

Where Have all the Salmon Gone?



Mat-Su Legislator Training

by MSB Fish and Wildlife Commission
December 6, 2012

MAT-SU BOROUGH FISH & WILDLIFE COMMISSION



2007 established as sportsmen's committee, 7 members appointed by mayor



2011 adopted into Borough code as Fish & Wildlife Commission



purpose: to represent the interests of the Borough in the conservation and allocation of fish, wildlife, and habitat



FISHERIES 101

Salmon are **essential** to the character, lifestyle and economy of the Mat-Su Borough

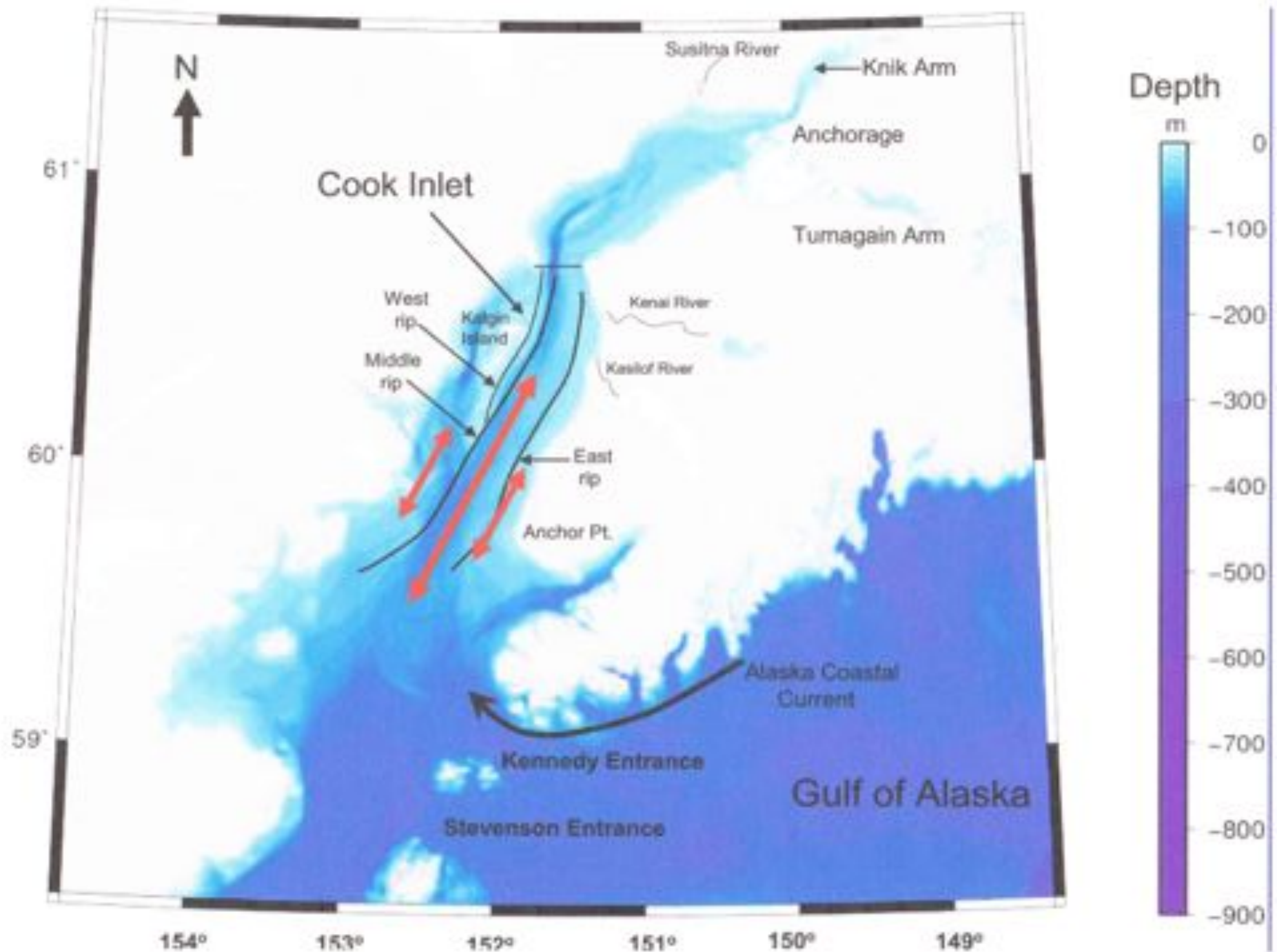


Physical Characteristics Of UCI



Gulf of Alaska

Fish Migration Patterns



Upper Cook Inlet

a complex, mixed-stock fishery

Run Timing of Salmon In UCI



UCI Salmon Production

UCI SALMON RUNS EXCEED 15 MILLION

LARGEST HARVEST TOP 10 MILLION



AVERAGE HARVEST 4 MILLION

MAT SU DRAINAGES PRODUCE MOST

King salmon
Coho salmon
Pink salmon
Chum salmon

KENAI DRAINAGES PRODUCE MOST SOCKEYE SALMON



UCI Sport Fishery

Population - Nearly 2/3s of AK's residents reside along shores of UCI

UCI has about 250,000 sport fish participants annually of which over 160,000 are salmon fishermen. 30,000 households also participate in personal use fisheries.

