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# Public Notice – Administrative Application Posted

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<b>Applicant:</b> Sustainable Blue (2025) Inc.	Type of Application: Renewal
<b>Application File Number:</b> AQ#1312	<b>Species:</b> Atlantic halibut, Sablefish, European sea bass, Black sea bass, Striped bass, Gilthead seabream, Atlantic salmon
<b>Location:</b> Summerville, Hants County	Method of Cultivation: Land-based facility
<b>Application Received On:</b> June 17, 2025	

To learn more about the aquaculture lease and license application process, please visit <a href="https://novascotia.ca/fish/aquaculture/licensing-leasing/Aqua-Licensing-and-Leasing-Overview.pdf">https://novascotia.ca/fish/aquaculture/licensing-leasing/Aqua-Licensing-and-Leasing-Overview.pdf</a>

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Doc ID: AQ-ADM-PNO-02

Version 1.0



Office Use Only
Received June 17, 2025

# **Aquaculture Renewal Application**

1100000 /10000 No. 1312

ricence/rease Mo.	
Licence/lease holder:	
Applicant: SUSTAINABLE BLUE (2025) INC CO	ntact Person: KIEK HAVERCEOFT
Nova Scotia Registry of Joint Stocks Number: 4644	703
Revenue Canada Business Number:	
Telephone No. (Work): 902 468 8040 (Home):	(Cell)
Fax No.: E-mail: kirkhavere	roftasustainableblue.com
Mailing Address; 20 MACDONALD AVE., &	ARTMOUTH
NOVA SCOTIA	Postal Code: B3B1C5
Civic Address: 259 RED BANK ROAD, C	ENTRE BURLINGTON
NOVA SCOTIA	Postal Code: BON 2AD

### **Application Materials**

A complete application includes the following:

- Renewal fee (payable to Minister of Finance) according to Section 77 of the Aquaculture Licence and Lease Regulations for Nova Scotia made under Section 64, Chapter 25 of the Acts of 1996, the Fisheries and Coastal Resources Act
- Application Form
- Development Plan according to application
- Copy of up-to-date Shareholder's Register which sets out the shareholdings of the company (if applicable)

#### **Public Notice and Disclosure**

As part of the process for deciding on an aquaculture application, the Nova Scotia Department of Fisheries and Aquaculture ("Fisheries and Aquaculture") will disclose application information to other government bodies, including, if applicable, the Nova Scotia Aquaculture Review Board for use at an adjudicative hearing relating to the application.

Submit completed applications to:

Nova Scotia Department of Fisheries and Aquaculture, Aquaculture Division

1575 Lake Road, Shelburne, NS BOT 1WO

E-mail: aquaculture@novascotia.ca

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In accordance with departmental policy, which seeks to promote public involvement in the process for deciding on aquaculture applications, Fisheries and Aquaculture may disclose application information – not including, however, personal or business confidential information – on the departmental website.

### **Privacy Statement**

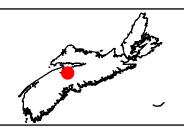
The personal and business confidential information collected as part of an aquaculture application will only be used or disclosed by Fisheries and Aquaculture for the purpose of deciding on the application.

All application information collected is subject to the Freedom of Information and Protection of Privacy Act ("FOIPOP") and will only be used or disclosed in accordance with FOIPOP.

By signing and submitting this form, I acknowledge that I have read, understand, and accept the above statements regarding the collection, use, and disclosure of the information provided on this form.

