds Landed In Ninilchik ^{2,5}	Total Ex-Vessel Value Of Landings In Ninilchik ^{2,5}
2000	58	1	1	77	102	15	-	-
2001	62	4	1	80	101	37	618,682	\$539,286
2002	40	6	2	77	96	37	811,572	\$513,815
2003	36	1	1	85	99	4	-	-
2004	53	5	1	82	95	7	156,849	\$224,004
2005	46	1	2	36	23	4	-	-
2006	39	1	3	29	22	6	-	-
2007	39	1	2	24	26	2	-	-
2008	43	2	1	24	26	50	-	-
2009	37	9	2	26	29	12	150,902	\$201,036
2010	42	12	0	26	27	15	95,742	\$224,348

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

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

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

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

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

⁵ Totals only represent non-confidential data.

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

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	18	653,000	72,377
2001	18	625,856	74,134
2002	19	644,733	78,959
2003	19	571,370	69,956
2004	15	461,620	62,573
2005	14	446,200	61,466
2006	15	640,420	99,671
2007	8	622,173	93,622
2008	8	427,983	56,011
2009	8	427,983	50,183
2010	8	427,983	46,229

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 Ninilchik: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (pounds)
2000	1	1,103	99
2001	1	1,103	94
2002	1	1,103	94
2003	1	1,103	112
2004	1	1,103	127
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 Ninilchik: 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 Ninilchik: 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	-	-	-	-	-	-	-	-	-	18,480	33,177
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	718,687	-	108,111	-	-	-	-	-	-
<i>Total²</i>	-	-	718,687	-	108,111	-	-	-	-	18,480	33,177
	<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	-	-	-	-	-	-	-	-	-	\$18,480	\$32,957
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	\$339,583	-	\$78,576	-	-	-	-	-	-
<i>Total²</i>	-	-	\$339,583	-	\$78,576	-	-	-	-	\$18,480	\$32,957

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.

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Ninilchik 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	64,123	72,852	-	75,387	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	8,462	12,138	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	698,466	414,970	612,437	557,845	733,103	715,697	552,499	550,748	587,813	423,464	1,396,938
<i>Total²</i>	<i>771,051</i>	<i>499,960</i>	<i>612,437</i>	<i>633,232</i>	<i>733,103</i>	<i>715,697</i>	<i>552,499</i>	<i>550,748</i>	<i>587,813</i>	<i>423,464</i>	<i>1,396,938</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	\$166,619	\$145,101	-	\$228,981	-	-	-	-	-	-	-
Herring	-	-	-	-	-	-	-	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	\$3,412	\$4,146	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	\$317,792	\$214,857	\$260,802	\$302,464	\$413,863	\$526,568	\$382,662	\$435,909	\$421,619	\$276,110	\$801,621
<i>Total²</i>	<i>\$487,823</i>	<i>\$364,104</i>	<i>\$260,802</i>	<i>\$531,445</i>	<i>\$413,863</i>	<i>\$526,568</i>	<i>\$382,662</i>	<i>\$435,909</i>	<i>\$421,619</i>	<i>\$276,110</i>	<i>\$801,621</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 recreational fishing industry has a large presence in Ninilchik, providing significant employment in the community.⁸³² From 2000 and 2010, the number of active sport fish guide businesses located in Ninilchik varied between 25 and 38 per year and the number of licensed sport fish guides residing in the community varied between 46 and 59 per year. Between 2000 and 2010, the number of Ninilchik residents that purchased sportfishing licenses (irrespective of point of sale) varied between 473 and 629 per year. The number of fishing licenses sold in Ninilchik was much larger, varying between 934 and 4,964 per year. The greater number of licenses sold in Ninilchik than licenses sold to residents indicates that sportfishing is a large tourism draw in Ninilchik. Information about sportfishing activity is presented in Table 11.

The Alaska Statewide Harvest Survey,⁸³³ conducted by ADF&G between 2000 and 2010, noted the species known to be targeted by private anglers in Ninilchik. In freshwater, anglers targeted Chinook, coho, sockeye, and pink salmon, rainbow trout, Dolly Varden, smelt, Arctic grayling, and northern pike. In saltwater, anglers pursued the same salmon species listed above, as well as Dolly Varden, Pacific halibut, rockfish, lingcod, Pacific cod, and shark. The survey also noted sport harvest of Tanner crab, razor clams, hardshell clams, and shrimp by Ninilchik residents.⁸³⁴

Kept/released statistics from charter logbook data reported by ADF&G⁸³⁵ show that Pacific halibut was by far the most important species targeted by fishing charters out of Ninilchik between 2000 and 2010, with 41,705 halibut kept and 54,425 released in 2010. Chinook salmon were the next most numerous species caught by sport charters, although numbers of Chinook caught decreased significantly in 2009 and 2010. In 2000, 1,977 large Chinook salmon were kept and 171 released, compared to only 361 kept and 15 released in 2010. Coho salmon and pelagic rockfish were the next most numerous species reported in charter logbooks. The greatest number of coho were reported in 2002 (1,229 kept), and the lowest number was reported in 2010 (195 kept). The greatest number of pelagic rockfish were reported caught in 2004 (2,349 kept), and the lowest number was reported in 2006 (41 kept). Other species that were also caught during charters out of Ninilchik between 2000 and 2010 include sockeye, chum, and pink salmon, lingcod, yelloweye rockfish, ‘other rockfish’, sablefish, and shark.

Ninilchik is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, saltwater and freshwater sportfishing at this regional level was substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska resident logged 20,292 saltwater angler days and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska

⁸³² 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.

⁸³³ 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).

⁸³⁴ The Alaska Statewide Harvest Survey includes separate categories for Dungeness crab, Tanner crab, razor clams, hardshell clams and shrimp. Remaining species fall into the ‘other shellfish’ category.

⁸³⁵ 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.]

resident anglers, and the opposite was true of freshwater sportfishing. For both Alaska resident and non-Alaska resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased between 2000 and 2010 (Table 11).

Table 11. Sport Fishing Trends, Ninilchik: 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 Ninilchik ²
2000	28	46	493	934
2001	25	48	514	978
2002	28	52	473	1,149
2003	26	51	598	1,065
2004	30	54	601	1,111
2005	33	51	602	1,467
2006	37	54	600	1,687
2007	35	57	625	1,295
2008	38	59	606	4,964
2009	36	54	646	4,906
2010	36	56	629	4,207

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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

Ninilchik is located in the historic territory of the Kenaitze people, a branch of Athabascan Indians. The Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.⁸³⁶ Russian settlers living in the area in the mid 1800s also survived from subsistence fishing, as well as hunting, trapping, and gardening.⁸³⁷ Today, many residents of Ninilchik continue to harvest marine resources for subsistence purposes.

No information was reported by ADF&G regarding per capita subsistence harvest or the percentage of households in Ninilchik utilizing various marine resources for subsistence purposes between 2000 and 2010 (Table 12). However, an ADF&G survey of subsistence activities in 1998 provides information regarding subsistence use of marine mammals, marine invertebrates, and non-salmon fish (not including halibut) in Ninilchik. The survey indicated that Ninilchik residents harvested the following species of marine invertebrates in 1998: butter, horse, Pacific littleneck, pinkneck, and razor clams, black and red chitons, cockles, mussels, oysters, scallops, limpets, snails, sea urchin, sea cucumber, whelk, Dungeness, Tanner, snow, and king crab, octopus, and shrimp. Of these species, the greatest percentage of households reported harvesting razor clams (54%), Pacific littleneck clams (12%), and mussels (10%). The percentage of households using these resources was greater than the percentage harvesting, indicating the presence of sharing networks.⁸³⁸

Species of non-salmon fish (not including halibut) harvested by Ninilchik residents in 1998 included Dolly Varden, Arctic char, steelhead, cutthroat, lake, and rainbow trout, pike, whitefish, sheefish, sturgeon, grayling, eel, euchalon (hooligan candlefish), black and red rockfish, lingcod, sablefish, Pacific cod, walleye pollock, Pacific tom cod, sea bass, greenling, Irish lord, unknown sculpin, smelt, flounder, sole, wolf fish, skate, shark, and herring. The survey also noted harvest of herring sac roe and herring spawn on kelp. Of these species, the greatest percentage of households reported harvest of Dolly Varden (14%), while 20% of households reported using Dolly Varden for subsistence purposes.⁸³⁹

In addition, the survey found that Ninilchik households harvested the following marine mammal species in 1998: bowhead and unknown whale, harbor seal, and Steller sea lion.⁸⁴⁰

Information was reported during the 2000-2010 period regarding subsistence harvest of salmon, halibut, and marine mammals. Between 2000 and 2007, the number of subsistence salmon permits issued to Ninilchik households varied between two and eight. In 2008, the number rose dramatically, to a reported 65 total permits issued. Based on reported harvests, on average, sockeye was the most heavily harvested salmon species. Harvest of some Chinook, chum, and pink salmon was also reported in some years. Information about subsistence salmon harvest is presented in Table 13.

⁸³⁶ Kenaitze Indian Tribe (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

⁸³⁷ 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.

⁸³⁸ Ibid.

⁸³⁹ Ibid.

⁸⁴⁰ Alaska Department of Fish and Game (2011). *Community Subsistence Information System (CSIS)*. ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sb/CSIS/> (Accessed February 2011).

Between 2003 and 2010, an average of 54 Subsistence Halibut Registration Certificates (SHARC) were issued to residents of Ninilchik. Of these, an average of 14 SHARC cards were fished, with an average subsistence halibut harvest of 4,675 pounds per year. The highest reported harvest of halibut during the 2000-2010 period occurred in 2004, when 26 SHARC cards were fished and a total of 7,627 pounds of halibut were harvested. Information about subsistence harvest of halibut is presented in Table 14.

Some information was reported about subsistence harvest of marine mammals by residents of Ninilchik. According to data reported by the U.S. Fish and Wildlife Service data, several sea otters were harvested each year between 2008 and 2010. A total of 13 were reported harvested in 2008, while only 2 were reported in 2009, and 3 in 2010. No information was available from management agencies regarding harvest of beluga whale, walrus, polar bear, Steller sea lion, harbor seal, or spotted seal by Ninilchik residents between 2000 and 2010. This information about marine mammal harvest is presented in Table 15.

Additional Information

According to a linguistic study, “Ninilchik Russian” is a distinct and unique variety of the Russian language. In 2010, there were no speakers of Ninilchik Russian under the age of 70, and the language is expected to die out in coming years. The language incorporates characteristics of various Russian dialects and neighboring Slavic languages, and is also influenced by Eskimo-Aleut and Athabascan languages. Nevertheless, it is the Russian language, and the remaining speakers of Ninilchik Russian are able to communicate fully with speakers of standard Russian.⁸⁴¹

⁸⁴¹ Bergelson, M.B., and A.A. Kibrik (2010). The Ninilchik Variety of Russian: Linguistic Heritage of Alaska. In *Sociolinguistic Approaches to Non-Standard Russian*. Eds. Mustajoki, A., Protassova, N. and Vakhtin. Helsinki. Retrieved February 1, 2012 from <http://www.helsinki.fi/slavicahelsingiensia/preview/sh40/pdf/20-sh40.pdf>.

Table 12. Subsistence Participation by Household and Species, Ninilchik: 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, Ninilchik: 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	8	8	3	1	n/a	n/a	192	n/a	n/a
2001	7	8	2	n/a	5	n/a	137	n/a	n/a
2002	3	3	n/a	n/a	n/a	n/a	83	n/a	n/a
2003	5	6	2	n/a	n/a	n/a	49	n/a	n/a
2004	3	3	n/a	n/a	15	n/a	10	n/a	n/a
2005	8	7	n/a	n/a	n/a	n/a	60	n/a	n/a
2006	2	2	n/a	n/a	n/a	n/a	44	n/a	n/a
2007	8	7	89	n/a	n/a	n/a	451	n/a	n/a
2008	65	62	5	n/a	5	n/a	557	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, Ninilchik: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	51	18	3,538
2004	61	26	7,627
2005	62	21	7,509
2006	64	16	3,735
2007	67	14	7,218
2008	44	7	1,661
2009	41	7	3,135
2010	38	3	2,974

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, Ninilchik: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	13	n/a	n/a	n/a	n/a	n/a
2009	n/a	2	n/a	n/a	n/a	n/a	n/a
2010	n/a	3	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.

Port Graham

People and Place

*Location*⁸⁴²



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

*Demographic Profile*⁸⁴³

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

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

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

⁸⁴² 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.

⁸⁴³ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census and the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

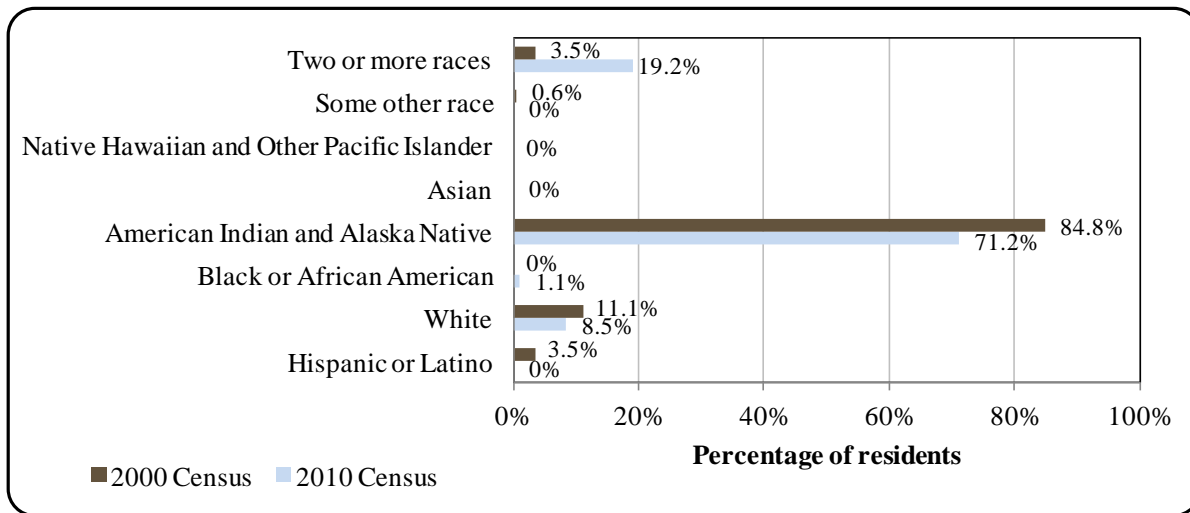
Table 1. Population in Port Graham from 1990 to 2010 by Source.

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

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

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>.

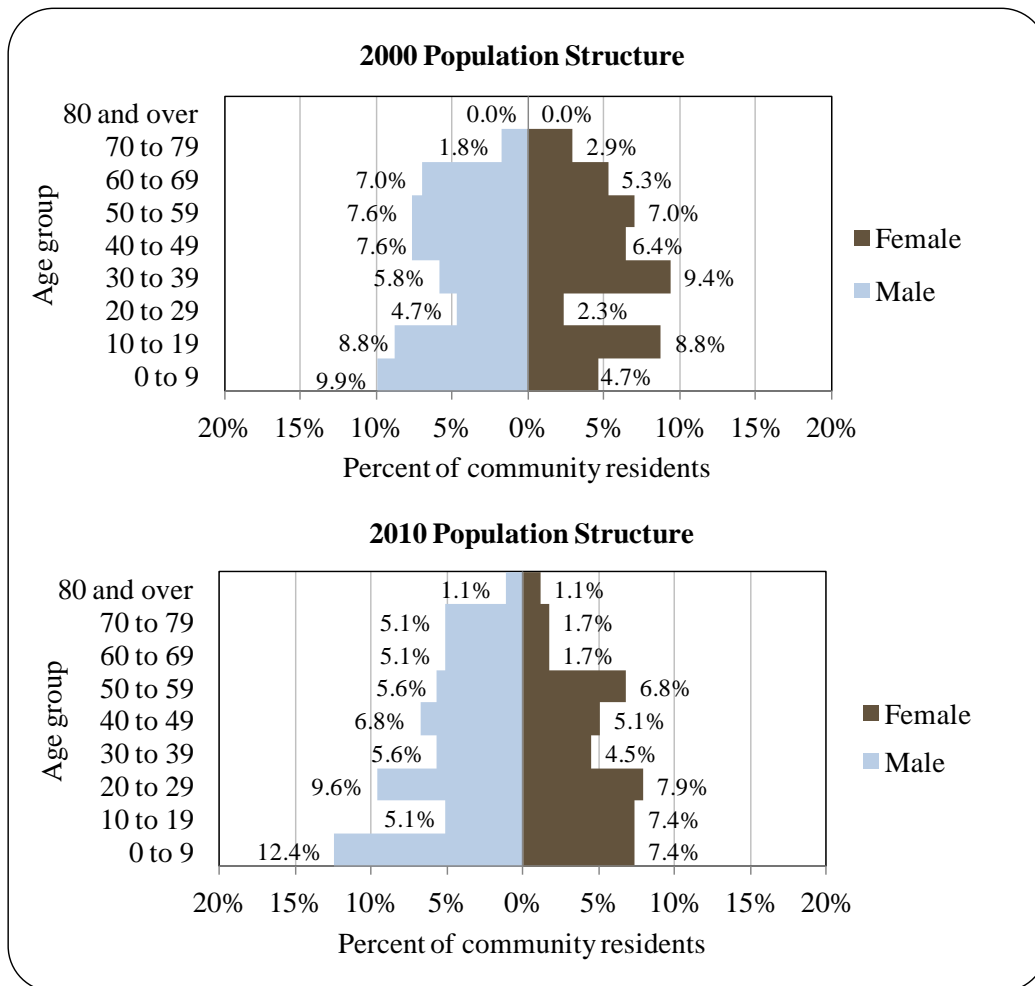
Figure 1. Racial and Ethnic Composition, Port Graham: 2000-2010 (U.S. Census).



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

In 2010, the gender makeup was slightly skewed, at 56.5% male and 43.5% female, and slightly more skewed toward males than the state as a whole (52% male, 48% female). The median age in Port Graham was 30.3 years, lower than the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. The greatest percentage of residents fell within the age category 0-29 years old, with the next largest percentage for the age category 40-59 years old. Relatively few people were 60 or older. The overall population structure of Port Graham in 2000 and 2010 is shown in Figure 2.

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



In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),⁸⁴⁴ 80.9% of residents aged 25 and over held a high school diploma or higher degree in 2009, compared to 90.7% of Alaskan residents overall. Also in 2009, 11.8% of the population had less than a ninth grade education, compared to 3.5% of Alaskan residents overall; 7.4% had a 9th to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 36.8% held a high school diploma or equivalent, compared to 27.4% of Alaskan residents overall; 36.8% had some college but no degree, compared to 28.3% of Alaskan residents overall; 2.9% had earned an Associate's degree, compared to 8% of Alaskan residents overall; 0% earned a Bachelor's degree, compared to 17.4% of Alaskan residents overall; and 4.4% earned a graduate or professional degree, compared to 9.6% of Alaskan residents overall.⁸⁴⁵

*History, Traditional Knowledge, and Culture*⁸⁴⁶

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

Natural Resources and Environment

Port Graham experiences cool winters and moderate summers: temperatures range from 14 – 27°F in the winter (-10 to -3°C) and 45 – 65°F in the summer (7 to 18°C). Port Graham receives an average of 24 inches of precipitation per year.⁸⁴⁷

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

⁸⁴⁴ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁸⁴⁵ 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>.

⁸⁴⁶ 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.

⁸⁴⁷ Ibid.

Port Graham is located near the Kachemak Bay State Park and State Wilderness Park. Alaska's first state park, and only wilderness park, contains roughly 400,000 acres of mountains, glaciers, forests and ocean. The bay's twisted rock formations are evidence of the movement of the earth's crust. Highlighted by constantly changing weather patterns, the park's outstanding scenery is a backdrop for high quality recreation. Park visitors will find opportunities for fishing, boating, kayaking, hiking, camping and mountain sports. Kachemak Bay is a critical habitat area, supporting many species of marine life. Visitors frequently observe sea otters, seals, porpoise and whales. Land mammals include moose, black bear, mountain goats, coyotes and wolves. The many species of birds that inhabit the bay, including eagles, gyrfalcons and puffins, make it a popular area for bird watching.⁸⁴⁸

Port Graham also lies near the western border of Kenai Fjords National Park. This National Park was established in 1980 to "maintain unimpaired the scenic and environmental integrity of the Harding Icefield, its outflowing glaciers and coastal fjords and islands." Fifty-six percent of the park is covered by ice. Animals living in the mountains, the shores and the fjords of the National Park include black bear, brown bear, moose, mountain goat, sea otter, Steller sea lion, harbor seal, Dall's porpoise, Pacific white-sided dolphin, orca, minke whale, humpback whale, fin whale, and birds including bald eagles, puffins, murrets, Steller's jay, black-billed magpie, peregrine falcon, and marbled murrelet.⁸⁴⁹ Portions of both Kenai Fjords National Park and the Kachemak Bay State Park and State Wilderness Park are included in the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.⁸⁵⁰

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures and soil liquefaction.⁸⁵¹

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields on and off shore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.⁸⁵²

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

⁸⁴⁸ Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. *Kachemak Bay State Park and State Wilderness Park*. Retrieved February 17, 2012 from <http://dnr.alaska.gov/parks/units/kbay/kbay.htm>.

⁸⁴⁸ Unless otherwise noted, all monetary data are reported in nominal values.

⁸⁴⁹ National Park Service (2010). Kenai Fjords National Park Retrieved December 27, 2011 from <http://www.nps.gov/kefj/>.

⁸⁵⁰ Wilderness.net website. (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from <http://www.wilderness.net>.

⁸⁵¹ Kenai Peninsula Borough. 2010. *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

⁸⁵² Resource Development Council. (n.d.). *Alaska's Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

Council was formed as a result of meetings convened by the Chugachmiut Environmental Health Program to examine where funding for wetlands protection was most needed in the region.⁸⁵³

According to the Alaska Department of Environmental Conservation (DEC), there are no notable active environmental cleanup sites located in Port Graham as of October 2012.⁸⁵⁴

Current Economy⁸⁵⁵

The economy of Port Graham is somewhat influenced by commercial fishing. Although only a small number of local residents are directly engaged in commercial fishing activities themselves, a new \$4.5 million fish cannery⁸⁵⁶ and hatchery was completed in June 1999. However in a survey conducted by NOAA's AFSC in 2011, community leaders report that the cannery is currently not operational. In addition to the formal economy, residents of Port Graham participate in subsistence fishing and hunting to supplement their incomes.

Based on the 2006-2010 ACS,⁸⁵⁷ the per capita income in Port Graham in 2010 was \$9,368, and the median household income in 2010 was \$18,942, compared to \$13,666 and \$40,250 in 2000, respectively. However, after accounting for inflation by converting the 2000 values to 2010 dollars,⁸⁵⁸ the real per capita income (\$17,971) and the real median household income in 2000 (\$52,928) indicate a substantial decrease between 2000 and 2010. In 2010, Port Graham ranked 282nd out of 305 communities with per capita income that year, and 280th out of 299 Alaskan communities with household income data. Port Graham's small population size may have prevented the ACS from accurately portraying economic conditions.⁸⁵⁹ A potentially more accurate understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database, maintained by the Alaska Department of Labor and Workforce Development (DOLWD). According to the ALARI database, the per capita income in Port Graham in 2010 was \$7,739, which indicates an overall decrease compared to the real per capita income values reported by the U.S. Census in 2000.⁸⁶⁰ This is supported by the fact that the community was recognized as "distressed" by the Denali Commission indicating that over 70% of residents aged 16 and older earned less than \$16,120 in 2010.⁸⁶¹ However, it should be noted that ACS and DOLWD data are based on wage earnings and do not take into account the value of subsistence within the local economy.

⁸⁵³ U.S. Environmental Protection Agency. March 2000. *Tribal Wetland Program Highlights*. EPA 843-R-99-002. Retrieved December 26, 2011 from <http://water.epa.gov/>.

⁸⁵⁴ Alaska Dept. of Environmental Conservation (n.d.). *List of Contaminated Sites*. Retrieved April 17, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

⁸⁵⁵ Unless otherwise noted, all monetary data is reported in nominal values.

⁸⁵⁶ 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.

⁸⁵⁷ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁸⁵⁸ Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved October 18, 2011 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

⁸⁵⁹ See footnote 857.

⁸⁶⁰ 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/>.

⁸⁶¹ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

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

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

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

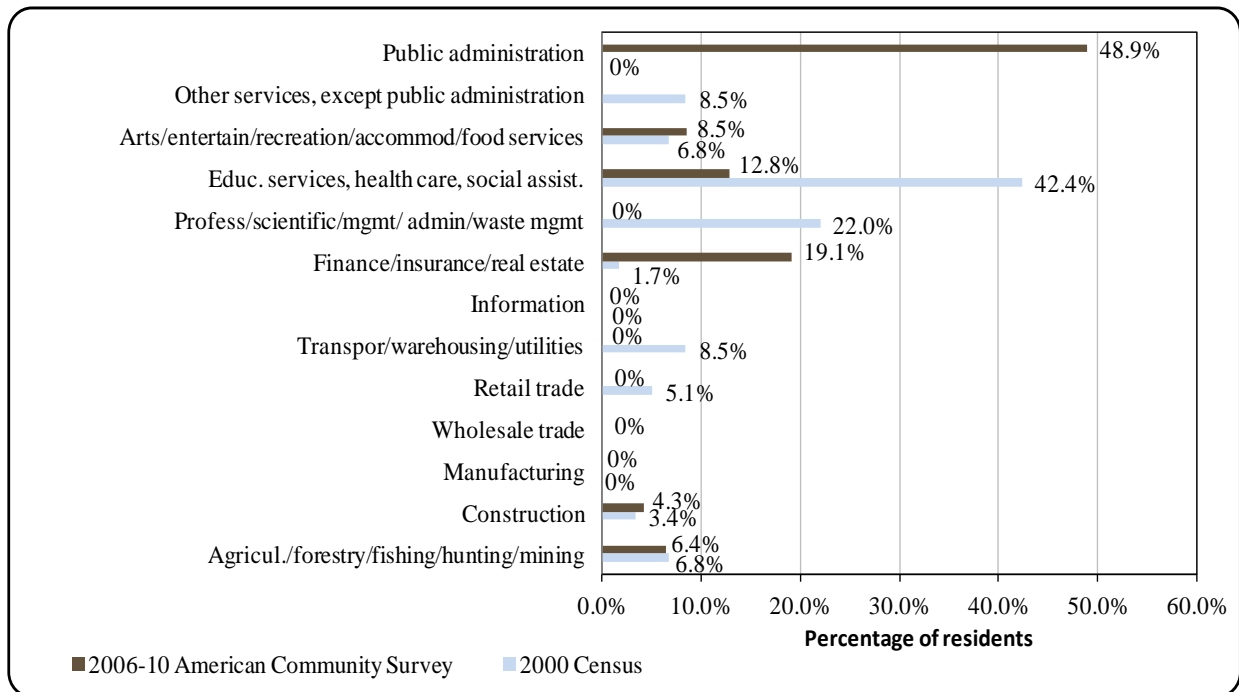
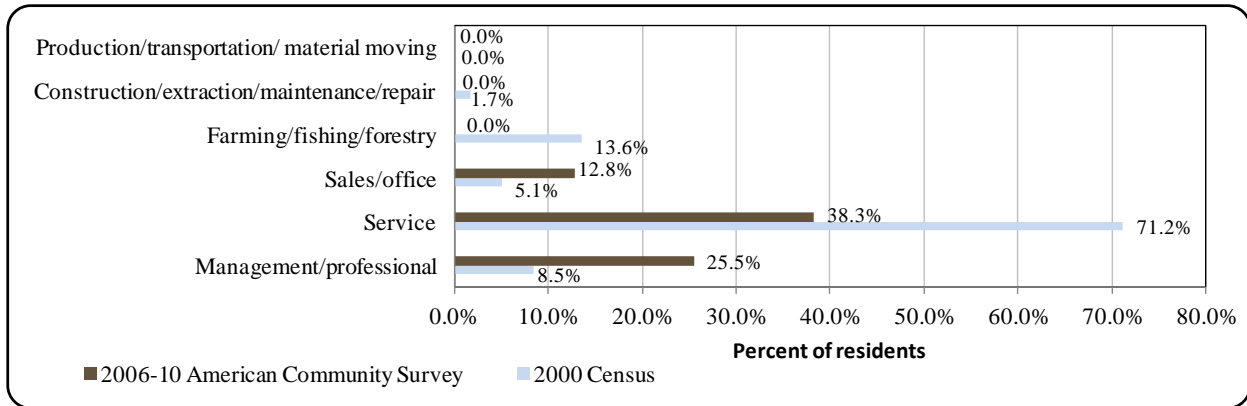


Figure 4. Local Employment by Occupation in 2000-2010, Port Graham (U.S. Census).



Governance

Port Graham is an unincorporated community governed by a traditional village council and is located within the Kenai Peninsula Borough. The Native Village of Port Graham is federally recognized by the U.S. Bureau of Indian Affairs (BIA). The Port Graham Corporation also holds a land entitlement under the Alaska Native Claims Settlement Act (ANCSA). Port Graham is a member of a regional Native corporation, the Chugach Alaska Corporation.⁸⁶² The nearest Alaska Department of Fish and Game (ADF&G), Department of Natural Resources, and National Marine Fisheries Service (NMFS) offices are located in Homer. The nearest Alaska Department of Commerce, Community, and Economic Development office is in Anchorage, as are the nearest offices for U.S. Immigration and Customs Enforcement and the Bureau of Citizenship and Immigration Services.

As of 2010, the Kenai Peninsula Borough administers a 3% sales tax.⁸⁶³ Port Graham itself does not administer its own sales tax. In addition, since it is unincorporated, Port Graham does not maintain a municipal budget with community revenue and expenditures. Data are not available for community revenues from 2000-2010, with the exception of a grant received by Port Graham in 2008 in the amount of \$80,000 for a floating skiff dock. Information on municipal revenue received by Port Graham between 2000 and 2010 is presented in Table 2.

⁸⁶² 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.

⁸⁶³ Alaska Dept. of Comm. and Econ. Dev. (n.d.). *Alaska Taxable (2000-2010)*. Retrieved at http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

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

Year	Total Municipal Revenue ¹	Sales Tax Revenue ²	State/Community Revenue Sharing ^{3,4}	Fisheries-Related Grants (State and Federal) ⁵
2000	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	\$80,000
2009	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a

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

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

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

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

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

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

Infrastructure

Connectivity and Transportation

Port Graham is not accessible by road. A state-owned 1,975-foot airstrip is available for local charter flights. There are no roads in the community, but a trail connects Port Graham with the nearby village of Nanwalek.⁸⁶⁴ There is no scheduled water taxi or ferry service however non-scheduled barge service for delivery of fuel and supplies is available from Homer.⁸⁶⁵ Roundtrip airfare to Anchorage, after a short charter flight to Homer, was \$239.⁸⁶⁶

*Facilities*⁸⁶⁷

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

⁸⁶⁴ See footnote 862.

⁸⁶⁵ Port Graham Corporation (n.d.). *Our Heritage*. Retrieved November 23, 20110 from <http://www.portgrahamcorp.com/our-heritage.html>.

⁸⁶⁶ Airfare was obtained on the travel website <http://www.travelocity.com> for a round-trip ticket for travel from June 1 to June 8, 2012. Retrieved on November 16, 2011.

⁸⁶⁷ See footnote 862.

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

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

*Medical Services*⁸⁶⁸

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

*Educational Opportunities*⁸⁶⁹

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

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Port Graham has been the site of subsistence harvest of marine resources for thousands of years. It was probably a seasonal hunting and food gathering site when it was first recorded in 1786 by Captain Portlock of the Cook party.⁸⁷⁰ Archaeological evidence reveals that marine mammals were a primary food source for early Eskimo residents of the area, and that finfish and shellfish increased in importance over time.⁸⁷¹

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

⁸⁶⁸ Ibid.

⁸⁶⁹ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

⁸⁷⁰ ASCG Incorporated. September 2006. *Chugachmiut Facilitated Integrated Resources Management Plan for Nanwalek and Port Graham*. Retrieved December 26, 2011 from <ftp://200-10-178-69.static.gci.net/>.

⁸⁷¹ Stanek, R. T. 1999. *Ethnographic Overview and Assessment for Nanwalek and Port Graham*. Draft. Division of Subsistence, Alaska Department of Fish and Game. Retrieved December 27, 2011 from <http://www.alaska.boemre.gov/>.

Seldovia, and the community of Port Graham was founded when a cannery was built there in 1912. Salmon was the primary focus of fishing and processing effort in early years of the fishing industry, and herring was also an important early product. A cannery was also built nearby at English Bay in 1920, which was the first to can king crab, known at that time as ‘spider crab.’⁸⁷²

In the early years of commercial fishing, Native residents of the Cook Inlet area typically lacked the resources to purchase expensive fishing vessels. Instead, they participated in commercial fishing as cannery workers, salmon trap attendants, and setnet fishers. Native residents were also unable to work a full summer season at the cannery, since they also needed to put up subsistence resources for their winter food supply. By the 1950s, villagers were able to afford to lease or purchase commercial fishing vessels and gear.⁸⁷³

Port Graham is located within Port Graham Bay, within the Southern district of the ADF&G-managed Lower Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts. Purse seine gear is used throughout the Lower Cook Inlet management area, while set gillnets are limited to the Kachemak Bay sub-district.⁸⁷⁴ In some years during the 2000-2010 period, one Cook Inlet ‘special harvest area’ (hatchery) permit was also held in Port Graham. Sockeye salmon escapement in the English Bay Lakes system reached a low of 5,000 adults in 1985, from a historical high of 40,000 fish. ADF&G closed the fishing season to allow the stock to recover. To meet the need, the Port Graham Salmon Enhancement Project began operations in 1990 at the Port Graham hatchery facility. Currently, eggs are taken from the English Bay Lakes system, incubated and reared at the Port Graham hatchery, and fry are released into Port Graham Bay.⁸⁷⁵ In 2011, the Cook Inlet Aquaculture Association coordinated cost recovery harvest of Port Graham Bay and other Cook Inlet hatchery returns.⁸⁷⁶

Port Graham is also located in Pacific Halibut Fishery Regulatory Area 3A, the Central Gulf of Alaska Sablefish Regulatory Area, and Federal Statistical and Reporting Area 630. Port Graham is eligible participate in the Community Quota Entity Program and has set up the Port Graham CQE, Inc. in order to be able to purchase quota. As of Fall 2013, the Port Graham CQE, Inc. had not yet purchased any commercial halibut IFQ or non-trawl groundfish License Limitation Program permits for lease to eligible community members. However, the non-profit had acquired seven halibut charter permits for lease to community members.⁸⁷⁷ The community is not eligible to participate in the Community Development Quota program.

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

⁸⁷² 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.

⁸⁷³ Ibid.

⁸⁷⁴ 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>.

⁸⁷⁵ Ibid.

⁸⁷⁶ Cook Inlet Aquaculture Association. April 2011. *2011 Prospective Fish Sales*. Retrieved December 27, 2011 from <http://www.ciaa.net.org/>.

⁸⁷⁷ NOAA Fisheries. (2013). *Community Quota and License Programs and Community Quota Entities*. Retrieved October 30, 2013 from <http://alaskafisheries.noaa.gov/ram/cqp.htm>.

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

*Processing Plants*⁸⁷⁸

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

Fisheries-Related Revenue

Given that Port Graham has no taxing authority and does not manage a community budget, no data were available regarding revenue received by Port Graham from fisheries-related taxes and fees (Table 3). However, in 2008, Port Graham received a grant in the amount of \$80,000 for work on a floating skiff dock.⁸⁷⁹

Commercial Fishing

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

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

⁸⁷⁸ See footnote 872.

⁸⁷⁹ A direct comparison between fisheries-related revenue and total municipal revenue cannot reliably be made as not all fisheries-related revenue sources are included in the municipal budget.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fisheries Resource Landing Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total fisheries-related revenue ⁴	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total municipal revenue ⁵	n/a	n/a	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 Alaska Dept. of Comm. and Econ. Dev. (n.d.) *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

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

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

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

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

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Port Graham

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Crab (LLP) ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0	0	0	0	0	0	0	0	0	0	0
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Federal Fisheries Permits ¹	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
Crab (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Other shellfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Halibut (CFEC) ²	Total permits	1	1	0	0	1	1	1	1	1	1	1
	Fished permits	1	1	0	0	1	1	1	1	1	1	1
	% of permits fished	100%	100%	-	-	100%	100%	100%	100%	100%	100%	100%
	Total permit holders	1	1	0	0	1	1	1	1	1	1	1
Herring (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	1	1	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	-	-	-	-	-	-	-	-	-
	Total permit holders	1	1	0	0	0	0	0	0	0	0	0
Groundfish (CFEC) ²	Total permits	1	1	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	-	-	-	-	-	-	-	-	-
	Total permit holders	1	1	0	0	0	0	0	0	0	0	0
Other Finfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	15	11	11	11	12	11	9	9	8	8	6
	Fished permits	4	2	1	3	4	3	1	1	1	1	0
	% of permits fished	27%	18%	9%	27%	33%	27%	11%	11%	13%	13%	0%
	Total permit holders	15	11	12	13	15	13	9	9	8	8	6
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>18</i>	<i>14</i>	<i>11</i>	<i>11</i>	<i>13</i>	<i>12</i>	<i>10</i>	<i>10</i>	<i>9</i>	<i>9</i>	<i>7</i>
	<i>Fished permits</i>	<i>5</i>	<i>3</i>	<i>1</i>	<i>3</i>	<i>5</i>	<i>4</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>1</i>
	<i>% of permits fished</i>	<i>28%</i>	<i>21%</i>	<i>9%</i>	<i>27%</i>	<i>38%</i>	<i>33%</i>	<i>20%</i>	<i>20%</i>	<i>22%</i>	<i>22%</i>	<i>14%</i>
	<i>Permit holders</i>	<i>15</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>15</i>	<i>13</i>	<i>9</i>	<i>9</i>	<i>8</i>	<i>8</i>	<i>6</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 Port Graham: 2000-2010.

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

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

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

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

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

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

⁵ Totals only represent non-confidential data.

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

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

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

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

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

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

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

Year	Number of Crab Quota 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 Port Graham: 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
Finfish	--	--	0	0	0	--	0	0	0	0	0
Halibut	--	--	0	0	0	--	0	0	0	0	0
Herring	--	--	0	0	0	--	0	0	0	0	0
Other Groundfish	--	--	0	0	0	--	0	0	0	0	0
Other Shellfish	--	--	0	0	0	--	0	0	0	0	0
Pacific Cod	--	--	0	0	0	--	0	0	0	0	0
Pollock	--	--	0	0	0	--	0	0	0	0	0
Sablefish	--	--	0	0	0	--	0	0	0	0	0
Salmon	--	--	0	0	0	--	0	0	0	0	0
<i>Total²</i>	--	--	0	0	0	--	0	0	0	0	0
	<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
Finfish	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0
Halibut	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0
Herring	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0
Other Groundfish	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0
Other Shellfish	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0
Pacific Cod	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0
Pollock	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0
Sablefish	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0
Salmon	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0
<i>Total²</i>	--	--	\$0	\$0	\$0	--	\$0	\$0	\$0	\$0	\$0

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

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

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

² Confidential data are not included in annual totals.

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Port Graham 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	145,338	--	--	--	--	--	--	--	--	--	--
<i>Total²</i>	<i>145,338</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	\$131,853	--	--	--	--	--	--	--	--	--	--
<i>Total²</i>	<i>\$131,853</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 Confidential data are not included in annual totals.

Recreational Fishing

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

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

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

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

Year	Active Sport Fish Guide Businesses¹	Sport Fish Guide Licenses¹	Sport Fishing Licenses Sold to Residents²	Sport Fishing Licenses Sold in Port Graham²
2000	0	0	36	45
2001	0	0	54	57
2002	0	0	56	63
2003	0	0	31	37
2004	0	0	30	40
2005	0	0	37	42
2006	0	1	32	31
2007	0	0	42	55
2008	0	0	36	51
2009	0	3	36	58
2010	1	3	44	61

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

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

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

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

Many residents of Port Graham supplement their incomes and diet with subsistence resources.⁸⁸⁰ According to a survey conducted by the AFSC in 2011, community leaders indicated that king salmon, halibut, and seals/sea lions are the three most important subsistence marine or aquatic resources to the residents of Port Graham. There is considerable harvest of halibut for subsistence by residents in Port Graham that hold a valid Subsistence Halibut Registration Certificate (SHARC) card issued by NMFS (Table 14). Of the marine species documented by the ADF&G Division of Subsistence, salmon, marine mammals, marine invertebrates, halibut, and non-salmon fish make up the majority of targeted subsistence species for residents of Port Graham involved in subsistence fishing.

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

⁸⁸⁰ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

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

The ADF&G Division of Subsistence reported that the following species of marine invertebrates were used for subsistence in Port Graham during this period: black (small) chitons, butter clams, limpets, octopus, oyster, Pacific littleneck clams (steamers), red (large) chitons, sea urchin, shrimp, snails, unknown cockles, unknown mussels, and whelk. Marine mammals reported as harvested for subsistence use included harbor seal and Steller sea lion. Non-salmon fish reported as harvested for subsistence use included: black rockfish, Dolly Varden, eel, eulachon (hooligan candlefish), herring, herring roe/unspecified, herring sac roe, lingcod, Pacific cod (gray), Pacific tom cod, rainbow trout, red rockfish, sablefish (black cod), sea bass, starry flounder, steelhead, unknown greenling, unknown Irish lord, unknown shark, and unknown sole.⁸⁸¹

Additional Information

The Port Graham region has some of the most unique tourism areas in the state. High mountain vistas, tidewater and massive glaciers, deep fjords, protected bays and inlets, abundance of wildlife and access from major population centers make this region ideally suited for the tourism industry.⁸⁸²

⁸⁸¹ 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).

