

21. SOCIOECONOMICS

21.1 Introduction

The socioeconomic baseline studies were undertaken to collect local- and borough-level demographic and economic information for the Bristol Bay Drainages study area. The Iliamna Lake/Lake Clark study area consists of eight communities in the Lake and Peninsula Borough: Nondalton, Newhalen, Kokhanok, Port Alsworth, Iliamna, Pedro Bay, Levelock, and Igiugig. Jurisdictions also included in the study were Lake and Peninsula Borough, the Bristol Bay Borough, and the Dillingham Census Area. Demographics include population size, age, gender, race, language, and household characteristics. The discussion of economies includes information on employment, labor force status, key employers, basic industries, income, occupational information, and other data. The discussion of community infrastructure provides information on utilities, housing, education, healthcare, and public safety.

This socioeconomic baseline description includes the most recent demographic and economic data available at the time of writing, from publically available sources. Long-term historical trend analysis relies on 1990 and 2000 U.S. census data.

21.2 Results and Discussion

Selected demographic and economic information for each of the eight communities in the Iliamna Lake/Lake Clark study area, Lake and Peninsula Borough, the Bristol Bay Borough, and the Dillingham Census Area are provided in the Table 21-1.

The eight communities in the study area ranged in population from a low of 48 in Pedro Bay and Igiugig to a high of 186 in Nondalton. The percent of population who are Alaska Natives living in these communities ranged from 22 percent in Port Alsworth to 95 percent in Levelock. Alaska Native groups are mainly comprised of Central Yup'ik Eskimos, Alutiiq speakers (Aleut or Susp'iaq) and Dena'ina. Per capita income (2000) ranged from \$7,732 in Kokhanok to \$21,716 in Port Alsworth. Median household income (2000) ranged from \$18,750 in Levelock to \$60,625 in Iliamna.

Overall trends in demographics and economic status are evident upon review of the data. A review of the Lake and Peninsula data provides a regional view and indicates:

- An overall decline in population in the Lake and Peninsula Borough. While some communities are exceptions (e.g. Port Alsworth's population increased 20 percent between 2000 and 2009), there was an overall decrease in population of 11 percent from 2000 – 2009. Likewise school enrollment dropped 36 percent from 1997 to 2010.
- A substantial percentage of the population is living below the poverty level. This statistic is only available for 1999; at that time, 19 percent of individuals were living below the

poverty level and it is likely that percentage had increased by 2009. This was attributed to the economy being dependent primarily on the Bristol Bay salmon fishery as discussed below.

There are three industries that drive the economy in the study area: commercial fishing/seafood processing, the visitor industry, and government. Though the mining industry does not currently play a major role in the region's economy, a brief overview of mining-industry activity in the region is included.

21.2.1 Commercial Fishing/Seafood Processing

Commercial fishing, dominated by sockeye salmon, has a long history in the Bristol Bay region which dates back to Russian ownership of Alaska, but began in earnest in the last two decades of the 19th century. Variable fishery management practices resulted in periods of decline mixed with rebuilding of the sockeye stocks. Throughout this history, there have been periods of foreign interest; Alaskan were alternately involved in or effectively excluded from the commercial fishery throughout its history. The State of Alaska initiated a "limited entry program" in 1973. Limited entry permits could only be issued to "natural persons" to maintain a high level of resident Alaskan participation within the fishery, but they could be sold to non-residents. Distribution of the permits among Alaskans has changed significantly over the years, although the proportion of non-residents has remained about the same. Local Alaskans consistently have the smallest average earnings and non-residents the highest. Despite progressive management and the resulting sustainability of Bristol Bay salmon stocks in more recent periods, the rise of farmed salmon into the previous dominance of commercial fisheries on a world-wide scale has profoundly affected Bristol Bay fishery economics. The value of the harvest has fallen precipitously, along with the value of the permits, and the number of fisherman participating in the harvest since 1990 has fallen nearly 40 percent.

The study of current fishing participation, success and economics focuses first on the Bristol Bay area as a whole, and then focuses specifically on the Naknek-Kvichak district, the Nushagak district, and the rivers in those districts most relevant to the study area. In 2009, 2,287 Bristol Bay gillnet permits were fished (driftnet and setnet permits combined). The total harvest in 2009 of 192 million pounds was worth \$130 million. Roughly 32 million salmon were harvested in the Bristol Bay region with sockeye accounting for 31 million of this harvest.

Salmon processing in Bristol Bay is handled by both shore-based and floating facilities during the harvest season. In 2008, sockeye salmon processors in Bristol Bay produced just over 99 million pounds of finished product with a total first wholesale value of \$268 million. In 2008, seafood-processing employment in the Bristol Bay Borough was 2,943 employees (total annual count), 459 employees in the Dillingham Census Area, and 565 employees in the Lake and Peninsula Borough.

The Naknek-Kvichak District includes the Kvichak, Alagnak (Branch), and Naknek rivers. During the 2009 salmon season, 8.5 million sockeye salmon with an estimated ex-vessel value of \$35.2 million were harvested in this district. During the 2008 season, fishermen from the Kvichak River

harvested 2.9 million sockeye with an estimated ex-vessel value of \$11.5 million. Subsistence fishermen harvested a total of 48,797 sockeye in 2008.