17 - JUNE - 2025
Date
June 17, 2025

## **SCHEDULE A**

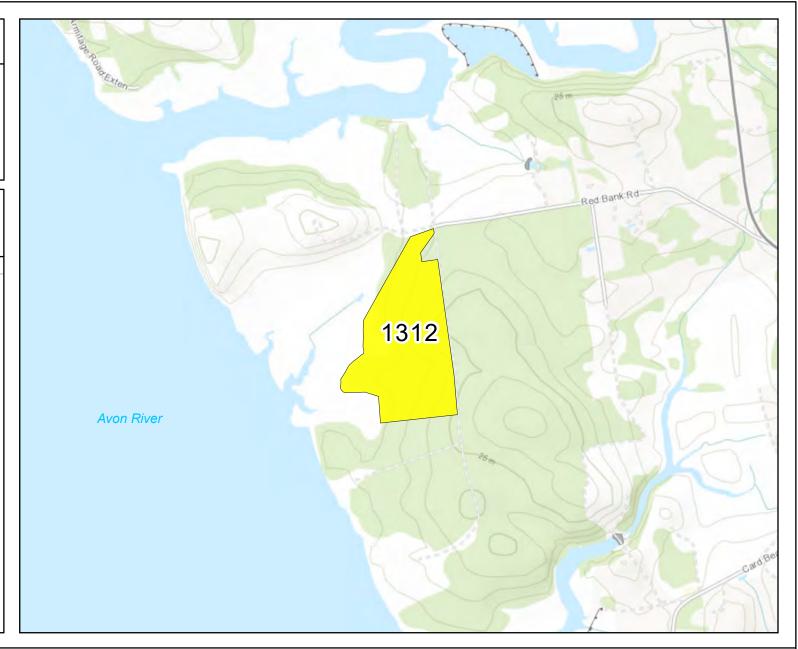


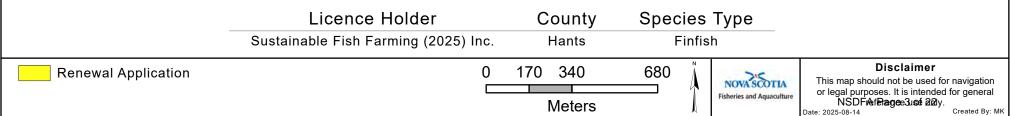
### Aquaculture Site

1312

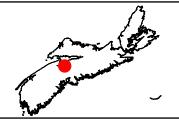
Latitude Longitude 45° 4' 11.133" -64° 8' 1.794"

DATUM NAD 83 CSRS UTM Zone 20 The above coordinates are not from a legal survey



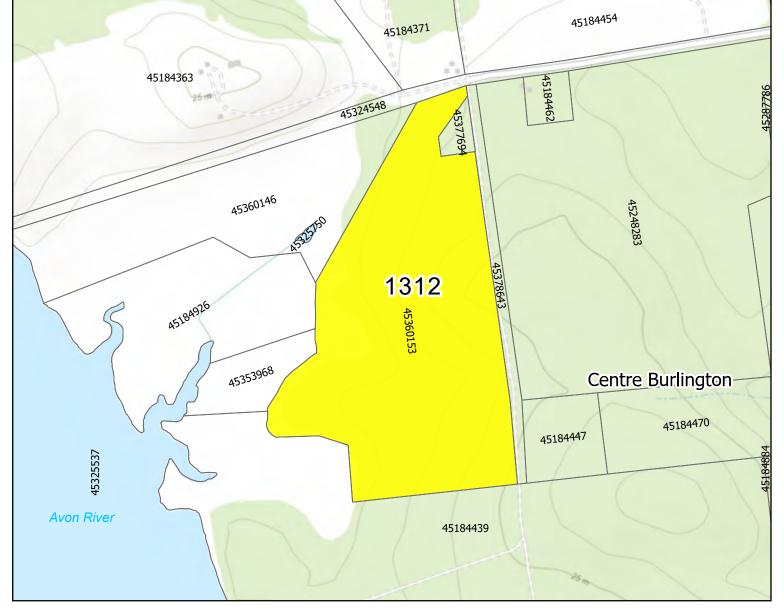






## Aquaculture Site 1312

Latitude Longitude 45° 4' 11.133" -64° 8' 1.794"



45184496

The above coordinates are not from a legal survey

DATUM NAD 83 CSRS UTM Zone 20



## Received June 17, 2025

# Land-based Aquaculture Assignment Development Plan

Submitted by:
Sustainable Blue (2025) Inc
June 17, 2025

#### **Section 1: Project Overview**

This application is a request for the renewal of an aquaculture license currently held by Sustainable Blue 2025 Inc (formerly **4644903 Nova Scotia Ltd**). The license was transferred in 2024 from Sustainable Fish Farming Canada Limited (SFFC) by Deloitte Restructuring Inc., acting in its capacity as Receiver and Manager of SFFC and associated entities. SFFC had held this license since 2007 for its land-based aquaculture operations located at 259 Red Bank Road, Centre Burlington, Nova Scotia.

