

ALASKA'S CRAB DEPENDENT COMMUNITIES  
&  
THE BSAI CATCH SHARE PROGRAM



**waterfront Associates LLC**

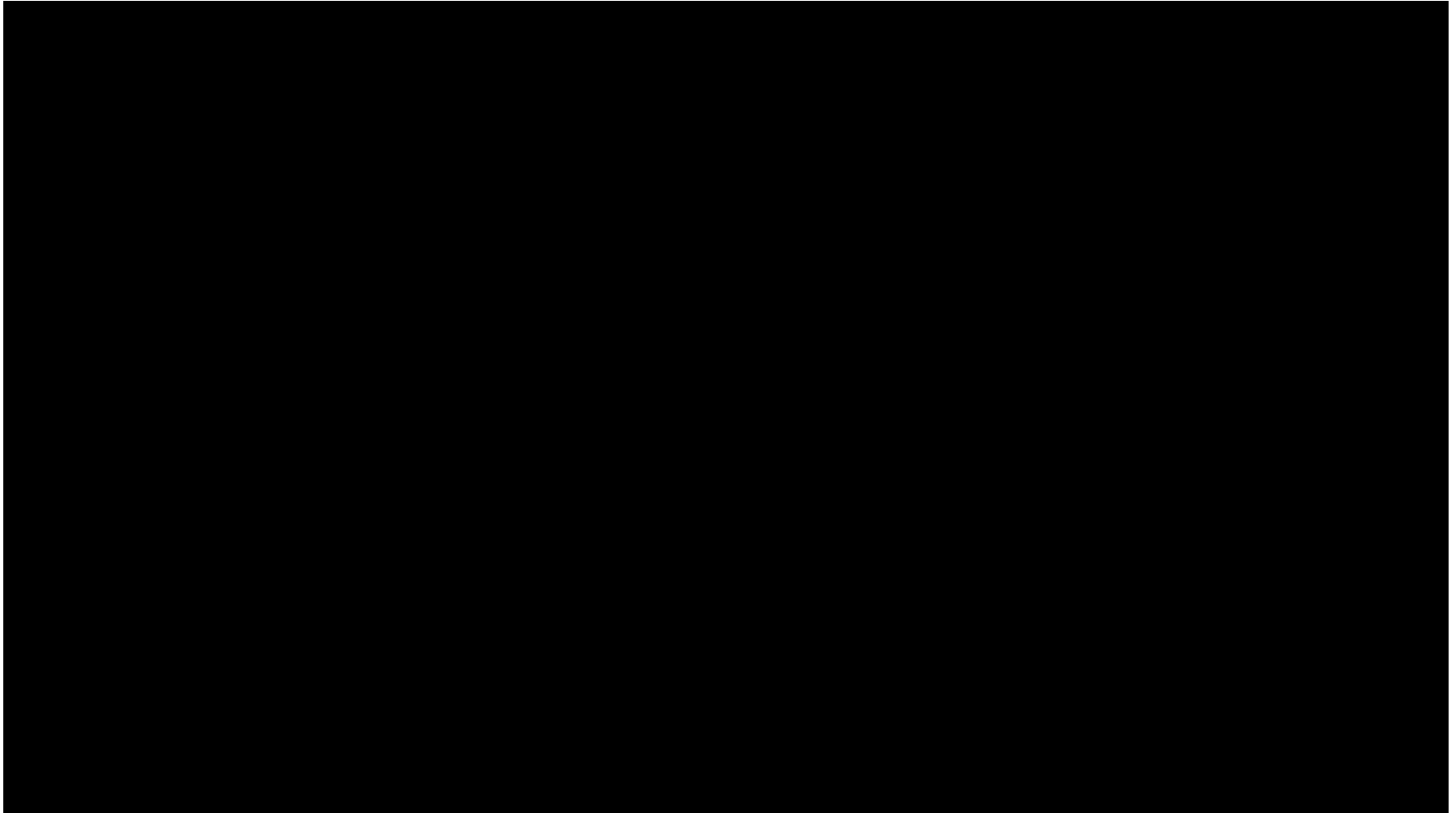
*Representing Alaska's Sustainable Fisheries and Coastal Communities*

## Overview

- Why the BSAI Crab “Catch Shares” Program Was Developed.
- How the “Stakeholders” Were Identified
- Major Characteristics of the Program



