

# **Community-Based Sustainable and Equitable Employment in Aquaculture on the Burin Peninsula**



**Harris Centre Thriving Regions Grant Final Report**

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Prepared for: The Harris Centre & The Communities on Burin Peninsula

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The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy.

## **Acknowledgments**

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## EXECUTIVE SUMMARY

The conceptualization of this study was initiated through the Harris Centre Thriving Regions Process which provides funding and support to researchers from Memorial University to build partnerships that help promote thriving social and economic regions through applied research. In 2019 community members who attended a workshop on the Burin peninsula organized by the Harris Centre identified four priority areas that could support community, economic and social development in the area

The present study covers two of the priority areas: 1) Attraction and retention of workers and families, and, 2) Ocean health and seafood opportunities, through the study of recruitment and retention in the aquaculture sector in the Burin Peninsula.

### Objective

The objective of this research project was to **co-create** with community and industry partners:

1) An understanding and a plan for addressing issues of recruitment & retention of the aquaculture workforce, including:

- Understanding labour shortages [current workforce, potential employment opportunities, gaps in training, education, skills, recruitment strategies at company and community level, Temporary Foreign Worker Program, Seasonal work patterns, etc.]
- Understanding issues related to immigration and migrant workers [worker and potential long-term community members: attraction and support for international workers and their families]
- Understanding issues related to education and training



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2) An understanding and a plan for addressing opportunities for sustainable aquaculture employment, including:

- Creating long-term, secure, full-time, non-precarious work opportunities; understanding the issues around local vs non-local workforce; addressing sustainable industry practices, risk mitigation and ramifications for employment, and sustainable ocean management for other ocean users (fish harvesters, recreational etc.)

## Goals

In focusing on both recruitment and retention and sustainable aquaculture employment in the emerging salmon aquaculture industry on the Burin Peninsula, we aimed to bring our knowledge of these two areas to the key stakeholders and communities and start a conversation about the potential benefits, concerns, and solutions for dealing with employment in aquaculture. We envisioned two potential main deliverables: 1) A collaborative report/presentation on potential benefits, concerns, and solutions; and, 2) a website that could be used to link potential employees with training, educational institutions, community supports, and employment opportunities.

## Outcome

Due to Covid-19 restrictions, research methods had to be adjusted, and community engagement scaled back. Therefore, we did not go forward with the website deliverable. The report findings are based on 22 semi-structured key informant interviews and an online survey with 91 participants, as well as secondary findings from newspaper articles, and government and industry reports.

## Main Findings

Preliminary findings from both the interviews and surveys showed that there was an overall desire for increased information and greater transparency on future employment opportunities that would allow individuals interested in working in the aquaculture industry, as well as educational institutions, and other community labour support programs, to plan, prepare, and align training with future employment.

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## BACKGROUND

The Burin peninsula, like other regions in Newfoundland and Labrador, has been experiencing population decline due to the combination of outmigration, and an aging population. In 2016, the population on the Burin Peninsula consisted of 19,795 residents and projections reveal this number will decrease to 14,000-16,000 in 2036<sup>i</sup>.

In 2019 community members who attended the Harris Centre workshop on the Burin peninsula identified four priority areas that could support community, economic and social development in the area:

1. Realizing tourism potential
2. Senior and child friendly communities
3. Attraction and retention of workers and families
4. Ocean health and seafood opportunities

This study covers two of the priority areas identified by the Burin peninsula community participants: 1) Attraction and retention of workers and families, and 2) Ocean health and seafood opportunities. The study could also contribute to the theme “senior and child friendly communities”, as attractive work and sustainable use of local resources have the potential of creating social and economic opportunities that improve the livelihoods of communities including seniors and children.

Not surprisingly, decreasing populations often coincide with decreased employment opportunities. As people and businesses leave the area, and overall population and potential employment opportunities decrease, this contributes to labor shortages, among other factors, including challenges to fund public services<sup>ii</sup>. Thus, attraction and retention of workers is one of the main issues that concerns communities in areas with a declining population. The Burin peninsula is a region with a rich history of marine based industries.