SFFC established its Recirculating Aquaculture System (RAS) facility at the Red Bank Road site in 2007 to demonstrate a novel RAS technology designed to eliminate effluent discharge to the environment. The facility initially cultured European Sea Bass (*Dicentrarchus labrax*), followed by Sea Bream (*Sparus aurata*), and has been focused on raising Atlantic Salmon (*Salmo salar*) since 2013.

Over the years, the facility expanded its production capacity, ultimately reaching an annual capacity of 1,000 metric tonnes (MT). This expansion led to operations being distributed across six separate buildings on site. The most recent addition, Building RBR5, is a 10-tank (3,400 m³) saltwater production system completed in 2022. However, in November 2023, an equipment failure led to the complete loss of stock within this system. The facility was subsequently repaired and restocked, but the incident resulted in a 10-month interruption in market presence and contributed to SFFC entering financial restructuring under receivership.

The court-approved sale of SFFC's assets to 4644903 Nova Scotia Limited marked a transition in ownership. The new company is owned by two long-standing shareholders of SFFC who have been actively involved in the development and operation of the facility.

Following the receivership, 4644903 Nova Scotia Limited made a strategic decision to reduce the farm's annual production capacity from 1,000 MT to 650 MT. As part of this restructuring, two of the six production buildings—RBR1 and RBR3—were taken out of service.

#### **Section 2: Technical Viability**

#### 2.1 Production Plan

During the receivership period, SFFC continued to operate the farm. The time required to reinstate the capacity of Building No. 5 caused a delay of several months in transferring fish from the other buildings. Once repairs were completed, fish were moved into Building No. 5, and the first harvest from this system took place in October 2024.

A production plan for 4644903 Nova Scotia Limited covering the period from June 2025 to June 2026 is provided in Table 1. The figures presented reflect the steady-state operations expected to be reached by August 2025, and production can be extrapolated accordingly from that date.

Table 1: Site Information (June 2025 to June 2026)						
License # 1312						
Period : Jun 2025 to Jun 2026						
Species (Strain)	Salmo salar (Saga Strain)					
Stock Source	Benchmark Genetics Iceland					
Maximum Site Biomass (MT)	260					
Maximum Fish Number (No.)	416,000					
Maximum Annual Feed (MT)	715					
Maximum Tank Densities (kg/m³)	90					
Maximum Total Tank Volume (m³)	5,147					
Stocking Plan	Ongoing - 6-week intervals					
Expected FCR	1.1:1					
Expected Grow-out Period	24 Months (from hatch)					
Expected Time to Maximum Production	2 Months (Aug 2025)					

