Trends in Local Permit Ownership in the Bristol Bay Drift Gillnet Salmon Fishery and Implications of Restructuring Proposals

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Outline

1. Introduction
2. Long-term trends in local permit ownership in the Bristol Bay drift gillnet salmon fishery
3. Causes of net transfers of permits from local residents to non-local residents
4. Implications of restructuring proposals for local permit ownership

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SUBMITTED BY
HELEN SMEATON

Public Comment # 12

Who I am . . .

- I'm an economics professor at University of Alaska Anchorage Institute of Social and Economic Research (ISER).
- I have done a lot of research about the fishing industry, including the Bristol Bay salmon industry.
- I teach courses at UAA about the Alaska economy and about fisheries economics.

- For the past several years, I've been studying trends in permit ownership in the Bristol Bay drift gillnet salmon fishery and other salmon fisheries, as part of an NSF-funded research project.
- My research goals have been to:
  - Understand the dynamics of what drives permit ownership
  - Describe and explain past changes in permit ownership
  - Project future changes in permit ownership
  - Project effects of policy changes on permit ownership

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My objectives in this presentation are to

- Describe long-term trends in local permit ownership in the Bristol Bay drift gillnet fishery
- Describe the causes of these long-term trends
- Describe the implications of restructuring permit proposals for local permit ownership

I am not arguing for or against the restructuring proposals.

- I am arguing that the implications of the restructuring proposals for local permit ownership are important and relevant and should be considered
- I recognize that a variety of other arguments for and against the proposals are also relevant and important—but I have not studied these other arguments carefully and I am not addressing them in this presentation.

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The bottom line

- There has been a dramatic and disturbing long-term decline in permit holdings by local Bristol Bay residents.
- One of the most important factors contributing to this decline has been differences in access to capital financing between local residents and non-local residents. These differences affect:
  - The types of boats and gear people can afford
  - The permit prices they can afford
- The restructuring proposals would tend to disproportionately benefit those most able to afford investments in boats and permits.
- The restructuring proposals would tend to exacerbate the long-term decline in permit holdings by local Bristol Bay residents
- This will happen unless there are significant and effective efforts to assist local residents in acquiring permits—or other policies to promote and assure local participation in the fishery

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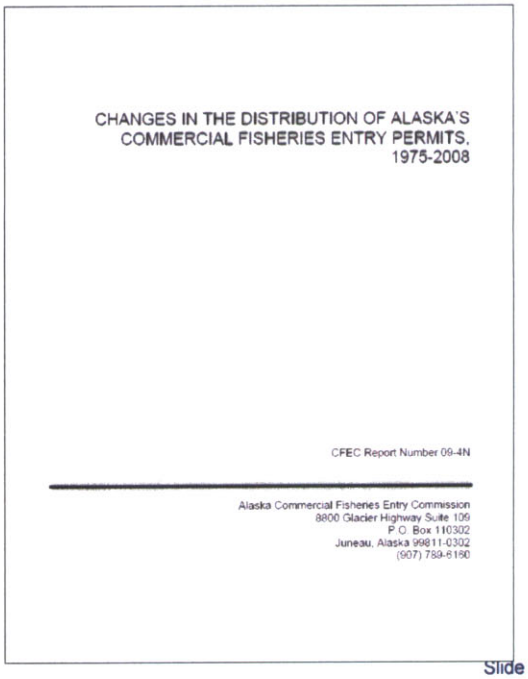
Most of the data I have used for my analysis has been published by the CFEC.

The CFEC publishes an annual report about changes in the distribution of entry permits, which has detailed information about local permit holdings and transfers for every limited entry fishery.



CHANGES IN THE DISTRIBUTION OF ALASKA'S COMMERCIAL FISHERIES ENTRY PERMITS, 1975-2008

CFEC Report Number 09-4N

Alaska Commercial Fisheries Entry Commission
8800 Glacier Highway Suite 109
P.O. Box 110302
Juneau, Alaska 99811-0302
(907) 789-6160

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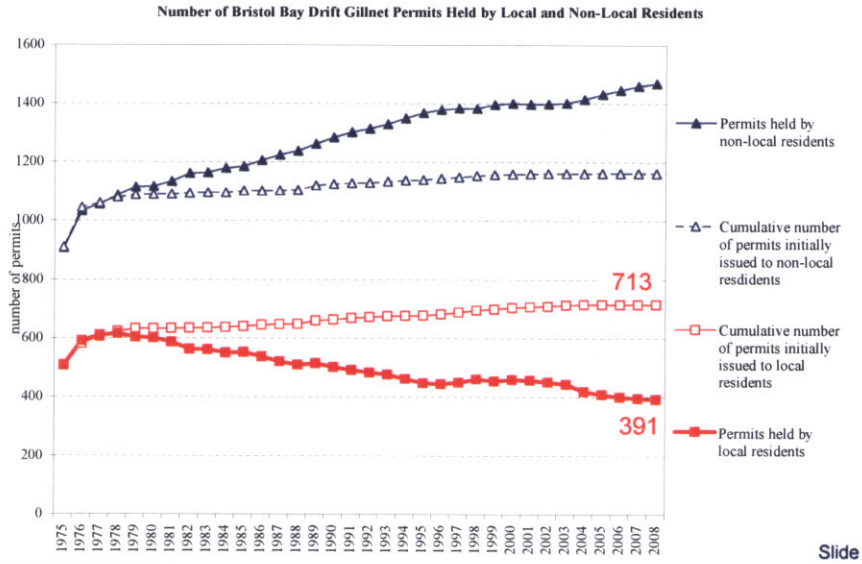
As of the end of 2008:
713 permits had been initially issued to Bristol Bay residents.
391 permits were held by Bristol Bay residents
Of the 713 permits initially issued to local residents, 322 permits, or 45% are no longer held by local residents.



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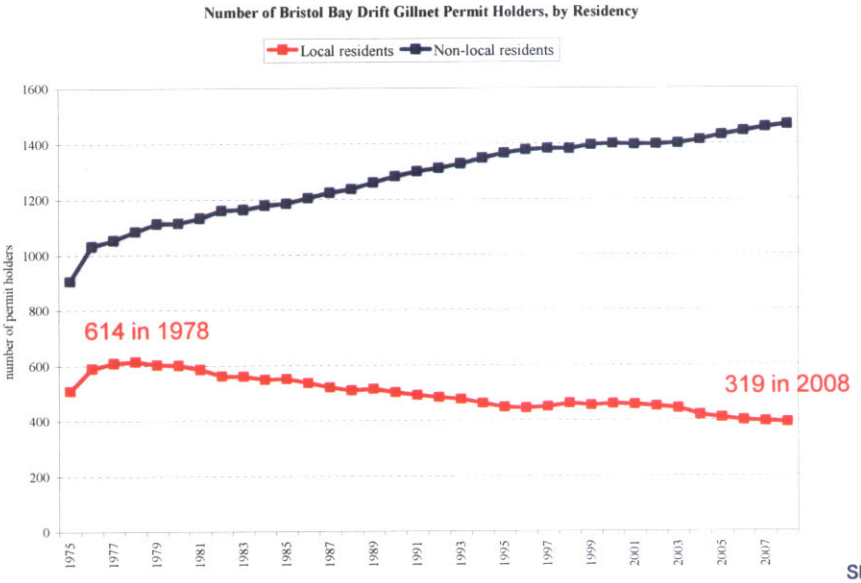
There has been a significant decline in the number and share of permits held by local Bristol Bay residents.



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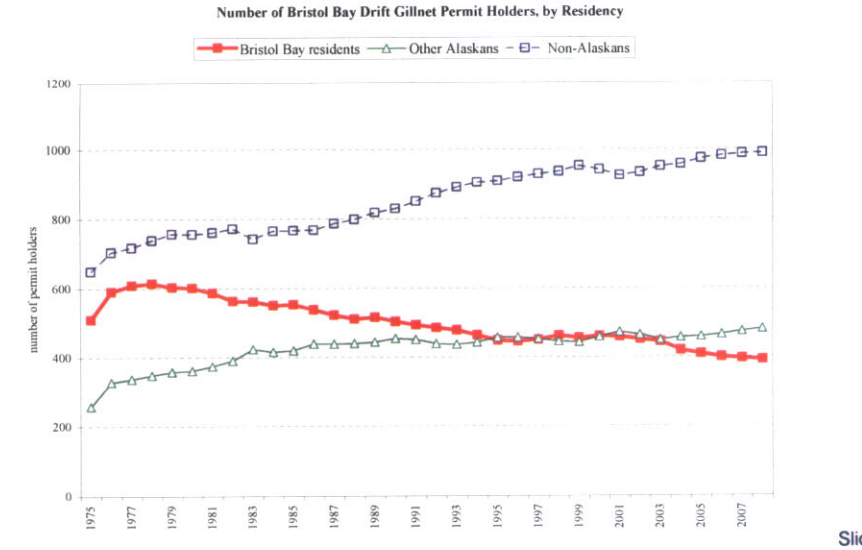
While local permit holdings have declined, holdings by both other Alaskans and non-Alaska residents have increased.



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A study conducted in 1984 found that Native residents of Bristol Bay accounted for a disproportionately large share of early permit losses.

Estimated Changes in Native and Non-Native Permit Ownership in Bristol Bay Salmon Fisheries Between Initial Issuance and 1983

	Fishery	Native	Non-Native	Total
Initial permit holders	Bristol Bay drift net	547	95	642
	Bristol Bay set net	405	107	512
Permit holders as of the end of 1983	Bristol Bay drift	465	102	567
	Bristol Bay setnet	303	83	386
Change	Bristol Bay drift	-82	7	-75
	Bristol Bay setnet	-102	-24	-126
Percent Change	Bristol Bay drift	-15%	7%	-12%
	Bristol Bay setnet	-25%	-22%	-25%

Source: Kamali (1984)

I don't know of any studies since then which have focused specifically on how Native permit ownership has changed since then.

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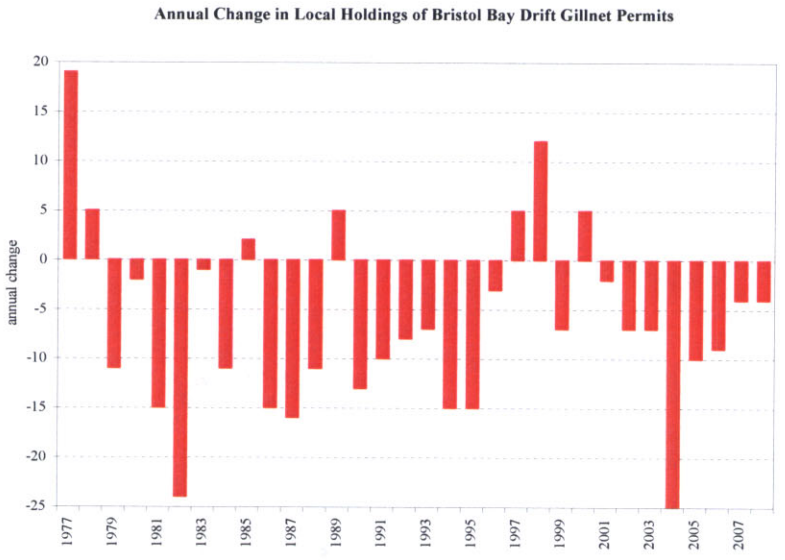
Annual changes in permit ownership have not been uniform.



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There are three potential causes of declining local permit ownership from the number initially issued to local residents:

- Net transfers from local residents to non-local residents.
- Net migration of permit holders out of the region
- Other causes: foreclosures, forfeits, administrative and criminal revocations (net of reinstatements)

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Net transfers have been the most important cause of declining local permit ownership over time

Causes of Change in Local Holdings of Bristol Bay Drift Gillnet Permits, 1975-2008

Number of local permits	Total initial issues, 1975-2008	713
	Net change due to transfers, migration, and other causes	-322
	Local permit holdings at end of 2008	391
Causes of change in local permits	All causes	-322
	Net transfers	-215
	Net migration	-65
	Other causes	-42
Causes of change as % of all causes	All causes	100%
	Net transfers	67%
	Net migration	20%
	Other causes	13%
Causes of change as % of total initial issues*	All causes	-45%
	Net transfers	-30%
	Net migration	-9%
	Other causes	-6%

*Causes of change expressed as a percentage of the total of 713 permits initially issued to local residents over the period 1975-2008. Source: CFEC (2009B).

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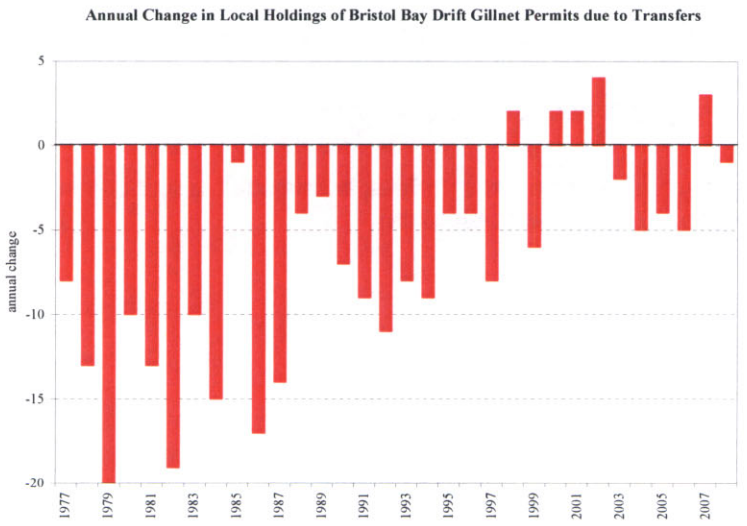
Net local permit loss due to transfers declined during the 1990s.
There were net gains in local permits due to transfers from 2000-2002.
Net local permit loss resumed in 2003.