## Why the BSAI Crab “Catch Shares” Program was Developed



# Why the BSAI Crab “Catch Shares” Program was Developed

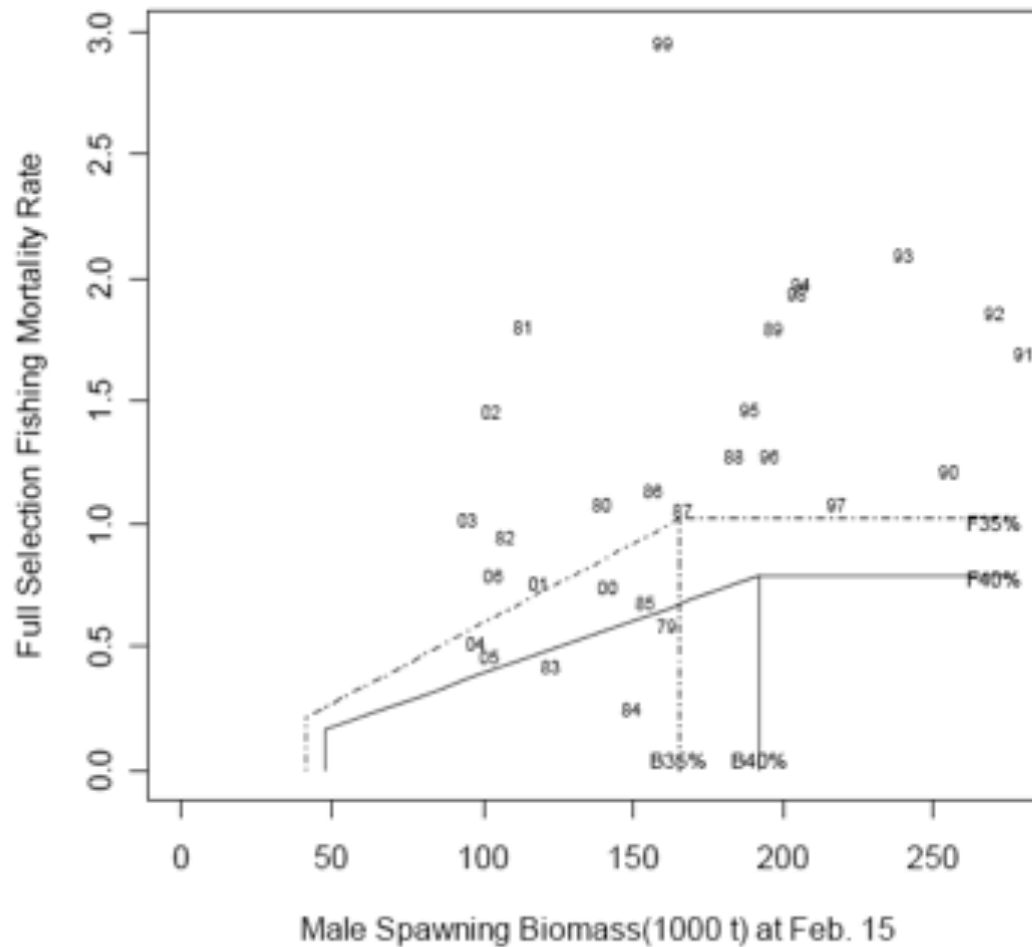
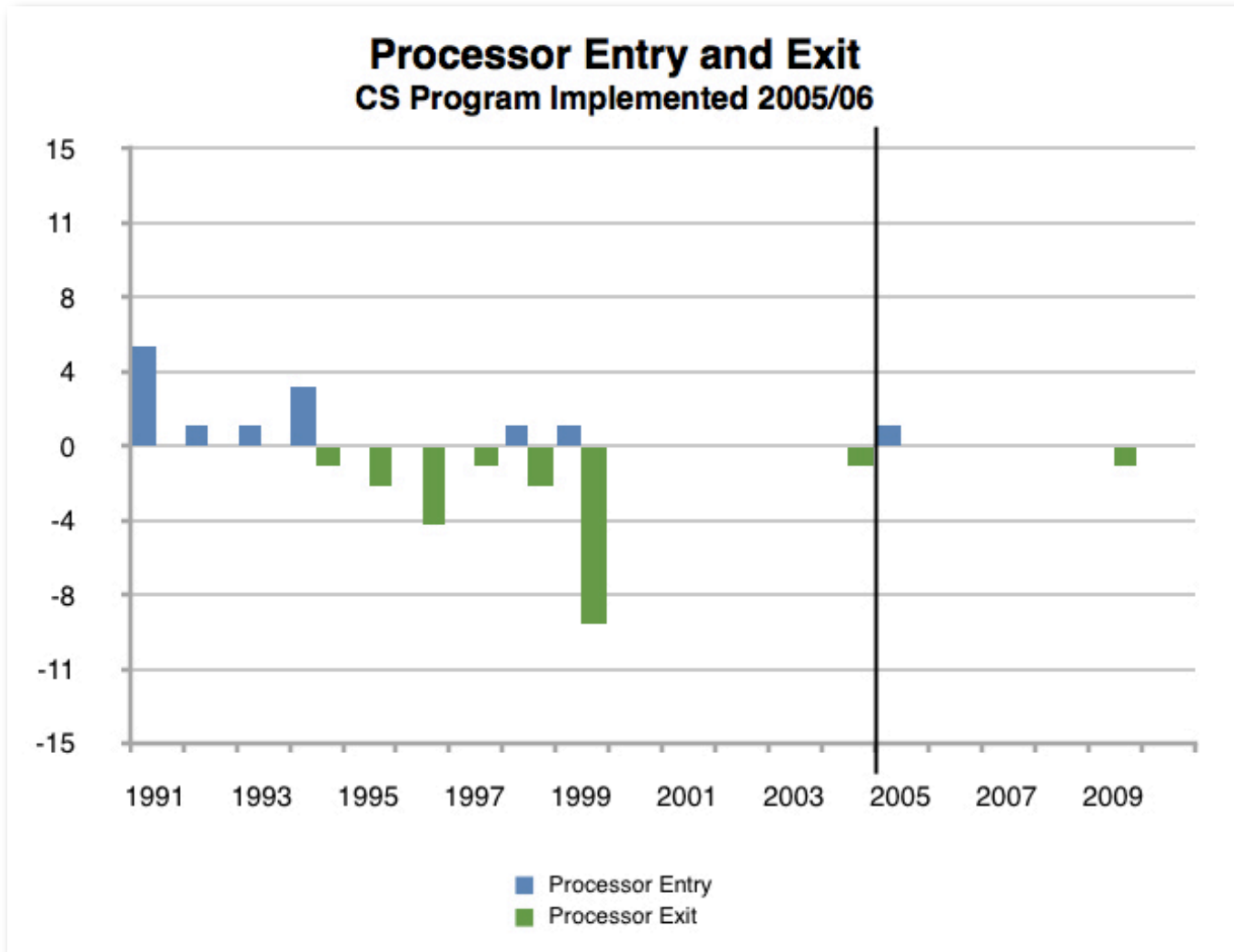
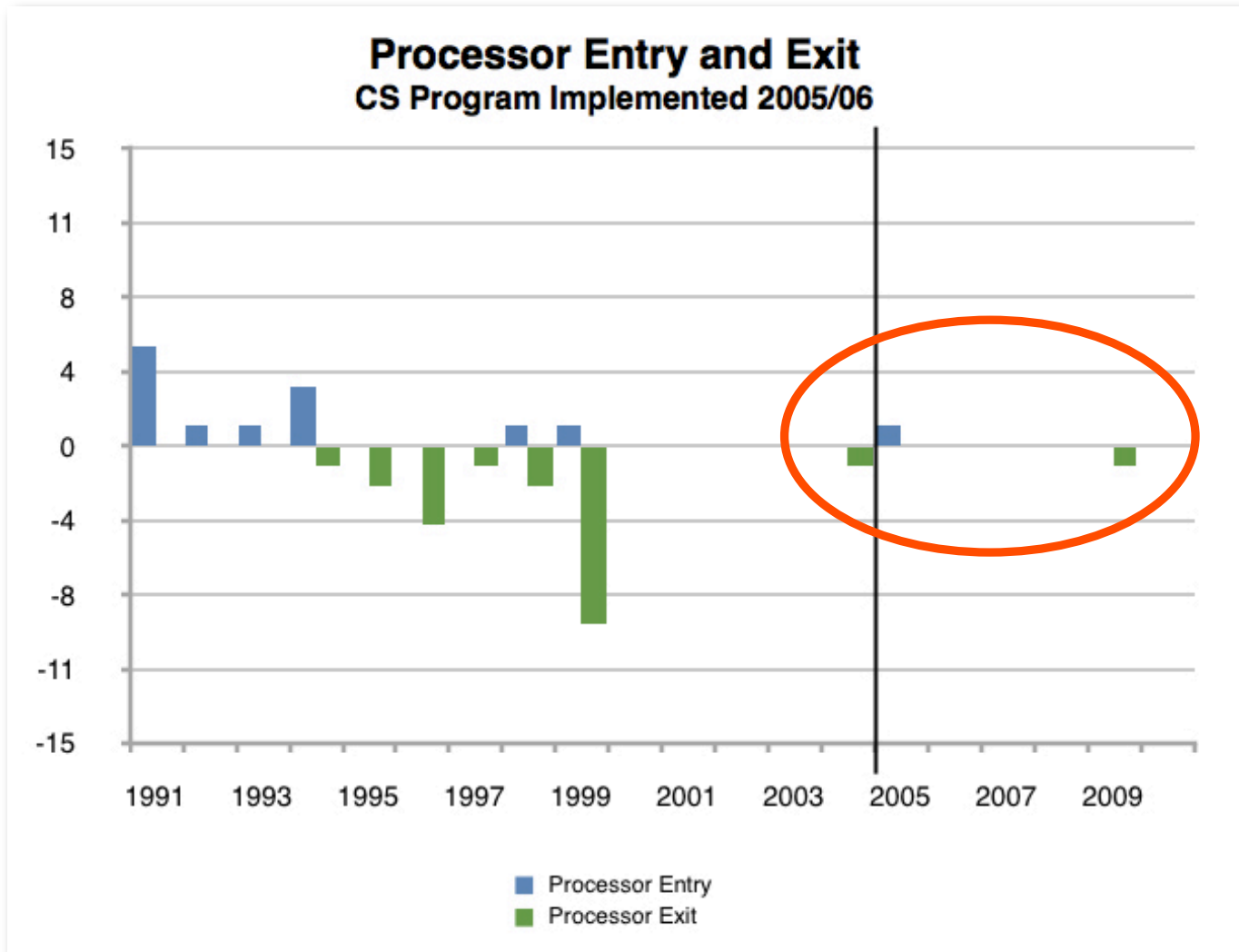


Figure 5-2 Full selection fishing mortality rate and male spawning biomass at February 15 estimated from the snow crab stock assessment model (Turnock and Rugolo 2006 Crab SAFE).