About 1 out of 3 Alaskans sport fish

highest rate in the nation



UCI COMMERCIAL CHARACTERISTICS

About 570 Commercial Drift and 750 Set Net Permits to fish UCI

Both gear types fish Central District with 70% of set netters on east side

Only set nets permitted in Northern District

Small subsistence set net fishery near Tyonek

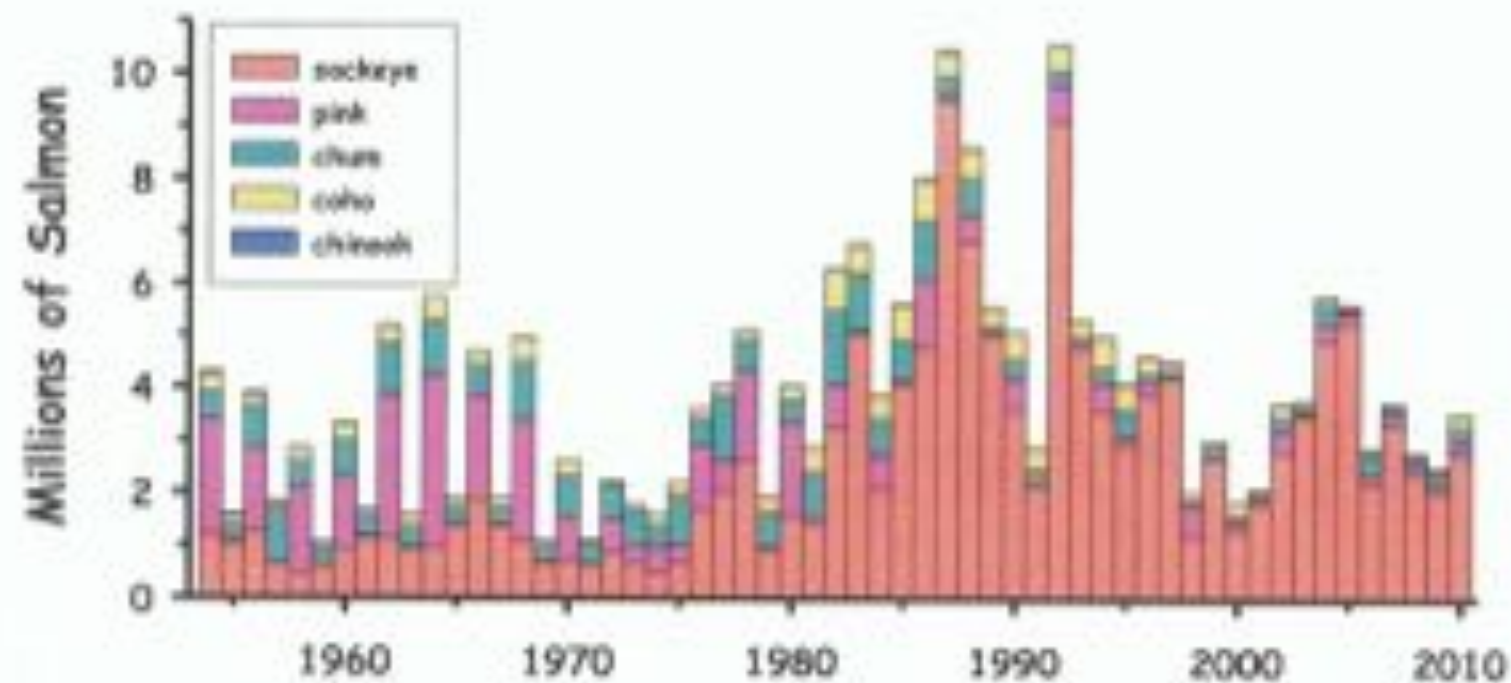


**99% of UCI harvest in Central District with
sockeye normally 85% of catch**

UCI Commercial Harvest

1950-2010

1959 Alaska becomes State and takes over fisheries management from the federal government.



Trends in UCI Commercial Harvest by Species

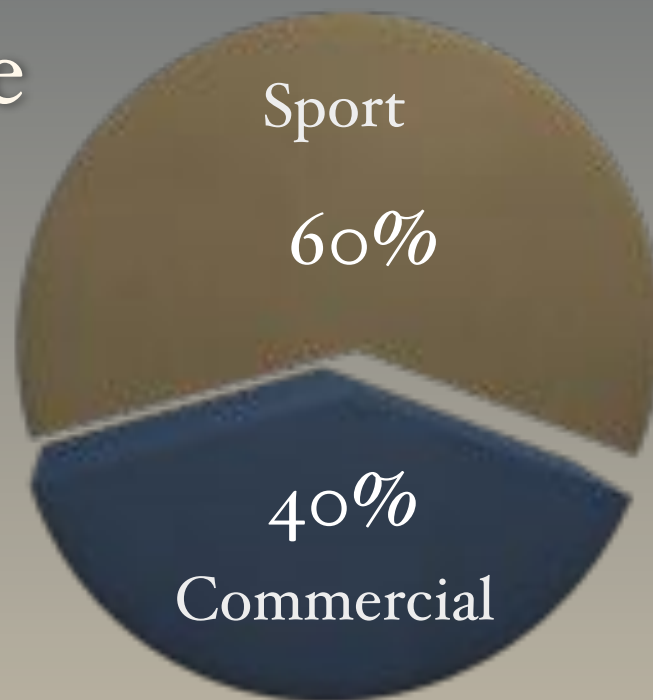
Upper Cook Inlet Harvest Shares 1999-2008



UCI Sockeye
3 million/year



UCI Coho
400,000/year



Kenai Chinook
30,000/year



All UCI Salmon
4 million/year

*sport includes personal use fisheries

The Economic Value of Sport Fishing

The value of commercial fisheries has always been widely known, yet the economic significance of sport fishing has only recently gained recognition