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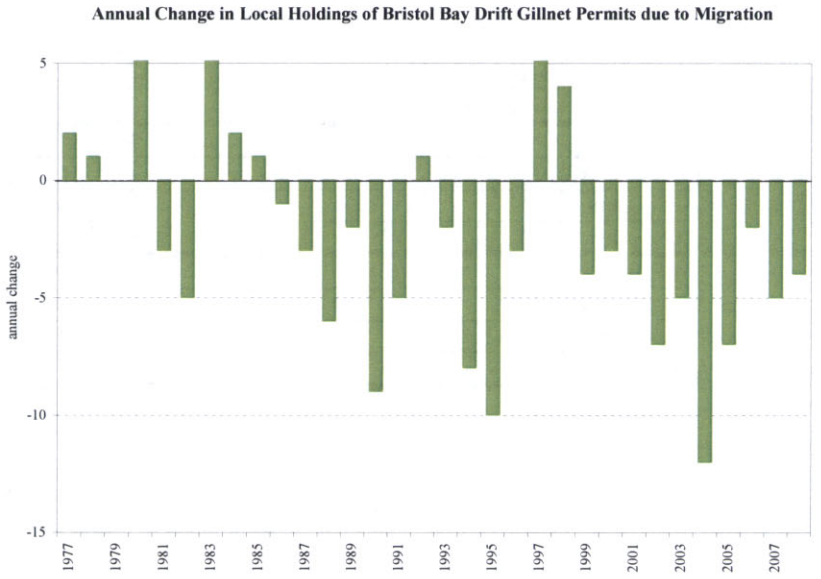
Net local permit loss due to migration began in the 1980s
and has continued since then in all but a few years.



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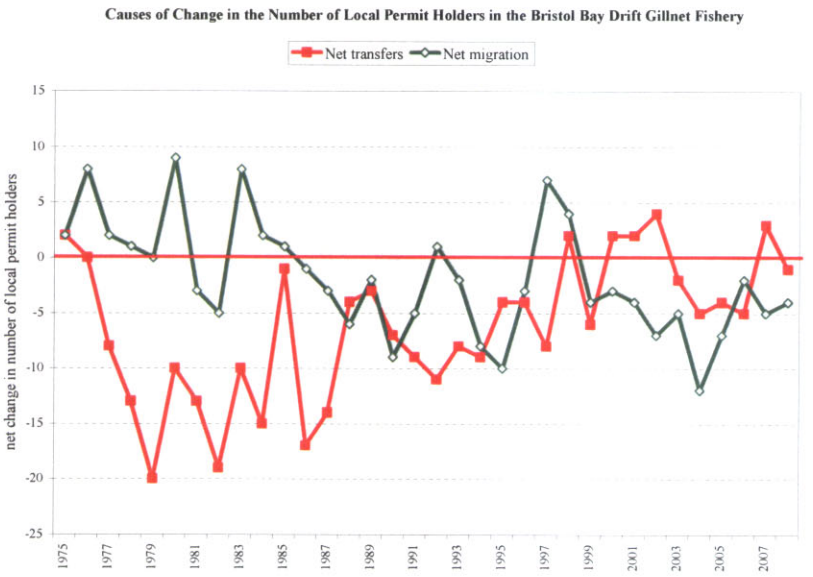
The relative effects of transfers and migration have been changing over time.



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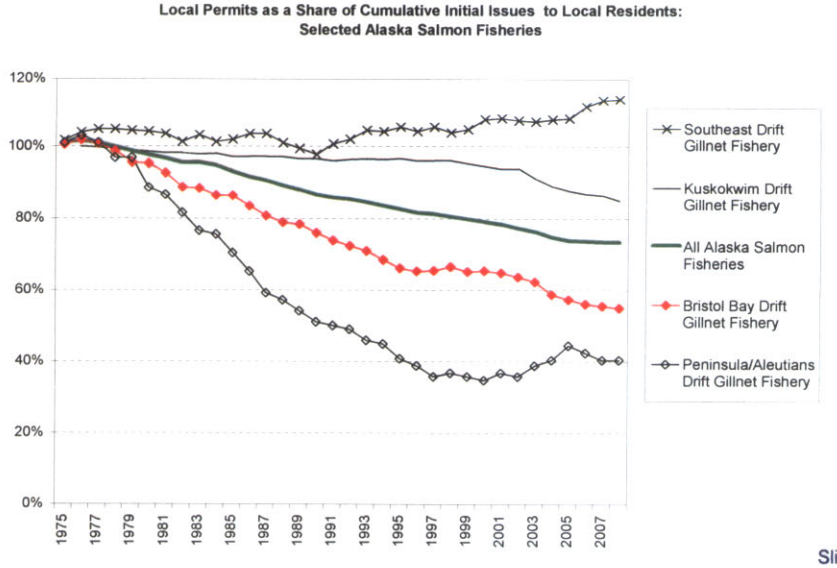
There is a lot of variation between Alaska salmon fisheries in the extent to which local permit holdings have declined. The Bristol Bay drift gillnet fishery is one of the fisheries which have experienced the greatest relative declines.



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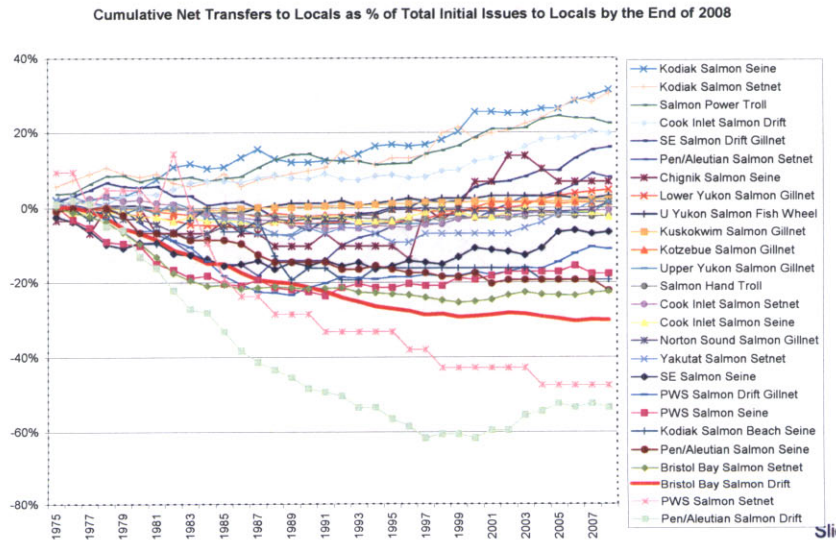
There is a lot of variation between Alaska salmon fisheries in the extent to which net transfers have contributed to a decline in local permit holdings. The Bristol Bay drift gillnet fishery is one of the fisheries which have experienced the greatest relative declines.



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UAA Anthropologist Dr. Steve Langdon explained the major factors affecting net permit transfers in 1980 (29 years ago!)—just a few years after the limited entry program started:

"If a given group of fishermen consistently fall below the average earnings in a fishery, for whatever reason, it is predictable that members of that particular group would be more likely to sell their permits than members of groups who are collectively above the average. "

If rural residents have lower average net earnings than other groups, they will be more willing to sell permits than other groups.

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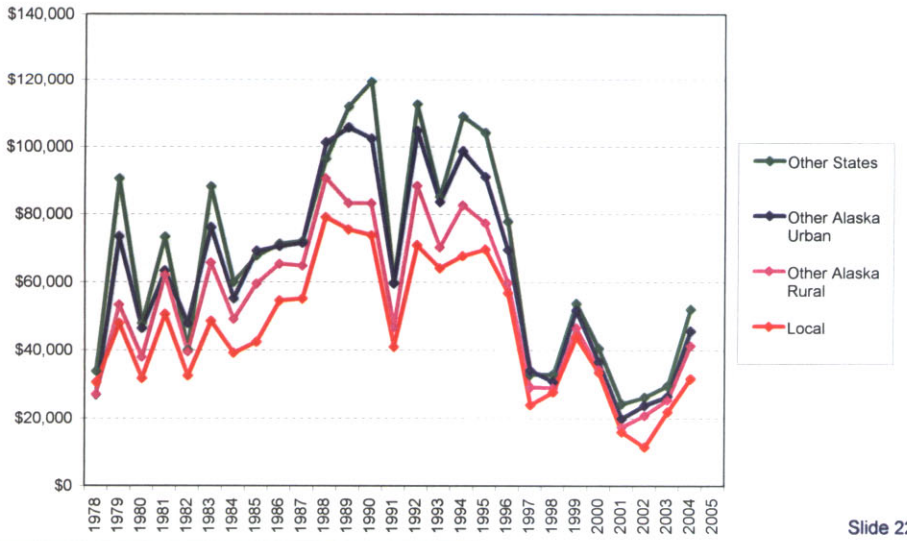
Local permit holders have lower average gross earnings than non-local permit holders. This helps to explain why they have been relatively more likely to sell permits and relatively less able to buy permits.

Average Annual Gross Earnings of Bristol Bay Permit Holders Who Fished



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In 1980, Dr. Langdon also pointed out that you also have to think about potential permit buyers and whether they can get financing:

"Factors on the buying side of importance are the availability of capital for permit purchases, and the ability of rural residents to meet requirements necessary to gain access to financing for permit purchases. Rising cost of technology and permits both will make outright purchases of permits less and less possible so that entry into the fisheries will become more and more dominated by the availability of financing. . . Financing requirements of the private sector, as well as the . . . operation of the State loan program to date revealed a gloomy picture indeed of access to financing by rural residents."

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For a more detailed analysis of net permit transfers over time, you need to look at:

- The relative numbers of local and non-local potential sellers (permit holders)
- The relative numbers of local and non-local potential buyers
- The relative prices that local and non-local potential sellers (permit holders) would be willing to sell their permits for.
- The relative prices that local and non-local potential buyers would be willing and able to pay for permits.

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Over time, as the number of locally held permits declines, we would expect net permit transfers to decline because:

- There are fewer potential local sellers.
- As the number of potential local sellers declines, it is more in balance with the number of potential local buyers.
- This is part of the reason why net transfers have declined over time.

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The relative prices that local and non-local potential sellers (permit holders) are willing to sell for are affected by many factors:

- How much they can earn from fishing, which is affected by:
  - How skilled they are at fishing
  - How aggressively they fish
  - What kind of boat they have
  - What kind of boat investments they can afford
  - What it costs them to go fishing—including the cost of getting themselves and their crew to Bristol Bay
- How much they could earn doing something else if they weren't fishing (their "opportunity cost")
- How much they need cash
- Non-economic factors such as how much they enjoy fishing
- The extent to which they prefer to transfer permits by gift or inheritance rather than sell

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Similarly, the relative prices that local and non-local potential buyers are willing and able to pay for permits are affected by many factors:

- How much they could earn from fishing
- How much they could earn doing something else
- Non-economic factors such as how much they enjoy fishing

and . . .

- Their access to capital to pay for permits and boats!
  - How much money they have which they could invest
  - How much they can borrow
  - What rate they can borrow it at

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Over time, changes keep happening which affect all of these different factors which affect permit transfers

- The relative numbers of local and non-local permit holders change
- The relative numbers of local and non-local potential buyers change
- The current permit holders get more experienced
- The current permit holders get older (and some die)
- Catches—and catches people expect in the future—go up and down
- Prices—and prices people expect in the future—go up and down
- Costs—and cost people expect in the future—go up and down
- Opportunities in other fisheries get better or worse

- All these changes may affect local and non-local potential sellers differently
- All these changes may affect local and non-local potential buyers differently

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The restructuring proposals for the Bristol Bay drift gillnet fishery would tend to:

- Make the fishery more profitable for some (but not all) fishermen
- Benefit those fishermen who are able to invest more in the fishery
  - To build bigger boats
  - To invest in multiple permits

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Changes which make the fishery more profitable
or which favor people who are able to invest more in the fishery
tend to increase the probability that permits
will be sold from locals to non-locals.

- As the fishery becomes more profitable:
  - travel costs are less of a disadvantage for non-locals
  - Other fishing and work opportunities for non-locals are relatively less attractive
  - Permits and boats become more expensive, favoring non-locals who can borrow more money more easily
- Non-locals are more likely to be able to invest more in the fishery because:
  - They have more assets they can use as collateral
  - They are more likely to have friends or relatives who can loan them money
  - It is easier for them to do business with banks

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The restructuring proposals would tend to:

- Increase the likelihood that permits will be transferred from local residents to non-local residents
- Exacerbate the long-term decline in permit holdings by local Bristol Bay residents

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Are the effects of the restructuring proposals
on local permit ownership relevant?
Should the Board consider these effects?

