

California Department of Fish and Wildlife
California Department of Fish and Game Commission

March 27, 2015

Dear Commissioners and CDFW staff,

As many of you know, collaborative partnerships between California's fishermen, managers, non-governmental organizations and scientists offer the potential to build cost effective management solutions that help support shared goals of healthy ocean ecosystems and thriving marine fisheries in California. Over the last few years, innovative new partnerships in California's fisheries have shown great success in expanding access to resources, improving management infrastructure and enhancing the capture, analysis and dissemination of fishery information.

We believe that the development of the Red Abalone Fishery Management Plan (FMP) provides a unique opportunity to expand the role of stakeholder participation and partnerships in the fishery; creating improved fishing opportunities, cost-effective monitoring and enforcement, and support for management.

Through the collaborative initiatives we suggest below, we are confident that it is possible to create the foundation for significant progress in the management of this resource and, perhaps, build a management model that could be successfully utilized in other fisheries in California.

We believe that the life history of red abalone, its ecology and the current fishery characteristics help to make this fishery a great candidate for piloting some of these approaches. We appreciate the Department's hard work over many years to stabilize the red abalone resource and improve this fishery and appreciate the opportunity to provide the following input into the ongoing development of the FMP.

Incorporating Geographic Variability in Management:

One of the unique challenges to effective abalone management is the substantial geographic variability observed in many key characteristics including growth rates, size of maturity, emergence from cryptic habitat and vulnerability to overfishing. Moreover, abalone are known to have a geographically limited scale of larval dispersal. Combined, these factors complicate management and make it essential to match the scales of monitoring and management to the scale and variability of the resource. For instance, a lack of appropriately scaled management measures could lead to localized depletions on the one hand or unnecessarily broad closures in response to local depletions on the other hand.

Consideration #1: We are firm believers that incorporation of finer-scale management decisions can better align ecosystem dynamics with management outcomes. For example,

inclusion of a process for examining area-specific stock information (perhaps by established sub-region) and a more flexible and adaptive approach to adjusting (up or down) management interventions (e.g. size limits, closures) at the appropriate spatial scale would allow for more responsive and proactive management. We recognize that increasing the resolution of these types of decisions is a significant undertaking and requires careful consideration of the underlying science, resources and enforcement, but we strongly believe that it is possible through effective partnerships with industry and other stakeholders. Such a collaborative process would allow finer scale management to be done within existing budget constraints resulting in better outcomes for the resource and the fishery.

Using An Indicator-Based Approach to Augment Existing Stock Assessment Protocols:

In order to transition to finer scale management decisions, it is necessary to collect spatially explicit stock information which accounts for geographic variability and which can inform appropriate management advice at the required resolution. The exclusive reliance on data from a relatively small number of reference sites limits the understanding of the heterogeneous nature of abalone resources. We believe that other information streams and analytical tools could be piloted, tested and ultimately adopted which could add significant information to what is currently provided by the existing data collection and assessment protocol. Specifically, the size structure of the catch has been successfully used to estimate the spawning potential ratio (SPR) and, thereby, manage abalone fisheries at finer scales in Australia. Data collection protocols to support this approach could be developed in a manner that expands sampling, is cost-effective and increases collaboration with divers. SPR assessment methods, when used in conjunction with other stock indicators could provide a geographically representative understanding of stock status and improve the management of the resource at more appropriate scales. Such an approach, at least at initial implementation, would need to be demonstrated as effective and run in parallel with existing CDFW protocols.

Consideration #2: We suggest that the CDFW consider, support and adopt fishery dependent data collection protocols with the explicit intention of using this information to help support finer-scale management decisions. Such measures could include voluntary or mandatory requirements for reporting the size of landed abalone.

Consideration #3: We suggest the CDFW consider, support and adopt the use of length-based stock status indicators into the management of the abalone resource as a complement to existing practices.

Further Expanding Public Engagement in Red Abalone Management:

We recognize and appreciate the great efforts the CDFW has consistently made to ensure a strong public voice and transparent decision-making in the management of our state's fisheries. Without a doubt, however, the nature of the red abalone fishery makes it particularly difficult to effectively engage the public and incorporate constructive input into the FMP. We believe there are ways to improve stakeholder engagement and communications throughout this FMP process

and we believe doing so will ultimately increase community buy-in, support and compliance; reduce conflict and misunderstanding; and enhance conservation outcomes.

Consideration #4: We suggest the process of developing the FMP expand to include a formal scientific advisory committee to incorporate the advice of independent experts and engage the broader community of stakeholders on the full range of possible improvements (science and management) which will be considered. We believe this can be done without unnecessary cost or delay to the development of the FMP and would help realize the full potential of this opportunity to improve the management of red abalone.

We would be happy to further discuss any of these considerations with you if you have any questions. Once again, we appreciate your continued efforts on this important issue and we look forward to working collaboratively with you and with all other stakeholders throughout this important process.

Thank you for your consideration,

A handwritten signature in black ink, appearing to read 'JRW', with a stylized, flowing script.

Jono R. Wilson, PhD
The Nature Conservancy