

The background features a dark blue gradient with a starry pattern. On the left side, there are several overlapping circular elements. One prominent circle has a scale around its perimeter with numerical markings from 140 to 260 in increments of 10. Other circles contain curved lines and arrows, suggesting a technical or scientific theme.

# BYCATCH OF SEAK CHINOOK & CHUM

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ALASKA DEPARTMENT OF FISH AND GAME

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# GOA CHINOOK SALMON BYCATCH LIMITS

- Limits for all trawl fisheries that have salmon bycatch
  - Pollock Central GOA = 18,316
  - Pollock Western GOA = 6,684
  - Non-pollock trawl = 7,500
- Total GOA limit = 32,500
- Once annual limits are reached, the fishery is closed

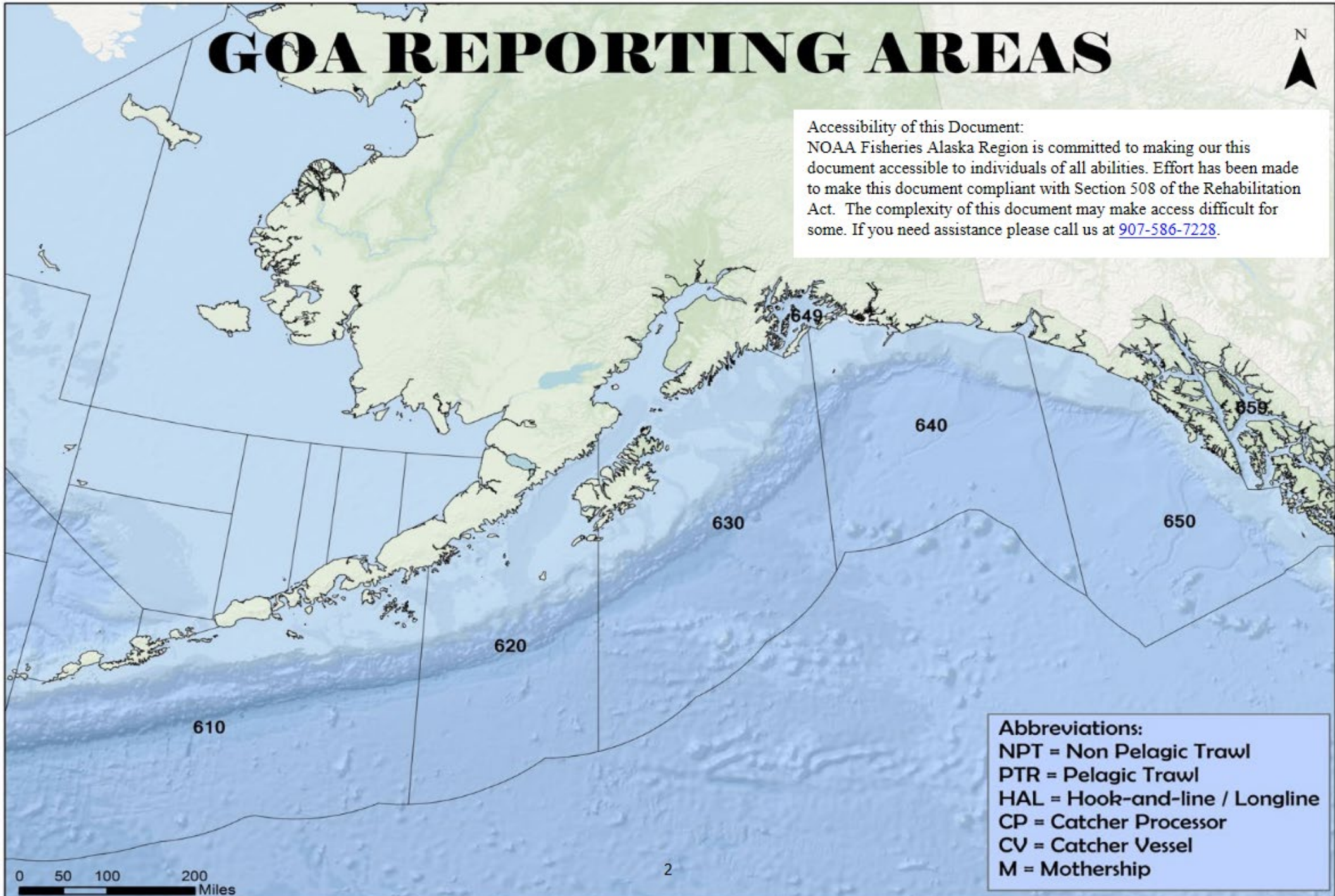


# GOA REPORTING AREAS



## Accessibility of this Document:

NOAA Fisheries Alaska Region is committed to making our this document accessible to individuals of all abilities. Effort has been made to make this document compliant with Section 508 of the Rehabilitation Act. The complexity of this document may make access difficult for some. If you need assistance please call us at [907-586-7228](tel:907-586-7228).



## Abbreviations:

NPT = Non Pelagic Trawl  
PTR = Pelagic Trawl  
HAL = Hook-and-line / Longline  
CP = Catcher Processor  
CV = Catcher Vessel  
M = Mothership