Aquaculture, specifically salmonoid aquaculture has been occurring on the Connaigre Peninsula since the 1980s<sup>iii</sup>. The Grieg NL project at the Marystown shipyard is the first salmon aquaculture production on the Burin and the first land-based model in the province. The Grieg NL salmon aquaculture project and related economic development in the seafood sector via the proposed marine hub Marbase, offered hope in the area to be able to attract and retain workers and families and to further create economic opportunities in the local seafood sector<sup>iv</sup>. When we started this project, Grieg NL, on

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its website, stated that they expected to generate 440 direct jobs and 380 jobs in affiliated sectors by 2022<sup>v</sup>. This was an exciting and hopeful development for the region, and would double the direct employment number for the aquaculture industry<sup>vi</sup>.

However, concerns around labour shortages due to the small population and potential skills mismatch raised questions about how the aquaculture industry will fulfill these jobs<sup>vii</sup>. Educational institutions, such as the Marine Institute (MI) and the College of the North Atlantic (CNA), have been flagged as providing education for new entrants into aquaculture, and the use of federal and provincial immigration programs has been discussed as ways to address these labour shortages<sup>viii</sup>.

Issues around labour in aquaculture, including recruitment and retention, and education and training are not new in Canada<sup>ix x xi</sup>. Issues raised include decreasing jobs alongside increased production, as well issues with the increase in hiring through federal migrant labour programs.

Newfoundland and Labrador Aquaculture Association (NAIA) commissioned the following reports which were published in 2018: *Labour Market Analysis of the Newfoundland and Labrador Aquaculture Industry*<sup>xii</sup>; *Training Capacity Review - Canadian Aquaculture Programs*<sup>xiii</sup>; and *Aquaculture Recruitment & Retention Strategy for Newfoundland and Labrador*<sup>xiv</sup>.

Findings from the *Labour Market Analysis of the Newfoundland and Labrador Aquaculture Industry*, which included workers from the shellfish and finfish aquaculture industry in Newfoundland as a whole, found that 1) workers chose aquaculture because they wanted to stay in their own communities, 2) retention was not seen as a current issue, but was raised as a potential future issue, 3) there were plans by employers to hire over 150 new workers in the next 5 years, and 4) workers were interested in training and education to further their skill sets (p.1). Barriers that were identified by participants to accessing skill upgrades included the cost of travel and relocating, as well as the lack of additional training opportunities, and age. Another important finding from this report was the gender division of labour - with significantly more men than women working across all positions except seafood processing, which was predominately women. Thus, the recommendations for increasing recruitment and retention from this report included considerations of wages, shifts schedules, employment advancement opportunities, increasing the number of women working in all positions, and the infrastructure needed to entice young families to live and work in these remote areas where aquaculture is located. Consideration for rotational travel in/out as well as the use of Canada's foreign workers programs were also suggested.

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In the *Training Capacity Review - Canadian Aquaculture Programs* report, an overview of current Canadian Aquaculture programs is provided. Key findings include that most workers learn and are trained on the job, but felt they benefited from school-based learning. Technological changes in aquaculture were cited as a major area needing to be addressed in future training/courses, and online learning was expected to grow. Attention to UK models of aquaculture apprenticeship programs that allowed different levels of entry, and further job mobility through on-the-job training was proposed in the report as a viable solution for the Newfoundland industry given the results of the labour market analysis study.

Similarly, in the *Aquaculture Recruitment & Retention Strategy for Newfoundland and Labrador* report, there were no recruitment issues or knowledge/skill gaps identified at that time (2017-2018) but the looming technological changes to the industry were identified as changing the requirements for workers in this industry. An important recommendation from this report was to create a unified voice through a website for industry promotion and information that NAIA could facilitate.



