

Where Have all the Salmon Gone?



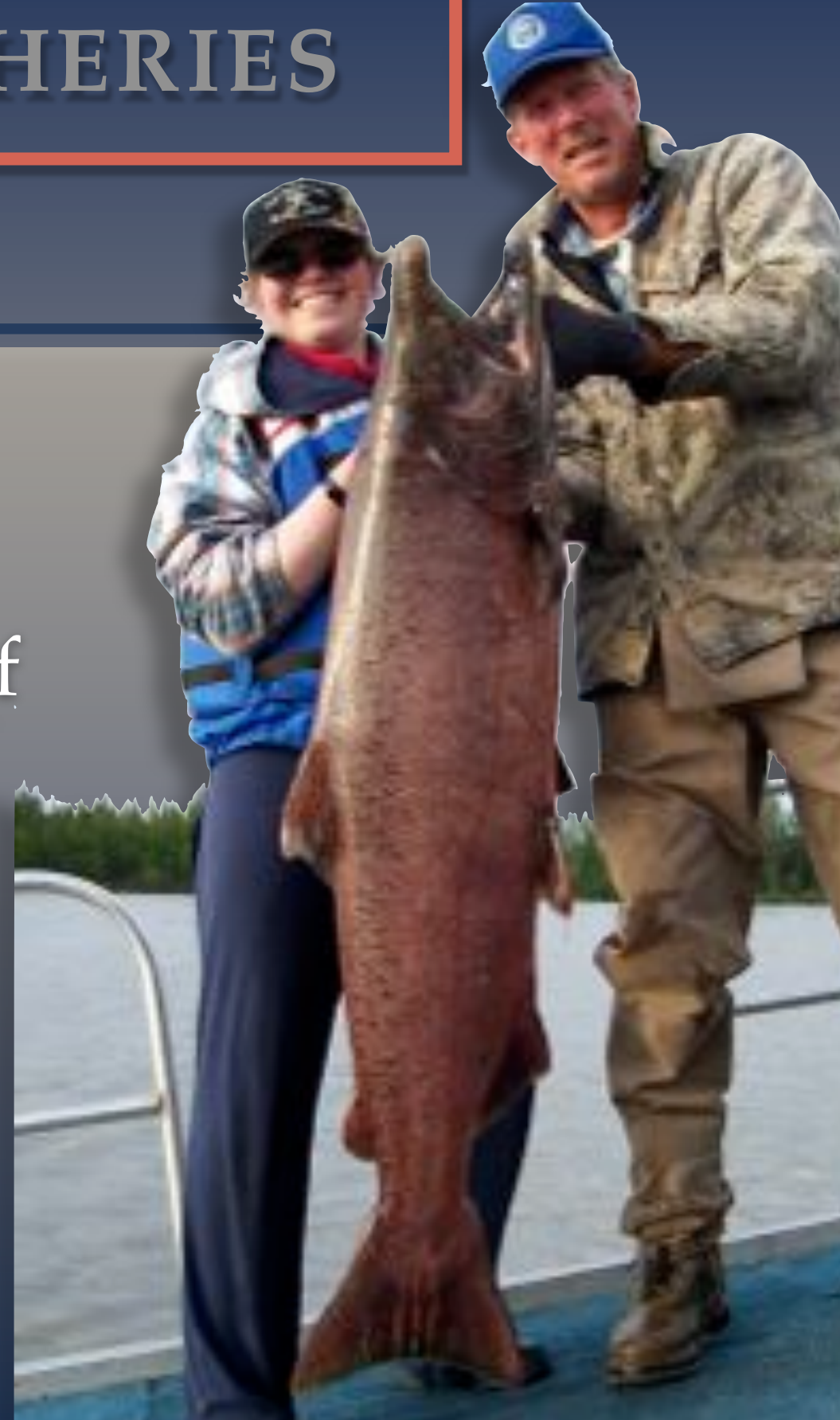
Upper Cook Inlet Fisheries

by MSB Fish and Wildlife Commission

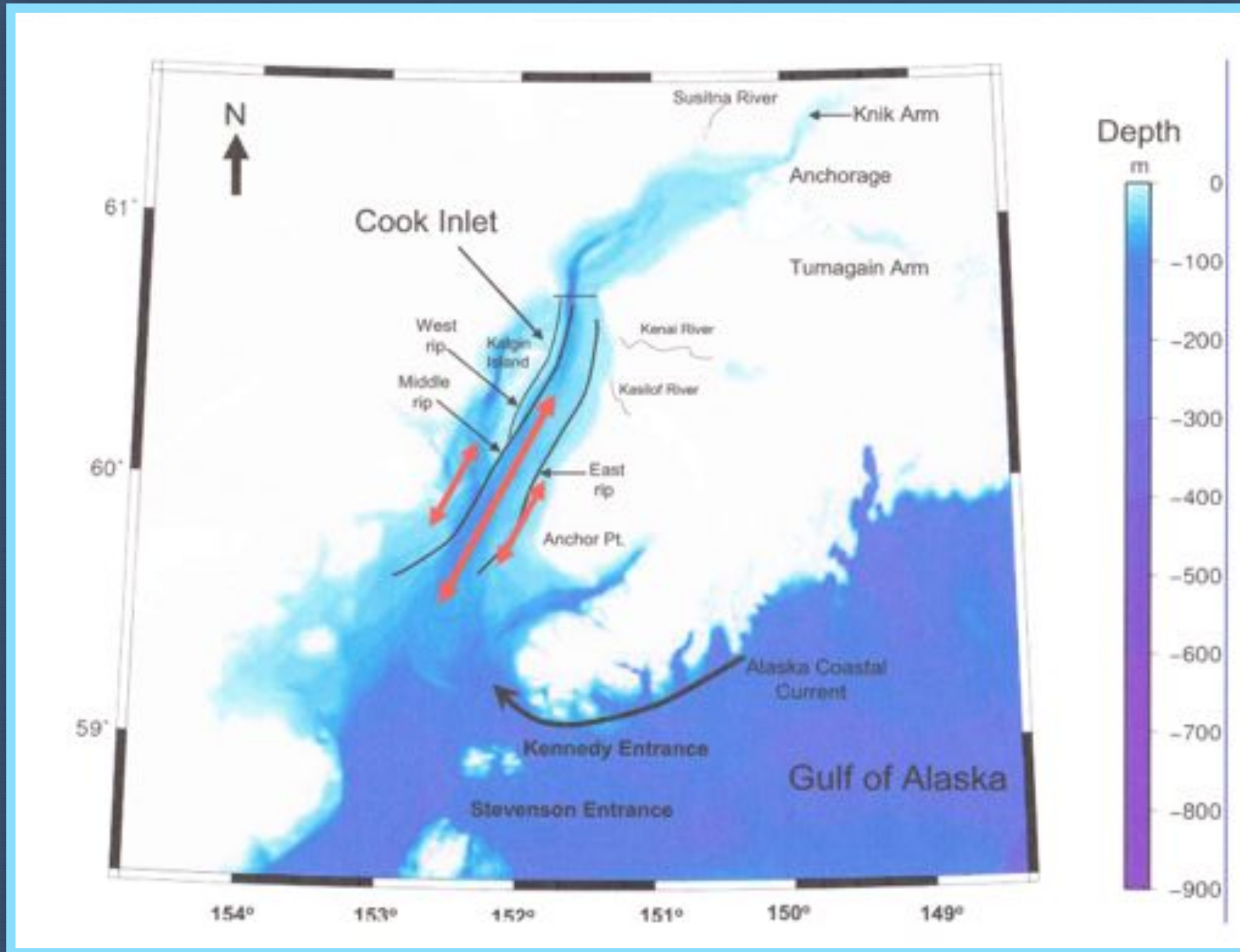
February 21, 2013

UPPER COOK INLET FISHERIES

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



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 **COMMERCIAL** Fishery

About 570 Commercial Drift and 750 Set Net Permits 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