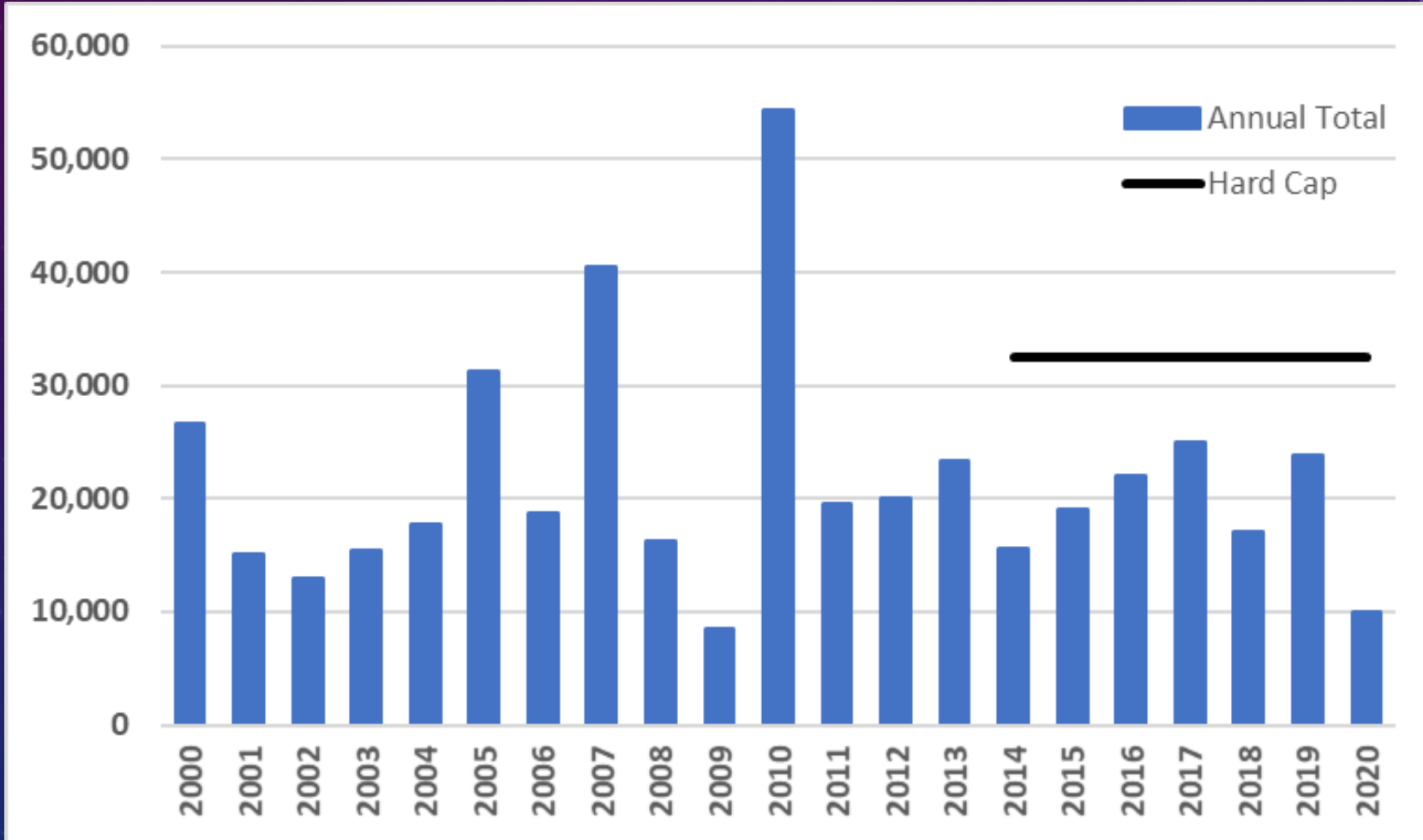


# CHINOOK BYCATCH SAMPLING

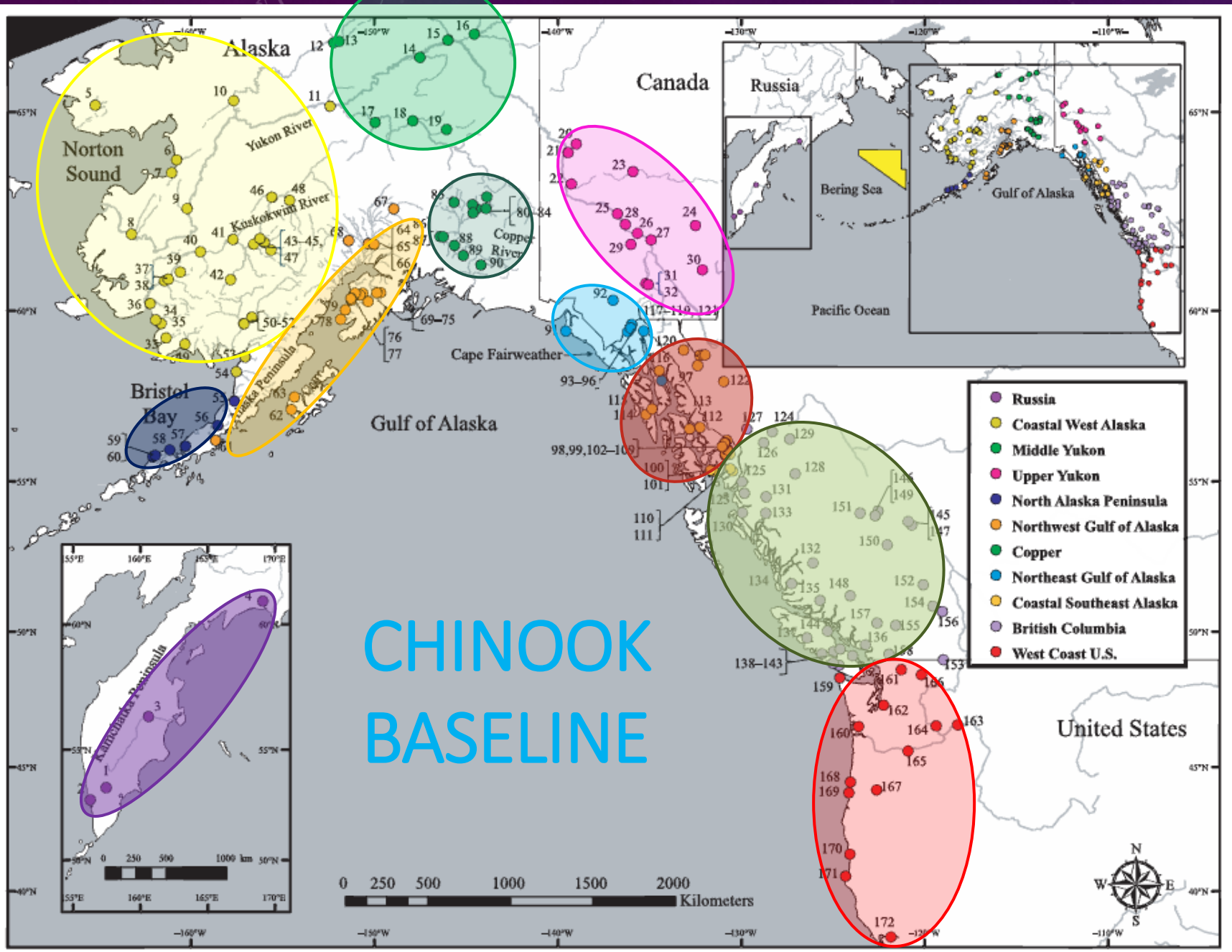
- Retention of all Chinook caught as bycatch in the GOA pollock trawl fishery
- Recognizing that not all pollock trips are observed at sea, the Observer Program implemented a simple random sampling protocol for collection of genetic samples in 2014
- In 2013, GOA CV rockfish trawl fishery implemented a census sampling approach (AKGD)



