

# Copper River District Salmon Fisheries, 2018–2020 Report To Alaska Board of Fisheries

RC 3, Oral Report Tab 8



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# Presentation Overview

- Copper River and Commercial Districts Overview
  - Fishery Assessment Methods
  - Escapement and Harvest

# COPPER RIVER WATERSHED

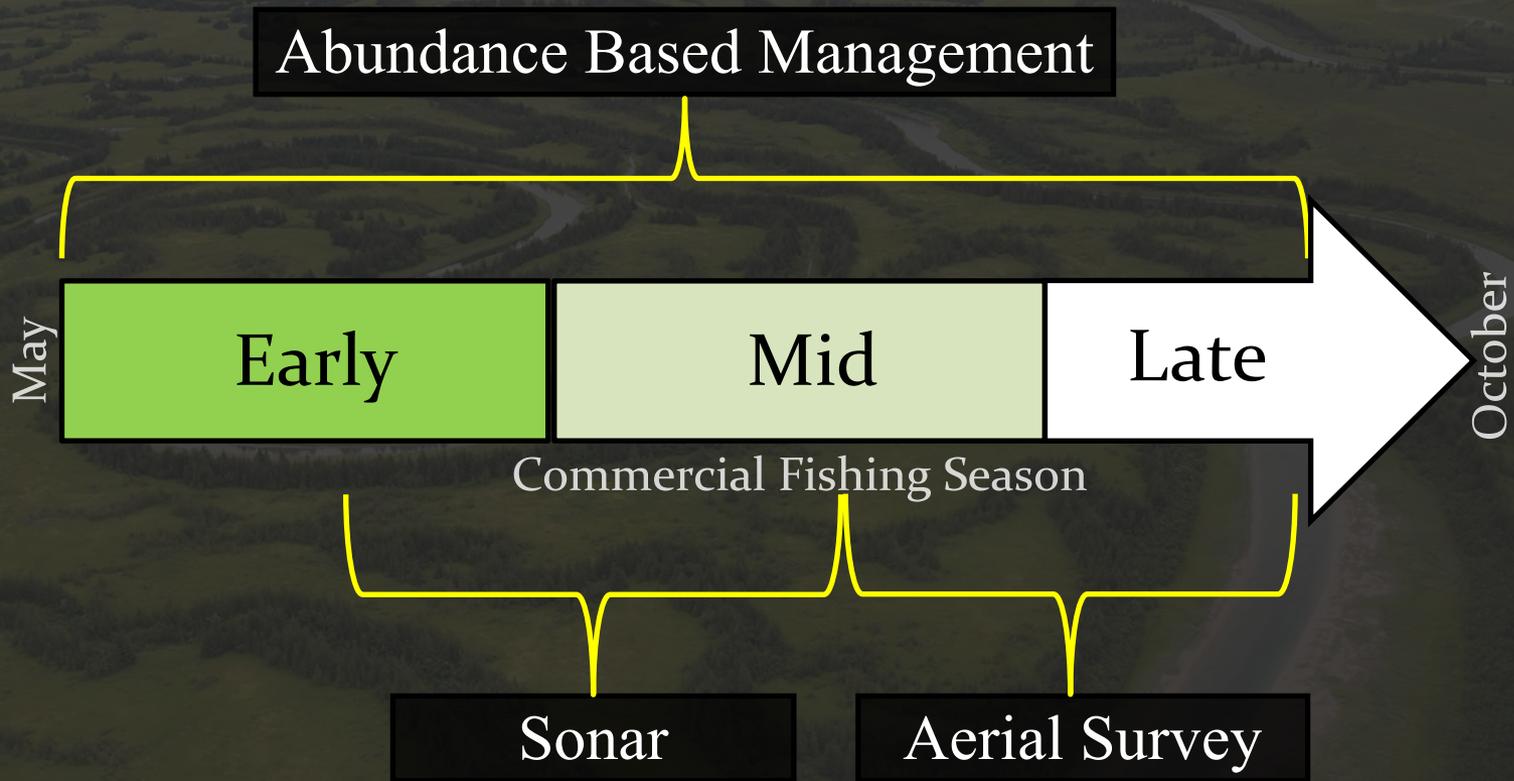


# Copper River District Inside Closure Area



© Harris Corp, Earthstar Geographics LLC Earthstar Geographics SIO © 2017 Microsoft Corporation