- I don't claim that they are the only or necessarily the most important consideration for the Board
- But I certainly think they are relevant!
- Surely we should care about whether people in rural Alaska are able to actively participate in the fisheries in their regions
- We should particularly care when these regions are suffering economic distress and when we are trying to promote economic development in rural Alaska
- We should particularly care if we expect rural residents to oppose other kinds of resource development--which might bring them other economic opportunities--in order to protect our fishery resources
- Ignoring the problem of loss of rural permit ownership is not going to make it go away

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Dr. Langdon pointed out the problem of rural permit loss 29 years ago:

". . . Does [the] loss of permits by rural Alaskans . . . represent a serious problem? If it were the case that the rural population had declined in the recent past, if it were the case that an expanding rural population was migrating to urban centers . . . at a higher rate than the rate of natural increase, if it were the case that employment opportunities in the local regions and on a statewide basis were expanding more rapidly for rural residents than their loss of permits, then one might be able to argue that the decline merely represents natural attrition due to a greater integration of the rural population into the Alaska economy. Since most of these ameliorating conditions do not appear to be taking place, the outflow of permits that has occurred and that potentially can occur must be regarded as a significant threat to the rural Alaskan economic base and the well-being of rural Alaskans."

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The CFEC has been tracking and documenting local permit loss for many years.

FROM THE INTRODUCTION TO THE ANNUAL CFEC PERMIT DISTRIBUTION REPORT:

". . . Many people remain concerned that permit transfers might result in undesirable consequences with regard to the distribution of permits. There is a concern that permits will leave the state, or that permits will disappear from isolated fishing communities which are local to a limited fishery, thereby eroding the economic base. Because of these concerns about free transferability, CFEC has produced this updated report so that the legislature, the administration, and other interested parties will be kept accurately apprised of the facts. . . "


CHANGES IN THE DISTRIBUTION OF ALASKA S COMMERCIAL FISHERIES ENTRY PERMITS, 1976-2006

But the State hasn't done anything about it.
We have been ignoring the problem.

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The bottom line

- There has been a dramatic and disturbing long-term decline in permit holdings by local Bristol Bay residents.
- One of the most important factors contributing to this decline has been differences in access to capital financing between local residents and non-local residents. These differences affect:
  - The types of boats and gear people can afford
  - The permit prices they can afford
- The restructuring proposals would tend to disproportionately benefit those most able to afford investments in boats and permits.
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The Struggle for Equity:

Resident Participation in the Bristol Bay Commercial Fishery

BRISTOL BAY ECONOMIC DEVELOPMENT CORPORATION

On the cover: Sailing off Flounder Flats, Nushagak River, circa 1938. The letter "A" on the stern of this sailboat indicates it is manned by Alaska residents.

Dave and Mary Carlson collection, Samuel K. Fox Museum, Dillingham

The Struggle for Equity: Resident Participation in the Bristol Bay Commercial Fishery

Tim Troll for the Bristol Bay Economic Development Corporation

Native cannery workers at Nushagak, circa 1917.
John Cobb, University of Washington Archives

As Alaskans marked 50 years of statehood in 2009, the commercial fishermen of Bristol Bay completed their 125th season. The convergence of these two milestones provides an opportunity to reflect upon the influence of each upon the other.

The Bristol Bay fishery embodies the enduring struggle in Alaska's history to determine who will manage our resources and who will benefit from their exploitation. With statehood Alaskans wrestled the management of fisheries away from the canneries and the federal government. Enlightened state management is often credited with saving the Bristol Bay fishery. Statehood also improved the standing of Alaskan residents with the fishing industry. Statehood, however, has not successfully preserved the benefits of the fishery for those Alaskans who live within the watersheds of Bristol Bay. Differences in expectations and need between watershed residents and nonresidents continue to clash. Many of these differences are rooted in the history of Bristol Bay's commercial fishery.

Paternalism and Prejudice in the Formative Years

1884 to 1920

John W. Clark, (1846 - 1896)
Elizabeth Nicholsen Butkovich

Bristol Bay was occupied for thousands of years before the first cannery was built in Bristol Bay. Native *Yup'ik, Aleutiq* and *Dena'ina* people settled into the region for the very same reason the canneries did – salmon. Salmon was a resource so abundant and reliably present that it enabled these Native peoples, unlike others in the arctic and subarctic, to give up a wide ranging nomadic life and build relatively settled communities.

The commercial salmon fishery in Bristol Bay dates from 1884 when San Francisco businessman Carl Rohlffs organized the Arctic Packing Co. and built the first cannery on Bristol Bay at the Native village of *Kanulik* across the Nushagak River from present day Dillingham. The fishery in Bristol Bay, as in all of Alaska, was pioneered by nonresidents like Rohlffs. However, in Bristol Bay, Rohlffs probably sought and benefited from the help of John W. Clark who was the trader at Nushagak for the Alaska Commercial Co. Clark arrived in Bristol Bay sometime in the late 1870's. Clark's familiarity with the region and his connections to the local Natives made him an indispensible contact for Non-natives coming into the Nushagak country. The selection of the site for the first cannery was no doubt made with Clark's input. Clark himself operated a small salting station that may predate the first cannery. Clark later became a principal owner in the fourth cannery built in Bristol Bay, the Nushagak Canning Co., at the place that now bears his name – Clark's Point.

Andrei, the "River Pilot" at Nushagak, circa 1884. The one local Native essential for early cannery operations was the river pilot who guided the large cannery ships up the shifting channels of Nushagak Bay to anchor. Henry Wienland, Moravian Church Archives, Bethlehem, PA

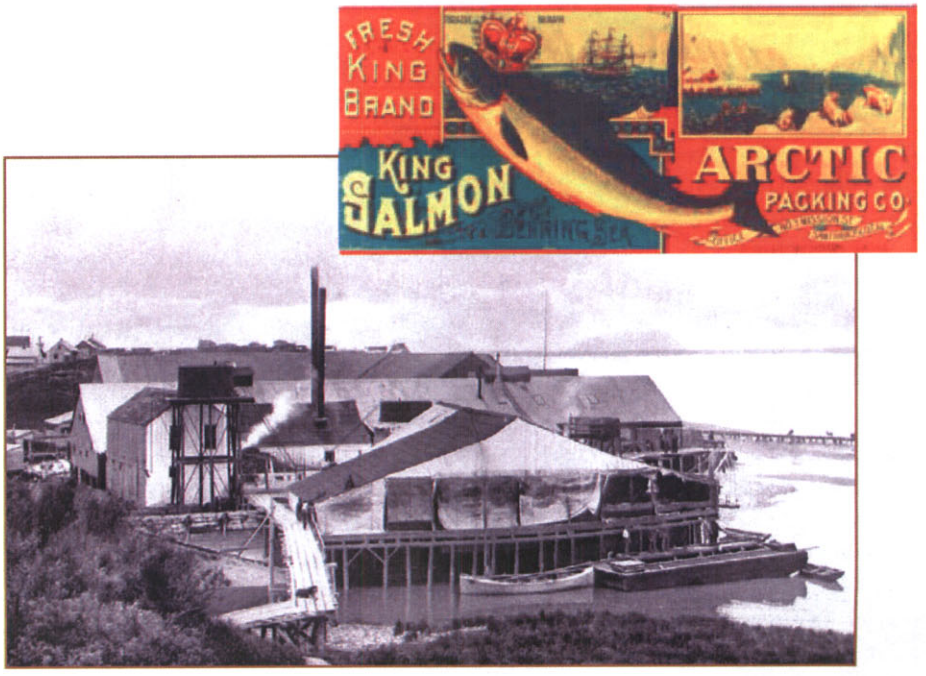
The first commercial pack of canned salmon from Rohllfs' cannery was only about 400 cases or 6000 fish. A meager beginning, but it was not long before the firm, red-fleshed sockeye of Bristol Bay commanded a premium price. The rush was on. Within six years there were four operating canneries on the Nushagak River. Two canneries were built on the Naknek River and one on the Egegik by 1895. The first canneries on the Kvichak and Ugashik Rivers appeared in 1896. Bristol Bay commercial fishing boomed in the first decade of the twentieth century. By 1910 Bristol Bay produced about 40% of Alaska's canned salmon. Over time more than 50 canneries would be built in Bristol Bay. Most have since succumbed to fire or neglect. Rohllfs' cannery at Kanulik ceased operating in 1905.

I was a cannery worker for nearly ten years, until the early 1930's. At this time Native people were allowed to fish, the kind of work we did normally at home. We also had become much more comfortable with English and Gasht'ana life in general. As fishermen we finally had the chance to make more money, and our life at Bristol Bay greatly improved.

Pete Koktelash

At the time Rohlffs built his cannery the Native people of the Bay had been exposed to western influence and goods for nearly seventy years. The Russians arrived in 1818 and built a modest fort and trading post on Nushagak Bay. Even though the impact of the Russians was profound, the number of Non-natives who came to Bristol Bay to operate Rohlffs' cannery in 1884 probably exceeded the total number of Non-natives that had ever visited the Bay since the Russians first arrived. Nothing in their previous experience prepared local Natives for the changes that came with the explosion of industrialized salmon canning.

As the industry gained a foothold in Bristol Bay little thought was given to the welfare of the local Natives or the impact upon their cultures and lifestyles. Within a few years, however, a more paternalistic attitude developed. The moral persuasion of Christian missionaries and sometimes simple economics eventually resulted in more concern for the Natives and Native employment. The Moravian church, at the behest of Sheldon Jackson, established a mission near



Bristol Bay's First Cannery – the Arctic Packing Company, also known as Rholffs' Cannery, circa 1900.

National Archives and Records Administration, U.S. Fish and Wildlife Service, RG 22-FF-A2513.

The "Natalia" at the PAF cannery dock in Dillingham, 1955. The "Natalia" was one of the first Bryant power boats in Bristol Bay. It was owned by Chief Ivan Blunka of New Stuyahok. Chief Ivan was one of the early independent fishermen.
Steve McCutcheon 1955, Anchorage Museum of History and Art, 26733

the Arcitc Packing Company cannery at Kanulik in 1886. Within a few years Moravian Missionaries noted how large tent settlements of Natives started appearing around canneries. Some canneries provided employment and also purchased fish from Natives.

Cannery efforts to help local Natives, however, were small tokens, extended less out of a sense of responsibility than to placate federal government officials who began appearing in Bristol Bay around 1890. Despite the fact Native labor was often cheaper to obtain it was not enough to shift cannery employment practices. In some cases it was the simple prejudice of cannery superintendents who thought the Natives too filthy or unreliable. In others it was a preference for imported workers and fishermen who were essentially indentured servants for the season. Imported workers and fishermen were also protective of their employment and discouraged the use of the local Natives. Canneries, however, were quick to overlook the alleged deficiencies of Natives when extra labor was needed to process a large volume of fish.

As the fishery completed its first decade in 1894 the Governor of Alaska was able to report that at three canneries on the Nushagak 468 persons were employed of which more than 25% were Native – an acceptable improvement. By 1901 Jefferson Moser, sent by the U.S. Department of Commerce to investigate the fishery, reported the canneries "employ every Native who is willing to work" and would employ many more "if they could be obtained and were reliable."

Natives benefited even more as increasing numbers were hired when the Chinese Exclusion Act was extended in 1904. However, future prospects for continued employment dimmed as E.A. Smith's new processing machine the "Iron Chink" first went into commercial operation at one of the Nushagak canneries in 1906. The technology spread. The "Iron Chink" beheaded, split and cleaned the fish and was named for the Chinese labor it replaced. It also replaced Native laborer.

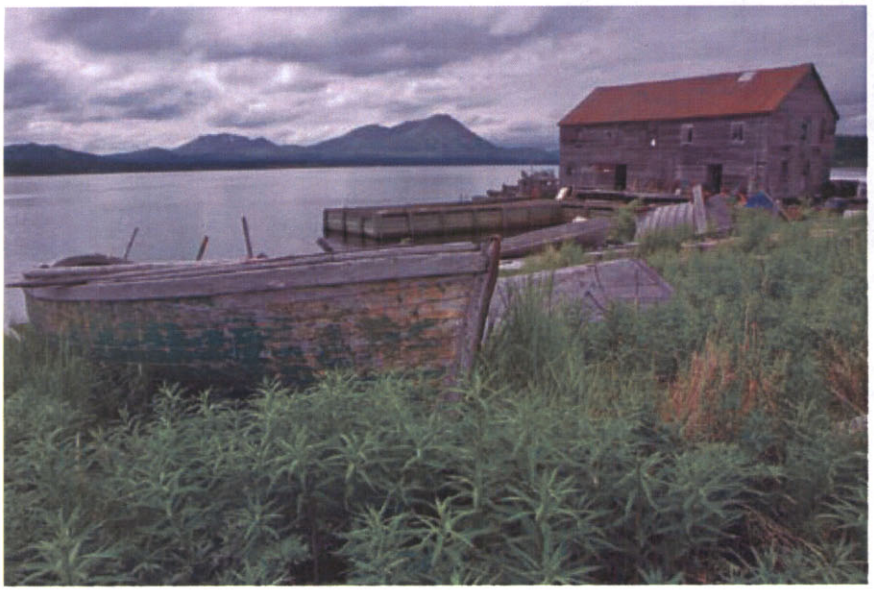
High speed cannery lines introduced in the 1920s further reduced labor requirements, but by then much of the Native labor supply had been tragically decimated by the Spanish Flu epidemic of 1919. The epidemic claimed so many lives that the U.S. Fish Commissioner monitoring the commercial fishery that year remarked in his report that Natives would likely "never again be a factor in the fishing and canning operations" of Bristol Bay.

