

# Bristol Bay Comprehensive Economic Development Strategy

2016 Update



Prepared for the United States Department of Commerce  
Economic Development Administration





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## Summary

The Bristol Bay Native Association (BBNA) has operated an Economic Development Program since 1974. Bristol Bay Native Association serves as the U.S. Department of Commerce Economic Development Administration’s designated planning organization for the Bristol Bay region. The Bristol Bay Comprehensive Economic Development Strategy (BBCEDS) is designed to bring together public and private sectors in the creation of an economic development guide to diversify and strengthen the regional economy. The BBCEDS is the product of ongoing planning efforts by the strategy committee. Tribally enrolled members and other participants concerned for the sustainability, long term responsible economic development, job creation and overall improvement in the quality of live in the Bristol Bay region.

## Planning and Project Oversight CEDS Steering Committee 2016

NAME	COMMUNITY	OCCUPATION	SECTOR
Ranya Aboras	King Salmon	Planner	Lake & Pen Borough
Erik O’Brien	Anchorage	Economic Development	SWAMC-ARDOR
Anna May Ferguson	Togiak	Executive Committee	Private Sector
Betty Gardiner	Clarks Point	Executive Committee	Private Sector
Charlie Johnson	Portage Creek	Executive Committee	Private Sector
Patrick Kosbruk	Perryville	Executive Committee	Private Sector
Deborah McLean	Dillingham	Director	UAF-Bristol Bay Campus
Alice Ruby	Dillingham	Mayor	City of Dillingham
Tanya Salmon	Igiugig	Executive Committee	Private Sector
Victor Seybert	Pilot Point	Executive Committee/ Chair CEDS Committee	Private Sector
Norm Van Vactor	Dillingham	Chief Executive Officer	BBEDC
Rae Belle Whitcomb	Dillingham	Director	Private Sector
Frank Woods III	Dillingham	Fisherman	Private
Lisa Wimmer	Dillingham	President	Financial Institution
Carvel Zimin Jr.	South Naknek	Assembly Member	Bristol Bay Borough
Ralph Andersen	Dillingham	BBNA Pres. & CEO	Ex Officio
Ted Angasan	South Naknek	BBNA Chairman	Ex Officio

## What is a CEDS?

A Comprehensive Economic Development Strategy (CEDS) is the result of an ongoing planning process that studies local economic conditions, identifies problems and opportunities, sets goals and objectives, coordinates implementation activities, and evaluates accomplishments. A CEDS identifies community needs and provides development strategies that coordinate the different efforts to yield efficiencies. A CEDS facilitates a unified effort to create jobs, raise income levels, diversify the economy, and improve the quality of life while protecting the environment. It adopts a logical process for long-range development while actively working on short-range problem solutions. (EDA-CEDS Req)

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The Bristol Bay CEDS promotes sustainable economic development within the Bristol Bay Region in a collaborative approach to improve in the economy. The BBCEDS: 1) Fosters a more stable and diversified economy; 2) Creates and sustains employment opportunities and regional investments; 3) Strengthens the skills and qualifications of the workforce; and 4) Improves the quality of life throughout the region.

## **Partners and Projects**

The BBCEDS is guided by locally driven initiatives in partnership with the local, state and federal government to stimulate economic development and produce healthy, sustainable local economies. These collaborations help the Bristol Bay Region achieve its goals and objectives.

### *Municipal Governments*

- First and Second Class Cities provide services and programs.
- Boroughs provide services and programs.

### *State Government*

- Updated community profiles are provided through the State of Alaska Department of Commerce, Community & Economic Development, Division of Community and Regional Affairs (DCRA)
- Alaska Department of Fish and Game (ADF&G) manages resources.

### *Federal Government*

- Economic Development Administration (EDA) provides the Planning Grant to update and implementation the CEDS.
- Department of Interior, Fish and Wildlife Service, Togiak National Wildlife Refuge manages wildlife.

### *Regional Native Organizations*

The Bristol Bay Partnership is a partnership of the five Regional Organizations, four of which are tribally directed organizations that work together on projects and initiatives of mutual interest:

- Bristol Bay Native Corporation (BBNC), a major land owner and investor.
- Bristol Bay Economic Development Corporation (BBEDC), the Community Development Quota (CDQ) holder that makes fisheries related investments in the Region.
- Bristol Bay Housing Authority (BBHA) receives HUD and other funds to improve housing.
- Bristol Bay Area Health Corporation (BBAHC), the major healthcare provider.
- Bristol Bay Native Association is a human services organization serving Tribes and their members.

### *Tribal Governments*

- Tribes provide programs and services or compact with regional organizations to serve the needs of their Tribal members.

This document is portions of the CEDS (2011-2016) that is updated annually. The work plan is to be revised and updated annually as actions are completed. This update is a guiding document that provides staff with direction for working with regional partners and highlights the regions' strengths, weaknesses, opportunities and threats (SWOTS). To begin this process, a SWOTS analysis was conducted throughout the year. In December 10, 2015, a presentation of "Where are we now" and "How do we get there" was presented to over 300 individuals at the Bristol Bay Native Corporation Leadership Forum. SWOTS presentation and analysis was conducted to UAF-Bristol Bay Campus students and BBNA's Senior Management team and Program Managers. On March 22, 2016 CEDS steering committee meetings was held to prioritize the analysis and help develop the work plan, goals and objectives, and identify regional partners to move forward in the creation of an economic development CEDS 2016 update.

## Planning Organization

Bristol Bay Native Association (BBNA) is the tribally directed regional non-profit corporation for the Bristol Bay Region. BBNA is a tribal consortium with the 31 Bristol Bay Tribes in its corporate membership. BBNA represents the Tribes collectively and assists them with a variety of services and programs.

BBNA provides a variety of services and programs with funds from contracts and grants from the State and Federal Governments. The **Community Services Department** provides technical assistance to tribal organizations on planning, village compacting, training & technical assistance, and administers the state-funded Public Safety (VPSO) Program. The **Family Service Department** includes family violence prevention, children’s services, wellness, food bank, and aging and disabilities services. The **Workforce Development Department** provides employment and training, cash assistance services, and vocational rehabilitation. The **Natural Resources Department** provides the marine mammal, environmental, brownfields, fisheries monitoring, and subsistence programs. **Land Management Services** covers land transactions, acquisitions, probate, Alaska National Interest Lands Conservation Act, forestry, and GIS services. **Child Development** provides Head Start, child development, child care, and career development. The **Program Development** provides planning and program development through its Economic Development Programs. The **Transportation & Infrastructure Development** provides assistance and coordination of road and building projects.