#### Table 2: Fish Production Plan (June 2025 to June 2026)

License # 1312

Period : Jun 202	to Jun 2026										
Species (Strain)	Stock Source	Batch Name (Tank)	Total Fish Number (No.)	Mean Fish Weight (g)	Date of Introduction (Batch ID)	Expected Date of Harvest / Transfer	Length of Growout Period (Months)	Maximum Stocking Density (kg/m³)	Maximum Biomass (kg)	Total Amount of Feed (kg)	Expected Harvest Weight (kg)
Salmo salar (Saga)	Benchmark Genetics	2022 ABCDE (GT-18, 22) (HT-16)	15,091	3,192	2022-02-08 (A) 2022-03-15 (B) 2022-05-03 (C) 2022-06-15 (D) 2022-07-20 (E)	Until Aug 2025	2 to 3	90	49,800	54,780	49,800
Salmo salar (Saga)	Benchmark Genetics	2022 FG (GT-21)	8,588	2,694	2022-09-21 (F) 2022-11-17 (G)	Until Aug 2025	2 to 3	90	27,482	30,230	27,482
Salmo salar (Saga)	Benchmark Genetics	2023 AB (GT-25)	8,271	2,331	2023-01-18 (A) 2022-03-21 (B)	Until Aug 2025	2 to 3	90	24,813	27,294	24,813
Salmo salar (Stofnfiskur)	Grieg Seafood Newfoundland	2022 H (GT-16, 19, 20, 23, 24)	46,143	1,803	2024-01-16 (50 g Fry)	Aug 2025 - Jan 2026	6	90	175,343	192,878	175,343
Salmo salar (Saga)	Benchmark Genetics	2023 FGH (GT-14, 15)	33,210	837	2023-08-17 (F) 2023-09-28 (G) 2023-11-15 (H)	Jan - Mar 2026	8	90	132,840	146,124	132,840
Salmo salar (Saga)	Benchmark Genetics	2024 CD (GT-13)	39,193	277	2024-04-10 (C) 2024-05-23 (D)	Mar - May 2026	10	90	156,772	172,449	156,772
Salmo salar (Saga)	Benchmark Genetics	2024 E (ST-1, 2)	19,146	180	2024-07-02	Jun - Jul 2026	13	90	76,584	84,242	65,096
Salmo salar (Saga)	Benchmark Genetics	2024 F (PT-2, 3)	19,763	103	2024-08-14	Aug - Sep 2026	14	90	79,052	86,957	71,147
Salmo salar (Saga)	Benchmark Genetics	2024 G (PT-1, 4)	48,912	32	2024-09-29	Sep - Nov 2026	15	90	150,000	165,000	150,000
Salmo salar (Saga)	Benchmark Genetics	2024 H (PT-5)	25,861	17	2024-11-06	Nov - Dec 2026	17	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2024 I (NT-1)	50,133	2.9	2024-12-18	Dec 2026 - Jan 2027	18	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2025 A (AT-1)	24,299	1.0	2025-01-30	Jan - Feb 2027	19	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2025 B (AT-2, 3)	38,587	0.5	2025-03-13	Feb - Mar 2027	21	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2025 C (Stack-2)	38,516	0.2	2025-04-24	Apr - May 2027	23	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2025 D (Stack-1)	41,993	0.1	2025-06-03	Jun - Jul 2027	24	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2025 E	40,000	Eyed Egg	2025-07-15	Jul - Aug 2027	24	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2025 F	40,000	Eyed Egg	2025-08-26	Aug - Sep 2027	24	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2025 G	40,000	Eyed Egg	2025-10-07	Oct - Nov 2027	24	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2025 H	40,000	Eyed Egg	2025-11-18	Nov - Dec 2027	24	90	75,000	82,500	75,000
Salmo salar (Saga)	Benchmark Genetics	2025 I	40,000	Eyed Egg	2025-12-30	Dec 2027 - Jan 2028	24	90	75,000	<sub>82,50</sub> NSDI	A Page <sub>080</sub> of 2

#### 2.2 Location

All production activities take place at the site located at 259 Red Bank Road, Centre Burlington, Nova Scotia—the same location as indicated in the original license application. The site has remained unchanged since that time.

Included with this application are a topographical map and a site description map, both of which show the location of all structures on the property.

While there is an intake line for bringing in fresh seawater, there is no discharge line, as the facility operates with zero effluent discharge to the environment.