## Why the BSAI Crab “Catch Shares” Program was Developed



## Why the BSAI Crab “Catch Shares” Program was Developed

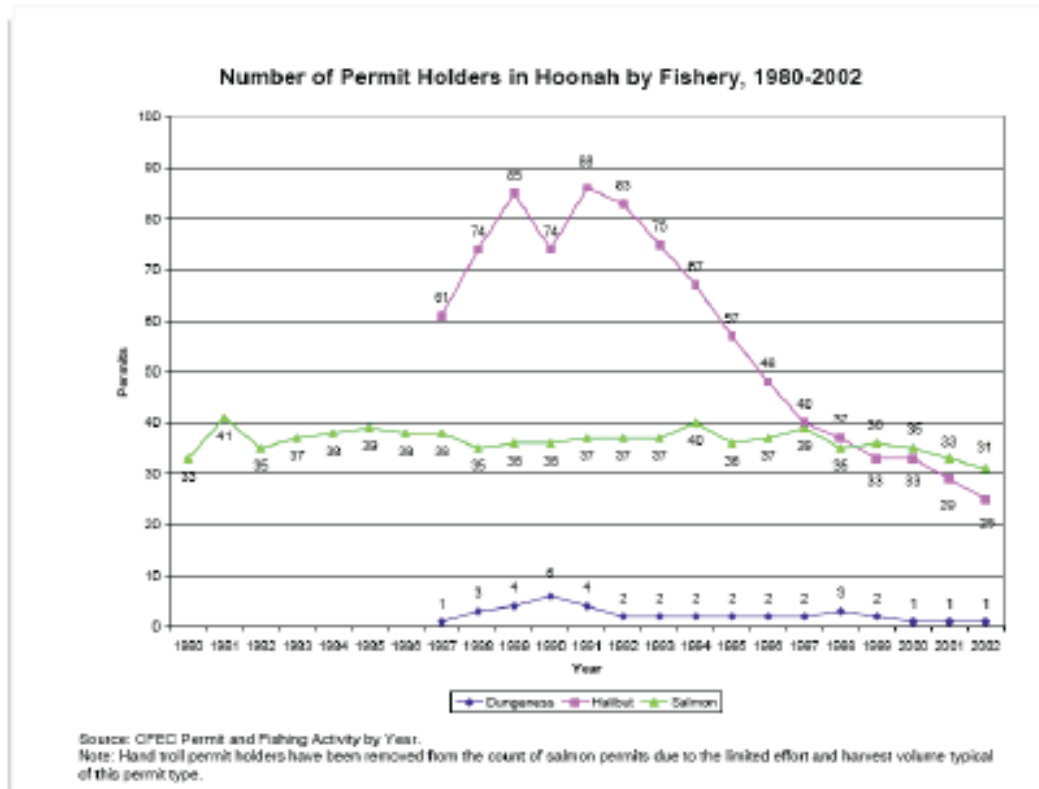


## How the Universe of “Stakeholders” was Identified.

### What We Learned from Previous Programs:

1. Look closely at **Adjacency, Dependency and Investment.**
2. **Catch Shares programs eliminate the “race for fish” and replace it with a “race for efficiency.”** This can be devastating to some fisheries-dependent communities. As the private sector pursues efficiency gains and improved margins, **dislocations can result through changes in landing patterns, fleet consolidation and other effects.**
3. Over time, **quota ownership migrated from rural communities to urban communities.**
4. In the case of the crab industry, it was easy to see that **uncontrolled processor consolidation would negatively impact the communities with the least diversified plants.** Conversely, these were the communities that were the most crab dependent.