Chris Petersen,1934. Chris Petersen was the son of a Norwegian father and Yup'ik mother. He was raised by Moravian missionaries. He is believed to be among the first, if not the first, resident born in Bristol Bay to become a drift fisherman. Ken Stevensen. Collection of Samuel K. Fox Museum, Dillingham, AK

Protectionism for Nonresidents in the Glory Days

1920 to 1941

The efforts of the Federal government to get the Alaska salmon industry to employ more residents never amounted to much more than a gentle prodding. Cannery interests were well entrenched in the halls of Congress. As a result, federal agencies charged with oversight of Alaska's fisheries rarely had budgets sufficient to take care of the fish, much less those Alaskans who wanted to participate in the industry. Even the elevation of Alaska to the status of territory did little to help. In 1912 Congress passed a new Organic Act. Fisheries management was normally ceded by the federal government to territorial governments. Not so for new the territory of Alaska. The canners feared an upstart territorial government and convinced Congress to retain federal control of Alaskan waters. Alaska's non-voting delegate was furious, but to no avail. The controversy, however, spurred a small but increasingly vocal opposition as Alaska residents began to resent industry dominance.



In Bristol Bay this growing resentment was manifest in the practice that virtually excluded residents from fishing. Canneries were generally willing to purchase some fish from local resident set nets, but access to the fishing grounds for drift fishing was from the earliest time the all but exclusive domain of fishermen brought North each year on cannery ships. As the fishery grew more fishermen who came North on those ships stayed behind after the season, married local women and raised families. These skilled fishermen became the first watershed residents to participate in the drift boat fishery. Despite the growing availability of this skilled labor, however, the canneries continued to favor nonresidents. The canneries owned all of the drift boats and necessary gear.

Fishermen were mostly Italians, Scandinavians and Finns hired at Seattle and San Francisco. The canneries liked Scandinavians from the Lofoten Islands off the coast of Norway, where sailing boats similar to those in Bristol Bay were used, or Italians from Sardinia or the Messina Straits for the same reason.

Al Andree

During the 1920's and 30's, the halcyon years of the Bristol Bay fishery, there were approximately 1,200 cannery sailboats fishing at the mouths of the five major rivers, the Nushagak, Kvichak, Naknek, Egegik, and Ugashik. However, as late as 1929 there were only twenty-eight watershed resident boats in all of Bristol Bay.

Discord among resident fishermen grew as canneries adopted more discriminatory practices. Many of these practices were imposed upon canneries by virtue of collective bargaining agreements negotiated with the Alaska Fishermen's Union. The AFU was dominated by nonresident members. Often resident fishermen were provided older boats and gear and were forced to wait while the boats of nonresident fishermen were allowed to deliver their fish. During peak runs swamped canneries would place resident boats on catch limits before nonresident boats. Canneries would sometimes pay higher prices to nonresidents or did not allow residents to work for "run money" offloading and onloading ships at the beginning and end of each season. Perhaps the most overt act of discrimination occurred when canneries required resident fishermen to paint an "A" on the side of their boats so the tally scows responsible for collecting fish could easily distinguish a resident from a nonresident.

The acrimony of Bristol Bay's resident fishermen reached a peak in 1939 as a result of two practices the AFU secured from the canneries. Canneries agreed to pay nonresidents a bonus equal to one-third of all the money paid to residents for fish that residents caught in Bristol Bay. Also, nonresidents were provided the first six boats for every canning line in Bristol

Harvey Samuelsen, circa 1955. Harvey Samuelsen came to Bristol Bay after serving in World War II. He became a leader in the effort to secure more of the benefits of the Bristol Bay commercial fishery for watershed residents.
Courtesy Robin Samuelsen

Bay. The latter practice virtually assured nonresidents of employment through out the season, while resident fishermen might only be engaged during the peak of the run. The Alaska Territorial legislature attempted to address the plight of resident fishermen with the introduction of a bill in 1939 to require a hiring preference for residents in Alaska's fisheries. The bill passed the Territorial Senate unanimously, but failed for lack of one vote in the House. That failure provoked resident fishermen to seek help from Anthony Dimond, Alaska's non-voting delegate to Congress. The cause became even more urgent when the Federal Bureau of Fisheries announced that commercial fishing in Bristol Bay would be curtailed by 50% in 1940 to allow for greater escapement. Bristol Bay resident fishermen feared they would have no work at all. Dimond introduced legislation that would require "all persons engaged in fishing in Bristol Bay in 1940 be residents of the territory." The bill failed to garner the necessary support.

World War Two and the Rise of Independent Fishermen

1941 to 1975

Natives and other watershed residents did not significantly enter the fishery until it became virtually impossible for nonresidents to participate - a condition created when the Japanese bombed Pearl Harbor and invaded the Aleutians.

The Second World War changed the fishery. The labor traditionally employed by the canneries was drafted to fight or was needed in the burgeoning war industries. Cannery operators had to draw upon resident labor. Cannery workers were not only needed, but fishermen as well. During the war canneries were no longer reluctant or beholding to nonresident fishermen to put residents into fishing boats. After the war there was a partial return to the former reliance upon nonresidents, but the proportion of residents working in both the canneries and as fishermen continued greater than before the war.

The war also foreshadowed the end of sailboats. Soldiers returning from the fully mechanized experience of war had little patience for fishing from quaint sailboats. Their growing

World War II saw a great change in Bristol Bay fishermen. Many of the Italians, Scandinavians and Finns were caught up in the military, or in wartime work and couldn't travel to Alaska to fish. Before the war the canneries didn't want to hire residents, but with the shortage of nonresident fishermen, they suddenly discovered that the Native Aleuts and Eskimos were marvelous boatmen and seemed to have been born to sail. Some of us resident whites didn't do so bad, either.

Al Andree

The outside fishermen, immigrants from Italy, immigrants from other nations of the world; Norway, Finland, that came to this country were able to catch 2,000 fish a day when we were on limit and us residents, if we were lucky, we were limited to 1,350. That went on until the '50's until we started raising a little bit of hell ourselves. Then we were also given second hand equipment by the great salmon industry. . . . Even when we became independent fishermen, they still wouldn't take 2,000 fish a day from certain fishermen. Well, all the resident fishermen. It still makes me mad today.

Harvey Samuelsen

intolerance was bolstered by safety concerns raised after many fishermen lost their lives in a storm in 1948. The "sailboat days" of the Bristol Bay fishery ended in 1951 when the ban on power was lifted.

The introduction of power, however, did not come without real economic concerns raised by residents. The sailboat was a great leveler. All fishermen used the same obsolete gear. The difference between an average fisherman and a "high-liner" was a measure of skill, strength and endurance. Some residents feared the economic benefits of the fishery would once again shift heavily in favor of outside fishermen who generally had the resources to purchase bigger boats and better gear. To some extent this fear appeared justified in the early days of power. Natives in particular were frequently relegated to "conversions," that is, sailboats with rebuilt sterns and makeshift engine installations. However, they did surprisingly well in these cumbersome fusions of sail and power and emerged as the backbone of a fishery increasingly populated with independent fishermen.

Though nonresident fishermen did not return to their pre-war position of influence with the canneries they did not hesitate to exert the influence that remained. In 1953 nonresident fishermen demanded that canneries stop hiring independent fishermen, most of whom were residents. The canneries quickly capitulated and independent fishermen, whose only income had been commercial fishing, found themselves without work. It took two years but Alaska's territorial legislature finally passed a law requiring canneries to buy salmon from independent fishermen.

Eventually, independent fishermen became the norm and cannery employed fishermen disappeared. Watershed residents pioneered the independent fishery, but as the decades progressed nonresidents were once again dominating the fishing ground with bigger boats and better gear. As some feared most resident fishermen were simply not in the best economic position to keep up.

Throughout 1950's and 60's the resident share of the total income from the fishery steadily increased. Despite these improvements, however, a study published by the University of Alaska noted that in 1970 nonresidents still caught more than twice as many fish as resident fishermen. The ADF&G area biologist for Bristol Bay in 1970 speculated this disparity may be attributable to differences in expectation and need:

> *Most of the nonresident fishermen are high-liners, that is, they consistently make large catches and are able to do so due to better gear and boats than possessed by many resident fishermen. A nonresident who comes all the way up from outside is going to fish pretty hard. Many of these fishermen have fished Bristol Bay for many years. On the other hand there are about three major groups of resident*

fishermen: (1) the high-liners who consistently make good catches and can and do compete with the non-resident; (2) the part-time or weekend fisherman who cannot compete. Most of these vacation fishermen use either skiffs and/or older gear and vessels which cannot compete with the larger mobile high-liner fleet; (3) the last group of resident fishermen are the upriver Native fishermen – they largely can't compete due to inadequate vessels . . . Further, these upriver fishermen have an entirely different approach to fishing as a livelihood. They normally catch just what they need to through to the next season.

The factor most directly responsible for differences in productivity between watershed resident and nonresident fishermen in the late 60's and early 1970's was that many watershed residents were set net fishermen. A much larger proportion of nonresidents were drift fishermen. For the years 1970, 1972 and 1973, 89% of nonresidents used drift gear compared with 63% of residents.

Limited Entry

1975 to Today

The reason I was against power boats was because every Tom, Dick and Harry might fish. After legalization of power and the establishment of limited entry, it seems there are now twice as many fishermen. These include doctors, lawyers and other professionals; it seemed all the pencil pushers started fishing.

John Nicholsen

In 1973 Bristol Bay experienced one of its worst returns ever. Fishing was closed by emergency order and federal authorities declared the region an economic disaster. The years before and after were not much better. In 1975 the State of Alaska finally imposed restrictions on the number of fishermen as the Limited Entry system was implemented to protect the resource. Qualifications for the right to fish in Bristol Bay were based upon past participation in the fishery and economic dependence on the fishery. A fixed number of permits were established. The desire of the State to limit the number of fishermen to protect the resource was tempered by its desire not to exclude past fishermen. The maximum number of permits was high – 1669 drift permits and 803 set net permits – and grew larger as a result of court challenges. The rules governing qualification were not particularly sensitive to the inability of many Bristol Bay fishermen to read and write English, or the fact that before 1975 many Bristol Bay fishermen fished with family or friends, shared expenses and profits and were often not concerned about who owned boats and gear - all qualifying factors for eligibility. Some watershed residents who fished all their lives were denied permits.

There is little debate now whether some form of limited entry was needed. In the 1960's and 70's there were simply too many fishermen chasing too few fish. After thirty years, however, it remains unclear whether limiting entry has protected the resource. What is clear is that limited entry has not helped retain or improve the access of watershed residents to the benefits of the fishery. The provisions of the law that enabled fishermen to transfer permits effectively privatized the salmon of Bristol Bay. Of the 754 drift fishing permits issued to watershed residents in 1975, only 398 remain. Likewise watershed residents held 661 set net permits in 1975 and that number is now 375.

Nick Gumlickpuk, Sacally Wonhola, Wassillie Gumlickpuk and Gusty Gumlickpuk.

Conclusion

The development of the commercial fishery altered forever the life of Bristol Bay's original Native inhabitants. Fortunately, it has not taken from them the subsistence resource upon which they still rely – salmon. It did, however, far more than the earlier Russian fur trade, create a dependency on goods and services that could only be imported from outside the region. The cash made available from the commercial fishery eventually became essential for maintaining a lifestyle that required frame houses, electricity, water and sewer, heating fuel, gasoline, medical services, imported food, education and the like. Indeed, this growing need for supplemental cash income spurred the push by residents for greater participation in the fishery. Now, as the first decade of the twenty-first century comes to a close the cost of living in Bristol Bay is perhaps greater than at any other time in its history.

Today, despite 125 years of fishing, 58 years of power, and 34 years of limited entry the issue of resident access to the Bristol Bay fishery remains a matter of serious concern, particularly for watershed residents. The struggle is no longer about gaining access, as it was during most of the sailboat days. The struggle now is more about preserving the access literally ripped from the clutches of canneries, unions and the federal government.

The one advantage Bristol Bay residents and all Alaskans should have now that they did not have for most of Alaska's commercial fishing history is a state and a Board of Fish appointed by a governor and approved by a legislature that Alaskan's elect. Statehood, however, eventually brought limited entry which led to a significant erosion of resident access to the Bristol Bay fishery. Bristol Bay residents are now engaged in an economic struggle to hold onto the benefits they secured from the fishery and regain some of those lost through the out-migration of limited entry permits.

It would be a sad comment on our failure as Alaskans if 50 years from now historians look back on the Bristol Bay commercial fishery and conclude that the decisions made during statehood brought the fishery full circle - Bristol Bay residents were once again sitting on shore while non-residents did all of the fishing.

