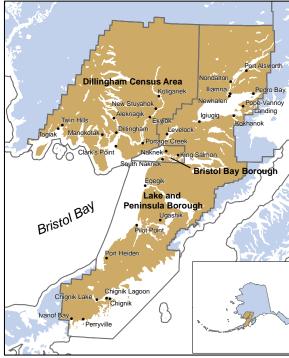
**Bristol Bay Region** 

The lay of the land

# The Bristol Bay Region

Area relies on fishing, synthesis of modern and traditional



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

f you were to drift down the Nushagak River and watch the scenery unfold between New Stuyahok and Clarks Point south of Dillingham, you would see the boreal forests of Southcentral Alaska begin to fade into the tundra marshlands of the Southwest.

Along the way, you might pass a fuel barge headed up the river or an overloaded Lund idling down, stuffed to the gunwales with fresh moose. Farther downriver you'd reach the freight dock (where the fish goes out and the groceries come in), and the fish dock (where the groceries go out and the fish comes in). A unique backdrop would lie in every direction: Kuskokwim Mountains to the north, the famous king crab fishery to the south, seemingly endless tundra stretching west, and smoke from the Alaska Peninsula volcanoes to the east.

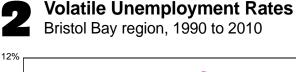
If you went into town to call home, you might hear Tagalog, Czech, Spanish, or Inupiaq while you waited at the pay phone. A walk to the coffee shop could get you an expertly made mocha, and while perusing the bulletin board offers you might find "one gallon seal oil: \$60. Also, Roomba floor cleaning robot, still in box, \$225."

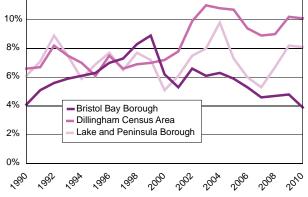
The Bristol Bay region<sup>1</sup> is in many ways the cultural and ecological crossroads of Alaska. It's home to one of the state's more diverse populations, a century-old commercial fishery, and a 6,000-year-old Yupik, Athabascan, Aleut, and Inupiat legacy.

The region is essentially rural — an informal group of the Bristol



Photo by Todd Arlo The village of Naknek, in the Bristol Bay Borough, had a population of 544 in 2010.





Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section Bay Borough, Dillingham Census Area, and the Lake and Peninsula Borough. Tiny communities accessible only by air and sea dot the rivers and beaches. (See Exhibit 1.)

Only Dillingham has more than 1,000 people, and there are just three villages with more than 500. Consistent with statewide migration patterns, many of these small villages shrank over the last decade as residents moved to more urban places. (See Exhibit 3.)

## Range in standard of living

Bristol Bay Borough's per-capita income — augmented by relatively high retirement benefits, dividends, and other transfer receipts — is second-highest in the state at about \$59,000<sup>2</sup> per year. In contrast, Dillingham Census Area and Lake and Peninsula Borough incomes are \$36,000 and \$37,000 per year, respectively — well below the state average of \$43,000.

In the summer, unemployment rates plummet to the lowest in the state sometimes less than 2 percent in Bristol Bay Borough — while winter rates reach the 12 to 13 percent range. Regional annual unemployment hovered around 7 percent in the 1990s but has become more volatile since 1999, with Dillingham Census Area's rates reaching double digits and Bristol Bay Borough's falling to 4 percent. (See Exhibit 2.)

All who live and work in the region pay a premium on fuel, food, and building materials due to the high costs of transport to the Bush. Several price indexes show Southwest communities have among the highest prices in Alaska.<sup>3</sup> The small, isolated populations and harsh conditions also mean most of the communities have water and sewer infrastructure problems endemic in much of rural Alaska.<sup>4</sup>

## **Employment and subsistence**

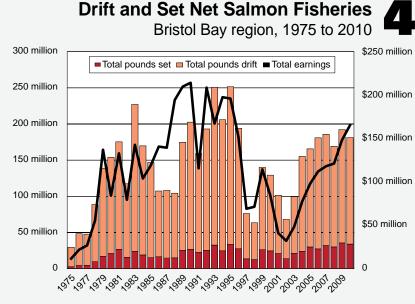
The area has abundant natural resources and though the amount used for subsistence is small, it's vital. Subsistence users in the re-