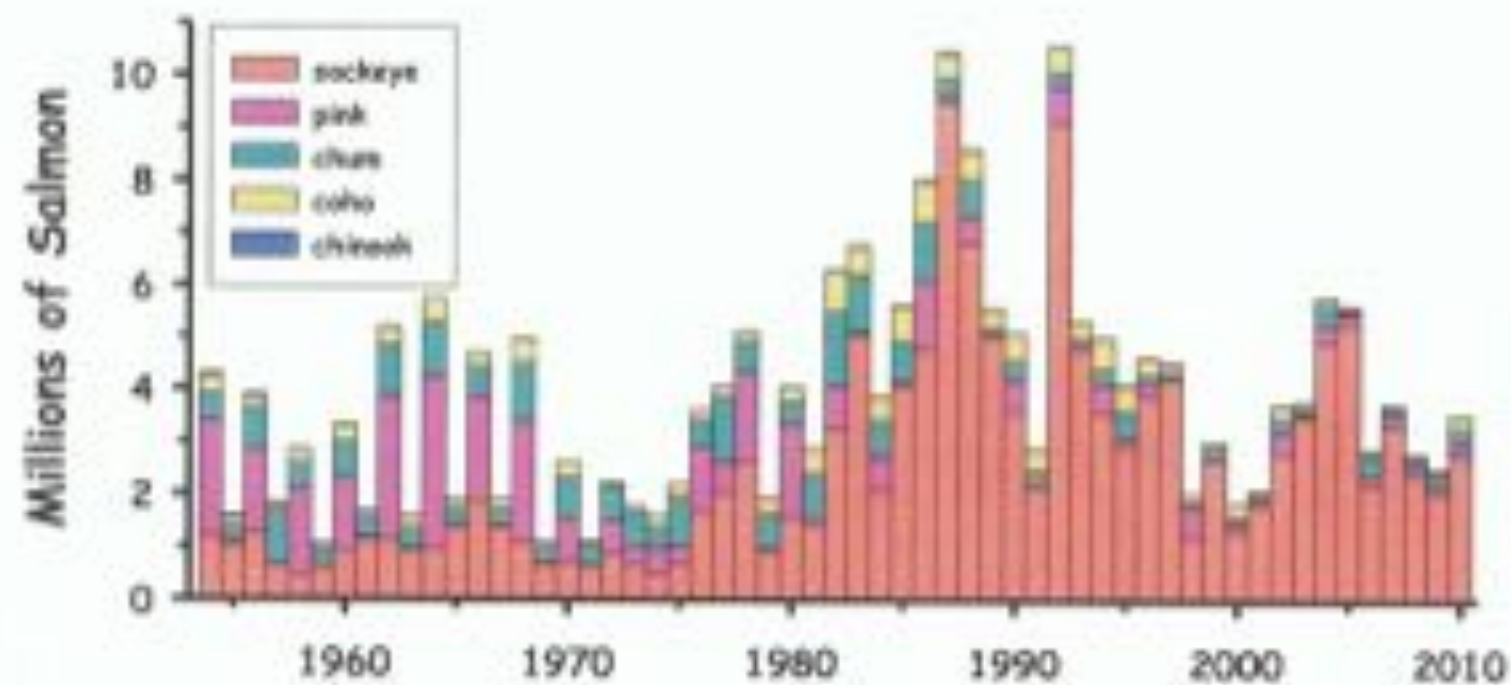


**99% of UCI harvest occurs in Central District
with sockeye normally 85% of catch**

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

UCI Sport Fishery

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

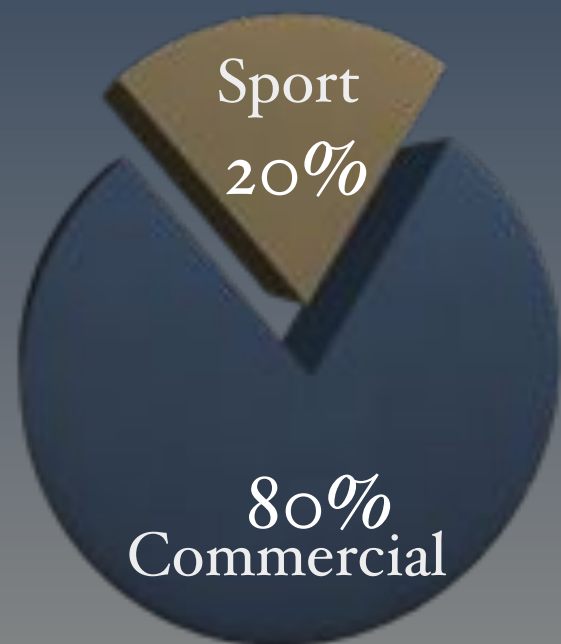
250,000 people sport fish annually
160,000 are salmon fishermen
30,000 households fish for personal use

