## GROUNDFISH ADVISORY SUBPANEL REPORT ON FISHERY ECOSYSTEM PLAN INITIATIVE 4: GROUNDFISH AND SALMON RISK TABLES

The Groundfish Advisory Subpanel (GAP) remains open to the idea of integrating ecosystem and climate information into the stock assessment and harvest specifications process. However, after hearing the update on the proposed approach and reviewing the California Current Integrated Ecosystem Assessment (CCIEA) Risk Table Report (H.1.a CCIEA Risk Table Report on FEP Initiative 4) the GAP believes the recommended approach (Option 1) will add complexity and subjectivity while failing to make meaningful improvements to the Council's current management system. Our rationale is described below.

When the risk table approach was initially proposed, the GAP was hopeful that it could be an opportunity to use current oceanographic and ecosystem information to better match the council's harvest guidance with the reality on the water. The idea of using relevant factors to modify harvest levels up or down in response to ecosystem changes was appealing in concept. This was especially true for Option 3 (informing the time varying penalty on sigma) given the lack of resources to conduct regular stock assessments for all stocks that need them, resulting in Acceptable Biological Catch (ABC)/Annual Catch Limit (ABC) reductions. Option 3 presented an opportunity to use current information to inform harvest guidance for stocks with outdated assessments.

While the GAP was interested in the idea in concept, we had a number of questions about how it would be operationalized in practice. In particular, we wanted to understand how the incorporation of this information might have changed harvest specifications in known prior examples where ecosystem and oceanographic changes created a mismatch between catch levels and actual abundance. For example, from our March 2024 statement (Agenda Item H.2.a, Supplemental GAP Report 1) the GAP recommended a retrospective analysis on shortbelly rockfish and/or sablefish, to see if the ecosystem and climate information could have anticipated the current fishery conditions as a possible outcome. For that reason, the GAP and several other advisory bodies recommended a retrospective analysis to assess the potential impacts to our management system. Unfortunately, the analysis presented at this meeting failed to answer many of those questions.

In addition, Option 1 (informing scientific uncertainty when an assessment is conducted) fails to achieve the primary purpose of the initiative - to develop clear pathways for ecosystem and climate information to be used in the setting of scientific uncertainty, harvest policy, and specific management actions. While ecosystem and oceanographic information might have some minor utility in informing sigma when an assessment is conducted, it becomes more valuable the farther we are from an assessment. True uncertainty increases rapidly, as does the harvest penalty associated with the time-varying sigma. Locking in a revised sigma when an assessment is conducted will do nothing to improve the match between harvest levels and a stock's response to changing ocean conditions after the assessment is conducted. The GAP was seeking to analyze an adaptive management response.

Finally, as we highlighted in our March report, there appears to be significant subjectivity in the currently proposed approach. For example, there is clear guidance in the Terms of Reference for what qualifies an assessment for Categories 1-3 (with different sublevels - see <u>Appendix D in the TOR</u>), but the same can't be said for the level determinations of the risk tables.

In sum, the GAP does not support Option 1. We remain open to the incorporation of climate and ecosystem information in stock assessments and the harvest specifications process and continue to believe that the most utility would be under Option 3 to improve the match between current conditions and harvest levels. Furthermore, the GAP strongly recommends taking a more holistic look at adaptive management, such as reviewing time-varying sigma in its entirety, or the ability for a "green light" management mechanism. Precaution is built into almost every level of our process, but there are very few ways to react when a stock is more abundant than expected.

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