Statewide \$1.4 billion spent sport fishing 2007

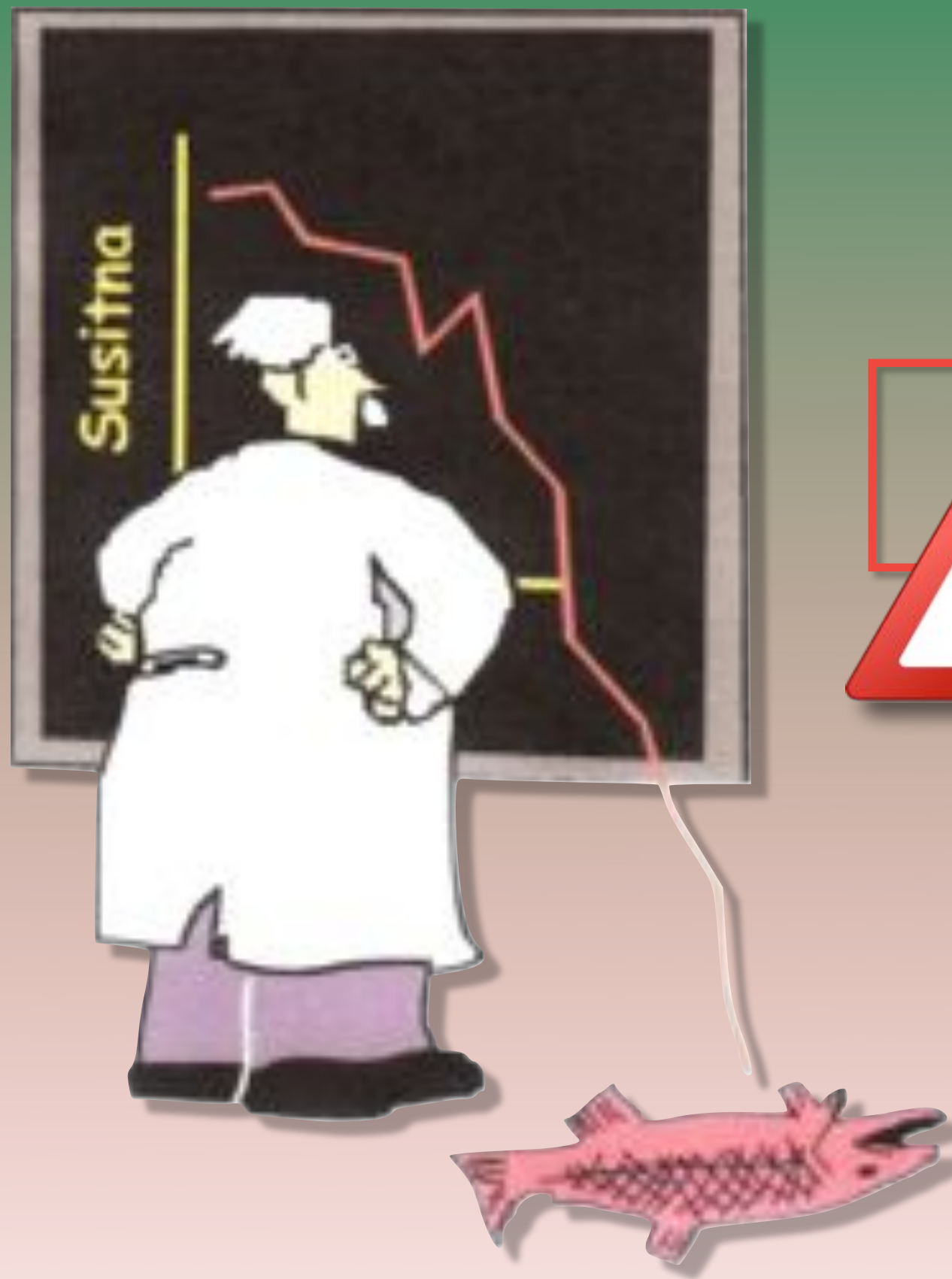


Cook Inlet, half of all sport fishing in AK occurs here, Anglers spent \$733 million in 2007, which supported 8,056 jobs and generated \$55 million in state and local taxes

Mat-Su, anglers fished nearly 300,000 days in 2007 spent \$118 million and generated \$31 M to \$64 M to local economy



Commercial fishing, in 2007, wholesale value of salmon harvest in Cook Inlet, \$ 77 million