# Management Tools



# Miles Lake Sonar



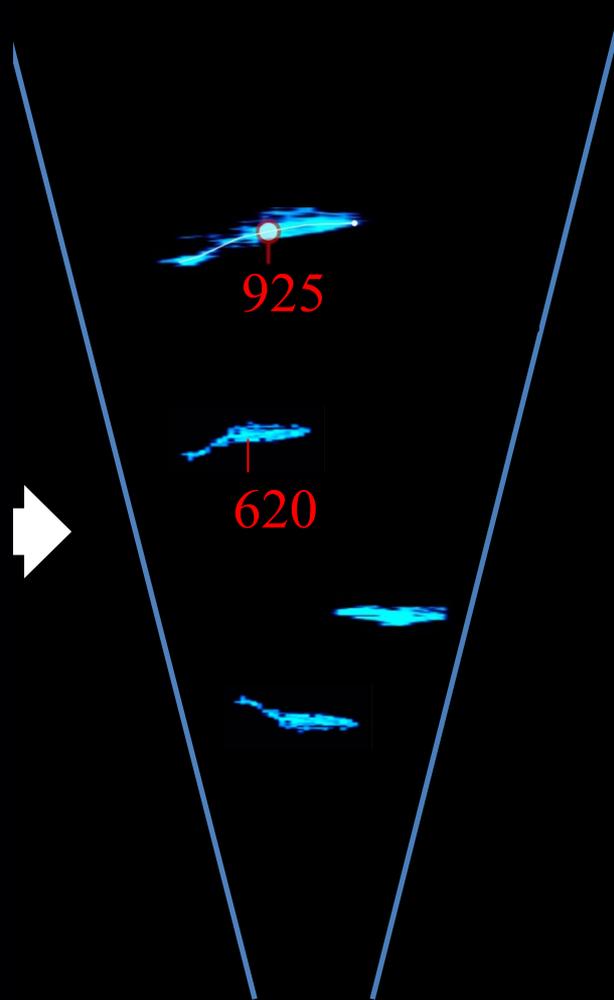
North Bank



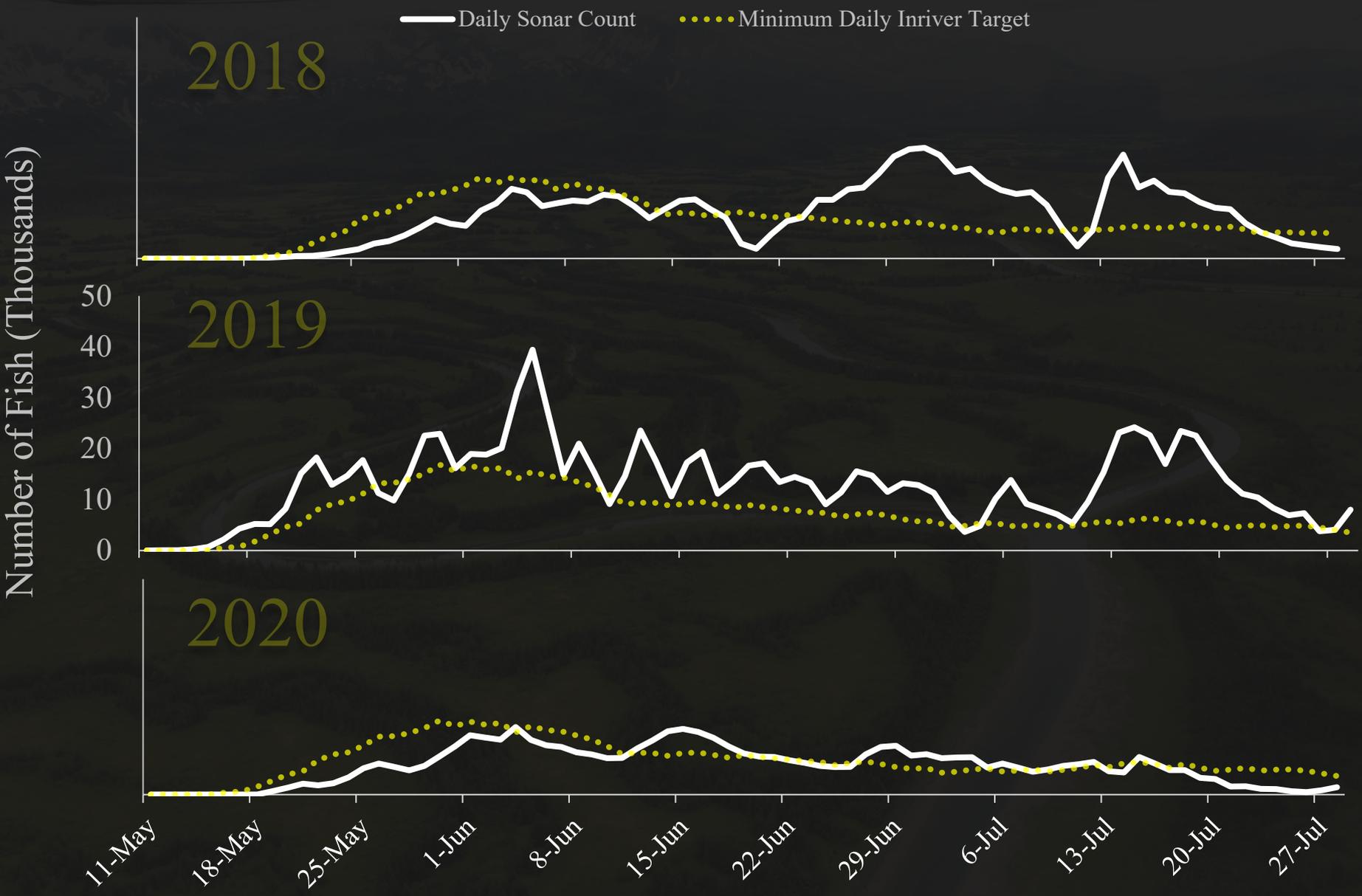
South Bank



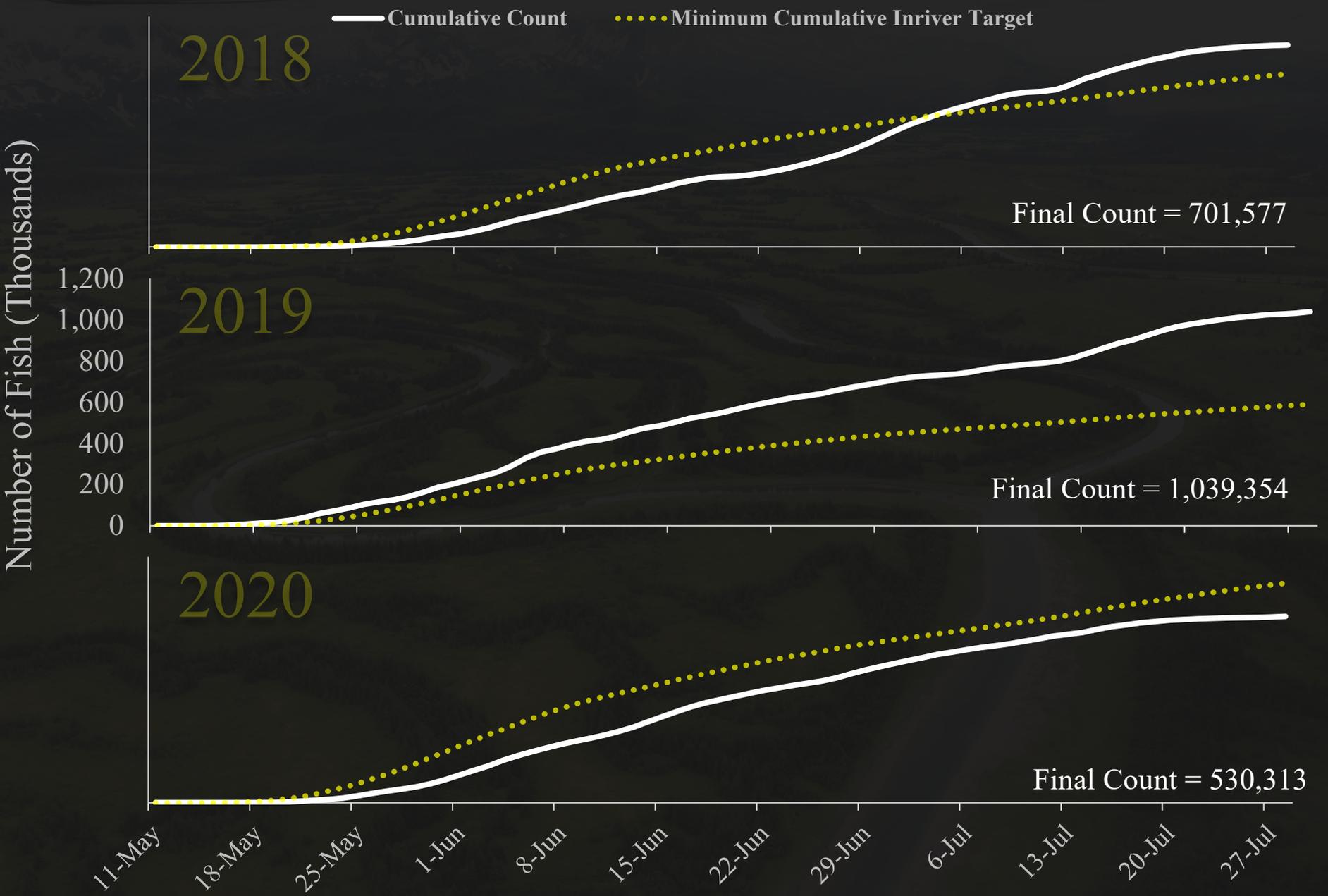
# Species Apportionment Research



# Miles Lake Daily Sonar Numbers 2018-2020



# Miles Lake Cumulative Sonar Numbers 2018-2020

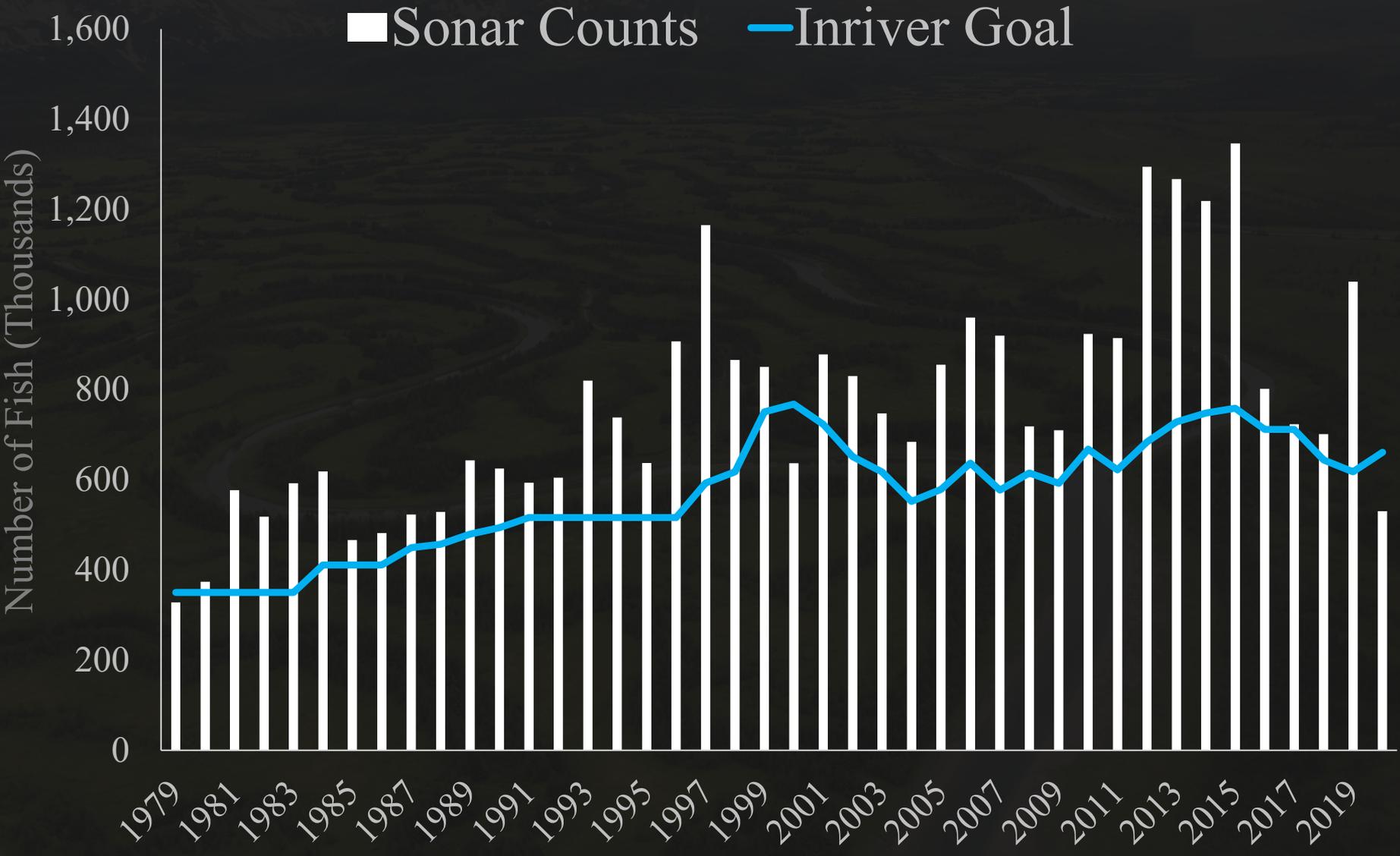


# 2018–2020 Inriver Goal (Thousands)\*

<b>Component</b>	<b>Number of Fish</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Spawning Esc. (Sockeye)	360	360	360	360
Spawning Esc. (Other Spp.)	17.5	17.5	17.5	17.5
Glennallen Sub.	61-82.5	82.5	82.5	77.9
Chitina PU	100-150	150	150	130.3
Sport Fishery	15	15	15	15
Hatchery Brood	Est. Annually	20	20	20
Hatchery Surplus	Est. Annually	114	67	69
<b>Total</b>	<b>Est. Annually</b>	<b>759</b>	<b>712</b>	<b>690</b>

\*5 AAC 24.360(b)