About 1 out of 3 Alaskans sport fish

highest rate in the nation



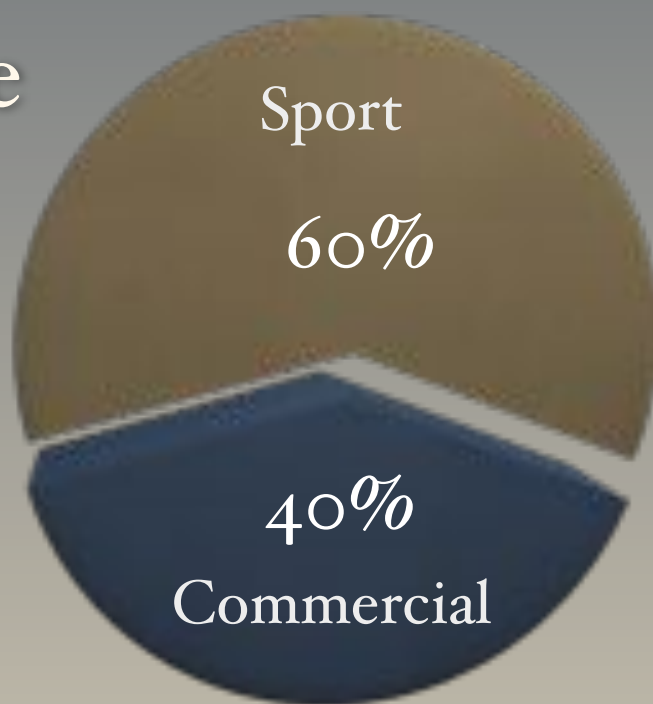
Upper Cook Inlet Harvest Shares



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 11 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