MAT-SU SALMON STOCKS OF CONCERN



7 out of 12 Stocks of Concern in Alaska are in North Cook Inlet

Susitna sockeye declared Stock of Concern in 2008

Six king stocks declared Stock of Concern in 2011

Minimum king salmon escapement missed for 6 consecutive years

Low king salmon returns throughout Mat-Su

12 of 17 goals missed in 2011

13 of 17 goals missed in 2012

Little Susitna River Coho escapement missed for four consecutive years



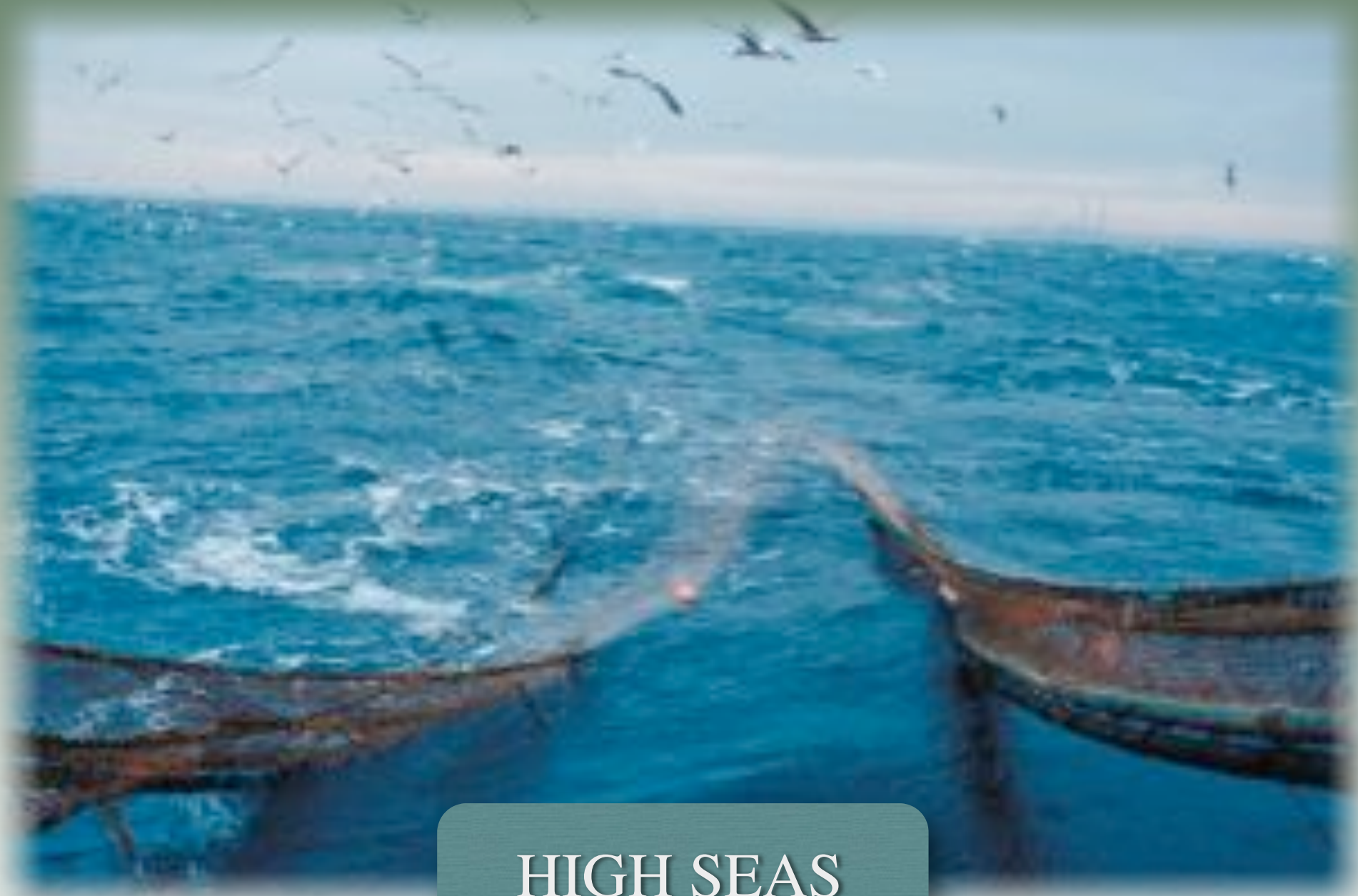
Sport fishing Is Plummeting in Mat-Su



Closures and restrictions to the recreational fishery have caused participation, as defined by angler-days, to crash.

*In 2011 participation fell to the lowest level in 35 years
(2012 was likely even lower)*

Causes For Low Salmon Abundance



HIGH SEAS

Environmental Changes (cold water) and/or bycatch

Causes For Low Salmon Abundance



Running the UCI gauntlet

UCI MARINE: OVER EXPLOITATION IN GILL NET FISHERY
TARGETING KENAI SOCKEYE

Causes For Low Salmon Abundance



FRESHWATER: ECOLOGICAL FACTORS SUCH AS CHANGES IN HABITAT

***THIS FALL'S CATASTROPHIC FLOOD WILL LIKELY
SEVERELY IMPACT ALREADY WEAK MAT SU RUNS***

UCI SALMON MANAGEMENT

Out of step with Economic and cultural realities of today



About 80% of the salmon harvest in UCI is taken by less than 1,300 limited entry commercial permit holders.

Over half of Alaska's sport fishing effort and most Personal Use fishing occurs in Cook Inlet

Less than 20% of salmon harvested by over 160,000 sport anglers and 30,000 PU households

Alaska Board of Fisheries

7-member board



3-year term

Appointed by Governor

