

C3 Bering Sea Aleutian Islands Groundfish September Plan Team Report

Steve Barbeaux, Kalei Shotwell, Diana Stram, Cindy Tribuzio



October 2023, Presentation to the Council



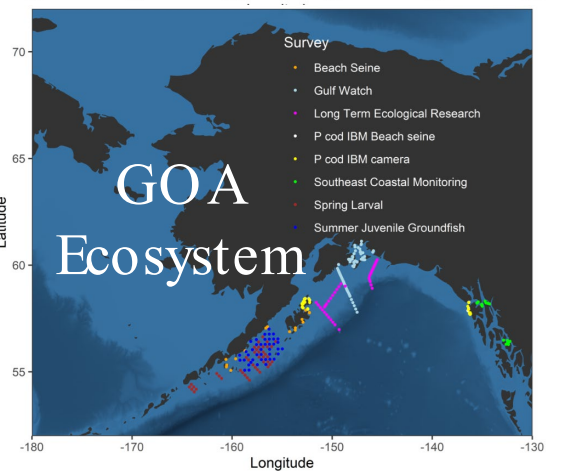
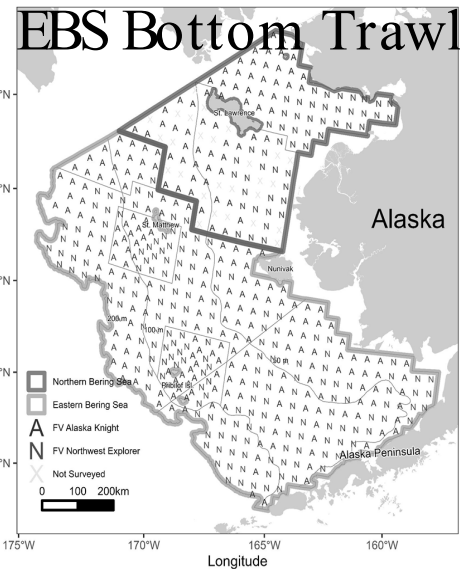
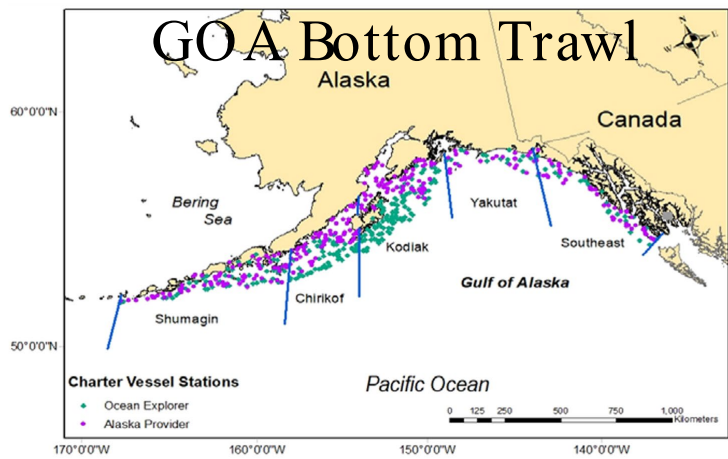
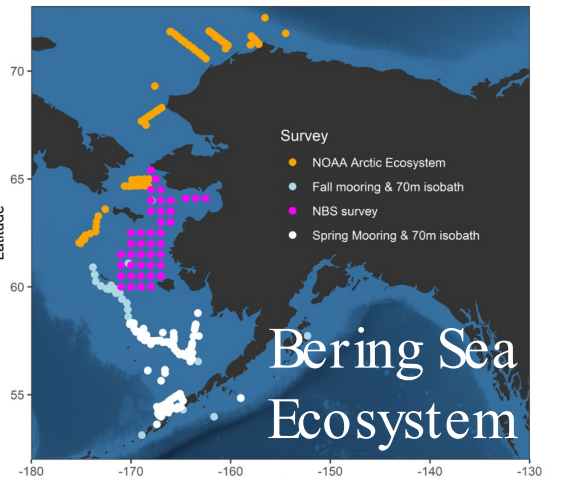
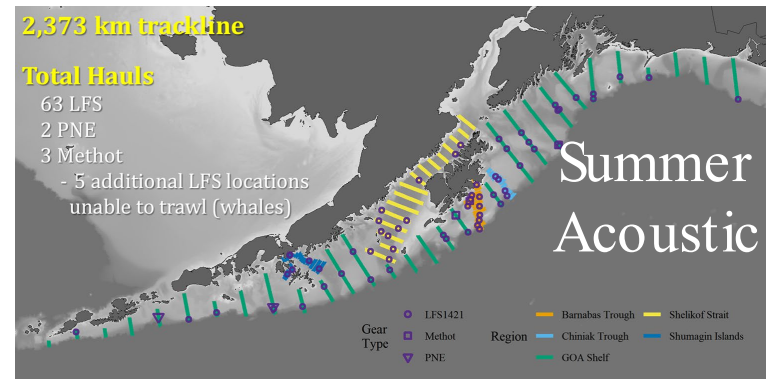
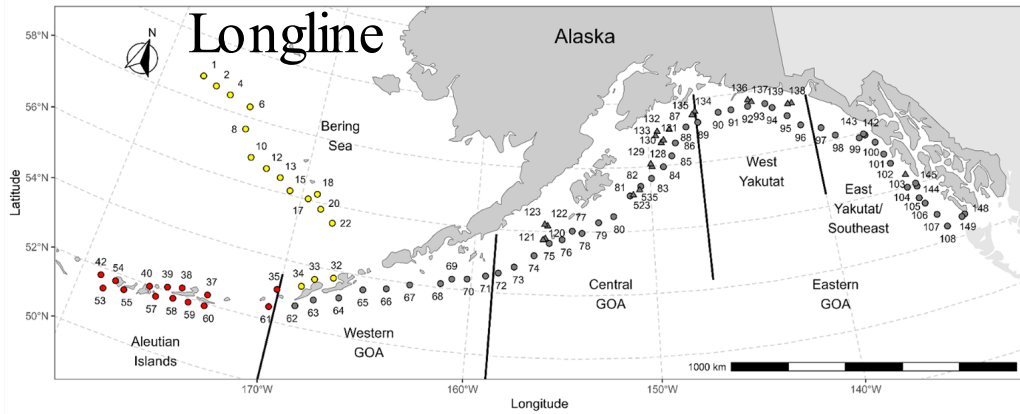
BSAI Presentation Summary