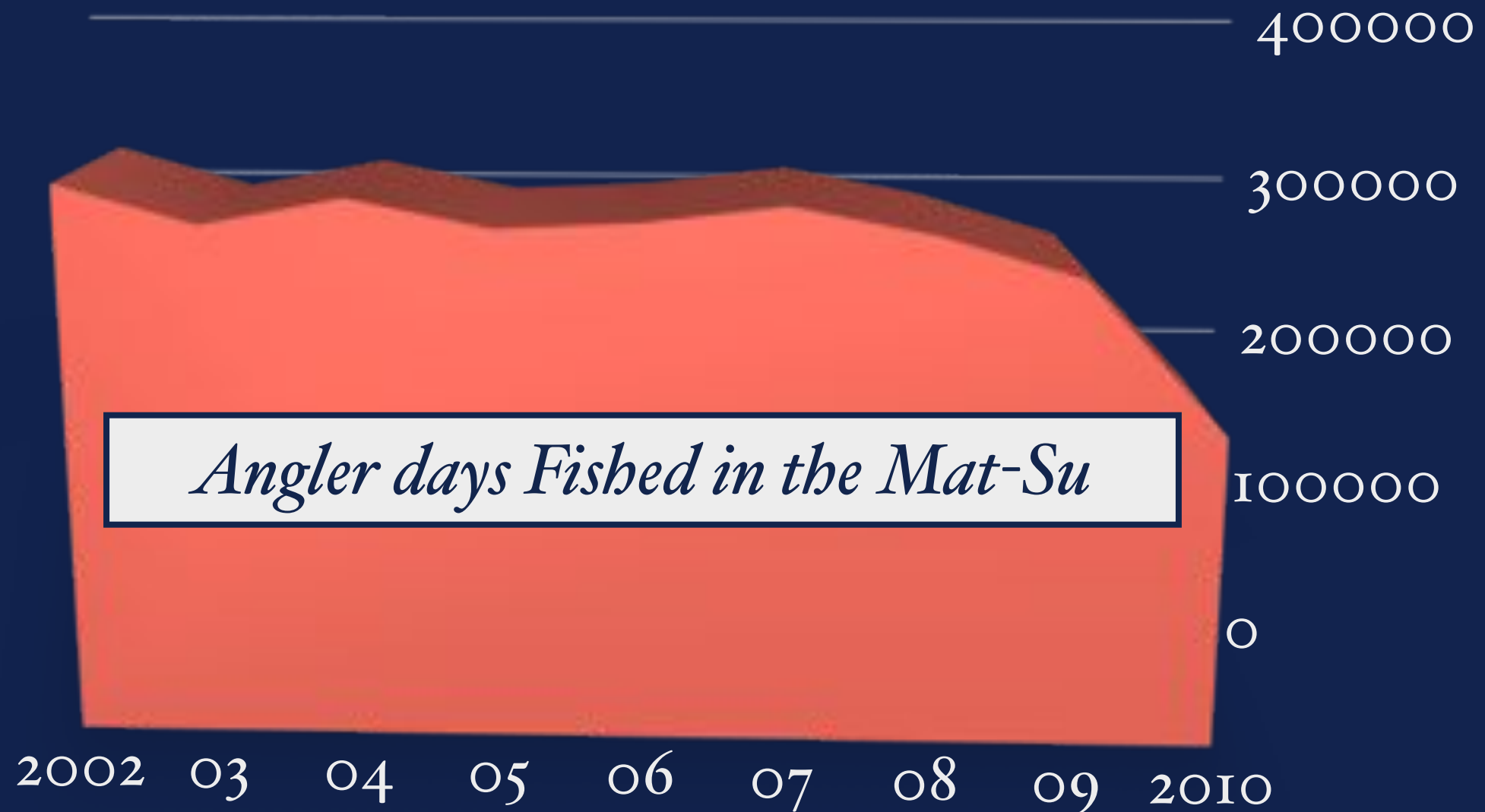
12 of 17 goals missed in 2011

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



...on three!

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***

CAUSES OF SALMON DECLINE

UCI Northern District salmon are not getting through commercial fishing gauntlet in sufficient numbers.

ADF&G lacks in-season management tools for mixed stock fishery

Lack of **genetic identification** of salmon species other than sockeye

UCI Fisheries management is **focused on 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

ACTION FOR LEGISLATORS

The background of the slide is a photograph of several people wading in a large body of water, likely a lake or a wide river. They are holding long poles with nets, suggesting they are fishing. The water is calm with some ripples. In the far distance, a range of mountains is visible under a clear sky. The overall tone of the image is somewhat muted, with a blueish-grey color palette.

Science and Research
Policy and Management changes
Legislation



Funding for ADF&G

1) Genetic Stock Studies

- ADF&G biological studies for all salmon species

2) Joint Legislative Salmon Task Force (2007-2008)

- funding to complete task force report

3) Economic Expertise for BOF

- professional economic analysts for BOF

4) Sport fishing economics

- update 2007 ADF&G study

(New) Off-Shore Test Fishery



For genetic stock identification

Policy and Management Changes



1) UCI Conservation Corridor

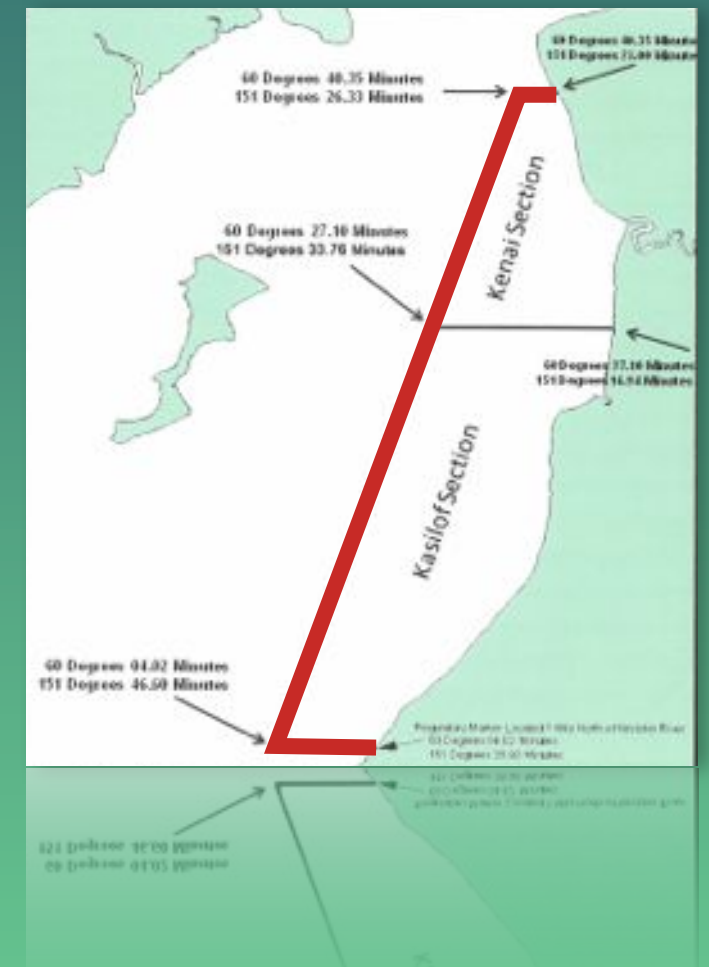
Retain conservation corridor established by BOF in 2011