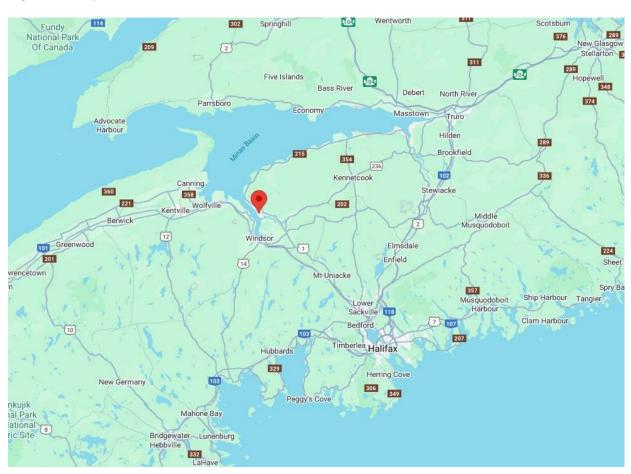


Figure 1a: Map of farm location

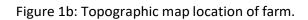




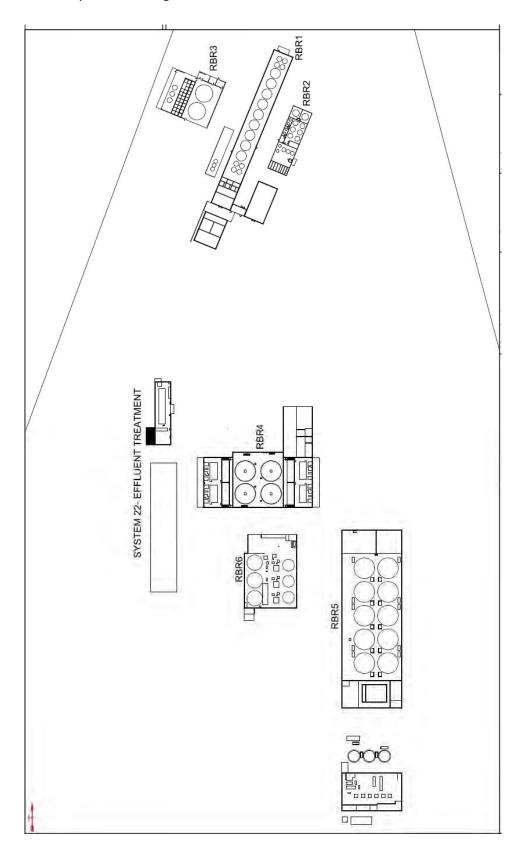
Figure 2a: Aerial View of Site Location at 259 Red Bank Road, Centre Burlington, NS.



Figure 2b: Aerial View of Site Location at 259 Red Bank Road, Centre Burlington, NS with building labels and year of completion.



Figure 3: Site Layout – Building Location



#### 2.3 Water Source

#### Saltwater supply.

When SFFC was first established in 2007, it operated using a flow-through system, drawing in and discharging seawater. Since 2015, the system has been redesigned to eliminate any discharge to the ocean.

Seawater is drawn at high tide from the Avon Estuary, an inlet of the Bay of Fundy. The Avon River is tidal, and its salinity is influenced by rainfall. Salinity levels typically range from 25 to 30 ppt and reflect ocean temperatures at the time of intake. Because only a small percentage of the farm's total water volume is replaced daily, variations in salinity and temperature are easily managed.

Seawater is pumped to an on-site receiving sump, where it undergoes initial treatment to eliminate potential disease or pest risks. Once cleaned and screened of debris, the seawater is introduced into the farm's central waste recovery system for further treatment before being distributed throughout the facility. At full production capacity, the farm requires approximately 20 m³ of new seawater per day.

#### Freshwater supply

Originally, freshwater was supplied via on-site boreholes. However, as the farm expanded, borehole capacity became insufficient to meet demand. Currently, all freshwater is produced on-site by filtering seawater through a saltwater reverse osmosis (RO) unit. This process yields both freshwater and brine.

The freshwater is primarily used for hatchery operations. All wastewater, including the freshwater effluent, is returned to the farm's central wastewater treatment system. The brine produced from the RO process is combined with the returning freshwater effluent to reconstitute saltwater. As a result, there is no reliance on groundwater sources for freshwater supply.

#### 2.4 Water Discharge

Originally, SFFC discharged up to 30 m³ of wastewater per day. However, since 2015, the facility has eliminated all direct water discharge to the environment. Currently, all waste materials are separated and collected from the internal waste streams. This collected waste is removed twice weekly and transported to Courthouse Hill Farm, where it is processed in an anaerobic digester to produce biogas for electricity generation. Approximately 15 m³ of wastewater is removed each week as part of this process.