John Thwaites, University of Washington Archives

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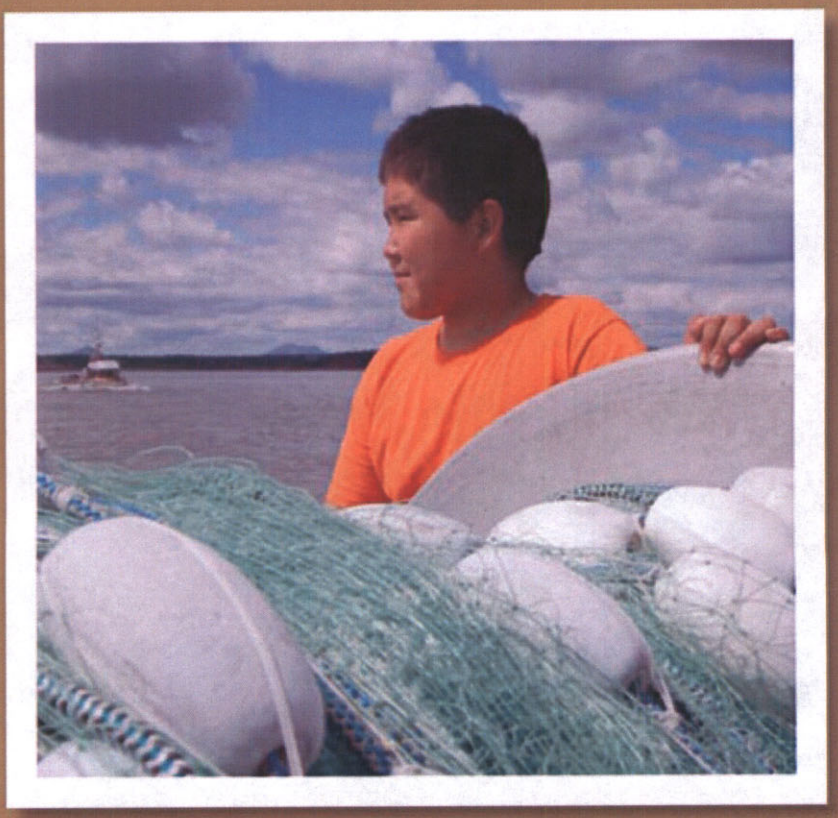

It is the purpose of the Bristol Bay Economic Development Corporation (BBEDC) to promote economic growth and opportunities for residents of its 17 member communities through sustainable use of the Bering Sea resources.

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Bristol Bay Permits

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Program Development and Implementation

Update Report

to the

Bristol Bay Economic Development Corporation

RedPoint Associates
Alaska Growth Capital
October 2007

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Bristol Bay Permits

Program Development and Implementation
October 2007

Introduction

This interim report is the fourth document for the Bristol Bay permit program. The first report, April 2007, presented data analyzing the loss of locally held salmon permits and detailed how and how many permits were leaving resident control.

The second report was created in May, 2007. It summarized the data from the first report into 9 key findings. This report also suggested possible program options addressing the facts of the situation.

The third report was created in August, 2007. It refined the several concepts developed in the second report into six broad programs, recommended an organizational structure for the programs and identified numerous specific activities within each of the six programs.
The report also provided three scenarios based on 60, 30 and 10 permits returned to the region per year. This provided the Committee the basis to form a preferred scenario for the consultants to focus on and detail.

This fourth report recommends a program for reaching an annual goal of returning 60 permits per year and that meets the long term goal of re-building local control of Bristol Bay permits to the levels of original issuance. This report also responds to Committee direction to design programs and budgets built around existing BBEDC programs and that expands as experience is gained.

Goal for Locally Held Permits

The Committee defined the program's goal as returning local ownership of Bristol Bay transferable driftnet and setnet permits to 1975 levels. CFEC

records show those permit levels as 557 setnet and 713 driftnet permits or a total of 1270 permits. At the end of 2005, locals held 735 permits.

	Setnet Permits		Driftnet Permits		Total Permits	
	BB-ARL	Total Permits	BB-ARL	Total Permits	BB-ARL	Total Permits
Original Issuance Transferable Permits	557	883	713	1875	1270	2758
2005 Transferable Permits	327	920	408	1859	735	2779
Need to Restore	**230**		**305**		**535**	

Source: CFEC with RedPoint analysis

This goal requires that programs be developed to return 230 setnet and 305 driftnet permits for a total of 535 permits.

Rate of Change Scenarios

Reaching the goal of restoring permits to the 1975 level can be done rapidly or slowly. After reviewing the three scenarios for restoring 10, 30 and 60 permits per year, the committee chose the 60 permit per year goal.

Permits Restored per Year	current loss rate	net change	Permits to Restore	Years to reach goal
10	17	-7	535	na
30	17	13	535	41.2
60	17	43	535	12.4

Currently, about 17 permits per year leave local control. Returning 60 permits per year to local residents creates a net increase of 43 permits per year. At this rate, reaching the goal of restoring 535 permits to local control requires about 15 years, including the ramp-up phase to bring all programs fully online.

Unstated, but assumed, is that after the goal is reached that some aspects of the program will remain in place to maintain 1975 levels of local ownership.

Clearinghouse - Overview

Permit loss occurs for varied and complex reasons. Each permit lost happens for a set of reasons – any one of which is fairly simple but unique in their combination. Reversing the outflow of permits will require a combination of simple but integrated tools that address the particular mix of issues in an individual situation.

Rarely will a single action fully address a given situation. And no number of independent solutions is likely to work either. Few of the tools are new ideas. What is completely new is the notion of coordinating all these programs under a single authority and with the single goal of restoring and retaining permits in local control.

We propose establishing a comprehensive set of interconnected programs under a single authority – a Bristol Bay Permit Clearinghouse (BBPC). The Clearinghouse would consist of several programs, each responding to an area of needs identified in prior phases of this Bristol Bay Permit Project.

This set of programs will help attract local residents to the fishery, help them qualify and keep them successful throughout their career. Clearinghouse programs will accomplish this through education, training, financial programs and by instilling pride in the profession of commercial fishing. When they retire from fishing, the program will help them transfer their permits and skills to other residents wanting to enter the fishery.

Organizationally, the BBPC would be a stand-alone entity (LLC or similar) of BBEDC. Further, its director would report to management committee, a special committee of the BBEDC Board.

The overriding goal of the program is to restore the number of locally held permits to 1975 levels. The BBEDC Board and Clearinghouse's management committee will set additional goals and evaluate performance toward those objectives and recommend appropriate revisions to the programs.

Clearinghouse Programs

The Bristol Bay Permit Clearinghouse coordinates all aspects of retaining and restoring earlier levels of limited entry permits in the hands of local

residents. BBPC receives policy direction from BBEDC. Its programs are funded by BBEDC, other NGOs and by grants from the private and public sector.

The overall goal of the BBPC is to restore locally held permits to levels of original issuance of transferable salmon permits; 713 driftnet and 557 setnet permits. The Clearinghouse will meet this goal through a system of five integrated programs, each a major department of the Clearinghouse:

1. Clearinghouse Administration
2. Outreach and Communication
3. Research and Data Services
4. Brokerage
5. Financial Services
6. Education and Training

Each of the 6 numbered sections below describes specific activities required to meet the goal of restoring 60 permits per year to local control

1. Clearinghouse Administration

Goals and Objectives

This function directs and coordinates the activities of other BBPC programs and activities. Initially this function may be assigned to existing BBEDC staff. Ultimately, however, it is likely that the task will require full time person.

Activities

The Clearinghouse director coordinates and synchronizes all clearinghouse activities to fully realize the benefits of having all programs in a single structure. The director is responsible for the administration and all functional activities of the Clearinghouse.

The Clearinghouse director is a seasoned manager with successful experience in the areas of politics, policy, business and financial management. The Director supervises all program elements, seeks supplemental funding, coordinates with state and local entities and otherwise assures program effectiveness.

2. *Outreach and Communication*

Goals and Objectives

The primary goal of the Outreach and Communication program of the BBPC is to elevate awareness of the importance of keeping approximately 50% of Bristol Bay salmon limited entry permits in the hands of area residents.

A secondary outreach goal will be to build an appreciation among policy makers for the social and economic benefits of maintaining strong local participation in the fishery.

Information about the purposes and programs of the BBPC will be directed to residents and policy makers through coordinated communications, trained personnel and comprehensive information programs reaching schools, tribal councils, regional NGOs and individuals. The outreach program will field questions and issues pertaining to building and protecting local control of limited entry permits.

The Director of this division should have considerable experience and skill in communicating with rural Alaskan residents, be credible in the fishing community and have a passion for the program's purposes.

Activities

Too many permits leave the region because local permit owners are not aware of the full range of transfer options and financial services available. This program, supported by Research and Data services addresses this need.

Dispersing Information

- Develop a mix of methods for communicating the value of keeping permits in the hands of residents. Suitable methods would include; well maintained website, periodic mailings, attractive printed materials, earned media, advertisements, community peer groups, role models "heroes" and town meetings.
- Create a special program for existing permit holders with specific information about tools available to residents for buying and selling permits.

- Design materials and contact programs targeting on potential sellers – permit holders moving out of the Bay, aging permit holders and permit holders in financially stressful situations.
- Create information and programs to contact potential permit buyers such as – resident crew members, members of successful fishing families, former fishermen looking to re-enter the fishery, fishermen wishing to shift from drift to setnet operations and similar.
- Promote awareness of all the BBPC's programs with specific packages describing the functions of the Clearinghouse's five programs.

Fielding questions

- Create a hotline for handling both general questions and efficiently getting information needed in a specific situation.
- Establish a network of paid community liaisons – people living in a community that can help identify potential permit buyers and sellers, answer general questions and introduce residents needing additional help to a BBPC staff person to help with particular needs. The core of the liaison program is the existing BBEDC program in 17 watershed communities.

Policy development

- Senior staff will regularly relay BBPC activities, successes and impediments to policy makers in federal, state and local government and with the appropriate staff with BBNC, BBNA etc. Similar updates will also be available to private foundations and public granting agencies.

3. Research and Data Services

Goals and Objectives

This program segment provides factual information needed by other BBPC activities, particularly Outreach & Communication and senior management.

This BBPC division monitors the number of locally held permits, measures progress toward goals, generates data on transfers,

maintains a list of prospective buyers, list of permit holders migrating out of the region, maintains data on all participants in education and training programs, maintains data on residents in financial assistance programs and generally supplies information needed by staff to meet the organization's goals.

This section will contract to develop and maintain a specialized database and query system and input existing data from ADF&G, CFEC and other sources. This system will supply BBPC with information needed to conduct its activities and monitor progress toward permit restoration goals.

This division will also assess impacts of new fishery management programs on local permit holders.

Activities

BBPC programs and clients will need considerable information. The source of the information is the responsibility of this division. The Outreach Division receives it from R&D and, through various means, gets in into the hands of local residents.

Registry of Qualified Buyers

- Returning permits to the region will require having a list (registry) of buyers ready to respond as non-local permits come on the market. Names on the list will come from other programs (outreach, training, education etc). One objective is to make it fast and easy to sell a permit to Bay residents.
- A related registry will be developed of residents desiring commercial fishing education and training programs.

Research

- Research and answer questions from staff and clients
- Study the likely impacts of various fishery management proposals on local participation in the fishery. An initial topic will be to measure the effect of stacking on local permit holders.

Permit Tracking

- This activity will monitor each resident-owned permit. The objective is to identify permits at risk of leaving the region. Each local permit holder will be contacted annually to assess early any potential for the permit leaving local control. Permit holders considering transfer of their permit for any reason will be coached on how they might sell in-region or might address the underlying reason for needing to sell. Permit holders experiencing financial stress or retirement will receive a blend of information and programs addressing their particular situation.
- Permit holders considering moving out of the region, or who have recently moved, will also be identified and regularly contacted so, when the time comes to sell, they will be inclined to sell to in-region buyers.

Stacking Study

No state entity currently tracks the trends associated with various forms of permit stacking. As a result, no one knows how many permits are being stacked or the economic effects of stacking on local fishermen.

This project encourages the state to institute systems to track the number of 1) dual stacking permits (two permits controlled by a single person) and 2) independent permit stacking (two permit holders sharing the cost of a single vessel). The tracking system should be designed to tie stacking data to other parts of the state's various limited entry databases.

Specifically the activity will:

- Clearly define and document the need. Communicate that need to the state and offer to assist them in developing the needed tracking system.
- Institute an in-house system to monitor the resulting data and use that data in other Clearinghouse programs.
- Develop a means for measuring the impacts of both permit stacking strategies on pricing of permits and fishing incomes.

Monitor program performance

- What is measured is done. This activity will track performance – vs – goals for BBPC's several programs. It may also, based on its evaluations and research, suggest ways of increasing BBPC effectiveness.

4. Brokerage

Goals and Objectives

The overall Goal of the Brokerage Program is to place Bristol Bay residents on an equal or superior footing with outside permit buyers to tip the balance of the current trend of loss of permits to the region. Brokers are experts in facilitating transfers; making the actual transactions fit particular buyers and sellers. This is different from the outreach function which is responsible for alerting residents to the availability and content of all BBPC programs.

One of the objectives of the overall program is to make it "easy" for existing brokers to locate, market and sell permits to Bay residents. This will be supplemented by broker incentives that will encourage brokers to market to Bay residents, something they do not currently do.

Another objective is to elevate the profile of the Local Broker Office to be prominent in the minds of all permit holders when they come to a decision to sell their permit. It should become the first option considered by any seller or buyer.

This program incorporates existing BBEDC brokerage program and considerably expands its overall mission. The budget item for the director of this program is not a new cost.

Activities

Broker Bonus Program

- This program will establish an incentive for permit brokers to make Bay residents a priority group of buyers. Although declining, permit brokers still handle a number of permit transactions. Most brokers do not live in the Bay and have little contact with Bay residents. Under this program brokers will receive a 50% bonus for sales made to local residents. At today's driftnet permit prices, that bonus would be about $800 per sale, a 50% increase of their current transaction revenues.