# Sonar Counts vs Inriver Goal



# Aerial Surveys

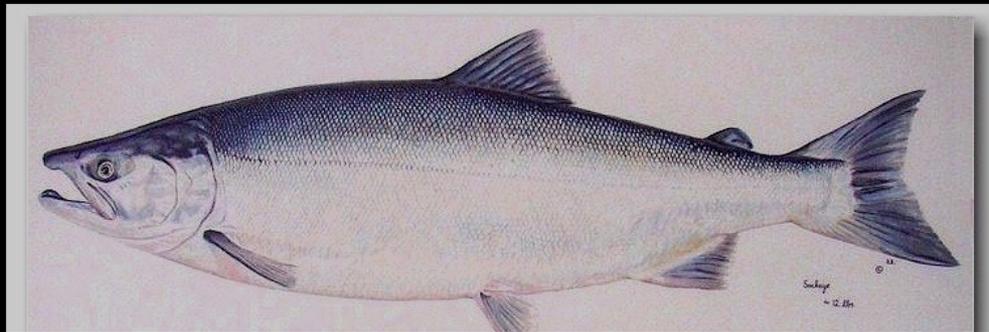


## Delta Escapement Goals

**Sockeye salmon: SEG of 55,000-130,000 (17 index systems)**

**Coho salmon: SEG of 32,000-67,000 (21 index systems)**

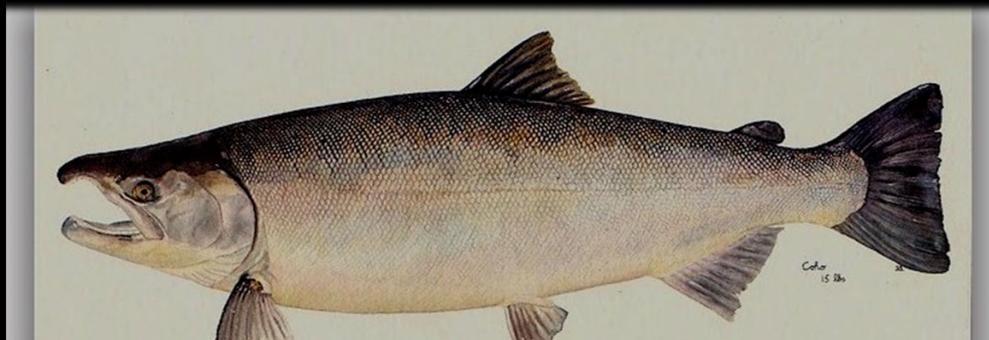
# Copper River Escapement and Harvest



**Sockeye Salmon**

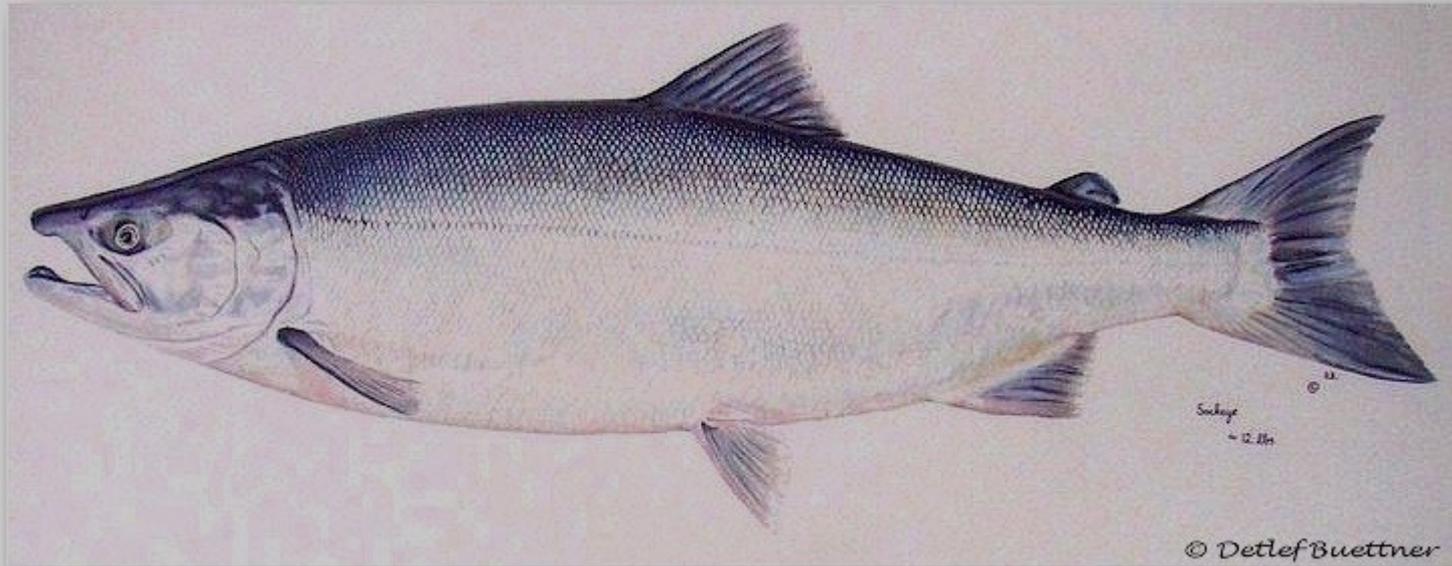