Confirmed by Legislature

Geographic representation (*historically*)

2 Southeast, 1 Bristol Bay, 1 Kodiak
1 Interior, 2 Southcentral

Board of Fisheries Meeting



FISH FIGHT!!



Alaska Department of Fish and Game

Make policy and management decisions on 750 active fisheries

UCI commercial fish office in Soldotna

UCI sport fish offices in Anchorage, Palmer and Soldotna

Commissioner is a cabinet level appointee by Governor

Salmon Management Authorities

Board of Fish provides direction to ADF&G through establishment of regulatory plans

EXAMPLES

UCI Drift fishery plan
Northern District salmon management plan

ADF & G has the authority to adjust regulations according to in-season Salmon abundance

EXAMPLES

Emergency Orders - Time, area restrictions, closures, etc..

COMMERCIAL HARVEST STRATEGIES

Maximize harvests from Kenai sockeye with little regard for Mat-Su salmon

“Strong stock” management of UCI salmon both limits the development and jeopardizes the health of sport fisheries in northern watersheds

In-season escapement goals exist for Kenai sockeye but are largely nonexistent for many Mat-Su stocks



Over Escapement: A MYTH FOR U



In-season management attempts to manipulate sockeye harvest to achieve desired escapements

Harvest, sonar escapement and test fishery catches are evaluated daily

Fear of over escapement of Kenai sockeye has dominated UCI management for decades

Management concerns about exceeding Kenai sockeye escapement goals often trumps achievement of minimum escapement goals for other species

Biologically, over escapement has never occurred for Kenai sockeye.