# Populations of Region's Villages

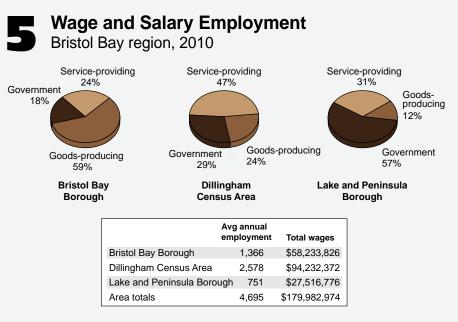
Bristol Bay area, 2000 and 2010

		5	•		
Community	Year incorporated	Census 2010 population	Census 2000 population	10-year change	Percent change
Bristol Bay Borough	1962	997	1,258	-261	-21%
King Salmon	-	374	442	-68	-15%
Naknek	-	544	678	-134	-20%
South Naknek	-	79	137	-58	-42%
Dillingham Census Area	-	4,847	4,922	-75	-2%
Aleknagik	1973	219	221	-2	-1%
Clark's Point	1971	62	75	-13	-17%
Dillingham city	1963	2,329	2,466	-137	-6%
Ekwok	1974	115	130	-15	-12%
Koliganek	-	209	182	27	15%
Manokotak	1970	442	399	43	11%
New Stuyahok	1972	510	471	39	8%
Portage Creek	-	2	36	-34	-94%
Togiak	1969	817	809	8	1%
Twin Hills	-	74	69	5	7%
Lake and Peninsula Borough	1989	1,631	1,823	-192	-11%
Chignik	1983	91	79	12	15%
Chignik Lagoon	-	78	103	-25	-24%
Chignik Lake	-	73	145	-72	-50%
Egegik	1995	109	116	-7	-6%
Igiugig	-	50	53	-3	-6%
Iliamna	-	109	102	7	7%
Ivanof Bay	-	7	22	-15	-68%
Kokhanok	-	170	174	-4	-2%
Levelock	-	69	122	-53	-43%
Newhalen	1971	190	160	30	19%
Nondalton	1971	164	221	-57	-26%
Pedro Bay	-	42	50	-8	-16%
Perryville	-	113	107	6	6%
Pilot Point	1992	68	100	-32	-32%
Pope-Vannoy Landing	-	6	8	-2	-25%
Port Alsworth	-	159	104	55	53%
Port Heiden	1972	102	119	-17	-14%
Ugashik	-	0	11	-11	

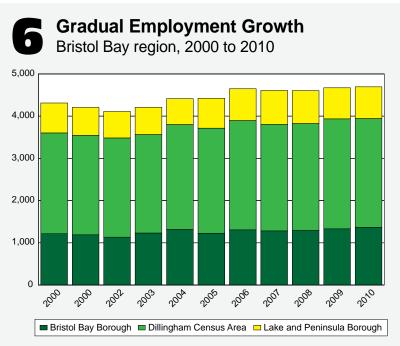
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; United States Census Bureau



Source: Alaska Department of Fish and Game, Commercial Fisheries Entry Commission



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

gion harvested 145,820 salmon in 2008, according to estimates from the Alaska Department of Fish and Game.<sup>5</sup> Residents also hunt moose, caribou, and marine mammals for food. Although detailed information on subsistence is outside the scope of this article, it's clear that the time demands of a subsistence economy limit the number of hours some residents can work in wage and salary jobs, effectively lowering potential cash income.

#### Fishing is the backbone

The area's commercial salmon fishery is the state's largest in terms of earnings: \$165 million in 2010<sup>6</sup> from 181 million pounds of fish. Bristol Bay's salmon volume is second to Prince William Sound, but more of Bristol Bay's harvests are sockeye, a higher value species. These earnings are dramatically higher than in the early 2000s, approaching levels not seen since 1996. (See Exhibit 4.) As fishermen have adjusted their expected future earnings, salmon permit prices have followed suit, also rising to mid-1990s levels.

Other significant seafood products are king crab at \$83 million, herring roe at \$3.9 million, and the Chignik salmon harvest — on the Pacific coast of the Lake and Peninsula Borough — at \$12 million in 2010.

