



November 16, 2022

NOAA Section 515 Officer
NOAA Executive Secretariat
Herbert C. Hoover Building B Room 5230
14th and Constitution Avenue, N.W.
Washington, D.C. 20230

Email: NMFS.PA@noaa.gov

Re: Appeal of Denial of Complaint About Information Quality: Bristol Bay Red King Crab

Dear Sir or Madam:

On April 26, 2021, Public Employees for Environmental Responsibility (PEER) submitted an Information Quality Complaint pursuant to the Data Quality Act of 2000, the Office of Management and Budget (OMB) Guidelines for Ensuring and Maximizing the Quality, Utility, and the National Oceanic and Atmospheric Administration (NOAA) Information Quality Guidelines.¹ PEER submitted this Complaint on its own behalf as well as on behalf of our client, Dr. Braxton Dew, a fisheries biologist who spent 25 years with the National Marine Fisheries Service (NMFS) studying and writing peer-reviewed research papers on red king crab.

More than a year-and-a-half later, on November 3, 2022, PEER finally received a response to this Complaint from NOAA/NMFS denying this Complaint. A copy of that Complaint and the denial are attached to this appeal which details why that denial was in error. Specifically, this appeal contends that the NOAA denial:

1. Was Incomplete and Improper
2. Failed to Address the Substance of the Complaint
3. Offered Inadequate Justifications for Lack of Data Quality
4. Ignored the Standard of Review for Influential Information
5. Wrongfully Rejected the Requested Correction

Turning to each of these points:

1. The Denial Was Incomplete and Improper.

NOAA's Information Quality Guidelines at Part III c (4) that –

¹ [Information Quality Guidelines | National Oceanic and Atmospheric Administration \(noaa.gov\)](https://www.noaa.gov/information-quality-guidelines)

“4. The initial decision or status update will contain the name and title of the person communicating the decision, the name of the NOAA Line or Staff Office of which the responsible office is a part, the name and title of the head of that Line or Staff Office, and a notice that the requester may appeal an initial denial, as in paragraph III.D.1. below, within 30 calendar days of the date of the initial denial.”

In this case, however, the denial offered no personal identification of the NOAA staff responsible either for the information that is the subject of this Complaint or the identity of the person(s) who composed the denial. Reinforcing this posture of bureaucratic anonymity, the unsigned denial simply indicated that it was “FROM: NOAA/National Marine Fisheries Service.”

This avoidance of accountability by NMFS is not only in conflict with the very essence of NOAA’s Information Quality Guidelines but is indicative of the systematic abdication of responsibility by NMFS in this matter. This organizational lack of transparency is also a major factor giving rise to the need for this Complaint.

2. The Denial Failed to Address the Substance of the Complaint

A key deficiency of NOAA’s 5-page response is that its author ignores the main thrust of our 19-page Complaint, which detailed the extent and effect of NMFS rogue sampling. The “survey design, data collection, stock assessment, and fisheries management” that are the core of our Complaint. Nor, by its terms, did the agency denial purport to even address the deficiencies the Complaint detailed concerning “the Bristol Bay red king crab assessment model” that was central to our Complaint.

Instead, the denial states that it is “focused on federal data collected and analyzed...” Yet, this posture suggests that NMFS is not concerned with problems that would skew or misdirect data collection but that it would only look to see if the bogus data was consistently analyzed. This “garbage in, garbage out” approach is contrary to the whole purpose of the Information Quality Act.

Moreover, it flies in the face of NOAA’s Scientific Integrity Policy which pledges to ensure “the integrity of the agency’s scientific activities used to inform management and policy decisions” as well as “strengthen universal confidence - from scientists to decision-makers to the general public - in the quality, validity, and reliability of NOAA science.”²

As outlined in the Complaint, NMFS cherry-picked, used non-random sampling locations, and discarded zero values when calculating averages from the primary survey. These actions worked together to produce a remarkable (but totally spurious) increase of nearly 800% in the size of the NMFS-estimated legal-male Bristol Bay Red King Crab (BBRKC) population during the 1970s.

These dramatically increased population estimates produced by these methodological failures reflected a result that was highly unlikely and perhaps impossible for long-lived, late-maturing organisms such as Alaska’s red king crab. Bradley G. Stevens, who was involved in the annual

² NOAA Administrative Order 202-735D.2, Section 1. [Scientific Integrity NAO 202-735D.2 Final signed.pdf \(noaa.gov\)](#)

calculation of NMFS BBRKC population estimates, expressed his ambivalence³ this way, writing:

“What we should wonder about is not so much that the abundance of king crabs declined but that they ever reached such a high abundance level in the first place.”

The denial offers no rebuttal to the Complaint’s charge that the inflated NMFS population estimates tripled every four years from 1970 through 1980, and the biomass of large males extracted from the population increased by a factor of 15, or more than 1400%. Then, in 1981, the BBRKC stock collapsed.

Rather than address the subjects raised in the Complaint, the NMFS denial argues that issues such as tow duration, region sampled, corner stations, number of tows per station, survey timing, area swept calculations, temperature variations, resampling, catch variability were the sources of “interannual variability.” The denial offers no empirical support for these assertions. Moreover, by ignoring fundamental flaws in the agency’s random sampling, the denial completely misses the crux of the Complaint.