Proactive Local Broker

- The brokerage envisioned here is an advocate for locally held permits and able to address a wider range of issues. The local broker representative is fully informed on CFEC law, regulations and policies. He is also generally familiar with other BBPC programs and can enlist fellow staff as needed to respond to the needs of local residents. The broker's services are free to locals thus supplying a strong incentive to utilize the local brokerage services.
- The broker will establish and maintain relations with non-local brokers, and possibly with non-local permit holders. The local broker will seek to get (perhaps by buying short term exclusives) first notice of BB permits being offered – before they hit the general market.
- The local broker will match up permits for sale with the BBPC registry of qualified buyers.
- Another method of matchmaking would be creating local partnerships with an existing Bristol Bay local fishermen to provide hands-on training for new permit purchasers.

Right of First Refusal

- The right of first refusal requires that a permit owner who received BBPC services (education, training financing etc) must allow any local resident to match a legitimate purchase offer from any outside buyer. If no Bay resident buys the permit at the offered price the permit holder is free to sell the permit to a non-resident at that same price.

  The Right of First Refusal clause could be part of any substantial BBPC service. But it is most likely to be associated with BBPC financing programs, including new finance programs through CFAB. This obligation could also apply to gifts and self financed transfers.

Gifting Bonus/Annuity Program

- Encourage gifting to BB-ARLs – provide a bonus for successful gift transfers.
- Provide a means for local permit sellers/gifters to benefit from a long term annuity from the new permit recipient – possibly enhanced by a matching program from external financial source.

Setnet Permits

Restoring setnet and drift permits will generally require the same set of programs – but with different emphasis given to each program component. Restoring setnet permits, for example, may require more weight be placed on outreach, training and quite possibly, loans and other forms of financial assistance.

Local setnet permit sellers employ brokers to facilitate just 30% of transfers. Local driftnet sales involve brokers over 70% of the time. It follows that broker programs described above cannot be expected to be as large a factor in restoring 230 setnet permits to local control as it will be for driftnet operations. The setnet goal will be addressed by relying less on the local broker program and greater emphasis on other strategies.

Lower setnet permit prices and capital/operating costs do not equate to a reduced role for loans as a means for restoring setnet permits. Although total amount of money is lower for setnet packages, residents wishing to enter either fishery are likely to need some amount of loan assistance and financial counseling.

Currently permit holders sell 70% of their permits without a broker. It is possible that offering a free brokerage service by the local broker program might compel non-resident sellers to list their permits with that service.

5. Financial Services

Goals and Objectives

The BBEDC Loan program aims to place BB residents on a competitive financial basis with permit seekers from the outside, based on access to capital and ability to access credit facilities. For the purposes of this proposal, we assume 40 permit transfers per year are directly tied to the financing program.

Near the back of this report are three scenarios – each applying a different set of assumptions regarding how continued participation in the program can reduce loan repayment. We refer to this long term program participation as "sweat equity".

Activities

- All residents of the BB region will be eligible to receive loans from BBEDC to purchase a set or drift net permit.
- BBEDC will access the United States Department of Agriculture Rural Development Intermediary Re-lender Program to receive a $750,000 initially at 1% interest, with the first three years interest only payments, and the remaining balance amortized over 27 years.
- Loans will be provided through the Alaska Commercial Fishing and Agriculture Bank (CFAB), at a rate of participation from CFAB at 25% and BBEDC at 75%. The CFAB interest rate will be at 7.5% and the BBEDC interest rate will be 3%.
- CFAB is utilized because no other organization in Alaska can collateralize commercial fishing permits, other than the Alaska Division of Investments.
- BBEDC will have the 'first right of refusal' when the permit becomes for sale by the borrower, allowing the Clearinghouse to arrange for the purchase of the permit by a region resident.
- A borrower that meets certain participation requirements (or Sweat Equity) will be eligible for certain loan reduction considerations.
- To earn sweat equity for loan pay-downs, the borrower must meet certain metrics, including remaining a resident of the region for the period of the loan, actively fish each year of ownership of the permit and meet certain fishing metrics during the term of the loan, and participate on a quarterly and annual basis in business coaching sessions to ensure adequate support for the borrower.
- BBEDC will provide business coaching resources, outreach staff, and credit counseling to borrower and potential borrowers.

<u>BBEDC Loan Program Eligibility Requirements</u>

- The applicant must show proof of being an Alaskan Bristol Bay watershed resident for at least two years.
- The applicant must have no overdue child support payments, nor delinquent with IRS tax assessments.
- Must submit a loan application. A $100 purchase of a single share of CFAB stock will be required. Additionally, 2% of the loan, up to $2,500, must be purchased from CFAB in preferred stock prior to closing the loan.

- Must provide copies of federal tax returns for the past 3 years, including Schedule C's, W2's, and 1099's (and any other returns needed to document your eligibility).
- Must have held a limited entry permit, commercial fishing or crewmember license in two of the preceding five years of the date of the application; or a demonstrable history in the commercial fishery.
- Must have proof of availability of vessel (provide proof of ownership, pending purchase , letter of intent from lessor, and/or copy of partnership agreement with existing vessel owner).
- For purchase of set net permits – provide verification of site and associated costs.
- Provide copy of the permit purchase agreement and down payment receipt (must be signed by seller and purchaser).
- Applicant must receive a certificate of attendance and satisfactory completion of a Commercial Fishing Business Planning Workshop prior to closing the loan.
- Applicant must provide two letters of reference completed by individuals who are familiar with character of the applicant and reside in within the Bristol Bay watershed.
- Applicant agree to make every effort not to accumulate commercial fishing violations that jeopardizes the permit status with the State of Alaska.
- Applicant must sign a document that he or she agrees to make every effort to give as much notice as possible to BBEDC's loan officer of their inability to make scheduled annual or monthly loan payments.

<u>BBEDC Earn-Out Criteria for Principal Reduction Events</u>

The borrower's of this program have the ability to earn-out up to 30% of the principal balance of the loan amount. The ability to have an earn-out event is contingent of the following criteria:

- Participation in the fishery in all years since the borrower has entered the program.
- Attendance all required one-on-one business coaching sessions. The quarterly sessions will focus on budgeting, taxes, balance sheet and profit/loss statement assessments, and future capital expenditure forecasts.

- Timely payments according to the loan agreement; or explanation of any lapses with at least a 60 day notice to CFAB for any payments that will be late or delinquent.
- Proof of residency within the Bristol Bay watershed for the period up to the earn-out, without any interruption over 90 days.
- Copies of all tax returns for period leading up to the earn-out event.
- Make every effort to abide by State of Alaska and Federal laws regarding the commercial fishery and maintain good standing with CFEC.

6. *Education and Training*

Goals and Objectives

Education and training are essential activities for the overall program but they are programs with a long term payout. The benefits will increasingly become apparent starting in 3-5 years. The education and training programs will build a long term sustainable pool of qualified resident fishermen that can successfully compete in the salmon fisheries.

The goals of this program element are to enhance the skills needed to become a successful Bristol Bay fisherman. Benefits of the program will be to increase average resident fishing income (now 30% less than non-resident revenues) and to raise the number of permits held by local residents.

A major goal of the education/training program is to elevate the prestige of commercial fishing as a respected profession.

Activities

Building the Education and Training Program

We propose creating a specific working group facilitated by staff skilled in education and training program development. From the education side local Bristol Bay school systems, University of Alaska, SeaGrant and Alaska school systems with marine technology programs (Ketchikan, Kodiak, Sitka and Cordova) would all supply needed expertise. From the training side of experience and knowledge of state/federal programs the Alaska department of Labor, Alaska Jobs Center and Alaska Vocational Technical Center

would be recruited. Local drift and setnet fishermen that understand the skills and knowledge required for competition and success in the Bay salmon fishery would round out the needed expertise. The Education Project Director of BBEDC (or other BBEDC designee) would chair the group to ensure coordination and synergy with all Clearinghouse programs.

Education Components:

Focus: develop entrepreneurial talent and knowledge to run a fishing operation as a successful small business

- Encourage an understanding of the "business of fishing" as a long term career choice. Develop business and financial skills needed for success in today's fishing industry. Many of these skills can start in the high school curriculum as students are preparing for careers as well as the Community College and Outreach programs.
- Start early in the school system to build respect and appreciation for professional fishermen.
- Create K-12 lesson plans that develop and refine abilities needed by contemporary fishermen.
- Work with the UA to develop college classroom curriculum for new and existing fishermen to teach business management, gear handling strategies, quality handling practices and boat maintenance skills.

The education programs developed under this initiative would be operated by the appropriate educational institutions – local school systems, University of Alaska and SeaGrant. There would be a needed role for the Clearinghouse to maintain an ongoing role of monitoring performance, obtaining needed funding for programs, coordinating growth and change in the programs over time as needs to support new and existing fishermen change.

Training Components:

Focus: Build skills and experiences needed to become successful fishermen

Skills learned in the classroom can provide a background and knowledge, but hands on activity on the dock, deck, engine room and beach is essential to building the next generation of successful resident fishermen. Training programs need to target all aspects of the wide variety of skills and knowledge fishermen must have –

nets and gear, seamanship, operation and maintenance of equipment, electronics and vessels.

There are several groups that can be enlisted in ongoing roles to build and operate successful training Bristol Bay Salmon fishermen training programs:

- Local fishermen can fulfill the roles of by "heroes" as mentors in schools and as trainers on the boat.
- SeaGrant has the competence and experience in many Alaska fisheries with outreach, material development and training.
- The Alaska Department of Labor is the central clearinghouse for state and federal training and trade assistance funds and has experience with many formal training programs and facilities in the State.

There are several specific options we have identified to be utilized in the overall training program:

- Pay fishing interns for a pre-season work programs on nets and maintenance of vessels to gain skills before becoming a deckhand.
- Provide a crew-share match to skipper hiring inexperienced local trainee crew.
- Existing law allows the Entry Commission to issue 'education permits'. This would allow a salmon training vessel of setnet training site where students and trainees could obtain their initial exposure to the salmon fishery and gain initial fishing skills. This has been successfully utilized in other fishery training programs.

Due to the uniqueness of the training programs the Clearinghouse would have to have a much more robust role in developing and maintaining these programs. Existing institutions such as SeaGrant and the schools systems can possibly operate some of these program components under contract.

<u>Overall Integration of Education and Training</u>

There are several other program components that can be integrated to enhance overall success of the education and training programs:

- Participants that successfully complete training and or education programs could be rewarded with qualification 'points' for financial support programs for permits and vessels. This would

create incentives to participate and succeed in the education and training programs.

- Other areas of the state and other fisheries have maintained a successful fishing fleet through access to other fisheries. A fishing way of life has thus been created. Current and prospective Bay salmon fishermen should be provided the opportunity and access to CDQ high seas fishing training, employment and careers to expand and build the Bay's own unique fishing lifestyle.
- Another incentive for Bay residents that successfully complete education and training programs could be general scholarships.

An important aspect of the Clearinghouse is maintaining a real life connection between the students and trainees coming up through these programs, actual participation in the fishery as deckhands and eventual entry into the fishery as permit holders. A key purpose of the Research and Database Activity is to track and integrate all of these programs and individuals.

Program Phase-in Schedule

60 Permit Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5
Annual No. Permit Transactions	15	25	35	45	60
ARL Net Change Permit +/-	-2	13	28	43	43
1 Program Coordination					
Permit Program Management and Coordination	xxx	xxx	xxx	xxx	xxx
Clearinghouse LLC Creation	xxx	xxx	xxx	xxx	xxx
Program Promotion with Agencies/Foundations		x	xx	xxx	xxx
2 Outreach and Communications					
Outreach Director		xxx	xxx	xxx	xxx
Information Services		xx	xxx	xxx	xxx
Mailings		xx	xxx	xxx	xxx
Candidate Pool creation		xx	xxx	xxx	xxx
Community Liason Expansion		x	xx	xxx	xxx
Community Peer Groups			x	xx	xxx
3 Research and Data Services					
Permit database and tracking, reporting		xx	xxx	xxx	xxx
Permit Website Creation & Maint		xx	xxx	xxx	xxx
Registry		xxx	xxx	xxx	xxx
Stacking Study		x	xxx	xxx	xxx
4 Brokerage					
Brokerage Director - Expand program	xxx	xxx	xxx	xxx	xxx
Broker Bonus	xx	xxx	xxx	xxx	xxx
Permit Listing Fee	xxx	xxx	xxx	xxx	xxx
Partnership & Matchmaker programs		xx	xxx	xxx	xxx
Gifting Bonus/Annuity for Elders		xx	xxx	xxx	xxx
5 Financial Services					
CFAB/USDA Loan Gaurantee Establishment	xxx	xxx	xxx	xxx	xxx
Finance Services by Contract	xxx	xxx	xxx	xxx	xxx
Permit Low Interest Loan Program	xxx	xxx	xxx	xxx	xxx
Permit Equity Forgiveness (sweat equity)	xxx	xxx	xxx	xxx	xxx
ARL Right of 1st Refusal contract	xxx	xxx	xxx	xxx	xxx
Vessel, Equip and Gear Loans Phase II		x	xxx	xxx	xxx
6 Education and Training					
Education and Training Administration		x	xxx	xxx	xxx
Curriculum Work Group		x	xx	xxx	xxx
K-8 curriculum			x	xxx	xxx
High School curriculum		x	xxx	xxx	xxx
Community College curriculum		x	xx	xxx	xxx
Business 101		xx	xxx	xxx	xxx
fishing skills summer Internships		xxx	xxx	xxx	xxx
Crewman jobs matching funds		xx	xxx	xxx	xxx
Education Fishing Permit and Vessel			xx	xxx	xxx
Fishing Live Style - CDQ & Other Fisheries				xxx	xxx

Clearinghouse Budget - Detail

Important Note: Costs below are total program costs – regardless of how paid for. Some functions already exist in BBEDC, or can be added to existing workloads.