⁸⁸² Port Graham Corporation (n.d.). *Our Lands*. Retrieved November 23, 2011 from <http://www.portgrahamcorp.com/our-lands.html>.

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

Year	% Households Participating in Salmon Subsistence	% Households Participating in Halibut Subsistence	% Households Participating in Marine Mammal Subsistence	% Households Participating in Marine Invertebrate Subsistence	% Households Participating in Non-Salmon Fish Subsistence	Per Capita Subsistence Harvest (pounds)
2000	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	n/a
2003	85%	95%	34%	100%	37%	466.35
2004	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a

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

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

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Port Graham: 2000-2010.

Year	Subsistence Salmon Permits Issued ¹	Salmon Permits Returned ¹	Chinook Salmon Harvested ¹	Chum Salmon Harvested ¹	Coho Salmon Harvested ¹	Pink Salmon Harvested ¹	Sockeye Salmon Harvested ¹	Lbs of Marine Inverts ²	Lbs of Non-Salmon Fish ²
2000	n/a	35	241	483	252	355	784	n/a	n/a
2001	n/a	15	104	32	57	20	176	n/a	n/a
2002	n/a	23	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	16	n/a	n/a	n/a	n/a	n/a	1,873	7576
2004	55	55	260	118	461	323	557	n/a	n/a
2005	48	48	267	52	51	349	202	n/a	n/a
2006	14	14	164	89	21	93	344	n/a	n/a
2007	14	14	164	89	21	93	344	n/a	n/a
2008	18	18	77	22	n/a	36	550	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

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

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

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

Table 15. Subsistence Harvests of Marine Mammal Resources, Port Graham: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	4	n/a	n/a	2	40	n/a
2001	n/a	6	n/a	n/a	n/a	39	n/a
2002	n/a	n/a	n/a	n/a	n/a	39	n/a
2003	n/a	3	n/a	n/a	1	45	n/a
2004	n/a	n/a	n/a	n/a	7	44	n/a
2005	n/a	n/a	n/a	n/a	n/a	63	n/a
2006	n/a	n/a	n/a	n/a	n/a	51	n/a
2007	n/a	1	n/a	n/a	n/a	8	n/a
2008	n/a	6	n/a	n/a	3	17	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

Seldovia (*sell-DOAV-ee-uh*)

People and Place

*Location*⁸⁸³



Seldovia and Seldovia Village are both discussed in this profile, given their close proximity to one another. The communities are located on the Kenai Peninsula on the south shore of Kachemak Bay, a 15-minute flight across the Bay from Homer. Seldovia Village is located just northeast of the City of Seldovia. Both are in the Seldovia Recording District, the Kenai Peninsula Census Area, and the Kenai Peninsula Borough. The City of Seldovia encompasses 0.4 square miles of land and 0.2 square miles of water.

*Demographic Profile*⁸⁸⁴

In 2010, there were a total of 420 residents in Seldovia and Seldovia Village combined. Seldovia, with 255 residents, ranked 175th of 352 total Alaskan communities with recorded populations that year, while Seldovia Village (165 residents) ranked 214th. According to Alaska Department of Labor population estimates, between 2000 and 2009, the combined population of permanent residents in Seldovia and Seldovia Village decreased by 5.35%. The average annual growth rate during this period was -0.39%, indicating a slow decline. However, the combined population of the two communities increased overall between 1990 and 2010. The change in population from 1990 to 2010 is provided in Table 1.

In a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders estimated that the annual, year-round population of Seldovia is less than 300 people, while estimating that more than 120 people come to Seldovia each year as seasonal workers or transients from May through September.

In 2010, the majority of residents of Seldovia and Seldovia Village identified themselves as White (72.5%). Other ethnic groups present in Seldovia and Seldovia Village that year include American Indian and Alaska Native (13.7%), two or more races (11.4%), Hispanic or Latino (3.9%), Asian (1.2%), and Black or African American (1.2%). The percentage of the population identifying themselves as White decreased slightly between 2000 and 2010, as did the percentages of the population identifying themselves as American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and some other race. In contrast, the percentage of the population identifying themselves as two or more races, Asian, Black or African American, and Hispanic or Latino increased slightly between 2000 and 2010. Changes in racial and ethnic composition between 2000 and 2010 are shown in Figure 1.

⁸⁸³ 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.

⁸⁸⁴ 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>.

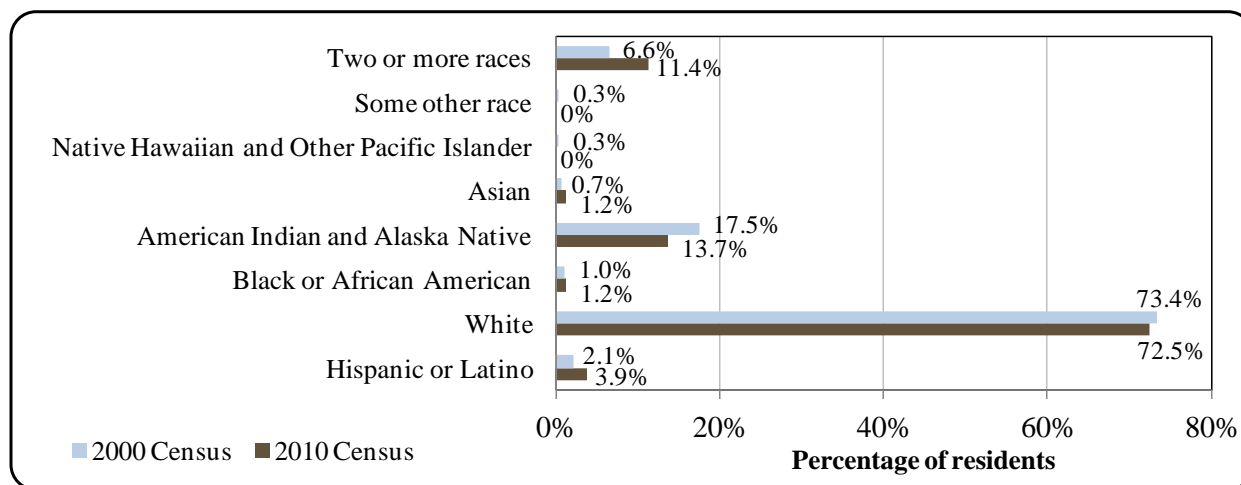
Table 1. Population in Seldovia and Seldovia Village from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	316	-
2000	430	-
2001	-	435
2002	-	449
2003	-	430
2004	-	423
2005	-	391
2006	-	413
2007	-	423
2008	-	420
2009	-	407
2010	420	-

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, Seldovia and Seldovia Village: 2000-2010 (U.S. Census).

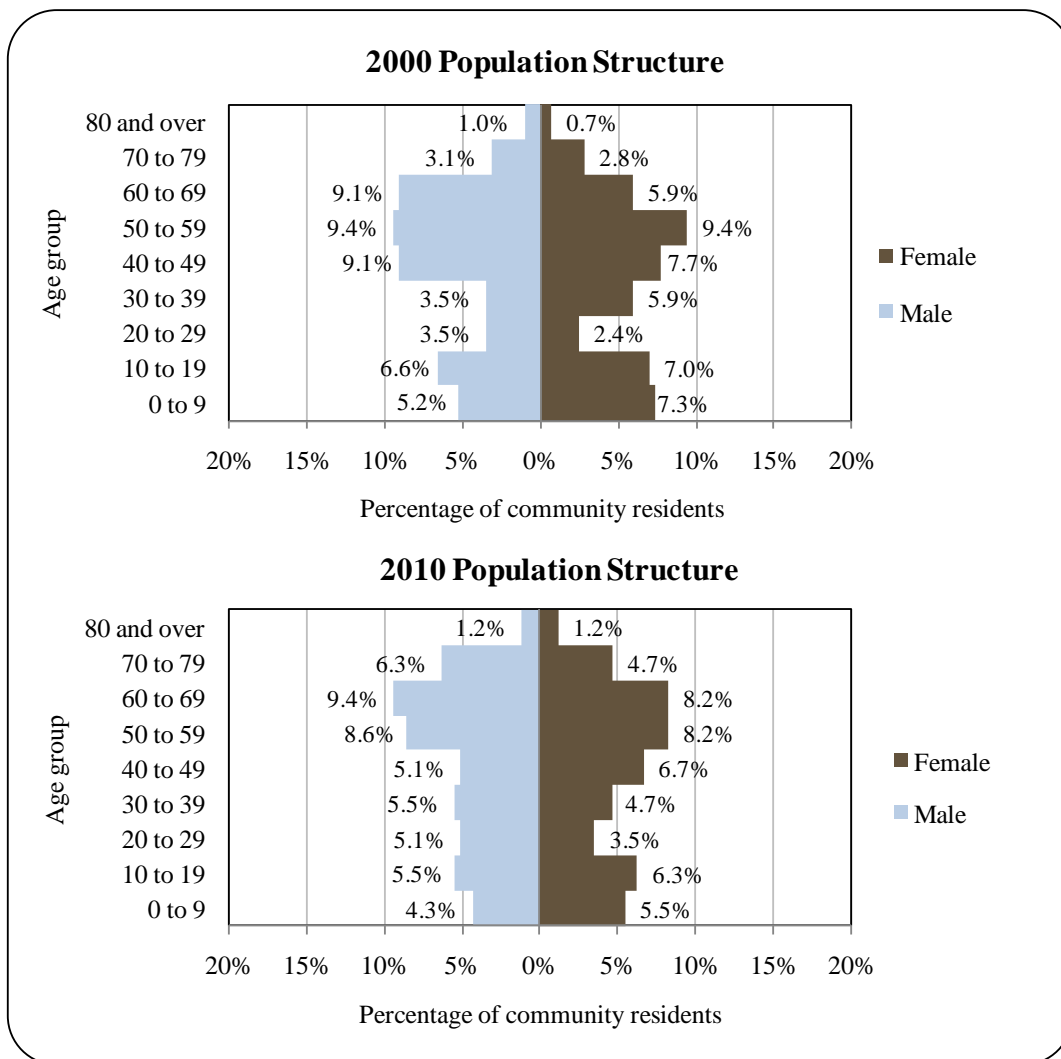


In 2010, the average household size in Seldovia was 2.11, a decrease from 2.40 in 1990 and 2.13 in 2000. In Seldovia Village in 2010, the average household size was 2.76, an increase from 2.32 in 2000 (data on household size were not available for 1990 for Seldovia Village). The combined total number of households in Seldovia and Seldovia Village decreased from 196 in 2000 to 158 in 2010. Of the total 377 housing units surveyed in Seldovia and Seldovia Village for the 2010 Decennial Census, 117 were owner-occupied, 41 were renter-occupied, and 219

were vacant. Throughout this period no residents of Seldovia or Seldovia Village were reported to be living in group quarters.

In 2010, the combined gender makeup in Seldovia and Seldovia Village was 53% male and 47% female, similar to the state as a whole (52% male, 48% female). The median age was estimated to be 48.2 years for Seldovia and 48.5 years for Seldovia Village, both higher than the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010 the greatest fell within the age group 50-69 years old, with the next largest percentage in the age group 30-49 years old. Relatively few residents were age 80 and over in 2010. The overall combined population age structure of Seldovia and Seldovia Village is shown in Figure 2.

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



In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),⁸⁸⁵ 89.3% of residents aged 25 and over in Seldovia and Seldovia Village were estimated to hold a high school diploma or higher, compared to 90.7% of Alaskan residents overall. Also in 2010, for Seldovia and Seldovia Village combined, 6.2% of residents aged 25 and older were estimated to have less than a ninth grade education, compared to 3.5% of Alaskan residents overall; 4.4% of residents were estimated to have a ninth to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 45.3% were estimated to have a high school diploma or equivalent, compared to 27.4% of Alaskan residents overall; 21.3% of residents were estimated to have some college but no degree, compared to 28.3% of Alaskan residents overall; 5% were estimated to hold an Associate's degree, compared to 8% of Alaskan residents overall; 14.5% were estimated to hold a Bachelor's degree, compared to 17.4% of Alaskan residents overall; and 3.3% were estimated to hold a graduate or professional degree, compared to 9.5% of Alaskan residents overall.

*History, Traditional Knowledge, and Culture*⁸⁸⁶

The Seldovia area was historically a meeting and trading place for a mix of native peoples, including the Koniags from Kodiak Island, Aleuts from the Aleutian Islands and Alaska Peninsula, the Chugach from Prince William Sound, and the Tanaina Kenaitze people of Cook Inlet.⁸⁸⁷ The Kenaitze who lived at Seldovia called it Chesloknu. The community's modern name is derived from the Russian phrase "Zaliv Seldevoy," meaning 'herring bay'. Russian settlers began to arrive in the late 1700s, following discovery of a coal mine eight miles south of the village. The mine was an important source of coal for the Russian fleet and settlements.⁸⁸⁸

In 1869, shortly after the sale of Alaska to the United States, a trading post was established in Seldovia which operated until 1882. Leading up to the turn of the century, the local economy was largely based on fur trapping, timber, and fish processing. In the early 1900s, Seldovia became an important gold rush transportation point. The port was ice-free throughout the year, providing access to steamers loaded with prospectors arriving from the "lower 48." From Seldovia, the prospectors boarded smaller steamers which transported them to the gold fields. A larger dock was constructed in 1926, providing improved moorage for large ocean-going steamers.⁸⁸⁹ A post office had been established in 1898, and the City would be incorporated in 1945.⁸⁹⁰

Seldovia also emerged as an early hub of the Cook Inlet seafood processing industry.⁸⁹¹ The first salmon cannery was built in 1911, followed by several herring processing salteries.⁸⁹²

⁸⁸⁵ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁸⁸⁶ 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.

⁸⁸⁷ Seldovia Village Tribe. (n.d.). *Our Story*. Retrieved March 21, 2013 from http://svt.org/our_story.html.

⁸⁸⁸ City of Seldovia. (2005). *Seldovia Comprehensive Plan*. Retrieved March 14, 2013 from <http://www.commerce.state.ak.us/dca/plans/Seldovia-CP-2005.pdf>.

⁸⁸⁹ Ibid.

⁸⁹⁰ See footnote 886.

⁸⁹¹ Ibid.

⁸⁹² See footnotes 887 and 888.

Seldovia fishermen also experimented with harvest and processing of king, Dungeness, and Tanner crab in the 1920s and 1930s, and Seldovia was the center of the shrimp processing industry in the region until 1964.⁸⁹³

The City of Seldovia was devastated by the Good Friday Earthquake of 1964, which destroyed three fish-processing plants and other business infrastructure, and caused the land to drop four-six vertical feet.⁸⁹⁴ This change in elevation allowed the ocean to inundate the boardwalk and flood waterfront buildings at high tide. The town had to be rebuilt.⁸⁹⁵ This loss of infrastructure crippled Seldovia's seafood processing industry, and Homer emerged to fill the role of the local fishing center.⁸⁹⁶ Homer also gained importance as a transportation hub in the region, following completion of a road linking Homer to Anchorage.⁸⁹⁷

Today, a majority of the residents of Seldovia and Seldovia Village are White, along with a vibrant native community. Native residents are a mix of Dena'ina Indian and Aleut and Sugpiaq Eskimo (also known as Alutiiq). Commercial fishing and subsistence harvest of wild resources are integral aspects of the local culture.⁸⁹⁸ Seldovia has an active commercial fishing fleet, as well as a well-developed charter fishing fleet.⁸⁹⁹

Natural Resources and Environment⁹⁰⁰

Seldovia is located in a maritime climate zone, dominated by the moderating effects of a marine environment and characterized by high humidity, precipitation and fog cover as well as warm winters and cool summers. Winter temperatures range from 12 to 21 °F, and summer temperatures vary from 48 to 65 °F.⁹⁰¹ Average annual precipitation is 34.5 inches.⁹⁰² The Kenai Mountains provide a dramatic backdrop to the community, with mountains rising to 3,000 feet above sea level within several miles of the coastline. Lowlands are covered in a forest of Sitka spruce, with alder and brush at middle elevations and alpine tundra along high ridgelines.⁹⁰³

Protected areas near Seldovia include Kachemak Bay State Park and State Wilderness Park, Kenai Fjords National Park, and the Kenai Wilderness. Seldovia is located approximately 7 miles from the western boundary of Kachemak Bay State Park and State Wilderness Park, which are Alaska's first State Park, and only Wilderness Park, respectively. Together, they are made up of approximately 400,000 acres of mountains, glaciers, and forests. Adjacent to these land-based protections, Kachemak Bay and Fox River Flats have both been designated as Critical Habitat

⁸⁹³ Field, C. and C. Walker. (2003). *A Site Profile of the Kachemak Bay Research Reserve: A Unit of the National Estuarine Research Reserve System*. Published by the Kachemak Bay Research Reserve. Retrieved March 21, 2013 from http://nerrs.noaa.gov/doc/pdf/reserve/kba_siteprofile.pdf.

⁸⁹⁴ See footnotes 888 and 893.

⁸⁹⁵ Ibid.

⁸⁹⁶ City of Homer. 2008. *Comprehensive Plan 2008 (Adopted 2010)*. Retrieved October 8, 2012 from <http://www.cityofhomer-ak.gov/planning/comprehensive-plan-2008-adopted-2010>.

⁸⁹⁷ See footnote 887.

⁸⁹⁸ See footnote 886.

⁸⁹⁹ See footnote 888.

⁹⁰⁰ Ibid.

⁹⁰¹ See footnote 886.

⁹⁰² Precipitation and snowfall information retrieved December 27, 2011 from <http://www.weatherbase.com/>.

⁹⁰³ Alaska Dept. of Natural Resources. (2001). *Kenai Area Plan: South Side Kachemak Bay and Chugach Islands*. Retrieved March 21, 2013 from http://dnr.alaska.gov/mlw/planning/areaplans/kenai/pdfs/chap_3_region_9.pdf.

Areas (CHAs) under Alaska Statutes, Title 16,⁹⁰⁴ protecting habitat for sea otters, seals, porpoises, and whales. Visitors to the park enjoy fishing, boating, wildlife viewing, kayaking, hiking, camping, and mountain sports.⁹⁰⁵ In addition to their status as CHAs, Kachemak Bay and the Fox River Flats were designated as part of the National Estuarine Research Reserve System in 1999, a network of 28 estuaries around the U.S. representing different biogeographic regions that are used for long-term research, water-quality monitoring, education, and coastal stewardship. It is the only Research Reserve located in the State of Alaska.⁹⁰⁶

Approximately 25 miles east of Seldovia lies the western border of Kenai Fjords National Park. This National Park was established in 1980 to “maintain unimpaired the scenic and environmental integrity of the Harding Icefield, its outflowing glaciers and coastal fjords and islands.” Fifty-six percent of the park is covered by ice. Animals living in the mountains, the shores, and the fjords of the National Park include black bear, brown bear, moose, mountain goat, sea otter, Steller sea lion, harbor seal, Dall’s porpoise, Pacific white-sided dolphin, orca, minke whale, humpback whale, fin whale, and birds including bald eagles, puffins, murre, steller’s jay, black-billed magpie, peregrine falcon, and marbled murrelet.⁹⁰⁷ Portions of both Kenai Fjords National Park and the Kachemak Bay State Park and State Wilderness Park are included in the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.⁹⁰⁸

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt, and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures, and soil liquefaction.⁹⁰⁹

The Kenai Peninsula and Cook Inlet oil and gas industry is very active, with a number of new wells being drilled each year. As of 2010, there were 28 producing oil and gas fields on and off shore in the area. Oil production has declined from a peak in 1970 of 230,000 barrels per day. In 2010, only 12,000 barrels were produced per day. Cook Inlet natural gas production has also been declining in recent years.⁹¹⁰

According to the Alaska Department of Environmental Conservation, there were no notable active environmental cleanup sites located in the Seldovia area as of March 2013.⁹¹¹

⁹⁰⁴ Alaska Statutes, Title 16. *AS 16.20.590* and *AS 16.20.580*. Retrieved February 8, 2012 from <http://touchngo.com/1glcntr/akstats/Statutes/Title16/Chapter20.htm>.

⁹⁰⁵ Alaska Dept. of Natural Resources (2009). *Kachemak Bay State Park and State Wilderness Park*. Retrieved January 27, 2012 from <http://dnr.alaska.gov/parks/units/kbay/kbay.htm>.

⁹⁰⁶ National Estuarine Research Reserve System. (n.d.). *Kachemak Bay Research Reserve website*. Retrieved June 15, 2012 from <http://www.nerrs.noaa.gov/Reserve.aspx?ResID=KBA>.

⁹⁰⁷ Kenai Fjords National Park website (2010). Retrieved December 27, 2011 from <http://www.nps.gov/kefj/>.

⁹⁰⁸ Wilderness.net (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from <http://www.wilderness.net>.

⁹⁰⁹ Kenai Peninsula Borough (2010). *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

⁹¹⁰ Resource Development Council (n.d.). *Alaska’s Oil and Gas Industry*. Retrieved January 26, 2012 from <http://www.akrdc.org/issues/oilgas/overview.html>.

⁹¹¹ Alaska Dept. of Environmental Conservation (n.d.). *List of Contaminated Sites by Region*. Retrieved March 5, 2013 from <http://dec.alaska.gov/spar/csp/list.htm>.

Current Economy⁹¹²

In a survey conducted by the AFSC in 2011, community leaders reported that Seldovia's economy relies on natural resource-based industries, specifically, fishing, ecotourism, and sport hunting and fishing. Commercial fishing is an important driver of the economy, and the shellfish farming industry is also active.⁹¹³

Based on the 2006-2010 ACS,⁹¹⁴ in 2010, the median per capita income in Seldovia was estimated to be \$28,892 and the median household income was estimated to be \$48,750, compared to \$23,669 and \$45,313 in 2000, respectively. However, when inflation is taken into account by converting the 2000 values to 2010 dollars,⁹¹⁵ the real median per capita income in 2000 was \$31,124 and the real median household income was \$59,586, indicating an actual decrease in both values between 2000 and 2010. In 2010, Seldovia ranked 68th out of 305 Alaskan communities with per capita income that year, and 106th out of 299 Alaskan communities with household income data.

For Seldovia Village, per capita income in 2010 was estimated to be \$25,311 and the median household income was estimated to be \$48,750, compared to \$21,396 and \$31,250 in 2000, respectively. However, again taking inflation into account by converting the 2000 values to 2010 dollars,⁹¹⁶ the real per capita income in 2000 was \$28,135 and the real median household income in 2000 was \$41,903. Therefore, while per capita income decreased between 2000 and 2010 for Seldovia Village, the median household income increased during this period. In 2010, Seldovia Village ranked 103rd out of 305 Alaskan communities with per capita income that year, and 140th out of 299 Alaskan communities with household income data.

The small population size of Seldovia and Seldovia Village may have prevented the ACS from accurately portraying economic conditions.⁹¹⁷ A potentially more accurate understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Decennial Census, the resulting per capita income estimate for Seldovia in 2010 is \$12,140 and the estimate for Seldovia Village in 2010 is \$12,264. Both of these values provide support for an overall decrease compared to the real per capita income values reported by the U.S. Census in 2000.⁹¹⁸ This is reflected in the fact that Seldovia met the Denali Commissions criteria as a “distressed community” in 2010, and Seldovia Village was also recognized as a distressed community (using a plus/minus 3%

⁹¹² Unless otherwise noted, all monetary data are reported in nominal values.

⁹¹³ 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.

⁹¹⁴ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

⁹¹⁵ Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved October 18, 2011 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

⁹¹⁶ Ibid.

⁹¹⁷ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁹¹⁸ 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/>.

formula). These listings prioritize the communities for economic assistance.⁹¹⁹ It should be noted 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 household surveys conducted for the 2006-2010 ACS, the greatest number of workers in Seldovia and Seldovia Village combined in 2010 was estimated to be employed in the private sector (54.6%), along with 28.4% in the public sector, 13.5% estimated to be self-employed, and 2.1% estimated to be unpaid family workers. Based on the ACS, in the same year, 67.1% of the population aged 16 and over was estimated to be in the civilian labor force, compared to the statewide rate of 68.8%. The local unemployment rate was 1.4%, compared to the statewide unemployment rate of 5.9%. Approximately 10.8% of local residents were living below the poverty line in 2010, compared to 9.6% of Alaskans overall. It should be noted that income and poverty statistics are based on wage income and other money sources; figures reported for Seldovia and Seldovia Village are not reflective of the value of subsistence to the local economy. In addition, these unemployment and poverty statistics are likely inaccurate given the small population of Seldovia and Seldovia Village. A more accurate estimate is based on the ALARI database, which indicates that the combined unemployment rate for Seldovia and Seldovia Village in 2010 was 10.3%.

Out of 278 people aged 16 and over that were estimated to be employed in the combined civilian labor force for both communities in 2010, the greatest percentages worked in arts, entertainment, recreational, accommodation and food services (19.8%), professional scientific, management, administration, and waste management (18%), retail trade (12.6%), and agriculture, forestry, fishing, hunting, and mining (12.2%) industries. Compared to 2000, the a greater percentage of the workforce was estimated to work in public administration and arts, entertainment, recreation, accommodation and food service industries in 2010, and there were declines in the percentages estimated to work in education, health care and social assistance as well as construction, manufacturing and transportation, warehousing and utilities industries. Information about employment by industry is broken down in Figure 3. It is important to note that the number of individuals employed in the fishing industry may be underestimated in census statistics as fishermen may hold another job and characterize their employment accordingly.

From the perspective of occupation, the greatest percentage of the Seldovia and Seldovia Village combined workforce was estimated to be employed in service occupations in 2010 (36.7% of the workforce). This represents a significant shift from 2000, when service occupations made up the smallest percentage of the workforce, and the greatest percentages of workers were estimated to be employed in management/professional, sales/office, and natural resource/construction/maintenance occupations. From among the 49 individuals estimated to be employed in natural resource, construction, and maintenance occupations in 2010 (17%), 17 were specifically estimated to be employed in farming, fishing, and forestry occupations, accounting for 6.1% of the total workforce that year. Figure 3 shows employment by industry and Figure 4 breaks employment down by occupation.

⁹¹⁹ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

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

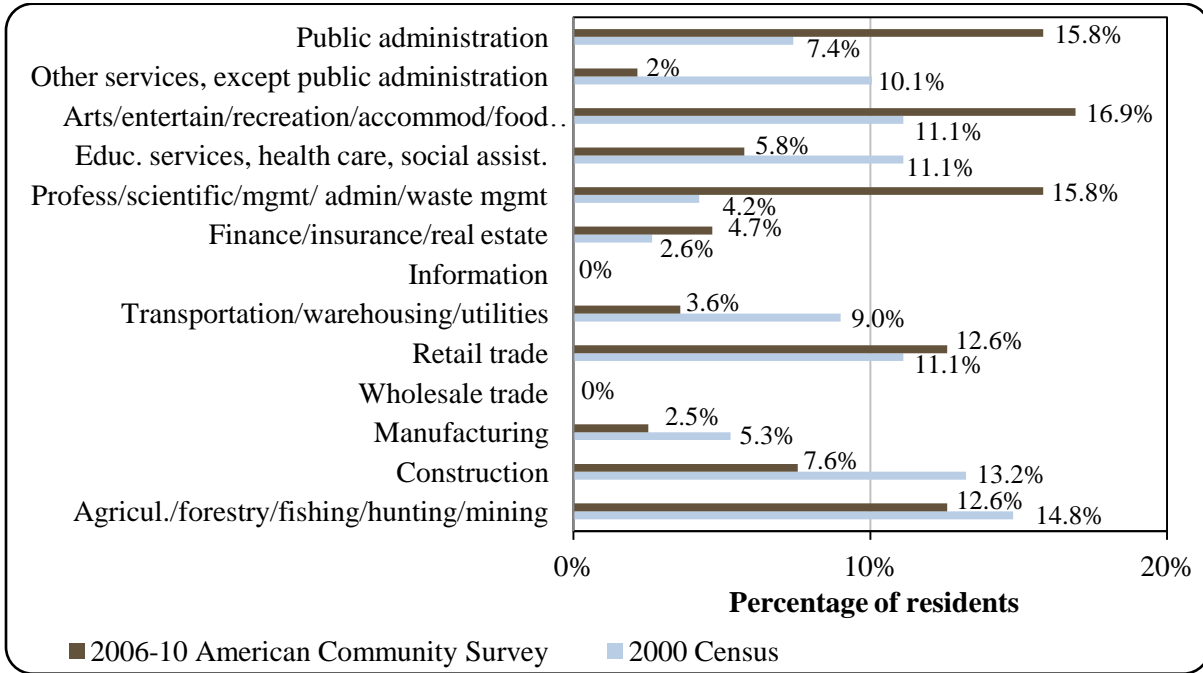
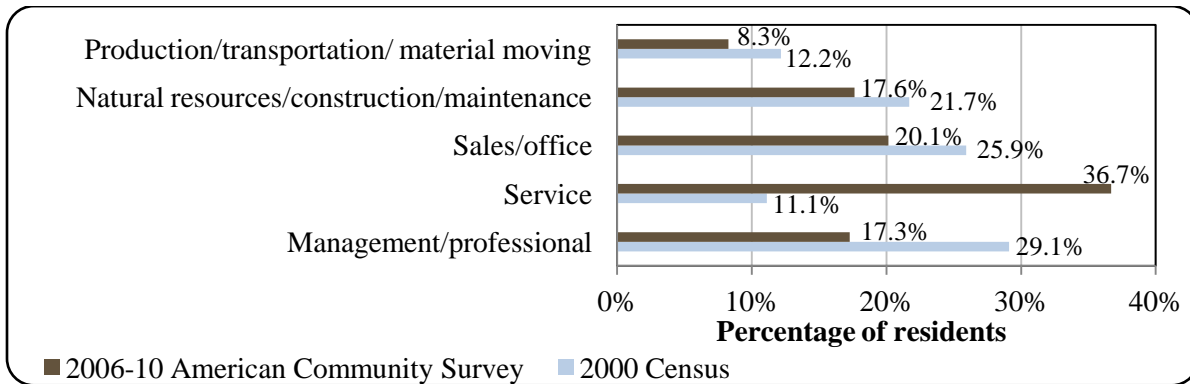


Figure 4. Local Employment by Occupation in 2000-2010, Seldovia and Seldovia Village (U.S. Census).



Governance

Seldovia is a 1st Class City located in the Kenai Peninsula Borough. The City has a Strong Mayor form of government, with a seven-person city council including the mayor, a nine-person school board, five-person planning commission, and various municipal employees. The City of Seldovia administers a varying 2% - 4.5% sales tax, and the Borough administers an additional 3% sales tax.⁹²⁰

⁹²⁰ 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.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Seldovia 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	\$965,213	\$87,493	\$22,803	n/a
2001	\$927,529	\$109,775	\$22,000	n/a
2002	\$921,712	\$106,740	\$21,995	\$2,000,000
2003	\$1,318,162	\$119,192	\$22,091	n/a
2004	\$1,160,612	\$112,690	n/a	n/a
2005	\$892,097	\$114,487	n/a	n/a
2006	\$1,600,220	\$111,231	n/a	n/a
2007	\$3,409,906	\$144,445	n/a	\$1,555,000
2008	\$1,071,383	\$174,460	n/a	n/a
2009	\$1,267,702	\$137,767	\$110,488	\$70,000
2010	\$1,462,486	\$110,389	\$109,290	\$1,000,000

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.

Seldovia Village is also located in the Kenai Peninsula Borough, but is an unincorporated community. As a result, Seldovia Village does not maintain a municipal budget with community revenue and expenditures. Therefore, revenue information presented in Table 2 relates to revenue streams associated with the City of Seldovia only.

In addition to municipal tax revenues, locally-generated income sources in Seldovia during the 2000-2010 period included lease and rental fees, permits and fines. In addition, special revenue sources came from charges for services including water, wastewater, the fire department, and fees for use of the dock, small boat harbor, and boat haul out facility. Outside revenue sources included shared funds and grants from state and federal source. Shared revenue sources included the State Revenue Sharing program (over \$20,000 per year from 2000 to 2003), the Community Revenue Sharing program (over \$100,000 each year in 2009 and 2010), the SAFE Communities program (public safety, utilities, infrastructure, etc.), the electric and telephone revenue share, and a fisheries business tax (see the *Fisheries-Related Revenue* section for more information).

State capital project grants were received throughout the decade for projects including water and sewer improvements, city office improvement, harbor improvements, equipment purchase, road and trail maintenance, and state grants were also received for municipal energy assistance, among others. Federal funding was received in some years from the COPS program (Community-Oriented Policing Services). Federal capital project grants were also received for water and sewer improvements and for road and trail maintenance. Fisheries-related grants received by the City of Seldovia during the 2000-2010 period included grants for development of

a commercial/visitor/dock, Kachemak Bay Ferry and docking facilities, a port economic development study, smolt stocking for Seldovia slough, purchase of a boat haul-out trailer, and harbor design and construction. It is important to note that the higher than average total municipal revenue reported by the City of Seldovia in 2007 can be largely be attributed to the \$2,276,093 total funds received toward harbor improvements that year.

The community of Seldovia was included under the Alaska Native Claims Settlement Act (ANCSA), and a federally recognized Native tribe is present. The authorized traditional authority, recognized by the Bureau of Indian Affairs (BIA), is the Seldovia Village Tribe. The local Native village corporation is the Seldovia Native Association, Inc., which manages 181,109 acres of land. The regional Native corporation to which the Tribe belongs is the Cook Inlet Region, Inc. (CIRI).⁹²¹

The Seldovia Village Tribe is also a member of the Cook Inlet Tribal Council (CITC), a tribal non-profit organization headquartered in Anchorage. CITC strives to work together with Native people of the Cook Inlet region, and all Natives living in Anchorage, to help them develop talents and strengths, and become successful and self-sufficient individuals, families, and communities, with the goal of advancing the overall economic, social and cultural development of the people of the Chugach Region.⁹²² CITC 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.⁹²³ CITC offers educational programs, job training, business assistance, youth programs, drug and alcohol treatment, and other assistance to families and individuals.⁹²⁴

The closest regional offices of the Alaska Department of Natural Resources (DNR), the Alaska Department of Fish and Game (ADF&G), and the National Marine Fisheries Service (NMFS) are located in Homer. The nearest offices of the Alaska Department of Commerce, Community, and Economic Development, the Bureau of Citizenship and Immigration Services, and U.S. Immigration and Customs Enforcement are located in Anchorage.

Infrastructure

Connectivity and Transportation

A state-owned 1,845 ft long by 60 ft wide gravel airstrip and a seaplane base are available in Seldovia. Direct flights are provided to Homer. The state ferry system connects Seldovia to Homer, where the Sterling Highway provides road access northward towards Anchorage. Water taxis from Homer also service the community. A harbor, boat washdown, and boat haul-out facility are available. Round-trip air service is available from Homer, which is a 15-minute flight from Seldovia. Jakolof Bay road connects Seldovia Village to the City of Seldovia. Residents of Seldovia Village use the airport, seaplane base, and harbor located in

⁹²¹ Ibid.

⁹²² Cook Inlet Tribal Council. (n.d.). *What We Do*. Retrieved February 23, 2012 from <http://www.citci.com/>.

⁹²³ 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>.

⁹²⁴ See footnote 922.

Seldovia.⁹²⁵ Air service from Seldovia to Homer is available for a set rate of \$105 round-trip,⁹²⁶ and round-trip airfare from Homer to Anchorage in June 2012 was \$255.⁹²⁷

*Facilities*⁹²⁸

Water is derived from the Fish Creek Reservoir and is then treated, stored in a tank, and distributed via water mains. Sewage is piped to a community septic tank for primary treatment, then discharged to an ocean outfall. One-hundred-seventy-five (175) homes and facilities are served by the system; all homes are completely plumbed. Individual wells have been unable to produce potable water. A borough-operated landfill is available. Individual wells and on-site septic tanks serve households in Seldovia Village.

Law enforcement is provided by the City Police Department and by state troopers in Homer. Fire and rescue services are provided by Seldovia Volunteer Fire and Rescue and the Kasitna Bay Area Fire. Seldovia has a court and a city jail, and the Boys and Girls Club operates a youth center. The City also operates a community hall, and Seldovia has public and school libraries.

In a survey conducted by the AFSC in 2011, community leaders reported that Seldovia has 5000 ft of dock space available for permanent vessels to moor, as well as 576 ft of dock space available for transient vessels. According to the same survey, Seldovia is capable of handling vessels up to 150 ft in length, including rescue vessels and ferries. Community leaders also indicated that Seldovia has a fish cleaning station, haul-out facilities, a U.S. Environmental Protection Agency-certified boat cleaning station, broadband internet access, a diesel powerhouse, and a landfill/solid waste site. Community leaders noted that projects planned for the next 10 years include improvements to existing dock structure, electricity and water serving the dock, and water and sewer pipelines.

*Medical Services*⁹²⁹

Medical services are provided by the Seldovia Medical Clinic, which is owned by the City and is privately operated. Alternate health care is provided by Seldovia Volunteer Fire and Rescue. The nearest hospital is located in Homer.

*Educational Opportunities*⁹³⁰

The Susan B. English School in Seldovia provides instruction to students from Seldovia and Seldovia Village in grades kindergarten through 12th grade. In 2011, the school had 54 students and 5 teachers.

⁹²⁵ 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.

⁹²⁶ Airfare was obtained from the travel website <http://www.homerair.com/Rates>. Retrieved on February 16, 2012.

⁹²⁷ Airfare was obtained from the travel website <http://www.travelocity.com> for a round-trip ticket for travel from June 1 to June 8, 2012. Retrieved on December 1, 2011.

⁹²⁸ See footnote 925.

⁹²⁹ Ibid.

⁹³⁰ 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

The Cook Inlet region was historically occupied by two distinct groups, the Kachemak tradition Eskimos and the Dena'ina Athabaskan Indians. In addition, portions of lower Cook Inlet below Seldovia were (and still are) occupied by Alutiiq, or Aleut, people. At the time of European contact in the late 1700s, the Dena'ina living in Kachemak Bay and other areas of Cook Inlet relied on subsistence harvest of a wide variety of marine and terrestrial resources. With the exception of Chinook salmon, which were not readily available to the Kachemak Bay Dena'ina, all five species were used throughout Cook Inlet. In addition, freshwater species including Dolly Varden were taken by alder drag nets.⁹³¹

Today, Seldovia is a commercial fishing village. Shellfish farming also occurs, and subsistence harvest of marine resources is an important aspect of the local culture.⁹³² Between 2000 and 2010, Seldovia residents were active in a wide range of commercial fisheries, with the greatest participation in fisheries for salmon, groundfish, and halibut. A number of residents also participated in commercial fisheries for sablefish, herring, and crab during the period.

Commercial fisheries developed in the Cook Inlet region after the 1867 purchase of Alaska by the United States. Commercial harvest of salmon in Cook Inlet began in 1882,⁹³³ with the development of a cannery at the mouth of the Kasilof River, in English Bay. An additional 17 canneries had been built in central Alaska by 1890.⁹³⁴ The first salmon cannery was established at Seldovia in 1911,⁹³⁵ and the community continued to develop around commercial fishing and fish processing.⁹³⁶ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.⁹³⁷ Around the same time, herring had become increasingly valued for oil and meal. Two salteries had been built in Seldovia by 1920.⁹³⁸ Commercial crab fisheries began to develop in the GOA in the 1930s. Historically, a sizable spawning biomass of herring was found in western Cook Inlet, and Lower Cook Inlet also supported commercial

⁹³¹ Fall, J.A., R.T. Stanek, B. Davis, L. Williams, and R. Walker. (2004). *Cook Inlet Customary and Traditional Subsistence Fisheries Assessment*. Alaska Dept. of Fish and Game. Final Report for Study No. FIS 03-045.

⁹³² 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.

⁹³³ 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>.

⁹³⁴ Cook, Linda, and Frank Norris. 1998. *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

⁹³⁵ Stanek, Ronald T. 1999. *Ethnographic Overview and Assessment for Nanwalek and Port Graham*. Draft. Division of Subsistence, Alaska Department of Fish and Game. Retrieved December 27, 2011 from <http://www.alaska.boemre.gov/>.

⁹³⁶ See footnote 932.

⁹³⁷ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

⁹³⁸ City of Seldovia. (2005). *Seldovia Comprehensive Plan*. Retrieved March 14, 2013 from <http://www.commerce.state.ak.us/dca/plans/Seldovia-CP-2005.pdf>.

fisheries for Dungeness, king, and Tanner crab. However, crab and herring fisheries are currently closed due to low stock abundance.^{939,940}

Today, ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.⁹⁴¹

Groundfish and crab fisheries that occur within 3 nautical miles (nmi) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nmi in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission. Cook Inlet is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA Sablefish Regulatory Area. In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch (TAC) set by NMFS applied to both fisheries. Beginning in 1997, an additional ‘state-waters fishery’ for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, Cook Inlet fisheries managed by ADF&G include an open access sablefish fishery under a GHL and directed mechanical jig fisheries for lingcod and rockfish.⁹⁴²

Seldovia is eligible to participate in the Community Quota Entity (CQE) program. 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 led to 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

⁹³⁹ 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>.