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## INITIAL RESEARCH OBJECTIVES

The objectives of this research were to be co-created with community and industry partners. Our initial goals included:

1) Understanding and addressing issues of recruitment & retention of the aquaculture workforce, including:

- Understanding labour shortages [current workforce, potential employment opportunities, gaps in training, education, skills, recruitment strategies at company and community level, Temporary Foreign Worker Program (TFWP) etc., Seasonal work patterns]
- Understanding the issues related to the use of Immigration/migrant workers [worker and potential long-term community members: attraction and support for international workers and their families]
- Understanding the education/training needs of the sector

2) Understanding and addressing opportunities for sustainable aquaculture employment, including:

- long-term, secure, full-time, non-precarious work opportunities; local vs non-local workforce; sustainable industry practices, risk mitigation and ramifications for employment, sustainable ocean management for other ocean users (fish harvesters, recreational etc.)

In focusing on both recruitment and retention and sustainable aquaculture employment in the emerging salmon aquaculture industry on the Burin Peninsula, we aimed to bring our knowledge of these two areas to the key stakeholders and communities and start a conversation about the potential benefits, concerns, and solutions for dealing with employment in aquaculture.

A focus on youth, women, elder, and migrant workers aimed to link issues of employment equity with filling labour shortage gaps. We envisioned two main deliverables: A collaborative report/presentation on potential benefits, concerns, and solutions and a website that could be used to link potential employees with training, educational institutions, community supports, and employment opportunities.

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## COVID-19 ADJUSTMENTS

Initially the project aimed to start in the Summer of 2020. As we had planned to engage in participatory methods with willing communities, we had planned to first set up meetings (3 in total) in June and July 2020, to set objectives and desired outcomes of community and industry stakeholders. The geographical focus was three main regions of the Burin Peninsula, spending one week in each region. These initial meetings were to inform our report and the design and application of the website. In addition to the meetings, we planned to conduct semi-structured interviews with relevant stakeholders (industry, provincial and municipal government, educational institutions, and relevant regional and community organizations). We then planned to travel back to the Burin peninsula in December to hold 3 regional consultation meetings over three days to present our initial findings and to receive feedback on the relevance, and to return to the Burin regions in May 2021 to hold 3 regional meetings over 3 days to present the final results and to launch the website.

Due to the global Covid-19 pandemic in the Spring of 2020, we first postponed our project, in the hopes that the pandemic would be over within the year, and we could carry on as planned, but with a delayed timeline. We realized in the summer of 2021 that we were running out of time to complete the project before our own employment contracts would end, and so revised our project aims and timelines. We started online (remote) interviews with key informants in September 2021. We planned to hold community meals in October/November, but Covid-19 outbreaks were continuing and we decided instead to hold a Facebook live event. We created a Facebook page for the project, and posted invitations for the event, which due to technological issues, we were unable to broadcast. We recorded a video of our study and posted this to the website. We then contacted every municipality on the Burin Peninsula to inform them of our study and asked that they would share with their community members. We spent 3 days on the Burin in November 2021, and again in December 2021 to hold key informant interviews, and to connect with municipalities to let them know about our study, and to gauge their interest in participating with us.

While we saw potential in the development of a website that would act as a hub for interested new employees to find all the educational and employment relevant information on working in aquaculture on the Burin, we were unable to develop the website due to the restructured research methods from the Covid-19 restrictions, which limited our ability to engage fully with the communities and workers. In addition, there was no current representative group of key individuals (such as representatives from

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Grieg and other spin off companies, educational institutions, including MI, CNA and Keyin College, and relevant municipal and provincial governments employees) that have come together to collectively and with current updated employment information, to address this issue. This would be a first step to ensuring that a website would have the necessary and relevant information. Future work in this area is important.

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# STUDY DESIGN

In addition to understanding and ensuring employment opportunities, it is also important to work with communities to understand how the Burin Peninsula population could benefit from the development of aquaculture in their region, as well as the impact of fish farming on local businesses and fish harvesters. The report findings are based on 22 semi-structured key informant interviews and an online survey with 91 participants, as well as secondary findings from newspaper articles, and government and industry reports.