| Topic | Presenter | Type | Action |
|--|--------------------|--------------------------|--------|
| <u>CEATTLE</u> | Kirstin Holsman | Information | No |
| <u>Pollock AVO Index</u> | Nate Lauffenburger | Information | No |
| <u>Pollock Movement</u> | Robert Levine | Information | No |
| <u>EBS Pollock Model</u> | Jim Ianelli | Model Update (recorded) | Yes |
| <u>Yellowfin Sole Model</u> | Ingrid Spies | Model Update | No |
| <u>AI Pacific Cod Model</u> | Ingrid Spies | Model Update | Yes |
| <u>EBS Pacific Cod Model</u> | Steve Barbeaux | Model Update (recorded) | Yes |
| <u>Northern Rockfish Stock Structure</u> | Paul Spencer | Information/Model Update | Yes |
| <u>Proposed Specifications</u> | Steve Whitney | | |
| <u>Halibut DMRs</u> | Diana Stram | | |

Note: Underlined text has a link to presentation



Surveys: covered in JPT minutes



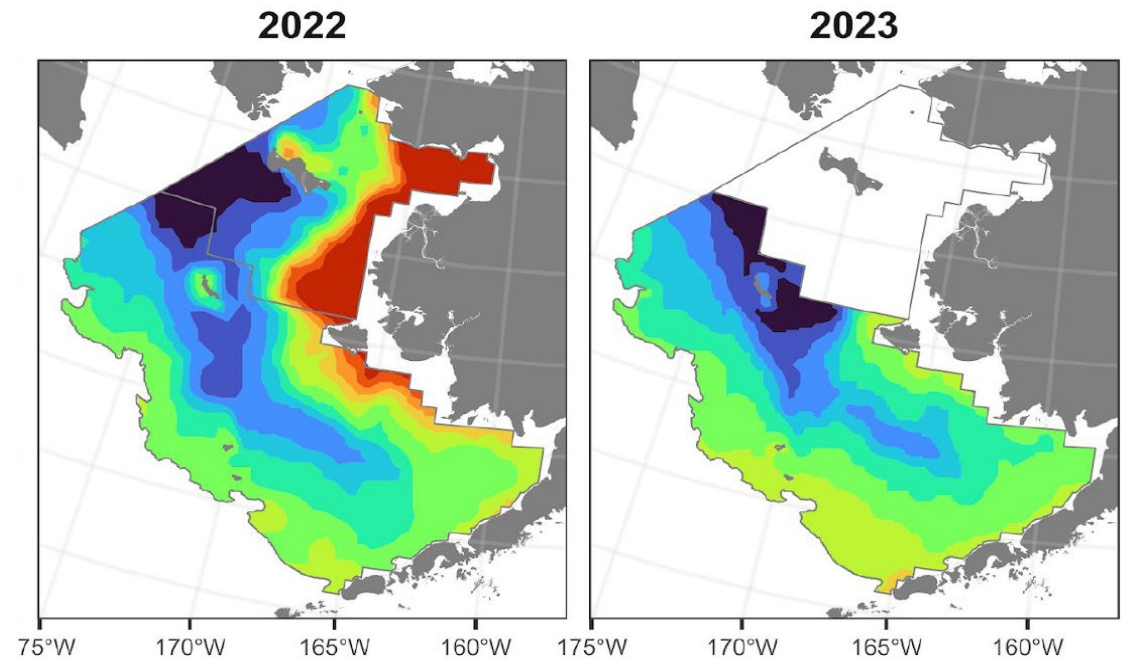
EBS trawl survey

● Highlights:

- Survey methods update and standard data collections
- Cold pool similar to 2022 in extent, but colder and below average
- Fish biomass generally down relative to 2022

● Discussion:

- NBS survey still being processed at time of this presentation



EBS trawl survey

Biomass/Population Changes

- Notable:
 - Summary table useful for looking at all stocks together
 - Showing biomass and population estimates for 2022 and 2023
 - Color coded for increase (green) or decrease (orange)

| Common name | Year | EBS | |
|---------------------|------|------------------|---------------------|
| | | Biomass (mt) | Population (x1,000) |
| walleye pollock | 2022 | 4,153,971 | 7,563,348 |
| | 2023 | 3,154,668 (-24%) | 5,685,500 (-25%) |
| Pacific cod | 2022 | 647,400 | 425,156 |
| | 2023 | 663,075 (2%) | 555,739 (31%) |
| yellowfin sole | 2022 | 2,039,968 | 8,660,407 |
| | 2023 | 1,393,379 (-32%) | 5,567,596 (-36%) |
| northern rock sole | 2022 | 1,294,581 | 7,408,458 |
| | 2023 | 1,380,684 (7%) | 6,657,558 (-10%) |
| flathead sole | 2022 | 703,375 | 2,442,797 |
| | 2023 | 594,851 (-15%) | 2,039,623 (-17%) |
| Bering flounder | 2022 | 6,237 | 36,007 |
| | 2023 | 6,813 (9%) | 33,736 (-6%) |
| Alaska plaice | 2022 | 385,294 | 660,307 |
| | 2023 | 358,845 (-7%) | 617,849 (-6%) |
| arrowtooth flounder | 2022 | 521,615 | 1,001,554 |
| | 2023 | 462,575 (-11%) | 861,345 (-14%) |
| Kamchatka flounder | 2022 | 29,699 | 45,293 |
| | 2023 | 24,875 (-16%) | 40,128 (-11%) |
| Pacific halibut | 2022 | 149,064 | 91,474 |
| | 2023 | 170,238 (14%) | 95,321 (4%) |
| Alaska skate | 2022 | 463,017 | 102,817 |
| | 2023 | 418,483 (-10%) | 98,290 (-4%) |
| Pacific ocean perch | 2022 | 126,805 | 242,638 |
| | 2023 | 18,914 (-85%) | 23,560 (-90%) |

Thanks to Duane Stevenson

Bering Sea Survey Modernization: Call for stakeholder engagement in workshops

Call for public and industry engagement in all projects, but especially in project on survey bottom trawl gear and fishing methods redesign. Initial workshop is planned in late October. If interested please email:

Workshop coordinator: Nancy Roberson nancy.roberson@noaa.gov

For specific questions about the project you can contact:

Stan Kotwicki stan.kotwicki@noaa.gov

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Mike Litzow mike.litzow@noaa.gov

Nicole Charriere nicole.charriere@noaa.gov

Shawn Russell shawn.russell@noaa.gov



Thanks to Stan Kotwicki

Proposed model changes for November Assessments

EBS pollock

- Revised Acoustic Vessels of Opportunity index
- Revised variance treatments, spawning biomass

EBS Pacific cod

- 2022 ensemble model simplified to single models
- Range of modifications including a fixed natural mortality

AI Pacific cod

- Updated Tier 3 age-structured model addresses issues with data fits in selectivity and growth
- Tier 5 (survey-based, status quo) model also considered

Yellowfin sole

- Modified fishery selectivity (single sex)

Northern rockfish

- Revised stock structure assessment and continued tracking of spatial catch concentration concerns



BSAI Assessments for 2023 (December Council meeting review)

| Assessment Type | BSAI Stocks for 2023 | Description |
|------------------------------|---|---|
| Operational Full | EBS Pollock EBS Pacific cod AI Pacific cod | <ul style="list-style-type: none"> • Formerly known as “full” or “benchmark” • Considers all data, new model configurations, new modeling platform • Full in-depth review required |
| Operational Update | Yellowfin sole Sablefish Northern rockfish Skates Octopus | <ul style="list-style-type: none"> • Formerly also known as a “full” • Introduced to improve efficiency and reduce workload • Maintains model structure of previous full assessment, incorporates new data, minimal changes • Reduced review required |



BSAI Assessments for 2023 (December Council meeting review)

| Assessment Type | BSAI Stocks for 2023 | Description |
|---------------------------|--|---|
| Harvest Projection | AI Pollock Alaska Plaice Arrowtooth Flounder Flathead Sole Northern Rocksole Kamchatka Flounder Greenland Turbot Other Flatfish Pacific Ocean Perch Rougheyeye/Blackspotted rockfish Atka Mackerel | <ul style="list-style-type: none"> • Formerly known as “partial” • Executive summary • Runs projection model, reports new catches, catch/biomass or REMA model |
| Catch Report | Bogoslof pollock Shortraker Rougheyeye Rockfish Other Rockfish Sharks | <ul style="list-style-type: none"> • Formerly known as a “n/a” • Introduced to show off year assessments are still thought about and accounted for • Reports recent catch, ABC, OFL • Compiled by Council staff and included in SAFE report |
| Other | Forage Species (including squid) (eco report) | |

BSAI Proposed Harvest Specifications

| Area | Gear | Operation | 2023 DMRs (specified) | 2024/25 DMRs (recommended) |
|------|-------------------|------------------|-----------------------|----------------------------|
| BSAI | Pot | All | 26% | 26% ^b |
| | Hook-and-line | CP | 9% | 7% |
| | Hook-and-line | CV | 9% ^a | 7% ^a |
| | Non-pelagic trawl | Mothership / CP | 85% | 85% |
| | Non-pelagic trawl | CV | 62% | 63% |
| GOA | Pot | All | 27% | 26% ^b |
| | Hook-and-line | CP | 13% | 11% |
| | Hook-and-line | CV | 9% | 10% ^b |
| | Non-pelagic trawl | Mothership / CP | 83% | 83% |
| | Non-pelagic trawl | CV | 74% | 69% |
| | Non-pelagic trawl | CV-Rockfish Prog | 55% | 56% ^b |
| All | Pelagic trawl | All | 100%* | 100%* |

^a Based on BSAI HAL CP

^b 4-year average

*Fixed, not estimated

Thanks to Michael Fey (AKFIN) and other Halibut DMR Working Group members: Jen Cahalan (PSMFC), Jennifer Ferdinand (NMFS AFSC), Mary Furuness (NMFS AKRO), Jason Gasper (NMFS AKRO), Ian Stewart (IPHC)



BSAI Proposed Harvest Specifications

Table 1. Plan Team Proposed recommended OFL, ABC for Groundfish in the Bering Sea and Aleutian Islands (metric tons) for 2024-2025