⁹⁴⁰ Alaska Dept. of Fish and Game. 2012. *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

⁹⁴¹ See footnote 933.

⁹⁴² See footnote 939.

corporation to purchase and manage quota shares on their behalf.⁹⁴³ Seldovia has established a CQE non-profit known as the City of Seldovia Community Holding Corporation. As of Fall 2013, the non-profit had not yet purchased commercial halibut IFQ or non-trawl groundfish License Limitation Program permits for lease to eligible community members. However, the corporation began offering halibut charter permits for lease to local captains in 2011. As of October 2013, the City of Seldovia Community Holding Corporation held seven halibut charter permits for lease to community members.^{944,945} Neither Seldovia nor Seldovia Village is eligible to participate in the Community Development Quota program.

According to a survey conducted by the AFSC in 2011, community leaders reported that Seldovia participates in the fisheries management process in Alaska through a representative that sits on regional fisheries advisory and/or working groups run by ADF&G. Community leaders also indicated that current challenges for the portion of Seldovia's economy that is based on fishing include a growing number of regulations and requirements that are being placed on smaller fishing boats, as well as the lack of a cannery in Seldovia which forces fishing vessels to deliver elsewhere and keeps money and jobs out of the community.

Processing Plants

According to ADF&G's 2010 Intent to Operate list, neither Seldovia nor Seldovia Village has a registered processing plant. A number of plants are registered in nearby Homer.

Fisheries-Related Revenue

Between 2000 and 2010, Seldovia received fisheries-related revenue from a raw fish tax, the Shared Fisheries Business Tax, the Fisheries Resource Landing Tax, harbor usage fees, and port/dock usage fees. The amount of revenue received from the raw fish tax varied from year to year, for years in which data were available. The amount of revenue received from the Shared Fisheries Business Tax was also quite variable from year to year between 2000 and 2010. Revenue received from the Fisheries Resource Landing Tax decreased overall between 2000 and 2010. Revenue received from harbor usage fees increased overall between 2000 and 2010, as did revenue received from port/dock usage fees. Overall the amount of revenue received from fisheries-related sources increased gradually between 2000 and 2010. Information about known fisheries-related revenue received by Seldovia from 2000 to 2010 is presented in Table 3.⁹⁴⁶

In a survey conducted by the AFSC in 2011, community leaders reported that harbor maintenance, water and wastewater systems, and roads are at least partially supported by revenue from fisheries-related sources. In addition, community leaders indicated that Seldovia administers local fishing-related fee programs (cleaning table fees, harbor fees, haul-out fees, and storage fees) that specifically support public services and infrastructure.

⁹⁴³ North Pacific Fishery Management Council. (2010). *Review of the Community Quota Entity (CQE) Program under the Halibut/Sablefish IFQ Program*. Retrieved October 23, 2012 from <http://www.fakr.noaa.gov/npfmc/PDFdocuments/halibut/CQEreport210.pdf>.

⁹⁴⁴ Jackinsky, M. (2011). "Seldovia corporation offers halibut charter permits." *Homer News*. Retrieved March 14, 2013 from http://homernews.com/stories/032311/news_scohcp.shtml.

⁹⁴⁵ NOAA Fisheries. (2013). *Community Quota and License Programs and Community Quota Entities*. Retrieved October 30, 2013 from <http://alaskafisheries.noaa.gov/ram/cqp.htm>.

⁹⁴⁶ A direct comparison between fisheries-related revenue and total municipal revenue cannot reliably be made as not all fisheries-related revenue sources are included in the municipal budget.

Commercial Fishing

In 2010, a combined 50 individuals from Seldovia and Seldovia Village held a total of 75 state-issued Commercial Fisheries Entry Commission (CFEC) commercial fishing permits, 46 of which were reported as actively fished that year. A majority of these permits were held in salmon (35) and halibut (14) fisheries. Other species for which community residents held CFEC permits in 2010 include crab, ‘other shellfish’, herring, sablefish, and groundfish. The number of halibut permits and permit holders decreased between 2000 and 2010, though the percentage of permits reported as actively fished remained stable during this period. The number of salmon permits and permit holders also decreased between 2000 and 2010, as did the percentage of permits reported as fished. The number of crab permits held decreased between 2000 and 2010, though the number of permits reported as actively fished remained stable during this period. The first year in which a permit for commercial harvest of ‘other shellfish’ was held was 2009, though the single permit was not reported as actively fished until 2010. The number of herring permits held decreased from 2000 to 2010, and no herring CFEC permits were reported as fished during this period. The number of sablefish permits held between 2000 and 2010, as well as the number of permits reported as fished, remained relatively stable. The number of groundfish permits held decreased between 2000 and 2010, while the number of permits reported as fished remained relatively stable.

Of 14 halibut CFEC permits held in 2010, the majority (11) were for the statewide long line halibut fishery using vessels under 60 ft, and 3 were for the statewide long line fishery using vessels over 60 ft. Of five sablefish CFEC permits, two were for the statewide long line sablefish fishery using vessels under 60 ft, and three were for the statewide long line sablefish fishery using vessels over 60 ft. In 2010, three CFEC permits were issued for the Dungeness crab pot fishery in Cook Inlet, three were issued for the roe herring purse seine fishery in Prince William Sound, two were for the herring roe purse seine fishery in Cook Inlet, one was for the statewide lingcod mechanical jig fishery, and one was issued for the Bristol Bay king crab pot fishery using vessels 60 ft in length or over.

Of the 35 salmon CFEC permits issued in 2010, 1 was issued for the salmon purse seine fishery in Cook Inlet, and the majority (19) was issued for the salmon set gill net fishery in Cook Inlet. Of the remaining salmon CFEC permits, two were issued for the salmon purse seine fishery in Kodiak, two for the purse seine fishery in Chignik, two for the salmon drift gillnet fishery in Prince William Sound, three for the drift gill net fishery in Cook Inlet, one for the drift gill net fishery in Bristol Bay, two for the set gill net fishery in Bristol Bay, two for the gill net fishery in Kotzebue, and one for the statewide power gurdy troll fishery.

Of the nine groundfish CFEC permits issued in 2010, two were for the miscellaneous saltwater finfish pot gear fishery for vessels under 60 ft, three were for the statewide miscellaneous saltwater finfish mechanical jig fishery, one was for the miscellaneous saltwater finfish longline fishery using vessels between 60 and 90 ft in the Gulf of Alaska, two were for the statewide miscellaneous saltwater finfish pot fishery using vessels 60 ft or over, and one was for the miscellaneous saltwater finfish pot fishery using vessels 60 ft or over in the Gulf of Alaska.

Also in 2010, one CFEC permit was issued for the shrimp pot fishery using vessels under 60 ft in Prince William Sound, and one was issued for the Tanner crab pot fishery using vessels 60 ft or over in the Bering sea.

There were also 10 community residents holding 10 federal groundfish License Limitation Program (LLP) permits in 2010, 2 residents holding 2 crab LLP permits in 2010, and 6 residents holding 6 Federal Fisheries Permits (FFP) in 2010. While the number of groundfish and crab permits held and reported as actively fished remained relatively stable between 2000 and 2010, the number of FFPs held decreased during this period. However, the number of FFPs reported as actively fished remained stable between 2000 and 2010. Information detailing permits and permit holders by species from 2000 to 2010 is detailed in Table 4.

In a survey conducted by the AFSC in 2011, community leaders reported that the predominant gear types used by commercial fishing boats that use Seldovia as their base of operations during the fishing season include pots, longline, gillnet, purse seine, troll, and set nets.

In 2010, there were 30 community residents holding crew licenses. This represents a decrease from 2000, when 44 crew licenses were held. There were no fish buyers in Seldovia between 2006 and 2010, and there were no shore-side processors based in Seldovia between 2002 and 2010. In 2010, there were 23 vessels owned primarily by community residents and 21 vessels homeported in Seldovia. Both of these numbers represent decreases from 2000, when 47 vessels were primarily owned by residents and 45 were homeported in Seldovia. Given the lack of fish buyers or processing plants, no vessels landed catch in Seldovia between 2005 and 2010, and for previous years in which landings were recorded in Seldovia, the amount and ex-vessel value of those landings is considered confidential due to the small number of participants. Information regarding characteristics of the commercial fishing sector in Seldovia is presented in Table 5.

In 2010, there were 13 individuals in Seldovia holding quota share accounts in the federal halibut catch share fishery, representing a decrease from 2000, when 21 individuals held halibut quota share accounts. Despite the decrease in quota share account holders during this period, the number of quota shares held remained relatively stable. The annual halibut individual fishing quota (IFQ) allotment decreased slightly during this period (Table 6). Six individuals held sablefish quota share accounts in 2010 in Seldovia, representing a decrease from nine account holders in 2000. The number of quota shares held decreased substantially between 2000 and 2010, as did the annual sablefish IFQ allotment during this period (Table 7). There has been one individual holding crab quota share accounts in Seldovia from 2005 to 2010, and the number of crab quota shares held remained stable between 2006 and 2010. Between 2005 and 2010, the annual crab IFQ allotment increased (Table 8).

Fish buyers in Seldovia recorded landings in five years during the 2000-2010 period (2000, 2001, and from 2003-2005). However the amount and ex-vessel value of those landings is considered confidential due to the small number of participants (Table 9). When landings are examined by vessel owner residence, landings and ex-vessel value are only reportable for halibut from 2000 to 2010, 'other groundfish' from 2004 to 2010, Pacific cod from 2000 to 2004 and 2008 to 2010, and salmon from 2000 to 2010. The rest of the landings and ex-vessel value for vessels whose owners resided in Seldovia are considered confidential due to the small number of participants. While landings for halibut and Pacific cod (for years in which data are reportable) remained relatively stable between 2000 and 2010, landings for other groundfish and salmon decreased during the same period. Ex-vessel value for halibut increased between 2000 and 2010, despite the relative stability in the amount of halibut landed during this period. Information regarding landings and ex-vessel value for vessels owned primarily by Seldovia residents is presented in Table 10.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	\$4,491	\$5,722	\$3,391	\$3,544	\$6,932	\$3,672	\$3,417	\$3,960	n/a	n/a	n/a
Shared Fisheries											
Business Tax ¹	\$4,221	\$5,478	\$2,923	\$3,183	\$3,054	\$3,559	\$3,309	\$3,878	\$2,558	\$7,172	\$4,490
Fisheries Resource											
Landing Tax ¹	\$270	\$244	\$468	\$362	\$54	\$113	\$108	\$82	\$124	\$59	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	\$115,159	\$121,269	n/a	\$126,016	\$119,975	\$134,381	\$118,025	\$146,571	\$122,800	\$137,009	\$146,350
Port/dock usage ²	\$54,423	\$60,423	n/a	\$49,008	\$50,600	\$56,850	\$55,833	\$80,936	\$65,596	\$65,618	\$64,486
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>\$178,564</i>	<i>\$193,136</i>	<i>\$6,781</i>	<i>\$182,112</i>	<i>\$180,615</i>	<i>\$198,574</i>	<i>\$180,692</i>	<i>\$235,428</i>	<i>\$191,078</i>	<i>\$209,859</i>	<i>\$215,326</i>
<i>Total municipal revenue⁵</i>	<i>\$965,213</i>	<i>\$927,529</i>	<i>\$921,712</i>	<i>\$1,318,162</i>	<i>\$1,160,612</i>	<i>\$892,097</i>	<i>\$1,600,220</i>	<i>\$3,409,906</i>	<i>\$1,071,383</i>	<i>\$1,267,702</i>	<i>\$1,462,486</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.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Seldovia

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	10	10	9	9	9	10	10	10	10	10	10
	Active permits	4	3	3	4	5	4	5	4	4	5	5
	% of permits fished	40%	30%	33%	44%	55%	40%	50%	40%	40%	50%	50%
	Total permit holders	10	10	9	9	9	10	10	10	10	10	10
Crab (LLP) ¹	Total permits	1	1	1	1	1	2	2	2	2	2	2
	Active permits	1	1	1	1	1	1	1	1	1	1	1
	% of permits fished	100%	100%	100%	100%	100%	50%	50%	50%	50%	50%	50%
	Total permit holders	1	1	1	1	1	2	2	2	2	2	2
Federal Fisheries Permits ¹	Total permits	12	12	13	6	6	6	7	7	7	6	6
	Fished permits	0	0	0	4	5	2	5	4	5	4	4
	% of permits fished	-	-	-	67%	83%	33%	71%	57%	71%	67%	67%
	Total permit holders	10	10	11	5	5	5	6	6	6	6	6
Crab (CFEC) ²	Total permits	9	9	9	9	6	4	3	3	6	5	5
	Fished permits	2	2	2	2	2	0	0	0	2	1	2
	% of permits fished	22%	22%	22%	22%	33%	-	-	-	33%	20%	40%
	Total permit holders	5	5	5	5	4	4	3	3	5	4	4
Other shellfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	1	1
	Fished permits	0	0	0	0	0	0	0	0	0	0	1
	% of permits fished	-	-	-	-	-	-	-	-	-	-	100%
	Total permit holders	0	0	0	0	0	0	0	0	0	1	1
Halibut (CFEC) ²	Total permits	18	18	15	15	17	16	15	14	13	13	14
	Fished permits	16	15	13	13	14	12	10	11	12	11	12
	% of permits fished	89%	83%	87%	87%	82%	75%	67%	79%	92%	85%	86%
	Total permit holders	18	18	15	14	16	15	14	14	13	13	14
Herring (CFEC) ²	Total permits	11	11	8	7	7	7	7	7	7	7	5
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	6	6	5	4	4	4	4	4	4	4	3

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	5	5	4	4	4	4	4	4	4	4	5
	Fished permits	5	5	2	3	3	3	3	3	3	3	3
	% of permits fished	100%	100%	50%	75%	75%	75%	75%	75%	75%	75%	60%
	Total permit holders	5	5	4	4	4	4	4	4	4	4	5
Groundfish (CFEC) ²	Total permits	25	18	15	14	15	13	7	6	7	11	10
	Fished permits	8	5	2	4	4	2	2	2	3	5	4
	% of permits fished	32%	28%	13%	29%	27%	15%	29%	33%	43%	45%	40%
	Total permit holders	18	13	11	9	9	8	6	6	7	10	9
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	40	42	36	34	36	36	35	32	35	34	35
	Fished permits	32	32	19	19	24	26	25	18	26	20	24
	% of permits fished	80%	76%	53%	56%	67%	72%	71%	56%	74%	59%	69%
	Total permit holders	42	43	37	35	37	36	35	32	35	35	36
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>108</i>	<i>103</i>	<i>87</i>	<i>83</i>	<i>85</i>	<i>80</i>	<i>71</i>	<i>66</i>	<i>72</i>	<i>75</i>	<i>75</i>
	<i>Fished permits</i>	<i>63</i>	<i>59</i>	<i>38</i>	<i>41</i>	<i>47</i>	<i>43</i>	<i>40</i>	<i>34</i>	<i>46</i>	<i>40</i>	<i>46</i>
	<i>% of permits fished</i>	<i>58%</i>	<i>57%</i>	<i>44%</i>	<i>49%</i>	<i>55%</i>	<i>54%</i>	<i>56%</i>	<i>52%</i>	<i>64%</i>	<i>53%</i>	<i>61%</i>
	<i>Permit holders</i>	<i>62</i>	<i>61</i>	<i>53</i>	<i>53</i>	<i>52</i>	<i>51</i>	<i>48</i>	<i>46</i>	<i>50</i>	<i>50</i>	<i>50</i>

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

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

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

Year	Crew License Holders ¹	Count Of All Fish Buyers ²	Count Of Shore-Side Processing Facilities ⁴	Vessels Primarily Owned by Residents ⁵	Vessels Homeported ⁵	Vessels Landing Catch in Seldovia ²	Total Net Lbs Landed in Seldovia ^{2,3}	Total Ex-Vessel Value of Landings in Seldovia ^{2,3}
2000	44	2	2	47	45	2	--	--
2001	43	1	2	40	42	2	--	--
2002	24	0	1	34	38	0	0	\$0
2003	33	3	0	33	35	2	--	--
2004	34	1	0	28	31	1	--	--
2005	36	2	0	30	26	2	--	--
2006	37	0	0	24	20	0	0	\$0
2007	34	0	0	24	19	0	0	\$0
2008	34	0	0	24	20	0	0	\$0
2009	33	0	0	25	22	0	0	\$0
2010	30	0	0	23	21	0	0	\$0

Note: Cells showing “--” indicate that the data are considered confidential.

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

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

³ Totals only represent non-confidential data.

⁴ 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.]

⁵ 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 6. Halibut Catch Share Program Participation by Residents of Seldovia: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Pounds)
2000	21	2,533,894	355,899
2001	19	2,231,415	364,983
2002	19	2,256,991	380,740
2003	18	2,265,356	380,775
2004	17	2,246,096	384,959
2005	16	2,276,634	369,282
2006	14	2,255,678	341,815
2007	13	2,312,167	343,100
2008	13	2,385,600	349,991
2009	12	2,436,728	330,285
2010	13	2,538,480	313,887

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 Seldovia: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Pounds)
2000	9	2,228,031	198,803
2001	8	2,227,981	188,626
2002	8	1,583,598	136,184
2003	8	1,386,966	142,695
2004	8	1,386,966	160,944
2005	8	1,205,810	138,056
2006	8	1,205,810	122,825
2007	7	1,204,369	119,683
2008	6	1,204,197	106,691
2009	6	1,204,197	97,023
2010	6	1,201,865	88,445

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 Seldovia: 2000-2010.

Year	Number of Crab Quota Share Account Holders	Crab Quota Shares Held	Crab IFQ Allotment (Pounds)
2005	1	6,654,936	190,769
2006	1	7,549,411	185,633
2007	1	7,549,411	305,627
2008	1	7,549,411	283,866
2009	1	7,549,411	222,303
2010	1	7,549,411	236,868

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 Seldovia: 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
Finfish	--	--	0	--	--	--	0	0	0	0	0
Halibut	--	--	0	--	--	--	0	0	0	0	0
Herring	--	--	0	--	--	--	0	0	0	0	0
Other Groundfish	--	--	0	--	--	--	0	0	0	0	0
Other Shellfish	--	--	0	--	--	--	0	0	0	0	0
Pacific Cod	--	--	0	--	--	--	0	0	0	0	0
Pollock	--	--	0	--	--	--	0	0	0	0	0
Sablefish	--	--	0	--	--	--	0	0	0	0	0
Salmon	--	--	0	--	--	--	0	0	0	0	0
<i>Total²</i>	--	--	0	--	--	--	0	0	0	0	0
	<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
Finfish	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0
Halibut	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0
Herring	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0
Other Groundfish	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0
Other Shellfish	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0
Pacific Cod	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0
Pollock	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0
Sablefish	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0
Salmon	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0
<i>Total²</i>	--	--	\$0	--	--	--	\$0	\$0	\$0	\$0	\$0

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

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

¹ Net lbs 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 Seldovia 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	308,114	331,518	217,593	416,233	429,951	391,394	308,596	309,750	315,964	327,561	304,036
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	7,202	3,049	3,869	2,778	6,702	5,504	5,761
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	1,659,673	916,377	813,760	512,278	635,091	--	--	--	1,527,256	1,527,256	1,527,256
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	796,263	636,955	684,668	619,823	923,306	752,373	373,162	550,986	772,747	576,987	415,826
<i>Total²</i>	<i>2,764,050</i>	<i>1,884,850</i>	<i>1,716,021</i>	<i>1,548,334</i>	<i>1,995,550</i>	<i>1,146,816</i>	<i>685,627</i>	<i>863,514</i>	<i>2,622,669</i>	<i>2,437,308</i>	<i>2,252,879</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	\$806,960	\$664,930	\$492,336	\$1,214,878	\$1,317,613	\$1,229,482	\$1,195,662	\$1,411,544	\$1,441,515	\$1,027,302	\$1,410,965
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	\$3,167	\$1,383	\$1,607	\$965	\$2,827	\$2,176	\$2,169
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	\$563,867	\$294,044	\$233,146	\$201,079	\$173,990	--	--	--	\$706,693	\$389,176	\$449,806
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	\$557,334	\$341,010	\$449,187	\$487,410	\$458,564	\$682,253	\$359,881	\$372,156	\$566,976	\$475,468	\$488,726
<i>Total²</i>	<i>\$1,928,161</i>	<i>\$1,299,984</i>	<i>\$1,174,668</i>	<i>\$1,903,367</i>	<i>\$1,953,335</i>	<i>\$1,913,117</i>	<i>\$1,557,150</i>	<i>\$1,784,664</i>	<i>\$2,718,011</i>	<i>\$1,894,124</i>	<i>\$2,351,666</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 lbs refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Recreational Fishing

From 2000 to 2010, the number of active sport fish guide businesses in Seldovia generally remained between three and five, with a peak of eight in 2007. The number of licensed sport fish guides registered in the community each year varied between 7 and 11. In 2010, 156 sportfishing licenses were sold to community residents (irrespective of the location of the point of sale), representing a slight decrease in total purchases from earlier in the decade. Local licenses sales were much higher, with an average of just under 600 licenses sold in Seldovia per year between 2000 and 2010. The fact that a greater number of licenses are sold locally than are purchased by local residents indicates that visitors to the community pursue sportfishing activities (Table 11).

Seldovia is located within Alaska Sport Fishing Survey Area P, including saltwater fishing in Cook Inlet and freshwater fishing on the Kenai Peninsula. Between 2000 and 2010, saltwater and freshwater sportfishing at this regional level was substantial. In 2010, Alaska residents logged 47,656 saltwater angler days and 28,294 freshwater angler days, while non-Alaska residents logged 20,292 saltwater angler days and 71,555 freshwater angler days. Typically, Alaska residents took part in saltwater sportfishing at greater rates than non-Alaska resident anglers, and the opposite was true of freshwater sportfishing. For both resident and non-resident anglers in both freshwater and saltwater, the number of angler days fished per year decreased between 2000 and 2010. This information about regional sportfishing activity is also presented in Table 11.

Statistics provided by charter logbook information indicate that Chinook salmon, chum salmon, coho salmon, halibut, lingcod, other rockfish, other salmon, pink salmon, pelagic rockfish, shark, sockeye salmon, and yelloweye are caught by anglers fishing from charter vessels based in Seldovia.⁹⁴⁷ The ADF&G Statewide Harvest Survey⁹⁴⁸ indicates that the following species are targeted by anglers with sportfishing licenses in the Cook Inlet region: Chinook salmon, coho salmon, sockeye salmon, pink salmon, chum salmon, Dolly Varden, Pacific halibut, rockfish, lingcod, Pacific cod, Tanner crab, razor clam, and hardshell clam.

In a survey conducted by the AFSC in 2011, community leaders reported that sportfishing in Seldovia takes place on charter boats/party boats, on private boats owned by local residents, on private boats owned by non-residents, as shore-based or dock fishing by local residents, and as shore-based or dock fishing by non-residents. Community leaders also noted that recreational fishermen using boats based in Seldovia target pink salmon, chum salmon, Chinook/king salmon, coho/silver salmon, sockeye/red salmon, halibut, rockfish, crab, and clams.

⁹⁴⁷ 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.]

⁹⁴⁸ 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).

Table 11. Sportfishing trends, Seldovia: 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 Seldovia ²
2000	3	7	173	499
2001	4	9	180	513
2002	3	11	150	512
2003	3	8	150	496
2004	3	9	148	543
2005	5	8	154	700
2006	4	7	150	643
2007	8	10	163	779
2008	5	9	162	707
2009	5	8	159	564
2010	4	6	156	526

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	68,928	40,179	42,157	139,737
2001	62,340	22,585	28,245	69,053
2002	53,537	22,745	26,479	83,335
2003	49,366	24,522	35,299	80,368
2004	57,167	24,224	39,009	83,478
2005	65,997	27,827	37,309	91,489
2006	67,259	23,225	33,988	76,100
2007	67,556	24,465	31,105	89,061
2008	54,136	21,762	28,780	70,285
2009	41,925	21,446	24,959	77,945
2010	47,656	20,292	28,294	71,555

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

In a survey conducted by the AFSC in 2011, community leaders reported that halibut, sockeye salmon, and crab are the most important subsistence marine or aquatic resources to the residents of Seldovia. Although data are not available regarding subsistence participation by household and species from 2000 to 2010 (Table 12), data are available regarding subsistence harvest levels of salmon, halibut, seals, sea lions and sea otters. The number of subsistence salmon permits issued and permits reported as fished both declined between 2000 and 2010. The

amount of salmon harvested for subsistence use varied substantially by species between 2000 and 2010 for years in which data were available and included Chinook salmon, chum salmon, coho salmon, pink salmon, and sockeye salmon (Table 13). However, residents appear to be targeting sockeye salmon significantly more than other species.

Between 2003 and 2010, the number of Subsistence Halibut Registration Certificates (SHARC) issued and reported as fished, as well as the number of lbs of halibut harvested, generally increased, with small declines in the final years of the period (Table 14). In 2010, 152 SHARC cards were issued, and 42.7% of them were actively fished. That year, 18,746 lbs of halibut were harvested.

While data are limited regarding subsistence harvest of marine mammals in Seldovia between 2000 and 2010, the U.S. Fish and Wildlife Service reported harvest of sea otters in some years during the period and ADF&G reported harvest of a small number of harbor seals each year. Information was not reported by management agencies regarding harvest of beluga whale, walrus, polar bear, Steller sea lion, or spotted seal during the 2000-2010 period. This information is presented in Table 15.

Although no data were reported between 2000 and 2010 regarding harvest of marine invertebrates and non-salmon fish in Seldovia (Tables 12 and 13), an earlier subsistence survey conducted by ADF&G in the early 1990s provides insight into the species utilized by local residents. In 1993, the following species of marine invertebrates were reported used for subsistence by Seldovia residents: abalone, black (small) chitons, butter clams, cockles, Dungeness crab, horse clams (gaper), limpets, mussels, octopus, oyster, Pacific littleneck clams (steamers), pinkneck clams, razor clams, red (large) chitons, scallops, sea urchin, shrimp, snails, softshell clams, unknown clams, unknown crab, unknown king crab, unknown Tanner crab, and whelk. Non-salmon fish reported harvested for subsistence use in 1993 included: Arctic char, black rockfish, Dolly Varden char, eulachon (hooligan candlefish), grayling, herring, herring roe/unspecified, herring sac roe, herring spawn on kelp, Irish lord, kelp greenling, lake trout, lingcod, Pacific cod (gray), Pacific tom cod, pike, rainbow trout, red rockfish, sablefish (black cod), sea bass, shark, sheefish, skates, steelhead, sturgeon, unknown cod, unknown flounder, unknown greenling, unknown rockfish, unknown sculpin, unknown smelt, unknown sole, unknown trout, unknown whitefish, walleye pollock, and wolf fish. The same survey also noted harvest of several marine mammal species in 1993: harbor seal, Steller sea lion, unknown seal, and unknown whale.⁹⁴⁹

Additional Information

Seldovia is home to an annual Chainsaw Carving Contest, the Seldovia Music Festival, and a Fourth of July Festival.⁹⁵⁰

⁹⁴⁹ 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).

⁹⁵⁰ Seldovia, Alaska website. Retrieved February 17, 2012 from <http://seldovia.com/>.

Table 12. Subsistence Participation by Household and Species, Seldovia: 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 (lbs)
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, Seldovia: 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	23	22	179	16	n/a	n/a	252	n/a	n/a
2001	20	16	148	n/a	n/a	n/a	142	n/a	n/a
2002	24	21	124	11	13	31	234	n/a	n/a
2003	18	16	117	66	2	22	290	n/a	n/a
2004	17	14	97	18	16	65	69	n/a	n/a
2005	20	18	60	9	11	71	310	n/a	n/a
2006	18	11	23	n/a	n/a	31	12	n/a	n/a
2007	19	14	24	35	12	103	66	n/a	n/a
2008	16	14	16	6	54	81	279	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, Seldovia: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	103	54	17,344
2004	113	78	27,499
2005	123	68	19,876
2006	123	80	17,406
2007	140	102	23,768
2008	150	101	23,577
2009	165	93	21,708
2010	152	65	18,746

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, Seldovia: 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	2	n/a
2001	n/a	n/a	n/a	n/a	n/a	3	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	1	n/a
2005	n/a	n/a	n/a	n/a	n/a	1	n/a
2006	n/a	15	n/a	n/a	n/a	3	n/a
2007	n/a	n/a	n/a	n/a	n/a	2	n/a
2008	n/a	n/a	n/a	n/a	n/a	1	n/a
2009	n/a	1	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Seward (SOO-word)

People and Place

*Location*⁹⁵¹



Seward is situated on Resurrection Bay on the east coast of the Kenai Peninsula, 125 highway miles south of Anchorage. It lies at the foot of Mount Marathon and is the gateway to the Kenai Fjords National Park. Bear Creek and Lowell Point are adjacent to Seward. Seward is located in the Seward Recording District, the Kenai Peninsula Census Area, and the Kenai Peninsula Borough. The city boundaries encompass 14.4 square miles of land and 7.1 square miles of water.

*Demographic Profile*⁹⁵²

In 2010, there were 2,693 residents in Seward, making it the 36th 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 7.81%. The average annual growth rate during this period was -0.72%, indicating a slow population decline. The change in population from 1990 to 2010 is provided in Table 1. In a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that Seward has approximately 1,500 seasonal workers or transients each year, primarily between February and October.

In 2010, the majority of Seward residents identified themselves as White (68.5%). Other ethnic groups present in Seward that year included American Indian and Alaska Native (16.7%), two or more races (8.1%), Hispanic or Latino (3.6%), Black or African American (3.1%), Asian (2.4%), Native Hawaiian and Other Pacific Islander (0.6%), and some other race (0.6%). Between 2000 and 2010, the percentage of the population identifying themselves as White decreased by 3.6%, with corresponding increases in the percentages of the population identifying themselves as two or more races, Asian, Black or African American, Hispanic or Latino, Native Hawaiian and Other Pacific Islander, and some other race. The percentage of the population identifying themselves as American Indian and Alaska Native did not change between 2000 and 2010. Changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

In 2010, the average household size in Seward was 2.14, a decrease from 2.4 persons per household in both 1990 and 2000. The total number of households in Seward increased during this same period, from 886 in 1990 to 917 in 2000 to 1,097 in 2010. Of the 1,288 housing units surveyed for the 2010 Decennial Census, 600 were owner-occupied, 497 were renter-occupied, and 191 were vacant. In 2010, 709 Seward residents were reported to be living in group quarters.

⁹⁵¹ 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.

⁹⁵² 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 Seward from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	2,699	-
2000	2,830	-
2001	-	2,758
2002	-	2,755
2003	-	2,744
2004	-	2,544
2005	-	2,598
2006	-	2,593
2007	-	2,649
2008	-	2,561
2009	-	2,609
2010	2,693	-

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

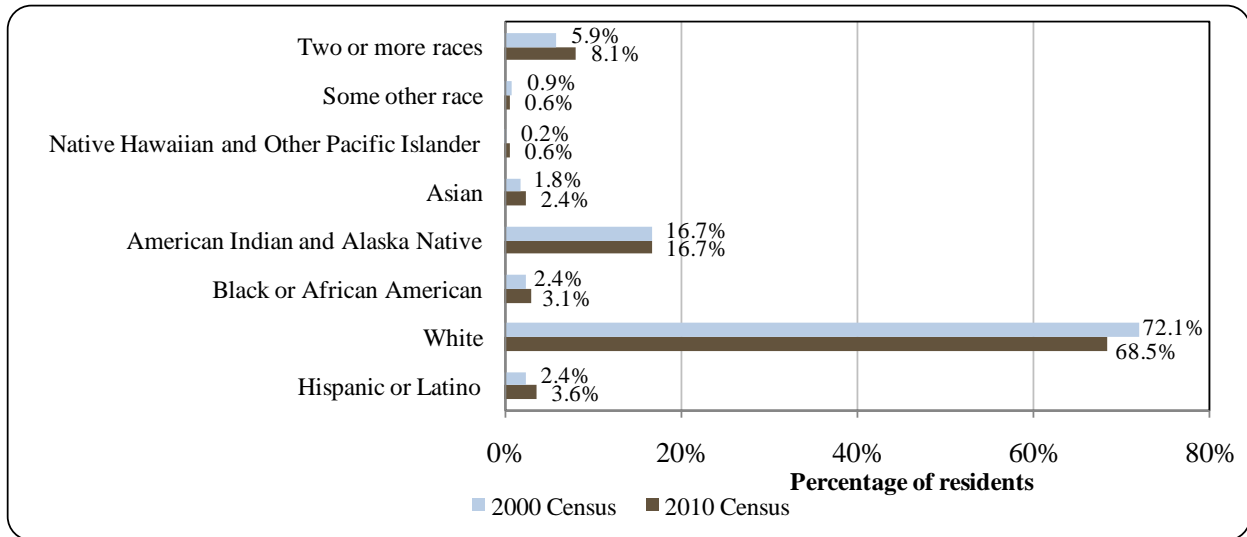
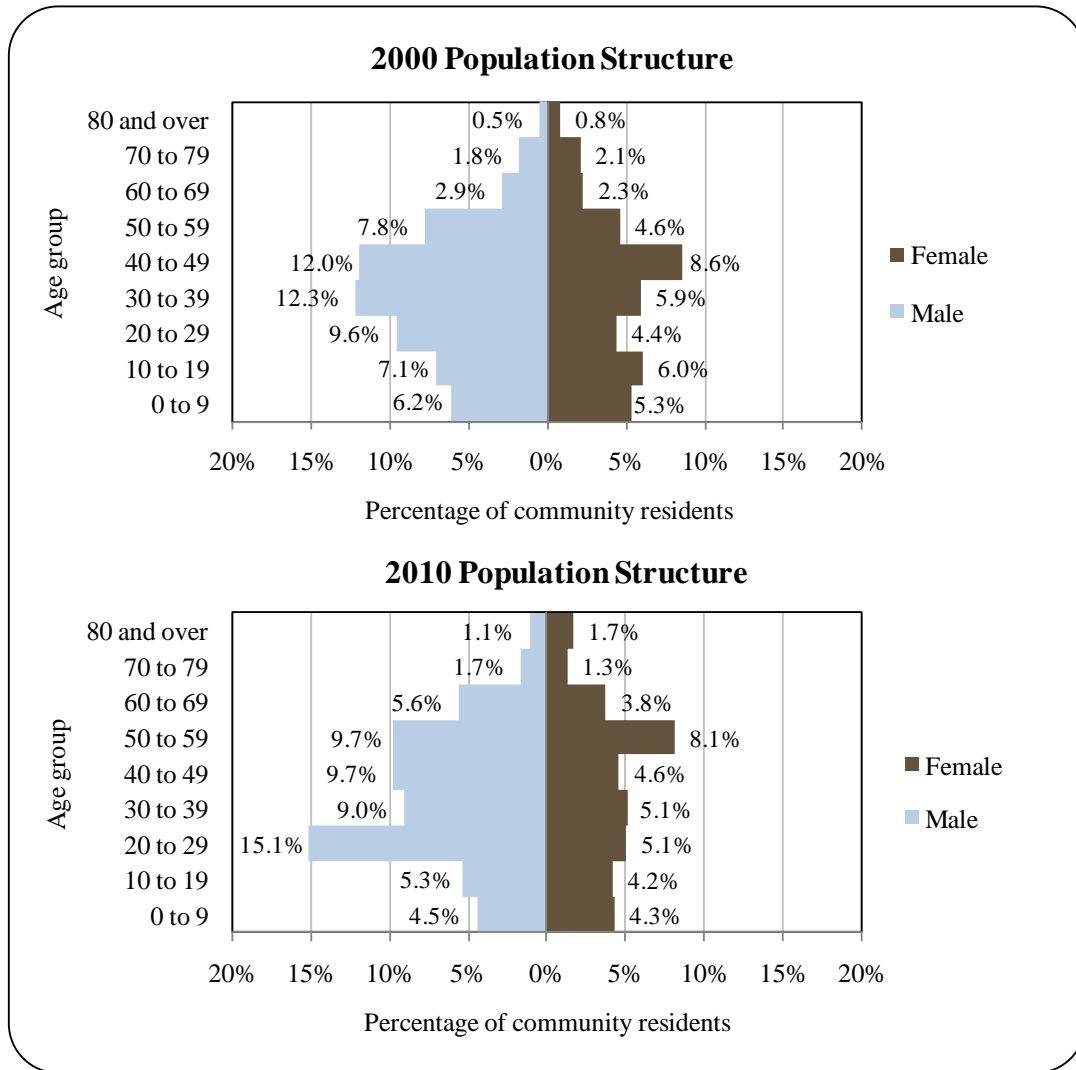


Figure 2. Population Age Structure in Seward Based on the 2000 and 2010 U.S. Decennial Census.



In 2010, the gender makeup of Seward was 62% male and 38% female, more skewed than the state as a whole (52% male, 48% female). The age groups between 20 and 59 years of age were especially skewed towards males. The median age was estimated to be 38.3 years, higher than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, the largest age group was 20-39 years old, with the next largest percentage of residents falling within the age group 40-59 years old. The overall population structure of Seward in 2000 and 2010 is shown in Figure 2.

In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),⁹⁵³ 89.7% Seward residents aged 25 and over were estimated to hold a high school

⁹⁵³ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not

diploma or higher degree in 2010, compared to 90.7% of Alaskan residents overall. Also in 2010, 1.7% of residents aged 25 and older were estimated to have less than a ninth grade education, compared to 3.5% of Alaskan residents overall; 8.6% were estimated to have a 9th to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 37.6% were estimated to hold a high school diploma or equivalent, compared to 27.4% of Alaskan residents overall; 24.1% were estimated to have some college but no degree, compared to 28.3% of Alaskan residents overall; 3.4% were estimated to hold an Associate's degree, compared to 8% of Alaskan residents overall; 13.4% were estimated to hold a Bachelor's degree, compared to 17.4% of Alaskan residents overall; and 11.3% were estimated to hold a graduate or professional degree, compared to 9.6% of Alaskan residents overall.

History, Traditional Knowledge, and Culture

The earliest inhabitants of Resurrection Bay were the Unegkurmiut, a subgroup of the Alutiiq Chugach that lived along the outer coast of the Kenai Peninsula. Anthropologists disagree about whether the Unegkurmiut were closely affiliated with the Koniag people of Kodiak Island, or whether they had previously inhabited Cook Inlet and were pushed back into a smaller territory by the Koniag.⁹⁵⁴

Resurrection Bay received its modern name in 1792 when Russian explorer and fur trader Alexander Baranof found unexpected shelter in the bay en route from Kodiak to Yakutat. He gave it this name because the day he arrived was the Russian “Sunday of Resurrection.”⁹⁵⁵ The Russians never built a permanent settlement in Resurrection Bay, although Baranof did establish a camp near Tonsina Point, close to the current City of Seward. The Russians built a ship called the Pheonix at the site, which is believed to have been the first western ship to be constructed on the west coast of North America.⁹⁵⁶

In the late 1800s, following the discovery of gold and coal in Alaska, private investors in Seattle were in search of a port to serve as a transportation link for a railroad to the interior. A real-estate developer and journalist named John Ballaine ordered a survey of mineral, timber, and farming potential of the Kenai Peninsula. Resurrection Bay was chosen as the site for a railroad terminus, based on positive reports regarding the natural resources in the area, and the fact that it offered an ice-free harbor throughout the year. John and his brother Frank, along with a group of settlers, arrived in 1903 to found the town of Seward. They layed the townsite and built a wharf.^{957,958} They had formed a railroad company – Alaska Central Railway (ACR), and by 1905 they had already laid 50 miles of railroad track. ACR went bankrupt by 1907, and a second group, the Alaska Northern Railway (ANR), purchased the railroad and constructed an

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.

⁹⁵⁴ Cook, Linda, and Frank Norris. (1998). *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

⁹⁵⁵ 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.

⁹⁵⁶ Alaska State Housing Authority. (1963). *Seward Comprehensive Plan*. Retrieved March 14, 2013 from <http://www.commerce.state.ak.us/dca/plans/Seward-CP-1968.pdf>.

⁹⁵⁷ Ibid.