## Summary of Key Informant Interviews

This research project offered an opportunity to engage with community organizations and other relevant key informants. We attempted to talk to Mayors, municipal councilors, employment councilors, the Fish, Food and Allied Workers Unions (FFAW), aquaculture representatives from GriegNL, Marbase, Newfoundland and Labrador Aquaculture Industry Association (NAIA), the College of the North Atlantic (CNA), Keyin College, the Marine Institute (MI), the Association for New Canadians (ANC), senior organizations, daycare providers operating or delivering services to residents on the Burin peninsula, and other relevant spin off industries to create grounded and applicable research catered to developing viable and healthy communities and economies in the region. While not everyone responded, and some wished to remain anonymous, we were successful in connecting with people from most of these organizations/groups.

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*22 semi-structured interviews*

*online survey with 91 participants*

*findings from newspaper articles, and government and industry reports*

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## Summary Survey responses

The online survey was launched November 30<sup>th</sup>, 2021 and it was closed December 7<sup>th</sup>, 2021. There were 266 visits to the online survey, but only 91 participants answered at least one question from the seven core questions that required a text answer. About half of participants were men (51%, n=46) and about half were women (49%, n=45). Participants had an average age of 44.5 years, the youngest respondent was 23 years old, and the oldest respondent was 79 years old. There were no significant age differences between genders and all participants (n=91) self-identified as “White or Caucasian”.

**Table 1.** Age groups by gender of survey participants (only 75 participants reported their age)

Age groups	Men	Women	Total
	n (%)	n (%)	n (%)
20-29	6 (16.22)	9 (23.68)	15 (20)
30-39	10 (27.03)	4 (10.53)	14 (18.67)
40-49	7 (18.92)	9 (23.68)	16 (21.33)
50-59	9 (24.32)	10 (26.32)	19 (25.33)
60-69	4 (10.81)	6 (15.79)	10 (13.33)
>69	1 (2.7)	0 (0)	1 (1.33)
Total	37 (100)	38 (100)	75 (100)

Twenty-two participants reported they worked in the aquaculture sector (Table 2). The two participants who reported that they did “Other work in aquaculture”, one explained they worked as a fish harvester and one in healthcare.

**Table 2.** Number of Respondents Working in Aquaculture

	n*
Aquaculture Farm	8
Aquaculture Office	3
Construction	7
Other work in aquaculture	2
Service/Supply	2
<b>Total</b>	<b>22</b>

\*Multiple choice question, some participants reported two categories

We also sent out an online survey to all municipalities on the Burin but had no response.



## FINDINGS SUMMARY

Our findings from the key informant interviews and survey provided information on the following themes:

Key Issues identified around employment in aquaculture on the Burin Peninsula	<ul style="list-style-type: none"> <li>▪ High demand for employment opportunities in the area</li> <li>▪ High employment in development/construction phase</li> <li>▪ A need to work with local educational Institutions to coordinate training</li> <li>▪ Concerns about nepotism in hiring - who you know</li> <li>▪ Year-round processing more attractive for younger people to enter seafood processing</li> <li>▪ Low wages</li> <li>▪ Services for families/internet/cell service</li> </ul>
Vision for employment in aquaculture in the region	<ul style="list-style-type: none"> <li>▪ Steady year-round employment</li> <li>▪ Available to anyone who wants to work in aquaculture</li> <li>▪ Living wage &amp; benefits</li> <li>▪ Permanent work/seasonal</li> <li>▪ Jobs for locals</li> <li>▪ Good and safe working conditions</li> </ul>
Key information needed about employment in the aquaculture industry	<ul style="list-style-type: none"> <li>▪ Training required and offered locally</li> <li>▪ Job titles</li> <li>▪ Number of people needed</li> <li>▪ Timeframe</li> <li>▪ Co-op program with the high school</li> <li>▪ Hiring process</li> </ul>
Impacts of aquaculture growth in the community	<ul style="list-style-type: none"> <li>▪ Increase in migrant/immigrant workers</li> <li>▪ Increase in employment offer</li> <li>▪ Economic growth through creation of spinoff industries</li> </ul>
Impacts of aquaculture development on other industries (Fishing, tourism etc.)	<ul style="list-style-type: none"> <li>▪ Environmental concerns</li> <li>▪ Provide opportunity for economic growth of other industries</li> </ul>
Impacts of Covid-19 on the development of aquaculture in the region (Grieg's/Marbase)	<ul style="list-style-type: none"> <li>▪ Decrease in numbers employed</li> <li>▪ Delayed timeline</li> </ul>
What the study should focus on/deliver	<ul style="list-style-type: none"> <li>▪ Information about employment opportunities, wages, training</li> <li>▪ Updated information delivered on a website, maybe a social media outlet (e.g. Facebook)</li> <li>▪ Information about aquaculture employment across the province</li> </ul>