Costs for programs already being conducted by BBEDC or that can be absorbed by current staff are addressed below in the Revenue section of this budget.

BBEDC must decide how much of the permit restoration program can or should be integrated into ongoing activities. Provisionally, figures in the Revenue section assume that all personnel needs for the program can be met with existing BBEDC staff.

60 Permit Scenario

Total costs less grants and existing expenses

	Year 1	Year 2	Year 3	Year 4	Year 5
Program Coordination					
Total Personnel	0	78,000	80,340	82,750	85,233
Personnel (Director)	0	65,000	66,950	68,959	71,027
Benefits	0	13,000	13,390	13,792	14,205
Travel	0	7,500	7,500	7,500	7,500
Activities:					
1					
2					
3					
Total Program Cost	0	85,500	87,840	90,250	92,733

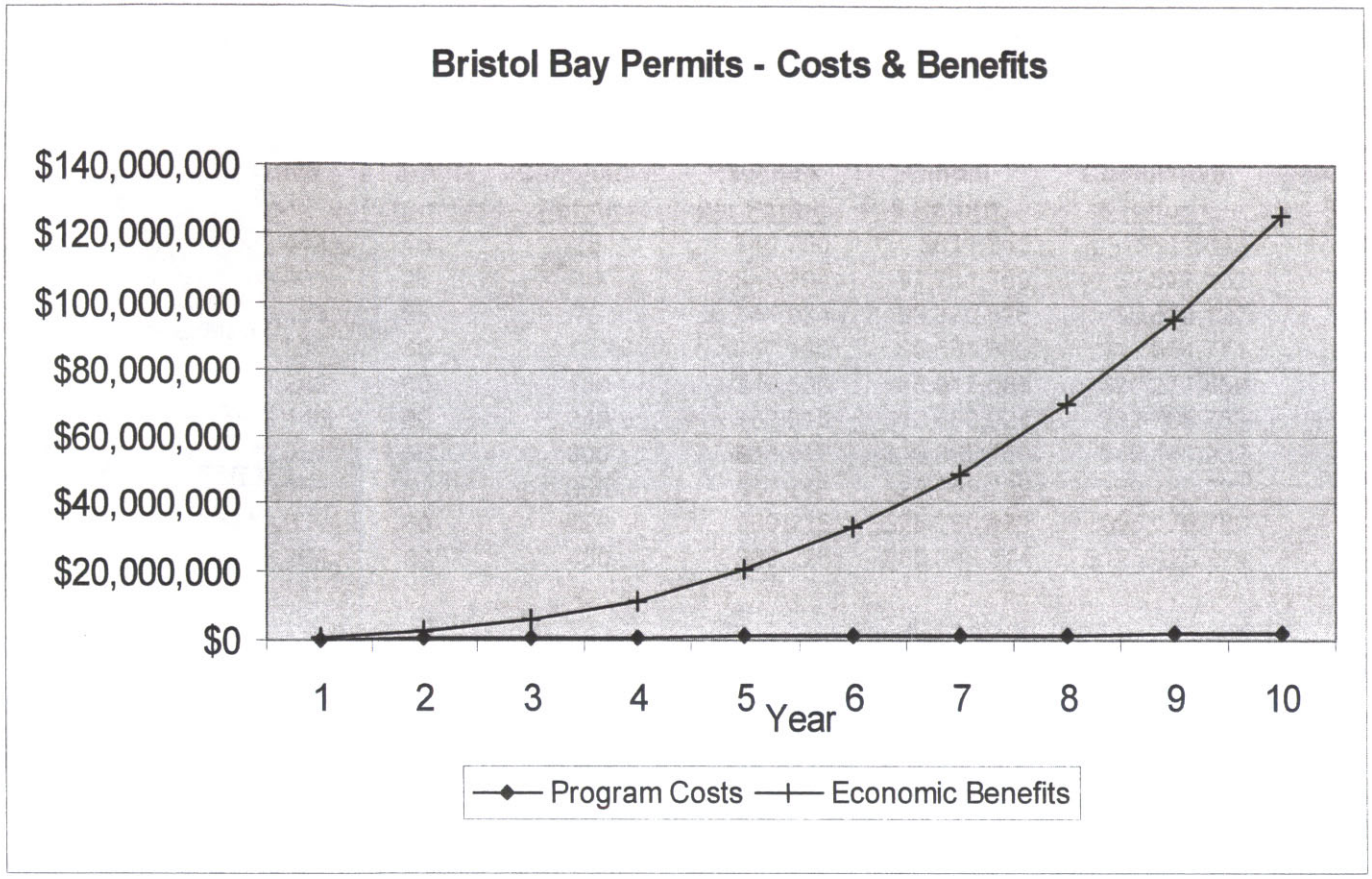
	Year 1	Year 2	Year 3	Year 4	Year 5
Outreach and Communications					
Total Personnel	0	60,000	103,800	106,914	110,121
Personnel 1	0	50,000	51,500	53,045	54,636
Personnel 2		0	35,000	36,050	37,132
Benefits	0	10,000	17,300	17,819	18,354
Travel	0	7,500	7,500	7,500	7,500
Activities:					
Community Peer Groups			4,000	8,000	15,000
Mailings		8,000	8,000	8,000	8,000
Advertising	0	2,500	2,500	2,500	2,500
Total Program Cost	0	78,000	125,800	132,914	143,121
Research and Data					
Total Personnel					
Personnel 1					
Personnel 2					
Benefits					
Travel					
Equipment & supplies	0	15,000	15,000	7,000	7,000
Activities:					
Database dev & maintenance	0	30,000	10,000	10,000	10,000
Permit Stacking Study	0	75,000	25,000		
Website development and maintenance	0	10,000	2,500	2,500	2,500
Total Program Cost	0	130,000	52,500	19,500	19,500

	Year 1	Year 2	Year 3	Year 4	Year 5
Brokerage					
Total Personnel	78,000	80,340	82,750	85,233	87,790
Personnel 1	65,000	66,950	68,959	71,027	73,158
Personnel 2					
Benefits	13,000	13,390	13,792	14,205	14,632
Travel	2,500	3,500	3,500	3,500	3,500
Activities:					
Broker Bonus	8,000	12,000	16,000	16,000	16,000
Permit Listing Fee	5,000	10,000	10,000	10,000	10,000
Gifting Bonus Elders		50,000	50,000	50,000	50,000
Total Program Cost	93,500	155,840	162,250	164,733	167,290
Financial Services					
Total Personnel		120,000	123,600	127,308	131,127
Personnel 1		100,000	103,000	106,090	109,273
Personnel 2					
Benefits	0	20,000	20,600	21,218	21,855
Travel	25,000	15,000	15,000	15,000	15,000
Activities:					
CFAB	20,000	13,000	13,000	13,000	13,000
AGC Contract	120,000				
Loan Operating Fund	-7,687	-19,893	-33,781	-51,241	-67,600
Sweat Equity	225,000	375,000	450,000	600,000	600,000
Total Program Cost	382,313	503,107	567,819	704,067	691,527

	Year 1	Year 2	Year 3	Year 4	Year 5
Education and Training					
Total Personnel		60,000	61,800	63,654	65,564
Personnel 1	0	50,000	51,500	53,045	54,636
Personnel 2	0				
Benefits	0	10,000	10,300	10,609	10,927
Travel	0	2,500	2,500	2,500	2,500
Activities:					
Curriculum Develop	0	75,000	50,000	25,000	25,000
Community College Student Fees	0	20,000	30,000	40,000	40,000
Business 101 Program/Counseling	0	30,000	45,000	60,000	60,000
fishing skills summer Internships	0	20,000	40,000	40,000	40,000
Crewman jobs matching funds	0		25,000	50,000	50,000
Total Program Cost	0	207,500	254,300	281,154	283,064

Subtotal Division

	Year 1	Year 2	Year 3	Year 4	Year 5
Total Budget					
Total Personnel	78,000	398,340	452,290	465,859	479,835
Travel	27,500	36,000	36,000	36,000	36,000
Contracts and Special Activities	145,313	335,607	297,219	283,759	274,400
Total Program Cost	475,813	1,159,947	1,250,509	1,392,618	1,397,235
Revenues (grants, foundation, appropriations, etc)					
Current BBEDC spending on similar activities	78,000	398,340	452,290	465,859	479,835
Foundation Funding		50,000	50,000	75,000	75,000
Legislative Appropriation	25,000	50,000	50,000	50,000	50,000
Dept of Labor Training Funds		40,000	75,000	75,000	75,000
Federal Economic Development funds	50,000	100,000	100,000	100,000	100,000
Stacking Study		25,000	25,000		
	153,000	663,340	752,290	765,859	779,835
Regional Funding Needed	322,813	496,607	498,219	626,759	617,400
Annual No. Permit Transactions	15	25	35	45	60
Cost per permit	21,521	19,864	14,235	13,928	10,290



Source: CFEC data – RedPoint Analysis

- Year 10 cumulative costs are $1.9 million, cumulative benefits are $125.4 million.
- Permits returned to local control contribute to the area's economy year after year
- Program costs remain steady or possibly decline after program goals are met.
- Assumes harvests and prices similar to 2006

Cost Benefit Analysis

60 Permit Scenario

Year	Program Costs New Funding	Cumulative Costs	# Permits Returned	Cumulative Permits	Revenue per Permit	Annual $ Return	Cumulative $ Return	Cumulative ROI
1	173,444	$173,444	15	15	$40,756	$611,343	$611,343	352%
2	289,557	$463,001	25	40	$42,794	$1,711,759	$2,323,102	502%
3	213,432	$676,433	35	75	$44,934	$3,370,026	$5,693,127	842%
4	178,904	$855,337	45	120	$47,180	$5,661,643	$11,354,771	1328%
5	178,904	$1,034,242	60	180	$49,539	$8,917,088	$20,271,859	1960%
6	178,904	$1,213,146	60	240	$52,016	$12,483,924	$32,755,783	2700%
7	178,904	$1,392,051	60	300	$54,617	$16,385,150	$49,140,932	3530%
8	178,904	$1,570,955	60	360	$57,348	$20,645,289	$69,786,221	4442%
9	178,904	$1,749,859	60	420	$60,215	$25,290,479	$95,076,700	5433%
10	178,904	$1,928,764	60	480	$63,226	$30,348,574	$125,425,274	6503%

Permit Type	% of Permits	Avg Income	Extrapolated
drift	57%	$55,669	$31,731
set	43%	$20,988	$9,025
		Fleet Avg Income	$40,756

Financial Services – Scenarios

Overview of Loan Program Scenarios

All scenarios use identical basic assumptions regarding loan size, interest rates, loan maturity, etc.

Each scenario assumes 15 loans in Year 1, 25 in Year 2, 30 in Year 3, and 40 per year thereafter.

Each scenario is likely to have tax consequences for fishermen, but can be structured to minimize cash impacts.

Each scenario models different assumptions regarding the use of a "sweat equity" reward system, as follows.

Scenario 1: 30% equity infusion given to program participants by BBEDC before Year 1

* BBEDC cash required to pay permit seller approximately 30% of purchase price.
* If guidelines not met, debt balance grows in future years, leading to increased losses and foreclosures.

Scenario 2: 30% equity infusion made to "Equity Builder" account by BBEDC before Year 1

* BBEDC cash required to fund Equity Builder account of approximately 30% of purchase price.
* BBEDC to maintain oversight of Equity Builder accounts; to be used for boats, gears, loan payments, etc.
* If guidelines not met, Equity Builder balances are reclaimed by BBEDC.
* Option to include "matching" program to further encourage building of equity (not currently modeled).
* Lowest expected loss rate due to use of reserve accounts (Equity Builder).

Scenario 3: Three separate 10% equity infusions made to pay down loan principal in Years 3, 5 & 7

* BBEDC cash required to pay down balances at CFAB
* BBEDC cash (eventually) required to pay down IRP deficit; annual negative cash flow may be higher than shown.
* If guidelines are not met, BBEDC does not make principal pay downs in Years 3, 5, & 7.
* Mid-range loss rate is assumed.