9/14/2023

| Species | Area | 2022 | | | | Catch as of 12/31/2022 | 2023 | | | | Plan Team Proposed 2024/2025 | | |
|---------------------|----------|-----------|-----------|-----------|-----------|---------------------------|-----------|-----------|-----------|--------------------------|------------------------------|-----|-----|
| | | OFL | ABC | TAC | | | OFL | ABC | TAC | Catch as of 9/13/2023 | OFL | ABC | TAC |
| Pollock | EBS | 1,469,000 | 1,111,000 | 1,111,000 | 1,105,677 | 3,381,000 | 1,910,000 | 1,300,000 | 1,250,856 | 4,639,000 | 2,275,000 | | |
| | AI | 61,264 | 50,752 | 19,000 | 3,058 | 52,383 | 43,413 | 19,000 | 2,694 | 52,043 | 43,092 | | |
| | Bogoslof | 113,479 | 85,109 | 250 | 259 | 115,146 | 86,360 | 300 | 117 | 115,146 | 86,360 | | |
| Pacific cod | BS | 183,012 | 153,383 | 136,466 | 120,448 | 172,495 | 144,834 | 127,409 | 82,262 | 166,814 | 140,159 | | |
| | AI | 27,400 | 20,600 | 13,796 | 6,450 | 18,416 | 13,812 | 8,425 | 2,763 | 18,416 | 13,812 | | |
| | BSAI/GOA | 40,432 | 34,521 | n/a | | 47,390 | 40,502 | | | 48,561 | 41,539 | | |
| Sablefish | BS | n/a | 5,264 | 5,264 | 5,514 | n/a | 8,417 | 7,996 | 4,796 | n/a | 10,185 | | |
| | AI | n/a | 6,463 | 6,463 | 2,230 | n/a | 8,884 | 8,440 | 1,919 | n/a | 10,308 | | |
| Yellowfin sole | BSAI | 377,071 | 354,014 | 250,000 | 154,253 | 404,882 | 378,499 | 230,000 | 71,967 | 495,155 | 462,890 | | |
| Greenland turbot | BSAI | 7,687 | 6,572 | 6,572 | 1,478 | 4,645 | 3,960 | 3,960 | 1,248 | 3,947 | 3,364 | | |
| | BS | n/a | 5,540 | 5,540 | 1,038 | n/a | 3,338 | 3,338 | 771 | n/a | 2,836 | | |
| | AI | n/a | 1,032 | 1,032 | 440 | n/a | 622 | 622 | 477 | n/a | 528 | | |
| Arrowtooth flounder | BSAI | 94,445 | 80,389 | 20,000 | 7,857 | 98,787 | 83,852 | 15,000 | 5,910 | 103,070 | 87,511 | | |
| Kamchatka flounder | BSAI | 10,903 | 9,214 | 9,214 | 8,369 | 8,946 | 7,579 | 7,579 | 6,753 | 8,776 | 7,435 | | |
| Northern rock sole | BSAI | 214,084 | 206,896 | 66,000 | 18,399 | 166,034 | 121,719 | 66,000 | 22,833 | 196,011 | 119,969 | | |
| Flathead sole | BSAI | 77,967 | 64,288 | 35,500 | 14,690 | 79,256 | 65,344 | 35,500 | 7,522 | 81,167 | 66,927 | | |
| Alaska plaice | BSAI | 39,305 | 32,697 | 29,221 | 11,253 | 40,823 | 33,946 | 17,500 | 9,489 | 43,328 | 36,021 | | |
| Other flatfish | BSAI | 22,919 | 17,189 | 10,000 | 2,559 | 22,919 | 17,189 | 4,500 | 2,874 | 22,919 | 17,189 | | |



Thanks to Steve Whitney

BSAI Proposed Harvest Specifications

Table 1. Plan Team Proposed recommended OFL, ABC for Groundfish in the Bering Sea and Aleutian Islands (metric tons) for 2024-2025 9/14/2023