The Tribes provide their membership with a variety of programs and services including infrastructure, housing, healthcare, education, land management, social services, Tribal courts, economic development, energy, and cultural activities. The tribes contract with Bristol Bay Native Association (BBNA) to provide programs and services to their members at the level of assistance they require.

*BBNA’s mission is to maintain and promote a strong regional organization supported by the Tribes of Bristol Bay to serve as a unified voice to provide social, economic, cultural, educational opportunities and initiatives to benefit the Tribes and the Native people of Bristol Bay.*



The region extends about 350 miles north to south, and about 230 miles east to the west. The Bristol Bay Region covers an area about 46,573 square miles, roughly the size of the state of Ohio. The region is outlined by three mountain ranges with numerous watersheds that serve as the habitat for five species of salmon, herring, and halibut. The habitat is mostly pristine, intact and unchanged for thousands of years providing a wide variety of other aquatic and natural resources.

**Figure 1: Bristol Bay Region**

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## **Bristol Bay Regional Vision Project Used to Guide Planning**

From September 2010 to November 2011, the Bristol Bay Regional Vision Project took the people of Bristol Bay through a visioning process. The Regional Vision project demonstrated that there is unity across this large and diverse region. Our foundation is our commitment to families and our connection to the land and waters. Our shared values include community, culture and subsistence.

Our Vision is: We believe future generations can live healthy and productive lives here. We see a future of educated, creative people who are well prepared for life through: 1) Safe & healthy families; 2) Excellent schools; 3) Local jobs; and 4) Cultural values & tradition.

This proposal supports the Bristol Bay Regional Vision in regards to collaboration and cooperation, energy, and capacity building. Public meetings were held throughout the region providing the widest possible grassroots participation. It was the first regional planning process of its kind in the region and set an example for regional planning in the state. The Bristol Bay Regional Vision Statement reflects the shared values of the people of the region based on input from meeting participants. Participants responded to an identical set of questions using electronic voting keypads, and engaged in conversations around issues important to them in their community.

Although the region is diverse covering a vast area encompassing three Alaska Native races with differing cultures, social structures, resources, and economies, the project discovered that there is strong agreement about the most important aspects of peoples' lives and their vision for the future.

The following themes emerged from meeting results:

- Participants in all communities hold family, connection to the land and water, and subsistence activities as the most important parts of their lives today, and expect the same to be true 25 years from now.
- When asked about things they would like to change in their community, the most often cited issue was alcohol/drug abuse and/or fear of domestic violence.
- People said the goal of education is to prepare youth to graduate with skills needed for success in college or vocational schools.
- Respondents welcome sustainable economic development that is based largely on renewable resources. Overwhelmingly, people said large development must not threaten land and waters.
- People believe they can live healthy and productive lives here in the next 25 years.

On January 30, 2011 the Commissioners drafted the regional vision statement after listening to the opinions and concerns of nearly 1,000 people. The vision statement was presented in a second round of meetings where people approved the vision statement, which now has the authority of the people.

While the goal of the project was at the regional level, it was recognized that the information would be valuable community by community.

## Bristol Bay Regional Vision Statement

### Bristol Bay Regional Vision Statement

**The foundation** of the Bristol Bay Region is committed families, connected to our land and waters.

**We believe** future generations can live healthy and productive lives here. Across our region, we share common values of community, culture, and subsistence.

**We see** a future of educated, creative people who are well prepared for life. This requires:

- Excellent schools
- Safe and healthy families
- Local jobs
- Understanding our cultural values and traditions

**We assert** the importance of local voices in managing our natural resources to continue our way of life.

**We welcome** sustainable economic development that advances the values of Bristol Bay people. Our future includes diverse economic opportunities in businesses and industries based largely on renewable resources. Large development based on renewable and non-renewable resources must not threaten our land, our waters, or our way of life.

**We foster** cooperation among local and regional entities to coordinate infrastructure planning for stronger, more affordable communities. Investments in energy, housing and transportation promote sustainable communities and spur economic development.

**We recognize** the need to locate new sources of capital to implement this vision with a goal of generating self-sustaining regional economies.

**We are unified** to secure a prosperous future.

(BBRV Commissioners) February 2011

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## Bristol Bay Region Economic Overview:

There is a great need to promote sustainable economic development within the Bristol Bay region where the cost of living is very high, cost of energy is high, unemployment rate is high, and jobs are scarce.

The region faces two major economic barriers that impede upon economic development efforts. One is the high cost of living and energy in the region (among the highest in both the state and nation). The cost for home-heating fuel and electricity in many of the villages is four times as high as the Anchorage area. The region also faces the high cost of transporting goods, materials, and people in and out of the region. No roads or railroads exist in the region linking the region to Anchorage. All goods must be either flown in or shipped in by barges.

This document presents basic demographic and economic data on Bristol Bay, including the Dillingham Census Area, the Lake and Peninsula Borough, and the Bristol Bay Borough. In addition, regional and local priority projects have been identified, including projects identified by the Bristol Bay Comprehensive Economic Development Strategy Committee.

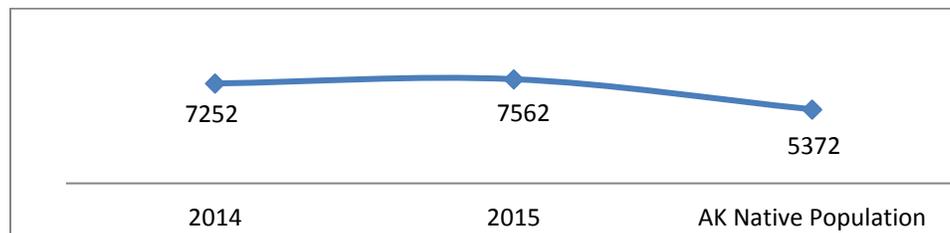
Identifying priority projects for collaboration is extremely challenging in an area as large, diverse, road less, and remote as Bristol Bay. Each area and each community has critical needs to improve its economy and meet the needs of its residents. This document is but another step in gathering and organizing information and laying the groundwork to identify projects suitable for collaboration and cooperation. To understand the needs and barriers in the Bristol Bay Region, some demographics and statistics follow.