## How the Universe of “Stakeholders” was Identified.



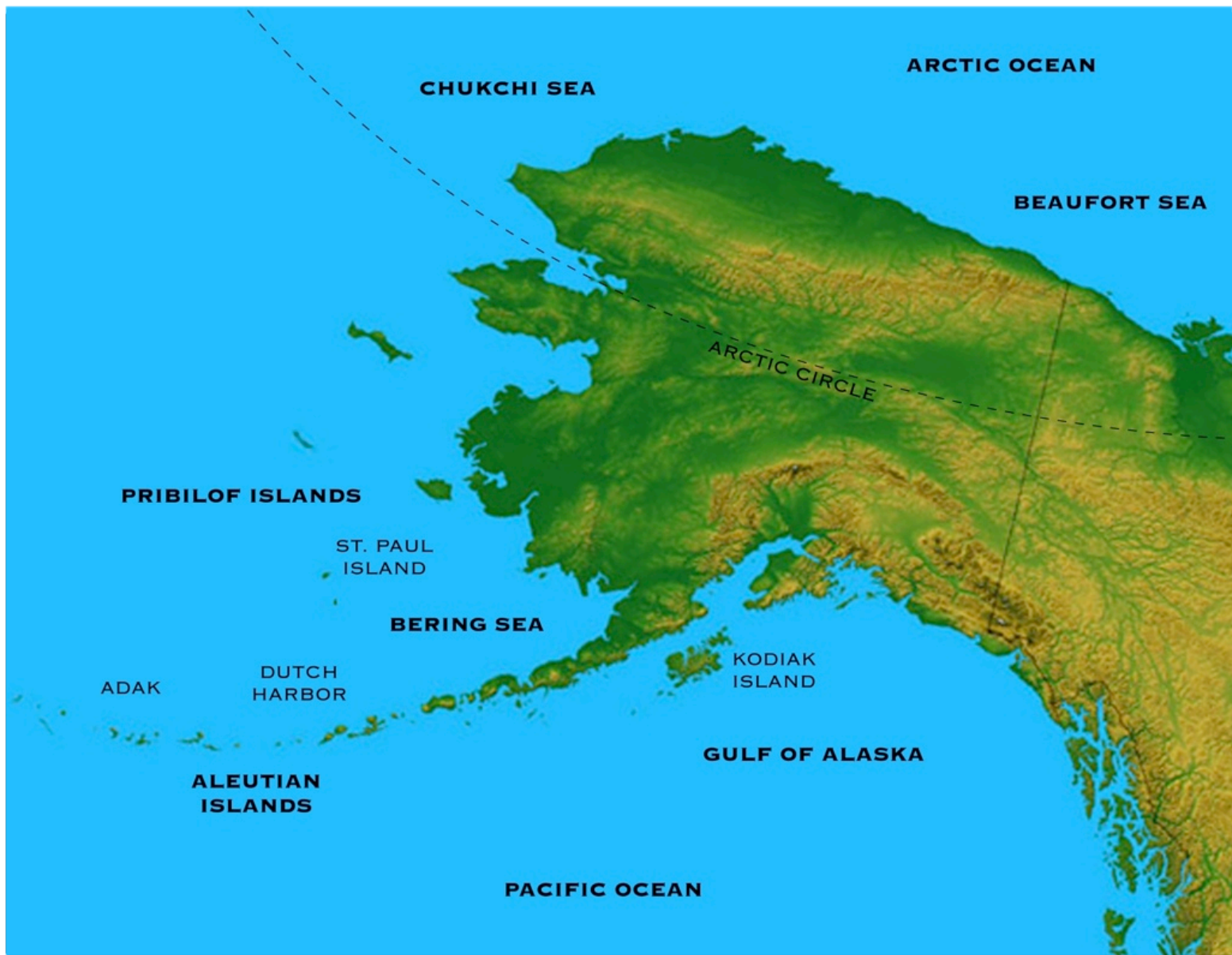


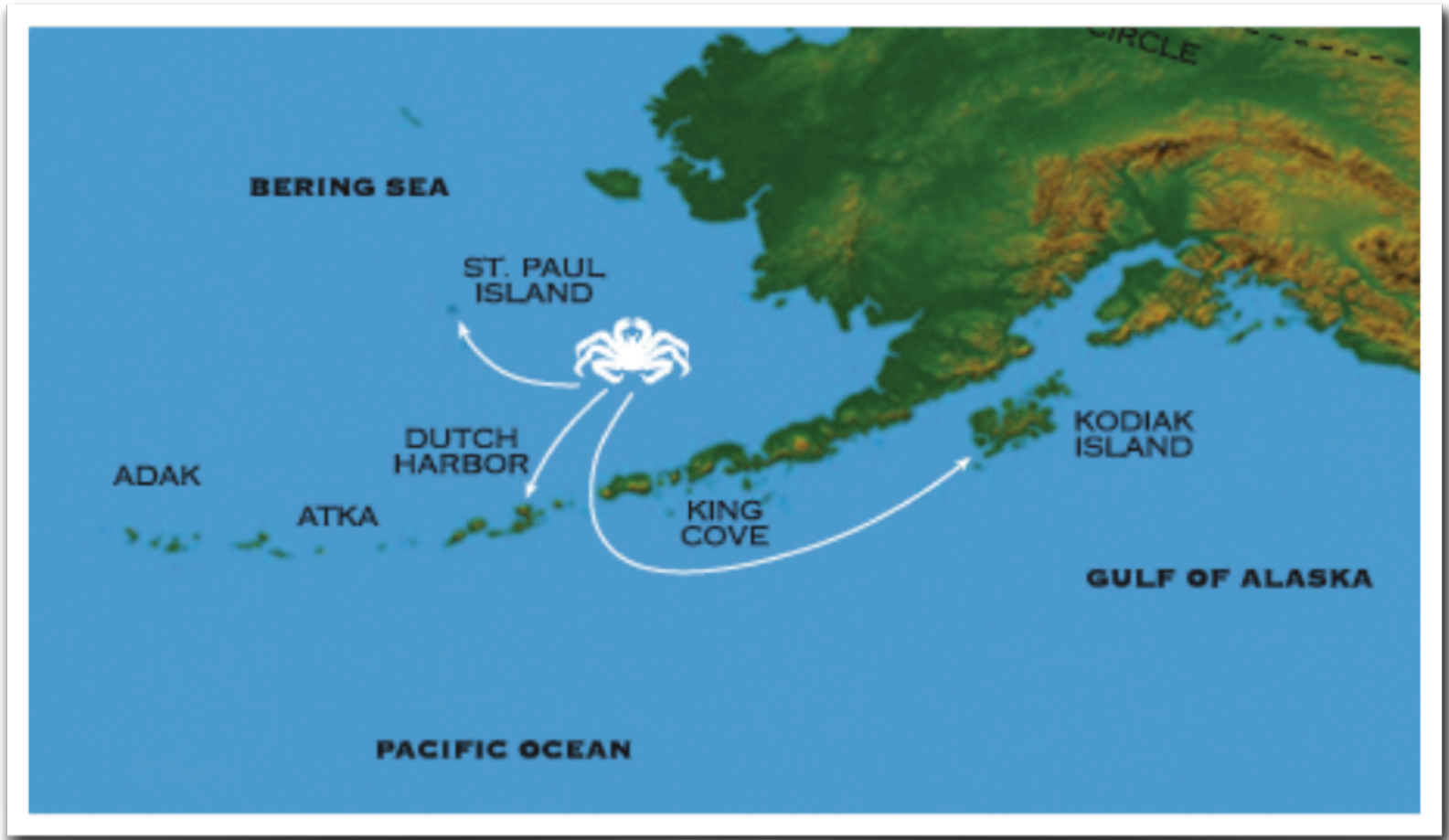
## Major Characteristics of the Program

- The program covers **seven species of crab**, harvested in the Bering Sea and the Aleutian Islands (hence “BSAI” Crab Program).
- **QS/IFQ was allocated to vessel owners and qualified skippers** as three distinct share types (A,B, and C). Since then, additional work has been done to tighten up eligibility to give active crewmen - particularly **new entrants - preferential access to all share types.**
- **PQS/IPQ allocated to qualified shore- based processors.**
- **CP shares allocated to catcher vessel owners and qualified skippers** as two distinct share types (CPO and CPC).
- **Community Development Quota (“CDQ”) groups were allocated 10% of the QS/IFQ** as a unique share type.
- **Communities granted (a) Regional Landing protections (b) a Two Year “Cool Off” protection, (c) PQS “Rights of First Refusal” and (d) CPO shares embedded with “one way” characteristics.**

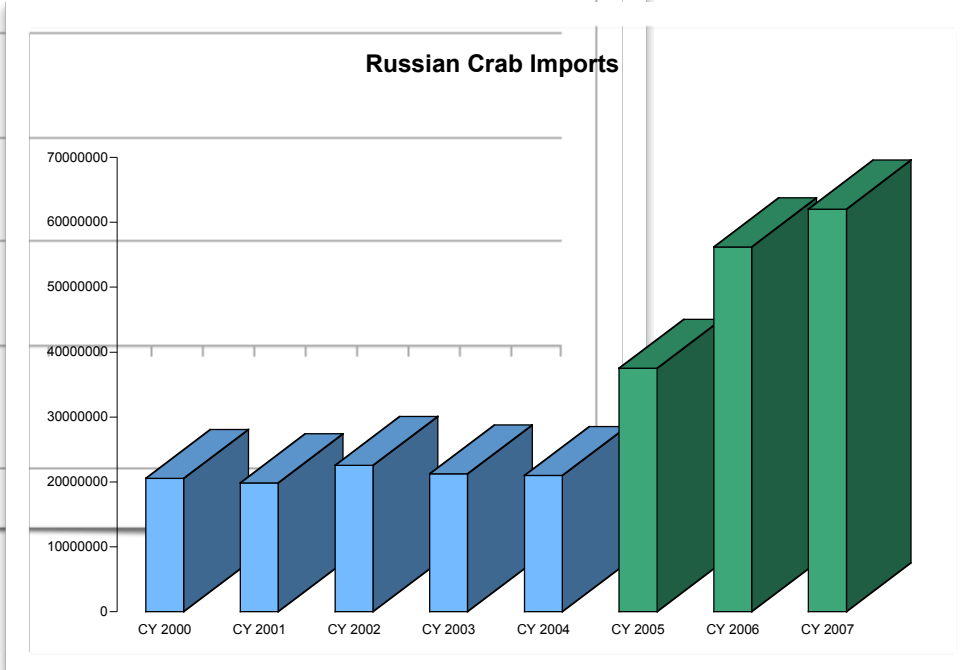
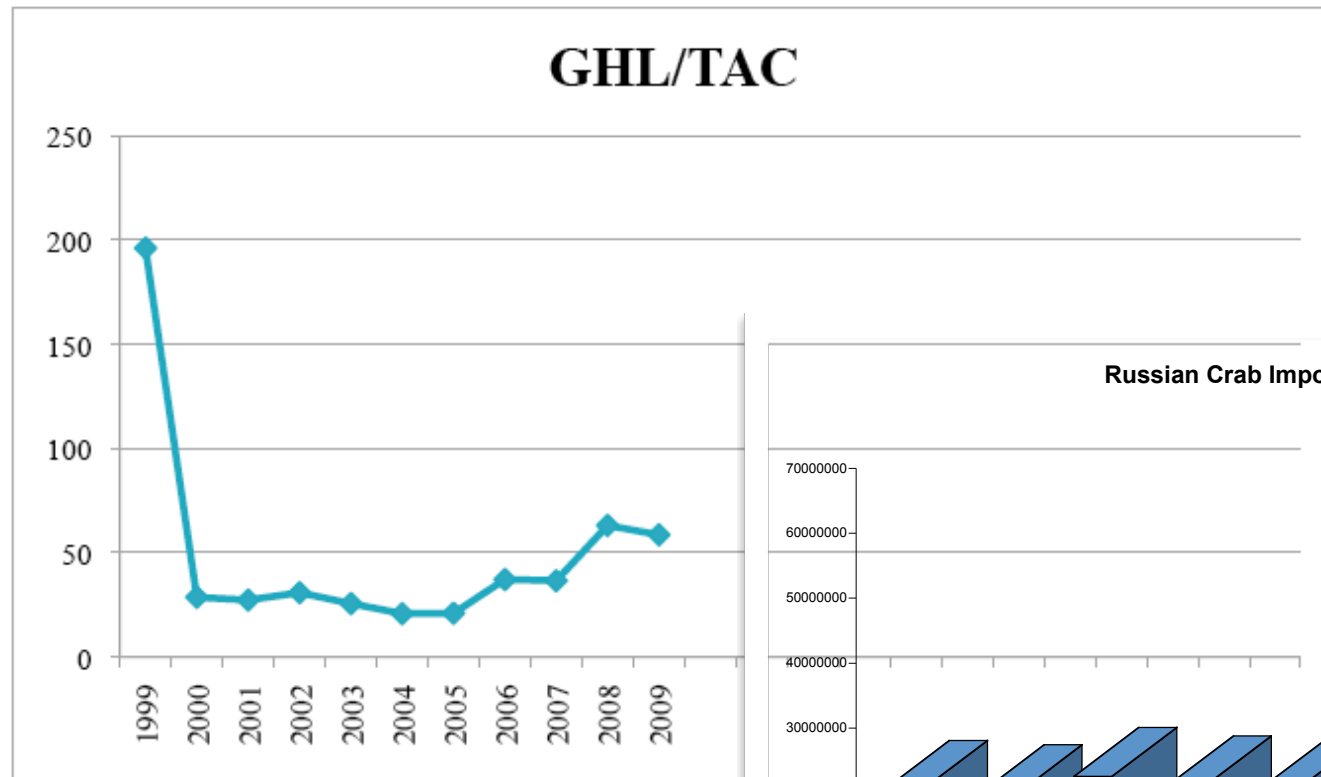
# Economic Outcomes for Communities

- **Two Examples: St. Paul Island and Kodiak Island**
- **St. Paul is almost entirely crab-dependent but close to the grounds.**
- **Kodiak is very diversified but far from the grounds.**