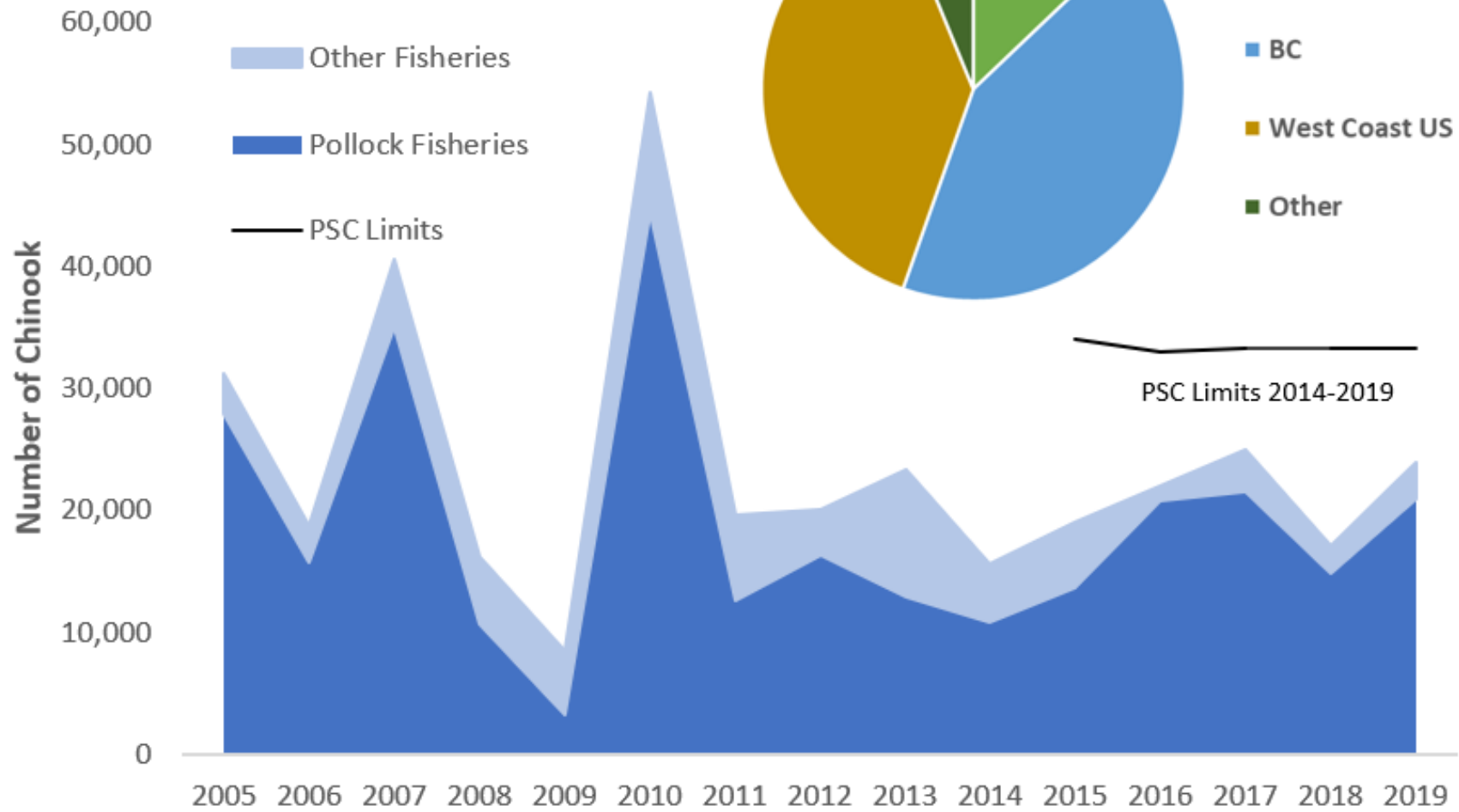
# CHINOOK MORTALITY IN GOA GROUND FISH FISHERIES



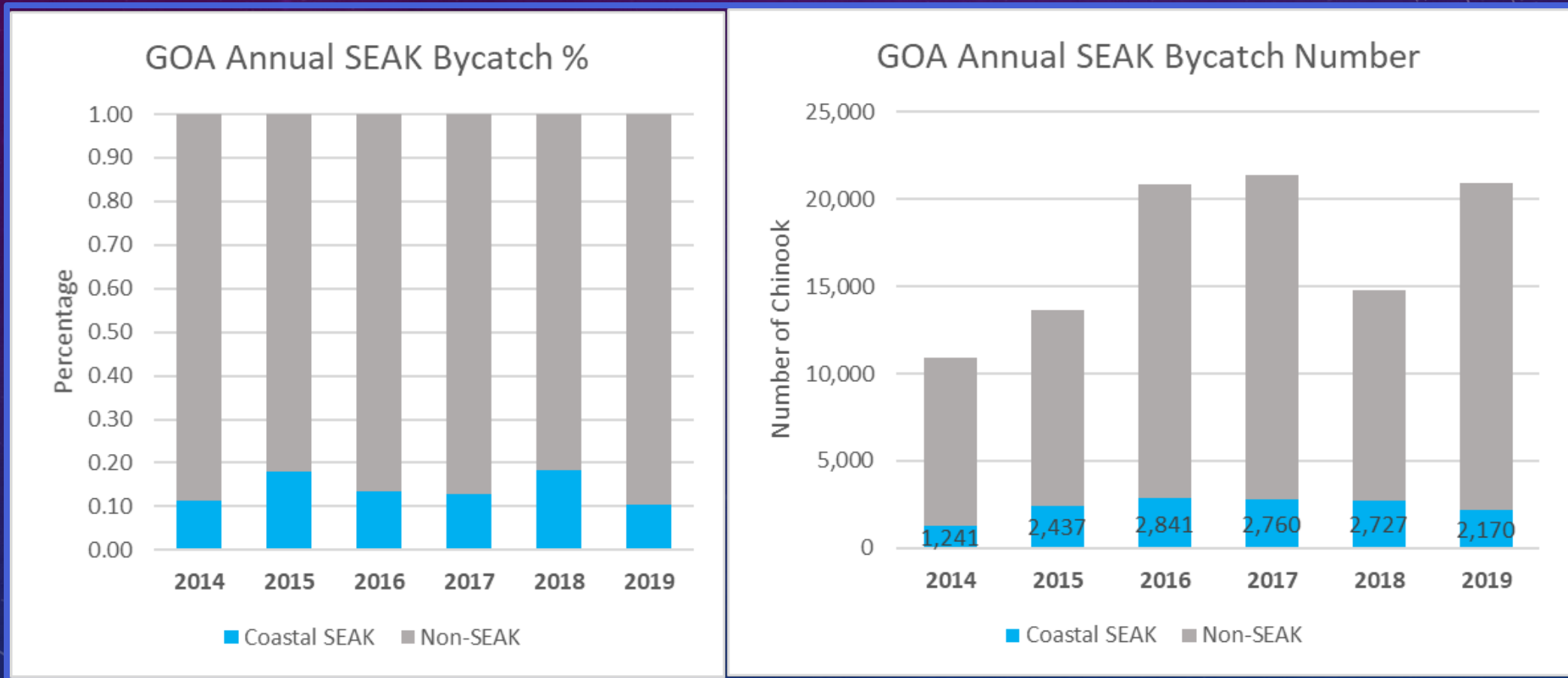