#### 2.5 Infrastructure

The site infrastructure includes several buildings which are outlined in the following table (Table 3).

#### Table 3 : Site Infrastructure Usage

License # 1312

Period : Jun 2025 to Jun 2026

Period : Jun 2025	เบ Jun 2026			
Building ID	Tank ID	Salinity	Volume (L)	Description
RBR1	FT-1	Freshwater	10,000	Fry Tank - Not in use
RBR1	FT-2	Freshwater	10,000	Fry Tank - Not in use
RBR1	FT-3	Freshwater	10,000	Fry Tank - Not in use
RBR1	FT-4	Freshwater	10,000	Fry Tank - Not in use
RBR1	GT-1	Freshwater	56,000	Grow-out Tank - Not in use
RBR1	GT-2	Freshwater	56,000	Grow-out Tank - Not in use
RBR1	GT-3	Freshwater	56,000	Grow-out Tank - Not in use
RBR1	GT-4	Freshwater	56,000	Grow-out Tank - Not in use
RBR1	GT-5	Freshwater	56,000	Grow-out Tank - Not in use
RBR1	GT-6	Freshwater	56,000	Grow-out Tank - Not in use
RBR1	GT-7	Freshwater	56,000	Grow-out Tank - Used for freshwater storage
RBR1	GT-8	Freshwater	56,000	Grow-out Tank - Used for freshwater storage
RBR1	GT-9	Freshwater	56,000	Grow-out Tank - Used for freshwater storage
RBR1	HT-1	Freshwater	10,000	Harvest Tank - Not in use
RBR1	HT-2	Freshwater	10,000	Harvest Tank - Not in use
RBR1	HT-3		10,000	Harvest Tank - Not in use
	HT-4	Freshwater	,	Harvest Tank - Not in use
RBR1		Freshwater	10,000	Eyed fish eggs until hatch
RBR2	Heath Trays	Freshwater	20	Alevin Tank - Sac fry / first feeding fry
RBR2	AT-1	Freshwater	1,000	Alevin Tank - Sac fry / first feeding fry
RBR2	AT-2	Freshwater	1,000	
RBR2	AT-3	Freshwater	1,000	Alevin Tank - Sac fry / first feeding fry
RBR2	AT-4	Freshwater	1,000	Alevin Tank - Water reservoir for incubator heath trays
RBR2	NT-1	Freshwater	7,000	Nursery Tank - Fry up to 5 g
RBR2	PT-1	Freshwater	12,500	Parr Tank - 5 to 30 g
RBR2	PT-2	Freshwater	12,500	Parr Tank - 5 to 30 g
RBR2	PT-3	Freshwater	12,500	Parr Tank - 5 to 30 g
RBR2	PT-4	Freshwater	12,500	Parr Tank - 5 to 30 g
RBR2	PT-5	Freshwater	12,500	Parr Tank - 5 to 30 g
RBR2	ST-1	Freshwater	25,000	Smoltification Tank (simulated winter photoperiod) - 30 to 100 g
RBR2	ST-2	Freshwater	25,000	Smoltification Tank (simulated winter photoperiod) - 30 to 100 g
RBR3	GT-10	Brackish	235,000	Grow-out Tank - Not in use
RBR3	GT-11	Brackish	235,000	Grow-out Tank - Not in use
RBR4	GT-12	Saltwater	340,000	Grow-out Tank - 100 to 1,000 g
RBR4	GT-13	Saltwater	340,000	Grow-out Tank - 100 to 1,000 g
RBR4	GT-14	Saltwater	340,000	Grow-out Tank - 100 to 1,000 g
RBR4	GT-15	Saltwater	340,000	Grow-out Tank - 100 to 1,000 g
RBR5	GT-16	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
RBR5	GT-17	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
RBR5	GT-18	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
RBR5	GT-19	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
RBR5	GT-20	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
RBR5	GT-21	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
RBR5	GT-22	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
RBR5	GT-23	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
RBR5	GT-24	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
RBR5	GT-25	Saltwater	340,000	Grow-out Tank - 1,000 to 4,000 g
	HT-16	Saltwater	90,000	Harvest / Purge Tank
RBR6				
RBR6	HT-17	Saltwater	90,000	Harvest / Purge Tank

#### 2.6 System - Water treatment

The treatment of Recirculating Aquaculture System (RAS) water on-site is divided into two main categories: primary treatment and secondary treatment.