### Population

For census purposes, there are three separate census areas. The Dillingham Census Area includes eleven communities located in the Nushagak and Togiak areas. The Bristol Bay Borough Census Area includes the communities of King Salmon, Naknek, and South Naknek, and the Lake and Peninsula Borough Census Area includes 17 communities located on the Alaska Peninsula and Lake Iliamna areas. Three of Alaska's major ethnic Native groups - Yup'ik Eskimos, Athabascans, and Aleuts live in the region. The Alaska Native population for the region is about 5,372 or 71% of the total population.<sup>1</sup>

According to State of Alaska estimates for 2015, the total population for the Bristol Bay area is 7,562 living in 31 communities, up 1.0% from the 2014 total population of 7,259.<sup>2</sup>

Figure 2: Total Population



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<sup>1</sup> State of Alaska Department of Labor and Workforce Development, Research and Analysis Section, Alaska Local and Regional Information (ALARI) webpage: <http://live.laborstats.alaska.gov/alari/>

<sup>2</sup> State of Alaska Department of Labor and Workforce Development, Research and Analysis Section website: <http://laborstats.alaska.gov/pop/popest.htm>

**Population by Age and Gender**

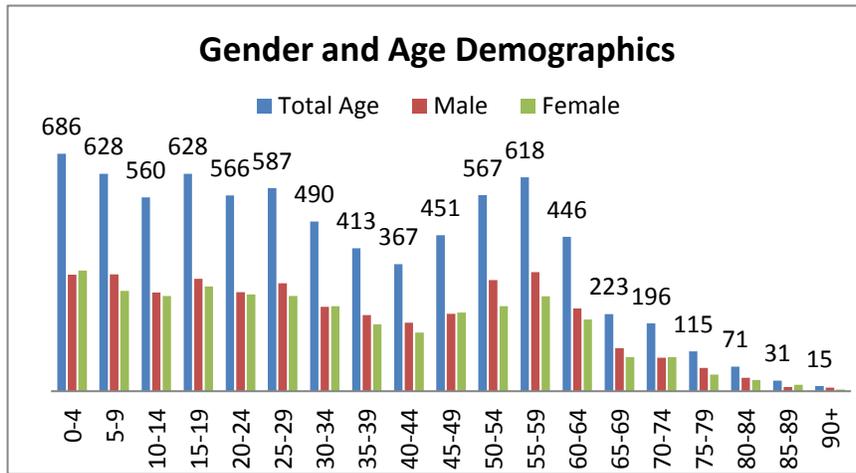


Figure 3: Population by Age and Gender

The age distribution illustrated in Figure 2 causes some areas of concern, especially for the dwindling number of elders’ ages 80-90 years old. However, the region has a fairly young population. 16% of the total population is classified as youth in the Bristol Bay region. Youth, for statistical purposes, are those individuals between the ages of 15-24 years of age.

The total population is fairly evenly divided by gender, with 52% males and 48% females. A full description of the population by age and gender can be seen in Figure 2.

**Regional Earnings: Per Capita Income**

Wages are higher in the region reflecting the higher cost of living, but wages generally do not keep up with rising costs. Many young families often reside with parents or relatives due to the shortage of housing. Table 1 show that household incomes reveal the effect of more than one wage earner and/or multifamily households. Per capita income is \$47,552 and Median Household Income is \$61,903.<sup>3</sup>

	Dillingham	Bristol Bay	Lake & Pen	Region Combined
Median Age	29.1	42.8	31.2	34.4
Average Family Size	4.35	2.93	3.17	3.5
Average Household Size	3.5	2.32	2.74	2.85
Per Capita Income	\$43,268	\$54,474	\$44,915	\$47,552
Median Household Income	\$60,800	\$84,000	\$40,909	\$61,903

Table 1: Median Income

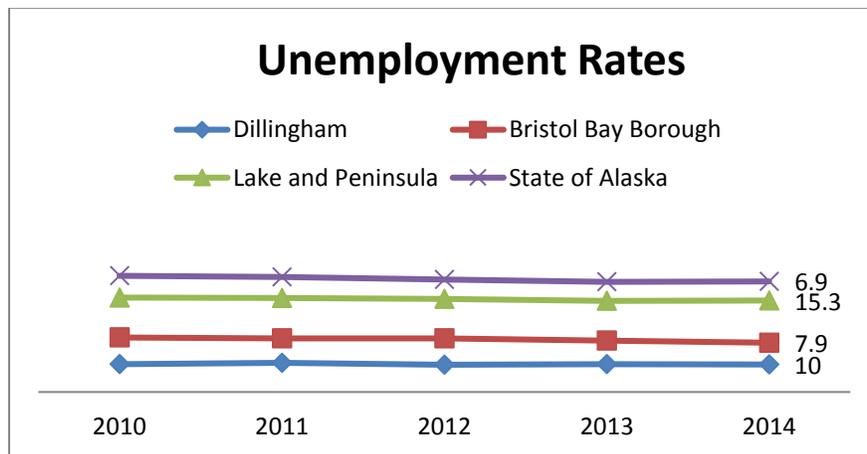
<sup>3</sup> “Bristol Bay Comprehensive Economic Development Strategy,” (2015) Bristol Bay Native Association

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## Regional Economy

There are two types of regional economies - year-round and seasonal. The two transportation hubs, Dillingham and King Salmon, have fairly stable year-round economies. Commercial fishing and salmon processing, government jobs, transportation employment, and service industries are their economic mainstays.

For the other 28 communities, their economies of commercial fishing and subsistence activities are seasonal and offer little employment alternatives. With the salmon season lasting three months (late May through July), the seasonal fluctuations of the salmon stocks play a major part in the economic conditions of these communities. During the off fishing season, unemployment levels increased to more 15% in the Lake and Peninsula Borough, compared to the State of Alaska at 6.9%<sup>4</sup>.



**Figure 4: Unemployment rates**

Full time employment in some of the regions' smaller communities is generally limited to the schools and community and government services. Some factors such as lack of employment opportunities, lack of employment skills that could potentially secure long-term employment, substance abuse and generally low-paying jobs affect this regions persistent unemployment among its working age class. There are some part-time, seasonal and on-call positions that maybe available such as cashiers, teacher aids and or substitutes, laborers and the like.