The area exports more than just frozen and canned seafood: 60 percent of earnings in 2010 went to out-of-state permit holders. Among Alaskan permit holders, Bristol Bay residents made \$36 million — roughly 14 percent of 2010 estimated earnings in Bristol Bay and Chignik fisheries.

## Wage and salary jobs by area

Industry employment shows an economy that's compartmentalized to serve the Bristol Bay region. Canneries in Naknek and King Salmon make the Bristol Bay Borough the leader in production of goods. Dillingham leads in private services with the agglomeration of trade and visitor services, a hospital, and transportation/distribution hubs. Fif-ty-seven percent of Lake and Peninsula employment is in government. (See Exhibit 5.)

Total wage and salary employment in 2010 which does not include fish harvesting — averaged 4,695, and firms paid \$180 million in total wages. Employment inched upward over the last decade (see Exhibit 6) because of heightened summer activity. Peak July hiring increased by several hundred over the last 10 years while nonseasonal employment remained flat or declined in most sectors. Seventy percent of jobs, or 3,285, were in private-sector firms in 2010, while the rest were in government.

## Summer is the busiest time

Seasonal employment is the norm rather than the exception in the Bristol Bay region; most wages are earned in a few short months rather than in the typical year-round, 40-hour work week. In 2010, wage and salary employment fluctuated from 3,350 in December to 8,900 in July when the fishing season was in full swing. (See Exhibit 7.)

Thousands of seafood processing workers from all over the world descend on King Salmon, Naknek, Chignik, and Dillingham each summer. Housed in dormitories, nine out of 10 Bristol Bay seafood processing workers are from outside Alaska, which contributes to the area's high average nonresident employment rates among wage and salary workers. (See Exhibit 8.)

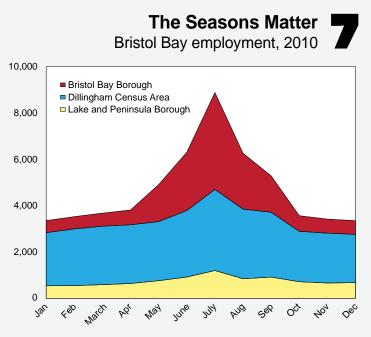
Summers also include wildlife viewing, sport fishing, and tourism in the nearby wilderness and national parks. Katmai National Park, home of the famous fishing grizzly bears and the Novarupta volcano, had a record 82,600 visitors in 2007.<sup>7</sup> Leisure and hospitality services pick up 500 employees each visitor season. Weather-dependent outdoor work — such as waste removal, transportation, building, and repairs — also increases in the summer.

#### Jobs to stick around for

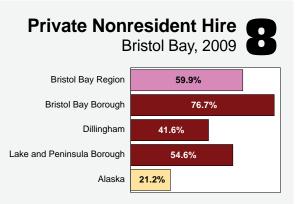
Many establishments close at summer's end, making government the employment mainstay the rest of the year. Four school districts served 1,672 pre-kindergarten through 12th-grade students in 2009–2010,<sup>8</sup> employing 514 workers in 2010. Tribal and local government agencies had average employment of 579 that year. Average yearly earnings are generally lower for local government than for the private sector or state and federal government. (See Exhibit 9.)

The University of Alaska has a small extension campus in Dillingham that bumps up state government employment to more than 100. The U.S. Postal Service, Federal Aviation Administration, Department of the Interior, and Department of Agriculture also employ more than 100 people year-round — more in the summer — and federal agencies typically pay well.

Other private industries make up the balance of employers. The hospital in Dillingham, the



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Bristol Bay Native Association, and a few small clinics create 600 health care and social assistance jobs in the region. The trade and transportation sectors provide year-round services and employed 520 in 2010. Key players were small general stores and air services.

#### The self-employed

Certain workers — such as the self-employed, most fishermen, and those in family businesses — are exempt from unemployment insurance laws, so they aren't represented in wage and salary data. However, these groups are an important part of the region's economy. The U.S. Census Bureau's Nonemployer Statistics (which are based on tax records of businesses that have no employees)<sup>9</sup> show that 1,382 firms sold \$40.7 million in goods and services in 2009, the most recent year for which data are available. Most of these sales were in fishing, though construction workers, daycare providers, bed and breakfasts, and real estate agents all contributed. (See Exhibit 10.)

