

April 30, 2019

Michael Pentony, Regional Administrator  
Greater Atlantic Region Fisheries Office, National Marine Fisheries Service  
National Oceanic and Atmospheric Administration  
55 Great Republic Drive  
Gloucester, MA 01930

Re: Atlantic Mackerel Rebuilding Plan

Dear Administrator Pentony,

On behalf of the organizations below, including members of the Mid-Atlantic Fishery Management Council's (Council) Mackerel, Squid and Butterfish Advisory Panel, we write to bring your attention to new scientific information affecting the Council's proposed rebuilding plan for Atlantic mackerel.<sup>1</sup> Specifically, the recently completed Canadian Atlantic mackerel stock assessment provides new scientific information on poor recruitment in the fishery that renders the Council's plan unapprovable by the Agency. As a result, NOAA Fisheries should request that the Council reconsider its mackerel rebuilding plan, and ask its Science and Statistical Committee to review the latest science and develop a new plan that would rebuild the Atlantic mackerel population as quickly as possible, consistent with the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

### Context

The Atlantic mackerel (*Scomber scombrus*) population has declined for decades. Atlantic mackerel are prey for a wide variety of fish, seabird, and marine mammal predators,<sup>2</sup> and are an important component of the forage stock complex that supports the Northeast Shelf Large Marine Ecosystem. The best available science suggests that with effective conservation, Atlantic mackerel could again provide vast ecological and economic benefits to the United States within a few years. After years of speculation about the stock's status, there is a peer-reviewed U.S. stock assessment<sup>3</sup> and a newly completed Canadian assessment. Taking into consideration the wealth of information in both assessments, Atlantic mackerel is now one of the most data-rich fisheries in the Northwest Atlantic.

The U.S. 2017 assessment highlighted five major findings important for effective conservation and management: 1) there is a U.S. stock, shared with Canada, and it is responsive to catch levels; 2) the population is overfished and the spawning stock biomass has declined by 96 percent since 1972; 3) the population was subject to overfishing and has been for most of the last four decades; 4) a retrospective pattern resulted in overly optimistic biomass projections; and, 5) since 1968, there have been four relatively large year classes that were equal or

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<sup>1</sup> See presentations, briefing materials, and webinar recordings for the Council's August 2018 meeting in Virginia Beach, VA. Available from: [www.mafmc.org/briefing/august-2018](http://www.mafmc.org/briefing/august-2018).

<sup>2</sup> Moustahfid, H., Link, J. S., Overholtz, W. J., and Tyrrell, M. C. 2009. The advantage of explicitly incorporating predation mortality into age structured stock assessment models: an application for Atlantic mackerel. – ICES Journal of Marine Science, 66: 000–000.

<sup>3</sup> See 64th Northeast Regional Stock Assessment Workshop (64th SAW) (February 2018), available at: <https://www.nefsc.noaa.gov/publications/crd/crd1803/>.

greater than the projection for the 2015 year class, and each was followed by catch increases and subsequent years of stock decline.<sup>4</sup>

This 2017 Atlantic mackerel stock assessment likely cost U.S. taxpayers over a million dollars<sup>5</sup> and required significant investments of time and effort by NOAA Fisheries staff and scientific advisors to ensure the assessment represented the best available science. There is also now a rigorous, newly completed Canadian stock assessment. As a result, the Council and NOAA Fisheries have access to unprecedented amounts of commercial and scientific data on Atlantic mackerel.

