C4 BBRKC: GROUNDFISH CLOSURES SUMMARY

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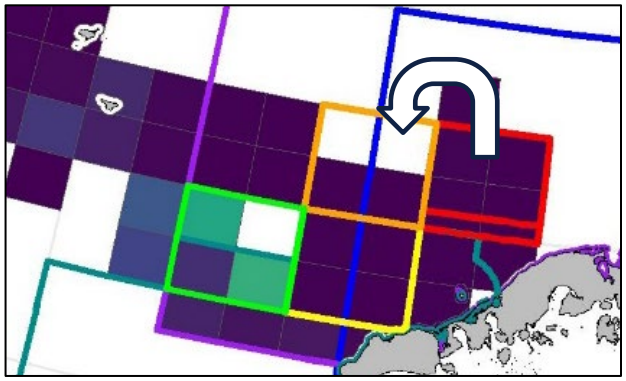
TO-DO

- Dispense with Section 4 (PTR definition and “trawl gear performance standard”) – what the SSC doesn’t need to do
- Executive summary-level coverage of Appendix 2 (spatial PSC rate comparisons in the context of displaced/relocated groundfish effort) – 2 slides
- Summation of information presented (or lacking) that would:
  - Allow the Council to make a benefit-cost analysis of the action alternatives
  - Consider the incremental effect of choosing either action alternative, or the cumulative effect of choosing both

PSC DISPLACEMENT (APPENDIX 2)

- Gives an idea of changes in PSC for affected species
  - Chinook, non-chinook, herring, halibut, BBRKC, Opilio, and Bairdi
- Dec 2022: Council suggested mapping PSC displacement over a range of years/seasons
  - Annual estimates (2020-2022) chosen to represent the Council motion
- Displacement to: adjacent area (orange), area of high PSC in the SCA (yellow), and an area of highest PSC rates (green) of equal size to the displaced area

$$Est.Increase = [(RKCSA\ GF\ catch) * (avg\ PSC\ rate)] - RKCSA\ PSC$$



PSC DISPLACEMENT (APPENDIX 2)

- Maximum (worst-case scenario) increases:

Group	Max. increase	% increase of Area T PSC
Chinook	964 to 1,178	5-19%
Non-chinook	33,209 to 237,586	44-74%
BBRKC	3,462 to 21,702	8-51%

- Displaced areas of high non-chinook & BBRKC PSC rates consistent
  - Good for PSC avoidance measures
- Movement of pot gear into 512 resulted in highest BBRKC PSC
- Limited by mismatch in seasonal groundfish effort and PSC rates
  - Negligible B season PTR landings in the RKCSA when non-chinook PSC rates were very high, so these numbers would likely be much lower in reality
  - Future analysis to split seasonally

SUMMARY

- Relative to No Action, assessing the action alternatives requires the Council to weigh adverse impacts on groundfish fisheries against potential benefits to BBRKC
  - Impacts to GF are easier to point to…
    - e.g., revenue at risk; optionality; efficiency loss; cost to labor; cumulative effect of multiple GF fisheries becoming more constrained and less productive
  - … but not necessarily easy to pin down the frequency and magnitude of those impacts on a fishery-by-fishery basis
    - i.e., assume that area closure will be in effect most/every year; new area closure is just one piece in a complex puzzle of how successful a sector/company/vessel will be in its annual fishing plan
    - Other factors: “Was the RKCSA/SS important to that sector/vessel that year? Why/why not?”
  - Benefits to BBRKC are easy to envisions but difficult to quantify and more difficult to “prove”
    - Direct benefits (bycatch): Where does GF effort shift? How big an issue is unobserved mortality? Are DMRs as good as they can be? What is the relationship between gear presence and mortality? Crab movement.
    - Indirect benefits (habitat): Questions outstanding about RKC life history. Is the RKCSA a valuable area to protect? Is it the most valuable? What about inshore areas (no trawl)? What about areas south and west of RKCSA that were thought of as core habitat decades ago?

SUMMARY – KEY INFORMATION PRESENTED

- Groundfish fisheries
  - Participation, catch, bycatch, revenue by area & season
  - 512 and 509/16 (RKCSA) show higher incidence of RKC pot catch
  - Qualitative narrative of annual fishing plan by “fishery” – highlighting contingencies that have been relevant in recent years
  - Existing regulatory restrictions (spatial, PSC) and operational considerations
  - Recent trends in use of/reliance on RKCSA and Area 512 (for harvesters, shore-based processors, and communities); why those might persist or change
  - Noting where participants are co-reliant on other fisheries (crab/other), and impediments to diversification from current fisheries prosecuted
- BBRKC
  - Historical participation and value: fishery data and disaster relief letters
  - Trawl survey maps (male/female) relative to RKCSA/512
  - Life-history as presented in the stock assessment
  - Recent and ongoing efforts to fill movement/presence data gaps; some still at snapshot-stage
  - Predation (PCod, salmon)
  - EFH, FE, bottom contact

SUMMARY

- The Council's P&N, NMFS's ER denial letter, and the BBRKC SAFE each note the gravity of the situation, but hedge on the relative contribution of GF impacts
- The information presented RE: BBRKC acknowledges that "best available" may not meet the bar of an evidentiary basis for *likely* benefit to the stock
- The SSC may comment on whether available information was omitted and consider the decision-making value of additional permutations of how negative impacts to groundfish fleets might manifest. In other words – what could be added that doesn't fall into the category of additional context that has limited evidentiary value RE: likely impacts

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Some conclusions reached:

- Under a narrow time-scope, RKCSA has been deemphasized by all but PTR… but analysts do not believe that to be a fair representation of the value of the ability multiple sector to fish in this area (as permitted under existing restrictions [NPT]) as a tool to manage other PSC-related mgmt. objectives
- In the near-term, Alt 2 (alone) most likely results in efficiency loss and operational uncertainty for the PTR sector regarding target catch and salmon avoidance in the A season. Impacts are likely localized to the vessel-operator level.
- Pot cod (O60 CV) sector is most at risk of attributable revenue impact (Alt 3). Whether Alt 2 is also selected may or may not matter if pot cod sector continues to avoid RKCSA voluntarily.