EXHIBIT 45

NOVA SCOTIA AQUACULTURE REVIEW BOARD

IN THE MATTER OF: Fisheries and Coastal Resources Act, SNS 1996, c 25

- and -

IN THE MATTER OF: An Application by KELLY COVE SALMON LTD. for a boundary amendment and two new finfish aquaculture licenses and leases for the cultivation of Atlantic salmon (*Salmo salar*) - AQ#1205x, AQ#1432, AQ#1433, in Liverpool Bay, Queens County (the "**Application**")

Affidavit of Stephen Coyle affirmed on January 22, 2024

I affirm and give evidence as follows:

- 1. I am Stephen Coyle of Halifax, Nova Scotia. I am a professional consultant and Vice President of Research and Strategy of Group ATN, a Halifax-based consulting firm.
- 2. I have personal knowledge of the evidence affirmed in this affidavit except where otherwise stated to be based on information and belief.
- 3. I state, in this affidavit, the source of any information that is not based on my own personal knowledge, and I state my belief of the source.
- 4. I have been retained by Stewart McKelvey on behalf of Kelly Cove Salmon Limited ("KCS") to provide my independent expert opinion to the Nova Scotia Aquaculture Review Board in connection with KCS's Application to expand its Atlantic salmon operations at Coffin Island (AQ#1205X) and for two new Atlantic salmon aquaculture farms at Mersey Point (AQ#1433) and Brooklyn Point (AQ#1432).
- 5. In particular, I have been asked for my independent expert opinion with respect to the contribution of KCS's proposed expansion of its Atlantic salmon aquaculture operations in Liverpool Bay to community and Provincial economic development, with particular focus on tourism in the area of Liverpool Bay.
- 6. My independent opinion on the impact of the proposed expansion on tourism in the area of Liverpool Bay is set out in my report attached as **Exhibit A**.
- 7. My CV is attached as **Exhibit B**.



A Barrister of the Supreme Court of Nova Scotia

Scotia on January 22, 2024.

DAVID A. BARRY A Barrister of the Supreme Court of Nova Scotia

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4140-3517-1406

KCS' Application re AQ#1205X, AQ#1432, AQ#1433 in Liverpool Bay, Queens County

This is Exhibit A referred to in the Affidavit of Stephen Coyle, affirmed before me on January 22, 2024.



A Barrister of the Supreme Court of Nova Scotia

DAVID A. BARRY A Barrister of the Supreme Court of Nova Scotia

The Impact of Aquaculture on Tourism Kelly Cove Salmon (KCS) Ltd. Liverpool Bay Applications

January 22, 2024

Prepared for: Stewart McKelvey





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Executive Summary

Study Purpose

This report summarizes research undertaken to understand the effect of aquaculture on the tourism industry in Nova Scotia in general and locally in the context of the Kelly Cove Salmon (KCS) applications in Liverpool Bay. Group ATN has been retained by Stewart McKelvey to provide an expert opinion on this matter.

Relevant factors considered in this research include:

- The optimum use of marine resources.
- The contribution of the proposed operation to community and Provincial economic development; and
- The other users of the public waters surrounding the proposed aquacultural operation.

Key Findings

This section summarizes key findings arising from research undertaken to understand the effect of aquaculture on the tourism industry in Nova Scotia in general and locally in the context of the Kelly Cove Salmon. In some cases, the scope of the research was global where lessons learned from other provinces and counties offered potential insights to the relationship between aquaculture and tourism.

The Liverpool Area has a Robust Tourism Ecosystem

The Liverpool area has a robust tourism ecosystem with an opportunity to develop and grow including through more aquaculture involvement.

Kelly Cove Salmon also directly benefits the local tourism ecosystem by supporting member businesses through employees, contractors, visiting scientists, vendors, etc. Local Liverpool area tourism businesses have directly benefited economically through KCS.

Tourism activity in the South Shore is highly seasonal, indicating that year-round Kelly Cove Salmon related contribution to the hospitality sector is proportionately more impactful in the period outside July to September.

According to Tourism Nova Scotia, in 2019 30% of overnight visitors to the province stopped for at least 30 minutes or stayed overnight in the South Shore tourism region. The South Shore is the third most visited region in the province behind Halifax (73%) and the Annapolis Valley (37%).

Tourism in the South Shore Region Outperformed the Province

While measures of tourism activity were not readily available for the Liverpool area, tourism activity in Nova Scotia's South Shore tourism region provides valuable context. In 2022, rooms sold in the South Shore accounted for 7% of all rooms sold in Nova Scotia. The South Shore's annual room nights sold were 208,600 in 2022 reflecting a 17% increase compared to 2016. The South Shore outperformed the province which recorded an 8% increase over the same period.

Liverpool Area Visitor-Generated Online Insights and Social Media Listening

Predominantly positive visitor reviews for accommodations and attractions in Beach Meadows, Brooklyn, Liverpool, and Region of Queens Municipality as a whole, combined with their high ratings that often approach five out of five on platforms like Airbnb and TripAdvisor, are a testament to the region's popularity as a tourism destination. These high marks suggest that the visitor experience has <u>not</u> been compromised by aquaculture in the area.