UCI DRIFT FISHERY MANAGEMENT PLAN

Purpose



“to insure adequate escapement into Northern District drainages”



Conservation elements based solely on abundance
of Kenai sockeye not northern stocks

1. Less than 2.3 M sockeye.... most conservation for northern stocks!
2. 2.3 to 4.6 M sockeye... some conservation for northern stocks
3. Over 4.6 M sockeye.... No conservation for northern stocks?



More than 4.6M sockeye past two years

Northern District Management Plan



Once required:

When Kenai sockeye run is predicted to exceed 4 million, then Susitna sockeye escapement goal is dropped from 90,000 to 75,000

Risks of low escapement universally recognized but exceeding the Kenai goal has priority in UCI

Currently, there is no in-season escapement goal for Susitna sockeye



Bristol Bay Fisheries

Commercial fishery subdistricts



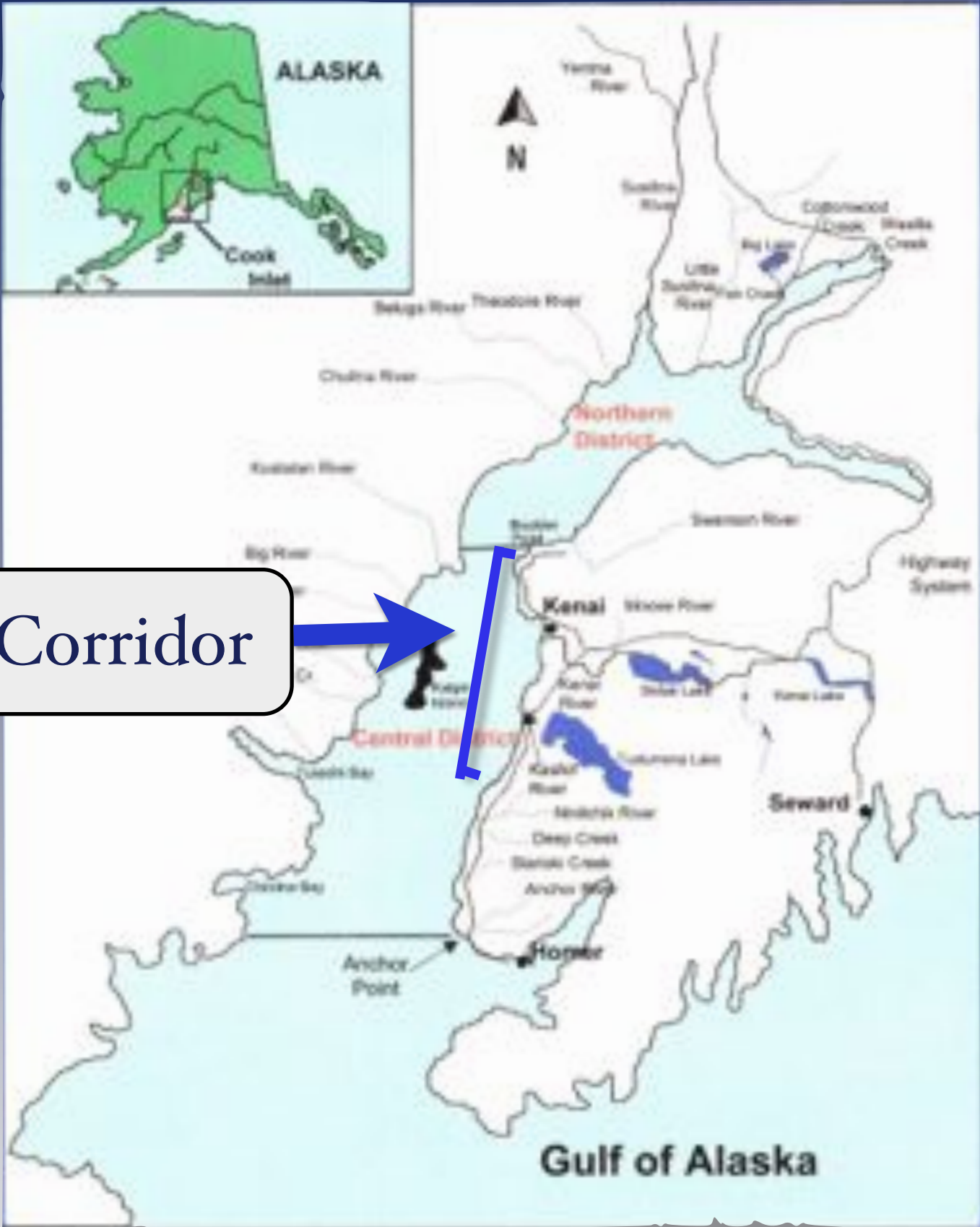
SOLUTIONS

Restructure UCI commercial fishery to be more similar to Bristol Bay commercial fishery (most successful salmon fishery in the world)