## 2005-2019 Chinook Salmon Bycatch in the Gulf of Alaska



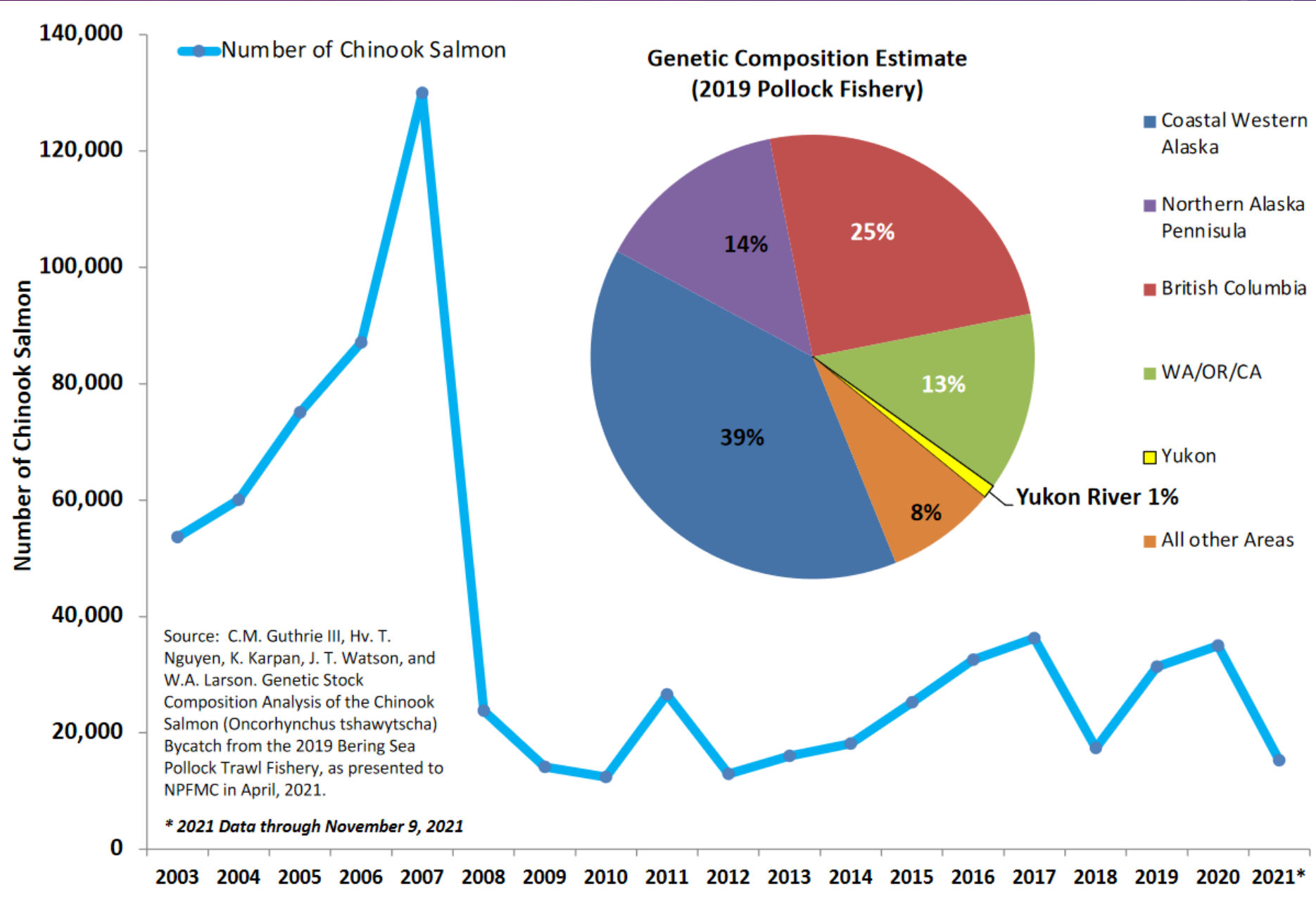
# GOA SEAK CHINOOK BYCATCH