2) Revision of Cook Inlet Management Plans

Revise and improve management plans to insure sustained yield for UCI northern district salmon

3) Allocation Criteria

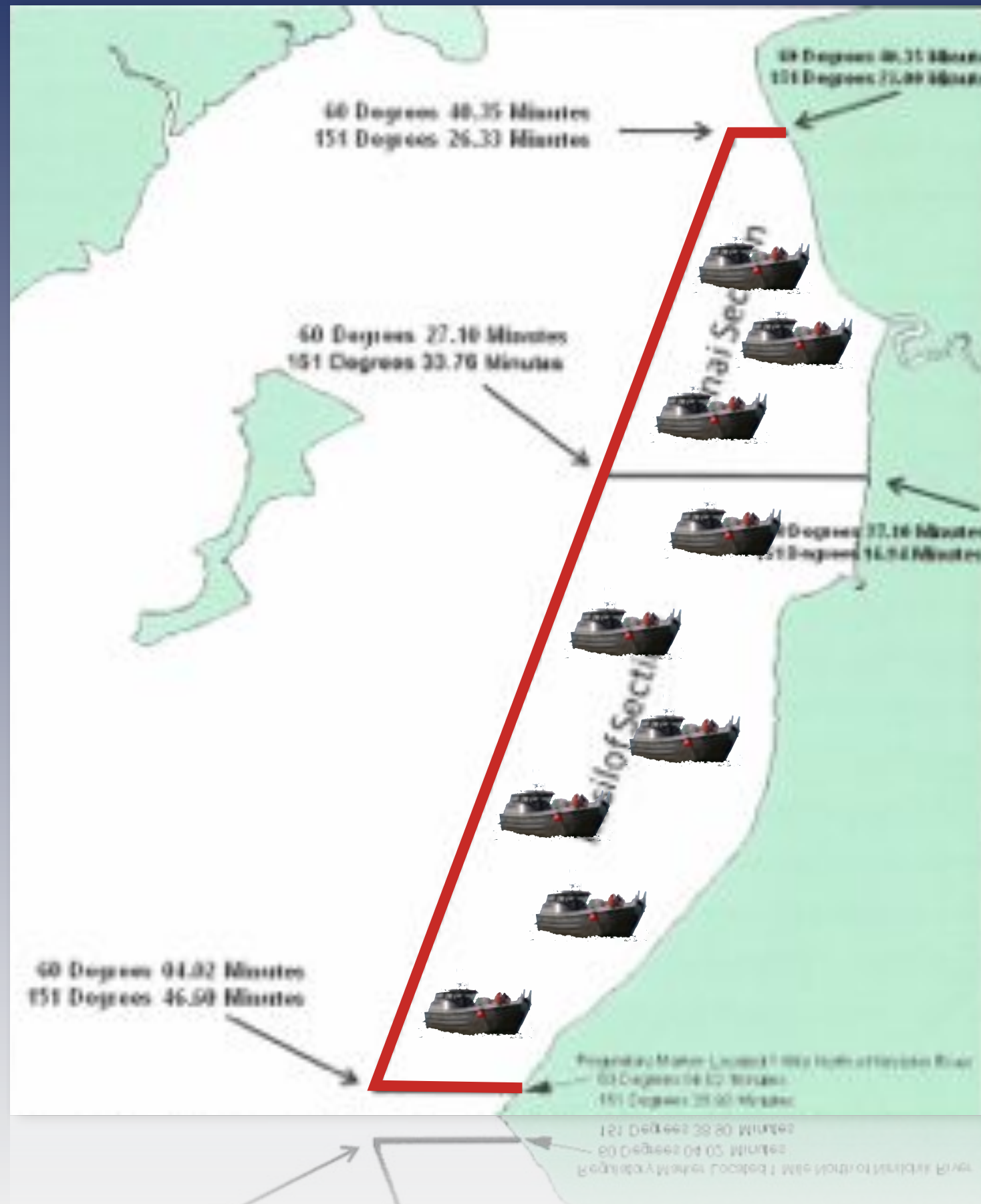
Update fishery resources allocation to reflect current biological and economic conditions