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## DETAILED FINDINGS

### Community History/background

*KI 7: Well, you know, the fishery was a major, major employer here in the Burin Peninsula, the cod moratorium had immense impact in the Burin Peninsula. The largest fish plant, I understand, in Newfoundland and Labrador was in [Marystown]. There was also a significantly sized fish plant in Burin, as well as in St. Lawrence, Fortune, and Grand Bank had smaller plants [laughs], in other areas. And in connection with the fish plant in the 60's, there was the development of the Marystown shipyard, which primarily built vessels for the [draggers and such]. And so, the two major employers in this area, and Marystown immediately, certainly was the – were the fish plant and the shipyard.*

Almost everyone we spoke to mentioned the historical significance of the ocean and its marine life to the communities on the Burin. The commercial fishery including seafood processing, despite its decline, has shaped the communities and people that make up the Burin Peninsula, and as such, there is pride and respect for the health of the surrounding waters. Additionally, the history of the fishing industry has shaped how and who has worked in the industry, some of which, such as the significance of work in processing plants, and seasonal patterns of work, are still relevant. Fishing is not the only industry with a strong history in the area, and both mining, and oil and gas (both locally, provincially, and in other provinces) also have reshaped how local people think about and engage with work in the area. Thus, higher wages and the benefits that come with higher earnings is one aspect, but other important factors in how people in the area are thinking about work include, the benefits of staying closer to home, and the ability to spend time with family.

Aquaculture is also not new to the area, with participants mentioning cod ranching, as well as mussel and oyster farms located in the area. Currently however, aside from one mussel farmer, salmon aquaculture is the main aquaculture company in the area, with a non-compete clause that restricts other salmon aquaculture development in Placentia Bay. Thus, until the non-compete clause is no longer at play and other salmon companies can access the area, one salmon aquaculture company is the benefactor of both government and community support in the area. This also means that one salmon aquaculture company is responsible for upholding the promises of employment and community benefits that were an integral part of the government fiscal support.

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Leading up to the project start date, Grieg, as well as provincial and municipal governments have been vocal about the need for sustainable long-term employment in the area, and often referenced how the Grieg development will specifically address and improve this.

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*“...This aquaculture investment is transformational for the industry in our province and will strengthen communities on the Burin Peninsula and around Placentia Bay, spur regional economic growth and support the creation of hundreds of good, well-paying jobs.”*

*Churence Rogers, Member of Parliament for Bonavista-Burin-Trinity*

*“As the seafood sector evolves, today’s announcement will bring about good stable jobs and economic growth for the entire Placentia Bay area. We have seen successes by similar operations in other regions of the province, and this arrangement with Grieg NL will result in positive developments for both the local population and our provincial seafood industry as a whole...”*

*Mark Browne, MHA for Placentia West – Bellevue*

*“This project has strong potential in terms of export market opportunities and economic benefit, especially in outport Newfoundland. An operation of this size will provide very significant employment opportunities, resulting in a much needed major boost to the current economy of NL and providing prospects for graduates to utilize their skills and knowledge in their home province. Newfoundland is world renowned for some of its training facilities and the graduates that it produces. The Fisheries and Marine Institute of Memorial University is one such training facility that GNS has already utilized for recruiting skilled employees and will continue to utilize this and other training facilities in the province for its workforce.”*