Summary of Loan Program for Years 1-8:

	Scenario 1	Scenario 2	Scenario 3
Average Annual Cash Flow for Average Fishermen	$3,432	$4,498	$4,308
Average Fisherman Debt Balance at end of Year 8	$20,227	$27,071	$16,732
Average Balance of "Equity Builder" Account at end of Year 8	na	$14,646	na
Average Fisherman Debt Balance at end or Year 8 (net of Equity Builder)	$20,227	$12,426	$16,732
Average Annual Cash Flow for Fishermen that Forfeit Equity	$3,641	$4,641	$4,795
Forfeiting Fisherman Debt Balance at end of Year 8	$28,120	$27,071	$27,071
Average Annual Cash Flow for BBEDC	($478,249)	($461,447)	($6,844)
IRP Balance Owed at end of Year 8	$5,028,144	$7,183,062	$7,183,062
Total Balances Owed to BBEDC at end of Year 8	$5,185,698	$7,183,062	$5,907,623
Estimated Number of Permit Foreclosures/Sales during Years 1 thru 8	43	11	22

Scenario 1

Assumptions:

BBEDC Participation %	75%
IRP Interest Rate (paid by BBEDC)	1%
BBEDC Interest Rate (paid by fishermen)	3%
CFAB Interest Rate (paid by fishermen)	7.50%
Loan Servicing Fee (to CFAB)	0.50%
Loan Origination Fee (to CFAB)	1.00%
Loan Closing Costs (to CFAB)	400
Average Loan Size - Drift (after sweat equity)	56,000
Average Loan Size - Set (after sweat equity)	14,000
Average Loan Size	35,000
Loan Term	15
Sweat Equity Reversal at end of Year 3	-10%
Sweat Equity Reversal at end of Year 5	-10%
Sweat Equity Reversal at end of Year 7	-10%
% who forfeit Sweat Equity	15%

PROS	CONS
* Smallest fisherman payments	* Potential legal issues
* Least borrowing under IRP	* Fosters grant mentality
	* Highest expected losses
	* Most permit foreclosures
	* Negative impact on permit values
	* Large use of BBEDC cash
	* Highest long-term debt balances

Cash Impact on Fishermen that Forfeit Equity:	1	2	3	4	5	6	7	8	Totals / Averages
Total Annual Cash flow	$4,640	$3,190	$3,190	$3,190	$3,361	$3,621	$3,791	$4,140	$3,641
Loan Principal Balance - BBEDC	$24,839	$23,385	$21,888	$22,970	$21,382	$22,142	$20,221	$20,572	
Loan Principal Balance - CFAB	$8,415	$8,055	$7,668	$8,127	$7,652	$7,986	$7,380	$7,548	$28,120
Total Principal Balance	$33,254	$31,440	$29,555	$31,097	$29,034	$30,128	$27,600	$28,120	

Cash Impact on Average Fisherman:	1	2	3	4	5	6	7	8	
Total Annual Cash flow	$4,640	$3,190	$3,190	$3,240	$3,240	$3,296	$3,296	$3,361	$3,432
Loan Principal Balance - BBEDC	$24,839	$23,385	$22,281	$20,711	$19,488	$17,788	$16,431	$14,583	
Loan Principal Balance - CFAB	$8,415	$8,055	$7,799	$7,383	$7,067	$6,586	$6,200	$5,644	$20,227
Total Principal Balance	$33,254	$31,440	$30,080	$28,094	$26,555	$24,374	$22,631	$20,227	

Cash Impact on BBEDC:	1	2	3	4	5	6	7	8	
Number of New Loans	15	25	30	40	40	40	40	40	
Interest Expense on IRP	($3,938)	($10,092)	($16,984)	($25,507)	($33,359)	($40,531)	($47,018)	($52,813)	
Interest Income on Loans	$11,813	$30,441	$51,488	$78,225	$103,079	$126,465	$147,810	$167,527	
Sweat Equity - payments to permit sellers	($225,000)	($375,000)	($450,000)	($600,000)	($600,000)	($600,000)	($600,000)	($600,000)	
CFAB Annual Servicing Fee	($20,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	
CFAB Servicing paid by BBEDC (for fishermen)	($2,494)	($6,424)	($10,936)	($16,555)	($21,866)	($26,741)	($31,267)	($35,312)	
Total Annual Cash flow	($239,619)	($374,075)	($439,432)	($576,837)	($565,146)	($553,807)	($543,475)	($533,598)	($478,249)

Cumulative Loan Balances:									
Total Balances owed by Fishermen	$498,804	$1,284,798	$2,187,207	$3,310,971	$4,373,156	$5,348,105	$6,253,334	$7,062,422	
Total Balance of IRP (USDA loan to BBEDC)	$372,579	$957,202	$1,613,830	$2,427,644	$3,177,917	$3,862,743	$4,480,160	$5,028,144	$5,028,144
Total Balances owed to BBEDC by Fishermen	$372,579	$957,202	$1,625,642	$2,454,096	$3,233,617	$3,945,139	$4,602,374	$5,185,698	$5,185,698
Estimated Charge-off Expense (at 4% per year)	($19,952)	($51,392)	($87,488)	($132,439)	($174,926)	($213,924)	($250,133)	($282,497)	
BBEDC Funding Deficit (IRP vs. receivables)	($19,952)	($51,392)	($75,676)	($105,986)	($119,226)	($131,528)	($127,919)	($124,943)	

Estimated Permit Foreclosures/Sales	1	2	3	4	6	8	9	11	43

Scenario 2

Assumptions:

BBEDC Participation %	75%
IRP Interest Rate (paid by BBEDC)	1%
BBEDC Interest Rate (paid by fishermen)	3%
CFAB Interest Rate (paid by fishermen)	7.50%
Loan Servicing Fee (to CFAB)	0.50%
Loan Origination Fee (to CFAB)	1.00%
Loan Closing Costs (to CFAB)	400
Average Loan Size - Drift	80,000
Average Loan Size - Set	20,000
Average Loan Size	50,000
Loan Term	15
Sweat Equity Reversal at end of Year 3	10%
Sweat Equity Reversal at end of Year 5	10%
Sweat Equity Reversal at end of Year 7	10%
% who earn Sweat Equity	85%

PROS	CONS
* Built-in cushion for lean years	* Most borrowing under IRP
* Lowest expected losses	* Highest payments in early years
* Fosters long-term mentality	* Large use of BBEDC cash
* Least permit foreclosures	
* Significant cash set aside for boat and gear	

Cash Impact on Fishermen that Forfeit Equity:	1	2	3	4	5	6	7	8	Totals / Averages
Total Annual Cash flow	$6,157	$4,251	$4,353	$4,349	$4,453	$4,451	$4,557	$4,557	$4,641
Escrow Account Balance	$15,000	$15,300	$10,200	$10,404	$5,202	$5,306	$0	$0	
Loan Principal Balance - BBEDC	$35,484	$33,407	$31,268	$29,065	$26,795	$24,458	$22,051	$19,571	
Loan Principal Balance - CFAB	$12,021	$11,507	$10,954	$10,359	$9,720	$9,033	$8,294	$7,500	
Total Principal Balance	$47,505	$44,914	$42,222	$39,424	$36,516	$33,491	$30,345	$27,071	$27,071

Cash Impact on Average Fisherman:	1	2	3	4	5	6	7	8	
Total Annual Cash flow	$6,157	$4,251	$4,261	$4,256	$4,266	$4,260	$4,270	$4,264	$4,498
Escrow Account Balance	$15,000	$15,300	$14,795	$15,091	$14,581	$14,873	$14,359	$14,646	
Loan Principal Balance - BBEDC	$35,484	$33,407	$31,268	$29,065	$26,795	$24,458	$22,051	$19,571	
Loan Principal Balance - CFAB	$12,021	$11,507	$10,954	$10,359	$9,720	$9,033	$8,294	$7,500	
Total Principal Balance	$47,505	$44,914	$42,222	$39,424	$36,516	$33,491	$30,345	$27,071	$27,071

Cash Impact on BBEDC:	1	2	3	4	5	6	7	8	
Number of New Loans	15	25	30	40	40	40	40	40	
Interest Expense on IRP	($5,625)	($14,418)	($24,263)	($36,439)	($47,655)	($57,902)	($67,169)	($75,447)	
Interest Income on Loans	$16,875	$43,488	$73,554	$111,076	$145,953	$178,108	$207,458	$233,918	
Sweat Equity - Deposits to Escrow Accounts	($225,000)	($375,000)	($450,000)	($600,000)	($600,000)	($600,000)	($600,000)	($600,000)	
CFAB Annual Servicing Fee	($20,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	
CFAB Servicing paid by BBEDC (for fishermen)	($3,563)	($9,177)	($15,510)	($23,395)	($30,698)	($37,397)	($43,466)	($48,880)	
Total Annual Cash flow	($237,313)	($368,107)	($429,219)	($561,759)	($545,400)	($530,191)	($516,177)	($503,409)	($461,447)

Cumulative Loan Balances:									
Total Balances owed by Fishermen	$712,577	$1,835,426	$3,102,081	$4,679,044	$6,139,670	$7,479,316	$8,693,119	$9,775,972	
Total Balance of IRP (USDA loan to BBEDC)	$532,256	$1,367,432	$2,305,471	$3,468,062	$4,539,881	$5,518,205	$6,400,228	$7,183,062	$7,183,062
Total Balances owed to BBEDC by Fishermen	$532,256	$1,367,432	$2,305,471	$3,468,062	$4,539,881	$5,518,205	$6,400,228	$7,183,062	$7,183,062
Estimated Charge-off Expense (at 1% per year)	($7,126)	($18,354)	($31,021)	($46,790)	($61,397)	($74,793)	($86,931)	($97,760)	
BBEDC Funding Deficit (IRP vs. receivables)	($7,126)	($18,354)	($31,021)	($46,790)	($61,397)	($74,793)	($86,931)	($97,760)	
Estimated Permit Foreclosures/Sales	0	0	1	1	2	2	2	3	11

Scenario 3

Assumptions:

BBEDC Participation %	75%
IRP Interest Rate (paid by BBEDC)	1%
BBEDC Interest Rate (paid by fishermen)	3%
CFAB Interest Rate (paid by fishermen)	7.50%
Loan Servicing Fee (to CFAB)	0.50%
Loan Origination Fee (to CFAB)	1.00%
Loan Closing Costs (to CFAB)	400
Average Loan Size - Drift	80,000
Average Loan Size - Set	20,000
Average Loan Size	50,000
Loan Term	15
Sweat Equity Paydown at end of Year 3	10%
Sweat Equity Paydown at end of Year 5	10%
Sweat Equity Paydown at end of Year 7	10%
% who earn Sweat Equity	85%

PROS	CONS
* Smallest loan payments	* Most borrowing under IRP
* Low use of BBEDC cash	* Highest payments in early years
* Reasonable loss expectations	* Significant balances not funded by IRP
* Fosters business mentality	

Cash Impact on Fishermen that Forfeit Equity:	1	2	3	4	5	6	7	8	Totals / Averages
Total Annual Cash flow	$6,457	$4,557	$4,557	$4,557	$4,557	$4,557	$4,557	$4,557	$4,795
Loan Principal Balance - BBEDC	$35,484	$33,407	$31,268	$29,065	$26,795	$24,458	$22,051	$19,571	
Loan Principal Balance - CFAB	$12,021	$11,507	$10,954	$10,359	$9,720	$9,033	$8,294	$7,500	
Total Principal Balance	$47,505	$44,914	$42,222	$39,424	$36,516	$33,491	$30,345	$27,071	$27,071

Cash Impact on Average Fisherman:	1	2	3	4	5	6	7	8	
Total Annual Cash flow	$6,457	$4,557	$4,557	$4,157	$4,157	$3,704	$3,704	$3,170	$4,308
Loan Principal Balance - BBEDC	$35,484	$33,407	$28,080	$26,102	$20,876	$19,055	$13,992	$12,419	
Loan Principal Balance - CFAB	$12,021	$11,507	$9,891	$9,297	$7,595	$6,908	$5,107	$4,313	
Total Principal Balance	$47,505	$44,914	$37,972	$35,399	$28,472	$25,963	$19,099	$16,732	$16,732

Cash Impact on BBEDC:	1	2	3	4	5	6	7	8	
Number of New Loans	15	25	30	40	40	40	40	40	
Interest Expense on IRP	($5,625)	($14,418)	($24,263)	($36,439)	($47,655)	($57,902)	($67,169)	($75,447)	
Interest Income on Loans	$16,875	$43,488	$73,554	$107,251	$138,573	$163,625	$186,491	$203,282	
Sweat Equity - Principal Pay Down on CFAB Loan	$0	$0	($15,938)	($26,563)	($47,813)	($69,063)	($90,313)	($111,563)	
CFAB Annual Servicing Fee	($20,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	
CFAB Servicing paid by BBEDC (for fishermen)	($3,563)	($9,177)	($14,873)	($21,953)	($27,647)	($32,840)	($36,659)	($40,006)	
Total Annual Cash flow	($12,313)	$6,893	$5,481	$9,296	$2,458	($9,180)	($20,650)	($36,734)	($6,844)

Cumulative Loan Balances:									
Total Balances owed by Fishermen	$712,577	$1,835,426	$2,974,581	$4,390,528	$5,529,391	$6,567,928	$7,331,893	$8,001,158	
Total Balance of IRP (USDA loan to BBEDC)	$532,256	$1,367,432	$2,305,471	$3,468,062	$4,539,881	$5,518,205	$6,400,228	$7,183,062	$7,183,062
Total Balances owed to BBEDC by Fishermen	$532,256	$1,367,432	$2,209,846	$3,253,921	$4,088,977	$4,851,191	$5,410,877	$5,907,623	$5,907,623
Estimated Charge-off Expense (at 2% per year)	($14,252)	($36,709)	($59,492)	($87,811)	($110,588)	($131,359)	($146,638)	($160,023)	
BBEDC Funding Deficit (IRP vs. receivables)	($14,252)	($36,709)	($155,117)	($301,952)	($561,492)	($798,372)	($1,135,989)	($1,435,462)	
Estimated Permit Foreclosures/Sales	0	1	1	2	3	4	5	5	22

Next Steps for Financial Services / Loan Program