August 29, 2016

The Honorable Marco Rubio
United States Senate
284 Russell Senate Office Building
Washington, DC 20510

Dear Senator Rubio:

This responds to questions raised in your June 27, 2016, letter regarding red snapper in South Atlantic Federal waters. Specifically, you requested that our office review National Oceanic Atmosphere Administration (NOAA)'s decisions and assessment modeling, especially the Beaufort Assessment Model, relating to the South Atlantic red snapper fishery.

To help address your concerns related to the South Atlantic Federal waters, we reached out to NOAA for information (see enclosure 1). In its response, NOAA refers to a protracted benchmark stock assessment for red snapper and gray triggerfish, and various public meetings informing the decisions made with respect to these species, including the use of the Beaufort Assessment Model. This information is consolidated on a public website.[1] The decision process related to these species has numerous features involving multiple stakeholders, the South Atlantic Fishery Management Council, and the NOAA Fisheries Southeast Fisheries Science Center, among others. To date, we have not encountered or been alerted to specific risks with respect to NOAA's actions or the Council process.

Concerns related to stock assessment have been raised with other species and in other regions. To address these concerns, we are planning an FY2017 project related to the inventory of the science that NOAA's National Marine Fisheries Service Office of Science and Technology has used to estimate the population of various fish stocks. We are also planning to conduct an audit in FY2017 of the NOAA grant to the Gulf States Marine Fisheries Commission/National Marine Fisheries Service Stock Assessment Enhancement, whose purpose included conducting enhanced stock assessments of the fisheries of the Gulf of Mexico. We expect that this review will allow us to gain a better understanding of the issues related to stock assessments—and what is being done by the agency to address concerns identified by multiple stakeholders.

Thank you for your interest in this important area. If you would like to discuss our planned reviews in greater detail, please contact me at (202) 482-4661.

Sincerely,

David Smith
Deputy Inspector General

Enclosure

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[1] http://sedarweb.org/

DATE: July 27, 2016

MEMORANDUM FOR: The Honorable David Smith, Acting Inspector General
                         Department of Commerce

FROM: Dr. Paul N. Doremus, Deputy Assistant Administrator for Operations
                         National Marine Fisheries Service
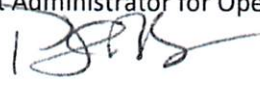
THROUGH: Ben Friedman, Deputy Under Secretary for Operations
                         National Oceanic and Atmospheric Administration

SUBJECT: Information for response to a June 27, 2016 inquiring from Senator
                         Rubio on South Atlantic Red Snapper

The Office of the Inspector General has been requested by Senator Rubio to review the "Department's decisions and assessment modeling, especially the Beaufort Assessment Model, as it relates to the South Atlantic red snapper fishery." NOAA welcomes all such reviews of its science, particularly in situations such as this where the science has already been determined to be the Best Scientific Information Available (BSIA). The process through which this assessment advice was developed was rigorous, multi-step, and open to the public.

The South Atlantic red snapper stock is assessed through the Southeast Data Assessment and Review (SEDAR) process. Program guidance for the SEDAR is provided through a Steering Committee, composed of representatives from the 3 Councils, 2 Commissions, and 3 NOAA Fisheries Offices, collectively referred to in the Program as "Cooperators." SEDAR is operated as a Council process, with dedicated staff and administered through the South Atlantic Fishery Management Council (SAFMC). Each assessment conducted through SEDAR is reviewed by independent scientists from the Center for Independent Experts (CIE).[1] These assessments then receive an additional level of review by the members of the Science and Statistical Committee (SSC) of the SAFMC.