*Grieg Newfoundland Salmon Ltd.2016, p.1.*

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Additionally, conditions on labour were part of the Memorandum of Understanding (MOU) between Grieg and the Government of Newfoundland and Labrador, as well as part of the Environmental Assessment - both key documents in the approval process for the project and its future impacts. For example, the MOU states that the Grieg project will provide 325 direct, and 235 indirect/induced persons years of employment in production, harvesting and processing combined.

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## Key Issues identified around employment in aquaculture on the Burin Peninsula



(Gray Aqua Group, <https://naia.ca/index.php/media/photos>)

In asking participants what the key issues were for them around employment in aquaculture a variety of different issues and concerns were raised. Often highlighted was the high demand for employment in the area, and while this was somewhat filled during the construction phase of the project, that the expectation for local employment in aquaculture was not met. For example, people mentioned that many people were laid off, and that some who applied didn't get hired. This led to concerns about misinformation on the number of actual jobs, or that who was being hired was based on nepotism, or that many who were hired were not from the local area, and that the jobs were not well paid.

**KI 6: And around here too, it's desperate, people want jobs. So when you come out with a number – the net number – whether it's construction, the hatchery or whatever...and that's like a promise to them. That's like how people operate. They're just programmed to think like that. And then they plan their life around that, so it takes on a very serious implication.**

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Another interesting point that was brought up by many people was that for younger people to stay or to move to the area and raise children, the recreational and other community services for families, including better cell coverage, would need to be improved.

**KI 4: I would say things for families. Workers that most people are looking at are probably young families. Parents that have young families, they're ideal employees, because they're young and educated or whatever. But if there's nothing for your kids to do, or they also community, activities and resources. There's lots of outdoor things to do here. Which is appealing to young people. Loads of hiking trails, and all that kind of stuff. But I think a really big thing is a lack of access to cell service and internet. What young person wants to live in a town with no internet? You can't get high speed internet. A lot of the peninsula has satellite internet, so when it's foggy, you can't watch a video on YouTube. Or do a Zoom call.**

Issues around training and education requirements were also raised; here the issues were complex and related to not knowing what was needed, not knowing where to go, or how long the training would take, and not being able to take aquaculture courses locally. Of significance was a pilot program offered locally that did not result in employment by most of the people who took the course.

**KI 8: Yes, well I guess the first one that always comes to mind for me, is just the lack of education around it right now. I think that's - as much as I'd like to see people moving into the area to work at aquaculture - that I think there's just probably just as many people who may be interested in pursuing aquaculture that are from the area. So, I think that there needs to be more education for people. And I know when I was at the College, that was something that we discussed a lot, was how do people train locally for positions within aquaculture?**

Other issues included training taking too long, but also low enrollments in the current courses offered. Barriers for local workers included the type of work and thus training required, specifically that work in aquaculture is becoming increasingly reliant on technology, which requires specific training/schooling and differs from traditional farm or fishing labour.



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## A vision for employment in aquaculture in the region

Participants overwhelmingly described their vision of employment in aquaculture as a “good job”. They described hope in that these jobs would provide a living wage and benefits, would be safe and healthy places to work, and would provide permanent and secure jobs for those who live in the area, or would like to move to the area, to work in aquaculture.