**Chinook Salmon**



**Coho Salmon**

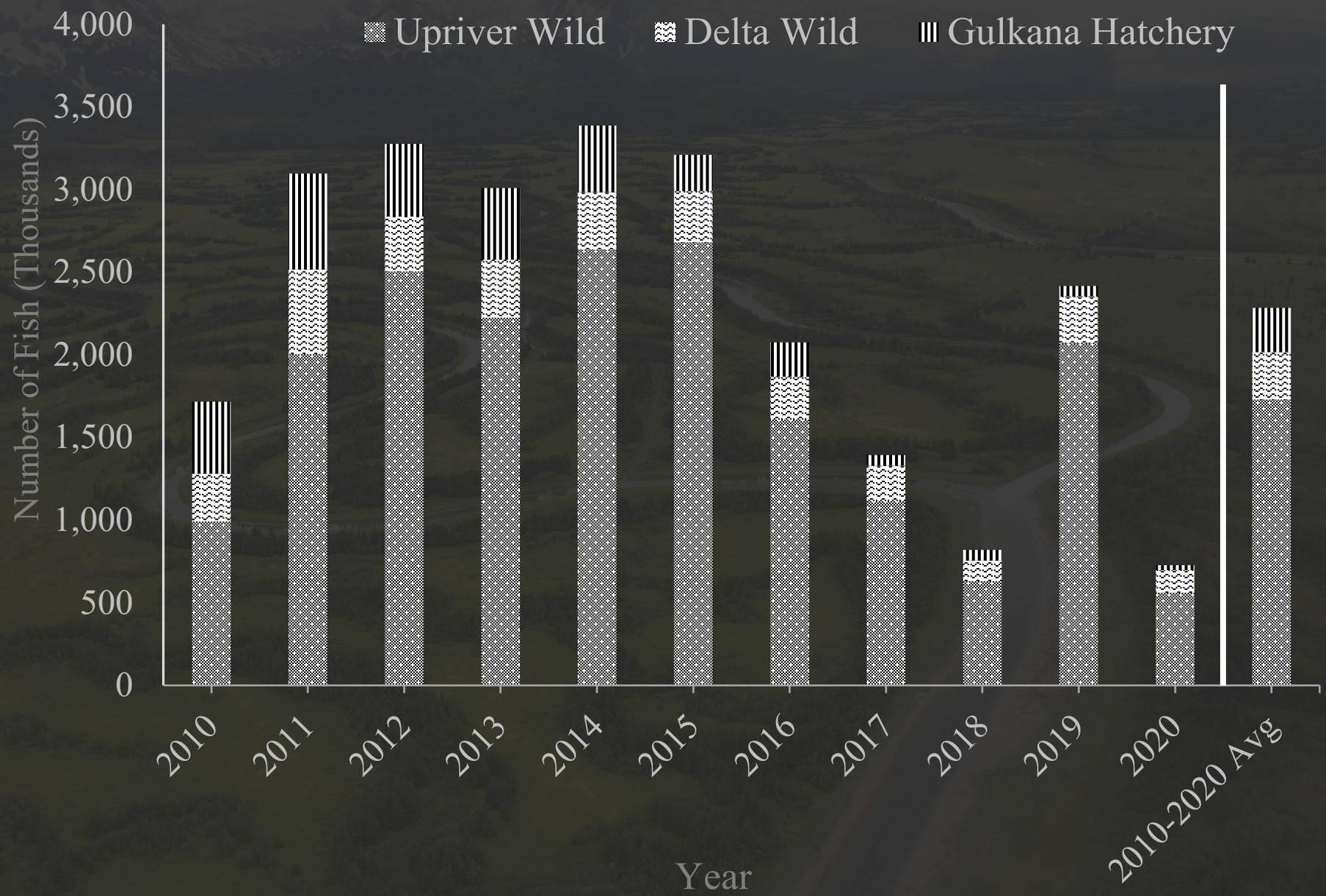
## Sockeye Salmon



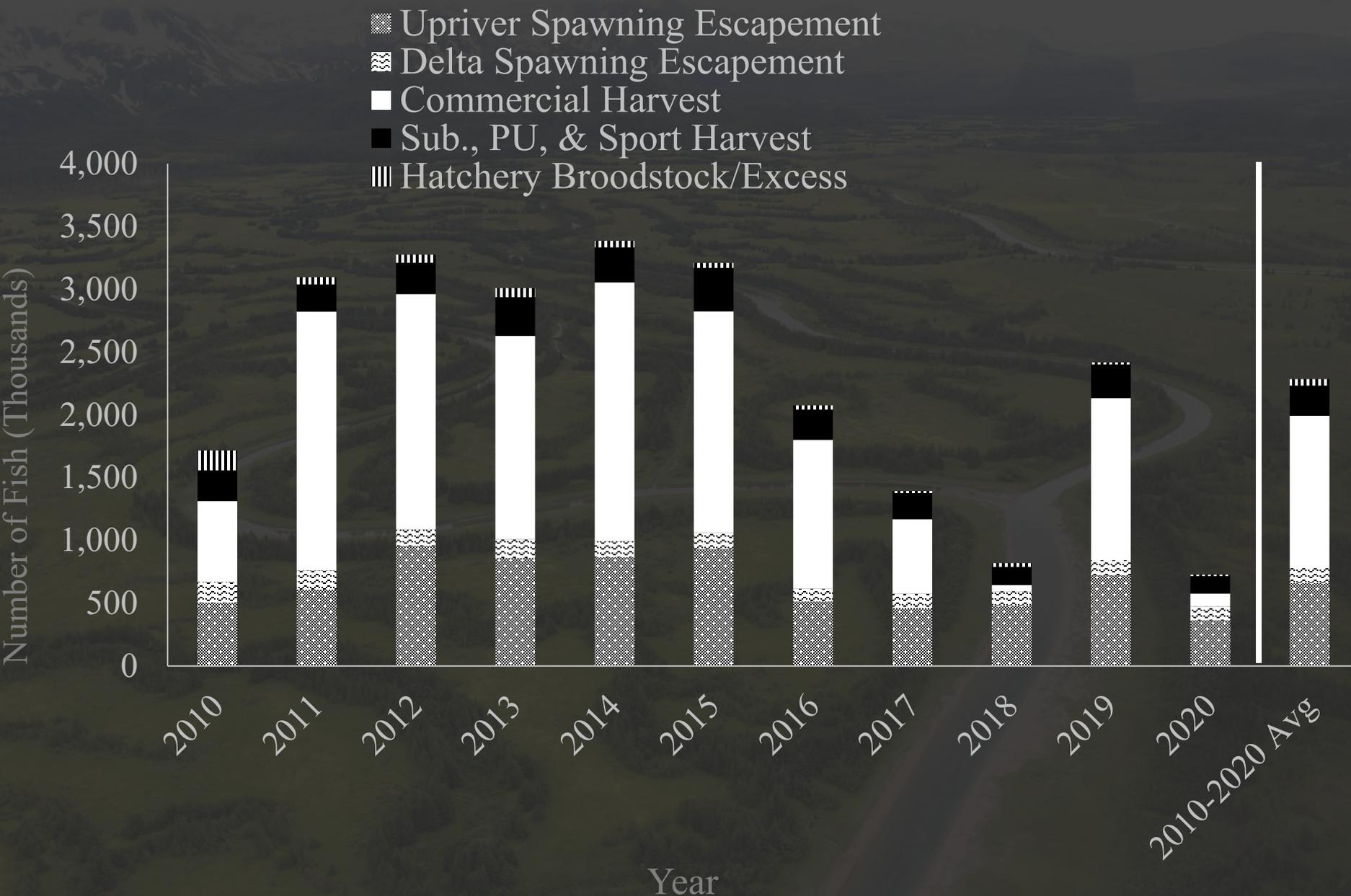
12 lbs. Sockeye 1990

- Run Origin
- Historical Run Composition
- Size-at-Age

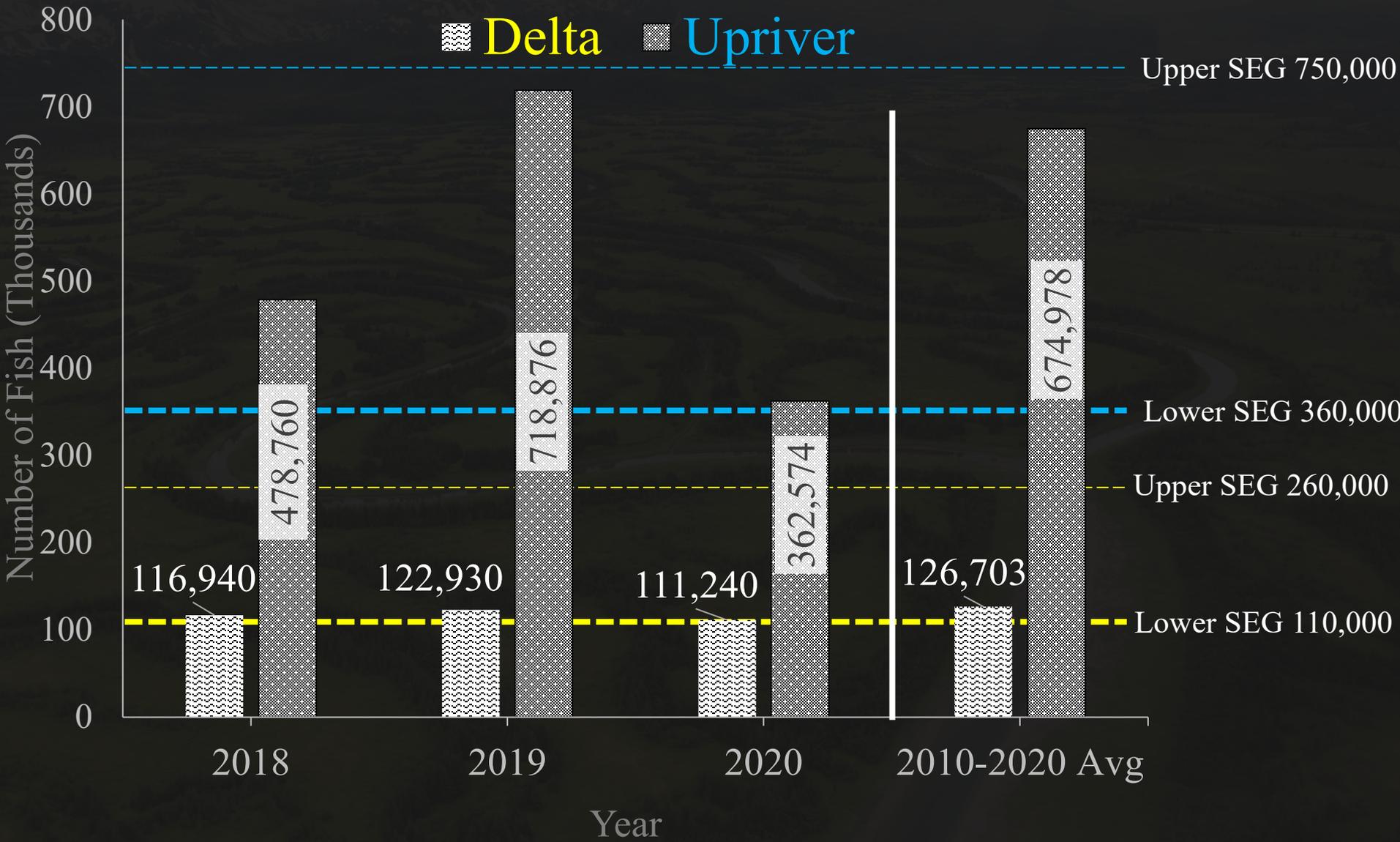
# Copper River Escapement and Harvest- Sockeye



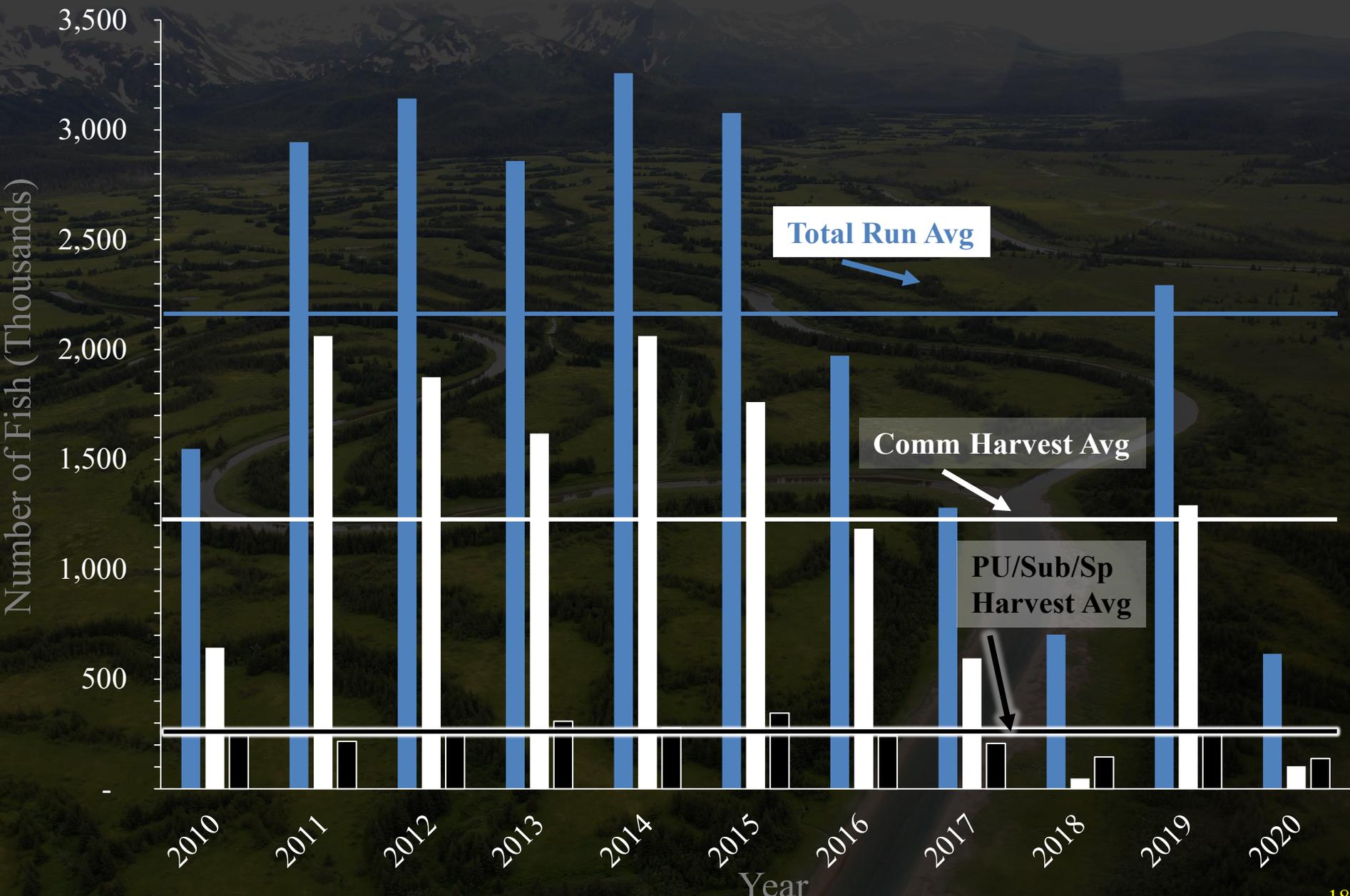
# Copper River Escapement and Harvest- Sockeye