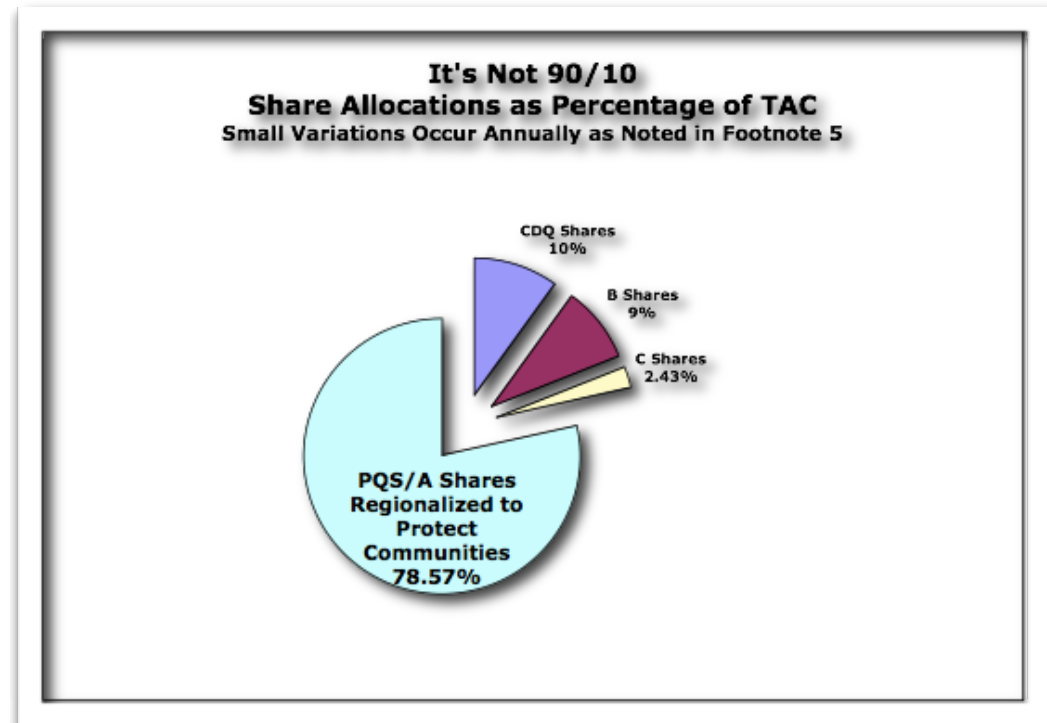


# Qualifiers: TACs, Rebuilding Plans and Global Markets



# Community Protection Measures

- **Regional Landings Requirements**
- **Two Year “Cool Off Period”**
- **Community “Right of First Refusal” Privileges to Purchase PQS that Originated in that Jurisdiction**
- **Community “ECCO”s that can Purchase Quota on Behalf of Local Residents**



## St. Paul Island, Alaska's Most Crab Dependent Community

- An Aleut community of approximately 500 people.
- Opilio crab processing drives 85% of the economy.
- Crab processing supports the entire overhead of the shore-based plant and majority of City revenues.
- Largest source of employment is local halibut fleet which operates as a day fishery Cooperative.
- No crab processing = no plant = no halibut processing = no halibut fleet = no economy





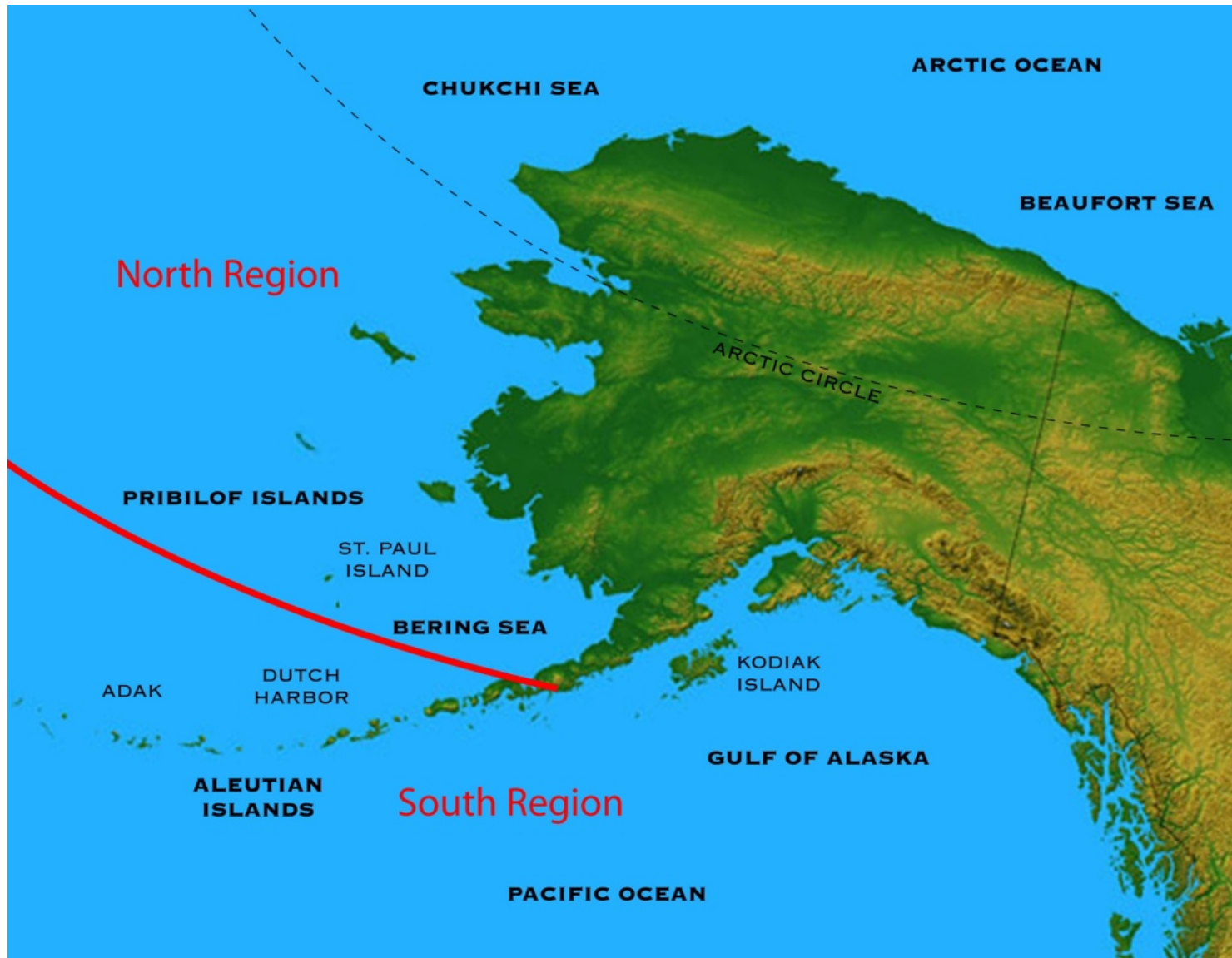
## The Domino Effect also applied to Private Sector

- Major processors have also used floaters in and around St. Paul Island, contributing to City revenues and support business income.
- The platforms then go North to process herring, and then work down the coast processing salmon.
- Without the crab processing income, the other fisheries would be in jeopardy -- especially salmon.