As explained in our prior comment letters (attached), the Council's rebuilding plan regrettably chose to ignore factual information on the status of the stock, abandon its own risk policy, and dismiss the legal mandate to rebuild the fishery in a timeframe that is "as short as possible."<sup>6</sup> The Council's proposed five-year rebuilding plan, which would nearly double the commercial catch limit (89 percent increase) in the first year, does not meet that Magnuson-Stevens Act rebuilding requirement. It also takes unwarranted risks given the fishery's history of high quotas based on overly optimistic stock projections, which were followed by stock decline. Increasing fishing pressure when the Atlantic mackerel population is at historic lows is risky for mackerel, its predators, and its reliant fisheries.<sup>7</sup> The Council's unacceptable plan would continue a historic pattern of overfishing, driving this important forage fish further toward commercial extinction. Such a collapse is not unprecedented. The West Coast Northern Pacific sardine fishery will be closed for the fifth consecutive year. A new stock assessment concluded that stock is now overfished after years of historically-low recruitment.<sup>8</sup>

### **New Science from Canada**

During the Council process, NOAA Fisheries raised a number of concerns and then voted against the five-year rebuilding plan. The Council's only justification for the drastic quota increase proposed was the U.S. assessment's assumption that there might be an abundant 2015 year class. This projection was based on limited data from the terminal year (2016) of that 2017 stock assessment. However, now, several years later, the Canadian assessment includes additional information about the 2015 year class as well as troubling data regarding the recruitment of the 2016 and 2017 year classes, which is characterized as the lowest recruitment in recent history.<sup>9</sup> As a result, it would be unreasonable, and contrary to National Standard 2's requirement that conservation and management measures be based on the best available science,<sup>10</sup> for the Atlantic mackerel rebuilding plan to be based on

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<sup>4</sup> Northeast Fisheries Science Center (NEFSC). 2018. 64th Northeast Regional Stock Assessment Workshop (64th SAW) Assessment Summary Report. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 18-03; 27 p. Available from: <http://www.nefsc.noaa.gov/publications/>.

<sup>5</sup> NOAA's Cost of Fish Stock Assessments, Presentation by Richard Merrick, Ph.D, Director, NOAA Fisheries Scientific Programs and Chief Science Advisor, and Richard Methot, Ph.D, NOAA Fisheries Senior Scientist for Stock Assessments. Date: October 11, 2016. [https://www.npfmc.org/wp-content/PDFdocuments/CM/2016/102016/NOAA\\_FisheriesCostofStockAssessments.pdf](https://www.npfmc.org/wp-content/PDFdocuments/CM/2016/102016/NOAA_FisheriesCostofStockAssessments.pdf). Accessed: April 23, 2019. See Slide 16 (the average stock assessment in the Northeast region between 2011 and 2015 cost \$1,732,565).

<sup>6</sup> 16 U.S.C. § 1854(e) Rebuilding Overfished Fisheries

<sup>7</sup> See Figure 1, p. 4; The Pew Charitable Trusts, Letter re: Mackerel Rebuilding Framework, August 9, 2018; attached in Appendix I.

<sup>8</sup> Fisheries Resources Division. Sardine Population Remains Low, New Draft Stock Assessment Finds. 27 Mar. 2019, <https://swfsc.noaa.gov/news.aspx?ParentMenuId=39&id=23239>. Accessed 25 Apr. 2019.

<sup>9</sup> Pre-publication Canadian DFO Data, Accessed April 25, 2019: <http://www.mafmc.org/ssc-meetings/2019/may-7-8>.

<sup>10</sup> 16 U.S.C. § 1851(a)(2).

speculative information about recruitment beyond the 2015 year class. While the Canadian assessment provides evidence that the 2015 year class materialized, as it made up an estimated 75 percent of the 2018 Canadian catch,<sup>11,12</sup> there is no evidence of the subsequent year classes recruiting into the fishery. This is crucial new information that the Science and Statistical Committee needs to analyze in developing a new, scientifically sound rebuilding plan. In short, there is no scientific basis for ramping up catch in the U.S. Atlantic mackerel fishery as was proposed by the Council; instead catch limits should be set more conservatively to account for what looks to be a period of historically low recruitment.