# Copper River Escapement and Harvest- Sockeye

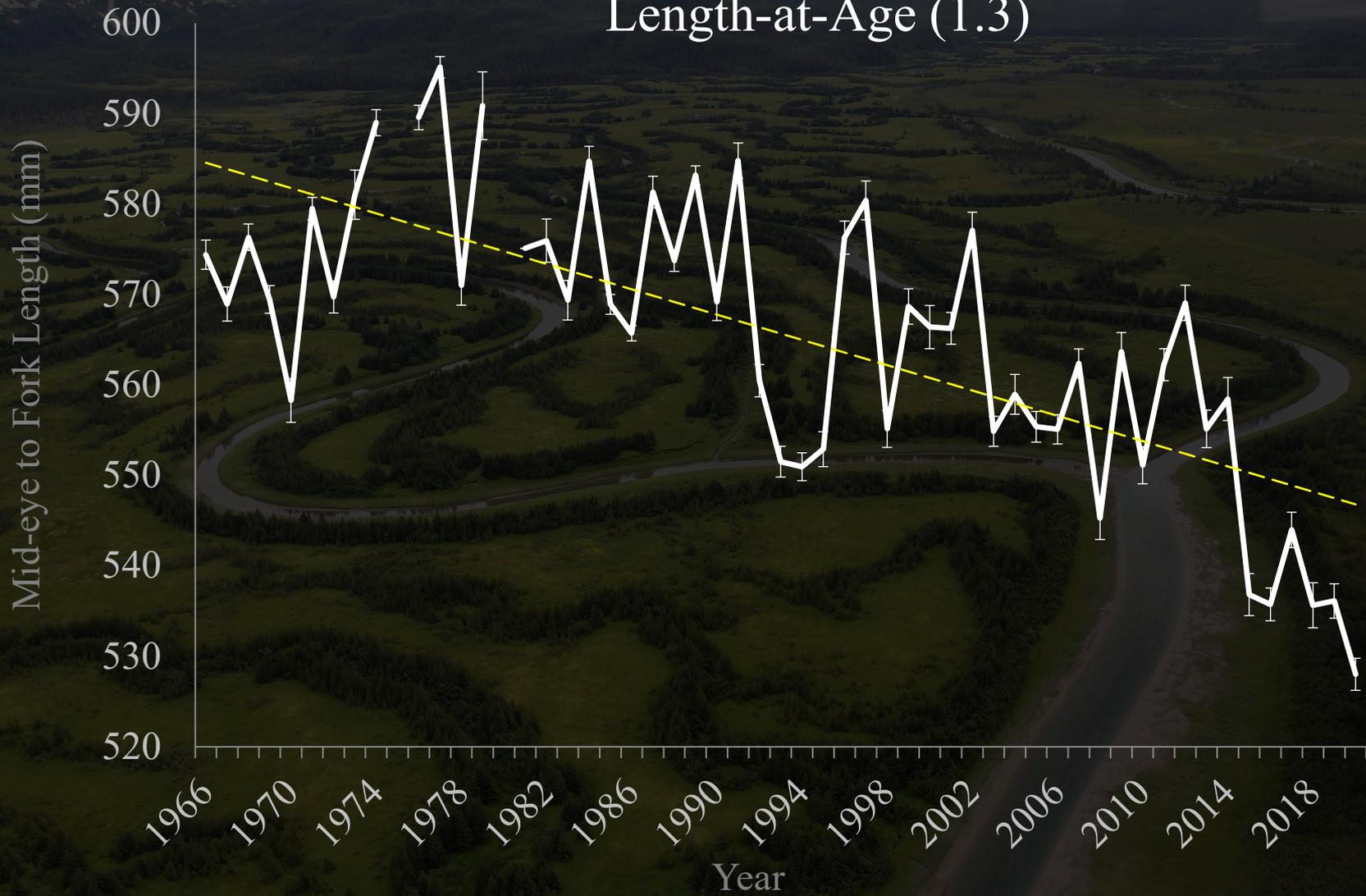


# Copper River Escapement and Harvest- Sockeye



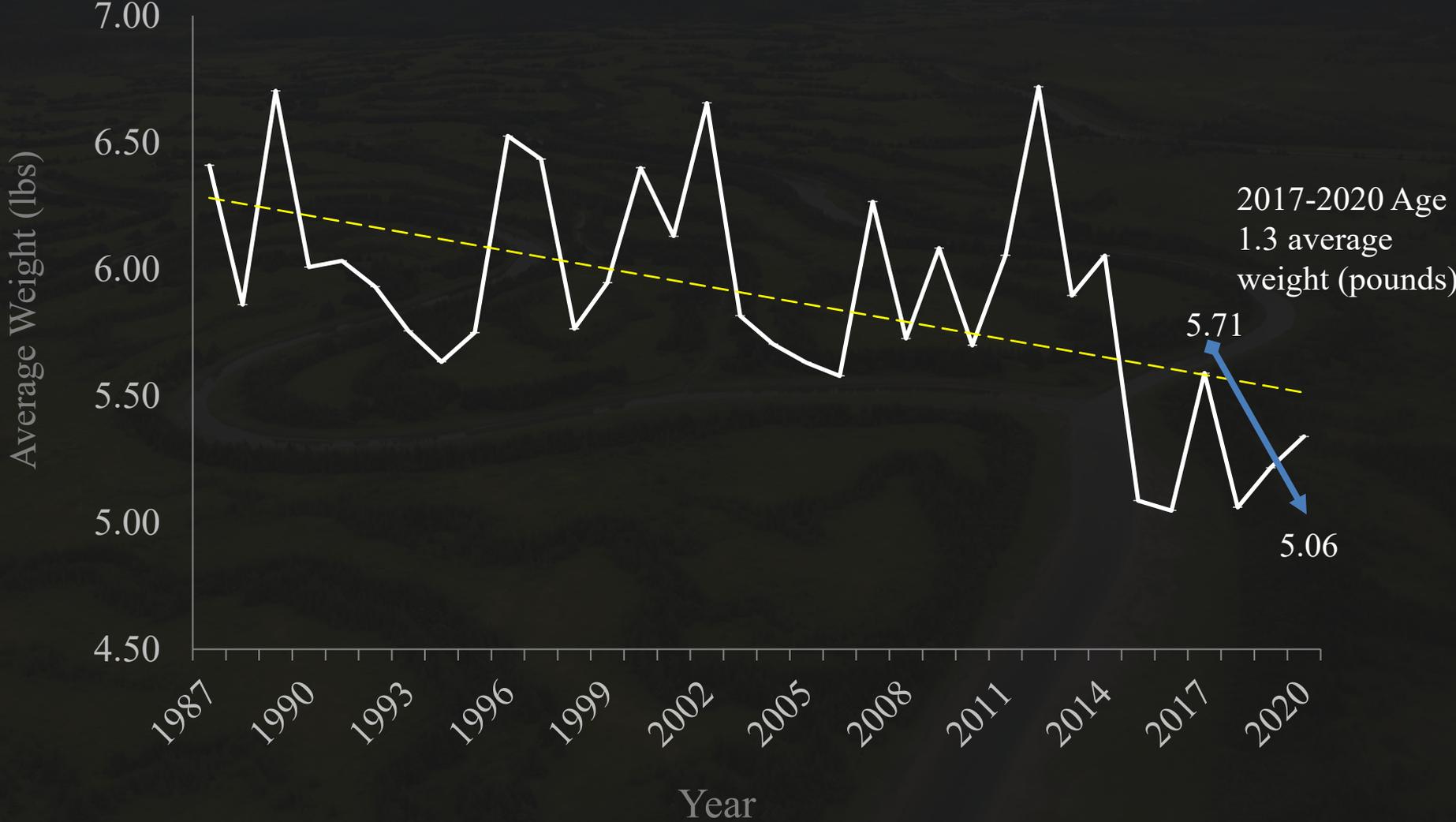
# Copper River Escapement and Harvest- Sockeye size