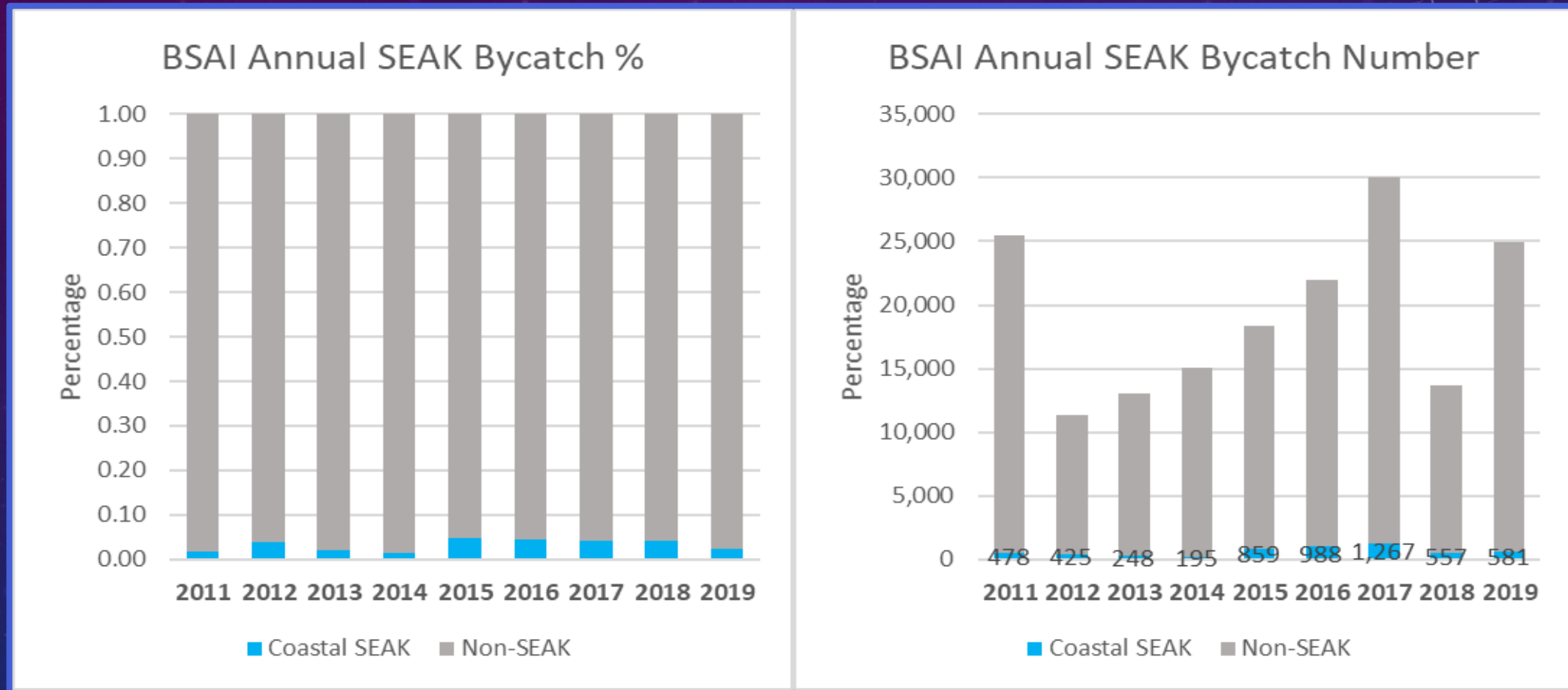
Range: 1,241 to 2,841 immature SEAK Chinook  
(source data: Guthrie et al. 2015, 2016, 2017, 2018, 2019, 2020, 2021)