## Education

Bristol Bay Native Association in partnership with the State and Federal agencies provides Head Start to children ages three to five years old. Head Start's mission is to promote and develop the education, health, culture and wellbeing of our children, families and communities<sup>5</sup>. Head Start services are family centered,

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<sup>4</sup> Alaska Department of Labor and Workforce Development, Research and Analysis Section., <http://live.laborstats.alaska.gov>

<sup>5</sup> Bristol Bay Native Association Head Start Program. [www.bbna.com/our-programs/head-start/](http://www.bbna.com/our-programs/head-start/)

and are located in Togiak, New Stuyahok, Manokotak, and Dillingham. Head Start enrolls at an average of 100 children.

There are four school districts in the region with 25 schools in operation throughout the region, totaling 1,752 school age children in the region. According to the Department of Labor and Workforce Development, graduation rates in the region are at 71 % and dropout rates in the region is at 6%<sup>6</sup> as illustrated in Table 2. Eligible for free or reduced lunches averages at 67.85% for children who meet the State of Alaska Department of Education and Early Development eligibility guidelines. School districts student eligibility for free and reduced lunches can be an economic indicator of employment opportunities or in such case, a lack of wages in the region.

District Name:	SWRS	DCSD	BBSD	LPSD
Operated By	REAA	City	Borough	Borough
Total Number of Schools	7	3	2	13
Total Number of Teachers	59	51	18	48
Total Number of Students	601	535	153	363
Student/Teacher Ratio	11.1	10.6	11.9	7
Graduation Rate	57.7%	75.0%	62.5%	89.3%
Dropout Rate (7-12 Grade)	9.10%	7.50%	0.00%	3.20%
Percent Native Students	96.00%	61.00%	59.00%	77.00%
Percent Eligible for Free or Reduced Lunch	86.15%	72.30%	47.79%	65.18%
Source: Department of Labor and Workforce Development Feb 19, 2015				

**Table 2: Schools and enrollment**

## Higher Education

Regional opportunities for higher education include University of Alaska Fairbanks Bristol Bay Campus (BBC) located in Dillingham, Alaska with four satellite campuses located in New Stuyahok, Togiak, King Salmon and Unalaska/Dutch Harbor. The campus offers a broad range of courses that are available by audio conference. BBC provides vocational/technical and academic courses to this region’s communities. Most students are enrolled part time because they have jobs, children, or other community responsibilities. Alaska Natives make up 54% of the campuses student body<sup>7</sup>.

Southwest Alaska Vocational and Education Center (SAVEC) is a non-profit Rapid Response Training Center, located in Southwest Alaska on the King Salmon Air Force Base. SAVEC provides industry-driven education in occupations essential for Alaskans to fill 70-80% of state jobs that do not require a college degree. SAVEC's educational training focus is on community, industry and agency needs<sup>8</sup>.

<sup>6</sup> State of Alaska Department of Labor and Workforce Development.

<sup>7</sup> Bristol Bay Comprehensive Economic Development Strategy 2011-2016 June 2013 Update.

<sup>8</sup> Southwest Alaska Vocational and Education Center. [www.savec.org](http://www.savec.org)

## Strengths, Weakness, Opportunities, and Threats (SWOTS)

The portion of this section comes from the 2016 CEDS update that is revised annually. The work plan is to be revised and updated annually as actions are completed. This update is a guiding document that provides staff with direction for working with regional partners and highlights the regions' strengths, weaknesses, opportunities and threats (SWOTS).

To begin this process, a SWOTS analysis was conducted throughout the year. In December 10, 2015, a presentation of "Where are we now" and "How do we get there" was presented to over 200+ individuals at the Bristol Bay Native Corporation Leadership Forum. SWOTS presentation and analysis was conducted to UAF-Bristol Bay Campus students and BBNA's Senior Management team and Program Managers. On March 22, 2016 CEDS steering committee meetings was held to prioritize the analysis and help develop the work plan, goals and objectives, and identify regional partners to move forward in the creation of an economic development CEDS 2016 update. For detailed SWOTS that were conducted throughout the year, see Appendix A.

		<b>BBNA Analysis of Economic Development Problems and Opportunities:</b>			
		<b>Helpful</b>	<b>Harmful</b>		
		Region's relative Competitive Advantages	Region's relative Competitive Disadvantages		
		<b>STRENGTHS</b>	<b>WEAKNESSES</b>		
<b>Internal Factors</b>	Region's Unique Asset:	Fish- 50% of world supply	High Transportation Cost		
		Abundant Natural Resources	Drug and Alcohol Use		
		Access to Internet	High Cost of living		
		Subsistence and resource skills	Inadequate Elder Care		
		Our environment: Natural Beauty	Limited Jobs in Villages		
		Regional Improvement or Progress	Negative Impacts on the Region or Regional Decline		
		<b>OPPORTUNITIES</b>	<b>THREATS</b>		
<b>External Factors</b>	Assets of the Regions E	Millennials (18-35 YO)	Climate Change		
		Elders and Youth	High Drug and Alcohol Use		
		Technology	Economy based on resource Extraction: land and resources		
		Branding Bristol Bay	High Cost of Food, Energy and Transportation		
		Energy Efficiency	Small School Closure		