## Copper River Drift Gillnet Sockeye Salmon Length-at-Age (1.3)



# Copper River Escapement and Harvest- Sockeye size

## Copper River Drift Gillnet Sockeye Salmon Average Weight (All Ages)



## Chinook Salmon

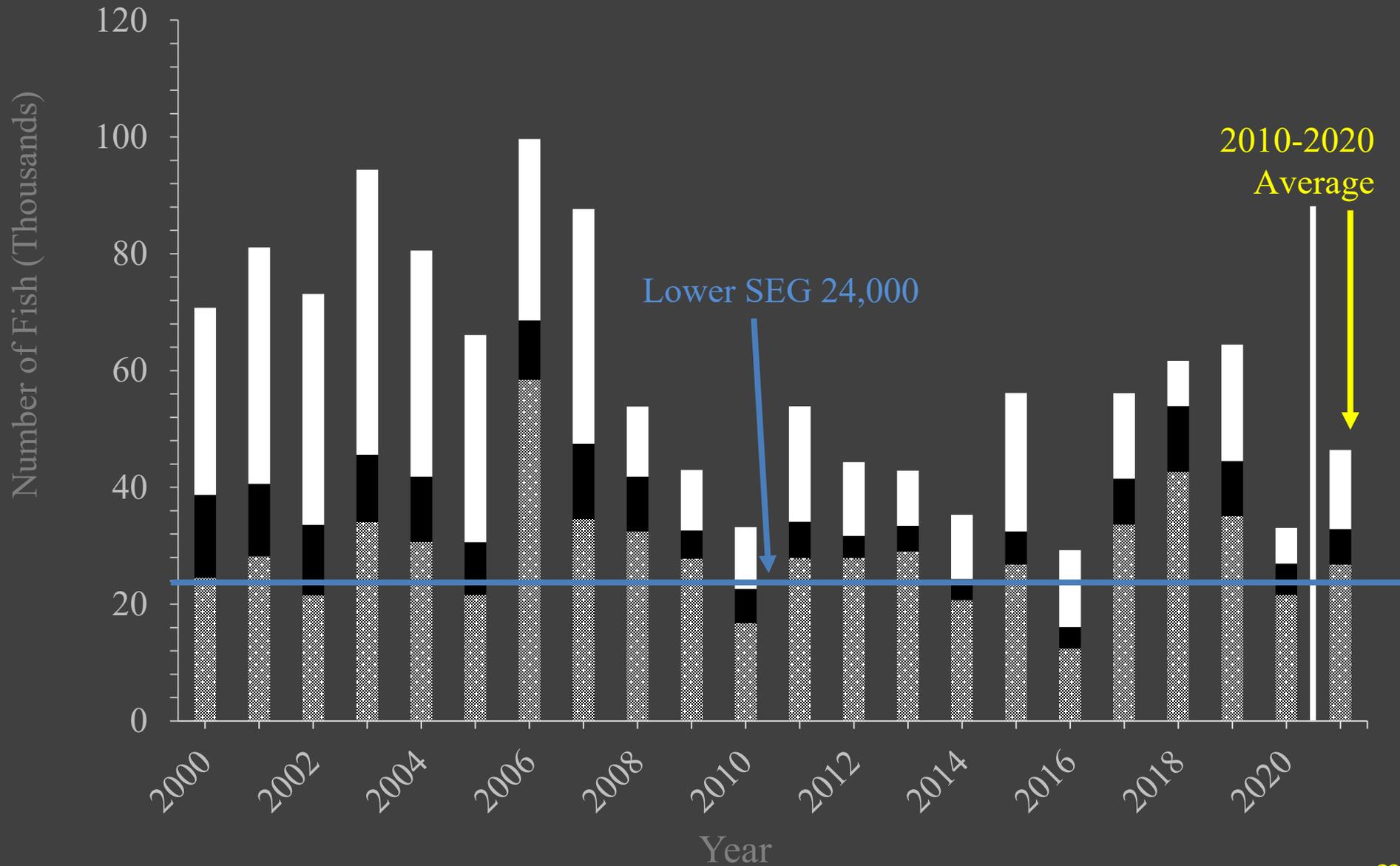


32 lbs. Kingsalmon 1993

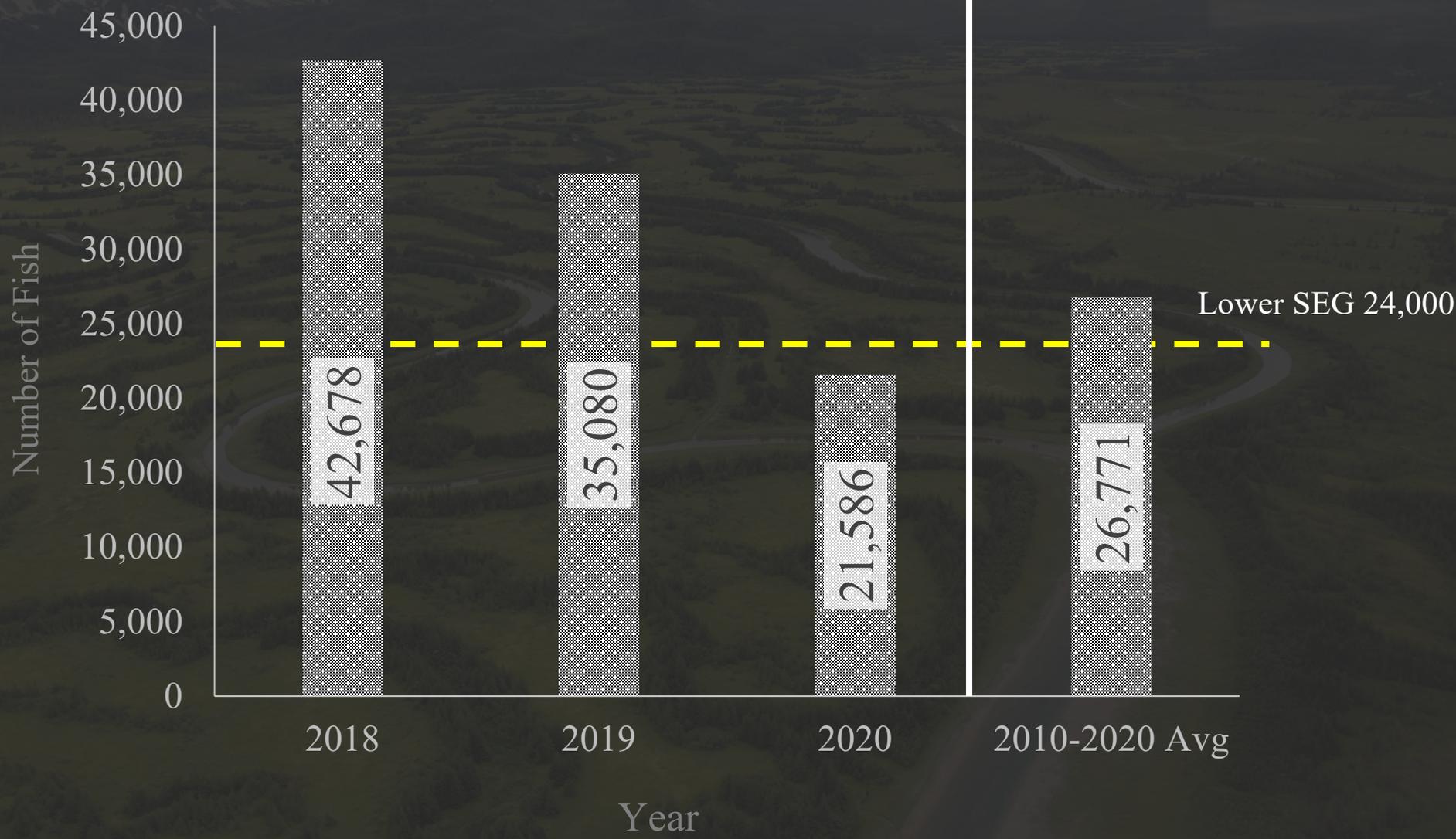
- Historical Run Composition
  - Size-at-Age