While Canada's Department of Fisheries and Oceans (DFO) is expected to announce its own 2019 Canadian mackerel rebuilding plan and related quotas soon, DFO's newly completed stock assessment found, like the U.S. assessment, that "mackerel are in the 'critical zone' where serious harm is occurring and recovery is threatened by overfishing."<sup>13</sup> In fact, the Northern (Canadian) contingent of mackerel were first assessed as being in this critical zone as far back as 2013, and their status has yet to improve.<sup>14</sup> This new assessment also found, in contrast to U.S. projections, that "the spawning population is down 86 percent from pre-2000 levels, and the number of fish surviving to breed is at all-time lows"<sup>15</sup> (emphasis added). Furthermore, the current age structure is truncated compared to the pre-2000 period and is now occupied by one year class—the 2015 year class—which, as noted above, represented 75 percent of declared Canadian landings by weight in 2018.<sup>16</sup> Also of concern is the fact that the Canadian assessment estimates that more of the Northern (Canadian) contingent of Atlantic mackerel are being caught by the U.S. fishery.<sup>17</sup> The fact that U.S. catch has been increasingly reliant on the critically overfished Canadian mackerel population further undermines U.S. projections and the proposed rebuilding plan—jeopardizing the stock's future.

## **Conclusion**

Considering this new and alarming information, it is our view that under the Magnuson-Stevens Act, NOAA Fisheries would be unable to approve either the five-year rebuilding plan passed by the Council, or even the three-year rebuilding plan alternative we previously supported.<sup>18</sup> Therefore, we urge you to request the Council to reconsider its Atlantic mackerel rebuilding framework and ask its Scientific and Statistical Committee to develop a new rebuilding plan that relies on the most recent scientific information and would rebuild the stock as quickly

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<sup>11</sup> Presentation to Atlantic Mackerel Advisory Committee Meeting, Halifax, NS, March 28, 2019, slide 16.

<sup>12</sup> Paul Withers, CBC News, "Atlantic mackerel stocks down 86% over past 20 years, says new DFO report", April 10, 2018, accessed April 22, 2019; <https://www.cbc.ca/news/canada/nova-scotia/atlantic-mackerel-forecast-grim-few-surviving-to-spawn-1.5092692>.

<sup>13</sup> Paul Withers, CBC News, "Atlantic mackerel stocks down 86% over past 20 years, says new DFO report", April 10, 2018, accessed April 22, 2019; <https://www.cbc.ca/news/canada/nova-scotia/atlantic-mackerel-forecast-grim-few-surviving-to-spawn-1.5092692>.

<sup>14</sup> Presentation to Atlantic Mackerel Advisory Committee Meeting, slide X, Halifax, NS, March 28, 2019., slide 22.

<sup>15</sup> Paul Withers, CBC News, "Atlantic mackerel stocks down 86% over past 20 years, says new DFO report", April 10, 2018, accessed April 22, 2019; <https://www.cbc.ca/news/canada/nova-scotia/atlantic-mackerel-forecast-grim-few-surviving-to-spawn-1.5092692>.

<sup>16</sup> Presentation to Atlantic Mackerel Advisory Committee Meeting, Halifax, NS, March 28, 2019, slide 16.

<sup>17</sup> Id. at slides 5-6.

<sup>18</sup> Because alewife, blueback herring, American shad and hickory shad are also critical forage fish, we also continue to strongly oppose the provision in the Council's rebuilding framework that scales up the river herring and shad bycatch cap with any increase in Atlantic mackerel catch. Increasing the at-sea catch of these four species would lead to the further depletion of these valuable and once-abundant forage fish.

as possible. With proper management, Atlantic mackerel can grow in abundance and fulfill its critical ecological role, while supporting thriving directed fisheries into the future.

Sincerely,



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Attachments:

1. Earthjustice, Letter re: Mackerel Rebuilding Framework, July 17, 2018
2. Wild Oceans & Conservation Law Foundation, Letter re: Mackerel Rebuilding Framework, August 1, 2018
3. The Pew Charitable Trusts, Letter re: Mackerel Rebuilding Framework, August 9, 2018