



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

May 14<sup>th</sup>, 2023

Mr. Jeff Ruch  
Director, Pacific PEER  
248 3rd Street #331  
Oakland, CA 94607

Dear Mr. Ruch:

I have reviewed your appeal of the denial of your Request for Correction under the Information Quality Act Regarding Bristol Bay Red King Crab, as well as the National Marine Fisheries Service's ("NMFS") response to your request. At the outset, I would like to acknowledge that NMFS's response to your request for correction failed to include a procedural detail in that the author of the response was not identified. Consistent with the Information Quality Act (IQA) guidelines, the initial response was authored by Dr. Robert Foy, Director of the Alaska Fisheries Science Center.

Upon review of your appeal and the record before me, I affirm Dr. Foy's response. Dr. Foy explained how survey methods were performed in the 1970s and 1980s and how they were modified over time. Your request and appeal argue that this work should have been performed differently along the lines recommended by yourself and Dr. C. Braxton Dew. While I appreciate Dr. Foy's efforts in providing a reasoned response to your request for correction, the IQA and our guidelines are not applicable to research performed in the 1970s and 1980s.<sup>1</sup>

The IQA requires that for the work the agency undertakes with available resources for its science, that we disseminate the results and analysis of the information we possess in a manner consistent with standards of utility, integrity, and objectivity. I agree with Dr. Foy that the survey methods in question, while different from the techniques Dr. Dew would have recommended, were performed with commonly accepted best available scientific

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<sup>1</sup> The IQA was promulgated on December 21, 2000 as Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554; 114 Stat. 2763). The statute did not immediately impact government scientific operations, but rather required the Office of Management and Budget to issue guidance by September 30, 2001. OMB then required federal agencies to issue their own guidance documents, and NOAA promptly did so. In part II ("Scope") of those guidelines, we explain that the guidelines "cover information disseminated by NOAA on or after October 1, 2002 regardless of when the information was first disseminated." The red king crab scientific information with which you are concerned was disseminated in the 1970s and 1980s, and is therefore well outside the scope of the IQA and our guidelines. Nonetheless, Dr. Foy's response addressed your IQA concerns and claims.

standards at the time and with procedures that resulted in a product which was objective in the meaning of the IQA and our guidelines. I see no evidence of inaccurately processing the data the agency possessed or substantive imprecision in our analysis. In other words, our dissemination of those data complied with IQA standards, appropriately outlining potential uncertainties. The IQA Complaint and Appeal question the existence of a climatic regime shift in the Bering Sea during the late 1970s. While that is not a question to be resolved or debated through the IQA process, it has been an issue of debate in the scientific literature for decades, with many peer-reviewed studies supporting the existence of a climatic regime shift.<sup>2</sup>

Dr. Foy's response explains how Bristol Bay Red King Crab fisheries science has been performed in the past and present, and why that science conforms to the agency's IQA guidelines. I conclude that, even if the IQA guidelines were relevant to this work, the agency has met its requirements in this case. Our guidelines explain how the agency will work to ensure utility, integrity, and objectivity of its information products. Your request and appeal primarily address perceived concerns with the objectivity and accuracy of this science. Our guidelines explain that:

Because NOAA deals largely in scientific information, that information reflects the inherent uncertainty of the scientific process. The concept of statistical variation is inseparable from every phase of the scientific process, from instrumentation to final analysis. Therefore, in assessing information for accuracy, the information is considered accurate if it is within an acceptable degree of imprecision or error appropriate to the particular kind of information at issue and otherwise meets commonly accepted scientific, financial, and statistical standards, as applicable. This concept is inherent in the definition of "reproducibility" as used in the OMB Guidelines and adopted by NOAA. Therefore, original and supporting data that are within an acceptable degree of imprecision, or an analytic result that is within an acceptable degree of imprecision or error, are by definition within the agency standard and are therefore considered correct.

Further, while I agree that the Bristol Bay King Crab stock assessments qualify as Influential Scientific Information (ISI) under the IQA, the relevant standards for peer review have been met by the review process of the Scientific and Statistical Committee of the North Pacific Fishery Management Council. Data quality is maintained and assured through these peer review and public processes, and those processes satisfy the standards of the IQA. The Bristol Bay Red King Crab SAFE reports (2015-2020) were prepared in a collaborative process that includes scientists from NMFS and the State of Alaska. The

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<sup>2</sup> For discussion see: S. Hare & N. Mantua (2000), "Empirical evidence for North Pacific regime shifts in 1977 and 1989", *Progress in Oceanography*, 47(2-4) pp. 103-145, [https://doi.org/10.1016/S0079-6611\(00\)00033-1](https://doi.org/10.1016/S0079-6611(00)00033-1).



substance of the stock assessments and recommendations that go into these are reviewed and discussed at public meetings by scientists, regulatory agencies, and industry representatives. All of this is in addition to external peer review, typically through the Center for Independent Experts (CIE). The process is public, and invites public comment by any individuals at multiple steps during the [process](https://www.npfmc.org/how-we-work/navigating-the-council-process/) (https://www.npfmc.org/how-we-work/navigating-the-council-process/).

In conclusion, and for the reasons noted above, I affirm Dr. Robert Foy's reply to your request.

Sincerely,

Cisco Werner, Ph.D.  
Director of Scientific Programs  
and Chief Science Advisor  
National Marine Fisheries Service