Figure 5: Final SWOTS

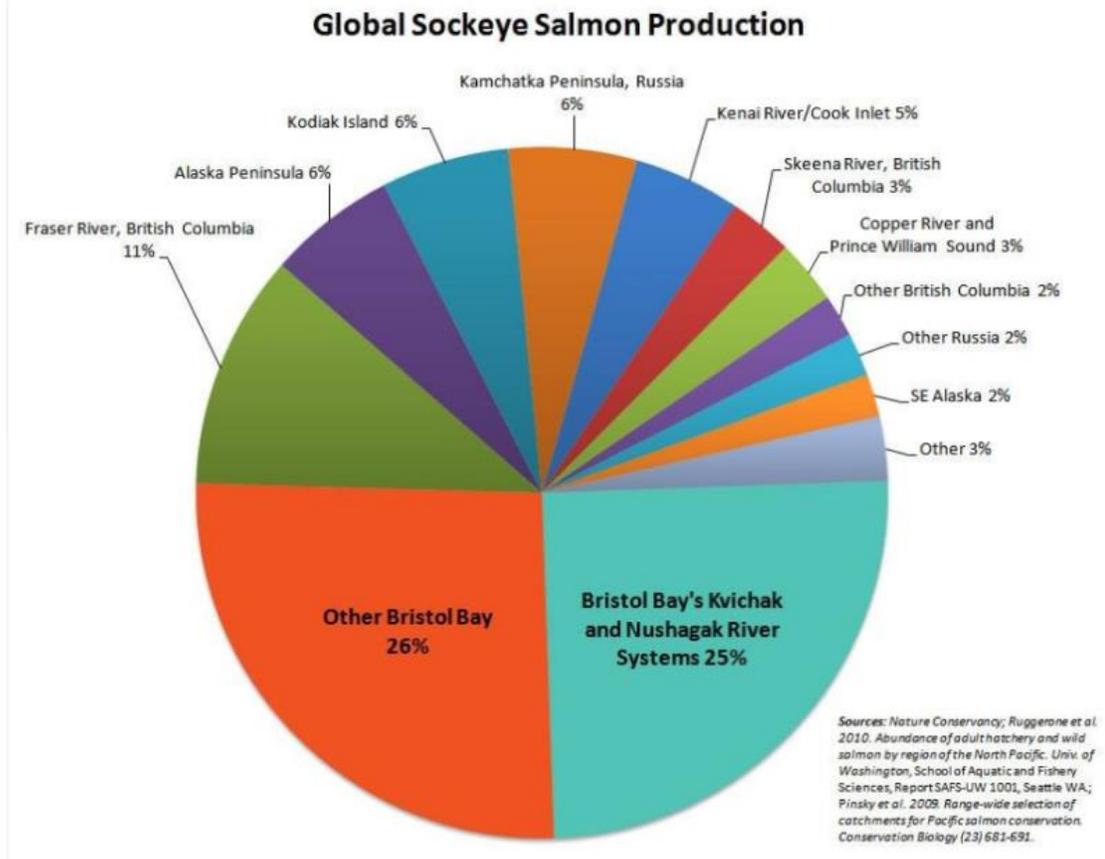
**Bristol Bay Native Association Focus Areas**

Bristol Bay Comprehensive Economic Development Strategy updates, includes the focus areas that are organized by Fish; Youth; Adaption Strategies; Transportation/Infrastructure and Energy that emerged through the SWOTS analysis conducted throughout the year. The analysis was finalized by the CEDS committee on March 22, 2016

**Fish:**

The Bristol Bay region is dominated by the commercial sockeye salmon industry. The fishing industry brings seasonal employment, and also brings in a large influx of hired labor during the summer months. The region is home to the largest natural sockeye salmon run in the world, and the third largest natural king salmon (Chinook) salmon run. In addition to the commercial salmon fishery, the region has herring and halibut fisheries. These fisheries have seen a downturn and don't have the participation and enthusiasm they once had.

Figure 5 demonstrates that; Bristol Bay's sockeye fishery supplies almost half of world's wild sockeye salmon. Commercial fishing for salmon has been the economic mainstay for the last century, yet there has been a prolonged decline in local participation.



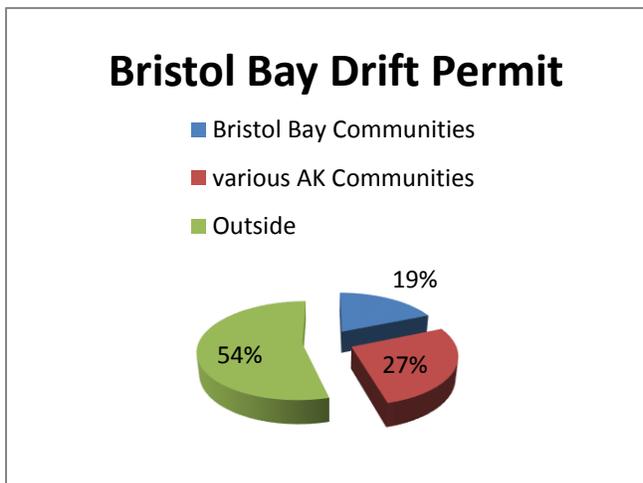
**Figure 6: Global Sockeye Salmon Production**

**Limited Entry Permit**

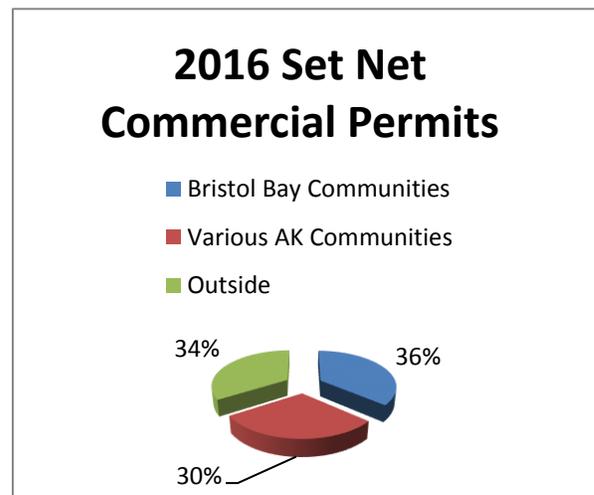
The Limited Entry Permit system was established by constitutional amendment in a statewide primary election on August 22, 1972. When the Bristol Bay Limited Entry Program began, commercial fishermen applied for a permit on a point system to qualify for a no cost permit. Limited Entry Permits are transferable and have gained considerable market value, creating a financial barrier to accessing the fishery. Once permits are sold to pay off debts, it is nearly impossible for local people to afford reentering the fishery.

Commercial fishing is the historical mainstay of the economy, but a number of factors affect its value to the local economy, as a result, the Limited Entry Permit system have decreased the number of locally owned permits, which increases the number of people unable to participate. According to the State of Alaska’s Commercial Fisheries Entry Commission (CFEC), Figure 7 illustrates that 54% of drift gill net commercial fishermen come from “outside” the State of Alaska, 27% from various Alaskan communities and only 19% from one of the Bristol Bay communities. Set netters, on the other hand is distributed in thirds, with 36% coming from one of the regions’ communities, 30% from various Alaskan communities, and 34% from outside the State of Alaska as shown in figure 8. For detailed list by communities see Appendix: Bristol Bay Communities Drift and Set.