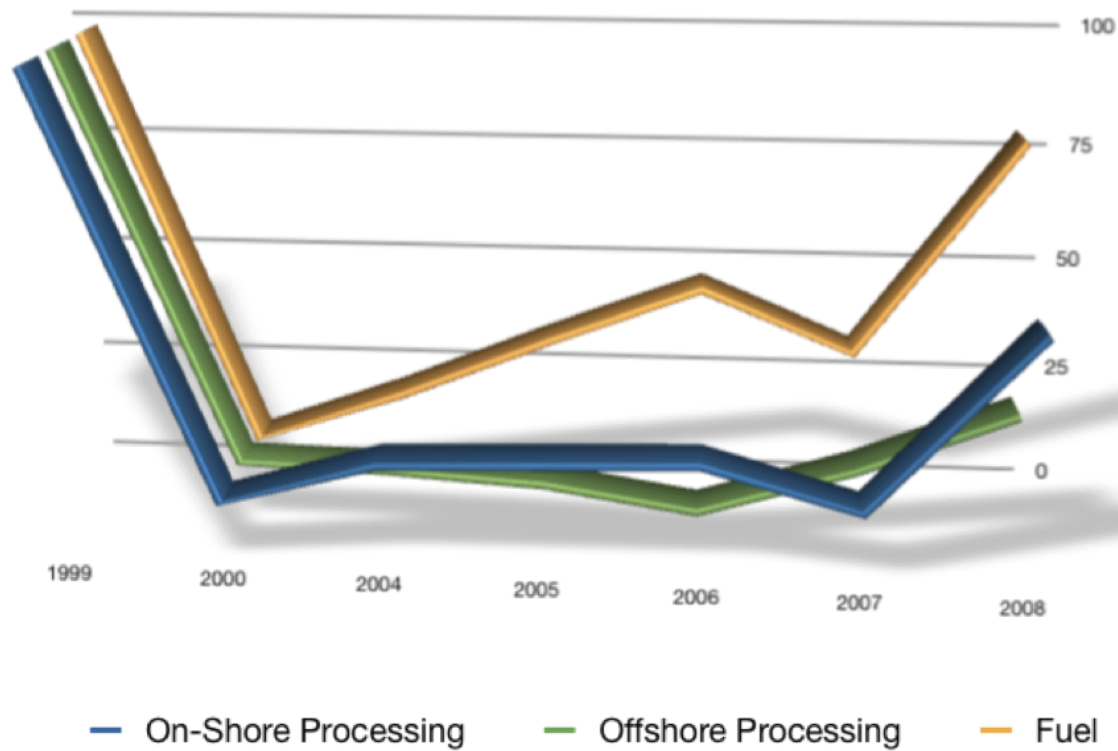




# Regional Landings Requirements

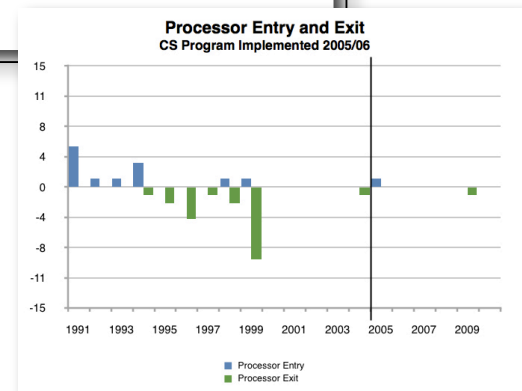
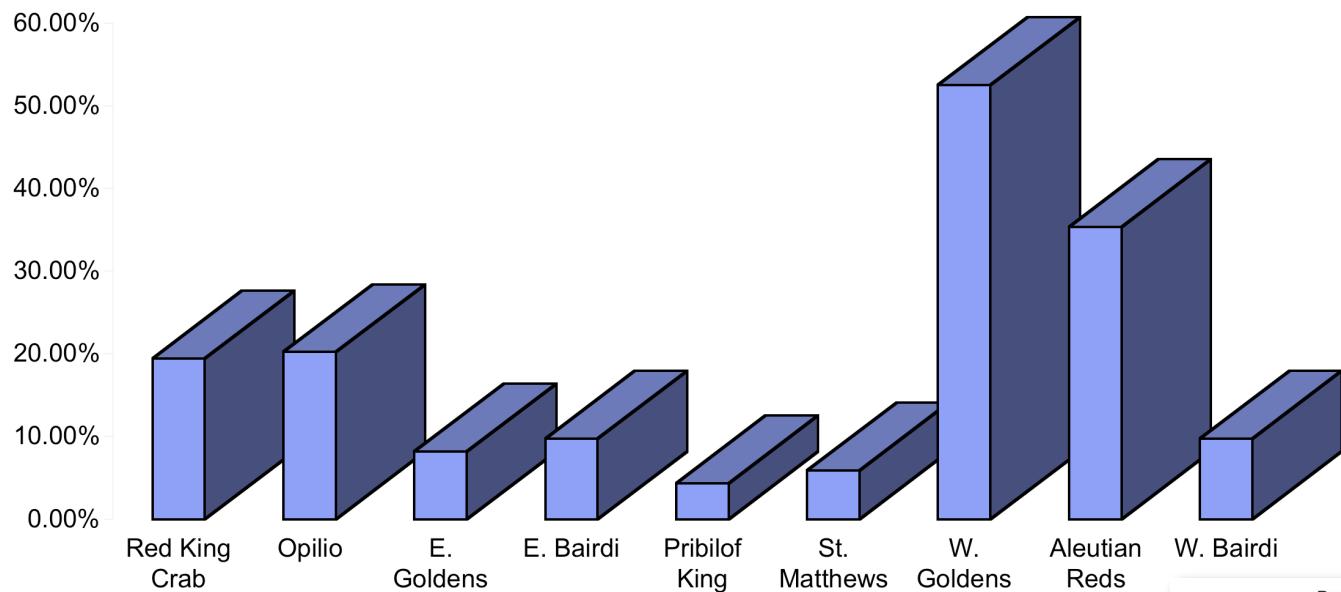


Crab landings Guaranteed, Halibut Fishery Saved, Slow Recovery but also an Opportunity.



# The Big Surprise.

**Alaska Community (ECCO) Ownership of Processor Quota Shares  
All Shares Acquired Since Implementation**

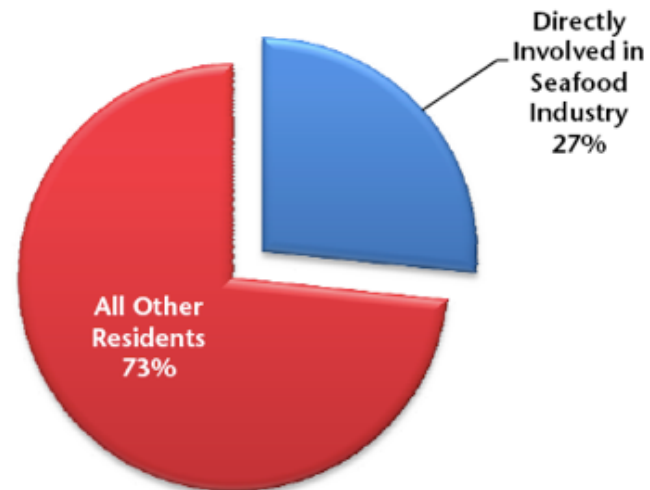


# Kodiak, a Historic Crab Port and Diversified Community

- Largest US Coast Guard Base in Nation and other Government Agency Facilities
- Diversified Fishing Fleet and Processing Sector
- Tourism, Regional Supply Center, etc.
- Greatest Distance from Crab Grounds