3. Offered Inadequate Justifications for Lack of Data Quality

Much of the material found in the NOAA Response is irrelevant, incomprehensible, or untrue. The denial has omitted any substantive discussion of the extensive non-random sampling that corrupted the integrity of the NMFS survey beginning in 1976 – sampling on the order of hundreds of tows that lacked any semblance of random sampling and violated the NMFS-publicized systematic sampling design.

Moreover, the denial does not address the ruinous collapse of the BBRKC population¹¹. Our Complaint charged that almost immediately after the BBRKC collapse in the early 1980s, NMFS adopted a model with the clear agenda to reinforce the agency’s bogus regime-shift story by killing off tens of millions of BBRKC without using fishing mortality to do it. The problem, of course, was the same as that which had caused the overfishing. That is, the system was awash in excess (but fake) BBRKC caused by NMFS biased survey sampling and NMFS dissemination of falsified and inflated population estimates.

Shortly after the LBA (Length-Based Analysis) model was initiated as a management tool in 1995, NMFS/ADFG modelers realized that it was difficult to maintain their credibility as scientists while trying to get rid of millions of adult RKC using natural mortality. The overseers of the modeling effort, known as the Scientific and Statistical Committee (SSC), which reports to the North Pacific Fisheries Management Council (NPFMC), advised the NMFS/ADFG modelers (almost annually) to justify the outlandish M-values used to fit the model to the NMFS-inflated data.

For example, in 2009 the Scientific and Statistical Committee stated:

“We request that the authors continue to explore a model that uses a constant M over time or other ways of accounting for the large biomass peak in the late 1970s / early 1980s and

³ [Stevens, B.G. 2014. Kings Crabs of the World, p.588](#)

the subsequent steep decline in crab abundance. It remains unclear whether the decline was due to increased mortality (e.g., predation by Pacific cod), a shift in productivity, or a fishing impact.”⁴

Dr. Jie Zheng, the Alaska Department of Fish and Game modeler’s response was:

“The model has a difficulty to get rid of crabs with a constant M of 0.18 during the early 1980s.”⁵

In other words, using reasonable values for natural mortality, it was not possible to kill off the huge numbers of crabs assumed to be in the system. As a result, the impact of the NMFS bloated and biased population estimates of the 1970s was echoed throughout the following decades, up to its present state of commercial extinction.

4. Ignored the Standard of Review for Influential Information

Our Complaint pointed out the challenged material constituted “influential information” in the meaning of both the OMB and NOAA Guidelines. The agency denial did not dispute this characterization.

The NOAA Information Quality Guidelines make clear that “influential information” upon which management decisions are based should be held to a higher standard of objectivity, reliability, and utility, in which “the objectivity of the underlying data and the sensitivity of the agency's conclusions to analytic assumptions” must be examined.⁶

However, the denial maintains that this type of intensified review is beyond the scope of the agency’s response. The only defense the denial offers for NMFS data collection and analysis is the unspecific and unsupported statement that they were based upon on “the best scientific information available”.

In contrast, NOAA’s Information Quality Guidelines stipulate that –

“Agency responses should not address the requestor's or agency's policy position, but rather should contain a point-by-point response to any data quality arguments contained in the RFC and should refer to a peer review that directly considered the issue being raised, if available.”⁷

In this regard, the denial only vaguely asserts that –

“Like all NOAA Fisheries stock assessments, the Bristol Bay red king crab stock assessment has been subject to a public, transparent, and rigorous, peer-review process.”

⁴ <https://www.npfmc.org/wp-content/PDFdocuments/resources/SAFE/CrabSAFE/CRABSAFE09.pdf> , p.138.

⁵ <https://www.npfmc.org/wp-content/PDFdocuments/resources/SAFE/CrabSAFE/CRABSAFE2010.pdf> , p.142

⁶ NOAA Information Quality Guidance Part II

⁷ Id at Part III c (4)

Despite being more than a year in preparation, the agency does not take the time to identify any peer reviewed material that directly addresses the issues raised by the Complaint.

Moreover, it is hard to imagine that any competent peer review would approve reliance upon a non-random search for large, male king crab as part of the NMFS systematic sampling design where, by definition, samples are collected only at fixed, uniformly spaced stations.

Paradoxically, the NOAA denial argues that a discussion of the accuracy of NMFS’s data and data collection would be “suitable for discussion in the scientific peer review literature” – an observation that seemed to tacitly concede the point that the issues raised in the Complaint have never undergone the scrutiny of the peer review process. In fact, NMFS’ responses to this Complaint and appeal are likely to be the most “public, transparent, and rigorous” peer review ever applied to the agency’s stock assessment process.