# Copper River Escapement and Harvest- Chinook

Upriver Spawning Esc. 
  Sub., PU, & Sport Harvest 
  Comm. Harvest



# Copper River Escapement and Harvest- Chinook

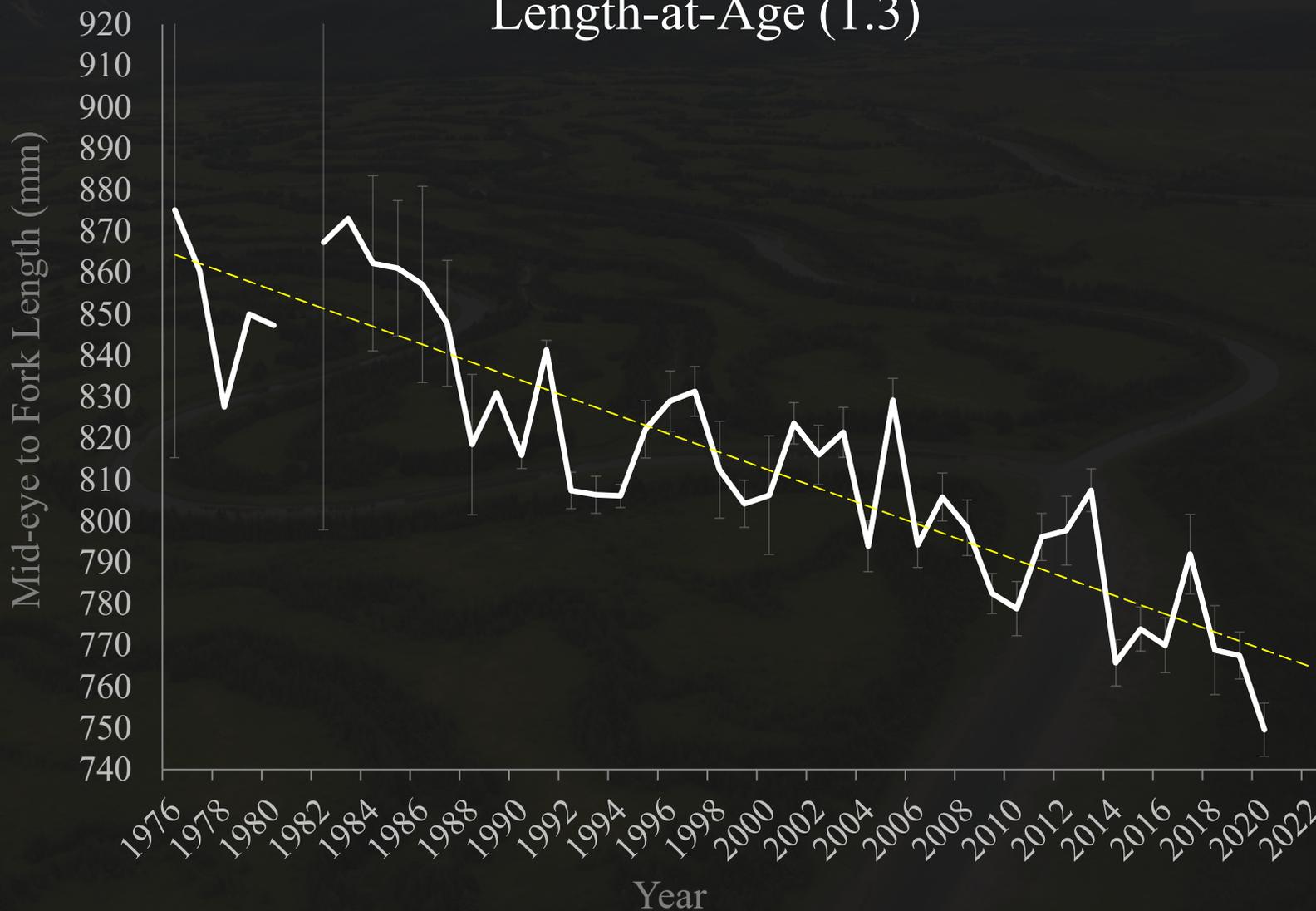


# Copper River Escapement and Harvest- Chinook Apportionment Pilot Project

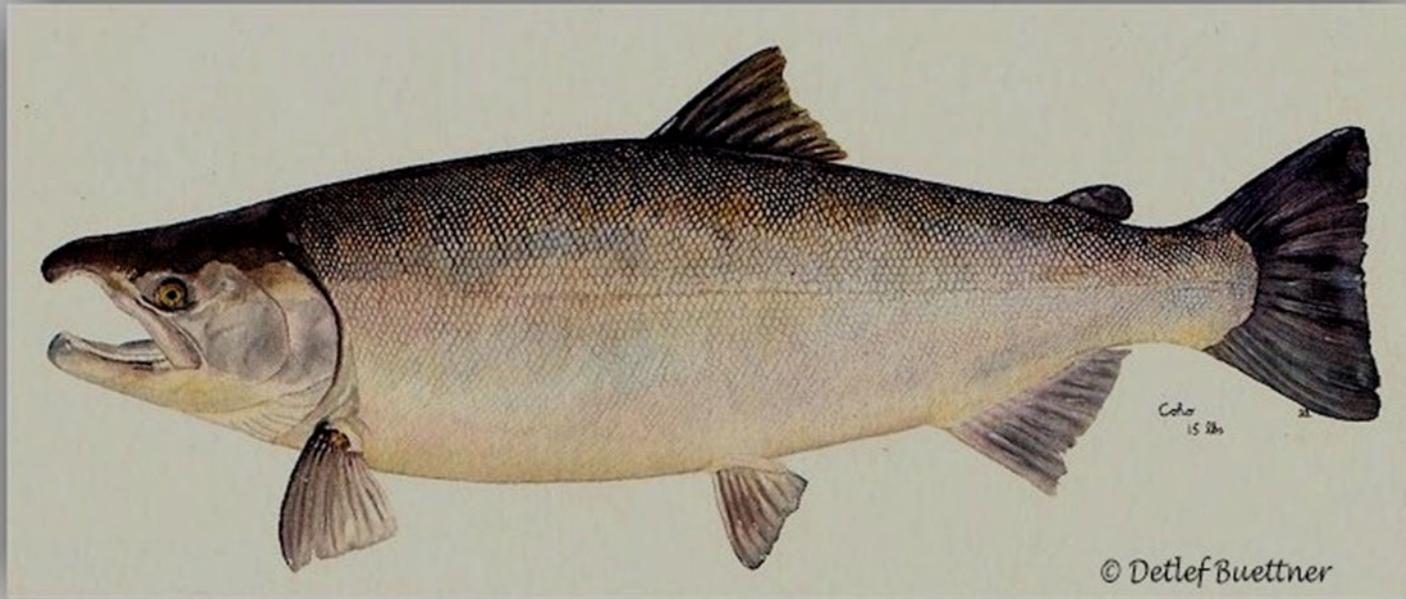
- Promising results
  - Measurement results are timely
  - Within error bounds of NVE fishwheel M-R results
- More years of building inseason passage trends and comparison with M-R results needed
- Ultimate goal: inseason assessment of Chinook salmon inriver abundance
  - Fishwheel M-R is a post season assessment of abundance
  - Adaptive management based on timely abundance indices

# Copper River Escapement and Harvest- Chinook size

## Copper River Drift Gillnet Chinook Salmon Length-at-Age (1.3)



## Coho Salmon

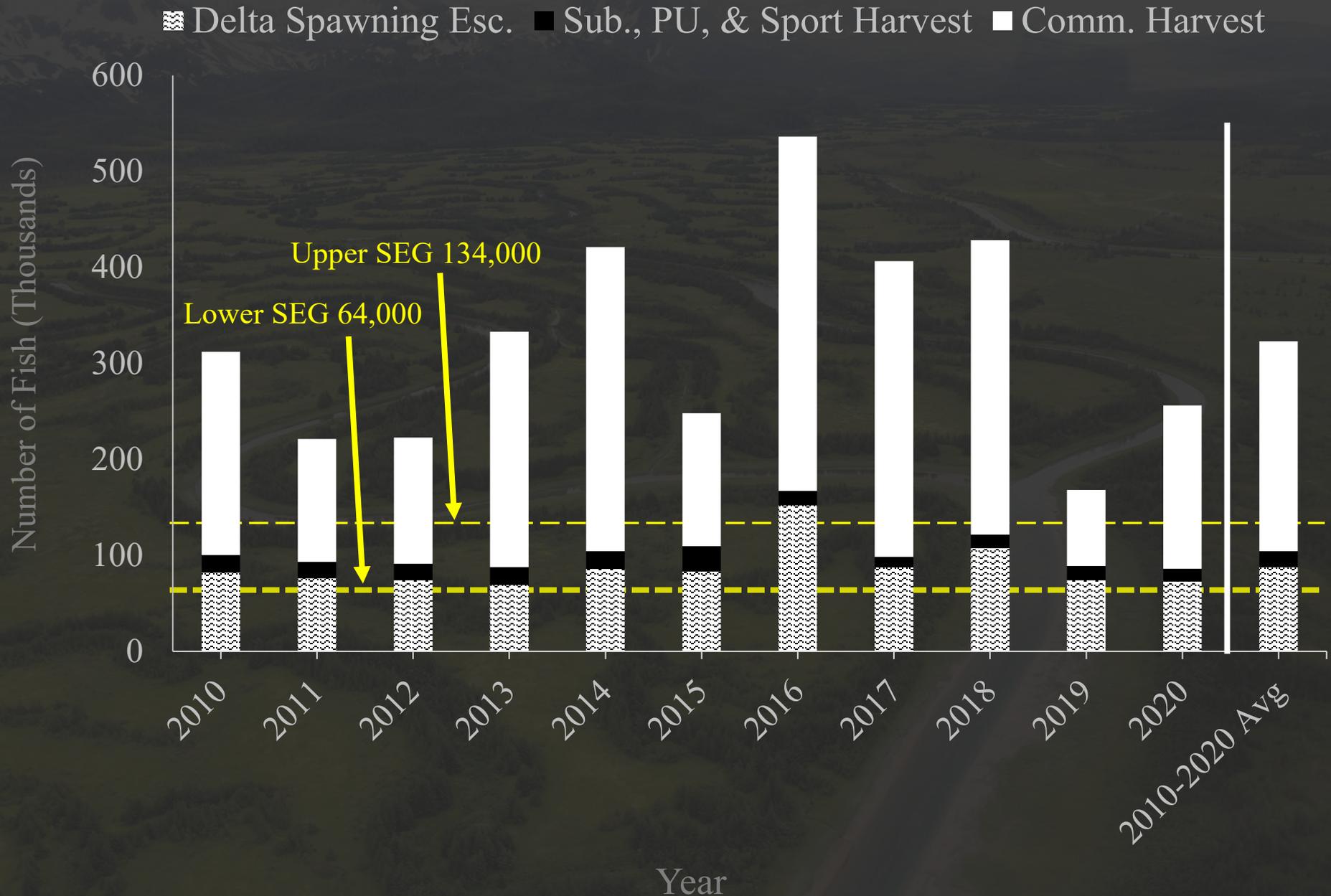


15 lbs. Coho 1986

© Detlef Buettner

- Historical run composition

# Copper River Salmon Escapement and Harvest- Coho



Questions or Comments?