The Nushagak District is located northwest of the Naknek-Kvichak District. In 2008, Nushagak District fishermen harvested 9 million fish with an estimated ex-vessel value of \$28 million. Nushagak/Mulchatna river drainage fishermen harvested 1.1 million sockeye with an estimated ex-vessel value of \$4.6 million in 2008. In 2008, an estimated 46,171 sockeye were harvested for subsistence use.

In fiscal year 2009, the Bristol Bay Borough received \$1,542,615 in shared fisheries business taxes; Lake and Peninsula Borough received \$151,743; and Dillingham received \$187,259. In FY 2009, Bristol Bay regional development tax receipts totaled \$1,066,270. Boroughs also can impose taxes on operators within their boundaries. In the Bristol Bay Borough in FY 2009, \$1,441,628 was collected from the three percent raw fish tax, and the Lake and Peninsula Borough collected \$1,260,995 from a two percent raw fish tax in FY 2009.

21.2.2 Visitor Industry

Tourism in the Lake and Peninsula Borough primarily involves sportfishing, hunting, and bear viewing. Secondary activities include hiking, camping, boating, and rafting. The borough contains a number of attractions, including a world-famous bear-viewing destination (Brooks Falls), , three national wildlife refuges, and numerous wild and scenic rivers, state critical habitat areas and three national parks and preserves. In 2009, 43,035 people visited Katmai National Park, 9,711 people visited Lake Clark National Park, and 14 people visited Aniakchak National Monument and Preserve. The Lake and Peninsula Borough *Comprehensive Economic Development Strategies* identified tourism as the third largest industry in the borough, after commercial fishing and government services.

21.2.3 Government

Government is by far the largest source of year-round employment in the Lake and Peninsula Borough. In 2008, federal, state, and local government (including tribal government) accounted for a monthly average of 424 jobs and nearly \$11.5 million in annual payroll. Local government accounted for 373 jobs in the borough in 2008, while there were 42 jobs in the federal government, and nine jobs in state government. Government is a stabilizing influence in the borough's otherwise highly seasonal economy. Private-sector employment in 2008 ranged from a low of 135 jobs in January to a high of 827 in July. In the same year, government employment ranged from a low of 276 jobs in July to a high of 483 in May. As reported in the Consolidated Federal Funds Report, total federal funds flowing into the borough are variable from year to year and totaled \$16.6 million in FY 2008.

21.2.4 Mining Industry

Mineral resources in the area around the Pebble Deposit include metallic base, precious, platinum-group, rare earth, and industrial rocks and minerals. The area, in general, has large quantities of sand, gravel, and quarry materials. Almost all State land within the study area is

open to mining. Historical mineral exploration dates back to the gold rush of 1898. Historical mineral exploration noted in this study included Kasna Creek and Crevice Creek. Detailed profiles of recent explorations included Big Chunk Super Project, Bonanza Hills, Iliamna Project, Kamishak Prospect, Pebble South, and other smaller claim activity including Chilikat East and Chilikat West Properties, Kolossus Property, Fog Lake, Kemuk, Koksetna, KUY, and Samuelson Property . Pebble deposit exploration dates back to Cominco American Exploration which began its investigation in 1986 and continued working in the area through 1997 before selling the claims to Northern Dynasty Minerals Ltd in 2001.

Socioeconomics—Bristol Bay Drainages

TABLE 21-1

Selected Demographic and Economic Overview of the Iliamna Lake/Lake Clark Communities, Lake and Peninsula Borough, Bristol Bay Borough, and Dillingham Census Area, Various Years

	Nondalton	Kokhanok	Newhalen	Port Alsworth	Iliamna	Levelock	Pedro Bay	Igiugig	Lake and Peninsula Borough	Bristol Bay Borough	Dillingham Census Area
Population, 2009	186	184	162	118	91	88	48	48	1,547	967	4,729
% Male Population, 2000	55%	59%	50%	46%	53%	59%	44%	43%	51%	55%	51%
% Female Population, 2000	45%	41%	50%	54%	47%	41%	56%	57%	49%	45%	49%
Median Age, 2000	28.5	29.5	20.5	25.5	31.5	27.5	35.0	36.3	29.2	36.0	28.9
Alaska Native or American Indian (alone or in conjunction with another race), 2000	90%	91%	91%	22%	58%	95%	64%	83%	80%	45%	76%
# of Households, 2000	68	52	39	34	35	45	17	16	588	490	1,529
Subsistence resources harvested (pounds per capita) ^a	358	680	692	133	469	527	306	542	N/A	N/A	N/A
Per capita income, 2000	\$8,411	\$7,732	\$9,447	\$21,716	\$19,741	\$12,199	\$18,419	\$13,172	N/A	N/A	N/A
Per capita income, 2007	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$32,231	\$48,747	\$33,380
# local employers, 2007	7	3	2	11	18	3	4	7	N/A	N/A	N/A
Commercial fishing permits fished, 2009	2	9	8	2	15	5	3	1	120	146	378
Crew-member licenses, 2009	11	15	3	3	33	8	1	2	224	149	587
Median household income, 2000	\$19,583	\$19,583	\$36,250	\$58,750	\$60,625	\$18,750	\$36,750	\$21,750	N/A	N/A	N/A
Student enrollment, FY2010	33	35	75	41	N/A	19	12	12	344	158	1,127

Notes:

a. Figures for Nondalton, Newhalen, Port Alsworth, Iliamna, and Pedro Bay are for 2004. Figures for Kokhanok, Levelock, and Igiugig are for 2005.

N/A = not available.