⁹⁵⁸ Alaska History and Cultural Studies. (2013). *Southcentral Alaska: 1900-1915 Fight for a Railroad*. Retrieved March 15, 2013 from <http://www.akhistorycourse.org/articles/article.php?artID=87>.

additional 21 miles of track by 1910.⁹⁵⁹ However, private construction was halted due to challenges in the construction and financing of the project, as well as a withdrawal of all coal lands by the federal government. Nevertheless, by 1910, 534 people were recorded as living in Seward, and the City was incorporated in 1912. Seward was named after U.S. Secretary of State William Seward, 1861-1869, who is best known for having negotiated the purchase of Alaska from Russia in 1867, often referred to at that time as “Seward’s Folly.”⁹⁶⁰

Railroad construction began again in 1915, after U.S. Congress agreed to fund, construct and operate the railway. The Alaska Railroad was completed in 1923.⁹⁶¹ Seward continued to grow as a supply center and ocean link to the interior. The Seward-Anchorage Highway was completed in 1950. Seward was heavily impacted by the Good Friday Earthquake of 1964. As much as 90% of the Seward’s industry, including docks, fishing boats, railway yards, warehouses, seafood processing plants, and oil tank farms, was destroyed by submarine landslides and the resulting sea waves, as well as by fire.⁹⁶²

Today, Seward remains a primarily non-Native community, although the Qutekcak Tribe is very active in the community.⁹⁶³

Natural Resources and Environment

Seward is located in a maritime climate zone. Winter temperatures average from 17 to 38 °F (-8.3 to 3.3 °C), and summer temperatures average 49 to 63 °F (9.4 to 17.2 °C). Annual precipitation averages 66 inches of rain and 80 inches of snowfall.⁹⁶⁴ Strong winds occasionally funnel up Resurrection Bay or down valleys from the north. The landscape surrounding Seward is typical of eroded glacial valleys, with steep mountain slopes rising to between 2,000 and 5,000 ft interspersed by low river valleys. The area is heavily forested up to tree line at about 1,000 ft, with stands of spruce, hemlock, birch, and cottonwood, along with underbrush of alder and devil’s club.⁹⁶⁵

Seward is located several miles from the eastern boundary of Kenai Fjords National Park, and hosts the primary information center for visitors preparing to enter the Park. This National Park was established in 1980 to “maintain unimpaired the scenic and environmental integrity of the Harding Icefield, its outflowing glaciers and coastal fjords and islands.” Fifty-six percent of the park is covered by ice. Animals living in the mountains, the shores, and the fjords of the National Park include black bear, brown bear, moose, mountain goat, sea otter, Steller sea lion, harbor seal, Dall’s porpoise, Pacific white-sided dolphin, orca, minke whale, humpback whale, fin whale, and birds including bald eagles, puffins, murre, steller’s jay, black-billed magpie, peregrine falcon, and marbled murrelet.⁹⁶⁶ A portion of Kenai Fjords National Park is included in the Kenai Wilderness, which covers a total of 1,354,247 acres on the Kenai Peninsula.⁹⁶⁷

⁹⁵⁹ Alaska Railroad Corporation. (n.d.). *Timber Trestle Bridges in Alaska Railroad History*. Retrieved March 15, 2013 from <http://alaskarailroad.com/Portals/6/pdf/projects/Timber%20bridge%20history%20booklet.pdf>.

⁹⁶⁰ See footnotes 955 and 956.

⁹⁶¹ See footnote 959.

⁹⁶² See footnote 956.

⁹⁶³ See footnote 955.

⁹⁶⁴ Ibid.

⁹⁶⁵ See footnote 956.

⁹⁶⁶ National Park Service. (2010). *Kenai Fjords National Park*. Retrieved December 27, 2011 from <http://www.nps.gov/kefj/>.

⁹⁶⁷ Wilderness.net (n.d.). *Kenai Wilderness*. Retrieved January 26, 2012 from <http://www.wilderness.net>.

Seward is also adjacent to the south-western boundary of the Chugach National Forest, the western and northern-most National Forest in the U.S., comprising 5.5 million acres. Of this area, 21% of the National Forest is located on the Kenai Peninsula.⁹⁶⁸

Natural hazards with the potential to occur in Seward include flooding, earthquake, wildfire, ash fall, snow avalanche, tsunami, severe weather, landslides, and erosion. All of these hazards have occurred historically in Seward. The hazards with the highest probability of occurring were identified to be flooding and earthquake, and hazards with the greatest extent include earthquake, ash fall, severe weather, and erosion.⁹⁶⁹

According to the Alaska Department of Environmental Conservation, there were no notable active environmental cleanup sites located in the Seward area as of March 2013.⁹⁷⁰

Current Economy⁹⁷¹

The local economy has long been based on Seward's strategic location as a transportation center, serving as the southern terminus for the Alaska Railroad and a road link to Anchorage and the Interior. Today the economy has diversified to include commercial fishing and fish processing, ship services and repairs, a coal export facility, educational and research facilities, a state prison, and tourism fueled by attractions such as Kenai Fjords National Park and the Alaska SeaLife Center. Seward is the location of the primary information center for Kenai Fjords National Park. Seward is a primary port of call for cruise ships during the summer season.⁹⁷² In addition, in a survey conducted by the AFSC in 2011, community leaders indicated that Seward's economy also relies on mining, oil and natural gas exploration or drilling, and sport hunting and fishing.

According to the 2006-2010 ACS,⁹⁷³ in 2010, the per capita income in Seward was estimated to be \$28,613, and the median household income was estimated to be \$43,188, compared to \$20,360 and \$44,306 in 2000, respectively. However, after taking inflation into account by converting the 2000 values to 2010 dollars,⁹⁷⁴ the real per capita income in 2000 was \$26,773 and the median household income in 2000 was \$58,262. This shows that per capita income in Seward increased slightly between 2000 and 2010, while household income decreased during that same period. However, Seward's small population size may have prevented the ACS from accurately portraying economic conditions.⁹⁷⁵ A potentially more accurate understanding of

⁹⁶⁸ National Park Service (n.d.). *Chugach National Forest: Forest Facts*. Retrieved December 14, 2011 from <http://www.fs.usda.gov/detail/chugach/about-forest/?cid=STELPRDB5053239>.

⁹⁶⁹ Kenai Borough. (2010). *City of Seward All Hazard Mitigation Plan*. Retrieved March 15, 2013 from <http://www2.borough.kenai.ak.us/emergency/hazmit/Final%20Drafts/Annexes/Annex%20E%20City%20of%20Seward.pdf>.

⁹⁷⁰ Alaska Dept. of Environmental Conservation (n.d.). *List of Contaminated Sites by Region*. Retrieved March 15, 2013 from <http://dec.alaska.gov/spar/csp/list.htm>.

⁹⁷¹ Unless otherwise noted, all monetary data are reported in nominal values.

⁹⁷² 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.

⁹⁷³ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

⁹⁷⁴ Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved October 18, 2011 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

⁹⁷⁵ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not

per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development. If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Decennial Census, the resulting per capita income estimate for Seward in 2010 is \$11,901.^{976,977} This alternative 2010 per capita estimate is lower than the 2000 Census per capita income estimate, suggesting that caution is warranted when citing an increase in per capita income in Seward between 2000 and 2010.

Based on household surveys conducted for the 2006-2010 ACS, in 2010, Seward ranked 72nd of 305 Alaskan communities with per capita income that year, and 174th of 299 Alaskan communities with household income data. In that same year, 62.3% of the population age 16 and over was estimated to be in the civilian labor force, compared to the statewide rate of 68.8%. The local unemployment rate was 6.7%, compared to the statewide unemployment rate of 5.9%. Approximately 14.5% of local residents were living below the poverty line in 2010, compared to 9.6% of Alaskan residents overall. It should be noted that income and poverty statistics are based on wage income and other money sources; figures reported for Seward are not reflective of the value of subsistence to the local economy. In addition, these unemployment and poverty statistics are likely inaccurate given the population of Seward. A more accurate estimate is based on the ALARI database, which indicates that the unemployment rate in 2010 was 17.3%.

Also based on the 2006-2010 ACS, the greatest number of workers was estimated to be employed in the private sector (61.2%), along with 30.4% in the public sector and 8.4% self-employed. Out of 1,231 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest percentage were employed in education services, health care, and social assistance (32.2%), arts, entertainment, recreation, accommodation and food services (17.9%), and public administration (13.4%) industries. Compared to 2000, there was a 55.6% increase in the percentage of the workforce estimated to be employed in educational services, health care, and social assistance. There were declines of more than 50% in the percentage of the workforce employed in several industries, including retail trade, manufacturing, wholesale trade, information, and ‘other services except public administration’. When viewing employment in terms of occupation, an increase can be observed in the percentage of the workforce employed in management/professional occupations between 2000 and 2010. Small decreases were observed in other occupational categories. Information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

With regard to commercial fishing employment, 8.1% of the workforce was estimated to be employed in agriculture, forestry, fishing, hunting, and mining industries in 2010, and 4.2% was estimated to be employed in farming, fishing, and forestry occupations (out of a total of 9.1% estimated to be employed overall in the combined category of “natural resource, construction, or maintenance occupations”). It is important to note that the number of individuals employed in the fishing industry may be underestimated in census statistics as fishermen may hold another job and characterize their employment accordingly.

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.

⁹⁷⁶ 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/>.

⁹⁷⁷ See footnote 973.

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

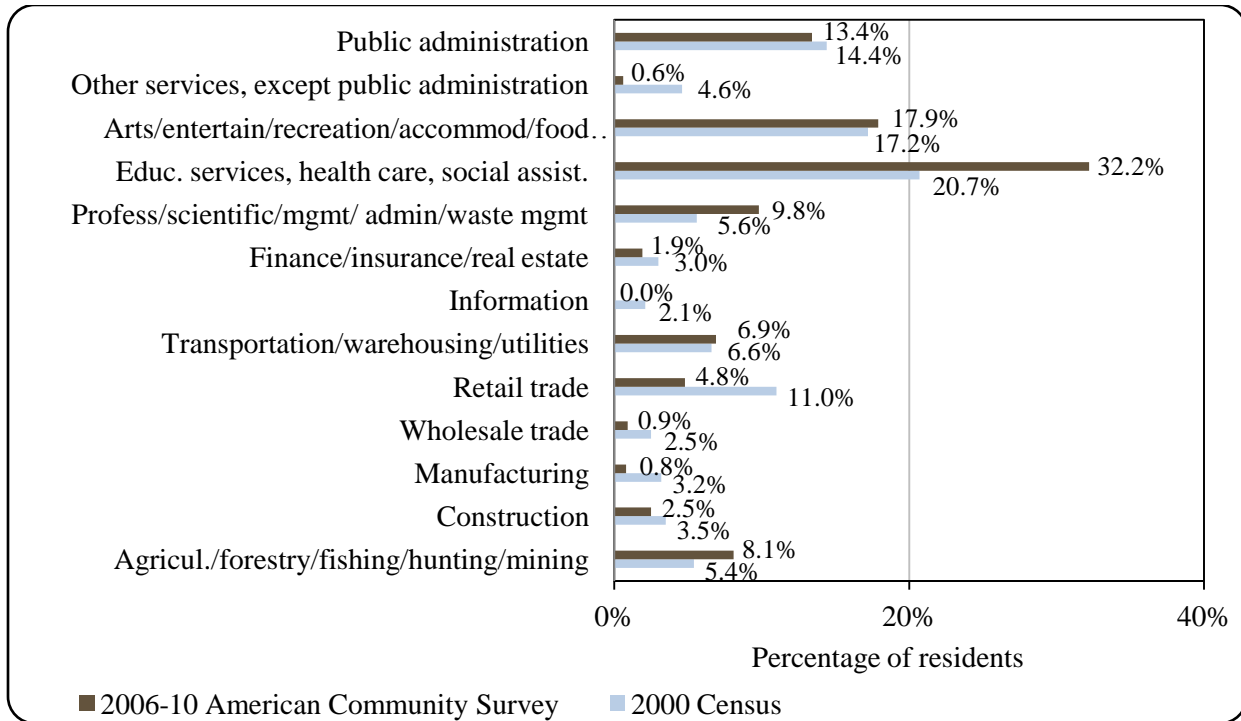
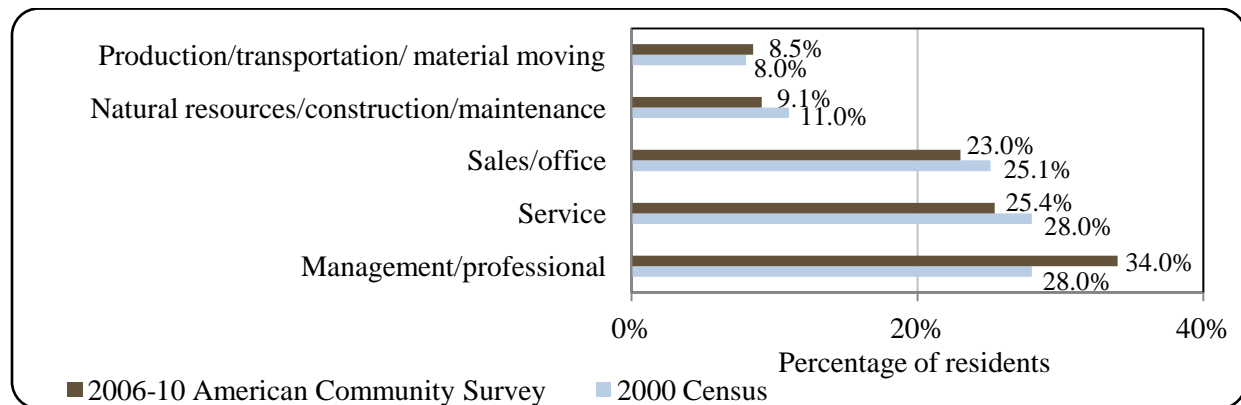


Figure 4. Local Employment by Occupation in 2000-2010, Seward (U.S. Census).



Governance

Seward is a Home Rule City located in the Kenai Peninsula Borough and is governed by a mayor and city council. The City of Seward administers a 4% sales tax and a 4% bed tax. The Borough administers an additional 3% sales tax, and together, the City and Borough levy a combined 8.12 mills property tax.⁹⁷⁸ Total annual municipal revenues received by the City followed an increasing trend between 2000 and 2010, in part due to increasing sales tax revenues. In addition to local tax revenue, other locally-generated income sources in Seward

⁹⁷⁸ 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.

during the decade included license and permit fees, fines and bails, and charges for city services. Intergovernmental revenue sources included shared revenues, capital and special projects grants, and Exxon Valdez settlement funds. Sources of shared revenues included the State Revenue Sharing program from 2000 to 2003 (between \$83,647 and \$100,000 per year) and the Community Revenue Sharing program (almost \$230,000 each year in 2009 and 2010) (Table 2).

In 2001-2004 and 2006-2010, Seward received a number of fisheries-related grants for purposes such as harbor expansion, harbor/construction, the Seward Shipyard portable workstation, an algae rearing system, upgrades to the Portage Distributing processing plant, funds for marketing of smoked salmon sausage, construction of a floating oyster smokehouse, a T-dock and bulkhead, the Alutiiq Pride Shellfish Hatchery, a shellfish enhancement project, East Harbor reconstruction, fish ditch restoration, and dredging of cruise ship berthing basins and approaches. The total amount received in fisheries-related grants varied from year to year from 2001 to 2010, though in most years total funds received were in excess of \$1 million. Grants were received for purposes including dredging cruise ship berthing basins and approaches, fish ditch restoration, shellfish enhancement, East harbor reconstruction, T-dock and bulkhead construction, the Alutiiq Pride Shellfish Hatchery, an algae rearing system, upgrades to the Portage Distributing processing plant, marketing of smoked salmon sausage, floating oyster smokehouse construction for Pristine Products, harbor construction (Phases I and II), a Seward Shipyard portable work station, harbor expansion, and improvements to the small boat harbor. Information on selected revenue streams for Seward from 2000 to 2010 is provided in Table 2.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Seward 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	\$9,035,747	\$2,197,561	\$102,439	n/a
2001	\$9,091,665	\$2,165,586	\$90,570	\$4,225,000
2002	\$8,300,675	\$2,250,081	\$89,187	\$3,500,000
2003	\$8,198,766 ⁶	\$2,671,613	\$83,647	\$8,468,050
2004	\$8,538,656	\$3,123,314	n/a	\$601,799
2005	\$8,910,517	\$3,411,283	n/a	n/a
2006	\$10,862,496	\$3,518,435	n/a	\$2,000,000
2007	\$10,396,325	\$4,068,600	n/a	\$2,350,000
2008	\$12,032,612	\$4,137,758	n/a	\$1,250,000
2009	\$14,186,121	\$3,585,304	\$229,606	\$61,250
2010	\$14,987,430	\$3,742,751	\$226,846	\$4,500,000

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.

⁶ This number reflects the 2003 budget projection rather than the total reported in the 2003 comprehensive annual financial report.

The office of the Qutekcak Native Tribe is located in Seward. The Tribe is governed by a seven-person Tribal Council, including the President. Tribal members are a mix of Alaska Native people from around the State. The Tribe offers a variety of cultural activities and services for members, including elder and youth programs, cultural education, jobs, and scholarships. The Tribe was not included in the Alaska Native Claims Settlement Act (ANCSA), and is not currently federally recognized as a Native village. However, the Qutekcak Native Tribe is seeking federal recognition.⁹⁷⁹

The nearest offices of the Alaska Department of Fish and Game (ADF&G) and the National Marine Fisheries Service (NMFS) are located in Seward. The Alaska Department of Natural Resources, Department of Commerce, Community, and Economic Development, the Bureau of Citizenship and Immigration Services, and U.S. Immigration and Customs Enforcement all have offices in Anchorage.

Infrastructure

*Connectivity and Transportation*⁹⁸⁰

Seward is connected to the Alaska Highway system by the Seward Highway. Bus and commercial trucking services to and from Anchorage are available daily. The port serves cruise ships, cargo barges, and ocean freighters from Seattle and overseas. The small boat harbor has moorage for 650 boats and two boat launch ramps. Seward is a major transit site for the Alaska Railroad. Seasonal passenger transportation is available by rail. Air services and charters are available at the state-owned airport. Two paved runways are utilized; one is 4,240 feet long by 100 feet wide, and the other is 2,279 feet long by 75 feet wide. Regular commercial air service between Seward and Anchorage is not available.

*Facilities*⁹⁸¹

Water is supplied by nine wells and is treated and distributed throughout Seward. Sewage is collected via pipes and sent to a secondary treatment lagoon. Almost all homes are fully plumbed. Refuse collection is provided by the City under contract; the borough provides solid waste disposal. The borough operates a refuse transfer facility in the community. Seward Electric System purchases power from Chugach Electric and owns six standby diesel generators. Police services are provided the City Police Department and the local state troopers post.

In a survey conducted by the AFSC in 2011, community leaders reported that a number of infrastructure projects have been completed in Seward within the past 10 years, including a fish cleaning station, barge landing area, construction of new dock space, improvements to existing dock structure, electricity and water serving the dock, roads serving the dock, pilings, fuel tanks at the dock, a breakwater and jetty, harbor dredging, drydock space, haulout facilities, broadband internet access, roads, airport/seaplane base, water and sewer pipelines, a diesel powerhouse, sewage treatment, water treatment, a new landfill/solid waste site, public

⁹⁷⁹ Qutekcak Native Tribe. (n.d.). *Qutekcak Native Tribe, Seward's Native Pride*. Retrieved September 9, 2013 from <http://sewardaknatives.com/index.php>.

⁹⁸⁰ 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.

⁹⁸¹ Ibid.

safety/police department, emergency response, fire department, school, telephone service, post office, and fire/safety. In addition, community leaders indicated that an Environmental Protection Agency-certified boat cleaning station and a community center/library are currently in progress and that infrastructure for wind energy is planned to be completed within the next 10 years. In the same survey, community leaders noted that Seward has 25,465 feet of dock space available for permanent vessels and 2,300 feet of dock space available for transient vessels, and that vessels up to 800-900 feet long can use moorage in Seward. Community leaders also indicated that Seward is capable of handling a number of different types of vessels, including rescue vessels, cruise ships, ferries, fuel barges, and hazardous materials.

*Medical Services*⁹⁸²

Medical services in Seward are provided by the Providence Seward Medical Center North Star health Clinic, which is privately owned and operated. The hospital is a Community Health Aid Program site and a qualified Acute Care facility. Long-term care is available at the Wesley Rehabilitation and Care facility. Specialized care is available at the Seward Life Action Council Counseling Facility. Emergency Services have highway and limited marine and airport access and are provided by 911 telephone service and volunteers. Alternate health care is provided by the Seward Volunteer Ambulance Corporation and the Bear Creek Fire/Emergency Medical Services Department.

*Educational Opportunities*⁹⁸³

Instruction is provided to students in Seward by one of four schools. The William H. Seward Elementary school provides instruction to students in pre-school through sixth grade, and in 2011, the school had 275 students and 20 teachers. The Seward Middle School provides instruction to students in 7th and 8th grades, and in 2011, the school had 93 students and 6 teachers. The Seward High School provides instruction to students in grades 9 through 12, and in 2011 the school had 168 students and 13 teachers. The Spring Creek School also provides instruction to students in grades 9 through 12, and in 2011, the school had 17 students and 4 teachers.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Seward is located within Resurrection Bay, an inlet from the Gulf of Alaska (GOA). In addition to fisheries that take place in the GOA, Seward fishermen have access to productive fisheries located on either side of the Kenai Peninsula, in Cook Inlet and Prince William Sound (PWS). Fisheries that occur within 3 nautical miles (nmi) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nmi in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission.

⁹⁸² Ibid.

⁹⁸³ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

Seward is located immediately within the Eastern district of the Lower Cook Inlet commercial salmon fishery, and the Southwestern district of the Prince William Sound commercial salmon fishery is located approximately 25 miles east of Resurrection Bay. The marine waters at the outlet of Resurrection Bay are included within Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA Sablefish Regulatory Area.

Commercial fisheries developed in Alaska after the 1867 purchase of Alaska from Russia by the United States. Commercial harvest of salmon in Cook Inlet began in 1882,⁹⁸⁴ with the development of a cannery at the mouth of the Kasilof River, in English Bay. An additional 17 canneries had been built in central Alaska by 1890. The first commercial salmon fishery in PWS developed along the Copper River Delta around 1900.⁹⁸⁵ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.⁹⁸⁶ In the 1920s, herring had become increasingly valued for oil and meal, and a number of reduction plants were built. Commercial crab fisheries began to develop in the GOA in the 1930s. Historically, commercial fisheries for herring took place in both Cook Inlet and PWS. Currently, the Cook Inlet herring fishery is closed due to low stock abundance.⁹⁸⁷ In PWS, the herring stock collapsed in 1993 in conjunction with an outbreak of hemorrhagic septicemia virus, and since 1998 the fishery has been closed. The relationships between the *Exxon Valdez* Oil Spill of 1989, the virus, and the stock collapse remain unclear, and the population has shown little sign of recovery since that time.^{988,989}

Historically, both Cook Inlet and PWS also supported commercial fisheries for Dungeness, king, and Tanner crab. However, crab fisheries are currently closed in these areas due to low stock abundance.^{990,991} Between 2000 and 2010, Seward residents participated in Tanner crab fisheries in other areas of Alaska (see *Commercial Fishing* section). In contrast to the closures of herring and crab fisheries, spot shrimp (*Pandalus platyceros*) pot fisheries reopened in PWS in 2010 after almost two decades of closure due to low abundance.⁹⁹²

In addition to federal groundfish fisheries that take place in the Central and Eastern GOA, state groundfish fisheries take place in the inland waters of Cook Inlet and PWS for rockfish,

⁹⁸⁴ 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>.

⁹⁸⁵ Cook, Linda, and Frank Norris. 1998. *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

⁹⁸⁶ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

⁹⁸⁷ Alaska Dept. of Fish and Game. 2012. *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

⁹⁸⁸ 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>.

⁹⁸⁹ Alaska Dept. of Fish and Game. 2012. *Pacific Herring Species Profile: Status, Trends, and Threats*. Retrieved April 30, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=herring.main>.

⁹⁹⁰ See footnote 988.

⁹⁹¹ See footnote 987.

⁹⁹² Alaska Dept. of Fish and Game. 2012. *Spot Shrimp Species Profile: Status, Trends and Threats*. Retrieved April 30, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=spotshrimp.main>.

lingcod, pollock, sablefish, and Pacific cod. The Cook Inlet and PWS Pacific cod fisheries are managed as parallel fisheries, which take place at the same time as the federal cod fishery. The Total Allowable Catch (TAC) set by NMFS applies to both federal and state fisheries. Beginning in 1997, additional ‘state-waters fisheries’ for Pacific cod were initiated in Cook Inlet and PWS. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet. In PWS, a pelagic trawl fishery for pollock began in 1995. The PWS limited entry sablefish fishery is also managed separately under a GHL.⁹⁹³

Seward is not eligible for the Community Development Quota or Community Quota Entity programs. In a survey conducted by the AFSC in 2011, community leaders reported that the annual peak in population each summer is “mostly” driven by employment in the fishing sectors, such as processing plants, commercial fishing, subsistence fishing, recreational/sportfishing, and charter fishing. Community leaders also indicated that Seward participates in the fisheries management process in Alaska through a representative that sits on regional fisheries advisory and/or working groups run by the ADF&G, a reliance on regional organizations to provide information on fisheries management issues, financially supporting research organizations, industry coalitions, and trade organizations such as the Alaska SeaLife Center, and by helping obtain funding for hatchery and other research programs.

Processing Plants

ADF&G’s 2010 Intent to Operate list indicates that six shore-based processing plants were operating in Seward in 2010. Detailed information is available about three of the plants. Captain Jack’s Seafood Locker is a seafood market and small processing facility located in Seward. They sell halibut, king crab, black cod, white fish, shrimp, scallops, and Chinook and sockeye salmon. Captain Jacks Seafood Locker also provides custom processing for sport fishermen. Their facility contains a blast freezer and a vacuum packing machine.⁹⁹⁴

Since 1978, Icicle Seafoods has owned a seafood processing facility in the small harbor of the town of Seward. This facility was originally established in 1968 as Seward Fisheries.⁹⁹⁵ Icicle processes halibut and black cod beginning in March until November. The facility also cans and freezes various species of salmon from June until the end of August. July and August are peak salmon seasons for the plant. During this time over 300 people are employed to work at the Seward facility. In 2010, the workforce in July and August totaled 350.⁹⁹⁶ Icicle’s Seward facility has a bunkhouse (with laundry facilities, showers, and a recreation room with satellite TV and DVD/VHS player) for its fish processing workforce and can accommodate 50 workers. April through May its galley serves one meal a day to workers Monday through Friday. June through August the galley serves three meals a day. Icicle also has a campground with laundry

⁹⁹³ See footnote 988.

⁹⁹⁴ Captain Jack’s Seafood Locker. 2012. *Homepage*. Retrieved on May 7, 2012 from <http://www.captainjacksalaska.com/default.asp>.

⁹⁹⁵ This information is based on the results of a survey of processing plant managers conducted by AFSC in 2011.

⁹⁹⁶ *Ibid*.

facilities, showers, restrooms, and canvas tents. The company provides its workers rain gear, gloves, boots, ear protection and other required safety gear for free.⁹⁹⁷

Sea Level Seafoods LLC processes halibut, Pacific cod, rockfish, and sablefish from March through November in its Seward facility. The plant began operations in 1975 and employs up to 30 workers each year.⁹⁹⁸ The facility offers services to local fishermen including ice, laundry facilities, showers, bait and Internet access.⁹⁹⁹

According to ADF&G's 2010 Intent to Operate list, Polar Seafoods, T-n-T Custom Smoke & Processing LLC, and Pure Pacific Seafood Inc. also operate seafood processing facilities in Seward.

Fisheries-Related Revenue

Between 2000 and 2010, Seward received fisheries-related revenue from the Shared Fisheries Business Tax, the Fisheries Resources Landing Tax, and harbor usage fees. Amounts received from the Shared Fisheries Business Tax and harbor usage fees increased between 2000 and 2010, however, revenue received from the Fisheries Resource Landing Tax decreased substantially during the same period. The revenue received from fisheries-related sources varied from 2000 to 2009, from a low of \$421,190 in 2010 to a high of \$3.1 million in 2009 (Table 3).¹⁰⁰⁰

Commercial Fishing

In a survey conducted by the AFSC in 2011, community leaders reported that commercial fishing vessels of all sizes use Seward as their base of operations during the fishing season and that there are more commercial fishing boats in Seward now as compared to 5 years ago. Community leaders also noted that commercial fishing boats that use Seward as their base of operations during the fishing season use the following gear types: trawl, pots, longline, gillnet, purse seine, and troll. In 2010, Seward ranked 12th of 67 communities in Alaska with commercial landings data for that year, and the ex-vessel value of catch landed in Seward ranked 8th of 67 communities with ex-vessel value information. In 2010, there were 25 Seward residents holding 30 groundfish License Limitation Program (LLP) permits, and 20% of those permits were reported as fished. Overall between 2000 and 2010, the number of groundfish LLP permits, permit holders, and permits reported as fished has decreased slightly. While there were four individuals holding four crap LLP permits in 2010 (both of which decreased between 2000 and 2010), none of the crab LLP permits were reported as fished between 2003 and 2010. For Federal Fisheries Permits, there were 15 individuals holding 18 permits in 2010, and 67% of those permits were reported as fished. While the number of Federal Fisheries Permits and permit holders decreased between 2000 and 2010, the number of permits reported as fished increased during that same period.

⁹⁹⁷ Icicle Seafoods, Inc. 2012. *Homepage*. Retrieved on May 7, 2012 from <http://www.americangoldseafoods.com/locations/swd/>.

⁹⁹⁸ See footnote 995.

⁹⁹⁹ Pacific Seafood Group. 2012. *Homepage*. Retrieved on May 7, 2012 from <http://www.pacseafood.com/default.aspx?page=1>.

¹⁰⁰⁰ A direct comparison between fisheries-related revenue and total municipal revenue cannot reliably be made as not all fisheries-related revenue sources are included in the municipal budget.

Also in 2010, there were 66 Seward residents holding 126 Commercial Fisheries Entry Commission (CFEC) permits for the following fisheries: crab, other shellfish, halibut, herring, sablefish, groundfish, and salmon. In that same year, 64% of CFEC permits held by Seward residents were reported as fished. For crab CFEC permits, the number of permit holders and permits held decreased between 2000 and 2010, though the number of permits actively fished varied between one and three per year. While permits for other shellfish have been held in each year between 2000 and 2010, permits were only reported as actively fished in 2005 and 2010. The number of permit holders and permits held exhibited a sharp increase between 2009 and 2010 for other shellfish CFEC permits. While the number of halibut CFEC permit holders and permits held both decreased between 2000 and 2010, the number of permits reported as actively fished in each of those years was relatively stable. Both number of permit holder and number of permits held decreased between 2000 and 2010 for the herring CFEC fishery, and no permits were reported as actively fished in that fishery between 2006 and 2010. For sablefish CFEC permits, the number of permits held and permit holders have both decreased between 2000 and 2010, however, the number of permits reported as actively fished remained relatively stable from year to year. The number of groundfish CFEC permit holders and permits held both decreased sharply between 2000 and 2010, though the number of permits actively fished in each year was variable during that period. While there have been other finfish CFEC permits held between 2000 and 2010, none of those permits were reported as fished during that period and there were no other finfish CFEC permits held in 2009 or 2010. The number of salmon CFEC permits held remained relatively stable between 2000 and 2010, though the number of permit holders decreased during that same period. The number of salmon CFEC permits reported as actively fished varied between 2000 and 2010, first experiencing a decrease and then an increase. Further information about commercial fishing permits and permit holders by species is presented in Table 4.

Of the 24 halibut CFEC permits issued in 2010, the majority (19) was issued for the statewide longline fishery using vessels under 60 feet, with 4 issued for the statewide longline fishery using vessels 60 feet or over and 1 issued for the statewide hand troll fishery.

Of the 17 sablefish CFEC permits issued in 2010, 7 were issued for the statewide longline fishery using vessels under 60 feet. Two were issued for the fixed gear sablefish fishery using vessels under 60 feet in length in Prince William Sound, one was issued for the fixed gear sablefish fishery using vessels under 35 feet in length in Prince William Sound, three were issued for the longline fishery in the northern southeast, three for the statewide longline fishery using vessels 60 feet or over, and one for the longline fishery in the southern southeast.

Of the eight herring CFEC permits issued in 2010, three were issued for the roe herring purse seine fishery in Prince William sound, two were issued for the herring roe purse seine fishery in Cook Inlet, two were issued for the herring gill net fishery in Norton Sound, and one was issued for the herring spawn on kelp pound fishery in Prince William Sound.

Of the 48 salmon CFEC permits issued in 2010, 12 were issued for the purse seine fishery in Prince William Sound, 10 were issued for the drift gill net fishery in Prince William Sound, 6 were issued for the purse seine fishery in Cook Inlet, 6 for the purse seine fishery in Kodiak, 5 for the purse seine fishery in Chignik, and 2 for the purse seine fishery in the Peninsula/Aleutians. Two salmon CFEC permits were issued for the drift gill net fishery in Cook Inlet, three for the drift gill net fishery in the Peninsula/Aleutians, one for the set gill net fishery in Bristol Bay, and one for the statewide power gurdy troll fishery.

Other shellfish CFEC permits were held in 2010 for the shrimp pot fishery in Prince William Sound using vessels under 60 feet, sea cucumber using diving gear in the southeast, the statewide clam mechanical digger fishery, the Tanner crab pot fishery using vessels under 60 feet in Kodiak, the Tanner crab pot fishery using vessels under 60 feet in the Peninsula/Aleutians, and the Tanner crab pot fishery using vessels under 60 feet in Kodiak.

Other CFEC permits issued in Seward in 2010 include the statewide lingcod hand troll and mechanical jig fisheries, the statewide and Gulf of Alaska miscellaneous saltwater finfish hand troll fisheries, the statewide and Gulf of Alaska miscellaneous saltwater finfish longline fisheries using vessels under 60 feet, the statewide and Gulf of Alaska saltwater finfish mechanical jig fisheries, and the southeast demersal shelf rockfish mechanical jig fishery.

In 2010, there were 119 crew license holders in Seward. While this number varied from year to year between 2000 and 2010, overall there has been a decrease in crew license holders during this period. Also in 2010, there were 13 fish buyers in Seward, which represents an overall decrease between 2000 and 2010, but a slight increase from a time-series low of 10 fish buyers in 2008. The number of shore-side processing facilities in Seward remained relatively stable between 2000 and 2010, varying between four and six facilities. Both the number of vessels owned primarily by Seward residents in the number of vessels homeported in Seward decreased substantially during this period, with the number of vessels owned primarily by Seward residents decreasing from 128 to 61 and the number of vessels homeported in Seward decreasing from 185 to 85. The number of vessels landing catch in Seward varied during this period, with the highest number of vessels landing catch in the year 2000 (327 vessels) and 227 vessels landing catch in Seward in 2010. Both total net pounds landed and the ex-vessel value of landings in Seward increased between 2000 and 2010. Additional information about characteristics of the commercial fishing sector in Seward between 2000 and 2010 is presented in Table 5.

The number of individuals holding halibut quota share accounts in Seward decreased between 2000 and 2010, though the number of halibut quota shares held remained stable during this same period. The overall halibut Individual Fishing Quota (IFQ) allotment for account holders in Seward increased steadily from 2000 to 2007, but decreased again from 2008 to 2010 (Table 6). While the number of sablefish quota share accounts decreased from 2000 to 2010, the number of sablefish quota shares held increased during this same period. However, after a slight increase in sablefish IFQ allotment, the 2010 allotment was similar to the 2000 allotment (Table 7). There were no residents of Seward holding crab quota share shareholder accounts, crab quota shares, or crab IFQ allotment between 2000 and 2010 (Table 8).

Information on landings and ex-vessel value for finfish, herring, other shellfish, and pollock landed in Seward were considered confidential between 2000 and 2010 due to the small number of participants. However, landings and ex-vessel value for catch of halibut, other groundfish, Pacific cod, sablefish, and salmon landed in Seward during this period are reportable. Overall, the total number of pounds landed in Seward increased between 2000 and 2010, though there was some variability between years during this period. The ex-vessel value of landings in Seward also increased overall between 2000 and 2010, though, like landings, the ex-vessel value was variable from year to year. The most notable trends in landings during this period are the sharp decrease in landings (and ex-vessel value) of Pacific cod between 2000 and 2010 as well as the sharp increase in landings (and ex-vessel value) of salmon during this same period. Information regarding landings and ex-vessel value for catch landed in Seward between 2000 and 2010 is presented in Table 9.

For catch landed by Seward residents, landings and ex-vessel value for crab, finfish, herring, other shellfish, and pollock are considered confidential between 2000 and 2010 due to the small number of participants. Landings and ex-vessel value for catch of halibut, other groundfish, Pacific cod, sablefish, and salmon landed by Seward residents are available for this time period. Overall, landings by Seward residents and ex-vessel value of those landings increased between 2000 and 2010, though both landings and value were variable from year to year during this period. While landings for halibut remained relatively stable during this period, the ex-vessel value of those landings increased. Landings of other groundfish and ex-vessel value of those landings both decreased between 2000 and 2010. Landings of Pacific cod and ex-vessel value of those landings increased during this period. While landings and ex-vessel value of landings of sablefish remained relatively stable during this period, the landings and ex-vessel value of salmon increased substantially between 2000 and 2010. Information regarding landed pounds and ex-vessel revenue by species for Seward residents is provided in Table 10.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Seward

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	\$198,284	\$265,068	\$354,644	\$243,100	\$242,763	\$514,336	\$317,786	\$371,609	\$314,796	\$407,558	\$421,190
Fisheries Resource Landing Tax ¹	\$11,132	\$9,053	\$18,591	\$28,654	\$7,795	\$5,994	\$5,856	\$230	\$4,663	\$236	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	\$1,518,452	\$1,569,560	\$1,590,082	\$1,830,301	\$1,818,674	\$1,900,090	\$2,366,568	\$1,632,213	\$2,743,521	\$2,756,993	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>\$1,727,867</i>	<i>\$1,843,681</i>	<i>\$1,963,317</i>	<i>\$2,102,055</i>	<i>\$2,069,232</i>	<i>\$2,420,420</i>	<i>\$2,690,209</i>	<i>\$2,004,052</i>	<i>\$3,062,980</i>	<i>\$3,164,787</i>	<i>\$421,190</i>
<i>Total municipal revenue⁵</i>	<i>\$9 Million</i>	<i>Million</i>	<i>Million</i>	<i>Million</i>	<i>Million</i>	<i>Million</i>	<i>Million</i>	<i>Million</i>	<i>Million</i>	<i>Million</i>	<i>\$15 M</i>

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

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

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

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

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

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

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Seward

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	38	36	32	32	32	31	31	31	30	30	30
	Active permits	10	11	10	9	9	8	8	9	8	9	6
	% of permits fished	26%	30%	31%	28%	28%	25%	25%	29%	26%	30%	20%
	Total permit holders	31	30	27	27	27	26	26	27	25	25	25
Crab (LLP) ¹	Total permits	9	9	5	5	4	4	4	4	4	4	4
	Active permits	3	4	1	1	0	0	0	0	0	0	0
	% of permits fished	33%	44%	20%	20%	-	-	-	-	-	-	-
	Total permit holders	8	8	5	5	4	4	4	4	4	4	4
Federal Fisheries Permits ¹	Total permits	24	24	25	17	18	18	18	19	22	17	18
	Fished permits	1	1	1	11	13	10	10	10	12	12	12
	% of permits fished	4%	4%	4%	65%	72%	56%	56%	53%	55%	71%	67%
	Total permit holders	22	22	23	16	17	17	16	16	19	14	15
Crab (CFEC) ²	Total permits	7	7	5	3	5	6	4	4	1	1	3
	Fished permits	3	2	1	1	3	3	2	2	1	1	1
	% of permits fished	43%	29%	20%	33%	60%	50%	50%	50%	100%	100%	33%
	Total permit holders	5	6	4	3	5	5	4	4	1	1	2
Other shellfish (CFEC) ²	Total permits	2	2	4	1	1	4	5	2	2	1	8
	Fished permits	0	0	0	0	0	1	0	0	0	0	6
	% of permits fished	-	-	-	-	-	25%	-	-	-	-	75%
	Total permit holders	2	2	3	1	1	4	3	2	2	1	8
Halibut (CFEC) ²	Total permits	31	32	29	27	25	28	30	30	27	27	24
	Fished permits	29	25	24	24	25	23	23	23	23	22	23
	% of permits fished	94%	78%	83%	89%	100%	82%	77%	77%	85%	81%	96%
	Total permit holders	31	32	29	26	24	25	27	27	26	26	24
Herring (CFEC) ²	Total permits	14	11	10	9	7	7	8	8	7	7	8
	Fished permits	2	2	1	1	1	1	1	0	0	0	0
	% of permits fished	14%	18%	10%	11%	14%	14%	13%	-	-	-	-
	Total permit holders	9	7	6	5	4	4	4	4	4	4	5

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	21	26	21	17	19	22	24	22	20	17	17
	Fished permits	15	21	18	16	17	21	19	19	17	15	15
	% of permits fished	71%	81%	86%	94%	89%	95%	79%	86%	85%	88%	88%
	Total permit holders	18	22	17	13	14	17	19	16	14	11	12
Groundfish (CFEC) ²	Total permits	42	36	23	22	24	26	20	22	14	18	18
	Fished permits	12	9	4	2	1	4	3	5	8	4	6
	% of permits fished	29%	25%	17%	9%	4%	15%	15%	23%	57%	22%	33%
	Total permit holders	28	23	17	15	15	14	14	15	13	15	14
Other Finfish (CFEC) ²	Total permits	3	3	1	1	0	0	0	1	1	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	1	1	1	1	0	0	0	1	1	0	0
Salmon (CFEC) ²	Total permits	49	47	46	42	42	42	48	46	51	45	48
	Fished permits	32	22	21	15	17	25	23	26	30	29	30
	% of permits fished	65%	47%	46%	36%	40%	60%	48%	57%	59%	64%	63%
	Total permit holders	46	43	44	40	42	42	42	40	43	39	38
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>169</i>	<i>164</i>	<i>139</i>	<i>122</i>	<i>123</i>	<i>135</i>	<i>139</i>	<i>135</i>	<i>123</i>	<i>116</i>	<i>126</i>
	<i>Fished permits</i>	<i>93</i>	<i>81</i>	<i>69</i>	<i>59</i>	<i>64</i>	<i>78</i>	<i>71</i>	<i>75</i>	<i>79</i>	<i>71</i>	<i>81</i>
	<i>% of permits fished</i>	<i>55%</i>	<i>49%</i>	<i>50%</i>	<i>48%</i>	<i>52%</i>	<i>58%</i>	<i>51%</i>	<i>56%</i>	<i>64%</i>	<i>61%</i>	<i>64%</i>
	<i>Permit holders</i>	<i>86</i>	<i>82</i>	<i>77</i>	<i>70</i>	<i>71</i>	<i>74</i>	<i>73</i>	<i>69</i>	<i>69</i>	<i>63</i>	<i>66</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 Seward: 2000-2010.