Conservation Corridor



Conservation Corridor



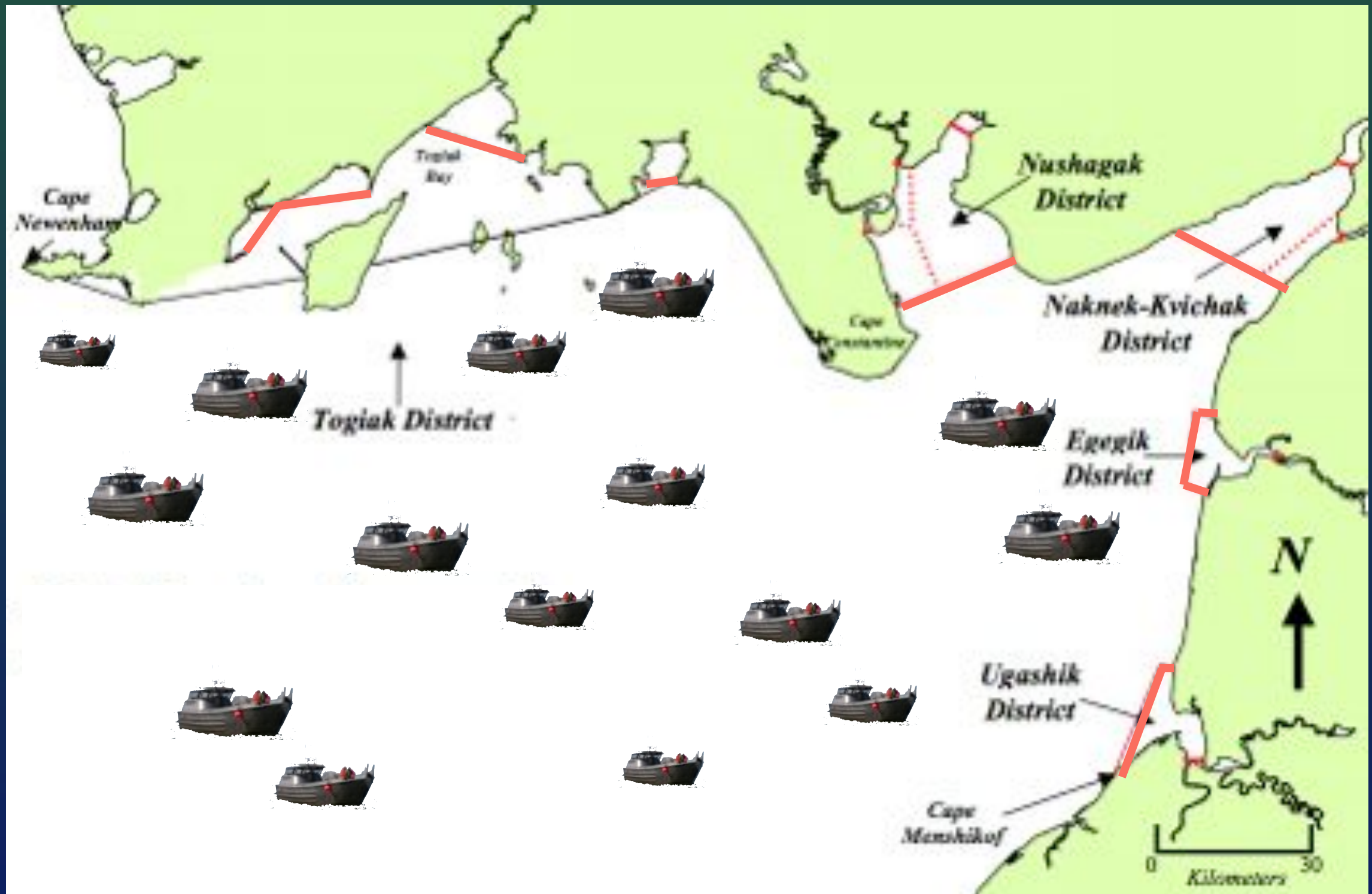
SOLUTIONS

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



Bristol Bay Fisheries

Commercial fishery subdistricts



Discreet stock harvest zones

Legislation

1.HB 98 Salmon Escapement Goals

Require establishment of salmon escapement goals for all salmon stocks identified as stocks of concern

1.HB 18 Personal Use Fisheries Preference

Put personal use fisheries preference first in ADF&G management actions



MSB Capital Funding Requested

Science and Research

Genetic Sampling of all Cook Inlet salmon species to supplement research being done by ADF&G to better inform management of mixed stock fishery

Economic Importance of Sportfishing in Mat-Su Borough - update of study conducted by the institute for Social Economic Research (UAA)






