## Butterfish Research Track WG <br> April 12, 2021, 9-11am <br> Agenda

G-Hang link and phone number:
meet.google.com/obu-syxm-kho
(US) +1 720-449-3586
PIN: 932923 321\#

1. Technical difficulties ( 10 mins, Jon)
a. WG roll call: Jon Deroba, Chuck Adams, Rob Vincent, Aly Pitts, Andy Jones, Kiersten Curti, Jason Didden, Laurel Smith, Brian Stock
2. Quick update on combining state surveys (10 mins, Jon)
a. Using NEAMAP ALK aggregated among all years to define length cut between age-0 and age-1; Brian found errors making our previous conclusions about annual ALK weaker; If anyone wants to revisit then let me know.
3. Spatial distribution of catch, this time with discards ( 15 mins, Curti)
a. Consider catch/discards within context of management and industry
4. Unaccounted catch ( 60 mins, Jones et al.)
5. Keeping tabs ( 10 mins)
a. Outreach (Didden)
i. To AP in April and will draft something June-ish
b. TOR 7 - Research recommendations (revisit who and what sometime)
c. TOR 8 - PlanB (revisit index methods work, who, and what sometime)
d. TOR A1 - "Ecosystem" (spatial distribution, Chuck and Curti; Habitat, Laurel; Aging, Robillard; other?)
e. TOR A2 - Consumptive Removals (Laurel, Brian Smith, Rob, Chuck, Smith, Don Lyons?)
i. Food habits, marine mammal (May or June - Laurel, Brian Smith)
6. Good of the order and next meeting plan (10 mins, all)
a. Calendar (Jon)
b. Cover catch at the next meeting; get Chuck comments

## Notes

## Butterfish Terms of Reference 2021 Research Track <br> (v. 10/01/2020)

1. Estimate catch from all sources including landings and discards. Describe the spatial and temporal distribution of landings, discards, and fishing effort. Characterize the uncertainty in these sources of data.
2. Present the survey data available (e.g., indices of relative or absolute abundance, recruitment, state surveys, age-length data, etc.), and describe the basis for inclusion or exclusion of those data in the assessment. Characterize the uncertainty in these sources of data.
3. Estimate annual fishing mortality, recruitment and stock biomass (both total and spawning stock) for the time series, and estimate their uncertainty. Include retrospective analyses (both historical and within-model) to allow a comparison with previous assessment results and projections, and to examine model fit.
4. Update or redefine status determination criteria (SDC point estimates or proxies for $\mathrm{B}_{\mathrm{MSY}}$, $\mathrm{B}_{\text {Threshold, }} \mathrm{F}_{\text {MSY }}$ and MSY) and provide estimates of their uncertainty. If analytic modelbased estimates are unavailable, consider recommending alternative measurable proxies for BRPs. Comment on the scientific adequacy of existing BRPs and the "new" (i.e., updated, redefined, or alternative) BRPs.
5. Make a recommended stock status determination (overfishing and overfished) based on new modeling approaches developed for this peer review.
6. Define the methodology for performing short-term projections of catch and biomass under alternative harvest scenarios, including the assumptions of fishery selectivity, weights at age, and maturity.
7. Review, evaluate and report on the status of the Stock Assessment Review Committee (SARC) and Working Group research recommendations listed in most recent SARC reviewed assessment and review panel reports, as well as the most recent management track assessment report. Identify new research recommendations.
8. Develop a "Plan B" for use if the accepted assessment model fails in the future.

## Additional Terms of Reference

1. Describe life history characteristics and the stock's spatial distribution, including any changes over time. Describe ecosystem and other factors that may influence the stock's productivity and recruitment. Consider any strong influences and, if possible, integrate the results into the stock assessment.
2. Evaluate consumptive removals of butterfish by its predators, including (if possible) marine mammals, seabirds, tunas, swordfish and sharks. If possible, integrate results into the stock assessment.