**Figure 7: 2016 Bristol Bay Drift Permits**



**Figure 8: 2016 Bristol Bay Set Net Permits**



Since 1975, when limited entry was first established, 2,806 Bristol Bay drift salmon permits were issued, out of this total, 1325 permits were issued to Bristol Bay residents. Today, 345 drift permits remain in Bristol Bay and 352 for set net permits. This has a devastating impact on the region’s overall economy, the economy of area villages, and numerous small businesses in the region. There is a great need to retain and return limited entry permits to the region. Many young adults that want to enter the fishery business do not qualify for loans or have a means to build assets due to lack of jobs.

**Youth/Workforce and Cultural Training:**

Although there have been improvements in education in the past 30 years, graduation rates in the region is at 71% as demonstrated in Table 2. This shows that the graduation rates are too low to attend postsecondary training for the youth in this region that can lead to meaningful employment opportunities. There is a great need to continue to provide small business technical assistance to area residents in this region. There is also a need to focus on training the millennials and

high school students to help with high school graduation requirements and preparation for postsecondary training, and employment opportunities.

### ***Climate Change Adaptation Strategies:***

Climate change is affecting nearly every aspect of our culture. In the last few years, local residents have noticed dramatic shifts in seasonal weather patterns. Coastal erosion is increasing due to lack of sea ice which historically acted as a buffer to coastal villages from winter storms and high tides<sup>9</sup>. Warmer winters with reduced snow coverage, reduces the opportunity to winter trap and ice fish. This impacts gathering local food security and affects an economic opportunity for local trappers to earn income. In the face of changing climates that affect economic, social and environmental conditions, there is a need to allow for and help to facilitate flexibility and adaptation strategies needed in rural economies.

### ***Transportation and Infrastructure:***

The region is remote with no road access to the State's highway system. Except for roads between Dillingham and Aleknagik, King Salmon and Naknek, and Iliamna and Newhalen, there are no inter-connecting regional roads that connect the communities. Most communities have gravel and earth surface community streets. Surface access between most communities is by boat along the rivers in the summer and by snow machine along winter trails in the winter.

The region has daily, year-round air transportation provided by commercial and cargo airlines through Dillingham, King Salmon and Iliamna which serve as the region's transportation hubs. Several small airlines provide local charter and cargo flights. Most freight is hauled via by-pass mail from Anchorage.

Transporting goods and services into the Bristol Bay region is mostly through air. Produce, dairy, meats, and any other perishable items cannot be shipped any other way. Therefore, these goods are usually expensive.

A large percentage of the freight comes in by barge from Seattle. Barge is the only way to haul large construction equipment, larger vehicles such as dump trucks and buses, and bulk fuel during the summer and fall. The barges are also used to haul construction materials such as gravel and riprap to communities that have substandard construction materials available onsite. There have been times when the river levels have been low and critical supplies such as bulk fuel could not be delivered. In circumstances such as this, fuel must be flown into the community in 55 gal containers at great cost.

Bristol Bay region due to its vast, remote and road less geographical location is faced with communication and transportation limitations, which does not adequately support regional business and community needs. Improving transportation in our region is a critical cornerstone to promoting economic development. It results in improved access, lowers the cost of living, increase export opportunities and stimulate economic activity.

### ***Housing***

Many of the homes in the Bristol Bay region are being modernized or replaced by Bristol Bay Housing Authority (BBHA). One of 16 regional housing authorities in Alaska, the Bristol Bay Housing Authority's mission is to eliminate substandard housing conditions through the development of local capacities that will provide safe, decent and affordable housing opportunities for the Native population of Bristol Bay. Since its founding in 1974, BBHA has built more than 500 such units, single family homes and apartments, with funds provided by the U.S. Department of Housing and Urban Development's Office of Native American Programs, the Alaska Housing Finance Corporation., and the U.S. Department of Agriculture Rural Development Division<sup>10</sup>.

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<sup>9</sup> Climate Change in Bristol Bay by Bristol Bay Native Association. August 2015

<sup>10</sup> Bristol Bay Housing Authority. [www.bbha.org](http://www.bbha.org)

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Many homes in the region are aging and need repairs and upgrades. In most communities there are housing shortages and the need to provide technical assistance in home ownership, loans, grants and financial and credit management. Water and sewer upgrades are needed in most communities.

### ***Communication Infrastructure***

In the Bristol Bay region, businesses and organizations are dependent on modern communication: ie, telephones, faxes, high speed internet and cell phone usage as part of everyday life. However, cell phone reception is limited throughout the region. Another barrier is bandwidth issues for internet connectivity. Distance education offered through the University of Alaska Fairbanks Bristol Bay Campus has a long and distinguished history in the Bristol Bay region. Technology, the use of internet and telecommunications is very important tool however, internet access is often unreliable.

### ***Energy:***

Currently, heating fuel #1 provides the majority of heating needs for the Bristol Bay region for all sectors: residential, commercial, public and industrial. There are a number of residential homes and commercial operators supplementing space heating with a woody biomass. There are a number of schools utilizing “waste heat” in conjunction with the local utility to provide some space heating. The Bristol Bay Housing Authority (BBHA) supports the installation of wood stoves as a way to supplement or serve as a back-up heating system in residential homes. The Lake and Peninsula Borough is pursuing the installation of wood boilers for community facilities where the resource is reliable

In most rural communities’ electricity is expensive, unreliable, and solely dependent on diesel-powered generation to produce power. Fuel delivery to most of the Bristol Bay communities is limited to barge delivery storing enough fuel to last the year. The average home in the region is 1,232 square feet and uses 136,000 BTUs of energy per square foot annually. This is close to the statewide average of 137,000 BTUs per square foot per year. Two-thirds (66%) is used for space heating, 16 percent for hot water, and 18 percent for electricity<sup>11</sup>. Fuel prices are relatively high in the Bristol Bay region. The current average price for heating fuel is \$5.03 per gallon; \$7.00 high and \$3.25 low. The average gas price is \$5.52; \$7.00 high and \$4.38 low<sup>12</sup>

Communities in Bristol Bay continue to be faced with high energy costs. High energy costs attribute to higher costs of conducting business. This region has an abundance of potential renewable energy options that could offset the high cost of energy.