# BERING SEA CHINOOK BYCATCH



# BSAI SEAK CHINOOK BYCATCH



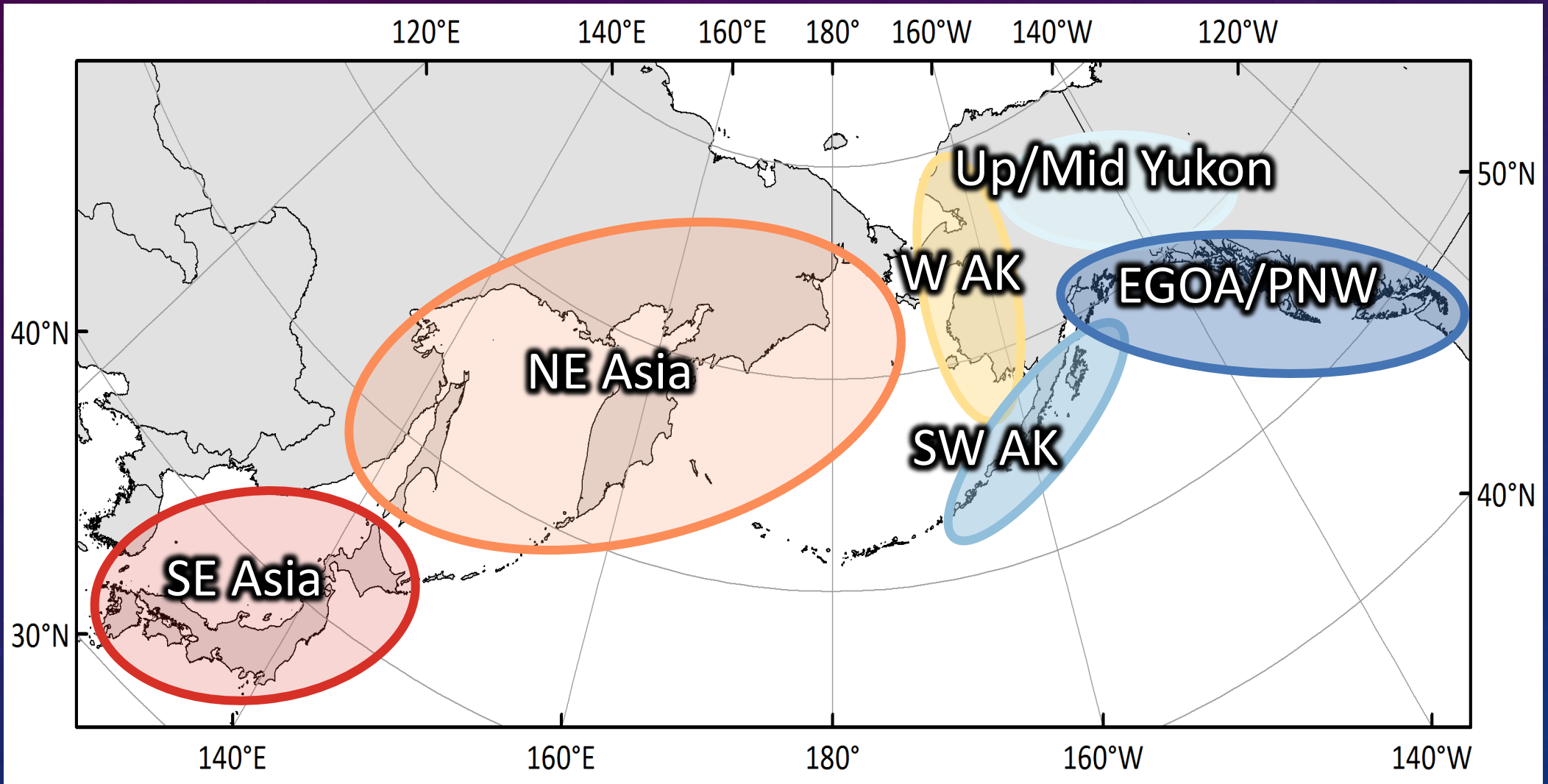
Range: 195 to 1,267 immature SEAK Chinook  
(source data: Guthrie et al. 2015, 2016, 2017, 2018, 2019, 2020, 2021)



# GOA CHUM SALMON BYCATCH

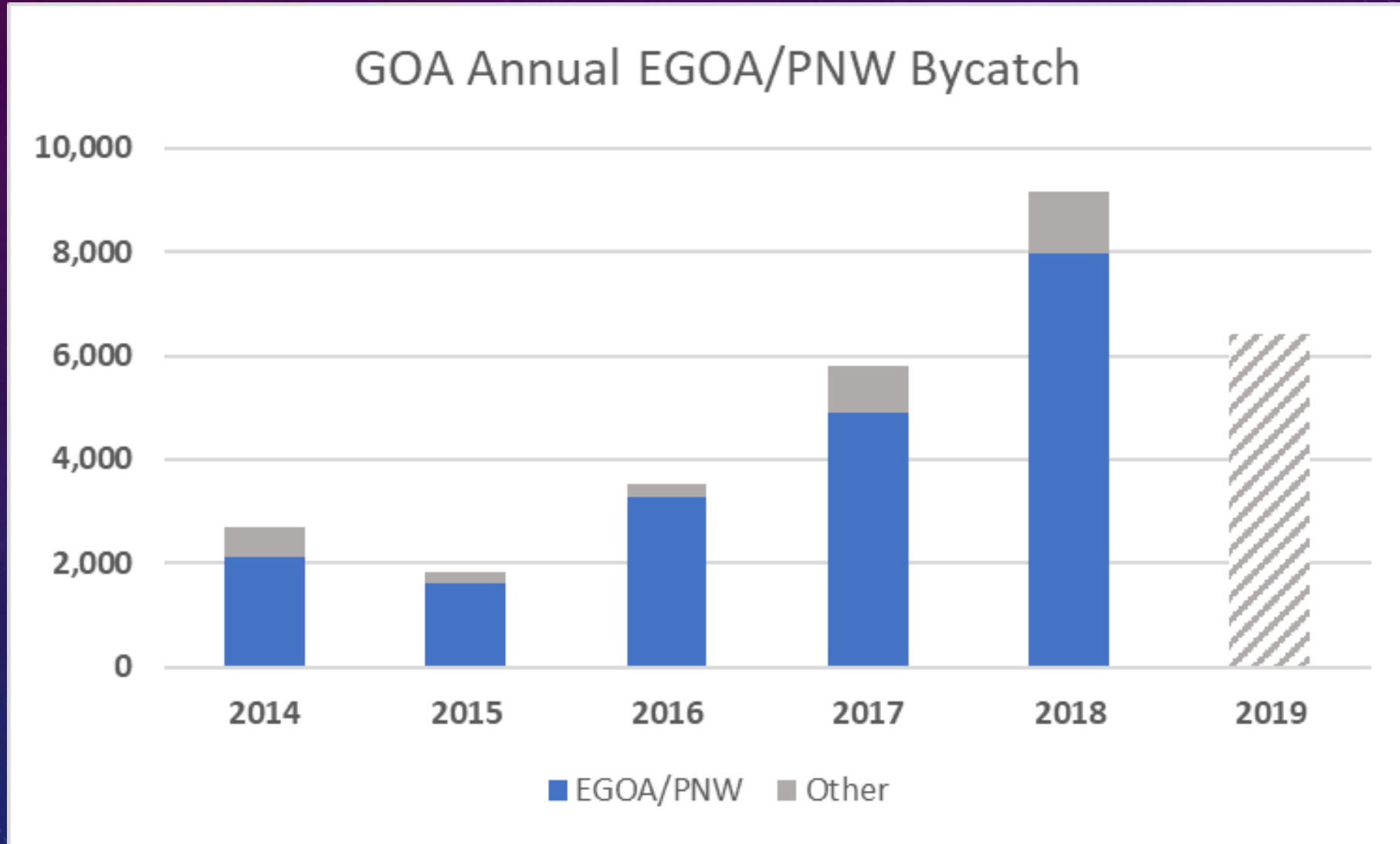
- Bycatch levels low
- No measures in place to limit bycatch