**KI 7: I think just well-paying jobs with, you know – and, you know, foster the opportunities for people to, you know, gain the education to participate in the industry and the benefit. Early on... sort of, you know, having the equal opportunity locally. So, I think that’ll be important for a lot of people, is that they can – is that if there are jobs to have, that local people get a good opportunity to have them. Having said that, I also believe that, you know, if people are moving to the area, then that’s a wonderful thing.**

**KI 9: Steady, year-round employment...if there was steady employment versus so many weeks a year, I think steady is the course. So, I'd like to see a year-round employment if that was possible. But I don't know if it is with aquaculture...But that would be my key thing is say year-round employment, so that people can have a steady lifestyle.**

**KI 3: Well, what it would look like, as long as it’s available and it’s available to everyone and anyone that wants it, regardless of their, you know, their age, their sex, their nationality, their race or what have you.... I mean, the main thing I want to see out of aquaculture is that, you know, there’s jobs available, and they’re responsible. And I mean, that’s general and open, but, you know, jobs open to anybody and everybody so that, you know, if my kids want to stay here on the Burin Peninsula and work in the aquaculture industry, they’re able to do that. But if they don’t, that the jobs are open and available to anybody who may want to come here, regardless of who or what or why they are, you know.**

Participants wanted access to secure and stable jobs for locals and others. They understood that this is the type of work that supports community because it supports people’s ability to live healthy and secure lives. This finding mirrors the findings from the *Labour Market Analysis of the Newfoundland and Labrador Aquaculture Industry* report, where wages, shift schedules, gender parity, and social infrastructure for young families was flagged as important factors for labour recruitment and retention.

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## Key information needed about employment in the aquaculture industry

Overwhelmingly, across the different sectors represented by participants, a need to have access to detailed information about employment and training required was requested. This included specific job titles, the number of positions, the timeframes for hiring and coordinated educational programs, as well as hiring processes made available early and offered locally so local people could plan to work in aquaculture. This also included planning with high schools via coop programs.

**KI 14: We need help from Grieg where they go to the local community groups and say, you know, “Does your son or daughter have – are they currently second, third, fourth year at MUN or Dal or St. FX because we have an opportunity for them to come home if they want.**

**KI 4: But I would want to know what kind of training do people need? How long does that take? If my husband wanted to quit his job again? Or could he go to school for a year or two? And then find the job here? Are there going to be lots of jobs? Are they going to be permanent? Is this going to be a five-year plan? And then we'll see....I would like to know I guess numbers? The potential for jobs in the region? What is the potential? Is this going to be 10 jobs, 20 jobs, 500 jobs potentially? And what kinds of organisations or businesses would – are these new? Is this new start-ups? Is it companies that are here already that are expanding? Where are the jobs coming from? Where are people working? And what town?**

**KI 6: I worry right now, so I don't know what's going to happen in the future. What are the type of jobs? How many people are going to be required? I know we have a state of the hatchery being built – the size of five Wal-Mart's we were told... Maybe a nice big sign outside and it's identified. You go to Kaetlyn Osmond Road, and I know all these things and I'm passing it. But for the regular person, I think there's a lot of things to celebrate. There's good news there...But if there's good opportunities there for people, maybe it's time to go back to the table and reopen that conversation.**

## Impacts of aquaculture growth in the area

Participants discussed the economic impacts of aquaculture growth in the area including the increase in employment opportunities directly from aquaculture as well as from the spin off industries. In addition, participants talked about the likely possibility of the use of temporary migrant and immigrant workforces to fill expected labour shortages, as exemplified by the quote below.

**KI 14: Short-term the potential is there to have a lot of community engagement or a lot of members of community working directly, but I mean all you've got to do is look at the demographics. Long-term no. The immigration policies both provincially and federally are going to be key to the success of this industry. The only way this works well is through immigration, you know, my opinion.**

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## Impacts of aquaculture development on other industries (fishing, tourism etc.)

Participants were asked about any impacts (both positive or negative) that the aquaculture development on the Burin Peninsula could have on other industries. The most common response was related to environmental concerns that would have negative impacts for other industries.

**KI 4: And also, just the environmental impact. I think people hear so much about the negative impacts of salmon farming for example, that people are a little bit afraid of what that could do to ecosystems, is that going to impact the crab fishing down here or the sea urchin harvesting or all that kind of stuff? People don't want salmon farming to the demise of other things.**

There were also participants who mentioned that aquaculture development could aid in supporting other industries, through year-round employment for those in the fishery, and through spin off opportunities.