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<sup>11</sup> Bristol Bay Regional Energy Plan: Phase II Stakeholder Engagement,” (September 2015), SWAMC, BBNA, Information Insights

<sup>12</sup> Fuel Price Survey, (2016) State of Alaska, Department of Commerce, Division of Community and Regional Affairs,  
<https://www.commerce.alaska.gov/web/dcra/ResearchAnalysis/FuelPriceSurvey.aspx>

**Bristol Bay Native Association Action Plan:**

<b>Goal One: Fish</b>				
<b>Activity</b>	<b>Partnerships</b>	<b>Begin date</b>	<b>End date</b>	<b>Lead Person Responsibility</b>
Facilitate meetings with BBEDC to provide additional technical assistance to local in-region residents to acquire drift, and set net commercial drift permits.	BBEDC Permit Loan program, BBNA Economic Development program and Village residents.	9/12/2016	6/30/2017	Economic Program Manager, BBEDC Permit Loan program staff
Determine needs, goals and development of memorandum of agreement (if needed) to implement the initiative.	BBEDC Permit Loan Program and BBNA	9/30/2016	5/30/2017	Economic Program Manager, BBEDC Permit Loan Program Staff,
Provide technical assistance to at least 25 individuals with credit counseling and financial management.	BBEDC Permit Loan program staff, Economic Development Program staff,	9/30/2016	5/30/2017	Economic Program Manager, BBNA program staff, BBEDC , Marine Advisory Program, UAF-BBC
Assist at least 5 residents with permit loan applications.	BBEDC Permit Loan program staff, Economic Development Program staff	10/01/2016	6/01/2017	Economic Program Manager, BBEDC Permit Loan Program Staff,
<b>Goal Two : Youth: Workforce and Cultural Training: Prepare youth and adults for meaningful employment through formal and cultural education and training.</b>				
<b>Activity</b>	<b>Partnerships</b>	<b>Begin date</b>	<b>End date</b>	<b>Lead Person Responsibility</b>
Collaborate with BBC to offer at least 5 course offerings for credit recovery and 5 dual credit offerings to high school students to help with high school graduation requirements and preparation for postsecondary training.	UAF-Bristol Bay Campus, BBEDC, BBNC, and School districts.	9/1/2016	6/30/2017	BBNA Economic Development Program staff, UAF BBC staff, BBEDC training staff, BBNC Education Foundation staff, and school district staff.
Co-sponsor at least 2 small business related training opportunities at UAF-BBC during the course of the year. One will be on development of an artist co-op and the	UAF-Bristol Bay Campus, BBNA Economic Development Program,	9/27/2016	5/7/2017	BBNA Economic Development Program staff, UAF BBC staff,

other will be cultural related to small business.	UAA-, World Wild Life Funds			
Coordinate with organizations to plan for cultural camps to youth to increase their self-esteem and strength of character, which will help them become better-grounded, productive members of the workforce.	BBNA, UAF Bristol Bay Campus, Community Tribes, Organizations	9/1/2016	6/30/2017	BBNA Economic Development Program staff, UAF BBC staff, BBEDC training staff, BBNC Education Foundation staff, and school district staff.
<b>Goal Three: Adaptation Strategies:: Economic disaster resiliency</b>				
Activity	Partnerships	Begin date	End date	Lead Person Responsibility
Promote partnerships between tribal programs and organizations/entities addressing climate change and hazard mitigation planning.	Bristol Bay Native Association, Communities, agencies and organizations	9/1/2016	06/30/2017	Economic Development Program Staff, BBNA Transportation Program, BBNA Natural Resources Program, Forestry, Bristol Bay Campus Environmental Program
Network with local agencies and organizations to determine current plans in effect and how economic resilience integrates with disaster planning.	Bristol Bay Native Association, Communities, agencies and organizations	9/30/2016	06/30/2017	Economic Development Program Staff, BBNA Transportation Program, BBNA Natural Resources Program, Forestry, Bristol Bay Campus Environmental Program
Determine potential funding sources and or how resources can be obtained and assess the ability to recover economically.	Bristol Bay Native Association, Communities, agencies and organizations	4/17/2017	6/30/2017	Economic Development Program Staff, BBNA Transportation Program, BBNA Natural Resources Program, Forestry, Bristol Bay Campus Environmental Program
<b>Goal Four: Transportation and Infrastructure: Improve on the region's transportation and infrastructure needs.</b>				
Activity	Partnerships	Begin date	End date	Lead Person Responsibility
Collaborate with tribes to identify priorities to support sustainable and thriving communities.	BBNA Transportation Program staff, Village tribes,	August 12, 2016	June 30, 2017	Economic Development Program Staff, BBNA Transportation Staff, Tribes
Assist up to ten communities that request	BBNA Transportation	August 12, 2016	June 30, 2017	Economic Development Program Staff, BBNA

planning assistance and secure funding towards development and improvement of their infrastructure.	Program staff, Village tribes,			Transportation Staff, Tribes
<b>Goal Five: Energy: Regional Energy Planning</b>				
Activity	Partnerships	Begin date	End date	Lead Person Responsibility
Build capacity at the Tribal level by providing energy related training workshops and events.	Bristol Bay Native Association, Communities, agencies and organizations	9/1/2016	6/30/2017	BBNA Economic Program Staff, BBNA Forestry Program, UAF-Bristol Bay Campus staff
Collect latest energy information to Tribes, Partners, and contacts through email, direct mailings, posting on the website .	Bristol Bay Native Association, Communities, agencies and organizations	9/1/2016	6/30/2017	BBNA Economic Program Staff
Continue partnership efforts with regional communities and members to identify and pursue funding sources for energy cost saving projects.	Bristol Bay Native Association, Communities, agencies and organizations	9/1/2016	6/30/2017	BBNA Economic Program Staff

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## **Evaluation Process**

The Bristol Bay CEDS committee views performance evaluation as an important part of the CEDS planning and development process. The evaluation provides an opportunity to review the authorized scope of work, and the action plan to determine how to meet the desired outcomes of these measures.

Bristol Bay Native Association will measure EDA's required outcomes which are the following:

- Number of jobs created after the implementation of the CEDS goals and objectives.
- Number of jobs retained in the region.
- Number and types of public investments generated by the projects.
- Amount of private sector investments in the region generated by the projects.
- Changes in the economic conditions in the region.