Primary RAS treatment occurs within the individual grow-out systems, each of which consists of between one and ten tanks. These systems include in-line treatment processes tailored to the needs of the stock being raised. Wastewater from all primary systems is collected and directed to a centralized secondary treatment process.

The secondary treatment involves separating solid waste from the water, reconditioning the water to its original quality, and then returning it to the respective grow-out systems. This closed-loop process ensures consistent water quality and minimizes environmental impact.

All incoming seawater is treated through ozonation and filtration to eliminate pests and potential disease vectors before being introduced into the system. Within the primary RAS units, treatment includes the removal of carbon dioxide via degassing vessels, biofiltration to manage ammonia and nitrite levels, temperature control, pH adjustment using sodium hydroxide, and ozonation. In the hatchery systems, UV sterilization is also applied to ensure biosecurity.

A summary process flow diagram illustrating the RAS treatment components is provided in Figure 4.

Recirculation Process Flow
(RBR1-RBR5)

Ongen Generation System

Ongen System

Pennay Secondary Fines/against System

Fish Tains

Pennay Secondary Fines/against System

Automitted
Control

Figure 4: Recirculation Process Flow Diagram

Oxygen is provided by one of three on-site oxygen generation systems. Additionally, two bulk liquid oxygen installations are located on-site to serve as backup or to supplement supply as needed. The backup oxygen system is sized to sustain operations for a minimum of 96 hours in the event of an interruption in on-site oxygen generation.

The site is also equipped with 3 MW of backup power capacity, distributed across three diesel generator installations. These generators are capable of supplying power to the entire facility during a power outage. Fuel storage on-site is maintained at levels sufficient to support a minimum of 96 hours of continuous operation.

#### 2.7 Containment

All grow-out facilities that house fish are located within secure, covered, and locked buildings. There are no external pipes or connections between these buildings and the surrounding environment. Waste generated from both hatchery and grow-out operations is collected in internal sumps or tanks, fully contained and isolated from the external environment. All waste, including mortalities and culls, is removed from the site and transported to an approved municipal or provincial disposal facility.

#### 2.8 Site History

The facility is located at 259 Red Bank Road, Centre Burlington, Nova Scotia. The property comprises 58 acres, approximately 30 of which have been cleared and developed to support current operations. SFFC acquired the site in its undeveloped (virgin) state in 2007.

#### 2.9 Technical Ability

The design and operation of the farm have been overseen since its inception by has over 35 years of experience in the design, construction, and operation of Recirculating Aquaculture System (RAS) technologies. He holds a PhD in Chemistry from the University of Strathclyde in Glasgow, UK, and has managed several companies involved in the development and operation of RAS aquaculture facilities.

Prior to the receivership, SFFC's Chief Executive Officer was Mr. Kirk Havercroft. He was retained by the Receiver to continue managing the farm during the restructuring process and remains CEO under the new ownership of 4644903 Nova Scotia Limited. Mr. Havercroft holds a degree in finance and has been involved with SFFC since its founding. He brings over 25 years of experience in the management and financial oversight of aquaculture RAS companies.

serves as the company's Technical Engineer. He has over 10 years of experience as a process engineer in the region and has worked with the company (formerly Sustainable Blue) for the past six years.

The company maintains a dedicated maintenance department staffed by three full-time employees, including a Red Seal—certified electrician. In total, the company employs 27 people.

The production and operations team include a chief operating officer, farm manager, production manager, technical officer, aquaculture supervisors, aquaculture technicians and a fish transfer team. All new employees participate in a three-month in-house training program, followed by ongoing on-site training throughout their first year.

A post-receivership organizational profile is provided in Figure 5.