## Impacts of Covid-19 on the development of aquaculture in the region (Grieg's/Marbase)

The impacts of Covid-19 on the development of aquaculture development were brought up a few times. Many participants mentioned the delay in the construction which meant that labour targets and production targets were not met. This delayed timeline was understood as out of the company's control, and many still hoped that things would continue as planned once the pandemic was over.

**KI 7: In terms of where it will lead and the magnitude of it, I can't exactly be sure. Of course, the construction of the project when the COVID-19 pandemic came about, the construction was shortened, so the facility is not as large right now as was originally intended. I think the hope is that – or some people's hope [laughs] I guess – that would be for that expansion to still take place. And for the... project to continue.**

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## Possible deliverables for the study

We had wanted to work with communities to develop a deliverable for the study, but then were unable to do community-based work because of the Covid-19 restrictions, therefore we asked participants we spoke to what they would suggest as a deliverable for the study. Responses included information about employment opportunities, wages, training, updated information on employment via a website or social media outlet – such as Facebook, and information about aquaculture employment across the province. Based on the information from the educational institutions and aquaculture companies, more work needs to be done on the collaboration and planning between these parties so that information is readily available to governments, employment organizations and the public. Thus, our main deliverable of this study is the finding that all parties that are working so hard to promote aquaculture development in the region and want to see local employment and community development from the industry need to come together to map this out in a concrete way that ensures workers and communities are put first.

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## RECOMMENDATIONS

### **OPEN, TRANSPARENT, ACTIVE, COOPERATIVE ENGAGEMENT**

Grieg, Marbase, OCI, CNA, MI, Keyin College, relevant government departments, and municipalities need to come together to align current and future labour market needs, including core work force and spin off industries, and meeting the needs of current, and new residents to the Burin Peninsula, and their families.

This requires more concrete data on employment regarding the number of jobs (and the type of jobs), types of industries, and credential and training requirements.

A straightforward and clear process on how to get a job in aquaculture should be made publicly available. Jobs will need to be “good jobs” to attract young people with families to stay, or move, to the Burin. This includes permanent, full-time, well-paid positions, with benefits.

This will require MI, CNA, and Keyin College to work together and create new partnerships to benefit those on the Burin Peninsula, and provide more qualified workforce for the aquaculture industry in NL. This will also require Grieg, and other aquaculture companies and their spin off industries to be open and transparent on the number of jobs, and the type and training needed to get hired.

Some collaboration has occurred, including, as mentioned above, MI and CNA, and Grieg working on curricula, which resulted in MI running a pilot aquaculture program through CNA. In fact, working with educational institutions and the Department of Advanced Education, Skills and Labour to ensure local workers have the rights skills to be employed is part of the agreement for the project approval by the Minister, including a focus specifically on increasing women working in aquaculture. A recommendation to achieving local training aligns with local employment opportunities in salmon aquaculture on the Burin Peninsula is to integrate meetings on regular basis, and with the intent of meeting the needs of those currently living in the Burin Peninsula who want to work in the industry. This will need to include ensuring that not only training, but also hiring practices, are open, and accessible to locals in the training programs, so as not to repeat what has happened with other industries attempts to hire locally in the region, such as the Vale nickel-processing project<sup>xv</sup> <sup>xvi</sup> As the NL government’s Way Forward Plan has set future employment targets in aquaculture in the province to hit 1100 person years of employment alongside increased production targets, working consistently with local educational



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institutions is crucial<sup>xvii</sup>. Future research is needed to see if this will result in reducing the labour shortage issue, and if communities will be able to work on additional services to attract and retain current residents, including recreational services, childcare, schools, and multicultural supports. The industry has been aware of these issues more broadly in Newfoundland and Labrador's aquaculture industry, and the recommendation that was made in the *Aquaculture Recruitment & Retention Strategy for Newfoundland and Labrador* report for NAIA to take on the management of an education and industry information portal is a good one, but requires a coordinated and collaborative approach if it will be successful.

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