Year	Crew License Holders ¹	Count Of All Fish Buyers ²	Count Of Shore-Side Processing Facilities ⁴	Vessels Primarily Owned by Residents ⁵	Vessels Homeported ⁵	Vessels Landing Catch in Seward ²	Total Net Pounds Landed in Seward ^{2,3}	Total Ex-Vessel Value of Landings in Seward ^{2,3}
2000	198	18	5	128	185	327	22,146,235	\$37,227,769
2001	150	17	4	114	172	255	43,924,453	\$31,270,657
2002	120	16	5	108	158	222	39,129,371	\$31,915,162
2003	115	20	4	116	159	224	36,877,097	\$41,628,850
2004	118	18	4	116	159	194	25,415,929	\$39,613,583
2005	120	16	5	61	79	166	33,975,508	\$34,685,445
2006	142	13	5	58	73	168	24,854,047	\$42,126,154
2007	129	14	5	57	75	160	58,915,998	\$48,529,903
2008	146	10	4	54	82	201	44,476,820	\$52,580,345
2009	124	12	5	58	86	187	29,537,765	\$35,194,431
2010	119	13	6	61	85	227	55,124,215	\$56,060,412

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

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

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

³ Totals only represent non-confidential data.

⁴ 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.]

⁵ 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 6. Halibut Catch Share Program Participation by Residents of Seward: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Pounds)
2000	45	3,506,372	442,390
2001	41	3,587,741	541,081
2002	39	3,343,434	524,355
2003	35	3,349,245	520,408
2004	38	3,760,404	605,923
2005	38	3,880,807	616,559
2006	38	3,739,847	565,319
2007	36	3,974,978	610,928
2008	33	3,644,822	506,988
2009	32	3,690,919	473,000
2010	31	3,598,299	424,203

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 Seward: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Pounds)
2000	19	5,348,346	481,446
2001	19	5,408,767	461,975
2002	18	5,012,574	420,204
2003	17	5,173,394	513,571
2004	20	5,726,463	642,698
2005	18	5,724,345	630,657
2006	16	5,079,591	504,183
2007	16	5,973,059	583,000
2008	15	6,957,195	620,731
2009	16	7,299,663	580,137
2010	15	6,659,312	480,714

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 Seward: 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.]

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Seward

Table 9. Landed Pounds and Ex-vessel Revenue, by Species, in Seward: 2000-2010.

	<i>Total Net Pounds¹</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	0	0	0	0	0	0	0	0	0	0	0
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	6,240,238	6,259,705	7,742,997	7,487,167	7,250,654	5,933,412	6,122,494	5,634,393	5,446,739	4,904,301	5,168,213
Herring	--	--	--	--	--	--	--	--	--	--	--
Other	882,122	438,635	226,865	289,046	228,422	251,893	289,648	326,962	321,003	376,400	776,079
Groundfish											
Other	--	--	--	--	--	--	--	--	--	--	--
Shellfish											
Pacific Cod	2,132,461	1,022,955	1,107,134	889,572	153,150	32,202	152,398	874,205	1,206,364	1,122,688	893,616
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	4,373,076	3,434,248	3,401,426	4,248,284	5,006,334	4,102,749	4,522,260	4,506,013	3,973,421	3,340,217	3,091,138
Salmon	8,194,207	32,628,086	26,647,898	23,953,507	11,267,371	23,083,174	13,767,247	46,997,323	33,520,285	18,648,728	45,095,884
<i>Total²</i>	<i>21,822,104</i>	<i>43,783,629</i>	<i>39,126,320</i>	<i>36,867,576</i>	<i>23,905,931</i>	<i>33,403,430</i>	<i>24,854,047</i>	<i>58,338,896</i>	<i>44,467,812</i>	<i>28,392,334</i>	<i>55,024,930</i>
	<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	\$0
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	\$16,073,372	\$13,025,565	\$17,046,697	\$21,773,187	\$22,252,947	\$18,235,976	\$23,082,219	\$24,812,004	\$23,597,370	\$14,978,754	\$24,031,030
Herring	--	--	--	--	--	--	--	--	--	--	--
Other	\$312,546	\$155,180	\$140,481	\$109,243	\$113,115	\$155,069	\$192,858	\$187,718	\$159,829	\$186,847	\$235,998
Groundfish											
Other	--	--	--	--	--	--	--	--	--	--	--
Shellfish											
Pacific Cod	\$855,862	\$353,995	\$296,888	\$300,946	\$37,331	\$7,264	\$69,360	\$491,465	\$734,783	\$384,201	\$253,436
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	\$16,129,222	\$10,774,509	\$10,688,918	\$15,380,217	\$15,489,666	\$13,275,785	\$15,650,528	\$13,553,843	\$13,567,445	\$12,062,346	\$13,196,011
Salmon	\$3,025,427	\$6,380,240	\$3,742,076	\$4,065,257	\$1,489,389	\$2,864,531	\$3,131,189	\$9,396,979	\$14,520,184	\$7,390,544	\$18,330,541
<i>Total²</i>	<i>\$36,396,428</i>	<i>\$30,689,488</i>	<i>\$31,915,061</i>	<i>\$41,628,850</i>	<i>\$39,382,448</i>	<i>\$34,538,625</i>	<i>\$42,126,154</i>	<i>\$48,442,010</i>	<i>\$52,579,610</i>	<i>\$35,002,692</i>	<i>\$56,047,017</i>

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

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

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

² Totals only represent non-confidential data.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Seward

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

	<i>Total Net Pounds¹</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	--	--	--	--	--	--	--	--	--	--	--
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	911,739	1,126,178	1,156,667	1,225,545	1,350,607	1,127,755	1,064,476	1,190,762	1,096,331	1,070,704	986,908
Herring	--	--	--	--	--	--	--	--	--	--	--
Other	165,745	90,051	72,902	52,856	62,437	80,759	66,091	82,090	96,752	63,436	96,022
Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	170,652	135,608	139,905	100,336	9,530	62,029	46,509	169,038	643,457	1,008,026	593,986
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	709,647	553,916	709,897	809,802	987,157	906,253	917,729	1,009,464	923,154	809,789	757,685
Salmon	4,965,549	4,713,359	3,251,802	1,893,972	897,871	2,151,596	3,000,495	10,331,657	7,458,274	3,219,207	11,062,524
<i>Total²</i>	<i>6,923,331</i>	<i>6,619,112</i>	<i>5,331,173</i>	<i>4,082,511</i>	<i>3,307,602</i>	<i>4,328,392</i>	<i>5,095,300</i>	<i>12,783,011</i>	<i>10,217,967</i>	<i>6,171,162</i>	<i>13,497,126</i>
<i>Ex-vessel Value (nominal U.S. dollars)</i>											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	--	--	--	--	--	--	--	--	--	--	--
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	\$2,299,913	\$2,246,127	\$2,519,459	\$3,446,295	\$4,012,325	\$3,403,564	\$3,924,556	\$5,135,470	\$4,725,209	\$3,242,129	\$4,527,407
Herring	--	--	--	--	--	--	--	--	--	--	--
Other	\$154,463	\$67,573	\$56,901	\$48,435	\$57,951	\$67,821	\$63,033	\$74,760	\$60,524	\$52,179	\$64,830
Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	\$64,416	\$46,465	\$39,819	\$34,872	\$2,574	\$22,226	\$21,052	\$86,835	\$385,980	\$264,903	\$185,587
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	\$2,955,728	\$2,004,843	\$2,614,132	\$3,274,966	\$3,305,226	\$3,204,989	\$3,371,660	\$3,356,557	\$3,470,668	\$3,274,852	\$3,412,354
Salmon	\$1,860,592	\$1,215,321	\$847,731	\$647,164	\$711,495	\$1,059,682	\$1,447,201	\$3,237,465	\$3,965,264	\$1,677,089	\$5,278,885
<i>Total²</i>	<i>\$7,335,111</i>	<i>\$5,580,329</i>	<i>\$6,078,043</i>	<i>\$7,451,732</i>	<i>\$8,089,572</i>	<i>\$7,758,281</i>	<i>\$8,827,503</i>	<i>\$11,891,088</i>	<i>\$12,607,645</i>	<i>\$8,511,152</i>	<i>\$13,469,063</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

Seward is a popular destination for recreational fishermen, with 28 active sport fish guide businesses and 73 local community members holding sport fish guide licenses in 2010.

Compared to 2000, these numbers show relatively stability in the recreational fishing industry in Seward. In some years in the 2000-2010 period, guide activity increased, with a peak of 38 active guide businesses in Seward in 2008, and a peak 87 sport fish guide licenses in 2006. In 2010, 1,723 sportfishing licenses were sold to Seward residents (irrespective of the location of sale), while 6,789 sportfishing licenses were sold in Seward. This indicates the potential that many visitors to Seward are pursuing sportfishing activities. While the number of sportfishing licenses sold to community residents increased moderately between 2000 and 2010, the number of sportfishing licenses sold in Seward more than doubled during the same period.

Seward is located in North Gulf Coast/Prince William Sound Statewide Harvest Survey Area which includes all drainages from east of Cape Suckling, through Prince William Sound to Gore Point. In 2010, there were a total of 212,793 saltwater angler days fished in the region, compared to 122,459 in 2000, representing a 74% increase. Non-Alaska residents made up 30.4% of total saltwater angler days fished in 2010 in the region, compared to 32.3% in 2000. Regional saltwater angler days fished peaked at 300,205 in 2007. Total freshwater angler days fished was 22,979 in 2010, compared to 12,108 in 2000; an increase of 90%. Non-Alaska residents made up 57% of freshwater angler days fished in 2010 in the region, compared to 26% in 2000. Total freshwater angler days fished in the region peaked in 2010. Information regarding these regional sportfishing trends can also be found in Table 11.

The Alaska Statewide Harvest Survey,¹⁰⁰¹ conducted by ADF&G between 2000 and 2010, noted numerous species targeted by private anglers in Seward, including all five species of salmon, rainbow trout, Dolly Varden, whitefish, burbot, Arctic grayling, Pacific halibut, rockfish, lingcod, Pacific cod, shark, smelt, razor clam, hardshell clam, shrimp, other fish, and other shellfish. In addition, logbook data for fishing charter trips out of Seward between 2000 and 2010 indicated that the following species were caught by anglers on charter vessels: all five species of salmon, halibut, lingcod, other rockfish, pelagic rockfish, sablefish, shark, and yelloweye rockfish.¹⁰⁰²

In a survey conducted by the AFSC in 2011, community leaders reported that recreational/sportfishing in Seward takes place aboard charter boats or party boats, private boats owned by local residents, private boats owned by non-local residents, and by shore-based or dock fishing by local residents and by non-local residents. Community leaders also indicated that the following species are targeted by recreational fishermen that use boats based in Seward: pink, Chinook, coho and sockeye salmon, halibut, rockfish, crab, sablefish, and shrimp.

¹⁰⁰¹ 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).

¹⁰⁰² Alaska Department of Fish and Game. 2011. *Alaska sport fish charger 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, Seward: 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 Seward ²
2000	25	79	1,679	3,190
2001	28	84	1,679	3,385
2002	26	72	1,664	3,644
2003	29	75	1,806	4,073
2004	32	86	1,767	4,789
2005	34	72	1,831	6,098
2006	36	87	1,698	5,788
2007	34	83	1,790	5,611
2008	38	85	1,612	6,612
2009	29	74	1,784	6,819
2010	28	73	1,723	6,789

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	39,551	82,908	3,168	8,940
2001	66,450	135,248	8,587	8,610
2002	67,698	133,508	5,132	8,126
2003	70,549	150,086	10,657	10,235
2004	76,173	184,492	9,199	10,349
2005	87,033	165,559	6,894	6,187
2006	79,313	157,194	8,886	5,655
2007	90,002	210,203	8,446	9,944
2008	67,410	181,381	8,056	5,489
2009	59,505	189,563	8,730	10,938
2010	64,776	148,017	13,118	9,861

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

Information regarding subsistence participation by household and species in Seward between 2000 and 2010 was not available (Table 12). However, in a survey conducted by the AFSC in 2011, community leaders reported that salmon, halibut, and rockfish are the three most important subsistence marine resources to the residents of Seward. In addition, ADF&G provides total harvest level reported for salmon and halibut, and some information is provided by management agencies regarding subsistence marine mammal harvest. The number of permits issued for the subsistence harvest of salmon in Seward increased between 2000 and 2010, with an associated increase in the number of those permits reported as fished and the number of salmon harvested for subsistence purposes. Available data indicate that sockeye are the most heavily harvested salmon species in Seward for subsistence use; however, harvest levels are relatively low compared to other communities in Alaska. Both Chinook and coho salmon were also harvested in low numbers by Seward residents between 2000 and 2010 (Table 13).

Data for Subsistence Halibut Registration Certificate (SHARC) cards issued between 2003 and 2010 indicate an overall increase in SHARC cards issued and reported as actively fished during this period, though the number of pounds of halibut harvested for subsistence each year decreased from 1,126 pounds in 2005 to 200 pounds in 2010 (Table 14).

Data for subsistence harvest of marine mammals in Seward are extremely limited between 2000 and 2010. Data reported by the U.S. Fish and Wildlife Service indicate that a small amount of subsistence harvest of sea otters took place in 2000 and 2002. Data were not reported by ADF&G between 2000 and 2008 for subsistence harvest of Steller sea lions or spotted seals. However, in both 2000 and 2002, ADF&G reported harvest of four harbor seals for subsistence purposes. No data were available from management agencies regarding subsistence harvest of beluga whale or walrus by Seward residents during the 2000-2010 period. Information about marine mammal subsistence harvest is presented in Table 15.

Additional Information

Seward was named All-American City in 1963, 1965, and 2005 and is also home to Mile 0 of the Iditarod Trail.¹⁰⁰³

¹⁰⁰³ City of Seward (n.d.). *City Profile*. Retrieved from <http://www.cityofseward.us> on February 27, 2012.

Table 12. Subsistence Participation by Household and Species, Seward: 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, Seward: 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	13	11	7	n/a	n/a	n/a	218	n/a	n/a
2001	10	13	2	n/a	n/a	n/a	120	n/a	n/a
2002	12	11	5	n/a	n/a	n/a	112	n/a	n/a
2003	7	10	4	n/a	7	n/a	118	n/a	n/a
2004	16	14	4	n/a	n/a	n/a	110	n/a	n/a
2005	15	14	5	n/a	n/a	n/a	180	n/a	n/a
2006	14	11	4	n/a	3	n/a	195	n/a	n/a
2007	15	15	18	n/a	n/a	n/a	280	n/a	n/a
2008	29	28	12	n/a	n/a	n/a	129	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, Seward: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	10	n/a	n/a
2004	9	n/a	n/a
2005	10	1	1,126
2006	12	2	n/a
2007	14	2	560
2008	17	6	635
2009	15	6	376
2010	12	1	200

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, Seward: 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	4	n/a
2001	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	1	n/a	n/a	n/a	4	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Soldotna (soul-DAHT-nuh)



People and Place

*Location*¹⁰⁰⁴

Soldotna is on the Kenai Peninsula, 150 highway mi south of Anchorage, at the junction of the Sterling and Kenai Spur Highways. It lies 10 mi inland from Cook Inlet and borders the Kenai River. Soldotna is located in the Kenai Recording District, the Kenai Peninsula Census Area, and the Kenai Peninsula Borough. The community encompasses 6.9 sq mi of land and 0.5 sq mi of water.

*Demographic Profile*¹⁰⁰⁵

In 2010, there were 4,163 residents in Soldotna, ranking it the 28th largest of 352 total Alaskan communities with recorded populations that year. Between 1990 and 2010, the population grew by 19.56%. Overall between 2000 and 2009, the population of Soldotna grew by 6.97%, with an average annual growth rate of 0.17%, indicating a slow rate of growth. Information regarding changes in Soldotna's population can be found in Table 1.

In 2010, a majority of Soldotna residents identified themselves as White (85.9%). Other ethnic groups present in Soldotna that year included two or more races (6.8%), some other race (0.8%), Native Hawaiian and Other Pacific Islander (0.3%), Asian (1.6%), American Indian and Alaska Native (4.3%), Black or African American (0.3%), and Hispanic or Latino (3.9%). The percentages of the population identifying themselves as White, American Indian and Alaska Native, and some other race decreased between 2000 and 2010, with corresponding increases in the percentages of the population identifying themselves as two or more races and Hispanic or Latino. Changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

The average household size in Soldotna in 2010 was 2.38, a decrease from 2.6 persons per household in 1990 and 2.53 in 2000. In that year, there were a total of 1,968 housing units, compared to 1,460 in 1990 and 1,670 in 2000. Of the households surveyed in 2010, 52% were owner-occupied, compared to 55% in 2000; 35% were renter-occupied, compared to 33% in 2000; and 13% were vacant or occupied seasonally, compared to 12% in 2000.

¹⁰⁰⁴ Alaska Department of Community and Rural Affairs (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

¹⁰⁰⁵ 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>.

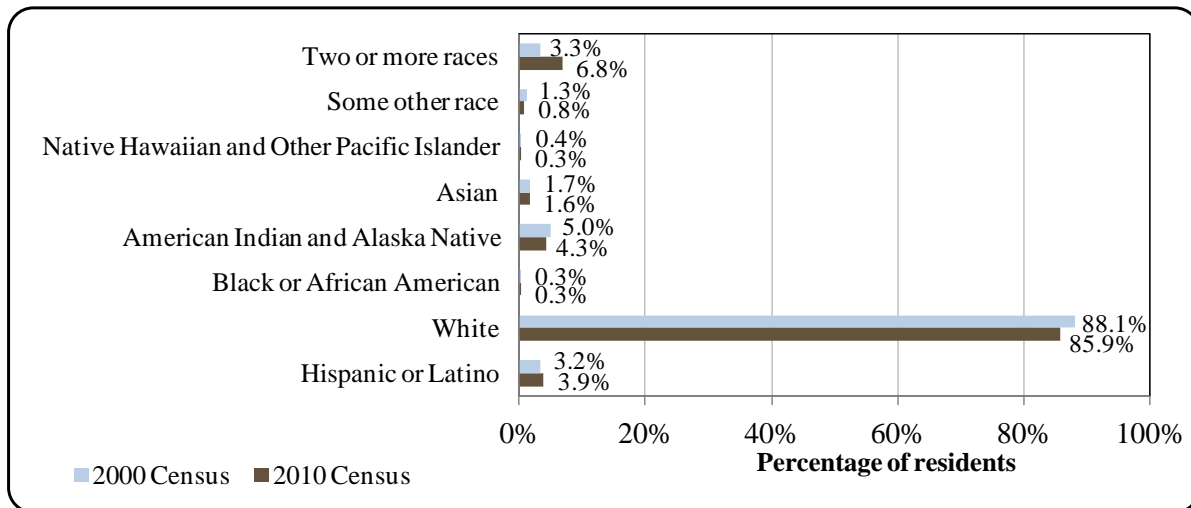
Table 1. Population in Soldotna from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	3,482	-
2000	3,759	-
2001	-	3,792
2002	-	3,851
2003	-	4,001
2004	-	3,778
2005	-	3,800
2006	-	3,762
2007	-	3,898
2008	-	3,926
2009	-	4,021
2010	4,163	-

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

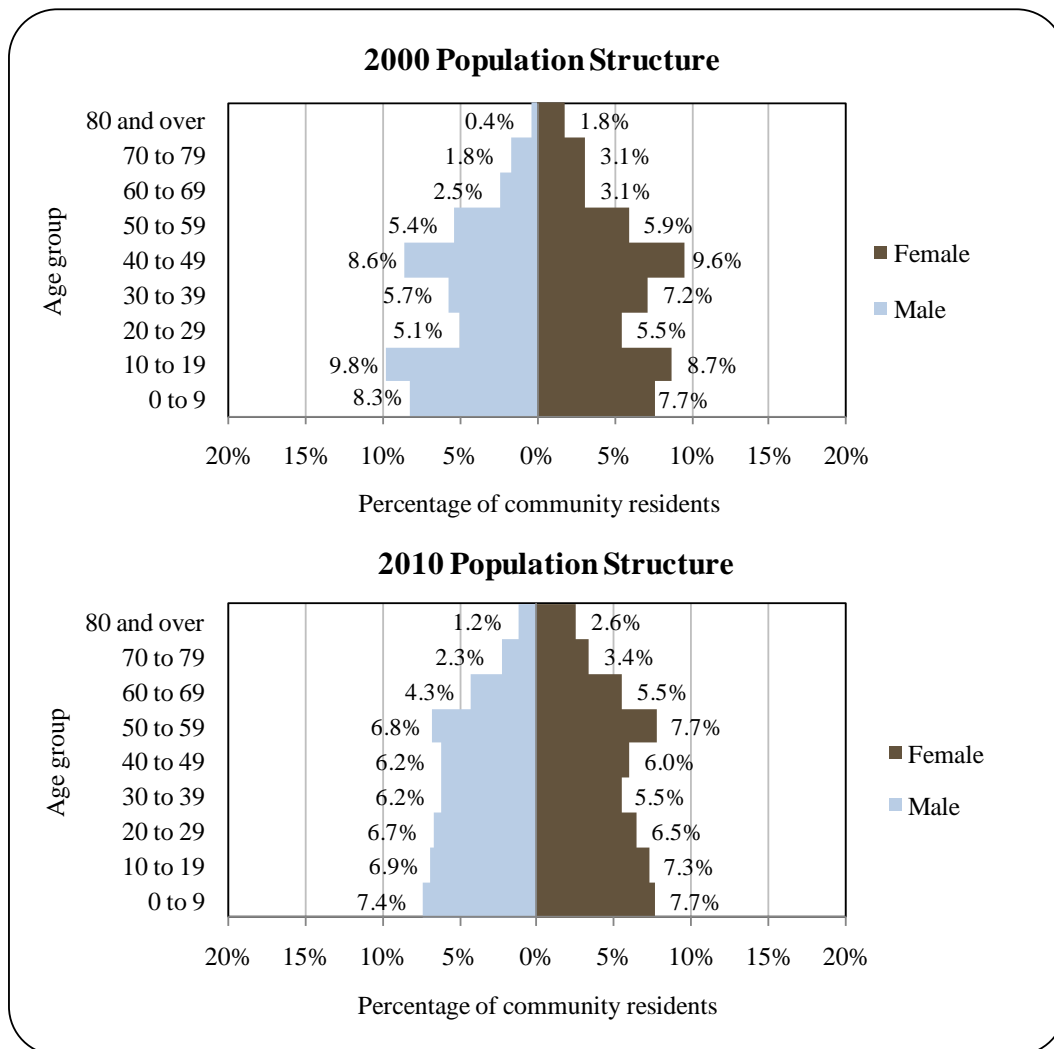


In 2010, the gender distribution in Soldotna was 47.8% male and 52.2% female, which was biased more towards females than the statewide distribution (52.0% male, 48.0% female), and similar to the distribution in 2000 (52.4% female, 47.6% male). In that year, the median age was 37 years, which was slightly older than both the statewide median of 34 and 2000 median of 35 years.

Compared with 2000, the population structure was more stationary in 2010. In that year, 29.3% of residents were under the age of 20, compared to 34.5% in 2000; 19.3% were over the age of 59, compared to 12.7% in 2000; 38.4% were between the ages of 30 and 59, compared to 42.4% in 2000; and 13.2% were between the ages of 20 and 29, compared to 10.6% in 2000.

Gender distribution by age cohort was more even in 2010 than in 2000. In that year, the greatest absolute gender difference occurred in the 80 and over range (2.6% female, 1.3% male), followed by the 60 to 69 (5.5% female, 4.3% male) and 70 to 79 (3.4% male, 2.3% female) ranges. Of those three, the greatest relative gender difference occurred in the 80 and over range.

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



In terms of educational attainment,¹⁰⁰⁶ 90.5% of Soldotna residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaska residents overall. Also in 2010, 3.5% of residents aged 25 and older were estimated to have less than a ninth grade education, compared to 3.5% of Alaska residents overall; 6.1% were estimated to have a ninth to 12th grade education but no diploma, compared to 5.8% of Alaska residents overall; 32% were estimated to hold a high school diploma or equivalent, compared to 27.4% of Alaska residents overall; 31.9% were estimated to have some college but no degree, compared to 28.3% of Alaska residents overall; 5.1% were estimated to hold an Associate's degree, compared to 8% of Alaska residents overall; 11.3% were estimated to hold a Bachelor's degree, compared to 17.4% of Alaska residents overall; and 9.4% were estimated to hold a graduate or professional degree, compared to 9.6% of Alaska residents overall.

*History, Traditional Knowledge, and Culture*¹⁰⁰⁷

The Kenai Peninsula has historically been the home of Kenaitze Indians and was developed by non-Natives for its rich resources, including fish, timber, and oil. Soldotna was named for a nearby stream. The name comes either from the Russian word for "soldier" or a Native word meaning "stream fork." The first homesteaders were World War II veterans who were given a 90-day preference over non-veterans in selecting and filing for property in 1947. That same year, the Sterling Highway right-of-way was constructed from Cooper Landing to Kenai. Soldotna was the site of the bridge crossing the Kenai River. A post office opened in 1949, with stores and a community center shortly thereafter. Soldotna continued to develop because of its strategic location at the Sterling-Kenai Spur Highway junction. In 1957, oil was discovered in the Swanson River region, bringing new growth and development. Soldotna was incorporated as a city in 1960.

The Kenai River offers top trophy king salmon fishing during June and July. A 97 pound 4 ounce world-record king salmon was taken from these waters in 1985, and catching king salmon of over 60 lbs is not uncommon here.

Natural Resources and Environment

Winter temperatures in Soldotna range from 6 to 24 °F (-14.4 to -4.4 °C); summers range from 45 to 66 °F (7.2 to 18.9 °C). Average annual precipitation is 17 inches.¹⁰⁰⁸

Soldotna is located near the Kenai National Wildlife Refuge (Refuge), and the U.S. Fish and Wildlife Service (FWS) Refuge Manager is located in Soldotna. The following information is from the FWS informational website on the Refuge.¹⁰⁰⁹ The Kenai Peninsula in southcentral Alaska is a relatively "young" or recently exposed area in geologic terms. Ice and glaciers, which once covered the entire peninsula, melted from most of the peninsula only 10,000-14,000 yrs

¹⁰⁰⁶ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

¹⁰⁰⁷ Alaska Department of Community and Rural Affairs (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

¹⁰⁰⁸ Ibid.

¹⁰⁰⁹ U.S. Fish and Wildlife Service (n.d.). *Kenai National Wildlife Refuge*. Retrieved March 19, 2012 from <http://kenai.fws.gov/>.

ago. The remnant of this once widespread ice sheet can still be observed today as the Harding Icefield at high elevation in the eastern Kenai Mountains of the peninsula. At its greatest depth in the center, the Harding Icefield is thousands of feet thick.

As one leaves the ice and snow of the Harding Ice Field and descends to lower elevations, the first major habitats encountered are the treeless alpine and subalpine zones. These open, rocky, and windy habitats are the home of mountain goats, Dall sheep, caribou, wolverine, marmots, and ptarmigan. Just below the more shrubby subalpine habitat one begins to encounter trees of the boreal forest. Timberline averages about 1,800 ft above sea level on the Kenai National Wildlife Refuge.

Most of the lower elevations on the Kenai Peninsula and the Refuge are covered by boreal forest and numerous lakes. The largest lake on the Kenai Peninsula is Tustumena Lake at nearly 74,000 acres. Boreal forests are the home of moose, wolves, black and brown bears, lynx, snowshoe hares and numerous species of neotropical birds such as olive-sided flycatchers, myrtle warblers and ruby-crowned kinglets.

Continuing down to lowest elevation at sea level, the refuge includes the last remaining, pristine major salt water estuary - the Chickaloon River Flats - on the Kenai Peninsula. It provides a major migratory staging area for thousands of shorebirds and waterfowl in the spring and fall and nesting habitat for waterfowl and shorebirds in the summer. The area is also used as a haul-out area by harbor seals and is used by beluga whales. Thousands of salmon migrate up the Chickaloon River system each year to spawn.

The subarctic stream and lake habitats and associated populations of salmon, trout, char, and other species are highly important resources of the Kenai NWR. Most of the aquatic habitats are in near-pristine condition and many of the fish species have significant recreational and commercial value. Several fish species are also important food resources for a variety of wildlife including loons, bald eagles, river otters, and black and brown bears. Welfare of the fish populations is dependent upon maintaining genetic variability, water quality, protection of critical rearing and spawning habitats, and escapement of sufficient spawning stocks. The national importance of these resources is particularly evident when they are compared to habitats and fish populations elsewhere in the nation, where many resources have been severely impacted by human expansion and development.

The shoreline of the Kenai Peninsula along Cook Inlet is located at the edge of the North American Plate, leading to frequent and often devastating earthquakes and volcanic activity in the area. Five active volcanoes are located within the Kenai Peninsula Borough, all situated on the west side of Cook Inlet. They are Fourpeaked, Augustine, Iliamna, Redoubt, and Mount Spurr. Major damage can also be caused by secondary earthquake hazards, including landslides, floods, avalanches, tsunamis, uplift, subsidence, infrastructure failures, and soil liquefaction.¹⁰¹⁰ Other natural hazards threats in the Kenai Peninsula Borough include flooding, wildfire, snow and avalanche, seiche, severe weather, erosion, and drought.¹⁰¹¹

According to the Alaska Department of Environmental Conservation, there is one active environmental remediation site located in Soldotna. A drycleaning facility located at the River Terrace RV Park exposed local groundwater and soils to hydrocarbon and perchloroethylene

¹⁰¹⁰ Kenai Peninsula Borough (2010). *All-Hazard Mitigation Plan*. Retrieved January 26, 2012 from <http://www2.borough.kenai.ak.us/emergency/hazmit/plan.htm>

¹⁰¹¹ State of Alaska (2002). *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

(PCE) contaminates in the early 1990s. Soil excavations and treatment began in 1997, and groundwater treatment began in 2000. Two contaminant groundwater plums exist in the area, one of which flows into the Kenai River. Between 2000 and 2004, efforts were made to treat plums prior to reaching the Kenai, and monitoring between 2005 and 2010 indicated that treatment processes had mostly broken down PCE contaminates, although the area is still considered a public health threat.¹⁰¹²

Current Economy¹⁰¹³

The area's economy is diversified. Kenai and Soldotna residents are employed in natural gas drilling and exploration and other oil industry services for Cook Inlet oil. Other important economic sectors include sport, subsistence, and commercial fishing, fish processing, government, agriculture, transportation, construction, services, and retail trade. In 2010, 161 area residents held commercial fishing permits. Soldotna is the site of the Central Peninsula General Hospital, the Kenai Peninsula Community College, the State Troopers' Headquarters, the Kenai National Wildlife Refuge, and the borough's administrative center and the school district's headquarters office.¹⁰¹⁴ Top employers for 2010 included: Kenai Peninsula Borough School, Central Peninsula General Hospital, State of Alaska, Fred Meyer Stores Inc., ASRC Energy Services O&M Inc., Kenai Peninsula Borough, VECO Alaska Inc., Frontier Community Services Inc., Peninsula Community Health Services Inc., and Safeway Inc.¹⁰¹⁵

According to the 2006-10 American Community Survey (ACS), the per capita income in Soldotna was estimated to be \$28,559 and the median household income was estimated to be \$46,548, compared to \$21,740 and \$48,420 in 2000, respectively. Taking inflation into account by converting the 2000 values to 2010 dollars,¹⁰¹⁶ the real per capita income in 2000 is shown to be \$28,588 and the real household income was \$63,672. This shows that per capita income decreased only slightly over the period, while there was a significant decrease in median household income. In 2010, Soldotna ranked 73rd of 305 Alaskan communities for which per capita income was estimated that year, and 154th of 299 Alaskan communities for which household income was estimated. However, Soldotna's small population size may have prevented the ACS from accurately portraying economic conditions.¹⁰¹⁷ Another understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development. According to the ALARI database, the per capita income in Soldotna in 2010 was \$19,169, which indicates a more significant decrease in per capita income than the

¹⁰¹² Alaska Department of Environmental Conservation (2012). *River Terrace RV Park*. Retrieved April 10, 2013 from: <http://www.dec.state.ak.us/spar/csp/sites/riverterrace.htm>.

¹⁰¹³ Unless otherwise noted, all monetary data are reported in nominal values.

¹⁰¹⁴ Alaska Department of Community and Rural Affairs (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

¹⁰¹⁵ 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/>.

¹⁰¹⁶ Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved October 18, 2011 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

¹⁰¹⁷ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

2006-10 ACS when compared to the real per capita income values reported by the U.S. Census in 2000.¹⁰¹⁸

Based on the ACS, in the same year, 59.1% of the population was estimated to be in the civilian labor force, compared to an estimated statewide rate of 68.8%. The local unemployment rate was estimated at 6.9%, compared to an estimated statewide unemployment rate of 5.9%. An estimated 8.9% of local residents were living below the poverty line, compared to an estimated 9.6% of Alaskans overall. It should be noted that income and poverty statistics are based on wage income and other money sources; figures reported for Soldotna are not reflective of the value of subsistence to the local economy. In addition, these unemployment and poverty statistics are likely inaccurate given the population of Soldotna. A more accurate estimate is based on the ALARI database, which indicates that the unemployment rate in 2010 was 11.4%.

Based on household surveys conducted for the 2006-2010 ACS, the greatest percentage of workers were estimated to be employed in the private sector (79%), while an estimated 16.5% were employed in the public sector, 3.4% were self-employed, and 1% were unpaid family workers. Out of 1,819 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest percentage worked in education services, health care, and social assistance (27.6%), arts, entertainment, recreation, accommodations, and food services (16.2%), retail trade (10.7%), and agriculture, forestry, fishing, hunting, and mining (10.4%). Smaller percentages of the population were employed in public administration (6.3%), other services, except public administration (6%), professional, scientific, management, administration, and waste management (5.1%), finance, insurance, and real estate (5.3%), information (2.1%), transportation, warehousing, and utilities (1.5%), wholesale trade (5.5%), manufacturing (0.7%), and construction (2.7%). Between 2000 and 2010, a significant proportional increase in employment occurred within the education services, healthcare, and social assistance sectors. Conversely, a significant proportional decline occurred within the retail trade, transportation, warehousing, and utilities sectors (Figure 3).

In terms of employment by occupation type, most (29.9%) employed residents were estimated to hold service positions in 2010; followed by management or professional (25.7%); sales or office (24.6%); production, transportation, or material moving (7.0%); and natural resources, construction, or maintenance (4.4%) positions. Between 2000 and 2010, a significant proportional increase occurred in the estimated number of residents holding service positions. Conversely, a significant proportional decrease occurred in the estimated number of residents holding natural resources, construction, or maintenance positions (Figure 4).

Given the data reported in the *Commercial Fishing* section below, the number of individuals employed in farming, fishing, and forestry industries may be underestimated in census statistics as fishermen may hold another job and characterize their employment accordingly.

¹⁰¹⁸ See footnote 1015.

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

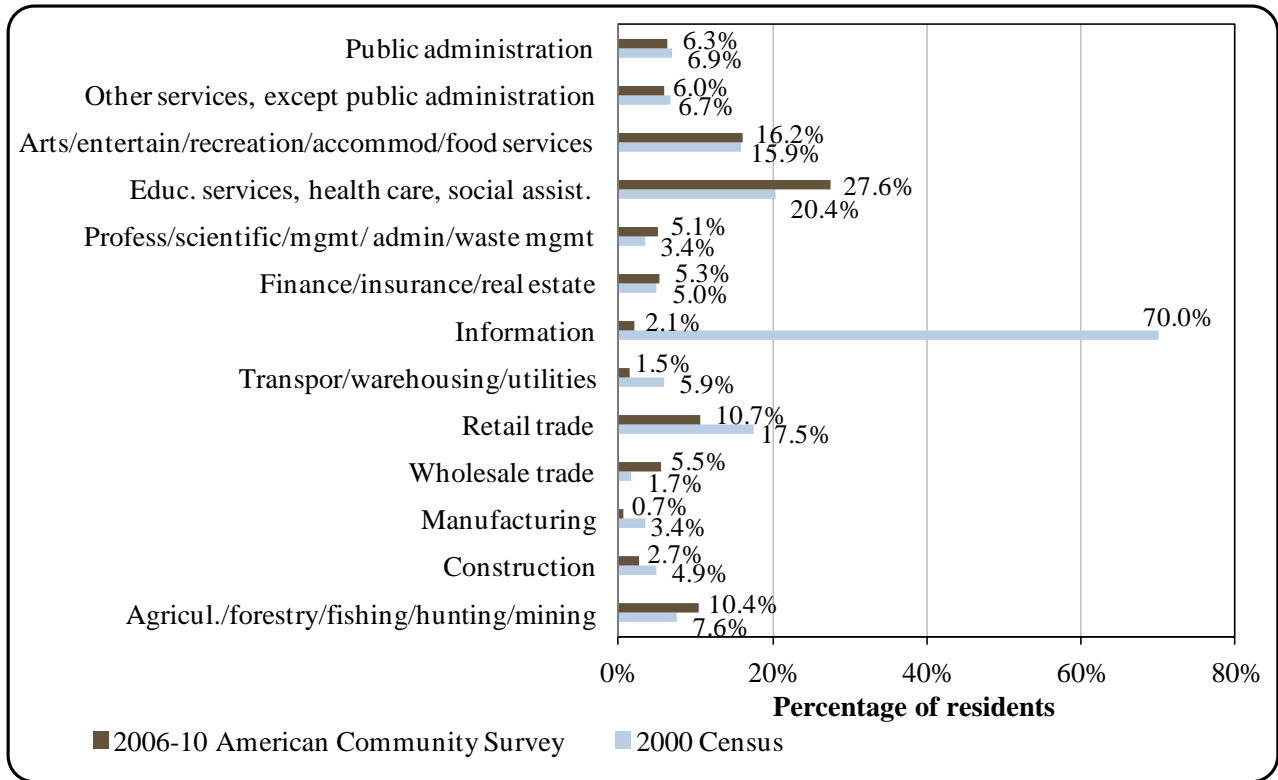
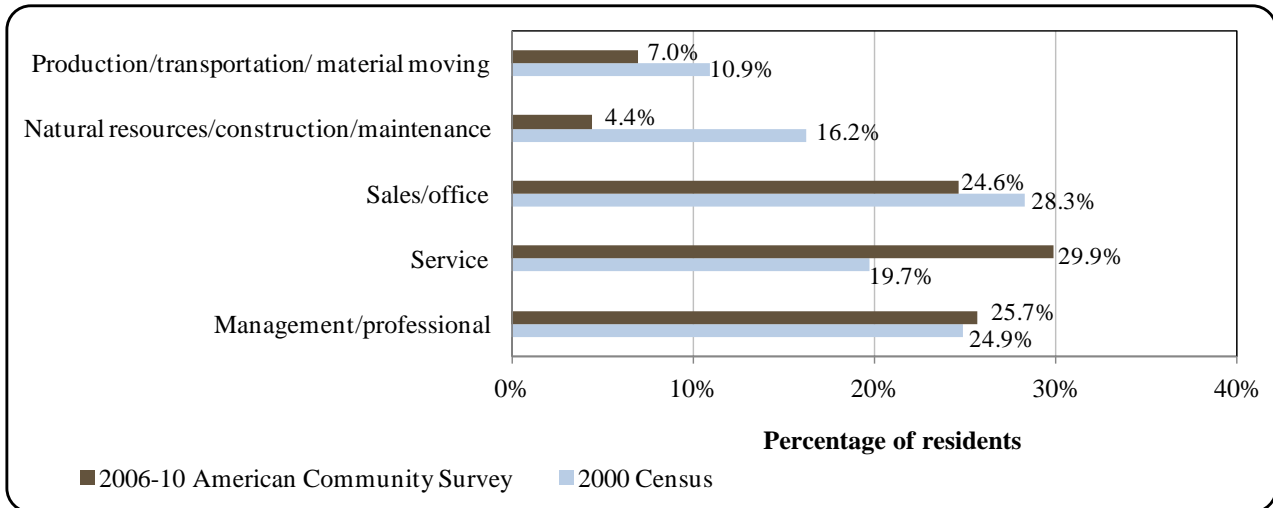


Figure 4. Local Employment by Occupation in 2000-2010, Soldotna (U.S. Census).



Governance

Soldotna is a First-class city located in the Kenai Peninsula Borough. Soldotna administers a 3% sales tax. Total municipal revenue increased overall between 2000 and 2010, though the years of highest municipal revenue during this period were 2008 and 2009. Sales tax revenue also increased overall during this period. Soldotna received revenue from state/community revenue sharing between 2000 and 2003 and in 2009 and 2010. In 2004, Soldotna received grants from the Alaska Department of Commerce, Community, and Economic Development’s Division of Community and Regional Affairs for value-added seafood processing equipment at Peninsula Processing and Smokehouse, equipment upgrades at Sea Products, LLC, and salmon marketing at Peninsula Processing. Municipal revenue totals given in Table 2 pertain to general fund revenues, and do not include operating revenues for utilities or the airport.