# CHUM MICROSATELLITE BASELINE



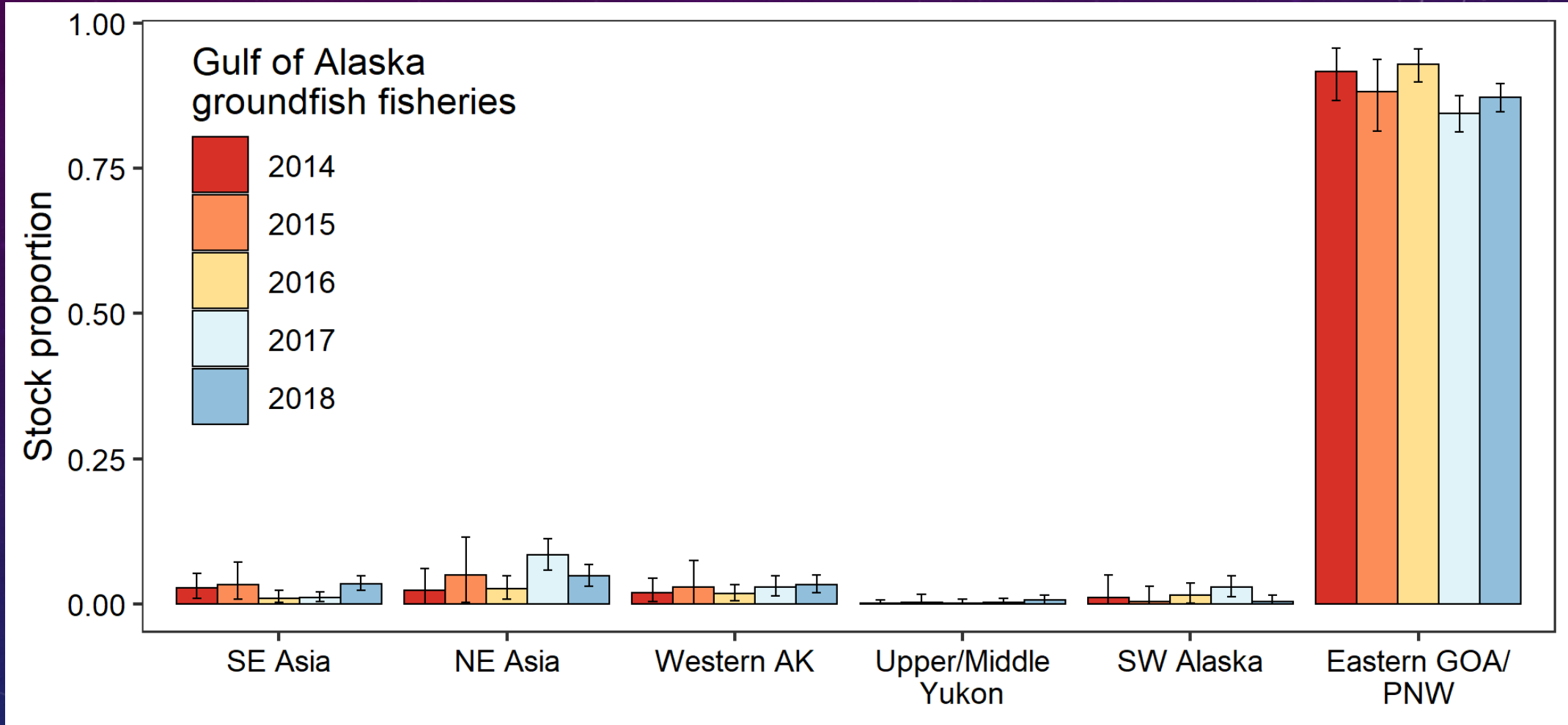


# GOA CHUM BYCATCH



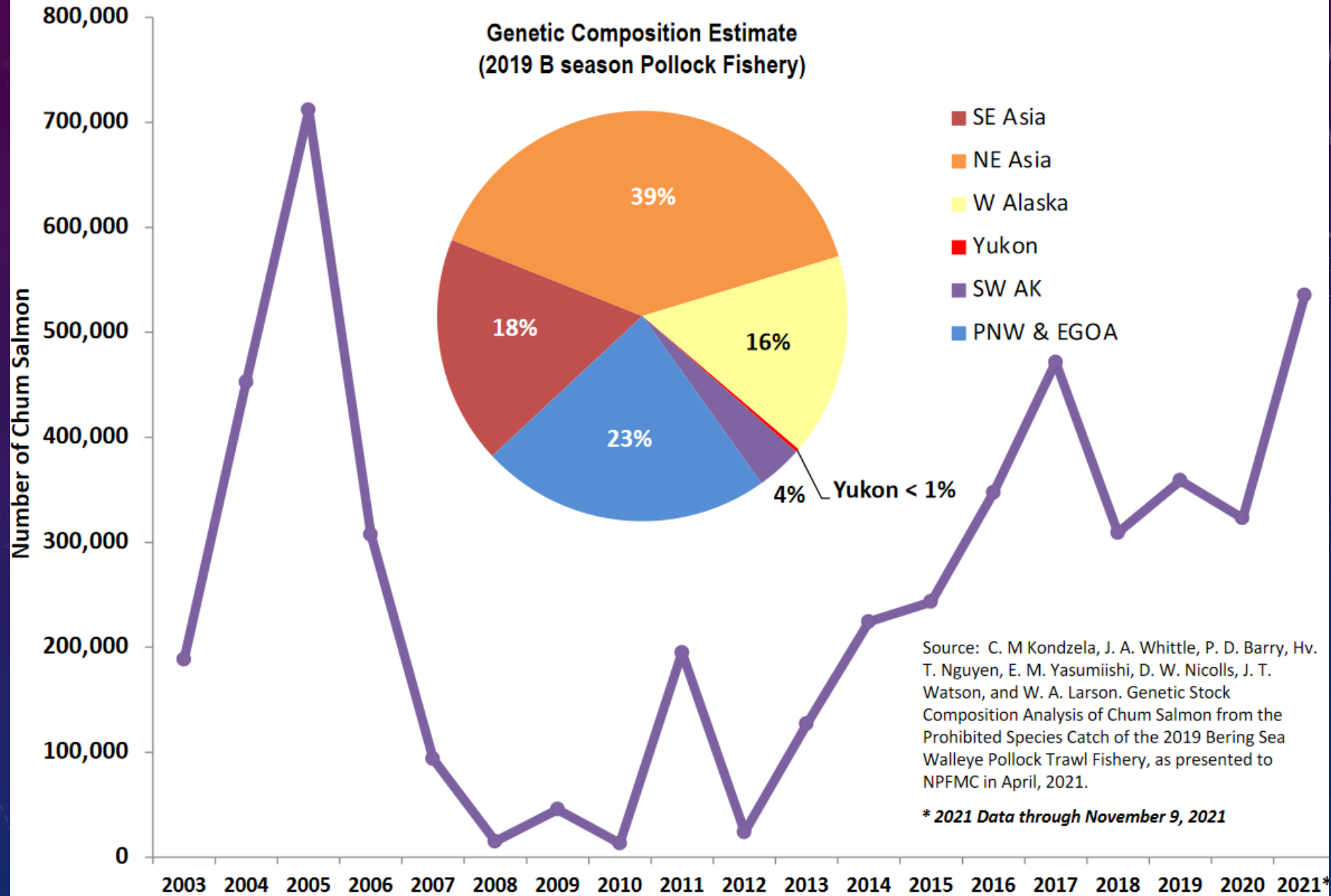
Kondzela et al. 2015, 2016, 2017, 2018, 2019, & 2021.

# CHUM BYCATCH





# Bering Sea Chum Salmon Bycatch (2003 – 2021)



# KEY POINTS

- Hard caps are in place for all GOA trawl fisheries that intercept Chinook.
- GOA Chinook bycatch is largely composed of stocks subject to the Pacific Salmon Treaty, however few of those are from coastal SEAK and bycatch levels are low
- Bycatch estimates are immature fish; not expressed in adult equivalents (AEQs)
- Stock composition relatively consistent across years
- Genetic analyses can not discriminate between hatchery and wild fish
- Chum bycatch in the GOA is low (<10,000 fish)
- Chum genetic reporting groups are too broad to estimate contribution of SEAK origin fish



# DATA SOURCES

- Chum genetics
  - <https://www.fisheries.noaa.gov/resource/document/genetic-stock-composition-analysis-chum-salmon-prohibited-species-catch-2015>
  - <https://meetings.npfmc.org/CommentReview/DownloadFile?p=80774ef6-3f2c-4d2f-a533-5498d01dad4a.pdf&fileName=C4%20Chum%20BSGOA%202014NOAA-TM-AFSC-314.pdf>