| Species | Area | 2022 | | | | Catch as of 12/31/2022 | 2023 | | | | Plan Team Proposed 2024/2025 | | |
|--------------------------------|---------|-----------|-----------|-----------|-----------|---------------------------|-----------|-----------|-----------|--------------------------|------------------------------|-----|-----|
| | | OFL | ABC | TAC | | | OFL | ABC | TAC | Catch as of 9/13/2023 | OFL | ABC | TAC |
| Pacific Ocean perch | BSAI | 42,605 | 35,688 | 35,385 | 34,782 | 50,133 | 42,038 | 37,703 | 29,580 | 49,279 | 41,322 | | |
| | BS | n/a | 10,352 | 10,352 | 10,066 | n/a | 11,903 | 11,903 | 8,078 | n/a | 11,700 | | |
| | EAI | n/a | 8,083 | 8,083 | 7,996 | n/a | 8,152 | 8,152 | 5,494 | n/a | 8,013 | | |
| | CAI | n/a | 5,950 | 5,950 | 5,837 | n/a | 5,648 | 5,648 | 4,792 | n/a | 5,551 | | |
| | WAI | n/a | 11,303 | 11,000 | 10,882 | n/a | 16,335 | 12,000 | 11,216 | n/a | 16,058 | | |
| Northern rockfish | BSAI | 23,420 | 19,217 | 17,000 | 7,898 | 22,776 | 18,687 | 11,000 | 9,867 | 22,105 | 18,135 | | |
| Blackspotted/Rougheye Rockfish | BSAI | 598 | 503 | 503 | 455 | 703 | 525 | 525 | 489 | 763 | 570 | | |
| | EBS/EAI | n/a | 326 | 326 | 204 | | 359 | 359 | 190 | n/a | 388 | | |
| | CAI/WAI | n/a | 177 | 177 | 250 | | 166 | 166 | 299 | n/a | 182 | | |
| Shortraker rockfish | BSAI | 722 | 541 | 541 | 284 | 706 | 530 | 530 | 199 | 706 | 530 | | |
| Other rockfish | BSAI | 1,751 | 1,313 | 1,144 | 1,308 | 1,680 | 1,260 | 1,260 | 1,034 | 1,680 | 1,260 | | |
| | BS | n/a | 919 | 750 | 651 | | 880 | 880 | 576 | n/a | 880 | | |
| | AI | n/a | 394 | 394 | 657 | | 380 | 380 | 458 | n/a | 380 | | |
| Atka mackerel | BSAI | 91,870 | 78,510 | 66,481 | 58,107 | 118,787 | 98,588 | 69,282 | 55,903 | 101,188 | 86,464 | | |
| | EAI/BS | n/a | 27,260 | 27,260 | 19,138 | n/a | 43,281 | 27,260 | 15,369 | n/a | 37,958 | | |
| | CAI | n/a | 16,880 | 16,880 | 16,761 | n/a | 17,351 | 17,351 | 16,601 | n/a | 15,218 | | |
| | WAI | n/a | 34,370 | 22,341 | 22,208 | n/a | 37,956 | 24,671 | 23,932 | n/a | 33,288 | | |
| Skates | BSAI | 47,790 | 39,958 | 30,000 | 29,236 | 46,220 | 38,605 | 27,441 | 20,205 | 44,168 | 36,837 | | |
| Sharks | BSAI | 689 | 517 | 500 | 127 | 689 | 450 | 250 | 307 | 689 | 450 | | |
| Octopuses | BSAI | 4,769 | 3,576 | 700 | 251 | 4,769 | 3,576 | 400 | 119 | 4,769 | 3,576 | | |
| Total | BSAI | 2,953,182 | 2,383,653 | 1,871,000 | 1,594,941 | 4,859,585 | 3,155,268 | 2,000,000 | 1,591,707 | 6,219,700 | 3,590,412 | | |



Thanks to Steve Whitney

Actions for Council under BSAI proposed specifications

- Proposed TACs for 2024-2025
 - Account for state waters cod fishery:
 - BS-12% of ABC
 - AI-39% of ABC
 - 45t for jig fishery
 - Account for state waters sablefish fishery (5% reduction on BSAI TAC)
- Flatfish Flexibility (Table 7)
 - Adopt ABC reserve
- EBS pollock fishery Chinook PSC limit in 2024 (no action necessary)
- PSC limits and apportionments: halibut, herring, Red King crab, Tanner crab, Snow crab (Tables 8-12)
 - TLAS and PCTC for 2024 and 2025 (Tables 10 and 11)
 - Herring has not yet been updated
 - Crab biomass estimates updated for new assessments
- Halibut DMRs (Table 13)



Questions?



BSAI Plan Team Contacts:

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