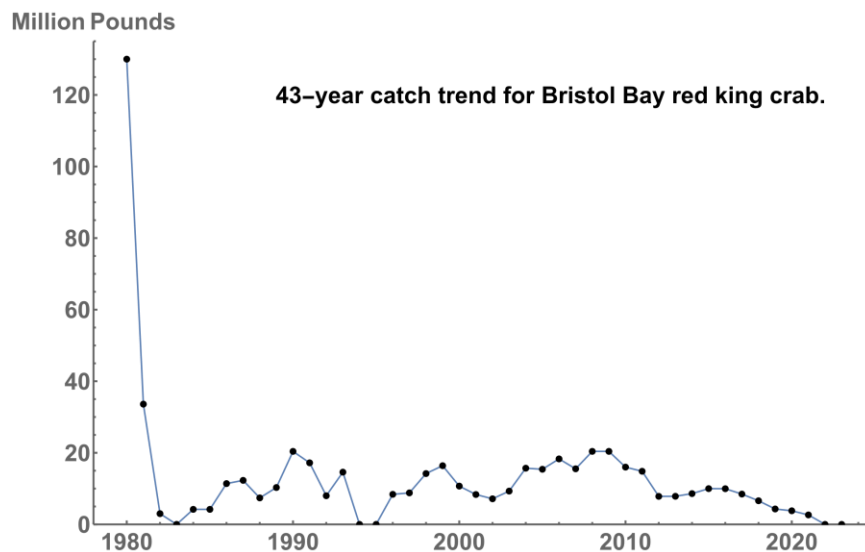
5. The Denial Wrongfully Rejected the Requested Correction

A. “Furthering Management Purposes” Is Not the Basis for Information Quality Correction

In dismissing the requested remedies specified in the Complaint, the denial maintains that correcting the record “does not serve a current management purpose...”

A close reading of the law and official guidance for the Information Quality Act does not offer any support that correction of inaccuracies and breakdowns in scientific integrity may be avoided if such corrections do not “serve a current management purpose.”

Further, the denial’s contention that this “Historical information⁸ does not affect current management” is both highly questionable and disturbing. The current management of the BBRKC offers no coherent explanation for the wild exaggeration of population estimates and/or the BBRKC fisheries’ collapse.



⁸ Data from Zheng, J., Siddeek, M.S.M., and Palof, K.J. BBRKC SAFE, Oct 2021, Table 1a.

Instead of dismissing the past record as irrelevant to current management, NMFS should heed the admonition of the philosopher George Santayana that “Those who forget history are condemned to repeat it.”

B. Responsibility Cannot Be Foisted onto Others

The agency denial also expresses the position that any problems downstream users have with the data, including modelers, the Crab Plan Team, the Scientific and Statistical Committee, and the NPFMC itself, will not be addressed and instead “should be directed to” these bodies.

This astonishing abdication of responsibility by NMFS is shameful and ignores that –

1. “The FMP delegates BBRKC management to the State of Alaska with Federal oversight as part of a State/Federal cooperative management regime.” This wording denotes a semi-formal hierarchy in which the NOAA overseer, also known as a supervisor, performs a job that entails providing instructions, guidance, and orders to subordinate employees. At the same time, an overseer is held responsible for the work and actions of his subordinates.
2. “. . . the State of Alaska is authorized to set guideline harvest levels that limit the total annual harvest”. In this process, our state partner, Alaska, is acceding to and trusting in the data provided by their federal overseer. In short, it sets GHs based on NMFS survey numbers.
3. According to Zheng, J., M.C. Murphy, and G.H. Kruse (1995), among the few authorities cited in the denial, the federal/state model uses and relies on the integrity of NMFS data. The modelers point out that they judge how well the model is performing by how well it mimics the NMFS annual survey data.
4. It is not realistic for NOAA to separate its data collection and analysis from the downstream problems suffered for years by end users.
5. There is no avoiding the downstream effects and the long-term damage done to end users, as well as to the credibility of “Government science”, by this lamentable violation of the Information Quality Act.

Significantly, the agency does not dispute that the material challenged by the Complaint is disseminated by NOAA. Nor is there any exception to the requirement that the agency correct any such data if it is found to lack integrity, utility, objectivity, and utility – as is the case here – simply because other parties also use this information. The involvement of these other allied entities is a greater reason to correct the information, not an excuse for shirking that responsibility.

In short, NMFS cannot excuse itself from the impact of its falsely inflating official estimates of BBRKC abundance to reflect a (phony) nine-fold increase from 1972 to 1978. The obvious impact was a ruinous fishing frenzy. As one participant explained –

“We took the real estate and sucked and squeezed everything we could out of it. And we felt genuinely human doing it. Why? Because the Department of Fish and Game and the National Marine Fisheries Service set the guidelines. They said it was okay. Hell, we fishermen weren’t about to argue. We just devoted the best Yankee ingenuity to the chores. And we did it in spades.”⁹

Conclusion

Per, the NOAA Information Quality Guidelines, this appeal contains all the requisite elements of our identity, address, contact information, prior correspondence, as well as specific reasons that justify this appeal. We look forward to the NOAA decision on this appeal with 120 days.

Sincerely,



Jeff Ruch
Pacific PEER Director

ATTACHMENTS

I. Information Quality Act Complaint

II. Information Quality Act Complaint Denial

⁹ Tom Casey, Working on the Edge, p.273