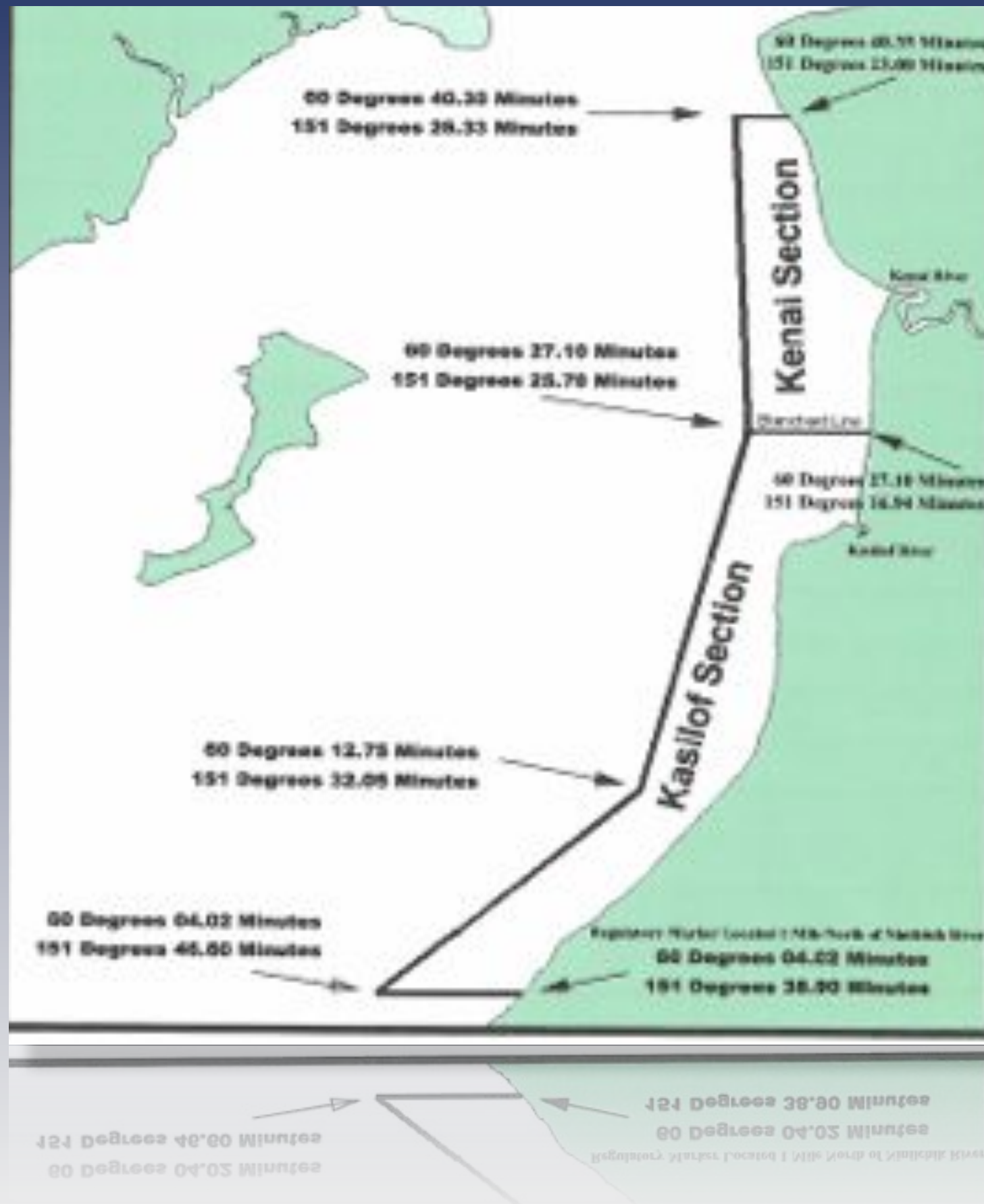
- Discreet stock harvest zones
- In-season escapement goals for all major stocks



