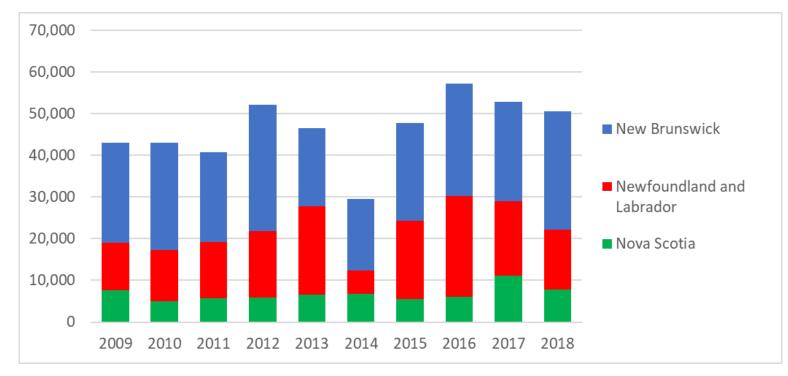
Overview Socioeconomic Benefits of Salmon Farming in Atlantic Canada

> Prepared by: RIAS Inc. September 2020

Salmon Farming: A Key Economic Driver in Atlantic Canada

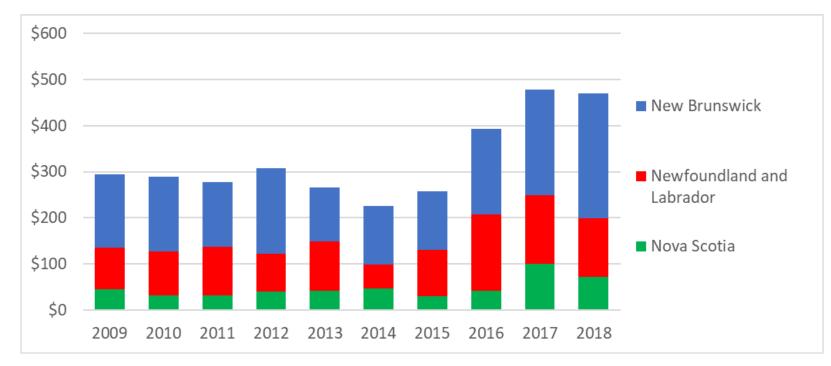
- Salmon farming is an important economic driver for Atlantic Canada, bringing prosperity and year-round, full-time jobs to rural, coastal communities across the region.
- As Atlantic Canada emerges from COVID-19 shut downs, the salmon farming industry is well positioned to assume a critical role in the region's post COVID-19 recovery strategy.
- The industry has tremendous potential to generate the economic benefits, jobs, investment, and regional growth that could significantly accelerate the Atlantic Canada's recovery, and do so in an environmentally and socially responsible way.

Production of Farmed Salmon in Atlantic Canada (tonnes)



Source: Statistics Canada (2020a)

Trade in Farmed Salmon, Atlantic Canada (tonnes)



Source: Statistics Canada (2020a)

Economic Impacts of Salmon Farming (2018)

					Atlantic
		NL	NS	NB	Canada
Direct	Output (\$M)	\$128.1	\$71.6	\$270.5	\$470.2
	GDP (\$M)	\$53.1	\$39.3	\$120.1	\$212.5
	Wages (\$M)	\$11.9	\$6.6	\$29.7	\$48.2
	Employment (PYs)	296	198	870	1,364
Indirect and Induced	Output (\$M)	\$55.7	\$35.9	\$110.4	\$202.1
	GDP (\$M)	\$24.7	\$15.1	\$46.1	\$85.9
	Wages (\$M)	\$11.9	\$8.1	\$23.1	\$43.0
	Employment (PYs)	248	198	536	982
Total	Output (\$M)	\$183.8	\$107.5	\$380.9	\$672.3
	GDP (\$M)	\$77.8	\$54.4	\$166.2	\$298.4
	Wages (\$M)	\$23.8	\$14.7	\$52.9	\$91.3
	Employment (PYs)	544	397	1,406	2,346

Source: RIAS Inc. calculations

Total Economic Impacts of Salmon Farming Sector (2018) Includes processing

					Atlantic
		NL	NS	NB	Canada
Direct	Output (\$M)	\$307.4	\$115.9	\$709.2	\$1,132.5
	GDP (\$M)	\$112.5	\$51.4	\$241.7	\$405.6
	Wages (\$M)	\$41.1	\$14.9	\$92.1	\$148.1
	Employment (PYs)	652	383	2,892	3,926
Indirect and Induced	Output (\$M)	\$261.0	\$97.7	\$505.2	\$863.8
	GDP (\$M)	\$119.7	\$44.3	\$229.5	\$393.5
	Wages (\$M)	\$58.8	\$23.3	\$119.0	\$201.1
	Employment (PYs)	1,124	504	2,531	4,159
Total	Output (\$M)	\$568.4	\$213.5	\$1,214.4	\$1,996.3
	GDP (\$M)	\$232.2	\$95.7	\$471.2	\$799.1
	Wages (\$M)	\$99.9	\$38.2	\$211.1	\$349.2
	Employment (PYs)	1,776	886	5,422	8,085

Source: RIAS Inc. calculations

An Environmentally Sustainable Sector

A very efficient and environmentally sustainable food protein source

Sustainability Metric		V	a a		Unit of Measurement
Carbon Footprint	0.60	0.88	1.30	5.92	carbon dioxide equivalent (g CO2eq) per typical serving (40 g) of edible protein
Land Use	3.7	7.1	11.0	102	area (m2) to produce 100g of protein
Water Consumption	2,000	4,300	6,000	15,400	Litre per kg of edible meat
Feed Conversion	1.2-1.5	1.7-2.0	2.7-5.0	6.0-10.0	kilograms (kg) needed to increase the animal's bodyweight by 1kg
Protein Retention	28%	37%	21%	14%	grams protein in edible portion / grams protein in feed
Calorie Retention	25%	27%	16%	7%	calories in edible portion / calories in feed
Energy Retention	23%	10%	14%		energy in edible parts / gross energy fed
Edible Yield	68%	46%	52%		edible meat / total body weight

- Source: <u>https://globalsalmoninitiative.org/en/sustainability-report/protein-production-facts</u> and Mowi (2019) Science-based practices that minimize stress, maintain a healthy aquatic environment, reduce • disease risks, and prevent the spread of diseases
- Environmental interactions minimized through proper siting, management of habitat impacts, . and escape prevention measures.

A Socially Responsible Sector

- Salmon farming takes place within remote coastal communities across Atlantic Canada.
- Farmed seafood companies & employees support local events and invest in communities through corporate giving, volunteering, jobs, and infrastructure.
- Other social and community benefits include:
 - o commitment to wild salmon protection/restoration
 - production of safe and healthy products with high nutritional value
 - \circ sophisticated traceability systems and third-party certification
 - partnerships with indigenous peoples and year-round jobs for Atlantic Canadians
 - \circ food security





SALMON FARMING IN NEW BRUNSWICK CREATES: 5,422 jobs \$1.2 BILLION economic output **181 MILLION** meals

SALMON FARMING IN NEWFOUNDLAND **AND LABRADOR CREATES:** 1776 jobs \$568 MILLION economic output 92 MILLION meals





Future growth in the farmed salmon sector could **increase annual economic output across Atlantic Canada by \$2.57 BILLION**.



This increased output would generate \$1 BILLION additional GDP per year, and \$450 MILLION in wages for 10,400 additional workers in Atlantic Canada.