Bristol Bay Native Association will prepare a mid-point progress report which is due January 31, 2017 to ensure completion of the authorized scope of work within the time frame.

A final progress report will be prepared and issued to EDA Project Officer due July 31, 2017 to assess each goal and objective outlined in the CEDS action plan.

In addition to the required EDA mid-point and final progress reports, BBNA will issue the financial reports on the following due dates:

- Financial Status Report (SF-425) on December 31, 2016
- Final Financial Status Report (SF 425) due June 30, 2017

BBNA will prepare a five year CEDS plan due July 31, 2017. BBNA CEDS steering committee will review the plan in March 2017 and again in May 2017 to ensure that the CEDS compliments regional projects.

Once the CEDS is approved, it will be distributed widely throughout the region via the BBNA website and by distributing the information to each one of BBNA's communities via BBNA's mass village mail outs to give an opportunity for feedback from our community members in the Bristol Bay region.

Appendix A: SWOTS

Name of Organization: UAF Bristol Bay Students  
 Date: February 17, 2016

“How to develop an artist cooperative”  
 Analysis of Economic Development Problems and Opportunities

Internal Factors Region's Unique Assets	<p><b>Helpful: Region's relative competitive advantages</b>  <b>STRENGTHS</b>                  Momentum-POTUS Visit                  People: Knowledge and history: Our Elders                  Nature: Rivers, Mountains, Bears and Fish                  Fishing Industry 50% World Supply                  Growing Population (youth)                  Tourism increase Year by Year                  Artist in Region (Talented)                  University systems and schools                  Hospital for the region                  Access to internet                  CDQ-BBEDC Bring back to our communities</p>	<p><b>Harmful: Region's relative competitive disadvantages</b>  <b>WEAKNESSES</b>                  Transportation Cost                  Fuel and housing cost                  Access: Roads                  Lack of training (Interest: youth)                  Attitudes                  Hope: Motivation                  Lack of communication and coordination                  Lack of creativity                  Priorities                  Dependence on outside sources                  Becoming vulnerable to outsiders                  Dependence on outside sources                  Lack of knowledge-tourist                  Lack of Infrastructure                  Technology Cost and Access</p>
External Factors Assets of the Region's Environment	<p><b>Regional Improvements or Progress Opportunities</b>                  Technology                  Job-tourism: Locals employed                 <ul style="list-style-type: none"> <li>Built and Renovate: Lodges/classes/camps/meetings</li> </ul>                 Use our Elders/Youth                  Global interest in rural Alaska                  Greatest salmon run in world                  Training and Education                 <ul style="list-style-type: none"> <li>Wellness/elders/campus</li> </ul>                 Hands-on demos for tourists                  Grants for underserved communities                  Millennials (18-35 yo)                 <ul style="list-style-type: none"> <li>Smart, progressive, interested</li> <li>Moving or stay in Bristol Bay region.</li> </ul> </p>	<p><b>Negative impacts on the Region or Regional decline</b>  <b>THREATS</b>                  People Power                 <ul style="list-style-type: none"> <li>Need to enhance fragmentation</li> </ul>                 Mass production competition                  High Prices                 <ul style="list-style-type: none"> <li>Shipping, transportation, Fuel and energy</li> </ul>                 State Budget                 <ul style="list-style-type: none"> <li>School closures, lay offs, reduced support, loss of culture</li> </ul>                 Access to Materials: native material                  Climate Change                  Out Migration: Elders passing away                  High rate of failure(why)                  Land sold to outsiders                  Diseases of animals, birds, and fish</p>

1 | SWOTS analysis: ABUS F 151 “How to develop an artist co-op” February 17, 2016

## Appendix A: cont. SWOTS

Name of Organization: BBNA Senior Managers and Program Managers

Date: March 14, 2016

### Analysis of Economic Development Problems and Opportunities

<b>Internal Factors</b> <b>Region's Unique Assets</b>	<p><b>Helpful: Region's relative competitive advantages</b>  <b>STRENGTHS</b>          Fish          Natural Beauty          Entrepreneurial Skills          UAF Bristol Bay Campus, BBEDC and SAVEC          Subsistence and resource/skills: availability.          Helps with economic survival(zombie apocalypse) Makes up for some high energy costs          Resources and potential for energy alternatives          Native land ownership (Lots)          Unique-our isolation actually drive the above.          Pristine          BBNC Success          BBNA Partnering (BB's) Promoting Self Sufficiency          Native Leadership          Connections-political              Large and small game              Subsistence in general          Family Connections          Cultural Connections          National Exposure through TV shows          Youth (School sports and other hospitality)          Bartering</p>	<p><b>Harmful: Region's relative competitive disadvantages</b>  <b>WEAKNESSES</b>          High Cost of living          High Transportation Costs          High domestic and violence          Drugs and alcohol          Limited jobs in villages          Lack of qualified workers          Public facilities          Return of qualified/educated students          Affordable housing (Rental and homes)          Recreational facilities          Cost of recreational vehicles (boat, snow-go)          Coordination between agencies          Rural/Urban divide          Generation poverty          Outsiders taking advantage of resources          Historical trauma          Budget Cuts          Out migration          Inadequate care for elders          Lack of education on life skills</p>
<b>External Factors</b> <b>Assets of the Region's Environment</b>	<p><b>Regional Improvements or Progress Opportunities</b>          Branding Bristol Bay (environmental protections)          Media Coverage          Money for education and training          Cultural/Spiritual Revival          Housing          Energy efficiency/Alternative Energy          Economic Growth          Community Interties          Community based money for services          Reactivating Wellness teams          Coordinating Services (BB's)          Tribal courts/Prison Re-entry</p>	<p><b>Negative impacts on the Region or Regional decline</b>  <b>THREATS</b>          Climate Change (Ocean and Land)              Fish by Catch/Interception              GMO Salmon          High Costs of Food, Energy and Transportation          Small School Closures          Budget Cuts              State and Federal          Out Migration          Economy Based on resources extraction              Land and resources              Fish/Cost/Prices              Fish Markets          Lack of modern technology              Internet-bandwidth          Predator Control              Rabies              Bird Flu          Lack of Language /Culture          High drug and alcohol use          High dropout rates          Natural and manmade disasters</p>

Appendix B: Bristol Bay Communities Drift and Set Net Permits

