COASTAL PELAGIC SPECIES MANAGEMENT TEAM REPORT ON AD HOC CLIMATE AND COMMUNITIES CORE TEAM REPORT ON THE CLIMATE AND COMMUNITIES INITIATIVE

The Coastal Pelagic Species Management Team (CPSMT) commends the Climate and Communities Core Team (CCCT) on their accomplishments during the Climate and Communities Initiative (CCI) as outlined in their Final Report (Agenda Item H.2.a). Several members of the Coastal Pelagic Species Management Team (CPSMT) attended the online webinar on September 2, 2021, presented by the CCCT and from their oral and written report we provide the following comments.

The CPSMT agrees that "the CCI has made the topic of climate change a more tangible and central focus of attention for the Council" and that their scenario planning was a start of the conversation. We also see there is more work to be done to accomplish the Initiative's goal. The CPSMT agrees with the CCCT recommendation that as the Council moves forward to accomplish these goals the primary oversight and input be provided through the Ad Hoc Ecosystem Workgroup (EWG) and the Ecosystem Advisory Subpanel (EAS), but we also think that additional input from and coordination with the various management teams and advisory subpanels for each Fishery Management Plan (FMP) will play a critically important role.

The CPSMT sees value in pursuing the many potential actions outlined by the CCCT but is unsure if adding them to the FEP appendix as initiatives is the most efficient and effective way to do so. The CPSMT is also cognizant of the current backlog in the Council's workload and scheduling of future agenda items and that adding additional items to future Council agendas will prove challenging. With that in mind, we provide our thoughts below on potential actions or activities identified in the CCCT report that we see as priorities. These include tasks for advisory bodies to pursue while recognizing that workloads and scheduling will affect the timelines.

- 1.a.i. The CPSMT recommends that the Council have the EWG and EAS conduct a literature review on expected shifts in stocks or stock abundances to identify which stocks are most likely to be affected over the next 5-20 years, and which stocks have the greatest knowledge gaps so focus can be placed accordingly.
 - The CPSMT recommends that the Council's Advisory Bodies should consider if the framework developed by Dorn and Zador, 2020 is an appropriate way to bring climate change and ecosystem considerations into management decisions for the Council. This is an initiative that could be pursued in the near-term and should be a high priority.
- 1.a.ii. We recognize the extensive work for the completion of the climate vulnerability assessment for Pacific salmon stocks and that assessments are in progress for other West Coast fish stocks.
 - The CPSMT supports future use of these assessments for potential management strategy evaluation (MSE) prioritization, however it is not clear who might conduct the MSEs for Council-managed fisheries and stocks, but if the Council desires that

MSEs be conducted, the CPSMT recommends that the Council prespecify criteria for the performance metrics for any model-based MSE conducted.

- 1.a.iii. The CPSMT sees benefits to the concept of providing additional ecosystem reporting but is unclear how it could best be implemented. While ecosystem reporting to the Council already occurs on an annual basis, there does not appear to be an easy, straightforward way to schedule additional FMP-specific reporting to the Council in a manner that would allow the Council to consider it thoroughly and ask questions. It would be useful to examine the timeframe of the availability for ecosystem information most useful to the Council while evaluating how to better include climate and ecosystem considerations into management decisions. Thus, the CPSMT values this concept but is not clear on how best to move this activity forward at this time.
- 1.a.iv. The CPSMT thinks that a brief appendix to the annual Integrated Ecosystem Assessment State of the California Current Ecosystem Report that summarizes which of the four scenario planning quadrants each of the Council's FMPs and/or their stocks falls into for the previous year may be useful. Doing so may, over time, provide insight into whether these scenario quadrants provide a useful framework for the Council. If any given stock consistently falls into a given quadrant or if certain stocks simply do not fit in well to any of the four quadrants, the scenarios for the specific stocks may need to be thought of in different terms.
- 1.b. The CPSMT supports pursuing the "civic science" initiative. If the Council chooses to pursue this initiative, the CPSMT recommends that the first step would be to fully develop the concept, followed by a process that involves designing a clear framework for the collection of "civic science" data, its analysis, and how it would be incorporated into fisheries management.
- 2.a. The CPSMT sees high value in pursuing an initiative to investigate ways that both the Council and National Marine Fisheries Service can implement revisions to ongoing management processes to increase flexibility, responsiveness, and adaptability. Building on ideas in the Nature Conservancy informational report mentioned in the CCCT report seems appropriate. Identification of current barriers to achieving these improvements in our management process would be a good first step.
- 2.a.ii.1-3. While having all the FMP-specific bodies report back to Council on their findings and recommendations is desirable, this initiative would likely take some time to complete.
- 2.b. The CPSMT sees value in pursuing a workshop involving elements of the Council and other regional and international organizations to discuss effects of climate change on transboundary stocks. The CPSMT notes that the Trinational Sardine and Small Pelagics Forum (TSF) has provided a venue for Mexico, the U.S., and Canada to engage in sharing information related to management, recent research findings, and fishery information for many years. Participants have included scientists, managers, and representatives of the fishing industry from all three nations and this international forum has helped with the exchange of information and building collaborations and relationships among participants. Climate change and changing oceanographic conditions as drivers affecting CPS have long been prominent topics. There have also been workshops on specific topics linked with

several of the TSFs. The TSF and associated workshops have proven valuable for transboundary CPS stocks.

- 2.d. The CPSMT supports the idea of an annual update to the Council on actions taken by other fishery management councils to better prepare their fisheries for climate change. This might be best as an informational report rather than scheduled as an agenda item.
- 2.e. The CPSMT encourages the Council to have Council staff create a permanent webpage for climate-related work and resources. As stated in the CCCT report such a webpage should assist in educating and engaging the public across platforms and increase stakeholder engagement and participation.
- 3.a-c. The CPSMT also encourages the Council to continue its engagement with partner agencies and stakeholders. Although this can hardly be called a new initiative *per se*, it is certainly a goal that should be a priority, and adding a climate change focus on fisheries may help ensure continued communication and increase stakeholder engagement.

The CPSMT looks forward to future engagement with the CCI as it continues to evolve and move forward through the Council process and thanks the CCCT for their great work.

References:

Dorn, M. W. and S. Zador, 2020. A risk table to address concerns external to stock assessments when developing fisheries harvest recommendations. Ecosystem Health and Sustainability 6:1, DOI: 10.1080/20964129.2020.1813634.

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