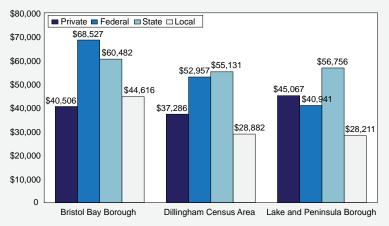
#### Industry crossroads

Though tourism is gaining a foothold, Bristol Bay's industries are built around fisheries. Economic activity hinges on logistics — shipping the product out and the goods in — while supporting the necessary workers and their villages.

The synthesis and adaptability of modern and conventional methods are what make this possible in Southwest Alaska. For example, community development fishing quotas provide education money while those same students set nets for subsistence salmon. Locals can hop on their snowmachines or on the Internet to visit neighboring villagers. Lamps are lit with seal oil as well as wind power. These crossings do not replace each other, nor are they at odds both are fundamental to the region's ability to manage and increase the benefits from their resources.

# **Government and Private Wages**

Bristol Bay average annual earnings, 2009



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

#### Notes

<sup>1</sup>Hereafter, "Bristol Bay region" or "region" will refer to the area made up of the Bristol Bay Borough, the Dillingham Census Area, and the Lake and Peninsula Borough, while "Bristol Bay" refers to the water body. <sup>2</sup>Per capita incomes are data for 2009, the most recent year available. <sup>3</sup>For more on the cost of living, see May 2011 *Alaska Economic Trends*. <sup>4</sup>Source: Indian Health Service Sanitation Tracking and Responding System: wstars.ihs.gov

<sup>5</sup>Includes the Bristol Bay and Chignik subsistence use areas. Source: Alaska Department of Fish and Game.

<sup>6</sup>Fisheries data from 2010 are preliminary estimates. Source: Alaska Department of Fish and Game, Commercial Fisheries Entry Commission <sup>7</sup>Source: National Park Service, www.nature.nps.gov/stats

<sup>8</sup>Source: Alaska Department of Education and Early Development <sup>9</sup>Receipts include gross receipts, sales, commissions, and income from trades and businesses as reported on annual income tax returns. Source: U.S. Census Bureau Nonemployer Statistics

#### Self-Employed Workers in Bristol Bay Region Select nonemployer\* statistics, 2009

	Bristol Bay Borough		Dillingham Census Area		Lake And Peninsula Borough		Totals	
Industry	Firms	Receipts	Firms	Receipts	Firms	Receipts	Firms	Receipts
Total for all sectors	261	\$8,380,000	809	\$20,023,000	312	\$12,309,000	1,382	\$40,712,000
Fishing	153	\$5,305,000	573	\$12,649,000	180	\$8,002,000	906	\$25,956,000
Construction	13	\$703,000	31	\$431,000	7	\$74,000	51	\$1,208,000
Retail trade	-	_	-	-	15	\$993,000	15	\$993,000
Transportation and warehousing	7	\$173,000	22	\$1,824,000	15	\$1,038,000	44	\$3,035,000
Real estate and rental and leasing	-	_	13	\$1,556,000	-	_	13	\$1,556,000
Professional, scientific, technical services	10	\$265,000	40	\$693,000	18	\$300,000	68	\$1,258,000
Administrative and support and waste management and remediation services	14	\$353,000	-	-	10	\$195,000	24	\$548,000
Educational services	4	\$28,000	6	\$51,000	22	\$160,000	32	\$239,000
Health and social services	-	_	31	\$183,000	6	\$17,000	37	\$100,000
Arts, entertainment, and recreation	-	_	11	\$172,000	-	_	11	\$172,000
Accommodations and food services	7	\$286,000	13	\$340,000	11	\$334,000	31	\$960,000
Other services (except public administration)	23	\$611,000	30	\$731,000	13	\$170,000	66	\$1,512,000

\*Based on tax receipts from businesses with no employees. Receipts include gross receipts, sales, commissions, and income from trades and businesses as reported on annual business income tax returns. Source: United States Census Bureau

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