1. Overview:

On March 4, 2019, the Nova Scotia Department of Fisheries and Aquaculture (NSDFA) received an application from Snow Island Salmon Inc. to renew Aquaculture Licence and Lease #0772 (AQ#0772), as described below:

 Table 1. Description of Aquaculture Licence and Lease #0772

Type: Marine Finfish	Size: 36.00 HA
Number: AQ#0772	Cultivation Method: Marine cage cultivation
Applicant: Snow Island Salmon Inc.	Species: Atlantic Salmon, Rainbow trout
Location: Owl's Head Bay, Halifax County	Proposed Term: 10 year Licence/20 year
	Lease

2. <u>History</u>

AQ#0772 was first issued on October 24, 1994 for a ten-year term (October 31, 1994 to October 31, 2004) to Grant Keating and Rosalie Keating. AQ#0772 was amended on January 3, 1996 to authorize the suspended cultivation of Steelhead trout. AQ#0772 was assigned on April 15, 1998 from Grant Keating and Rosalie Keating to Brian C. Muise and Associates. AQ#0772 was assigned on May 26, 2000 from Brian C. Muise and Associates to Ocean Glen Sea Farm Inc. AQ#0772 was amended on June 12, 2000 to authorize the suspended cultivation of Rainbow trout. AQ#0772 was assigned on January 10, 2001 from Ocean Glen Sea Farm Inc. to Limekiln Fisheries Ltd. AQ#0772 was renewed on November 18, 2004 for a five-year term (October 31, 2009). AQ#0772 was renewed on March 2, 2010 for a five-year term (October 31, 2009 to October 30, 2014). AQ#0772 was assigned on August 29, 2011 from Limekiln Fisheries (2000) Ltd. to Snow Island Salmon Inc. AQ#0772 was renewed on October 29, 2014 for a five-year term (October 31, 2014 to October 31, 2019).

3. <u>Procedure</u>

3.1 Performance Review

A performance review of the information submitted by the operator in support of their renewal application was completed. This review recommended that the site be renewed based on the technical and biological assessment. Several items of note were raised that will be further discussed in the *Factors to be Considered* section of the decision. This performance review is required pursuant to Subsection 72(d) of the Aquaculture Licence and Lease Regulations and was completed on January 21, 2020.

3.2 Public Comment Period

Notice of the application for the renewal of AQ#0772 for the 30-day public comment period was published on NSDFA's website (<u>http://novascotia.ca/fish/aquaculture/public-information/</u>) for

the period of July 4, 2019 to August 2, 2019. Notice of the application was also published in the Royal Gazette Part I on July 10, 17, 24 and 31, 2019.

3.3 Submissions

39 submissions were received by NSDFA during the 30-day public comment period.

4. Factors to be considered

AQ#0772 did not have production over the duration of the most recent licence and lease tenure; however, AQ#0772 has the potential to be operational in the future. Legislative and regulatory changes implemented in 2015 that relate to marine salmon farming were aimed to improve production outcomes in farms while reducing impacts. In addition, the Province has been actively collecting biophysical data around coastal Nova Scotia to inform future farming practices. Both the new regulatory framework and the biophysical data will mitigate production risks.

Prior to commencing production at the site, the operator will be required to submit a completed production plan for the review of the Department, all required stocking application information, as well as implement an approved Farm Management Plan. Should AQ#0772 come into full production, there should be resulting employment and local and provincial economic benefits. Should the operator not operate the site, the Department's site utilization review procedures will be commenced.

As per the *Fisheries and Coastal Resources Act* and the *Aquaculture Licence and Lease Regulations*, renewals of existing aquaculture sites are within the purview of the Aquaculture Administrator. As such, this application was not required to be submitted to the Aquaculture Review Board for decision. Furthermore, it will be a condition of licence that the operator must comply with any permits, protocols, approvals, licences or permissions which may be required under the laws of the relevant Municipality, the Province or Canada. The operator is also required to adhere to all relevant Government of Canada legislation and regulations that may pertain to conducting aquaculture in the marine environment. As at the time of the public submission period, as well as at the time of the writing of this decision, a Marine Protected Area (MPA) has not been created for the area encompassing AQ#0772, nor are the extent of what aquaculture activities that may be conducted within such an MPA should one be created known. The *Draft Eastern Shore Islands Area of Interest (AOI) Ecological Risk Assessment Results (August 2019)* speaks to some of the risks and mitigation measures related to Atlantic salmon farming within a potential Marine Protected Area.

The operators of AQ#0772 will be required to adhere to all Environmental monitoring provisions of the *Aquaculture Management Regulations*, including the need to maintain sufficient oxic conditions in the benthic environment. Should oxic conditions not be maintained, the operator will be required to implement mitigation measures with subsequent sampling to ensure compliance. The Farm Operations section of the Farm Management Plan for AQ#0772 will require the operator to indicate how they will operate AQ#0772 in accordance with industry best practices with respect to items such as interactions with wildlife, noise, maintain the site in good order, the removal of decommissioned farm supplies and equipment, and the retrieval of gear or debris that has broken loose.