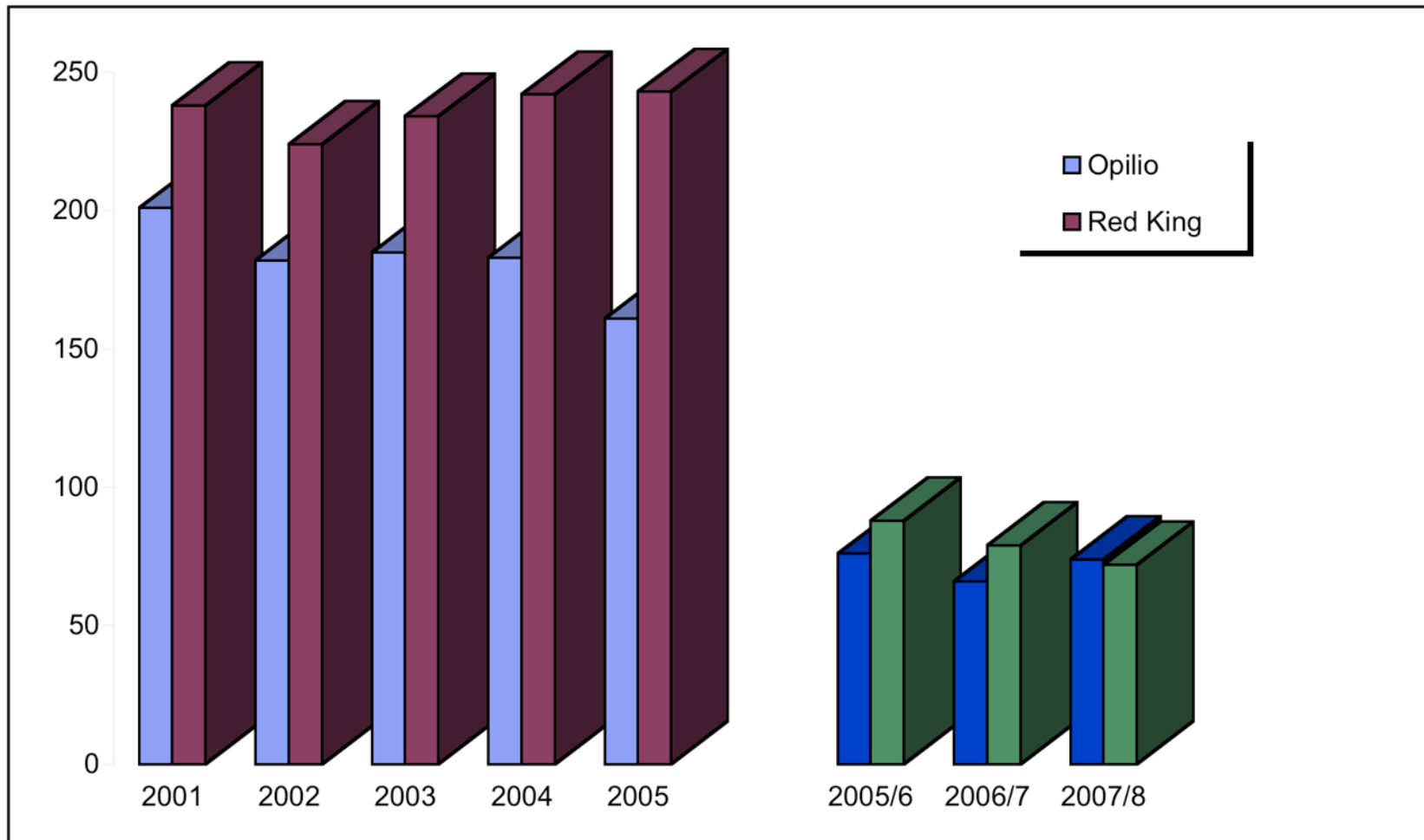
Kodiak Island Borough 16+ Population



# Fleet Consolidation.

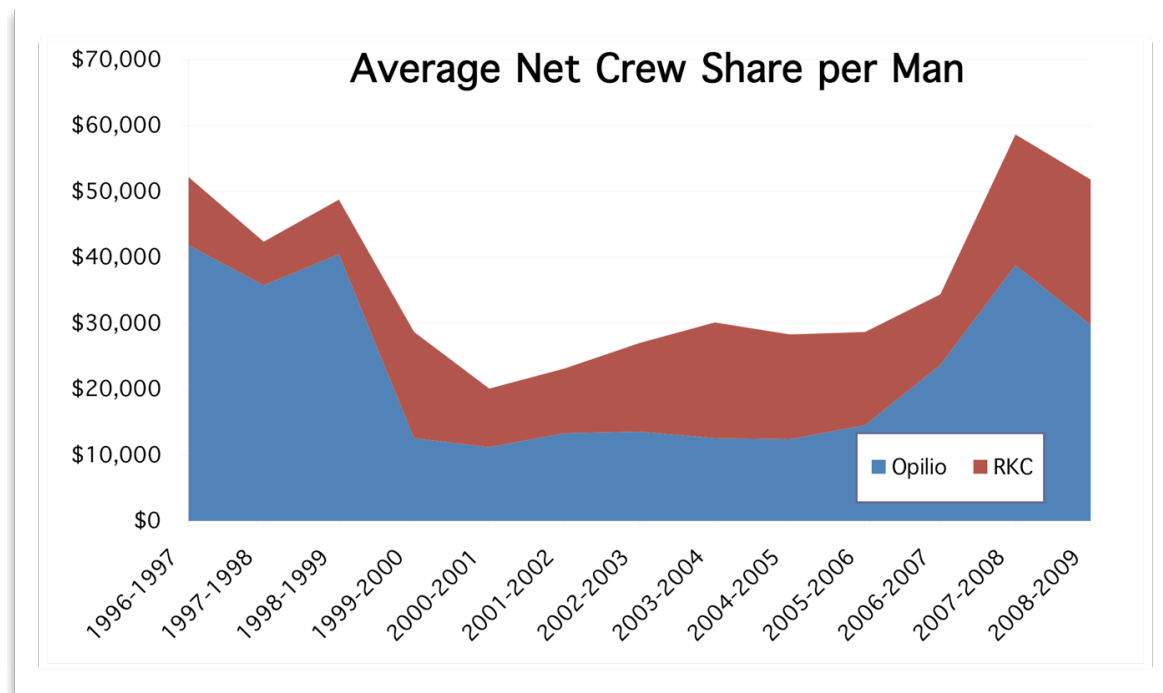
(Total Fleet Consolidation Shown.)

The Number of Kodiak Boats Still Fishing Has Declined 57%

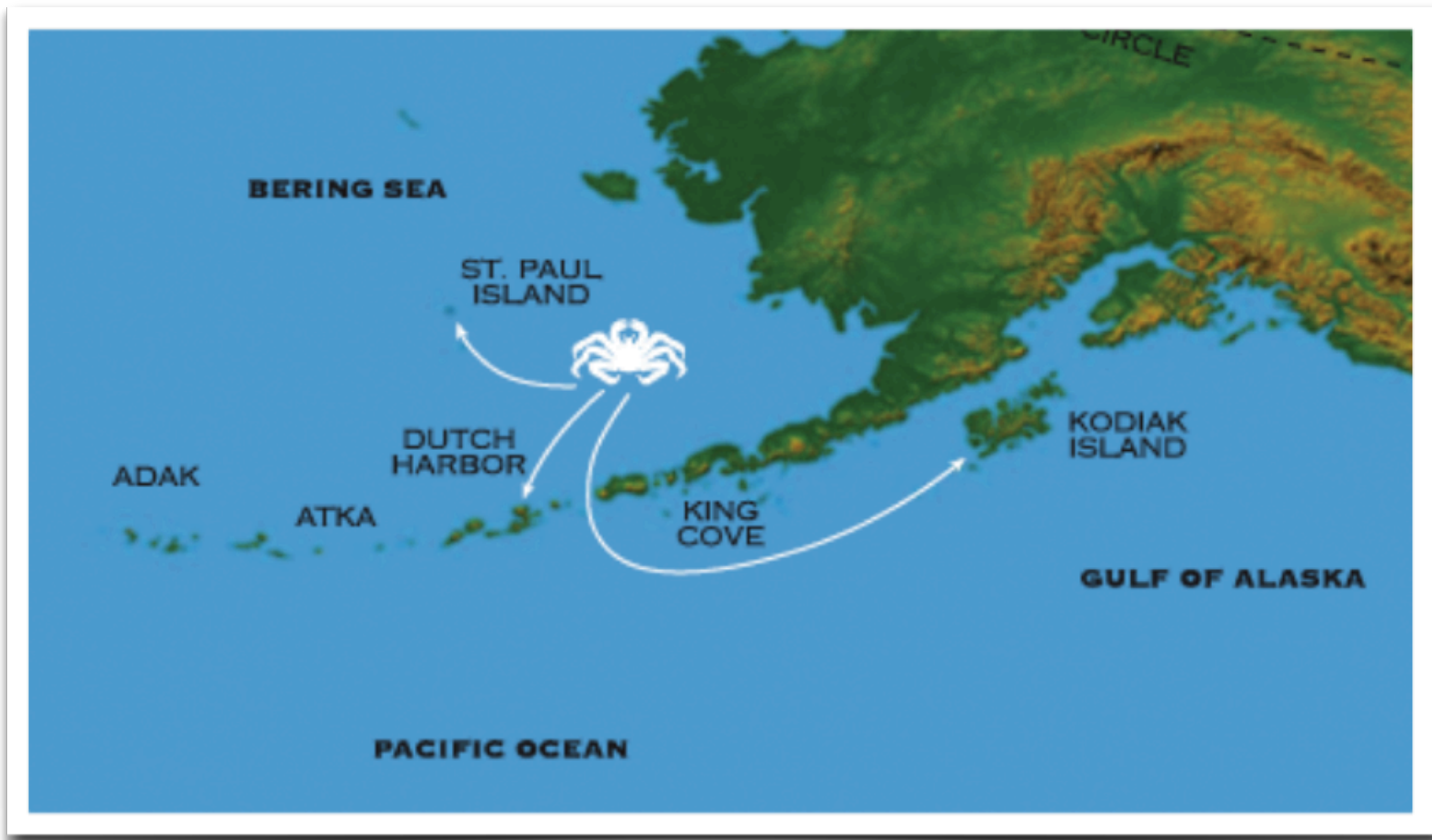


## But How Bad Was Fleet Consolidation? An On-going Philosophical Debate.

- Remaining Kodiak fleet is now harvesting a larger share of the TAC than prior to the Program.
- Is it better to have many short duration (5 to 10 day) high risk jobs or fewer long term (4 to 6 month) family wage jobs?



Location, location, location.



## In-Season Deliveries too Expensive.

### Kodiak Deliveries vs. Dutch Harbor Deliveries

Average/assumed load	170,000 Pounds of BBRKC	
Additional Transit Hours/Round Trip		144
Fuel, 33.33 Gals/Hr @ \$3.50/Gal		\$16,800
P&I Insurance, \$132/day for 6 men	\$	792
Groceries, \$150/day for 6 men	\$	900
Wear and Tear on Vessel	\$	+++
Lost Fishing Time	\$	+++
Dead Loss	\$	+++
<b>Total Additional Costs</b>	<b>\$</b>	<b>18,492</b>
<b>Ex Vessel Premium Required to Offset Costs</b>	<b>&gt;</b>	<b>11 cents/pound</b>



## The “Last Trip Home” Theory.

### **Actual Kodiak Deliveries / 2007 BBRKC**

Historic Average Share, 3.48% or 782,707 Pounds

Price Premium over Dutch Harbor	None
Total Landings in Kodiak	921,140
Unrestricted delivery shares available	4,484,260

