
April 8, 2019

Hon. Minister Wilkinson
Minister of Fisheries, Oceans and the Canadian Coast Guard
200 Kent Street, Ottawa, ON

Re: Atlantic Mackerel TAC and Management for 2019 season

Dear Hon. Minister Wilkinson,

The Ecology Action Centre is Atlantic Canada's oldest and largest environmental organization, founded in 1971. We sit on the Atlantic Mackerel Advisory Committee and are part of the Mackerel Rebuilding Working Group. We write to urge you to make the difficult decision to close the Atlantic mackerel commercial and bait fishery, or seriously reduce the TAC to near zero in order to ensure that the Atlantic mackerel population is giving a chance to grow out of the critical zone.

The results of this year's Atlantic mackerel assessment are alarming. The biomass continues to be in the critical zone, the recruitment is the lowest it has been in the time series, and the age structure is extremely truncated. In 20 000 samples, there was only one Age 1 fish found and no fish over 10 have been found for years. The current population is almost entirely made up of fish hatched in 2015.

The bottom line presented by Science is clear – a decrease in the amount of mackerel being fished is required to allow both the biomass and the recruitment of fish into the fishery to increase. Without a considerable drop in fishing mortality, the stock will continue to decline. The population is already at a critical level and continued fishing pressure threatens to reduce the stock to such a low level that it may not be able to recover. The Atlantic mackerel population has been overfished since 2008 and overfishing is ongoing. More fish are being taken out of the water than the population can sustain, and it is this situation of overfishing that must be the primary target for management.

The projections presented by Science showed that with a 0 TAC there is only a 77.5% probability of growth. This would be the most precautionary choice. It is also the closest TAC (at 68% probability) to achieving the Department's rebuilding plan goal of a 75% chance of increasing the population above the LRP. Any TAC choice below a 60% probability is unacceptable – you would be giving the population only a flip-of-the-coin chance of growth. With all the rapid changes occurring in the Gulf of St. Lawrence ecosystem on top of the severe mackerel population depletion, this is too risky. Most of our fishery committee and Regional Fishery Management Organization goal commitments are now to adhere to a 60% or more probability. The Department's rebuilding guidance notes that there should be 'no tolerance for preventable decline' when stocks are in the critical zone.

The Rebuilding Working Group and Atlantic Mackerel Advisory Committee meetings were encouraging. While no one wants to see a fishery curtailed, the majority of participants understood the gravity of the situation and came to the meeting with suggestions for measures that would require sacrifice from their fleets, but that they also hoped would help the biomass rebuild. We fear that these measures will not be sufficient enough to increase biomass, and that the costs of gear changes and

changes to the fishing season the fleets will make would be in vain. A far more straight-forward measure is to cut the TAC and resume fishing as normal when the population is healthier.

A number of gear mitigation and other management measures were discussed. We support the increased reporting for both commercial and bait licences. This will contribute to a more precise understanding of the full mortality for Atlantic mackerel.

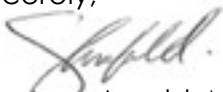
We have concerns about changing the gillnet mesh size to try to spare older, more fecund females and smaller fish for later recruitment. Science shows that the 2015 year class makes up 75% of the entire population and is currently the median size, therefore changes to mesh size may end up concentrating the catch on this all-important year class. This may also be the consequence of implementing a larger minimum size. A minimum size change would also disproportionately result in loss of catch for one or two sections of the fleet. Without a full suite of measures that also impact the purse seine catch, the large fish missed by the gillnets will be fished by that fleet after spawning anyway, taking them out for the next years of reproduction.

We fully understand the serious impacts on income that a 0 TAC or major reduction in the catch means for fishermen. However, there comes a point when socio-economic considerations cannot override ecological realities. Bold action for the next few years to ensure biomass increases, while difficult, is preferable to small management steps that are potentially more palatable, but ultimately will not be enough to halt the decline, thus prolonging the sacrifice of our fishing fleets. During the few years the fishery must be closed or reduced to near 0 TAC, we urge you to consider supporting smaller fleets and fishermen whose margins are too slim to absorb the loss of the mackerel portion of their income.

It is crucial to keep in mind that decisions made in this fishery impact far more fisheries and species than just mackerel commercial fishing. We also hold a seat on the Atlantic Large Pelagics Advisory Committee and recent Science presented showed that mackerel are the top food source for Western Atlantic blue fin tuna. Mackerel are an important bait fish for our economically central lobster fishery. This small fish is also an important prey species for countless seabirds, marine mammals, and larger fish. Keeping the complex ecosystem healthy by ensuring key species like Atlantic mackerel are thriving is imperative.

We also look to the government to continue to increase funding to DFO Science to support this work, and other crucial work, to inform our fisheries assessments and marine management goals that do not have sufficient capacity. Atlantic mackerel in particular suffers from a disconnect between the fishermen's observations and theories and the Science surveys and models. The science is robust, however with rapidly shifting ecosystems in the Gulf, we will need to be on the water more to ensure Science is capturing potential shifts in spawning time, oceanographic changes, shifts in available food, and impacts on the web of species and fisheries that rely on this important species.

Sincerely,



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cc: Brian Lester, Assistant Director, Integrated Resource Management