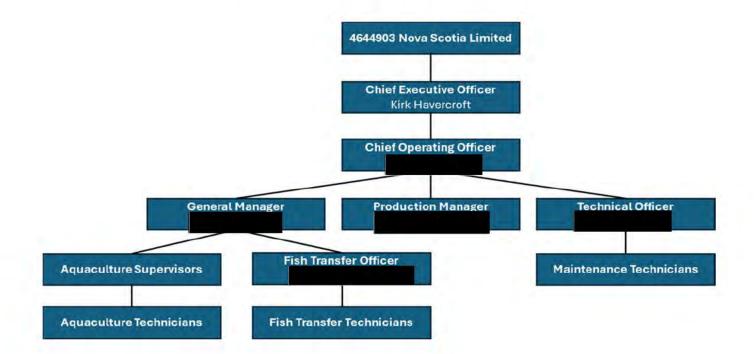


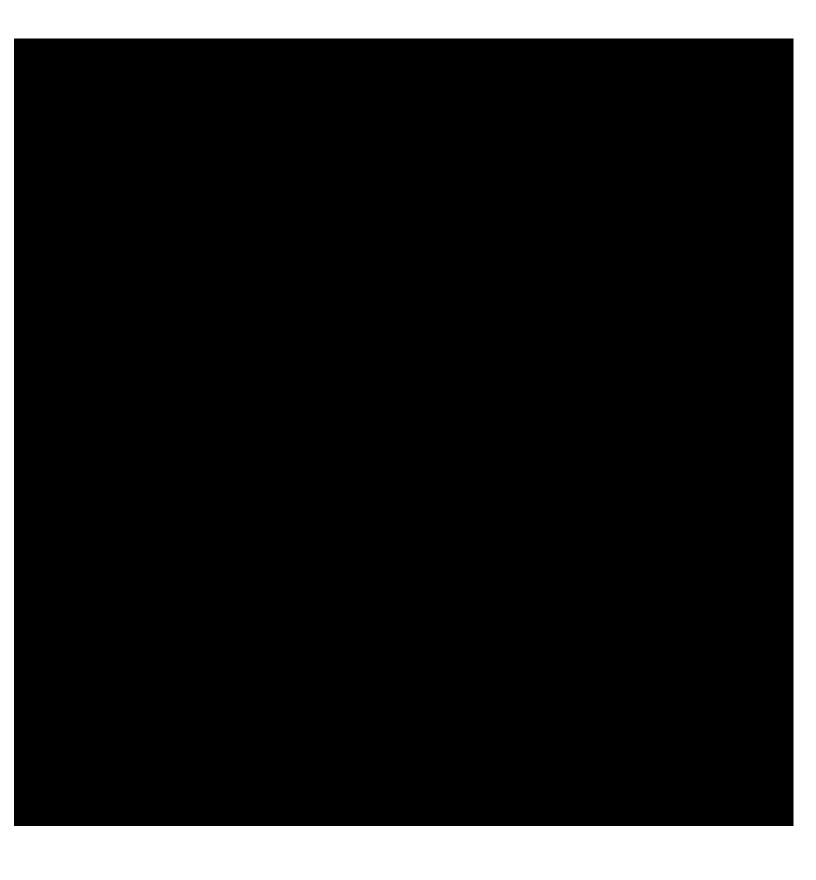
Figure 5 - Company Organizational Chart

#### 2.10 Compliance History

Having little (initially) or no (presently) discharge, no groundwater extraction, and no fish escape routes has meant that compliance with water extraction and discharge permits was easily achieved or not required.

### **Section 3: Financial Viability**

3.1 Financial ability



#### Section 4: Other Users of Area Surrounding the Proposed Aquaculture Operation

#### 4.1 Impacts to other users including wildlife

As all operations are contained onsite and primarily inside enclosed buildings there are no expected impacts on other users including wildlife. Historically the adjacent property owner expressed concern about lighting and noise. These were addressed through mitigating measures and as a result there have been no issues since.

#### 4.2 Impacts by other users including wildlife

There is no expected impacts by others including wildlife.

#### 4.3 Navigation Protection Act (NPA) approval.

As all components of the operation are on land, there is no requirement for an NPA approval.