Kathryn Read Senior Manager Ocean Outcomes

Fisheries and Oceans Canada (DFO) has received a request from the Herring Science Council and Ocean Outcomes to provide context for the industry-led management measures specific to the Southwest Nova Scotia / Bay of Fundy (SWNS/BoF) Atlantic herring purse seine fishery in North Atlantic Fisheries Organization areas 4X5Y.

Specifically, we have been asked to clarify the following:

DFO implements a variety of measures to meet management objectives in this fishery, including setting a total allowable catch, monitoring and reporting requirements. These measures are intended to work in concert with management measures that have been agreed to and implemented by the fleet, which have included small fish limits, limits on catch from specific spawning areas, and temporal limits on fishing activity, in order to meet conservation objectives for this fishery.

When DFO Resource Management requests advice from DFO Science to support decision-making related to the management of the SWNS/BoF herring stock component, the industry-led management measures are not included as objectives to be addressed within the official terms of reference for scientific information on the 4VWX herring stock components. These industry-led measures have been acknowledged and documented as part of the <a href="Southwest Nova Scotia/Bay of Fundy Herring Spawning Component Rebuilding Plan">Southwest Nova Scotia/Bay of Fundy Herring Spawning Component Rebuilding Plan</a> (2013: Section 8.0 Management Measures).

As part of a collaborative agreement between the Government of Canada and several members of the Herring Science Council (HSC), data used to monitor the voluntary management measures is provided to DFO Science through a mandatory port sampling program, which involves sampling fish size for 100% of the seiner fleet landings. The port sampling data sheets are collected from in-plant samples and independent, third-party port-sampling monitoring companies. Data sheets are sent to DFO on a real-time basis to provide both DFO and HSC, with the ability to review the data to estimate the relative landings of small-fish within the SWNS/BoF stock area. As well, the data is combined with data from mandatory logbooks and used to estimate landings from various spawning grounds. The industry also provides DFO Science with randomly selected biological samples, which they store at various processing plants. These samples are analyzed by DFO Science for diet, maturation, age, length, and weight morphometrics information, which are important for our stock assessment advice.

Under Canada's *Privacy Act*, the Department cannot release landings data from individual purse seine vessels without the consent of the licence holder. Therefore, DFO Science provides a biweekly aggregated report (or weekly when requested) on the status of management measures to the industry for them to track whether they are meeting objectives. When the industry are nearing the agreed upon caps on small fish landings or total landings on a particular spawning ground, they self-impose restrictions on catches. It is known that small-sized herring are distributed largely within the mouth of the BoF and seasonal changes in distribution are reported to the industry in biweekly reports during the fishing season (Figure 11 –in attached example of a biweekly landings report).

DFO can confirm that the industry-led management measures have been consistent since the 2020 fishing season as reported in the documents sent by Mr. Tony Hooper entitled "MM history 2018-

2021.pdf" (see attached) and that end of year landings have been near the self-imposed restrictions (see excel sheet entitled "Table\_1\_Catch\_report\_2019-2021").

Compliance with the industry-led measures is managed by the industry. The industry has demonstrated an ability to comply with the restrictions in the past, and the Department has no reason to believe either the measures themselves or industry's compliance with them will change. If additional management measures or alternative approaches to implementing or monitoring them were deemed necessary to meet fishery management objectives, this would be discussed with the industry and through the Scotia-Fundy Herring Advisory Committee process, and ultimately a decision would be made by the Department.

DFO's participation in any eco-certification process is to be a neutral provider of any relevant factual, evidence-based information. If you have any other questions about the above, please feel free to contact me or my colleague Jeffrey Reader. In addition, please be advised that Laura Hussey-Bondt is the Department's eco-certification coordination for Maritimes Region. Should you require additional information about the herring fishery, you are welcome to contact Laura directly (Laura.Hussey-Bondt@dfo-mpo.gc.ca).

Sincerely,

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