Soldotna was not included in the Alaska Native Claims Settlement Act and is not federally recognized as a Native village. However, Soldotna is a member of a regional Native corporation, Cook Inlet Region, Incorporated.

Offices of the Alaska Department of Fish and Game (ADF&G), the Alaska Department of Natural Resources (DNR), and the U.S. Fish and Wildlife Service (FWS) are located in Soldotna. The nearest offices of the National Marine Fisheries Service (NMFS), Alaska Department of Commerce, Community, and Economic Development, Bureau of Citizenship and Immigration Services, and U.S. Immigration and Customs Enforcement are located in Anchorage.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Soldotna 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	\$5,287,411	\$4,694,733	\$73,473	n/a
2001	\$5,432,609	\$4,827,209	\$65,768	n/a
2002	\$5,773,015	\$5,100,316	\$65,784	n/a
2003	\$6,319,577	\$5,232,283	\$65,881	n/a
2004	\$7,231,110	\$5,694,134	n/a	\$179,700
2005	\$7,193,617	\$5,910,189	n/a	n/a
2006	\$8,209,324	\$6,348,529	n/a	n/a
2007	\$8,809,182	\$6,807,184	n/a	n/a
2008	\$9,540,085	\$7,447,481	n/a	n/a
2009	\$9,073,100	\$7,717,581	\$303,169	n/a
2010	\$8,323,283	\$7,236,738	\$297,660	n/a

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

³ Alaska Department of Revenue (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 Department of Community and Rural Affairs. (n.d.). Community Funding Database. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm.

Infrastructure

Connectivity and Transportation

The Soldotna Municipal Airport provides facilities for charter services and local air traffic. The main runway is 5,000 ft long by 132 ft wide. The nearby Kenai Municipal Airport, located 10 mi away, offers scheduled flights and float plane facilities. Seaplanes can also land at Mackeys Lakes. There are four additional private landing strips in Soldotna and a heliport for medical emergencies at Central Peninsula General Hospital. The Sterling Highway provides access to Alaska's road system.¹⁰¹⁹ While Soldotna has an airport, there are no regular commercial flights available between Soldotna and Anchorage. In June 2012, round-trip airfare between Kenai (10 mi from Soldotna) and Anchorage was \$171.¹⁰²⁰

*Facilities*¹⁰²¹

The City of Soldotna operates a piped water and sewer system. All homes in Soldotna are completely plumbed. Water is derived from 4 wells and is treated and stored in a 1 million-gallon steel tank along with a second 500,000-gallon tank. Piped sewage receives secondary treatment with an activated sludge process; effluent discharges into the Kenai River. Individual wells and septic tanks are used by a few households outside of the core residential area. A private company provides refuse collection services to the community. Garbage is disposed of in the Borough's Class-1 regional landfill and baling facility at mile 98.5 Sterling Highway in Soldotna. Recycling and hazardous waste disposal are available. Electricity in the community is provided by Homer Electric Association which operates the Bradley Lake Hydroelectric Project and is part owner of the Alaska Electric Generation & Transmission Cooperative. The Cooperative operates a gas turbine plant in Soldotna. The community also purchases electricity from Chugach Electric. For home heating, most residents use natural gas from Enstar.

Law enforcement services are provided by the City Police Department and state troopers located in Soldotna. Fire and rescue services are provided by the Borough/Central Emergency Services (CES) Fire/Rescue/Emergency Medical Technicians (EMT). A youth center is run by the City and the Soldotna Peninsula Sports Center Boys and Girls Club, and a community hall is available at the Soldotna City Hall. Senior services are provided by Soldotna Area Senior Citizens, Inc. and the Senior Center at Frontier Community Services. The Central Peninsula Sports Center provides an ice rink, racquetball courts, weight room, and meeting facilities. Other community facilities include two swimming pools, a movie theater, a historical society and museum, two academic libraries, seven school libraries, and one public library.

¹⁰¹⁹ Alaska Department of Community and Rural Affairs (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

¹⁰²⁰ Airfare was obtained on the travel website <http://www.travelocity.com> for a round-trip ticket for travel from June 1 to June 8, 2012. Retrieved on December 1, 2011.

¹⁰²¹ See footnote 1019.

*Medical Services*¹⁰²²

Medical care in Soldotna is provided by the Central Peninsula General Hospital and the Central Peninsula Health Center. These facilities are owned by the Kenai Peninsula Borough and operated by the Central Peninsula Hospital. The hospital is a qualified Acute Care facility and provides Critical Care Air Ambulance Service. Alternate health care is provided by Central Emergency Services. Long term care is provided by Heritage Place, while specialized care is provided by the Frontier Training Center and Family Recovery Center. Emergency Services have highway, airport, and floatplane access and are provided by a 911 telephone service and a paid Emergency Medical Service.

*Educational Opportunities*¹⁰²³

There are 10 schools in Soldotna. The Soldotna Elementary School provides instruction to students in pre-school through sixth grade, and in 2011 had 295 students and 20 teachers. The Soldotna Montessori Charter School provides instruction to students in kindergarten through sixth grade, and in 2011 had 167 students and 11 teachers. The Redoubt Elementary School provides instruction to students in kindergarten through sixth grade, and in 2011 had 393 students and 26 teachers. The Aurora Borealis Charter School provides instruction to students in kindergarten through eighth grade and in 2011 had 193 students and 12 teachers. The Soldotna Middle School provides instruction to students in grades seven and eight, and in 2011 had 408 students and 25 teachers. The Soldotna High School provides instruction to students in grades nine through 12, and in 2011 had 521 students and 33 teachers. The Skyview High School also provides instruction to students in grades nine through 12, and in 2011 had 375 students and 20 teachers. Connections school provides instruction to students in kindergarten through 12th grade, and in 2011 had 871 students and 11 teachers. Kenai Alternative High School provides instruction to students in pre-school through 12th grade, and in 2011 had 88 students and 6 teachers. River City Academy provides instruction to students in grades 7 through 12, and in 2011 had 73 students and five teachers.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Soldotna is located in the traditional territory of the Kenaitze people, a branch of Athabascan Native Americans. Historically, the Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.¹⁰²⁴ The Soldotna area was homesteaded in the 1940s and grew along with the oil industry, which continues to be the primary economic driver in the community.¹⁰²⁵ In addition, some Soldotna residents became involved in commercial fisheries that had developed

¹⁰²² Ibid.

¹⁰²³ Alaska Department of Education and Early Development (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

¹⁰²⁴ Kenaitze Indian Tribe (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

¹⁰²⁵ See footnote 1019.

in the region following the purchase of Alaska by the U.S. in 1867. Commercial harvest of salmon in Cook Inlet began in 1882¹⁰²⁶ with the development of a cannery at the mouth of the Kasilof River, in English Bay. An additional 17 canneries had been built in central Alaska by 1890.¹⁰²⁷ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.¹⁰²⁸ In the 1920s, herring had become increasingly valued for oil and meal, and a number of reduction plants were built. Commercial crab fisheries began to develop in the GOA in the 1930s. Historically, a sizable spawning biomass of herring was found in western Cook Inlet, and Lower Cook Inlet also supported commercial fisheries for Dungeness, king, and Tanner crab. However, crab and herring fisheries are currently closed due to low stock abundance.^{1029,1030}

Today, ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.¹⁰³¹

Groundfish and crab fisheries that occur within 3 nautical mi (nm) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place beyond 3 nm in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission. Cook Inlet is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch (TAC) set by NMFS applied to both fisheries. Beginning in 1997, an additional ‘state-waters fishery’ for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL,

¹⁰²⁶ Clark, J. H., A. McGregor, R. D. Mecum, P. Krasnowski, and A. M. Carroll. 2006. The Commercial Salmon Fishery in Alaska. *Alaska Fisheries Research Bulletin* 12(1):1-146. Alaska Department of Fish and Game. Retrieved January 4, 2012 from <http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1.pdf>.

¹⁰²⁷ Cook, L., and F. Norris. 1998. *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

¹⁰²⁸ Thompson, W. F. and N. L. Freeman. 1930. *History of the Pacific Halibut Fishery*. Report of the International Fisheries Commission. Number 5. Retrieved June 1, 2012 from <http://www.iphc.int/publications/scirep/Report0005.pdf>.

¹⁰²⁹ Woodby, D., D. Carlile, S. Siddeek, F. Funk, J. H. Clark, and L. Hulbert. 2005. *Commercial Fisheries of Alaska*. Alaska Department of Fish and Game, Special Publication No. 05-09. Retrieved December 29, 2011 from <http://www.adfg.alaska.gov/FedAidPDFs/sp05-09.pdf>.

¹⁰³⁰ Alaska Department of Fish and Game. 2012. *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

¹⁰³¹ See footnote 1026.

and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.¹⁰³²

Soldotna is located 10 mi inland from Cook Inlet along the Kenai river. The community is nearest to Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central Gulf of Alaska Sablefish Regulatory Area. Soldotna is not eligible for the Community Development Quota (CDQ) or Community Quota Entity (CQE) programs.

Processing Plants

According to ADF&G's 2010 Intent to Operate list, there were two processing facilities in operation in Soldotna. Information about these facilities is presented below.

Echo Lake Superior Meat & Processing LLC has been custom processing seafood (primarily King salmon) and game meat since 1976. Their facility is located off K-Beach Road in Soldotna on the Kenai Peninsula. Their small facility processes fish caught by sport fishermen in summer as well as some commercially caught salmon. In addition, the plant owns a retail store in Soldotna, and Echo Lake sells salmon products on the Internet.¹⁰³³ In 2010, the plant employed between 15 and 35 workers.¹⁰³⁴

According to ADF&G's 2010 Intent to Operate list, Peninsula Processing & Smokehouse operates a seafood processing facility in Soldotna. Peninsula Processing & Smokehouse offer the following products for sale on their website: salmon (Chinook, sockeye, silver, cedar plank), crab (king and Dungeness), lobster, shrimp, prawns, scallops, clams, halibut, Chilean sea bass, ling cod, Black cod, Pacific cod, rockfish.¹⁰³⁵

Fisheries-Related Revenue

Between 2000 and 2010, Soldotna received fisheries-related revenue from the Shared Fisheries Business Tax and the Fisheries Resource Landing Tax. Amounts received from both sources were variable during this time period, as was the total fisheries-related revenue received. During this period, the percentage of total municipal revenue received from fisheries related sources was minimal compared to total municipal revenue, ranging from a low of \$3,765 in 2008 to a high of \$6,205 in 2001.¹⁰³⁶ Information about fisheries-related revenue received by Soldotna between 2000 and 2010 is presented in Table 3.

¹⁰³² See footnote 1029.

¹⁰³³ Echo Lake Superior Meat and Processing (n.d.). *About us*. Retrieved November 1, 2011, from <http://www.echolakemeats.com/aboutus.htm>.

¹⁰³⁴ This information is based on the results of a survey of processing plant managers conducted by the Alaska Fisheries Science Center in 2011.

¹⁰³⁵ Peninsula Processing and Smokehouse (n.d.). *Company website*. Retrieved November 1, 2011, from <http://great-alaska-seafood.com/>.

¹⁰³⁶ A direct comparison between fisheries-related revenue and total municipal revenue cannot reliably be made as not all fisheries-related revenue sources are included in the municipal budget.

Commercial Fishing

In 2010, there were 161 permit holders that held 195 commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC) for other shellfish, halibut, herring, sablefish, groundfish, other finfish, and salmon (Table 4). The total number of CFEC permits, permit holders, and permits reported as fished decreased overall between 2000 and 2010. There were between one and two permit holders with between two and four crab CFEC permits between 2005 and 2007. The number of other shellfish CFEC permits and permit holders was variable between 2000 and 2010, and other shellfish CFEC permits were only reported as fished in 2000, 2004, 2008, and 2010. In 2010, other shellfish CFEC permits were issued for the Prince William Sound shrimp pot fishery using vessels under 60 ft and the statewide clam shovel fishery. The number of halibut CFEC permits and permit holders, as well as the number of permits reported as fished, decreased between 2000 and 2010. In 2010, 22 of the 23 halibut CFEC permits issued were for the statewide longline fishery using vessels under 60 ft, with one permit issued for the statewide hand troll fishery. The number of herring CFEC permits, permit holders, and permits reported as fished was also variable during this period, and herring CFEC permits were reported as fished only in 2000-2002, 2005-2006, and 2009. Herring CFEC permits were issued in 2010 for the Cook Inlet, Kodiak, and Goodnews Bay roe herring gillnet fisheries and the Norton Sound herring gillnet fishery, as well as the Bristol Bay herring spawn on kelp hand-picking fishery. The number of sablefish permits, permit holders, and number of permits fished was variable between 2000 and 2010, while the number of groundfish permits, permit holders, and permits reported as fished decreased during this period. In 2010, sablefish CFEC permits were issued for the statewide longline fishery using vessels under 60 ft and the Prince William Sound fixed gear fishery using vessels with a maximum length of 50 ft. Groundfish CFEC permits issued in 2010 were for the statewide lingcod longline vessel fishery using vessels under 60 ft, the statewide lingcod dinglebar troll fishery, the statewide and Gulf of Alaska miscellaneous saltwater finfish longline fisheries using vessels under 60 ft, and the Gulf of Alaska miscellaneous saltwater finfish dinglebar troll fishery.

Since 2007, there have been two other finfish permit holders and permits, though those permits have not yet been reported as fished. In 2010, both of these other finfish CFEC permits were issued for the statewide freshwater fish set gillnet fishery. The number of salmon CFEC permits, permit holders, and permits reported as fished also decreased between 2000 and 2010. Of the salmon CFEC permits issued in 2010, the majority were for the Cook Inlet drift gillnet and set gillnet fisheries. The remainder of the salmon CFEC permits issued in 2010 were for the Prince William Sound, Cook Inlet, Kodiak, and Chignik purse seine fisheries, the southeastern, Prince William Sound, Peninsula-Aleutians, and Bristol Bay drift gillnet fisheries, the Bristol Bay set gillnet fishery, the Kuskokwim and Norton Sound gillnet fisheries, and the statewide hand troll fishery.

Also in 2010, there were seven Federal Fisheries Permit holders that held eight permits (Table 4). While the number of Federal Fisheries permits and permit holders decreased between 2000 and 2010, none of those permits were reported as fished until 2005. Since that time, the number of Federal Fisheries Permits reported as fished has varied between one and three. There were six groundfish License Limitation Program (LLP) holders in Soldotna in 2010, with represents a small overall increase since the year 2000, though the number of those permits reported as fished remained relatively stable between 2000 and 2010. In 2009 and 2010, there

was one crab LLP permit held by one individual, though that permit was only reported as fished in 2009.

In 2010, there were 199 crew license holders in Soldotna, a decrease from 255 in 2000. While there have been no fish buyers located in Soldotna since 2004, there are two shore-side processing facilities located in the community, which represents an overall decrease between 2000 and 2010. The number of vessels owned primarily by Soldotna residents declined substantially between 2000 (434 vessels) and 2010 (72 vessels), as did the number of vessels homeported in Soldotna between 2000 (315) and 2010 (21). Between 2000 and 2010, there was one vessel landing catch in Soldotna in 2001 and one vessel landing catch in 2004. However, because only one vessel landed catch in the community in those years, the landings and ex-vessel revenue data for those years are considered confidential. Information on the characteristics of the commercial fishing sector in Soldotna between 2000 and 2010 is presented in Table 5.

The number of halibut quota share account holders decreased between 2000 and 2010, though the total number of quota shares held and the associated amount of halibut Individual Fishing Quota (IFQ) allotment (in pounds) increased during the same period (Table 6). The number of sablefish quota share account holders also decreased between 2000 and 2010, while the number of quota shares held and the amount of sablefish IFQ allotment experienced an increase followed by a decrease during this period (Table 7). The number of crab quota share account holders increased from one to two between 2005 and 2010, but the number of quota shares held and the amount of crab IFQ allotment increased substantially during this period (Table 8).

While there were commercial landings and associated ex-vessel revenue reported in Soldotna in 2001 and 2004, the landings and ex-vessel revenue in those years are considered confidential due to the small number of participants. There were no commercial landings or ex-vessel revenue reported in the other years between 2000 and 2010 (Table 9). Landings reported by Soldotna residents (and associated ex-vessel revenue), irrespective of location, were recorded for halibut in 2000 to 2007 and 2009 to 2010, herring in 2000, other groundfish in 2000 to 2005, Pacific cod in 2000 to 2002 and 2006, and salmon between 2000 and 2010. Landings and ex-vessel revenue for species and years not listed here are considered confidential due to a small number of participants. Landings and ex-vessel value for halibut were variable from year to year, though landings experienced an overall decrease and ex-vessel value experienced an overall increase between 2000 and 2010. Landings and ex-vessel revenue for salmon were also variable from year to year between 2000 and 2010. Information regarding landed pounds and ex-vessel revenue by species for Soldotna residents is presented in Table 10.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	\$4,568	\$5,940	\$3,350	\$4,562	\$3,876	\$4,566	\$4,140	\$5,360	\$3,631	\$4,880	\$5,101
Fisheries Resource Landing Tax ¹	\$292	\$264	\$506	\$389	\$58	\$123	\$117	\$88	\$133	\$64	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>\$4,860</i>	<i>\$6,205</i>	<i>\$3,856</i>	<i>\$4,951</i>	<i>\$3,935</i>	<i>\$4,689</i>	<i>\$4,256</i>	<i>\$5,448</i>	<i>\$3,765</i>	<i>\$4,944</i>	<i>\$5,101</i>
<i>Total municipal revenue⁵</i>	<i>\$5,287,411</i>	<i>\$5,607,290</i>	<i>\$5,773,015</i>	<i>\$5,874,850</i>	<i>\$6,178,711</i>	<i>\$6,423,483</i>	<i>\$7,275,581</i>	<i>\$7,588,807</i>	<i>\$9,540,085</i>	<i>\$9,073,100</i>	<i>\$8,323,283</i>

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

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

² Alaska Department of Community 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 brings in each year from all sources, including fisheries-related revenue streams. Alaska Department of Comm and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Soldotna

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	5	5	4	4	4	5	5	5	5	6	6
	Active permits	2	2	1	1	0	1	1	1	1	2	1
	% of permits fished	40%	40%	25%	25%	-	20%	20%	20%	20%	33%	16%
	Total permit holders	5	5	4	4	4	5	5	5	5	6	6
Crab (LLP) ¹	Total permits	0	0	0	0	0	0	0	0	0	1	1
	Active permits	0	0	0	0	0	0	0	0	0	1	0
	% of permits fished	-	-	-	-	-	-	-	-	-	100%	-
	Total permit holders	0	0	0	0	0	0	0	0	0	1	1
Federal Fisheries Permits ¹	Total permits	16	17	17	13	13	14	13	13	14	8	8
	Fished permits	0	0	0	0	0	1	3	2	2	3	3
	% of permits fished	-	-	-	-	-	7%	23%	15%	14%	38%	38%
	Total permit holders	15	16	16	12	12	13	13	13	14	7	7
Crab (CFEC) ²	Total permits	0	0	0	0	0	4	2	2	0	0	0
	Fished permits	0	0	0	0	0	2	2	2	0	0	0
	% of permits fished	-	-	-	-	-	50%	100%	100%	-	-	-
	Total permit holders	0	0	0	0	0	2	1	1	0	0	0
Other shellfish (CFEC) ²	Total permits	6	2	4	2	1	1	0	2	1	1	5
	Fished permits	2	0	0	0	1	0	0	0	1	0	1
	% of permits fished	33%	-	-	-	100%	-	-	-	100%	-	20%
	Total permit holders	5	1	4	2	1	1	0	2	1	1	5
Halibut (CFEC) ²	Total permits	42	43	40	34	35	32	29	26	27	23	23
	Fished permits	30	31	33	25	28	29	21	21	21	21	18
	% of permits fished	71%	72%	83%	74%	80%	91%	72%	81%	78%	91%	78%
	Total permit holders	41	43	39	34	35	32	29	26	27	23	23
Herring (CFEC) ²	Total permits	17	9	8	10	8	11	8	10	11	9	12
	Fished permits	5	1	1	0	0	1	2	0	0	1	0
	% of permits fished	29%	11%	13%	-	-	9%	25%	-	-	11%	-
	Total permit holders	15	9	8	10	8	11	8	10	11	9	12

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	4	2	3	2	2	3	1	1	1	2	2
	Fished permits	1	1	2	1	2	3	1	1	1	2	2
	% of permits fished	25%	50%	67%	50%	100%	100%	100%	100%	100%	100%	100%
	Total permit holders	4	2	3	2	2	3	1	1	1	2	2
Groundfish (CFEC) ²	Total permits	11	10	9	11	8	10	8	6	9	6	6
	Fished permits	4	2	4	3	3	1	1	1	1	0	0
	% of permits fished	36%	20%	44%	27%	38%	10%	13%	17%	11%	-	-
	Total permit holders	9	9	8	9	7	8	6	4	7	4	4
Other Finfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	2	2	2	2
	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	2	2	2	2
Salmon (CFEC) ²	Total permits	153	155	148	143	145	146	136	140	144	147	145
	Fished permits	124	113	100	107	104	113	98	108	101	97	101
	% of permits fished	81%	73%	68%	75%	72%	77%	72%	77%	70%	66%	70%
	Total permit holders	157	157	153	146	146	146	137	146	143	147	144
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>233</i>	<i>221</i>	<i>212</i>	<i>202</i>	<i>199</i>	<i>207</i>	<i>184</i>	<i>189</i>	<i>195</i>	<i>190</i>	<i>195</i>
	<i>Fished permits</i>	<i>166</i>	<i>148</i>	<i>140</i>	<i>136</i>	<i>138</i>	<i>149</i>	<i>125</i>	<i>133</i>	<i>125</i>	<i>121</i>	<i>122</i>
	<i>% of permits fished</i>	<i>71%</i>	<i>67%</i>	<i>66%</i>	<i>67%</i>	<i>69%</i>	<i>72%</i>	<i>68%</i>	<i>70%</i>	<i>64%</i>	<i>64%</i>	<i>63%</i>
	<i>Permit holders</i>	<i>187</i>	<i>186</i>	<i>177</i>	<i>170</i>	<i>169</i>	<i>169</i>	<i>153</i>	<i>164</i>	<i>161</i>	<i>162</i>	<i>161</i>

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Soldotna: 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 Soldotna ²	Total Net Pounds Landed In Soldotna ²	Total Ex-Vessel Value Of Landings In Soldotna ²
2000	255	0	4	434	315	0	0	\$0
2001	240	1	5	441	319	1	--	--
2002	153	0	5	435	321	0	0	\$0
2003	211	0	4	442	314	0	0	\$0
2004	239	3	3	434	330	1	--	--
2005	234	0	2	97	29	0	0	\$0
2006	181	0	2	81	26	0	0	\$0
2007	201	0	2	86	25	0	0	\$0
2008	198	0	2	80	26	0	0	\$0
2009	193	0	2	70	18	0	0	\$0
2010	199	0	2	72	21	0	0	\$0

Note: Cells showing “--” indicate that the data are considered confidential.

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

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

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

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

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

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	57	1,785,453	182,300
2001	59	1,879,150	223,335
2002	57	2,049,767	251,809
2003	53	2,125,378	260,977
2004	50	2,049,342	278,410
2005	50	2,069,115	285,488
2006	43	1,867,541	254,584
2007	37	1,832,118	259,591
2008	36	1,960,341	256,767
2009	33	1,995,209	234,143
2010	32	2,019,722	218,343

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 Soldotna: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (pounds)
2000	4	721	65
2001	5	18,098	1,351
2002	4	16,574	1,500
2003	4	16,574	2,238
2004	4	16,574	2,246
2005	4	65,737	7,526
2006	3	65,483	7,095
2007	3	65,483	7,074
2008	3	65,483	6,445
2009	2	49,483	3,899
2010	2	49,483	3,524

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 Soldotna: 2000-2010.

Year	Number of Crab Quota Share Account Holders	Crab Quota Shares Held	Crab IFQ Allotment (pounds)
2005	1	286,797	8,279
2006	1	320,684	8,045
2007	1	320,684	13,285
2008	1	320,684	12,348
2009	2	2,733,598	88,534
2010	2	2,424,553	81,841

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 Soldotna: 2000-2010.

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

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Soldotna 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	153,666	215,334	213,715	193,170	183,935	268,534	213,672	105,515	--	88,262	93,676
Herring	352,094	--	--	--	--	--	--	--	--	--	--
Other Groundfish	3,531	3,818	4,618	6,564	2,348	9,540	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	3,601	4,958	2,884	--	--	--	2,944	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	2,934,537	2,714,488	2,999,765	3,142,378	3,837,423	4,650,491	1,384,709	3,654,628	2,113,377	1,915,193	3,329,354
<i>Total²</i>	<i>3,447,429</i>	<i>2,938,598</i>	<i>3,220,982</i>	<i>3,342,112</i>	<i>4,023,706</i>	<i>4,928,565</i>	<i>1,601,325</i>	<i>3,760,143</i>	<i>2,113,377</i>	<i>2,003,455</i>	<i>3,423,030</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	\$395,205	\$425,189	\$474,611	\$559,020	\$567,566	\$821,320	\$806,257	\$480,486	--	\$275,507	\$432,215
Herring	\$33,468	--	--	--	--	--	--	--	--	--	--
Other Groundfish	\$2,080	\$2,207	\$4,265	\$4,140	\$1,575	\$4,715	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	\$1,188	\$1,222	\$745	--	--	--	\$49	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	\$1,364,319	\$1,081,693	\$1,099,299	\$1,214,370	\$1,769,212	\$2,084,534	\$848,430	\$1,999,601	\$1,431,007	\$1,490,444	\$2,877,873
<i>Total²</i>	<i>\$1,796,260</i>	<i>\$1,510,310</i>	<i>\$1,578,920</i>	<i>\$1,777,530</i>	<i>\$2,338,353</i>	<i>\$2,910,570</i>	<i>\$1,654,737</i>	<i>\$2,480,087</i>	<i>\$1,431,007</i>	<i>\$1,765,951</i>	<i>\$3,310,088</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 Kenai River is the most heavily fished river in Alaska and also supports the largest sockeye sport fishery in the state. The Sterling Highway Bridge in Soldotna marks the beginning of the “Lower River.” This final 21-mile section is gentler than the upper portion of the river, and the river winds its way to empty in Cook Inlet near the City of Kenai. There are about 40 unique species of fish in the Kenai River. There are resident fish, which spend their entire life cycle in the river; anadromous fish, which spend part of their life in the river and part in salt water; and fish which are common to the intertidal area, which is a mixture of both fresh and salt water.¹⁰³⁷

The North Kenai Peninsula Management Area has two personal use sockeye salmon dip net fisheries which are open to Alaska-residents only. The Russian River sockeye salmon fishery is the second largest sockeye fishery in Alaska. Annual harvests in the Russian River regularly exceed 50,000 fish and have come close to 200,000 fish in some years. The Anchor River, Deep Creek, and Ninilchik Rivers also support large Chinook salmon runs from late May through mid-July. Coho salmon arrive in the area early August through mid-September; and Dolly Varden can be found mid-May through mid-July. Many lakes on the Kenai Peninsula are stocked with rainbow trout and salmon to support the large sportfishing economy.¹⁰³⁸

In 2010, there were 141 sport fish guide businesses in Soldotna, of which only 28 were active. This represented a decrease from the number of active businesses in previous years between 2000 and 2009. The number of active sport fish businesses peaked in 2007 at 43. In addition, 177 individuals held sport fish guide licenses in 2010; a decline from 216 in 2000. Also in 2010, there were 6,419 sport fish guide licenses sold to Soldotna residents (irrespective of the location of the point of sale), a number which increased steadily between 2000 and 2010. In the same year, there were 32,797 sportfishing licenses sold within the community, indicating the potential that visitors to Soldotna are participating in recreational fishing activities. The number of sportfishing licenses sold in Soldotna increased substantially between 2000 and 2010 (Table 11).

Soldotna is located within the Kenai Peninsula Alaska Sport Fishing Survey Area. Information is available about both saltwater and freshwater sportfishing activity at this regional scale. Between 2000 and 2010, sportfishing activity in this region was variable from year to year, though the total number of angler days fished in the region decreased overall during this period. There were considerably more angler days fished in freshwater than in saltwater in this region between 2000 and 2010. During this period, the percentage of angler days fished by non-Alaska residents in saltwater increased only slightly, from 23% to 28%, as did the percentage of angler days fished by non-Alaska residents in saltwater, which increased from 42% to 47%. The percentage of angler days fished by non-Alaska residents was higher in freshwater than in saltwater between 2000 and 2010. Information on sportfishing trends in Soldotna between 2000 and 2010 is presented in Table 11.

¹⁰³⁷ Alaska Department of Fish and Game. Division of Sport Fish. Southcentral Region. (n.d.). Kenai Peninsula Recreational Fishing Series: The Kenai River. Retrieved on May 9, 2012 from www.adfg.alaska.gov/static-sf/Region2/pdfpubs/kenairiver.pdf.

¹⁰³⁸ Kenai Peninsula Borough. (2005). Kenai Peninsula Borough Comprehensive Plan. Retrieved on July 9, 2012 from: <http://www.commerce.state.ak.us/dca/plans/KenaiPeninsulaBorough-CP-2005.pdf>.

The Alaska Statewide Harvest Survey,¹⁰³⁹ conducted by ADF&G between 2000 and 2010, noted the following species targeted by private anglers in Soldotna: all five species of salmon, rainbow trout, Dolly Varden, whitefish, burbot, Arctic grayling, Northern pike, Pacific halibut, rockfish, lingcod, Pacific cod, smelt, other fish, Dungeness crab, Tanner crab, razor clam, hardshell clam, shrimp, and other shellfish. No kept/release log book data were reported for fishing charters out of Soldotna between 2000 and 2010.¹⁰⁴⁰

Subsistence Fishing

Subsistence fishing activity by Soldotna residents appears limited. Data were not available regarding subsistence participation by household and species (Table 12), subsistence harvest of marine invertebrates and non-salmon fish (Table 13), or subsistence harvest of marine mammal resources (Table 15) between 2000 and 2010. However, data are available regarding subsistence salmon and halibut harvesting. The number of subsistence salmon permits issued in Soldotna between 2000 and 2008 was highly variable, as was the number of those permits reported as fished during this period. Although harvests were limited, sockeye salmon were the most commonly harvested subsistence species under the subsistence salmon permits, followed by Chinook salmon (Table 13). The number of Subsistence Halibut Registration Certificate (SHARC) cards issued to residents increased steadily between 2003 and 2010, though the number of those permits reported as fished and the amount of halibut harvested under those permits was variable from year to year during this period. In 2009 (the last year estimates were available), an estimated 3,473 pounds of halibut were harvested using 18 SHARC. This estimate vastly exceeded previous years, when estimated harvests ranged between 225 and 1,872 pounds (Table 14).

Additional Information

As of March 2012, Soldotna (also known as “Alaska’s Kenai River City”) was home to the World Record King Salmon, which weighed 97 lbs, four oz.¹⁰⁴¹

¹⁰³⁹ 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).

¹⁰⁴⁰ Alaska Department of Fish and Game. 2011. Alaska sport fish charter logbook database, 2000-2020. 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.]

¹⁰⁴¹ Soldotna Chamber of Commerce and Visitor Information Center. Visit Soldotna. Retrieved from <http://www.visitsoldotna.com/> on March 20, 2012.

Table 11. Sport Fishing Trends, Soldotna: 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 Soldotna ²
2000	34	216	5,799	10,087
2001	37	210	5,917	10,341
2002	33	222	5,914	11,712
2003	34	225	6,114	30,489
2004	33	231	6,342	35,386
2005	37	192	6,167	38,084
2006	41	227	6,091	37,639
2007	43	235	6,182	38,672
2008	30	221	6,351	37,411
2009	27	194	6,640	34,396
2010	28	177	6,419	32,797

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

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

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).

Table 12. Subsistence Participation by Household and Species, Soldotna: 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, Soldotna: 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	14	14	20	4	n/a	n/a	351	n/a	n/a
2001	20	29	18	n/a	n/a	n/a	309	n/a	n/a
2002	10	19	3	n/a	n/a	n/a	118	n/a	n/a
2003	13	23	8	n/a	106	n/a	152	n/a	n/a
2004	34	33	6	n/a	n/a	n/a	143	n/a	n/a
2005	24	23	n/a	n/a	n/a	n/a	129	n/a	n/a
2006	11	8	3	n/a	n/a	n/a	191	n/a	n/a
2007	12	9	13	n/a	n/a	n/a	203	n/a	n/a
2008	26	26	55	n/a	6	n/a	153	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, Soldotna: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	7	4	225
2004	13	n/a	n/a
2005	18	3	497
2006	16	10	1,439
2007	23	8	1,872
2008	24	3	783
2009	39	18	3,473
2010	44	7	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, Soldotna: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Sterling



People and Place

*Location*¹⁰⁴²

Sterling is located on the Sterling Highway at the junction of the Moose and Kenai Rivers, 18 miles east of the City of Kenai. Sterling is located in the Kenai Recording District, the Kenai Peninsula Census Area, and the Kenai Peninsula Borough.

*Demographic Profile*¹⁰⁴³

In 2010, there were 5,617 inhabitants in Sterling, making it the 20th largest of 352 total Alaskan communities with recorded populations that year. The community grew by 13.67% between 2000 and 2009, with an average annual growth rate of 1.04% during this period. Overall since 1990, the population of Sterling grew by 32.3%. The change in population from 1990 to 2010 is provided in Table 1.

In 2010, a majority of Sterling residents identified themselves as White (89.8%). Other ethnic groups present in Sterling that year included American Indian and Alaska Native (4.4%), two or more races (4.3%), Hispanic or Latino (2.7%), Asian (0.8%), some other race (0.4%), Native Hawaiian and Other Pacific Islander (0.1%), and Black or African American (0.1%). Between 2000 and 2010, the percentage of the population identifying themselves as White decreased by 2.9%, and the percentages of the population identifying themselves as Black or African American and some other race also decreased. During this period, there were corresponding increases in the percentages of the population identifying themselves as Hispanic or Latino, Asian, two or more races, and American Indian and Alaska Native. Changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

The average household size in Sterling in 2010 was 2.48, a decrease from 2.9 persons per household in 1990 and 2.8 in 2000. The total number of households in Sterling increased from 1,283 in 1990 to 1,676 in 2000 to 2,254 occupied housing units in 2010. Of the 3,347 total housing units surveyed for the 2010 Decennial Census, 1,865 were owner-occupied, 389 were renter-occupied, and 1,093 were vacant or used only seasonally. There were 14 residents of Sterling reported to be living in group quarters in 2000, and 19 in 2010.

¹⁰⁴² 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.

¹⁰⁴³ 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 Sterling from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	3,802	-
2000	4,705	-
2001	-	4,756
2002	-	4,781
2003	-	4,879
2004	-	4,924
2005	-	4,988
2006	-	5,059
2007	-	5,132
2008	-	5,179
2009	-	5,348
2010	5,617	-

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

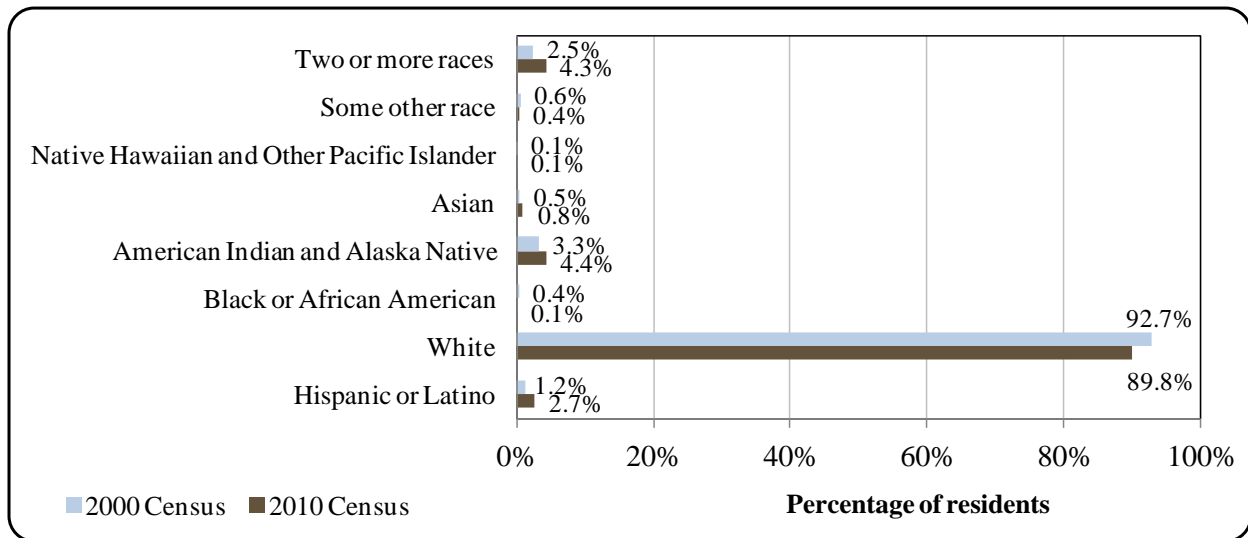
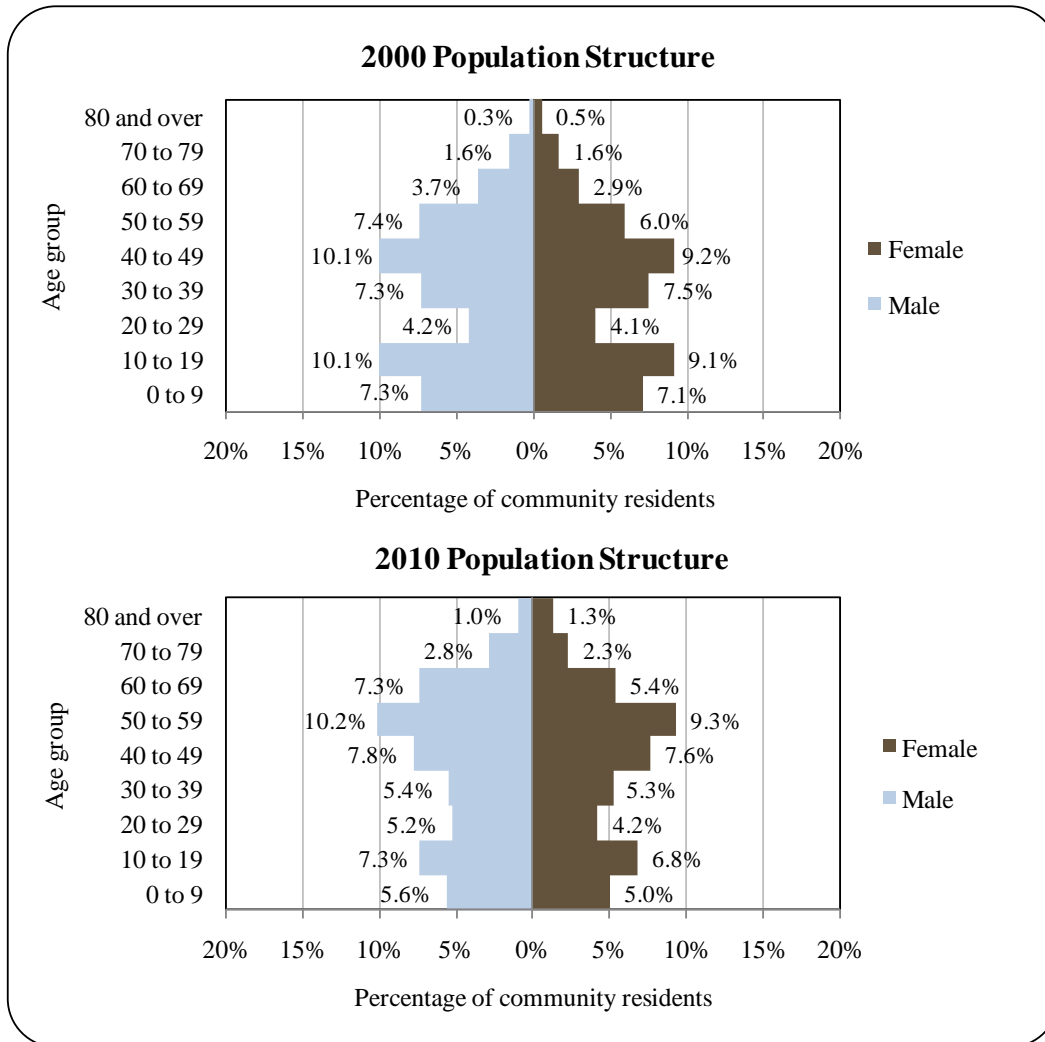


Figure 2. Population Age Structure in Sterling Based on the 2000 and 2010 U.S. Decennial Census.



The gender makeup in Sterling in 2010 was 52.8% male and 47.2% female, similar to the state as a whole (52% male, 48% female). The median age was estimated to be 44.1 years, higher than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, the largest percentage of the population fell within the age group 50 to 59 years old, with the next largest percentage falling within the age group 40 to 49 years old. Relatively few individuals were age 80 or older. The overall population structure of Sterling in 2000 and 2010 is shown in Figure 2.