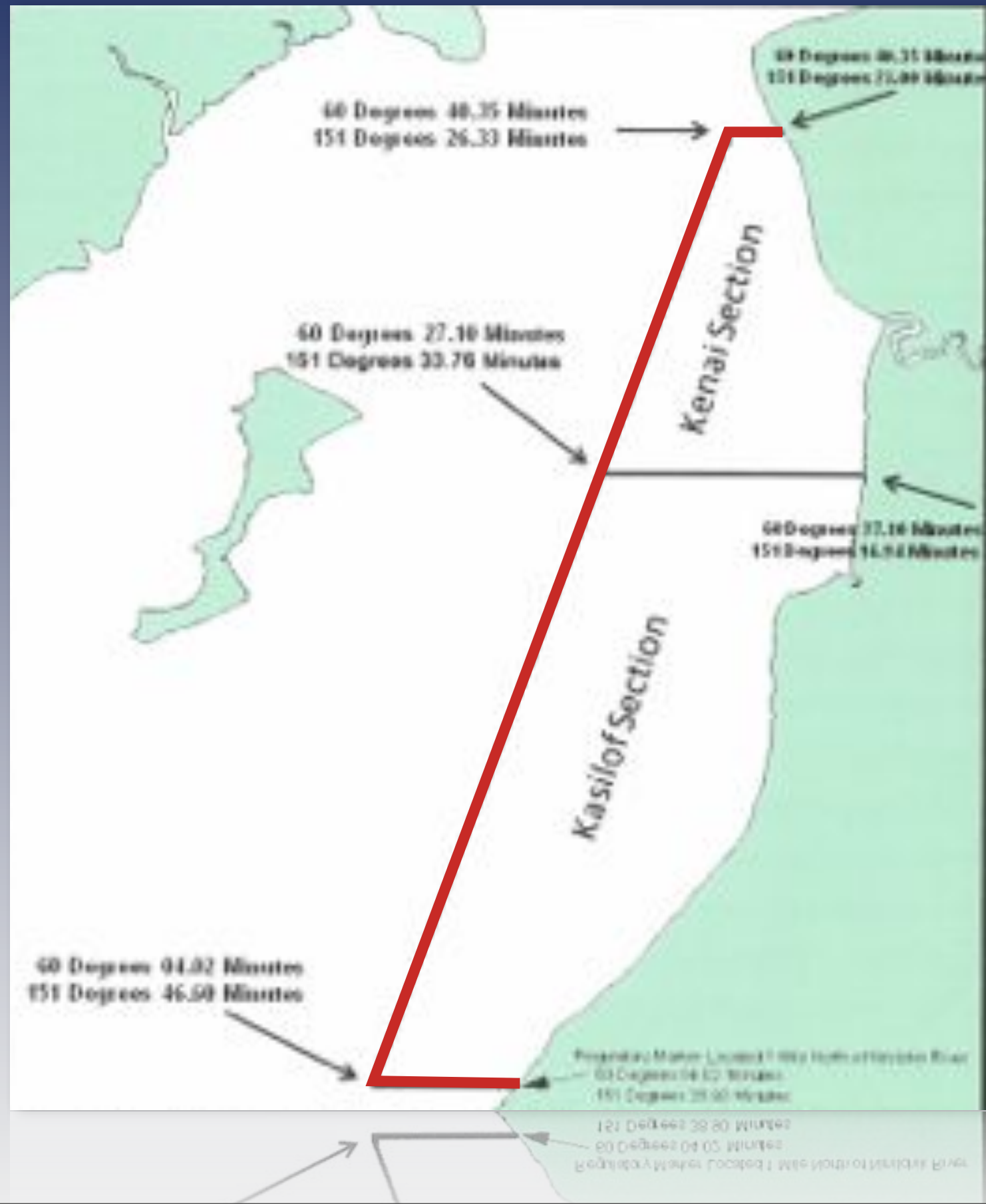
Expanded Corridor



Three mile corridor



Expanded Corridor



(New) Off-Shore Test Fishery





FISH & WILDLIFE COMMISSION ACCOMPLISHMENTS

- **In-Season Management** — returned the coho weir on Little Su River to original location, saved Deshka weir from being closed down
- **Conservation Corridor** — made compelling case for Board of Fish to allow the creation of an expanded conservation corridor in Cook Inlet to allow passage of northern bound salmon, by limiting the commercial drift net fleet during restricted July openings
- **Test Fishery** — Proposed new location for improved stock identification. Legislature funded 650K to

ACTION FOR LEGISLATORS



FWC Priorities for Legislature

- 1) Genetic Stock Studies - funding for biological studies for all species especially including “stocks of concern”
- 2) Joint Legislative Salmon Task Force (2007-2008) - funding to complete task force report
- 3) Allocation Criteria - review of validity and use of criteria
- 4) Economic Expertise for BOF - professional economic analysts for BOF
- 5) Limited Entry Act - reexamine number of permits in UCI





QUESTIONS?