

November 16, 2020

Mr. Serge Doucet President North Atlantic Salmon Conservation Organization 11 Rutland Square Edinburgh EH1 2AS Scotland, UK

Dear Mr. Doucet:

Thank you for your letter regarding the U.S. Implementation Plan (IP). The United States remains fully committed to strengthening the implementation of the resolutions, agreements, and guidelines adopted by the North Atlantic Salmon Conservation Organization (NASCO). We appreciate the hard work done by the Review Group charged with assessing the IPs. We have carefully considered all comments the Review Group provided in the most recent evaluation of our IP (IP(19)36). Upon completion of that review, we have concluded that we have provided all information possible in the current IP. This, coupled with the refinements made to the review process, has resulted in a decision to not submit a revised version for the next round of review. Below, we summarize outstanding issues related to our IP and why we are unable to revise it further.

Regarding Section 4.2 of our IP, the review group concluded that the United States has not demonstrated progress toward attainment of NASCO's goal of 100 percent of farms having effective sea lice management such that there is no increase in sea lice loads, or lice-induced mortality of wild salmonids attributable to sea lice. A key concern is that the United States did not provide quantitative information in this regard. Domestic confidentiality requirements make it impossible for us to provide such quantitative information in our IP. All relevant salmon farms occur in waters under the jurisdiction of the State of Maine. Maine state law prohibits the government from making public any data that can be linked to individual people or businesses. Because there is only one aquaculture company operating in Maine, there is presently no way to share that information without violating this law (State of Maine rules tit. 13-188 Ch. 5, § 5.30).

Although we are not able to provide quantitative results regarding lice loads, the actions described in our IP demonstrate progress toward NASCO's goal of effective sea lice management. Since 2001, enhanced oversight of fish health regulations for all commercial Atlantic salmon farming in Maine (i.e., 100 percent of farms) has been in place and administered by the State of Maine's Department of Marine Resources with federal oversight from the U.S. Department of Agriculture, U.S. Fish and Wildlife Service, and the National Marine Fisheries Service. The emphasis of the program includes maintenance of the current fish health protocols and expansion of an ongoing epidemiological monitoring program to determine the type, incidence, and geographic distribution of salmonid pathogens in Maine. The major components of the fish health regulations in place include vaccination of farmed fish prior to stocking in sea



cages, protocols for harvesting and stocking of farmed salmon, mandatory fallowing and single year-class stocking, vessel traffic protocols, and gear and vessel disinfection protocols. In addition, an Integrated Pest Management Plan is in place for all marine net pen sites in Maine. These protocols include monitoring of sea lice levels and evaluating treatment efficacy at all farms. The guidelines include best management practices that seek to reduce the need for use of chemicals or medications. Mandatory monitoring of sea lice levels occurs at least biweekly when water temperatures are greater than 8°C and monthly when water temperatures are between 6°C and 8°C.

The Review Group considers that the action related to sea lice (Action A1) is not measurable and, thus, not consistent with the IP guidelines. As explained in Section 4.2 of our IP and reiterated in the relevant section of this letter, domestic confidentiality requirements limit what we are able to share publicly regarding sea lice at aquaculture facilities. In our IP, we describe how monthly surveillance is conducted by a third party for pathogens and sea lice as required under the State of Maine fish health regulations. We fully expect that surveillance and, when necessary, enforcement will continue over the 5-year course of our IP. Lastly, we appreciate that progress could be measured and demonstrated in other ways (e.g., the use of sentinel cages). However, resource limitations prevent us from committing to monitoring wild salmon in this manner over the course of this IP.

The question in Section 4.4 of the IP asks that we describe what adaptive management and/or scientific research is underway that could better facilitate the achievement of NASCO's goals for sea lice and containment in commercial aquaculture such that the environmental impact on wild salmonids can be minimized. In our IP, we describe a scientific research initiative funded through NOAA and Maine Sea Grant currently underway that will help us better facilitate achievement of NASCO's goals. It is entitled "An integrated approach to addressing sea lice control in the commercial culture of Atlantic salmon." One of the main goals of the project is to bring together industry, research, and regulatory partners to develop a "gap analysis" and a formal needs assessment in order to advance acceptance of integrated pest management practices for salmon aquaculture. The effort recognizes that new pest management schemes are of little value if commercial producers do not accept them. Thus, this work seeks to identify barriers to stakeholder acceptance of new pest management practices and develops methods to foster implementation of new strategies. If this can be accomplished and new strategies are implemented as a result, sea lice management at salmon farms will be improved, and the risks to salmon in the wild will be reduced.

Regarding actions F2 and F3, the review group noted that "the level of threat posed is unclear and the method to assess the risk is not defined" for our actions aimed at reducing bycatch of Atlantic salmon in recreational fisheries (F2) and reducing poaching to the maximum extent possible (F3). We continue to take seriously the possibility that Atlantic salmon will be taken as bycatch or poached. The capture or collection of Atlantic salmon without a permit is prohibited by the Endangered Species Act and Maine state regulation. To minimize risk to Atlantic salmon, the State of Maine has imposed closures of certain areas of rivers, gear restrictions, and bag limit reductions to reduce the possibility that salmon will be taken. It has also developed species identification guides that are published in the summary of fishing regulations. In addition, the State of Maine and federal law enforcement personnel work together to patrol areas where

poaching and/or bycatch could occur. Anyone caught poaching salmon is prosecuted consistent with the law, which can include fines or jail time. While we take a number of actions to discourage poaching, we do not have the data to quantify this threat or associated risk reduction.

In respect to Action F2, we explain in the section entitled "expected outcome" that this action does not lend itself to a strictly quantitative approach, as baseline levels of mortality attributable to bycatch in recreational fisheries are not available and would be extremely difficult and costly to determine. For Action F3, we noted that estimates of mortality attributable to poaching are not available, and, therefore, developing quantitative targets is not possible. Nevertheless, as explained, the United States does have in place structures and processes that deter and otherwise minimize bycatch and poaching of Atlantic salmon, and the number of enforcement actions related to these activities has been and continues to be low despite robust patrolling of U.S. salmon rivers. We, therefore, determined that a qualitative approach for both of these actions as reported in our IP is appropriate. We continue to consider this an acceptable way forward that is in line with the IP guidelines.

If you have any questions regarding this correspondence, please contact

NOAA's Greater Atlantic Regional Fisheries Office,

Sincerely,