Fish Passage

6 projects to restore access for 12.2 miles of salmon habitat. Funds matched by grant and borough funds for culvert replacements



MAT-SU BOROUGH FISH & WILDLIFE COMMISSION

-  2007 Established as Mayor's Blue Ribbon Sportsmen's Committee, 7 members appointed by Mayor and Assembly
-  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



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 establish a new test fishery

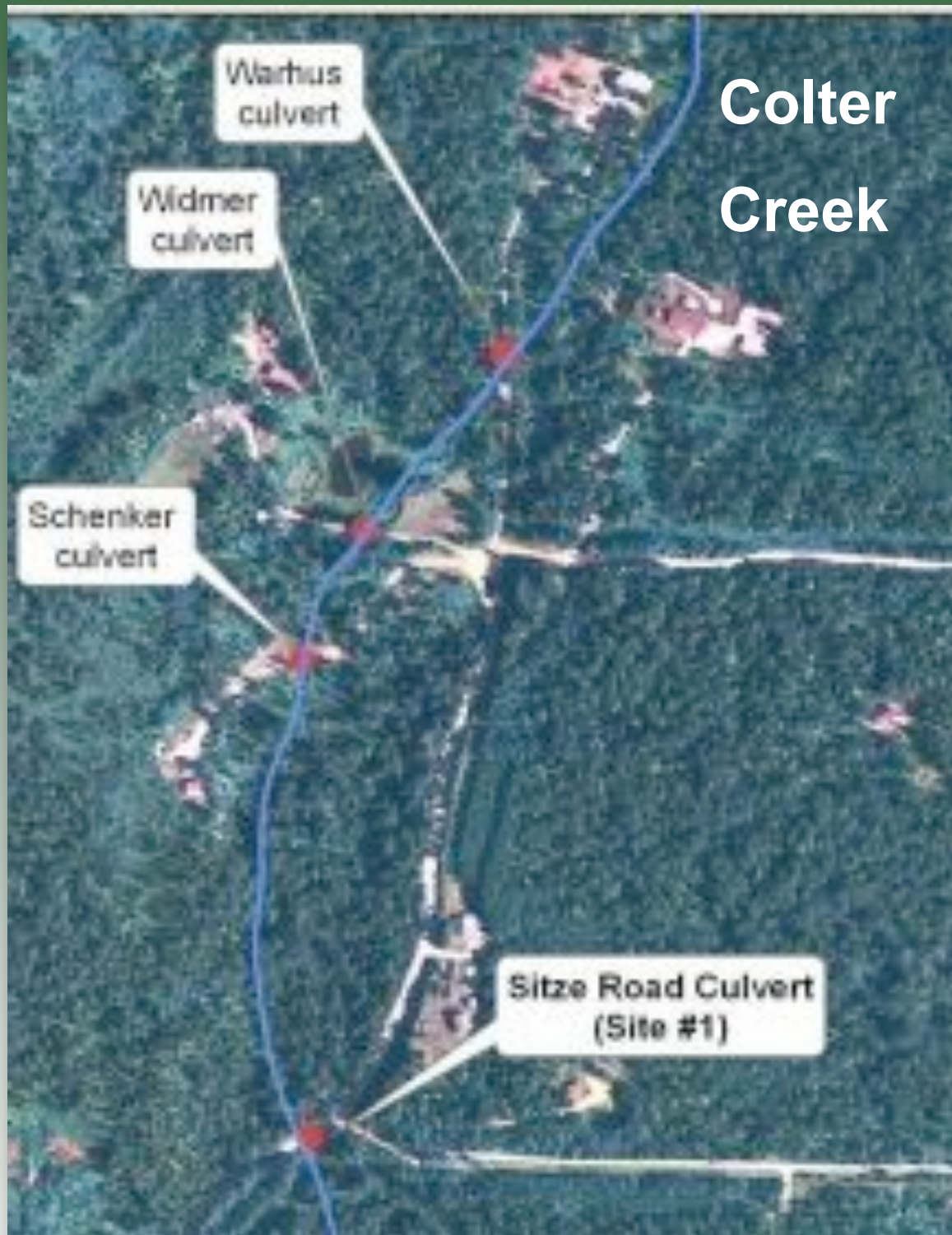
Partners in Action - Science

Over 50 partners
(businesses, tribes, NGO's and governments)

Salmon Watersheds Atlas —



Partners in Action - Fish Passage



Contacts

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THANK YOU
QUESTIONS?