During the review of the renewal application and the ensuing public submission period, specific concerns were raised with respect to derelict gear remaining in the marine environment associated with the past operation of AQ#0772. It will be a condition of the renewal that any remaining gear be removed from the marine environment or returned to proper working order within the marked boundaries of the site. Section 55 of the Licence and Lease Regulations requires an aquaculture licence holder to mark each of their sites in a manner determined by the Minister (see below) and keep each site marked during the term of their licence. Furthermore, AQ#0772 is required to maintain compliance with Transport Canada as it relates to Navigable Waters. The operator of AQ#0772 is also required to maintain a security bond for the site, which can be drawn upon by the Department to perform clean-up activities should the operator fail to perform its obligations with respect to site maintenance.

During the public submission period, concerns were raised with respect to the impact of AQ#0772 on local lobster populations and lobster harvesting activity. No specific information was provided that indicated that the past operation of AQ#0772 had a detrimental effect on lobster fishing activities. Several studies from other locations with finfish farming were submitted; however, they did not pertain directly to the aquaculture renewal application under consideration for AQ#0772 on the local tourism industry; however, no specific information was provided that indicated that indicated that the past operation of AQ#0772 had a detrimental effect on tourism activities.

A review of the application and available information indicates that the nearest salmon rivers from AQ#0772 are located approximately 25.00 km away from AQ#0772. It is a legislated requirement that the operator of AQ#0772 conform to the aquaculture management regulations specific to containment management through an approved Farm Management Plan. In the event of an escape, the operator would be required to adhere to measures prescribed in the Farm Management Plan and in Regulation on escape reporting, auditing and mitigation. The Department is also in the process of implementing a salmonid traceability program, through which any escaped salmonids could be traced back to the operator of origin, to mitigate against such future events.

A review of the file and subsequent public comments outlined past instances of fish mortality at the site due to weather or storm events. It will be a requirement of an approved Farm Management Plan for the operator to have strategies for responding to unusual events and severe weather. It is also required for operators to perform daily monitoring of oxygen and temperature and to implement appropriate mitigation measures when oxygen readings and temperature levels fall below prescribed levels. New technologies exist that were not previously in widespread use in Nova Scotia for salmon farming that allow for real-time monitoring and tracking of oceanographic parameters. It shall be a condition that the operators of AQ#0772 partake in a real-time monitoring program of prescribed oceanographic parameters and that such information be made available to the Department in real-time.

The depth of the site and the rate of flushing of the area were also raised during the public submission period. A review of the information available does not suggest that the water depth or flushing rate fully preclude the farming of Atlantic Salmon on this site.

Environmental performance, as measured by impacts to the benthic environment, can be managed on a performance basis. As AQ#0772 has not been operational for a number of years, full baseline data acquisition as prescribed by the Environmental Monitoring Program will be required prior to stocking. The baseline information and ongoing monitoring will inform the amount of fish that can be appropriately stocked on AQ#0772.

AQ#0772 is located to the west of Cable Island, with the site being approximately 60 metres away from Cable Island at its nearest point. AQ#0772 is located less than 1.0 km from the shoreline of the mainland, approximately opposite the community of Owl's Head Harbour. The nearest aquaculture sites to AQ#0772 is located more than 3.00 km away and is also subject to a renewal application decision at this time (AQ#0833). Several shellfish aquaculture sites are located in the upper portion of Ship Harbour, the nearest being approximately 6.50 km away. As such, there is adequate separation between AQ#0772, the shoreline, and other aquaculture sites to allow for navigation.

5. Decision

Based on the considerations above, Aquaculture Licence #0772 shall be renewed for a period of 10 years (November 1, 2019 to October 31, 2029) and Aquaculture Lease #0772 shall be renewed for a period of 20 years (November 1, 2019 to October 31, 2039).

The Licence and Lease documents shall be prepared in accordance with the stand ard operating documents of NSDFA, and shall be made publicly available subject to the provisions of the *Freedom of Information and Protection of Privacy Act.*

6. <u>Conditions</u>

In addition, the following conditions shall apply and shall be included as conditions or contained within a Schedule to each of the Licence and Lease:

- a) Prior to restocking the site and installing site infrastructure, to mark the site as in accordance with Transport Canada approval #8200-93-3084.
- b) By October 1, 2020 to ensure that all gear at the site that may reasonably have resulted from past aquacultural operations at the site is removed from the water and adjacent shoreline.
- c) To submit a security bond in the prescribed amount (\$25,000) in a form that is satisfactory to the Administrator.
- d) Prior to restocking the site, (i) to perform a baseline assessment as defined in the *Aquaculture Management Regulations*, and (ii) to obtain approval in advance from the Minister.
- e) Prior to re-stocking the site, to implement an approved Farm Management Plan.
- f) Compliance with any permits, protocols, approvals, licences or permissions which may be required under the laws of the relevant Municipality, the Province or Canada.

- g) Compliance with all relevant provincial and federal legislation that relates to conducting finfish aquaculture operations in the marine environment.
- h) Participation in a real-time monitoring program of prescribed oceanographic parameters, as prescribed by the Administrator. The Lessee shall make any data resulting from that program available to the Administrator in real-time, or in another such time and manner as requested by the Administrator.

Brennan Gorcham

<u>May 29, 2020</u> Date

Brennan Goreham Aquaculture Administrator Nova Scotia Department of Fisheries and Aquaculture