SEDAR-41, which focused on South Atlantic red snapper and gray triggerfish, was a protracted benchmark stock assessment that was initiated in August 2014 and completed in March 2016. The process included two data scoping calls, two Data Workshops, one Assessment Workshop, and ten data/assessment webinars. All of these calls and meetings were open to the public, recorded, and well attended by representatives of the fishing industry. Following protocol, the assessment was reviewed by independent scientists at the Review Workshop and again by the SSC. Throughout the SEDAR-41

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[1] SEDARs 1,2,4,10,15,17,19,24,25,28,32,36,41, Atlantic States Marine Fisheries Commission, and Gulf States Marine Fisheries Commission.

process, all documentation—working papers, data and assessment reports, reviewers' reports, recordings of the workshops and webinars—became publicly available on the SEDAR web page[2].

The Beaufort Assessment Model (BAM) was the primary model applied to Red Snapper. It has been used since SEDAR-1 (2001) to assess 16 different stocks in the southeastern U.S, with most stocks having been assessed multiple times (including Red Snapper in SEDARs 15, 24, and 41).[3] A detailed description of the BAM is publicly available in a peer reviewed NOAA technical memorandum[4], and the model has been used for multiple simulation studies and peer-reviewed scientific publications.[5]
The SEDAR-41 application of BAM to Red Snapper was deemed appropriate for management by the SEDAR Review Panel, including three reviewers from the CIE. Reviews were drawn from knowledgeable fishery scientists from Canada, the UK, and Norway. Specific comments from the independent stock assessment experts were the following:

> "The BAM is the approved assessment method for many stocks in the South Atlantic
> Snapper-Grouper complex, and allows for incorporating fishery dependent and
> independent indices, as well as life history information into the stock assessment.
> This model is also well suited for dealing with removals from a variety of sources,
> such as commercial fisheries, recreational fisheries, and discards. The model for this
> stock assessment was highly complex with many assumptions and data sources, and
> its application was consistent with standard practices. The configuration was
> thoroughly evaluated with respect to the determination of stock status."[6]

> "I agree with the consensus of the panel that the Beaufort Assessment Model
> (BAM) used as the base model in these assessments is appropriate, and that the
> best available data were used."[7]

After the SEDAR External Review was completed, the Red Snapper assessment received further scrutiny by the Scientific and Statistical Committee of the SAFMC in a public meeting held in Charleston SC on 3-5 May 2016. They concluded that *"the Red Snapper assessment represents BSIA[8]."*

BSIA is transmitted from the SSC to the SAFMC for use in fisheries management.
All SAFMC meetings are open to the public, and the group consists of 17 total members made up of 13 voting members and 4 non-voting members to include:
  • The Southeast Regional Administrator of the National Marine Fisheries Service.

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[2] http://sedarweb.org/

[3] Red Snapper, Red Porgy, Black Sea Bass, Vermilion Snapper, Gag, Greater Amberjack, Spanish Mackerel, Red Grouper, Cobia, Grey Triggerfish, Tilefish, Snowy Grouper, Blueline Tilefish, Atlantic Menhaden, Gulf Menhaden, and Croaker.

[4] http://dx.doi.org/10.7289/V57M05W6

[5] e.g. Conn et al. 2010. When can we reliably estimate the productivity of fish stocks? *Can. J. Fish. Aquatic. Sci.* 67: 511-523. Langseth et al. 2016. Management implications of temporally and spatially varying catchability for the Gulf of Mexico menhaden fishery. *Fish. Res.* 181:186-197. Siegfried et al. 2016. Improving stock assessments through data prioritization. *Can. J. Fish. Aquatic. Sci.*

[6] http://sedarweb.org/s41-cie-reviewer-report-volstad

[7] http://sedarweb.org/s41-cie-reviewer-report-smith

[8] BSIA is best scientific information available.

- The directors or designees of the four South Atlantic state marine resource management agencies.
- Eight citizens (two per state) of the southeastern states.
- Non-voting members include representatives of the U.S. Fish and Wildlife Service, U.S. Coast Guard, State Department, and Atlantic States Marine Fisheries Commission.

SAFMC members are charged with using BSIA to manage fish stocks within requirements to prevent and stop overfishing, minimize bycatch, and protect habitat with tenants of sustainability.