

## Review

**Journal:** Fish and Fisheries

**Manuscript Title:** Quota allocation policies in U.S. federal fisheries management and implications for climate resilience

**Manuscript ID:** FaF-25-Feb-087

The authors synthesize the diverse fisheries allocation policies used to manage U.S. federal fisheries (and select international fisheries) and evaluate the vulnerability of these policies to climate change. Quota allocation is one of the most important and contentious processes in fisheries management as it dictates how access is shared among fishery participants. While the establishment of catch limits is a largely objective and scientific process, decisions about how to distribute the resulting quota are more subjective. U.S. federal fisheries laws give regional fishery management councils flexibility in the implementation of allocation policies, resulting in a diversity of policies with various pros and cons. The authors find that allocation policies are used to manage 46% of U.S. federally managed stocks. Although most policies are based on historical catch, many include features that promote climate adaptiveness. The authors outline eight recommendations for improving allocation policies under climate change.

The article provides an excellent review and summary of fisheries allocation policies in the U.S., with additional illustrative examples drawn from international fisheries. The article is well-organized and clearly written.

The standardized database developed by the authors of the fisheries allocation policies of 491 stocks managed by the 42 fisheries management plans developed by the 8 U.S. fisheries management councils reflects a large amount of work and should be very useful to other researchers working on fisheries allocation policies.

The authors made very good efforts to validate the contents of the database by comparing the database with other less comprehensive databases and by obtaining reviews by relevant federal management council staff.

In the reviewer's opinion, this article is an excellent example of extremely valuable "review article" research that summarizes and organizes information in an accessible and useful manner. Such review articles are often "unsung," but they are very valuable work, as they greatly improve the efficiency of the research process by reducing the need for other researchers to undertake very time-consuming, redundant efforts. The reviewer believes that this article would be widely read and would support a tremendous amount of follow-on research. The article would serve as a solid foundation and reference for future articles that attempt to identify and propose solutions for the complex problem of fisheries allocation under climate change. The article would also be extremely useful for university teaching and agency training purposes.

## **Minor Issues**

Line 330 – The sentence that begins “Within the commercial sector, . . .” appears to refer to all fisheries, rather than to the Gulf of Alaska Pacific cod fisheries mentioned in the preceding sentence. This needs to be made a bit clearer.

In the caption of Figure 4, very briefly describe what the gray-colored boxes to the right of (B), (C) and (D) show; I believe it’s reference period.

Figures 10 and 11 seem unnecessary. Maybe incorporate some of the caption of Figure 10 regarding definitions of equity into the body of the text.

Page 117 (of 144) – Some highlighted notes indicate that some additional work needs to be done for the BSAI groundfish fishery.