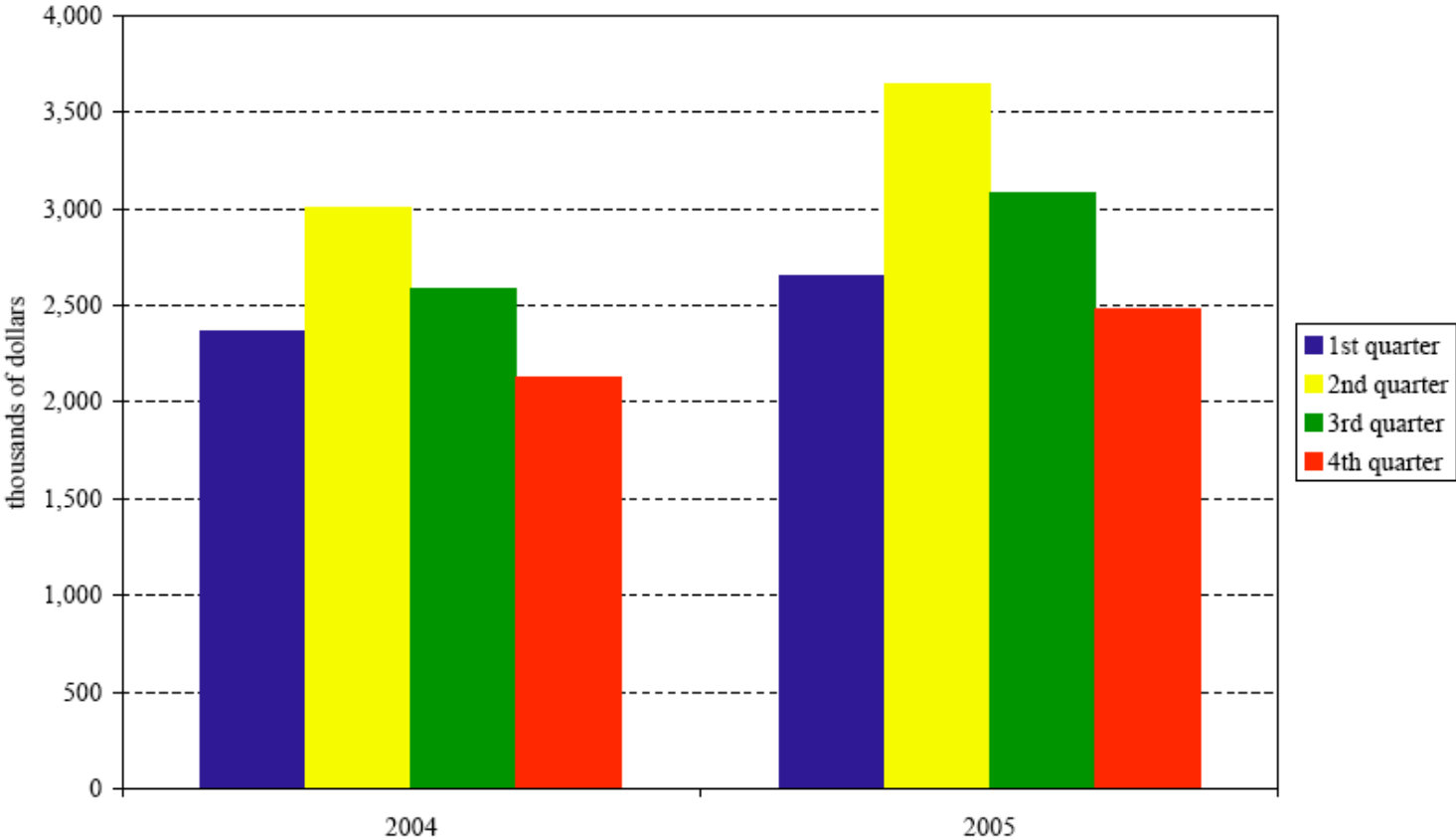
**Guaranteed Landings due to Kodiak-based Processor Quota Shares  
605,988**

Percent of Kodiak Landings Guaranteed by Processing Shares 65.8%

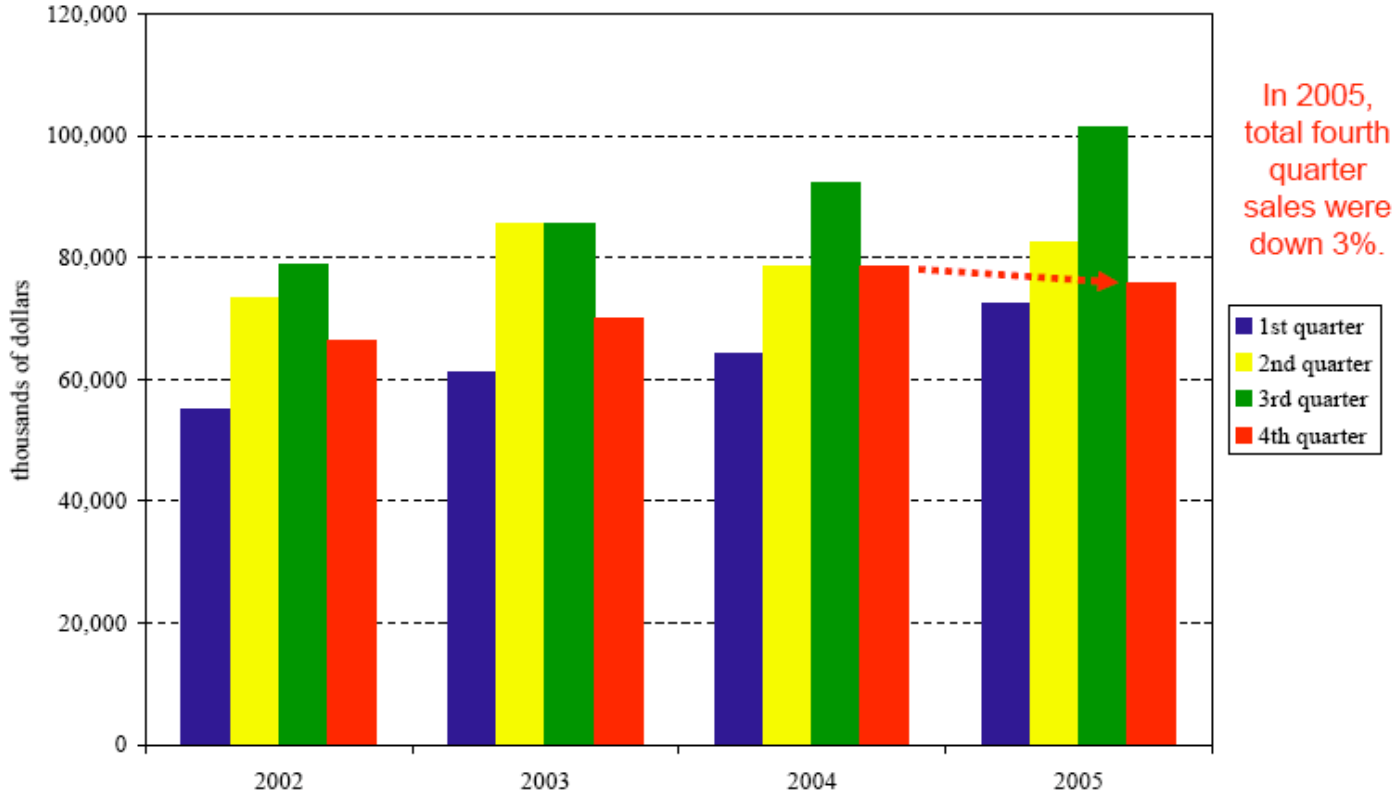
Type of business	Examples	Effects of crab rationalization depend on:
Businesses which sell to fishing boats, and for which sales depend on the number of boats fishing	Pot storage and loading Welding Marine supplies	Change in number of crab boats fishing Crab boats as % of total sales
Businesses which sell to fishing boats, and for which sales depend on the number of days fished	Fuel sales Bait sales	Change in total crab fishing days Crab boats as % of total sales
Businesses which sell to fishing crews	Fuel sales Bait sales	Change in number of crab fishermen working Crab fishermen as % of total sales
Businesses which sell to local residents	Grocery stores Restaurants Auto dealers	Change in crab fishing income Crab fishing % of total resident income
Businesses which don't sell to fishing boats or local residents	Tourism businesses	No change

Dr. Gunnar Knapp, UAA

**Gross Revenues of Kodiak Businesses:  
Twelve Marine Supply and Service Companies**



Gross Revenues of Kodiak Businesses:  
Total for All Business Types



## Lessons Learned.

- **Identify the Stakeholders before beginning any design process.** At a minimum the metrics should include **Adjacency, Dependency and Investment.**
- **Do not design your data collection process at the same time.** Make it incremental and/or wait until after implementation -- **no one can accurately predict how behavior will change**, or anticipate all of the design consequences.
- Likewise, **be prepared to “fine tune” the program** for the first few years.
- **Ownership caps and eligibility requirements** should be seriously considered.
- **Consider directing the use of shares for particular purposes rather than trying to allocate shares to every stakeholder group.**
- **Seafood is now a commodity**, sold in a globally competitive environment. **Use market mechanisms** instead of complex rules whenever possible.
- **Educate the public** about what you are doing during the design process, and report progress during implementation.