  - <https://meetings.npfmc.org/CommentReview/DownloadFile?p=2a560c5-387d-4b5a-b82b-c650b9d94f34.pdf&fileName=D5a%202017%20BS%20Chum%20Genetics%20Report.pdf>
  - <https://meetings.npfmc.org/CommentReview/DownloadFile?p=d107efe7-d1c5-4a00-a30b-666adbb06d22.pdf&fileName=D5a%202018%20Chum%20Genetics%20Report.pdf>
  - <https://meetings.npfmc.org/CommentReview/DownloadFile?p=e064f277-d63d-4ee4-9904-6a495f0b6552.pdf&fileName=PPT%20B2%20NMFS%20GOA%20Inseason%20Management%20Report.pdf>
- Bycatch estimates
  - GOA Chinook: <https://www.fisheries.noaa.gov/sites/default/files/akro/goasalmonmort2021.html>
  - GOA non-Chinook: [https://www.fisheries.noaa.gov/sites/default/files/akro/car142\\_goa\\_salmon2021.html](https://www.fisheries.noaa.gov/sites/default/files/akro/car142_goa_salmon2021.html)
  - BSAI Chinook: [https://www.fisheries.noaa.gov/sites/default/files/akro/chinook\\_salmon\\_mortality2021.html](https://www.fisheries.noaa.gov/sites/default/files/akro/chinook_salmon_mortality2021.html)
  - BSAI non-Chinook: [https://www.fisheries.noaa.gov/sites/default/files/akro/chum\\_salmon\\_mortality2021.html](https://www.fisheries.noaa.gov/sites/default/files/akro/chum_salmon_mortality2021.html)

*Note: You can change the year in the URL to get estimates from previous years*