According to the 2006-10 American Community Survey (ACS),¹⁰⁴⁴ in terms of educational attainment, 94.3% of Sterling residents aged 25 and over were estimated to hold a

¹⁰⁴⁴ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

high school diploma or higher degree in 2010, compared to 90.7% of Alaskan residents overall. Also in 2010, 1.3% of residents aged 25 and older were estimated to have less than a ninth grade education, compared to 3.5% of Alaskan residents overall; 4.4% were estimated to have a ninth to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 31.4% were estimated to have a high school diploma or equivalent, compared to 27.4% of Alaskan residents overall; 31% were estimated to have some college but no degree, compared to 28.3% of Alaskan residents overall; 7.8% were estimated to hold an Associate's degree, compared to 8% of Alaskan residents overall; 15.4% were estimated to hold a Bachelor's degree, compared to 17.4% of Alaskan residents overall; and 8.7% were estimated to hold a graduate or professional degree, compared to 9.6% of Alaskan residents overall.

*History, Traditional Knowledge, and Culture*¹⁰⁴⁵

The Kenai Peninsula has been the home of the Kenaitze Indians for thousands of years. Sterling is a relatively recent settlement. It was formalized as a community in 1954 when a post office was established under that name. An archaeological site containing prehistoric Dena-ina house pits has been discovered at the Izaak Walton Campground in Sterling. Sterling residents are mostly non-Native. Sterling is known as a destination for the tourism, hunting, and sportfishing industries. Much of the population lives in the community seasonally.

Natural Resources and Environment

Winter temperatures range from 4 to 22 °F (-15.6 to -5.6 °C); Summer temperatures vary from 46 to 65 °F (7.8 to 18.3 °C). Average annual precipitation is 20 inches.¹⁰⁴⁶

Sterling is located near the Kenai National Wildlife Refuge (Refuge), and the U.S. Fish and Wildlife Service (FWS) Refuge Manager is located in Soldotna. The following information is from the FWS informational website on Refuge.¹⁰⁴⁷ The Kenai Peninsula in southcentral Alaska is geologically a relatively “young” or recently exposed area. Ice and glaciers, which once covered the entire peninsula, melted from most of the peninsula only 10,000-14,000 years ago. The remnant of this once widespread ice sheet can still be observed today as the Harding Ice Field at high elevation in the eastern Kenai Mountains of the peninsula. At its greatest depth in the center, the Harding Ice Field is thousands of feet thick.

As one leaves the ice and snow of the Harding Ice Field and descends to lower elevations, the first major habitats encountered are the treeless alpine and subalpine zones. These open, rocky, and windy habitats are the home of mountain goats, Dall sheep, caribou, wolverine, marmots, and ptarmigan. Just below the more shrubby subalpine habitat one begins to encounter trees of the boreal forest. Timberline averages about 1,800 feet above sea level on the Refuge.

Most of the lower elevations on the Kenai Peninsula and Refuge are covered by boreal forest and numerous lakes. The largest lake on the Kenai Peninsula is Tustumena Lake at nearly 74,000 acres. Boreal forests are the home of moose, wolves, black and brown bears, lynx,

¹⁰⁴⁵ 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.

¹⁰⁴⁶ Ibid.

¹⁰⁴⁷ U.S. Fish and Wildlife Service. *Kenai National Wildlife Refuge*. Retrieved from <http://kenai.fws.gov/> on March 19, 2012.

snowshoe hares and numerous species of neotropical birds such as olive-sided flycatchers, myrtle warblers and ruby-crowned kinglets.

Continuing down to lowest elevation at sea level, the refuge includes the last remaining, pristine major salt water estuary - the Chickaloon River Flats - on the Kenai Peninsula. It provides a major migratory staging area for thousands of shorebirds and waterfowl in the spring and fall and nesting habitat for waterfowl and shorebirds in the summer. The area is also used as a haul-out area by harbor seals and is used by beluga whales. Thousands of salmon migrate up the Chickaloon River system each year to spawn.

The subarctic stream and lake habitats and associated populations of salmon, trout, char, and other species are highly important resources of the Refuge. Most of the aquatic habitats are in near-pristine condition and many of the fish species have significant recreational and commercial value. Several fish species are also important food resources for a variety of wildlife including loons, bald eagles, river otters, and black and brown bears. Welfare of the fish populations is dependent upon maintaining genetic variability, water quality, protection of critical rearing and spawning habitats, and escapement of sufficient spawning stocks. The national importance of these resources is particularly evident when they are compared to habitats and fish populations elsewhere in the Nation, where many resources have been severely impacted by human expansion and development.

Current Economy¹⁰⁴⁸

The community caters to the sportfishing industry and summer influx of recreational enthusiasts. The economy of the Kenai area is diverse; oil and gas processing, timber, fishing, government, retail, and tourism-related services provide employment.¹⁰⁴⁹ Top employers in 2010¹⁰⁵⁰ included Kenai Peninsula Borough School District, Central Peninsula General Hospital, State of Alaska, ASRC Energy Services O&M Inc., Kenai Peninsula Borough, Fred Meyers Stores Inc., BP Exploration Alaska Inc., Peak Oilfield Service Co., Frontier Community Services Inc., and VECO Alaska Inc.

According to the 2006-2010 ACS,¹⁰⁵¹ the per capita income in Sterling was estimated to be \$32,672 and the median household income was estimated to be \$64,545, compared to \$20,741 and \$47,700 in 2000, respectively. Taking inflation into account by converting the 2000 values to 2010 dollars,¹⁰⁵² the real per capita income in 2000 is shown to have been \$27,274 and the real household income was \$62,725. This shows that both per capita and household income increased between 2000 and 2010. In 2010, Sterling ranked 48th of 305 Alaskan communities with per capita income that year, and 62nd out of 299 Alaskan communities with household income data.

¹⁰⁴⁸ Unless otherwise noted, all monetary data are reported in nominal values.

¹⁰⁴⁹ See footnote 1045.

¹⁰⁵⁰ 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/>.

¹⁰⁵¹ 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>.

¹⁰⁵² Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved October 18, 2011 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

However, Sterling's small population size may have prevented the American Community Survey from accurately portraying economic conditions.¹⁰⁵³ An alternative estimate of per capita income is provided by economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Sterling in 2010 is \$19,222.¹⁰⁵⁴ This estimate is lower than both the 2000 Census and 2006-2010 ACS per capita income estimates, suggesting that caution is warranted when citing an increase in per capita income in Sterling between 2000 and 2010.

Based on the 2006-2010 ACS, in 2010, 63.4% of the population age 16 and older was estimated to be in the civilian labor force, compared to the statewide rate of 68.8%. Approximately 5.8% of local residents were living below the poverty line, compared to 9.6% of Alaskans overall. The local unemployment rate was 3.6%, slightly lower than the statewide unemployment rate of 5.9%. An alternative estimate based on the ALARI database indicates that the unemployment rate in 2010 was 12.1%, slightly higher than the statewide estimate of 11.5%.¹⁰⁵⁵ It should be noted that income and poverty statistics are based on wage income and other money sources; figures reported for Sterling are not reflective of the value of subsistence to the local economy.

Based on household surveys conducted for the 2006-2010 ACS, the greatest percentage of workers was employed in the private sector (66.2%), while 20.7% were employed in the public sector, 12.8% were self-employed, and 0.3% was unpaid family workers. Out of 2,610 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest percentage worked in educational services, health care, and social assistance (24.8%), construction (15.7%), agriculture, forestry, fishing, hunting, and mining (10.8%), retail trade (8.9%), and public administration (7.5%). The occupations in which the greatest percentages of the workforce were employed were estimated to be management, business, science, and arts (32%), sales and office (21.2%), and natural resources, construction, and maintenance occupations (20.5%). As with income and poverty statistics, it should also be noted that these employment statistics do not reflect residents' activity in the subsistence economy. Information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

It is also important to note that, although employment in natural resource-related industries and occupations appears high in these statistics, these figures do not reflect not fishing employment. A breakdown of the natural resources, construction, and maintenance occupation category reveals that only four individuals (less than 1% of the civilian labor force) were estimated to work in fishing, forestry, and farming occupations, while the remaining 532 individuals worked in either construction or maintenance occupations. However, fishing-related employment is likely higher than indicated by census statistics, as fishermen may hold another job and characterize their employment accordingly.

¹⁰⁵³ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

¹⁰⁵⁴ See footnotes 1050 and 1051.

¹⁰⁵⁵ See footnote 1050.

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

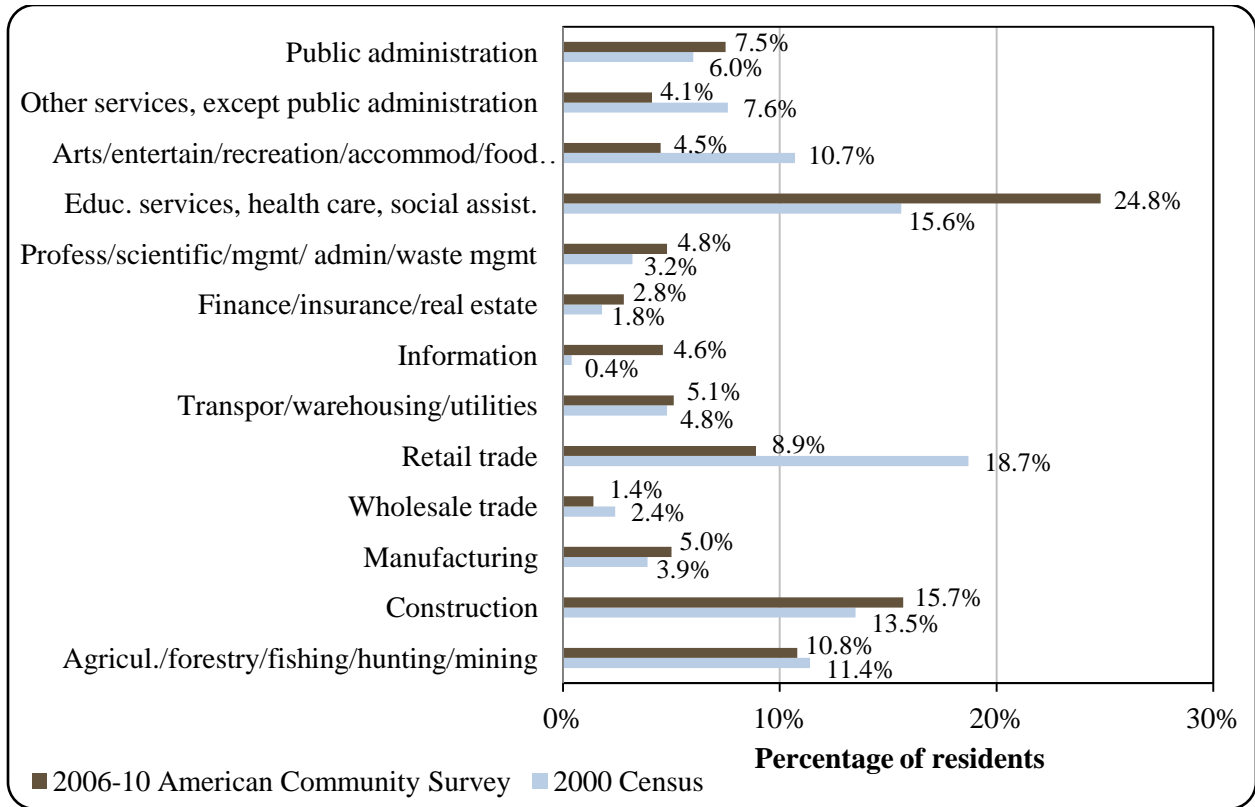
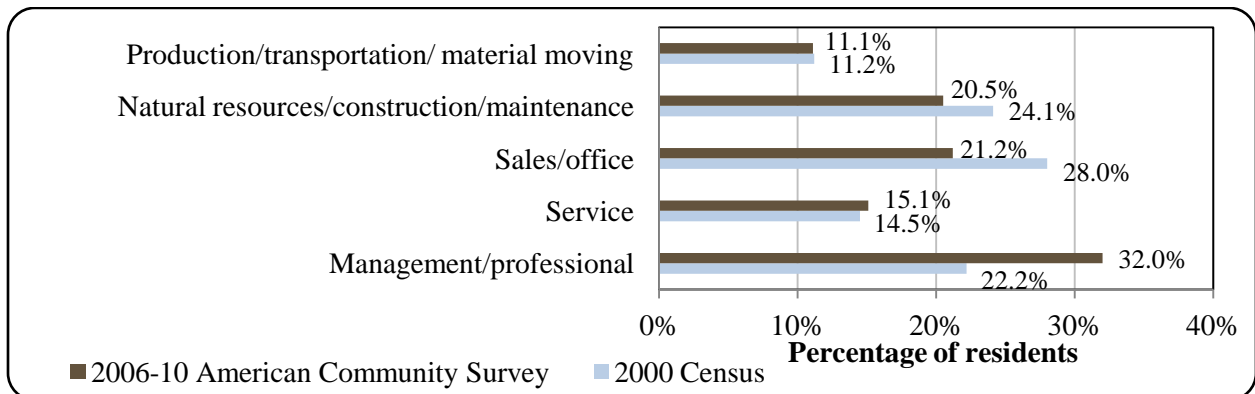


Figure 4. Local Employment by Occupation in 2000-2010, Sterling (U.S. Census).



Governance

Sterling is an unincorporated town located in the Kenai Peninsula Borough. Because of Sterling’s unincorporated status, no municipal taxes were administered between 2000 and 2010. Sterling did not receive any fisheries-related grants between 2000 and 2010 (Table 2).

Sterling was not included in the Alaska Native Claims Settlement Act (ANCSA) and no federally recognized Tribe is based in the community. The nearest offices of the Alaska Department of Fish and Game (ADF&G), the Alaska Department of Natural Resources, and the U.S. Fish and Wildlife Service (FWS) are located in Soldotna. The nearest offices of the National Marine Fisheries Service (NMFS), Alaska Department of Commerce, Community, and Economic Development, Bureau of Citizenship and Immigration Services, and U.S. Immigration and Customs Enforcement are located in Anchorage.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Sterling 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.

Infrastructure

*Connectivity and Transportation*¹⁰⁵⁶

The Sterling Highway provides access to Alaska's road system. There are several private airstrips in the Sterling area, and a private seaplane base at Scout Lake which is approximately three miles from the center of Sterling. There are two privately-operated boat launches. Nearby Kenai and Soldotna offer airports for charter services and local air traffic, as well as docking facilities. Sterling does not have a municipal airport, and nearby Soldotna does not offer regularly scheduled air service between Soldotna and Anchorage. However, Anchorage is accessible from Sterling by road and is approximately 135 miles away.

*Facilities*¹⁰⁵⁷

Occupied houses use individual water wells and septic tank systems and are fully plumbed. The school operates its own well-water system. Many homes in this area are used only seasonally. The Kenai Peninsula borough provides a refuse transfer facility at mile 85 Sterling Highway. Law enforcement services are provided by state troopers in Soldotna. Fire and rescue services are provided by Central Emergency Services. Sterling has a senior center and a school library.

*Medical Services*¹⁰⁵⁸

The nearest medical facility is the Central Peninsula General Hospital, located in Soldotna, approximately 11 miles away. Alternate health care is provided by Central Emergency Services. Emergency services have high way and helicopter access and are within 30 minutes of a higher-level satellite health care facility. Emergency services are provided by a 911 telephone service and volunteers.

Educational Opportunities

The Sterling Elementary School provides instruction to students in pre-school through sixth grade. In 2011 the school had 167 students and 14 teachers.¹⁰⁵⁹ Sterling is also a Head Start site.¹⁰⁶⁰

¹⁰⁵⁶ 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.

¹⁰⁵⁷ Ibid.

¹⁰⁵⁸ Ibid.

¹⁰⁵⁹ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

¹⁰⁶⁰ 2010 Rural Alaska Community Action Program 2010 Annual Report. Retrieved from www.ruralcap.com on December 20, 2011.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Sterling is located in the traditional territory of the Kenaitze people, a branch of Athabascan Native Americans. Historically, the Kenaitze had summer fish camps along the rivers and shores of Cook Inlet. They harvested all five salmon species using dip nets, weirs, dams, and fish traps.¹⁰⁶¹ The Soldotna area was homesteaded in the 1940s and grew along with the oil industry, which continues to be the primary economic driver in the community.¹⁰⁶² In addition, some Soldotna residents became involved in commercial fisheries that had developed in the region following the purchase of Alaska by the U.S. in 1867. Commercial harvest of salmon in Cook Inlet began in 1882¹⁰⁶³ with the development of a cannery at the mouth of the Kasilof River, in English Bay. An additional 17 canneries had been built in central Alaska by 1890.¹⁰⁶⁴ Commercial exploitation of halibut and groundfish first extended into the Gulf of Alaska (GOA) in the 1920s after development of diesel engines, which allowed fishing vessels to undertake longer trips.¹⁰⁶⁵ In the 1920s, herring had become increasingly valued for oil and meal, and a number of reduction plants were built. Commercial crab fisheries began to develop in the GOA in the 1930s. Historically, a sizable spawning biomass of herring was found in western Cook Inlet, and Lower Cook Inlet also supported commercial fisheries for Dungeness, king, and Tanner crab. However, crab and herring fisheries are currently closed due to low stock abundance.^{1066,1067}

Today, ADF&G manages the Cook Inlet salmon fishery. Lower Cook Inlet is divided into the Southern, Outer, Eastern, and Kamishak Bay fishing districts, and Upper Cook Inlet is divided into the Central and Northern fishing districts. Set gillnet is the only gear allowed in the Northern District, while set and drift gillnet and purse seine gear use is permitted in the Central District. However, seine gear use is limited to the Chinita Bay sub-district, which is open only sporadically. Purse seine gear is used throughout the Lower Cook Inlet management area, and set gillnets are limited to the Kachemak Bay sub-district.¹⁰⁶⁸

Groundfish and crab fisheries that occur within 3 nautical miles (nm) of the coast or in inland waters are under the jurisdiction of the State of Alaska, and fisheries that take place

¹⁰⁶¹ Kenaitze Indian Tribe. (n.d.). *Home Page: Raven's People*. Retrieved January 24, 2012 from <http://www.kenaitze-nsn.gov/RavensPeople.html>.

¹⁰⁶² See footnote 1056.

¹⁰⁶³ 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>.

¹⁰⁶⁴ Cook, Linda, and Frank Norris. 1998. *A Stern and Rock-bound Coast: Kenai Fjords National Park Historic Resource Study*. National Park Service Alaska Support Office, Anchorage. Retrieved January 25, 2012 from http://www.nps.gov/history/history/online_books/kefj/hrs/hrs.htm.

¹⁰⁶⁵ 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://www.iphc.int/publications/scirep/Report0005.pdf>.

¹⁰⁶⁶ 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>.

¹⁰⁶⁷ Alaska Dept. of Fish and Game. 2012. *Commercial Fisheries Overview: Lower Cook Inlet Management Area*. Retrieved June 19, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=commercialbyarealci.main>.

¹⁰⁶⁸ See footnote 1063.

beyond 3 nm in the U.S. Exclusive Economic Zone (EEZ) are under federal jurisdiction. Pacific halibut fisheries are managed under the International Pacific Halibut Commission. Cook Inlet is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central GOA federal Sablefish Regulatory Area.

In addition to federal groundfish fisheries that take place in the GOA, state groundfish fisheries take place in the inland and near-coastal waters of Cook Inlet for Pacific cod, sablefish, and rockfish. The Cook Inlet Pacific cod fishery is managed as a parallel fishery, which takes place at the same time as the federal Pacific cod fishery. The Total Allowable Catch (TAC) set by NMFS applied to both fisheries. Beginning in 1997, an additional ‘state-waters fishery’ for Pacific cod was initiated in Cook Inlet. Management plans for state-waters fisheries are approved by the Alaska Board of Fish, and guideline harvest limits (GHL) are set by ADF&G. Typically, state-waters fisheries are opened once federal and parallel fisheries close. In addition to Pacific cod fisheries, a Cook Inlet open access sablefish fishery is managed by ADF&G under a GHL, and the State also manages directed mechanical jig fisheries for lingcod and rockfish in Cook Inlet.¹⁰⁶⁹

Sterling is located in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central Gulf of Alaska Sablefish Regulatory Area. Sterling is not eligible to participate in either the Community Development Quota or Community Quota Entity programs.

Processing Plants

According to ADF&G’s 2010 Intent to Operate list, Sterling does not have a registered processing plant. The nearest processing plant is located in Soldotna.

Fisheries-Related Revenue

Sterling did not receive any known fisheries-related revenue between 2000 and 2010 (Table 3).

Commercial Fishing

In 2010, 15 Sterling residents held a total of 20 commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC) for halibut, herring, and salmon. The total number of CFEC permits and permit holders, as well as the number of CFEC permits reported as fished, increased and then decreased between 2000 and 2010. The number of halibut CFEC permits and permit holders, as well as the number of permits reported as fished, varied slightly but decreased overall between 2000 and 2010. The majority of halibut CFEC permits issued in 2010 were for the statewide longline fishery using vessels under 60 feet, with the remainder for the statewide hand troll fishery. None of the herring CFEC permits that were issued between 2000 and 2010 were reported as fished, and all were issued for the roe herring gill net fishery in Kodiak. The number of salmon CFEC permits, permit holders, and permits reported as fished increased and then decreased between 2000 and 2010. Of the salmon CFEC permits issued in 2010, the majority were for the drift gill net fishery in Cook inlet, with the remainder issued for

¹⁰⁶⁹ See footnote 1066.

the set gill net fishery in Cook Inlet and the beach seine fishery in Kodiak. Information on permits and permit holders by species is presented in Table 4.

There were 33 crew license holders in Sterling in 2010, though the number of crew license holders varied considerably between 2000 and 2010. There were no fish buyers in Sterling between 2000 and 2010, and the only years in which Sterling had a shore-side processing facility were 2008 and 2009. The number of commercial fishing vessels owned primarily by Sterling residents declined substantially between 2000 and 2010, from 94 to 11, as did the number of vessels homeported in Sterling, which declined from 69 to two during this same period. There were no vessels landing catch in the community between 2000 and 2010, and as such there were no landings or associated ex-vessel revenue to report during this period. Information on the characteristics of the commercial fishing sector between 2000 and 2010 is presented in Table 5.

There were four groundfish License Limitation Program (LLP) permits issued to four permit holders in each year between 2000 and 2010, and in each year between zero and two of those permits were reported as fished. There were four Federal Fisheries Permits (FFPs) issued to three permit holders in 2010, both of which represent a decrease from the number of permits and permit holders in 2000. However, none of those permits were reported as fished until 2004. The number of permits reported as fished varied between one and two between 2004 and 2010. Information on the permits and permit holders by species between 2000 and 2010 is provided in Table 4.

Between 2000 and 2010, the number of halibut quota share account holders declined between 2000 and 2010, as did the number of halibut quota shares held and the halibut Individual Fishing Quota (IFQ) allotment (in pounds) (Table 6). There was one sablefish quota share account holder in Sterling between 2000 and 2010, and that account holder held 10 sablefish quota shares in each year during this period. However, those sablefish quota shares translated to only one pound of sablefish IFQ allotment in each year between 2003 and 2006, with no sablefish IFQ allotment in other years during this period (Table 7). There were no crab share account holders or quota shares held by Sterling residents between 2005 and 2010 (Table 8).

As previously stated there were no commercial landings or associated ex-vessel value reported in Sterling between 2000 and 2010 (Table 9). Landings and ex-vessel revenue by Sterling residents between 2000 and 2010 are considered confidential for all species and all years due to the small number of participants, with the exception of halibut in 2000 and 2001 and salmon from 2000 to 2010. While landings of halibut increased slightly between 2000 and 2001, the associated ex-vessel revenue decreased during the same period. Landings and associated ex-vessel revenue for salmon landed by Sterling residents were highly variable between 2000 and 2010. Information on landed pounds and ex-vessel revenue by species by Sterling residents between 2000 and 2010 is provided in Table 10.

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries Business Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fisheries Resource Landing Tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Total fisheries-related revenue⁴</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>Total municipal revenue⁵</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>

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

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

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

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

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

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

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Sterling

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	4	4	4	4	4	4	4	4	4	4	4
	Active permits	2	2	1	1	1	2	1	1	0	1	1
	% of permits fished	50%	50%	25%	25%	25%	50%	25%	25%	-	25%	25%
	Total permit holders	4	4	4	4	4	4	4	4	4	4	4
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	5	5	5	5	5	6	5	5	5	4	4
	Fished permits	0	0	0	0	1	1	1	1	1	2	1
	% of permits fished	-	-	-	-	20%	17%	20%	20%	20%	50%	25%
	Total permit holders	4	4	4	4	4	5	4	4	4	3	3
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	3	4	4	6	5	5	5	6	6	4	0
	Fished permits	3	4	4	5	5	5	0	0	3	0	0
	% of permits fished	100%	100%	100%	83%	100%	100%	-	-	50%	-	-
	Total permit holders	3	4	4	5	5	5	5	6	6	4	0
Halibut (CFEC) ²	Total permits	7	7	6	7	7	7	7	9	5	5	6
	Fished permits	6	6	4	4	5	5	5	6	3	3	4
	% of permits fished	86%	86%	67%	57%	71%	71%	71%	67%	60%	60%	67%
	Total permit holders	6	6	5	6	6	6	6	7	4	4	5
Herring (CFEC) ²	Total permits	2	2	2	2	1	1	1	2	2	3	1
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	2	2	2	2	1	1	1	2	2	3	1

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Groundfish (CFEC) ²	Total permits	1	1	0	0	0	0	0	3	1	0	0
	Fished permits	0	0	0	0	0	0	0	2	0	0	0
	% of permits fished	-	-	-	-	-	-	-	67%	-	-	-
	Total permit holders	1	1	0	0	0	0	0	2	1	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	14	15	15	20	24	22	23	22	19	16	13
	Fished permits	11	10	8	15	21	19	19	17	15	13	10
	% of permits fished	79%	67%	53%	75%	88%	86%	83%	77%	79%	81%	77%
	Total permit holders	14	16	15	21	22	22	21	21	19	16	13
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>27</i>	<i>29</i>	<i>27</i>	<i>35</i>	<i>37</i>	<i>35</i>	<i>36</i>	<i>42</i>	<i>33</i>	<i>28</i>	<i>20</i>
	<i>Fished permits</i>	<i>20</i>	<i>20</i>	<i>16</i>	<i>24</i>	<i>31</i>	<i>29</i>	<i>24</i>	<i>25</i>	<i>21</i>	<i>16</i>	<i>14</i>
	<i>% of permits fished</i>	<i>74%</i>	<i>69%</i>	<i>59%</i>	<i>69%</i>	<i>84%</i>	<i>83%</i>	<i>67%</i>	<i>60%</i>	<i>64%</i>	<i>57%</i>	<i>70%</i>
	<i>Permit holders</i>	<i>17</i>	<i>21</i>	<i>20</i>	<i>27</i>	<i>26</i>	<i>23</i>	<i>22</i>	<i>25</i>	<i>24</i>	<i>19</i>	<i>15</i>

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

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

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

Year	Crew License Holders ¹	Count Of All Fish Buyers ²	Count Of Shore-Side Processing Facilities ⁴	Vessels Primarily Owned by Residents ⁵	Vessels Homeported ⁵	Vessels Landing Catch in Sterling ²	Total Net Pounds Landed in Sterling ^{2,3}	Total Ex-Vessel Value of Landings in Sterling ^{2,3}
2000	48	0	0	94	69	0	0	\$0
2001	37	0	0	102	75	0	0	\$0
2002	35	0	0	95	75	0	0	\$0
2003	29	0	0	95	73	0	0	\$0
2004	49	0	0	92	65	0	0	\$0
2005	54	0	0	20	6	0	0	\$0
2006	50	0	0	15	4	0	0	\$0
2007	46	0	0	14	4	0	0	\$0
2008	42	0	1	14	4	0	0	\$0
2009	40	0	1	12	3	0	0	\$0
2010	33	0	0	11	2	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 Totals only represent non-confidential data.

⁴ 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.]

⁵ 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 6. Halibut Catch Share Program Participation by Residents of Sterling: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Pounds)
2000	11	303,462	30,047
2001	12	304,433	36,040
2002	12	304,433	37,265
2003	11	199,175	24,373
2004	12	347,963	47,152
2005	12	252,856	34,829
2006	12	252,856	34,459
2007	10	195,696	27,728
2008	8	118,255	15,489
2009	7	118,255	13,877
2010	7	117,284	12,679

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 Sterling: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Pounds)
2000	1	10	0
2001	1	10	0
2002	1	10	0
2003	1	10	1
2004	1	10	1
2005	1	10	1
2006	1	10	1
2007	1	10	0
2008	1	10	0
2009	1	10	0
2010	1	10	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 Sterling: 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 Sterling: 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 Sterling 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	55,847	64,010	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	349,863	837,236	361,107	386,987	1,224,408	1,301,125	583,899	720,156	159,243	156,473	270,449
<i>Total²</i>	<i>405,710</i>	<i>901,246</i>	<i>361,107</i>	<i>386,987</i>	<i>1,224,408</i>	<i>1,301,125</i>	<i>583,899</i>	<i>720,156</i>	<i>159,243</i>	<i>156,473</i>	<i>270,449</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	\$146,175	\$127,119	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	\$136,722	\$201,090	\$161,795	\$220,048	\$384,117	\$527,299	\$249,556	\$348,470	\$167,432	\$167,952	\$414,744
<i>Total²</i>	<i>\$282,897</i>	<i>\$328,209</i>	<i>\$161,795</i>	<i>\$220,048</i>	<i>\$384,117</i>	<i>\$527,299</i>	<i>\$249,556</i>	<i>\$348,470</i>	<i>\$167,432</i>	<i>\$167,952</i>	<i>\$414,744</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 Kenai River is the most heavily fished river in Alaska and also supports the largest sockeye personal use fishery in the state. The Sterling Highway Bridge in Soldotna marks the beginning of the “Lower River.” This final 21-mile section is gentler than the upper portion of the river, and the river winds its way to empty in Cook Inlet near the City of Kenai. There are about 40 unique species of fish in the Kenai River. There are resident fish, which spend their entire life cycle in the river; anadromous fish, which spend part of their life in the river and part in salt water; and fish which are common to the intertidal area, which is a mixture of both fresh and salt water.¹⁰⁷⁰

The North Kenai Peninsula Management Area has two personal use sockeye salmon dip net fisheries which are open to Alaska-residents only. The Russian River sockeye salmon fishery is the second largest sockeye fishery in Alaska. Annual harvests in the Russian River regularly exceed 50,000 fish and have come close to 200,000 fish in some years. The Anchor River, Deep Creek, and Ninilchik Rivers also support large Chinook salmon runs from late May through mid-July. Coho salmon arrive in the area early August through mid-September; and Dolly Varden can be found mid-May through mid-July. Many lakes on the Kenai Peninsula are stocked with rainbow trout and salmon to support the large sportfishing economy.¹⁰⁷¹

In 2010, there were 4 active sport fish guide businesses registered in Sterling. This represents a decrease from the 12 sport fish guide businesses that were registered in 2000. A greater number of licensed sport fish guides were present throughout the period, varying between 32 and 55 guides present in Sterling each year. Between 2000 and 2010, the number of sportfishing licenses sold to Sterling residents (irrespective of the point of sale) increased to a total of 1,438 in 2010, representing 25.6% of the total population. During the same period, the number of sportfishing licenses sold in Sterling increased overall from 932 in 2000 to 1,146 in 2010 (Table 11). However, the number of sportfishing licenses sold in Sterling was smaller than the number of sportfishing licenses sold to community residents in all but three years during this period, indicating the potential that Sterling residents may pursue recreational fishing activities in other communities.

The Alaska Statewide Harvest Survey,¹⁰⁷² conducted by ADF&G between 2000 and 2010, noted the following species targeted by private anglers in Sterling: Chinook salmon, coho salmon, sockeye salmon, pink salmon, rainbow trout, Dolly Varden, whitefish, Arctic grayling, northern pike, Pacific halibut, rockfish, lingcod, Pacific cod, shark, smelt, other fish, razor clams, hardshell clams, shrimp, and other shellfish. No kept/released log book data were reported for fishing charters out of Sterling between 2000 and 2010.¹⁰⁷³

¹⁰⁷⁰ Alaska Department of Fish and Game. Division of Sport Fish. Southcentral Region. (n.d.). *Kenai Peninsula Recreational Fishing Series: The Kenai River*. Retrieved on May 9, 2012 from www.adfg.alaska.gov/static-sf/Region2/pdfpubs/kenairiver.pdf.

¹⁰⁷¹ Kenai Peninsula Borough. (2005). *Kenai Peninsula Borough Comprehensive Plan*. Retrieved on July 9, 2012 from: <http://www.commerce.state.ak.us/dca/plans/KenaiPeninsulaBorough-CP-2005.pdf>.

¹⁰⁷² 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).

¹⁰⁷³ 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.]

Sterling is located within the Kenai Peninsula Alaska Sport Fishing Survey Area. Information is available from ADF&G about both saltwater and freshwater sportfishing activity at this regional scale. Between 2000 and 2010, sportfishing activity in this region was variable from year to year, though the total number of angler days fished in the region decreased overall during this period. There were considerably more angler days fished in freshwater than in saltwater in this region between 2000 and 2010. During this period, the percentage of angler days fished by non-Alaska residents in saltwater increased only slightly, from 23% to 28%, as did the percentage of angler days fished by non-Alaska residents in saltwater, which increased from 42% to 47%. The percentage of angler days fished by non-Alaska residents was higher in freshwater than in saltwater between 2000 and 2010. Information on sportfishing trends in Sterling between 2000 and 2010 is presented in Table 11.

Subsistence Fishing

Sterling residents appear to engage in limited subsistence fishing activity. No data were reported regarding the percentage of households participating in subsistence for various species, or per capita subsistence harvest between 2000 and 2010 (Table 12). However, data were reported regarding salmon subsistence harvest totals, as well as halibut subsistence.

Between 2000 and 2010, the number of subsistence salmon permits issued to Sterling households varied between two and seven per year, and between two and five of those permits were reported as fished each year. The two salmon species reported to have been harvested using these subsistence permits were sockeye and Chinook. Information on subsistence harvest of marine invertebrates and non-salmon fish (excluding halibut) was not reported during this period. Information about salmon, marine invertebrates, and non-salmon fish is reported in Table 13.

Between 2003 and 2010, the number of Subsistence Halibut Registration Certificates (SHARC) issued to Sterling residents varied between four and six per year. The only years in which data indicate that SHARC cards were returned were 2009 and 2010. In 2009, two SHARC cards were reported to have been returned, and total halibut harvest was 132 pounds. In 2010, one card was reported returned, and total harvest was slightly higher (200 pounds). Information on subsistence halibut fishing participation is presented in Table 14.

Between 2000 and 2010, no information was reported regarding subsistence harvest of beluga whale, sea otter, walrus, polar bear, Steller sea lion, harbor seal, or spotted seal (Table 15).

Table 11. Sport Fishing Trends, Sterling: 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 Sterling ²
2000	12	50	1,333	932
2001	13	47	1,334	704
2002	12	48	1,321	853
2003	6	49	1,305	1,216
2004	8	51	1,435	1,656
2005	10	55	1,400	1,409
2006	7	53	1,364	1,095
2007	7	47	1,435	1,191
2008	3	46	1,420	1,640
2009	3	41	1,591	1,284
2010	4	32	1,438	1,146

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

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

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).

Table 12. Subsistence Participation by Household and Species, Sterling: 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, Sterling: 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	4	3	1	n/a	n/a	n/a	44	n/a	n/a
2001	4	3	18	n/a	n/a	n/a	12	n/a	n/a
2002	3	4	50	n/a	n/a	n/a	11	n/a	n/a
2003	4	6	5	n/a	n/a	n/a	21	n/a	n/a
2004	2	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	4	4	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	2	2	n/a	n/a	n/a	n/a	2	n/a	n/a
2007	7	5	4	n/a	n/a	n/a	73	n/a	n/a
2008	6	5	n/a	n/a	n/a	n/a	142	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, Sterling: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	4	n/a	n/a
2004	4	n/a	n/a
2005	4	n/a	n/a
2006	4	n/a	n/a
2007	6	n/a	n/a
2008	5	n/a	n/a
2009	5	2	132
2010	4	1	200

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, Sterling: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	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	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
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Tyonek (tie-OH-neck)



People and Place

*Location*¹⁰⁷⁴

Tyonek lies on a bluff on the northwest shore of Cook Inlet, 43 miles southwest of Anchorage. Tyonek is not located directly on the Kenai Peninsula. Tyonek is located in the Anchorage Recording District, the Kenai Peninsula Census Area, and the Kenai Peninsula Borough.

*Demographic Profile*¹⁰⁷⁵

In 2010, there were 171 inhabitants in Tyonek, making it the 210th largest of 352 total Alaskan communities with recorded populations that year. Overall since 1990, the population of Tyonek increased by 11%. The change in population from 1990 to 2010 is provided in Table 1.

In 2010, a majority of Tyonek residents identified themselves as American Indian and Alaska Native (88.3%). Other ethnic groups present in Tyonek in that year included White (5.3%), two or more races (6.4%), and Hispanic or Latino (5.3%). Between 2000 and 2010, the percentage of the population identifying themselves as American Indian and Alaska Native decreased by 7%, with corresponding increased in the percentages of the population identifying themselves as White, two or more races, and Hispanic or Latino. Changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

The average household size in Tyonek in 2010 was 2.44, a decrease from 2.8 persons per household in 1990 and 2.92 in 2000. The total number of households in Tyonek increased from 55 in 1990 to 66 in 2000 to 70 occupied housing units by 2010. Of the 144 housing units surveyed for the 2010 Decennial Census, 46 were owner-occupied, 24 were renter-occupied, and 74 were vacant or used only seasonally. Throughout this period no residents of Tyonek were reported to be living in group quarters.

The gender makeup of Tyonek in 2010 was 56.1% male and 43.9% female, slightly more skewed than the state as a whole (52% male, 48% female). The median age was estimated to be 33.6 years, lower than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. The greatest percentage of the population fell within the age group 0 to 9 years in 2010, while the second greatest percentage fell within the age group 50 to 59 years. The overall population structure of Tyonek in 2000 and 2010 is shown in Figure 2.

¹⁰⁷⁴ 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.

¹⁰⁷⁵ 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>.

According to the 2006-2010 American Community Survey (ACS),¹⁰⁷⁶ in terms of educational attainment, 85.4% of Tyonek residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaskan residents overall. Also in 2010, 4.2% of residents aged 25 and older were estimated to have less than a ninth grade education, compared to 3.5% of Alaskan residents overall; 10.4% were estimated to have a ninth to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 64.6% were estimated to have a high school diploma or equivalent, compared to 27.4% of Alaskan residents overall; and 20.8% were estimated to have some college but no degree, compared to 28.3% of Alaskan residents overall. There were no Tyonek residents estimated to have an Associate’s degree, a Bachelor’s degree, or a graduate or professional degree in 2010.

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

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	154	-
2000	193	-
2001	-	161
2002	-	181
2003	-	192
2004	-	185
2005	-	199
2006	-	199
2007	-	179
2008	-	154
2009	-	166
2010	171	-

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>.

¹⁰⁷⁶ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

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

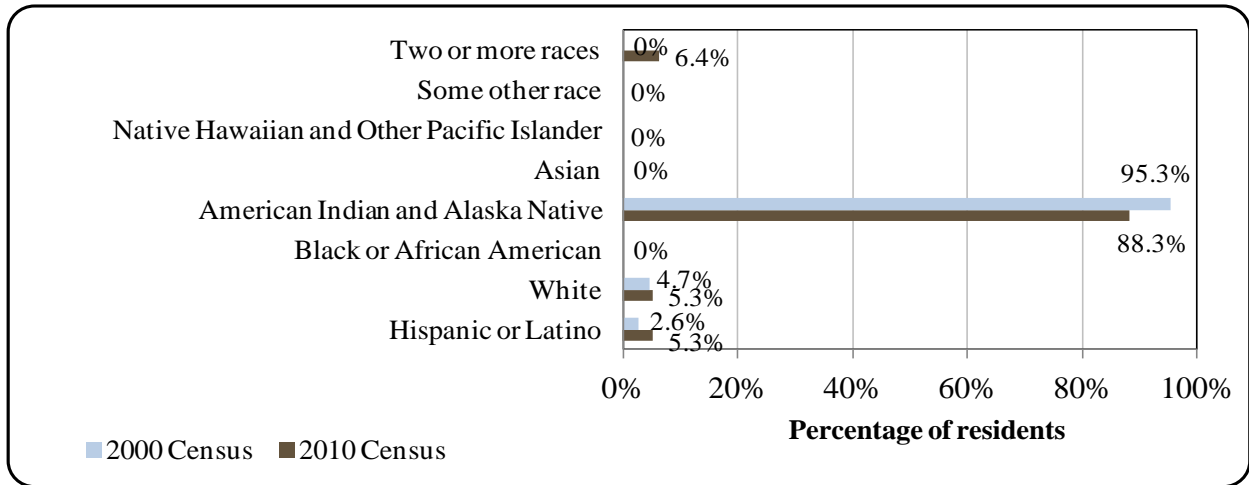
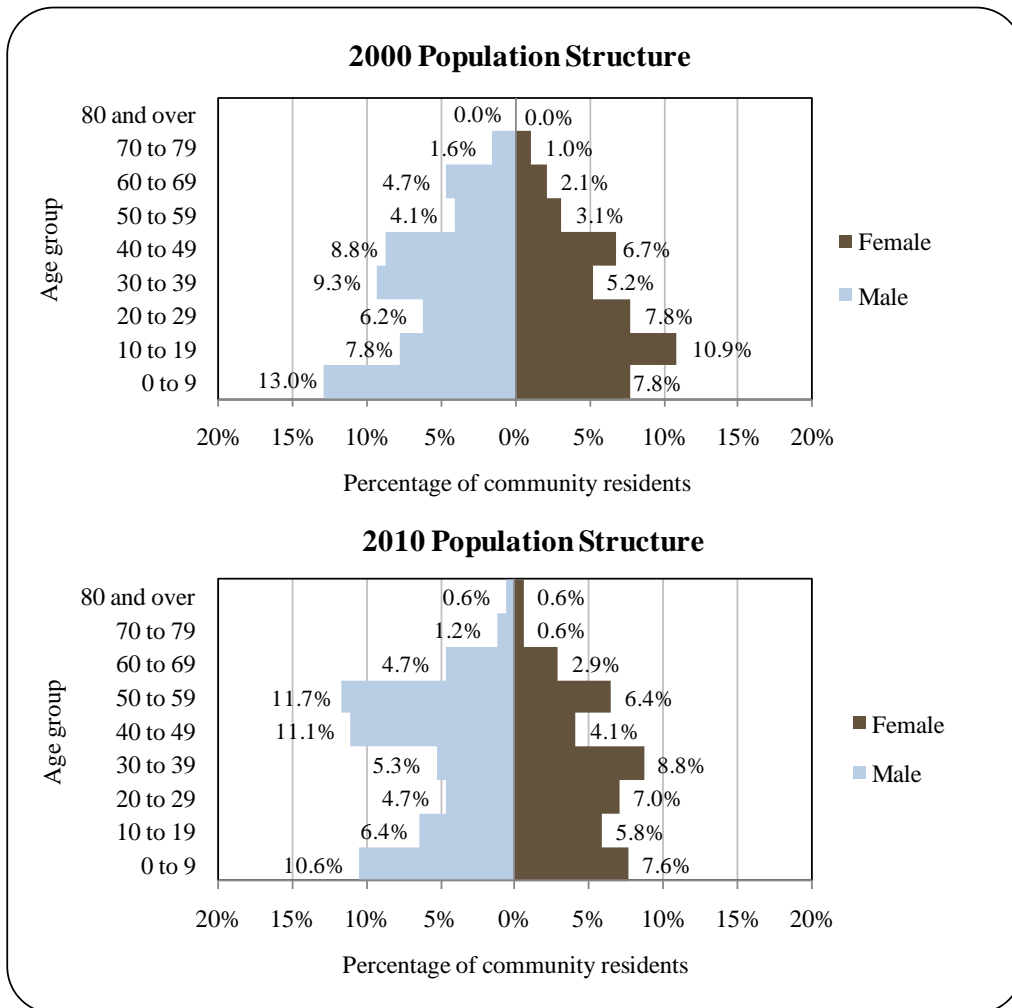


Figure 2. Population Age Structure in Tyonek Based on the 2000 and 2010 U.S. Decennial Census.



*History, Traditional Knowledge, and Culture*¹⁰⁷⁷

Tyonek is a Dena'ina Athabascan village practicing a subsistence lifestyle. Various settlements in this area include Old Tyonek Creek, Robert Creek, Timber Camp, Beluga, and Moquawkie Indian Reservation. Captain Cook's journal provides a description of the Upper Cook Inlet Athabascans in 1778 who possessed iron knives and glass beads. He concluded that the Natives were trading indirectly with the Russians. Russian trading settlements were established at "Tuiunuk" and Iliamna prior to the 1790s but were destroyed due to dissension between the Natives and the Russians. Between 1836 and 1840, half of the region's Indians died from a smallpox epidemic. The Alaska Commercial Company had a major outpost in Tyonek by 1875. In 1880, "Tyonok" station and village, believed to be two separate communities, had a total of 117 residents, including 109 Athabascans, six "creoles", and two whites. After gold was discovered at Resurrection Creek in the 1880s, Tyonek became a major disembarkation point for goods and people. A saltery was established in 1896 at the mouth of the Chuitna River north of Tyonek.

In 1915, the Tyonek Reservation (also known as Moquawkie Indian Reservation) was established. The devastating influenza epidemic of 1918-19 left few survivors among the Athabascans. The village was moved to its present location atop a bluff when the old site near Tyonek Timber flooded in the early 1930s. The population declined when Anchorage was founded. In 1965, the federal court ruled that the Bureau of Indian Affairs had no right to lease Tyonek Indian land for oil development without permission of the Athabascans themselves. The tribe subsequently sold rights to drill for oil and gas beneath the reservation to a group of oil companies for \$12.9 million. The reservation status was revoked with the passage of the Alaska Native Claims Settlement Act in 1971. Beluga, a site near Tyonek, is owned by Chugach Electric Association and provides some electricity for Anchorage.

Natural Resources and Environment

Winter temperatures typically range 4 to 22 °F (-15.6 to -5.6 °C); summer temperatures average from 46 to 65 °F (7.8 to 18.3 °C). Temperature extremes have been recorded from -27 to 91 °F (-32.8 to 32.8 °C). Average annual precipitation is 23 inches, with 82 inches of snow.¹⁰⁷⁸

Tyonek is located near the Lake Clark National Park and Preserve (LACL), an area that is managed by the National Park Service (NPS). The following information was obtained from a report issued by the NPS.¹⁰⁷⁹ The Chigmit Mountains divide the subpolar marine climate of Cook Inlet from the continental climate of Interior Alaska. Local climatic conditions within these two regimes vary with elevation and the distance from mountains and large bodies of water. LACL encompasses approximately 4 million acres of public and private lands in southwestern Alaska and contains more than 6,000 miles of rivers and streams. The Alaska and Aleutian mountain ranges form a continuous watershed divide separating the coast from the interior. Glacial ice covers approximately 30% of the park. LACL contains 130 miles of coastline in

¹⁰⁷⁷ 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.

¹⁰⁷⁸ Ibid.

¹⁰⁷⁹ Bennett, A. J., W. L. Thompson, and D. C. Mortenson (2006). Vital signs monitoring plan, Southwest Alaska Network. National Park Service, Anchorage, AK. Appendix II: Network Park Ecological Profiles.

western lower Cook Inlet. The rivers emptying into Cook Inlet carry very high loads of suspended sediments, mainly fine glacial flour.

Both white and Sitka spruce grow along the coast. Conifer forests have multi-aged trees with thick moss understory, devil's club, salmonberry, and scattered alder. The center of the park is primarily glacial ice and bedrock or till. Most valley glaciers are in retreat, leaving large expanses of moraines and ground till, which are slowly re-vegetating with mosses and lichens, fireweed and *Dryas*, willow and alder. The western side of the park is dominated by a series of large long lakes with their eastern extents in the Alaska Range and their western edge bounded by terminal moraines from the most recent advances of large valley glaciers. Low ridges and subdued mountains lie between the lake systems. The northern part of the park, by the Stony River, is boreal in character, with black spruce, muskeg, aspen and birch, and subject to wildfire. Further south, vegetation is a mosaic of spruce and mixed spruce/birch or cottonwood forests, paper birch, low shrubs dominated by dwarf birch, dwarf shrub tundra with ericaceous shrubs, scattered wetlands, and alpine tundra.

Intertidal sand flats in some locations within LACL support dense populations of mollusk bivalves, including razor, littleneck, and soft-shell clams. Forty-six species of fish are listed as present or probably present in LACL. In marine waters, small pelagic schooling fish, including capelin, sand lance, eulachon, and Pacific herring, occur in nearshore and estuarine waters, while halibut and gray cod are found offshore. Sockeye salmon are a keystone species in the LACL aquatic and terrestrial ecosystem. Sculpin, least cisco, lake trout, rainbow trout, and burbot all derive nutrients from sockeye salmon in one form or another. Salmon influence the seasonal distribution and abundance of birds and mammals that prey on them. In the interior of the park and preserve, bald eagles are exclusively associated with river-lake systems that support salmon. Bears depend on abundant salmon to bolster fat reserves vital to survival during hibernation. Because much of Lake Clark remains ice-free until February, salmon carcasses support overwintering bald eagles and are an important food resource for an array of vertebrate predators and scavengers, including wolves, coyotes, red fox, wolverine, and lynx.

Thirty-six species of terrestrial mammals are documented or expected to occur within LACL, including moose, Dall sheep, and the Mulchatna caribou herd, which calves adjacent to the western boundary of the preserve. This herd is one of the most important for local subsistence and nonlocal Alaska hunters and heavily supports Alaska's guide and transporter industry. Brown/grizzly bears, common in all habitats, are most numerous along the coast. Black bears use all areas of the park and preserve except the higher elevations. Other terrestrial mammals include wolves, lynx, coyotes, wolverines, porcupines, snowshoe hares, hoary marmots, arctic ground squirrels, and pikas, mink, beaver, river otter, red squirrel, American marten, short tail weasel, and least weasel.

Harbor seals haul out at three sites within LACL and pup near the mouth of the Tuxedni River. Beluga whales seasonally occur off the mouths of glacial rivers in both bays and are most numerous during August and September. Sea otter occasionally stray into LACL waters.

One hundred eighty-nine species of birds are documented or expected to occur in LACL. Bird species occurring within LACL include bald eagle, golden eagle, northern goshawk, sharp-shinned hawk, northern harrier, merlin, osprey, and peregrine falcons. Waterfowl nest and molt in wetlands throughout the area. Large migratory flocks of ducks, swans, and geese rest and feed in the LACL. Sea ducks, primarily white-winged scoters and surf scoters, are the most abundant waterfowl on the coast. The coast also provides important breeding habitat for mallards, American widgeon, Barrow's golden-eye, and red-throated loons. Other waterfowl occurring

within the park include diving ducks, other ducks, trumpeter swans, and Canada geese. Seabird breeding colonies occur along Cook Inlet and concentrate at Tuxedni and Chinitna Bays. Seabird surveys have revealed black-legged kittiwakes, horned puffins, double-crested cormorants, pelagic cormorants, glaucous-winged gulls, tufted puffins, common murre, and pigeon guillemots.

Current Economy¹⁰⁸⁰

Subsistence activities augment the local economy with salmon, moose, beluga whale, and waterfowl. In 2010, 17 residents held commercial fishing permits. Tyonek offers recreational fishing and hunting guide services. Some residents trap during winter. The North Foreland Port Facility at Tyonek is the preferred site for export of Beluga coal.¹⁰⁸¹ Top employers in 2010¹⁰⁸² included the Native Village of Tyonek, Tyonek Contractors LLC, Tyonek Native Corp., Kenai Peninsula Borough School, Aurora Gas LLC, and Cook Inlet Housing Authority.

In 2010, per capita income in Tyonek was estimated to be \$14,644 and the median household income was estimated to be \$20,625, compared to \$11,261 and \$26,667 in 2000, respectively. Taking inflation into account by converting the 2000 values to 2010 dollars,¹⁰⁸³ the real per capita income in 2000 is shown to have been \$14,808 and the real 2000 median household income was \$35,607. This shows a slight decrease in per capita income between 2000 and 2010 and a substantial decrease in median household income during this period. In 2010, Tyonek ranked 209th out of 305 Alaskan communities with per capita income that year, and 275th out of 299 Alaskan communities with household income data. However, Tyonek's small population size may have prevented the ACS from accurately portraying economic conditions.¹⁰⁸⁴ A potentially more accurate understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). According to the ALARI database, the per capita income in Tyonek in 2010 was \$9,736, which indicates an even more substantial decrease in per capita income compared to the real per capita income values reported by the U.S. Census in 2000.¹⁰⁸⁵ This is supported by the fact that the community was recognized as "distressed" by the Denali Commission indicating that over 70% of residents aged 16 and older earned less than \$16,120 in 2010.¹⁰⁸⁶ However, it should be noted that American Community Survey and DOLWD data are based on wage earnings and does not take into account the value of subsistence within the local economy.

¹⁰⁸⁰ Unless otherwise noted, all monetary data are reported in nominal values.

¹⁰⁸¹ 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.

¹⁰⁸² 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/>.

¹⁰⁸³ Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved October 18, 2011 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

¹⁰⁸⁴ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

¹⁰⁸⁵ See footnote 1082.

¹⁰⁸⁶ Denali Commission (2011). *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from: www.denali.gov.

Based on the 2006-10 ACS, 67.3% of the population age 16 and older was estimated to be in the civilian labor force, compared to the statewide rate of 68.8%. The local unemployment rate was 28.2%, compared to the statewide unemployment rate of 5.9%. Approximately 35.9% of local residents were living below the poverty line, compared to 9.6% of Alaskans overall. It should be noted that income and poverty statistics are based on wage income and other money sources; the relatively low income figures and high poverty rates reported for Tyonek are not reflective of the value of subsistence to the local economy. In addition, these unemployment and poverty statistics are likely inaccurate given the small population of Tyonek. A more accurate estimate is based on the ALARI database, which indicates that the unemployment rate in 2010 was 27.3%.

Based on household surveys conducted for the 2006-2010 ACS, the greatest percentage of workers was employed in the public sector (63.5%), while 36.5% were employed in the private sector. Out of 74 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest percentage worked in public administration (25.9%), transportation, warehousing, and utilities (22.4%), arts, entertainment, recreation, accommodation, and food services (12.1%), educational services, health care, and social assistance (12.1%), and construction (10.3%). Smaller percentages of the workforce were employed in finance, insurance, and real estate (6.9%), retail trade (5.2%), and agriculture, forestry, fishing, hunting, and mining (5.2%) (Figures 3 and 4). However, given the data reported in the *Commercial Fishing* section below, the number of individuals employed in the farming, fishing, and forestry industries may be underestimated by census statistics as fishermen may hold another job and characterize their employment accordingly.

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

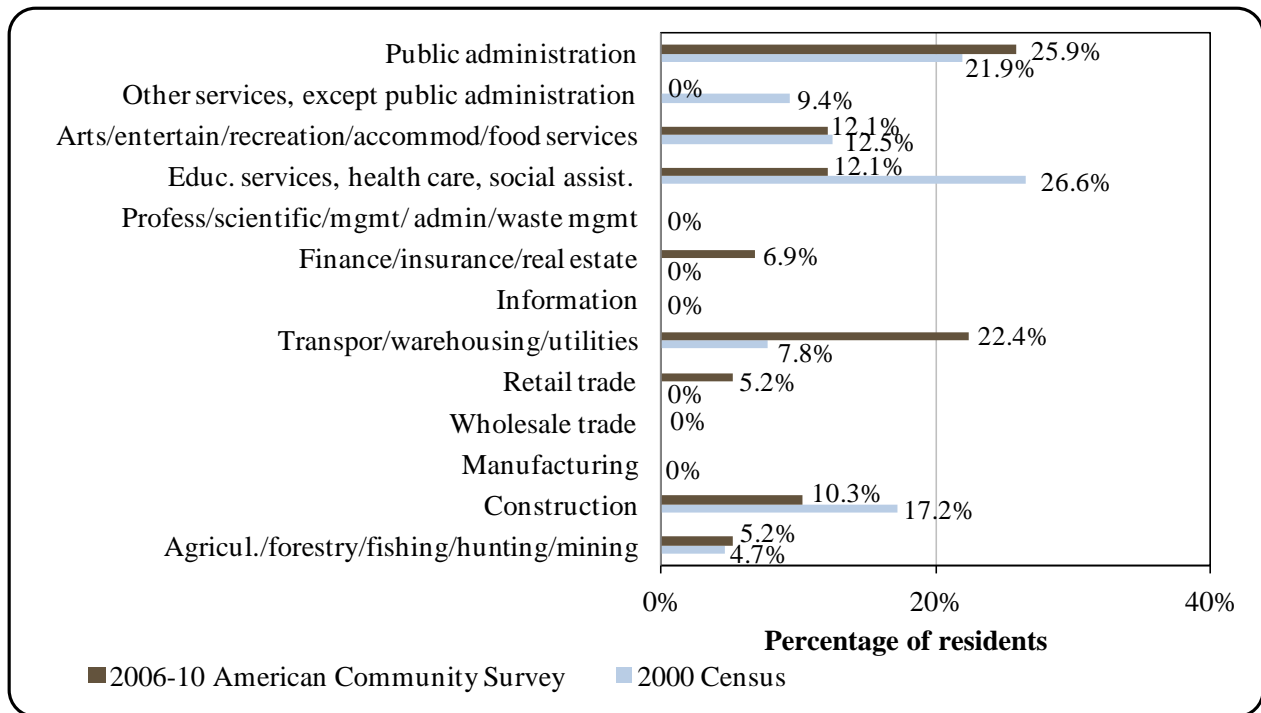
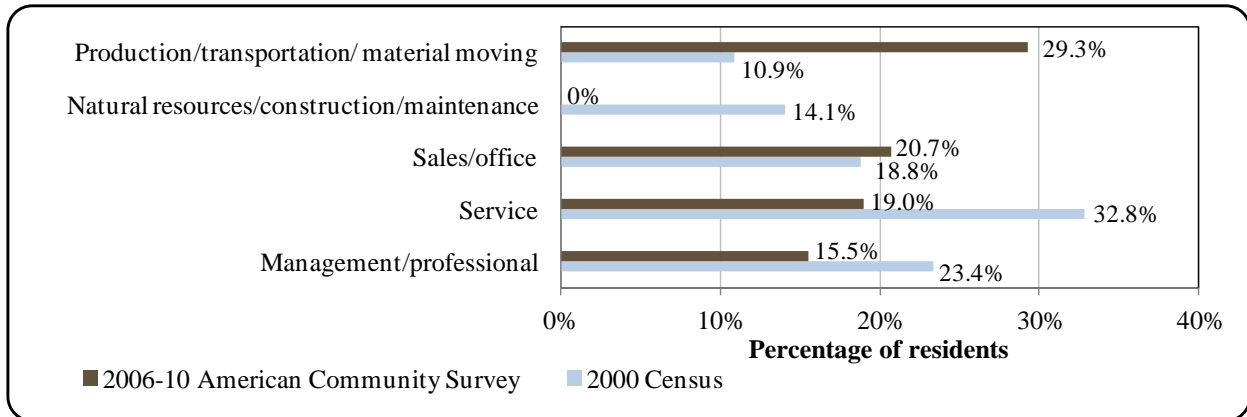


Figure 4. Local Employment by Occupation in 2000-2010, Tyonek (U.S. Census).



Governance

Tyonek is an unincorporated town located in the Kenai Peninsula Borough. Because of Tyonek’s unincorporated status, no municipal taxes were administered between 2000 and 2010. Tyonek did not receive any State or Community Revenue Sharing contributions or fisheries-related grants between 2000 and 2010. Information about selected aspects of Tyonek’s community revenue is presented in Table 2.

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Tyonek 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/dca/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.

Tyonek was included in 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 Tyonek Native Corporation. The regional native corporation to which Tyonek belongs is the Cook Inlet Region, Inc. (CIRI).¹⁰⁸⁷ CIRI is one of 12 Alaska-based regional corporations established ANCSA to benefit Alaska Natives who had ties to the Cook Inlet region. The Company is owned by more than 7,300 Alaska Native shareholders of Athabascan and Southeast Indian, Inupiat, Yupik, Alutiiq (Sugpiaq) and Aleut (Unangax) descent. It is based in Anchorage and has interests across Alaska, the lower 49 and abroad. CIRI's well-diversified portfolio of business operations and investments includes: traditional and alternative energy and resource development, oilfield and construction services, environmental services, real estate investment and management, tourism and hospitality, telecommunications, aerospace defense, private equity and venture capital investments. CIRI also created a family of nonprofit service organizations that provide needed health care, housing, employment, education and other social and cultural enrichment services for Alaska Natives and others.¹⁰⁸⁸

The closest regional offices of the Alaska Department of Fish and Game (ADF&G), Alaska Department of Natural Resources, Alaska Department of Commerce, Community, and Economic Development, National Marine Fisheries Service (NMFS), Bureau of Citizenship and Immigration Services, and U.S. Immigration and Customs Enforcement are all located in Anchorage.

Infrastructure

Connectivity and Transportation

Tyonek is not accessible by road. Permission is required to land at the local 3,000 foot long by 90 foot wide gravel airstrip, owned by the Village of Tyonek, although regularly-scheduled flights are available. A state-owned 4,003 foot long gravel airstrip is available at Nikolai Creek, and a 2,400 foot gravel airstrip, owned by Arco Alaska, is located at Beluga. Regular commercial air service is not available between Tyonek or Beluga and Anchorage. Private and charter flights are available. A local road connects to nearby Beluga. Barges deliver goods to the village.¹⁰⁸⁹

*Facilities*¹⁰⁹⁰

A piped water and sewer system serves the entire community, including approximately 90 homes and facilities. Water is derived from Second Lake and is treated and stored in a 175,000-gallon tank. Backup water supplies are available from a lake near the airport. A small coin-operated washeteria, with one washer and dryer, is available. Law enforcement services are provided by state troopers in Girdwood. Fire and rescue services are provided by the Tyonek

¹⁰⁸⁷ 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.

¹⁰⁸⁸ Cook Inlet Region, Incorporated (2012). CIRI Company Overview. Retrieved on May 10, 2012 from <http://www.ciri.com/content/company/business.aspx>.

¹⁰⁸⁹ See footnote 1087.

¹⁰⁹⁰ Ibid.

Volunteer Rescue Squad. The Boys and Girls Club operates a youth center, and Tyonek also has a community hall and a school library.

*Medical Services*¹⁰⁹¹

Medical care is provided by the Indian Creek Health Clinic, which is owned by the Village Council and operated by the Native Village of Tyonek. The clinic is a Community Health Aid Program site. Alternate health care is provided by the Tyonek Volunteer Rescue Squad. Emergency services only have air access and are provided by volunteers and a health aide. The nearest hospital is located in Anchorage.

*Educational Opportunities*¹⁰⁹²

The Tebughna School provides instruction to students in kindergarten through 12th grade. In 2011 the school had 35 students and 5 teachers.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Originally, the Kachemak Tradition Eskimos and Dena'ina Athabascans occupied the Cook Inlet region. Kachemak Eskimos were the first to arrive approximately 3,000 years ago followed by Dena'ina Athabascans. These groups utilized both marine and riverine ecosystems, relying on marine mammals and fish using drift nets, weirs, and dip nets, and basket traps. In general all five species of Pacific salmon and Dolly Varden char were utilized throughout the Cook Inlet.

Commercial fishing for Chinook salmon in the Cook Inlet began to increase substantially during the 1940s. Before 1940, commercial fishermen harvested approximately 60,000 Chinook annually, however, over the next decade harvests would more than double. Average harvests of Chinook were about 13,000 fish during the 1960s, 12,000 fish during the 1970s, 25,000 fish during the 1980s, and 17,000 fish during the 1990s. Sockeye salmon harvests did not exceed three million fish in any year until 1982. Prior to that, the peak decadal average occurred in the 1940s at 1.6 million fish. Commercial harvests of sockeye averaged 4.5 million fish in the 1980s and 4.1 million fish in the 1990s. Coho salmon harvests averaged less than 400,000 annually until the 1980s when the annual commercial harvest averaged about 540,000 fish. During the 1990s average annual harvest dropped to 360,000 fish. The largest commercial harvest of pink salmon in the Cook Inlet occurred in 1952 when almost five million were caught. Commercial harvests of chum salmon peaked in the 1980s at an average annual catch of around 906,000 fish.¹⁰⁹³

A commercial herring fishery began in the Lower Cook Inlet in 1914. A total of eight salteries were operating during the fisheries peak and over 7,900 tons were averaged between

¹⁰⁹¹ Ibid.

¹⁰⁹² Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

¹⁰⁹³ Clark, J. H.; et al. (2006). *The Commercial Salmon Fishery in Alaska*. Retrieved June 14, 2012 from: <http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1.pdf>.

1924 and 1926. In 1939, a fishery was started in and around Resurrection Bay and Day Harbor within the Eastern District. Again, peak years occurred from 1944 to 1946 where the average harvest was 16,250 tons. The fishery died out during the late 1950s due to over-harvesting. A Lower Cook Inlet herring sac roe fishery began in 1969; however, it went into decline after 1973 until limits were established in 1974. However, quotas were never followed and Outer and Eastern districts were eventually closed until 1984 for stock recovery.¹⁰⁹⁴

Today, the Cook Inlet is managed according to two distinct management areas: Upper and Lower Cook Inlet. The city of Anchorage plays a complex role in the Alaskan fishing industry. Historically, Anchorage was built around mining, and later petroleum. Fishing was never a central component of the city's economy in its early years. However, as fisheries developed in the Cook Inlet and around the Kenai Peninsula, Anchorage found itself playing an increasingly important role in the support of those fisheries.

Tyonek is located in the Tyonek Subdistrict setnet subsistence fishery, within the Northern District of the Upper Cook Inlet Management Area. The Alaska Board of Fisheries has found that salmon in the Tyonek Subdistrict are customarily and traditionally used for subsistence purposes. Subsistence fishing is open during two seasons per year. The early season runs from May 15 through June 15, while the late season is open June 16 through October 15.

Tyonek lies on a bluff on the northwest shore of Cook Inlet and is not located directly on the Kenai Peninsula.¹⁰⁹⁵ The area is included in Federal Statistical and Reporting Area 630, Pacific Halibut Fishery Regulatory Area 3A, and the Central Gulf of Alaska Sablefish Regulatory Area. The community is not eligible for the Community Development Quota program, but is eligible for the Community Quota Entity (CQE) program. However, the community has not formed a non-profit entity eligible to purchase quota share. 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 a portion 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 to 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.¹⁰⁹⁶

¹⁰⁹⁴ Schroeder, T. R. (1989). *A Summary of Historical Data for the Lower Cook Inlet, Alaska, Pacific Herring Sac Roe Fishery*. Retrieved June 14, 2012 from: <http://www.sf.adfg.state.ak.us/FedAidPDFs/FRB.1989.04.pdf>

¹⁰⁹⁵ 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.

¹⁰⁹⁶ North Pacific Fishery Management Council (2010). *Review of the Community Quota Entity (CQE) Program under the Halibut/Sablefish IFQ Program*. Retrieved October 23, 2012 from: <http://www.fakr.noaa.gov/npfmc/PDFdocuments/halibut/CQEreport210.pdf>.

Processing Plants

According to ADF&G's 2010 Intent to Operate list, Tyonek does not have a registered processing plant. The nearest processing plant is located in Anchorage.

Fisheries-Related Revenue

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

Commercial Fishing

In 2010, there were 17 Tyonek residents holding 18 commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC) for the Cook Inlet salmon set gill net fishery (Table 4). The number of CFEC salmon permits and permit holders decreased slightly between 2000 and 2010, while the number of permits reported as fished varied considerably from year to year. There were no Tyonek residents holding Federal Fisheries Permits or License Limitation Program (LLP) permits between 2000 and 2010. Between 2000 and 2010, there were an average of five crew license holders in Tyonek each year, with six crew license holders in 2010. During this period, there were no fish buyers or shore-side processing facilities located in Tyonek. There were an average of four commercial fishing vessels primarily owned by Tyonek residents between 2000 and 2010, and an average of three vessels homeported in Tyonek during this period. There were no vessels landing catch in Tyonek between 2000 and 2010, and therefore no landings or associated ex-vessel revenue to report during this period (Table 5). There were no halibut or sablefish quota share account holders located in Tyonek between 2000 and 2010 (Tables 6 and 7) and no crab quota share account holders between 2005 and 2010 (Table 8). As previously stated, there were no commercial landings recorded in Tyonek between 2000 and 2010 and therefore no associated ex-vessel revenue to report during this period (Table 9). Landings by Tyonek residents and associated ex-vessel revenue between 2000 and 2010 was considered confidential due to a small number of participants (Table 10).

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

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

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

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

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

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

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

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

NOAA-TM-AFSC-259 – Volume 9
Community Profiles for North Pacific Fisheries – Alaska: Tyonek

Table 4. Permits and Permit Holders by Species, Tyonek: 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	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, Tyonek: 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	20	19	20	21	20	19	17	17	17	18	18
	Fished permits	17	13	7	5	8	11	11	10	11	12	13
	% of permits fished	85%	68%	35%	24%	40%	58%	65%	59%	65%	67%	72%
	Total permit holders	23	21	20	21	20	21	17	16	17	17	17
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>20</i>	<i>19</i>	<i>20</i>	<i>21</i>	<i>20</i>	<i>19</i>	<i>17</i>	<i>17</i>	<i>17</i>	<i>18</i>	<i>18</i>
	<i>Fished permits</i>	<i>17</i>	<i>13</i>	<i>7</i>	<i>5</i>	<i>8</i>	<i>11</i>	<i>11</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>
	<i>% of permits fished</i>	<i>85%</i>	<i>68%</i>	<i>35%</i>	<i>24%</i>	<i>40%</i>	<i>58%</i>	<i>65%</i>	<i>59%</i>	<i>65%</i>	<i>67%</i>	<i>72%</i>
	<i>Permit holders</i>	<i>23</i>	<i>21</i>	<i>20</i>	<i>21</i>	<i>20</i>	<i>21</i>	<i>17</i>	<i>16</i>	<i>17</i>	<i>17</i>	<i>17</i>

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Tyonek: 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 Tyonek ²	Total Net Pounds Landed in Tyonek ^{2,5}	Total Ex-Vessel Value of Landings in Tyonek ^{2,5}
2000	5	0	0	3	2	0	0	\$0
2001	4	0	0	5	4	0	0	\$0
2002	6	0	0	5	4	0	0	\$0
2003	4	0	0	5	4	0	0	\$0
2004	9	0	0	4	3	0	0	\$0
2005	8	0	0	4	3	0	0	\$0
2006	3	0	0	4	3	0	0	\$0
2007	3	0	0	3	2	0	0	\$0
2008	6	0	0	4	3	0	0	\$0
2009	3	0	0	4	3	0	0	\$0
2010	6	0	0	2	1	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 Tyonek: 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 Tyonek: 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 Tyonek: 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 Tyonek: 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>

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.

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

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

Although several sport fish guide businesses were locally registered between 2000 and 2004, none were reported active. The number of sport fish guide licenses held by Tyonek residents decreased from 11 in 2000 to one in 2008, and there were no Tyonek residents holding sport fish guide licenses in 2009 and 2010 (Table 11). No kept/released log book data were reported for fishing charters out of Tyonek between 2000 and 2010.¹⁰⁹⁷

The number of sportfishing licenses sold to community residents (irrespective of the location of the point of sale) varied between 2000 and 2010, with an average of 30 sportfishing licenses sold to Tyonek residents each year. The number of sportfishing licenses sold in Tyonek was consistently lower during this period, averaging eight per year. This suggests that Tyonek residents often travel to other areas or nearby communities to participate in sportfishing activities. The Alaska Statewide Harvest Survey, conducted by ADF&G between 2000 and 2010, did not note any species as targeted by private anglers in Tyonek.¹⁰⁹⁸

Tyonek is located in the West Cook Inlet Drainages Alaska Sport Fishing Survey Area. Information is available about both saltwater and freshwater sportfishing activity at this regional scale. Between 2000 and 2010, sportfishing activity in this region was variable (Table 11). For saltwater sportfishing, non-Alaska resident angler days fished varied between 1,017 and 2,258 days between 2000 and 2005, while Alaska resident angler days fished varied between 788 and 2,595 during this period. There were no saltwater angler days fished in this region between 2006 and 2010. Between 2000 and 2003, Alaska resident anglers fished more freshwater angler days per year in this region, but between 2004 and 2010 non-Alaska resident anglers fished more freshwater angler days per year in this region.

Table 11. Sport Fishing Trends, Tyonek: 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 community ²
2000	0	11	31	11
2001	0	8	33	3
2002	0	7	27	12
2003	0	6	34	19
2004	0	7	27	0
2005	0	3	26	0
2006	0	2	26	9
2007	0	2	25	8
2008	0	1	32	7
2009	0	0	37	12
2010	0	0	28	4

¹⁰⁹⁷ 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.]

¹⁰⁹⁸ 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).

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

Year	Saltwater		Freshwater	
	Angler Days Fished – Non-residents ³	Angler Days Fished – Alaska Residents ³	Angler Days Fished – Non-residents ³	Angler Days Fished – Alaska Residents ³
2000	2,258	2,430	7,410	11,230
2001	2,037	1,483	6,555	8,557
2002	1,476	1,255	7,170	9,296
2003	1,017	788	8,057	8,413
2004	1,143	1,786	7,867	7,013
2005	1,756	2,595	8,097	8,011
2006	0	0	10,605	5,166
2007	0	0	10,242	9,463
2008	0	0	9,217	7,410
2009	0	0	8,133	5,619
2010	0	0	8,733	4,047

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

Tyonek is a Dena'ina Athabascan village where residents practice a subsistence lifestyle. Subsistence activities contribute salmon, moose, beluga whale, and waterfowl to the local diet. Some residents trap furbearers during winter.¹⁰⁹⁹

In 2006, the only year that a household subsistence survey was conducted by ADF&G in the community of Tyonek between 2000 and 2010, 75% of households were recorded as using salmon for subsistence, 15% of households used halibut, 13% used marine mammals, 28% used marine invertebrates, and 40% used non-salmon fish (not including halibut). Per capita, residents of Tyonek harvested 226.7 pounds of land and sea-based subsistence resources in 2006. Information about per capita subsistence harvest and household participation in subsistence activities is presented in Table 12.

Subsistence salmon fishing regulations for the Tyonek Subdistrict setnet fishery were established by court order in 1980. The lands adjacent to the Tyonek Subdistrict are owned by the Tyonek Native Corporation. Subsistence salmon fishing is open during two seasons per year, May 15 to June 15 and June 16 to October 15. A subsistence fishing permit is required and there

¹⁰⁹⁹ 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.

are separate permits for each season of the fishery. The permit is a household permit and comes with an annual possession limit for each household member. The gear allowed in the Tyonek Subdistrict subsistence salmon fishery includes set gillnets of a specific size. Gear must be marked, and fishing within 600 feet of another set gillnet or within 300 feet of a dam or other artificial obstruction are prohibited.¹¹⁰⁰ In years for which data were reported between 2000 and 2010, an average of 62 subsistence salmon permits was issued to Tyonek residents with an average of 48 permits returned. Chinook salmon were the primary species harvested under subsistence permits (an average of 1,095 per year), along with sockeye, coho, chum, and pink salmon.

In 2006, per capita harvest of marine invertebrates was 248 pounds and per-capita harvest of non-salmon fish (not including halibut) was 3,940 pounds. Information about subsistence harvest of salmon, marine invertebrates, and non-salmon fish (not including halibut) is presented in Table 13. The ADF&G Division of Subsistence noted that marine invertebrates harvested included clams, while non-salmon fish harvested included burbot, Dolly Varden, eulachon (hooligan candlefish), grayling, pike, rainbow trout, and whitefish.¹¹⁰¹ Data were not reported regarding subsistence harvest of halibut in Tyonek between 2003 and 2010 (Table 14).

Between 2000 and 2010, in years for which data were reported, an average of 219 pounds of marine mammals (an average of five animals per year) were harvested for subsistence use, which consists of seals. Information was not reported on any subsistence marine mammal harvest of beluga whales, sea otter, or walrus. Information about subsistence harvest of marine mammals is presented in Table 15. While information on subsistence harvest of sea lion and spotted seal was not reported between 2000 and 2010, between one and five harbor seals were harvested each year for years in which data were reported during this period.

Although not reported by ADF&G Division of Subsistence (Table 15), a review of the literature, including ethnographic and subsistence-related studies, first-hand historical accounts, and archaeological research, revealed documentation of the hunting and use of beluga by upper Cook Inlet Dena'ina, including the people of Tyonek, since at least the 1700s until present. Several sources also noted the high value that Cook Inlet Dena'ina placed on beluga products such as beluga meat and oil. Tyonek residents' level of beluga hunting activity has varied over the years, primarily due to changes in resource availability; however, cultural ties remained strong. After a decline in Cook Inlet beluga hunting during the 1940s through the 1960s, Tyonek residents began regularly hunting beluga again in the late 1970s. A decline in the Cook Inlet beluga population in the 1990s led to restrictions placed on beluga hunting in 1999. Since that time, residents' harvests of beluga, in addition to their harvest methods, have been regulated.¹¹⁰²

¹¹⁰⁰ Holen, D. and J.A. Fall (2011). *Overview of subsistence salmon fisheries in the Tyonek Subdistrict and Yentna River, Cook Inlet, Alaska*. Alaska Department of Fish and Game Division of Subsistence Special Publication No. BOF 2011-01, Anchorage.

¹¹⁰¹ 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).

¹¹⁰² Stephen R. Braund & Associates and Huntington Consulting (2011). *Relationship Between the Native Village of Tyonek, Alaska and Beluga Whales in Cook Inlet, Alaska*. Submitted to NOAA Fisheries, Juneau, Alaska, June 2011.

Table 12. Subsistence Participation by Household and Species, Tyonek: 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	75%	15%	13%	28%	40%	226.7
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, Tyonek: 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	46	45	1,083	n/a	26	6	43	n/a	n/a
2001	50	34	1,185	7	51	3	144	n/a	n/a
2002	81	52	1,477	6	132	14	294	n/a	n/a
2003	67	57	1,327	12	46	7	114	n/a	n/a
2004	75	57	1,154	n/a	120	n/a	75	n/a	n/a
2005	59	48	881	n/a	100	n/a	15	n/a	n/a
2006	63	44	770	n/a	3	n/a	8	248	3,940
2007	53	46	1,013	n/a	43	n/a	132	n/a	n/a
2008	60	45	961	7	101	10	76	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, Tyonek: 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, Tyonek: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	3	n/a
2003	n/a	n/a	n/a	n/a	n/a	5	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	1	n/a
2006	n/a	n/a	n/a	n/a	n/a	1	n/a
2007	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a	n/a	5	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

RECENT TECHNICAL MEMORANDUMS

Copies of this and other NOAA Technical Memorandums are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22167 (web site: www.ntis.gov). Paper and electronic (.pdf) copies vary in price.

AFSC-

- 258 HOFF, G. R. 2013. Results of the 2012 eastern Bering Sea upper continental slope survey of groundfish and invertebrate resources, 268 p. NTIS number pending.
- 257 TESTA, J. W. (editor). 2013. Fur seal investigations, 2012, 90 p. NTIS number pending.
- 256 LAUTH, R. R., and D. G. NICHOL. 2013. Results of the 2012 eastern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate resources, 162 p. NTIS number pending.
- 255 BOVENG, P. L., J. L. BENGTON, M. F. CAMERON, S. P. DAHLE, E. A. LOGERWELL, J. M. LONDON, J. E. OVERLAND, J. T. STERLING, D. E. STEVENSON, B. L. TAYLOR, and H. L. ZIEL. 2013. Status review of the ribbon seal (*Histiophoca fasciata*), 174 p. NTIS number pending.
- 254 ECHAVE, K. B., D. H. HANSELMAN, and N. E. MALONEY. 2013. Report to industry on the Alaska sablefish tag program, 1972 - 2012, 47 p. NTIS number pending.
- 253 ECHAVE, K., C. RODGVELLER, and S.K. SHOTWELL. 2013. Calculation of the geographic area sizes used To create population indices for the Alaska Fisheries Science Center longline survey, 93 p. NTIS number pending.
- 252 HOBBS, R. C. 2013. Detecting changes in population trends for Cook Inlet beluga whales (*Delphinapterus leucas*) using alternative schedules for aerial surveys, 93 p. NTIS number pending.
- 251 FRITZ, L., K. SWEENEY, D. JOHNSON, M. LYNN, T. GELATT, and J. GILPATRICK. 2013. Aerial and ship-based surveys of Steller sea lions (*Eumetopias jubatus*) conducted in Alaska in June-July 2008 through 2012, and an update on the status and trend of the western distinct population segment in Alaska, 91 p. NTIS number pending.
- 250 ZIMMERMANN, M., M. M. PRESCOTT, and C. N. ROOPER. 2013. Smooth sheet bathymetry of the Aleutian Islands, 43 p. NTIS number pending.
- 249 ZIMMERMANN, M., and J. L. BENSON. 2013. Smooth sheets: How to work with them in a GIS to derive bathymetry, features and substrates, 52 p. NTIS number pending.
- 248 SINCLAIR, E. H., D. S. JOHNSON, T. K. ZEPPELIN, and T. S. GELATT. 2013. Decadal variation in the diet of Western Stock Steller sea lions (*Eumetopias jubatus*). U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-248, 67 p. NTIS number pending.
- 247 CLAUSEN, D. M., and C. J. RODGVELLER. 2013. Deep-water longline experimental survey for giant grenadier, Pacific grenadier, and sablefish in the Western Gulf of Alaska, 30 p. NTIS number pending.
- 246 YANG, M-S., and C. YEUNG. 2013. Habitat-associated diet of some flatfish in the southeastern Bering Sea, 151 p. NTIS No. PB2013-107698.
- 245 ALLEN, B. M., and R. P. ANGLISS. 2013. Alaska marine mammal stock assessments, 2012, 282 p. NTIS number pending.
- 244 GUTHRIE, C. M. III, H. T. NGUYEN, and J. R. GUYON. 2013. Genetic stock composition analysis of Chinook salmon bycatch samples from the 2011 Bering Sea and Gulf of Alaska trawl fisheries, 28 p. NTIS number pending.
- 243 KONDZELA, C. M., C. T. MARVIN, S. C. VULSTEK, H. T. NGUYEN, and J. R. GUYON. Genetic stock composition analysis of chum salmon bycatch samples from the 2011 Bering Sea walleye pollock trawl fishery, 39 p. NTIS number pending.