Reviews on Airbnb, Vrbo and TripAdvisor for members of the local tourism ecosystem were assessed for mentions of "aquaculture", "fish farming" and "salmon farming" with no results. The absence of negative feedback related to aquaculture suggests a harmonious coexistence between aquaculture and tourism in the Liverpool Bay area.

Similarly, digital analytics revealed no negative online sentiments involving Liverpool, aquaculture, and tourism. The absence of negative sentiments emerging from this search suggests that tourists to the area are either unaware of the presence of Liverpool Bay aquaculture or have a neutral perception of aquaculture in the area.

In summary, consumer-generated insights and social media listening revealed no adverse aquaculture impacts on Liverpool's tourism experience.

Synergies Between Tourism and Aquaculture in Nova Scotia and PEI

There is evidence of working relationships between NS and PEI tourism authorities and aquaculture operators/associations. This suggests validation of the case that there are positive synergies between the two sectors. For example:

- Premium Tourism PEI led a working session at the 2020 PEI Oyster Aquaculture Business Conference on support for developing Experiential Tourism as part of your business (Events Development Officer, Tourism PEI); and
- Taste of Nova Scotia membership includes aquaculture enterprises such as Acadian Seaplants and Deon Oyster with restaurant members serving farmed salmon.

Experiential Tourism

Contemporary tourists are shifting from seeing to experiencing. Aquaculture aligns with the contemporary demands of visitors to Nova Scotia by offering an opportunity to learn, taste, experience and connect with local food and dining experiences, while understanding how locals

live and make a living. Nova Scotia's tourists are very interested in the ocean, marine heritage, etc. Aquaculture has the potential to be an important component of this value proposition.

Aquaculture and Tourism are Compatible Members of the Blue Economy

According to the World Bank, the blue economy is the "sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean ecosystem." The growing recognition of the Blue Economy is further evidence of the synergistic opportunities between aquaculture and tourism. Aquaculture has been shown to add value to the tourism experience, while tourism simultaneously generates demand for aquaculture's bounty.

Other areas with a more established aquaculture sector such as Maine, Norway, Greece and Scotland reveal a positive connection between aquaculture and tourism. However, even these analogues identified varying levels of resistance to aquaculture.

Other destinations have successfully showcased aquaculture operations as sites for experiential tourism and educational tours. Aquaculture experiences enable visitors to better understand sustainable seafood production and cuisine. The tenure and popularity of these aquaculture experiences demonstrate strong tourism demand.

Aquaculture Contributes to the Vitality and Tourism Value Proposition of a Working Waterfront

Contemporary waterfront development embraces visitor interest in a working waterfront. Working waterfronts and the industries they support have a fundamental cultural, societal, and economic impact on their local communities. Aquaculture and other marine industries add to the cultural significance and personal interaction that make working waterfronts an appealing place to work and to visit.

Attitudes Toward Aquaculture

Three surveys of Nova Scotia residents help to understand attitudes towards salmon farming. Two of the three surveys showed that Nova Scotians tend to view aquaculture positively. The third survey found that a larger segment does not support the sector, however, this difference could be explained in part by methodology. Regardless, there are mixed levels of support for aquaculture among Nova Scotians. Tourism does however provide an opportunity to support resident interest in developing an improved understanding of aquaculture.

The Canadian research suggests that economically, members of local communities view aquaculture as generally positive, with awareness of the employment opportunities created through operations and the positive impact on global food supply. However, opinions are more divided when assessing environmental and social perceptions regarding aquaculture - particularly finfish. Further, opinions toward aquaculture tend to be less favourable on the Pacific Coast.

There is a correlation between dissatisfaction with aquaculture operations and lack of knowledge of how operations are regulated and run. This suggests that public perception may be influenced by increased transparency into technological enhancements and environmental safety processes, in addition to acknowledging public concern, while offering open communication with the communities in which operations exist or are proposed.

Potential Areas of Friction Between Tourism and Aquaculture

There are potential areas of friction between tourism and aquaculture. Tension between aquaculture and tourism can result from shared space and colocation. A gap in perspectives can widen when aquaculture scales up. Experience in some areas demonstrates that this tension can be bridged including through communication, mitigation and working toward a shared vision for the community.

Conclusion

Nova Scotians tend to view aquaculture positively. While there are segments among residents and tourism industry membership that are not supportive of aquaculture, little evidence was found through extensive research conducted as part of this study to support the claim that aquaculture adversely impacts tourism. In fact, contemporary thinking around destination and waterfront development suggests that aquaculture can enhance the visitor experience while contributing to destination success. Analogues in British Columbia, Maine, Greece, New Brunswick, and Norway showcased successful and compelling tourism aquaculture experiences.

Similarly, no evidence was found to support the claim that tourism in the Liverpool area and the broader South Shore tourism region has been adversely impacted by aquaculture. The absence of negative feedback related to aquaculture on online tourism sales platforms suggests a harmonious coexistence between aquaculture and tourism in the Liverpool Bay area.

1 Introduction

This report summarizes research undertaken to understand the effect of aquaculture on the tourism industry in Nova Scotia in general and locally in the context of the Kelly Cove Salmon (KCS) applications in Liverpool Bay. Group ATN was retained to provide Stewart McKelvey with an expert opinion on this matter for filing with the NS Aquaculture Review Board.

Relevant factors considered in this research include:

- The optimum use of marine resources.
- The contribution of the proposed operation to community and Provincial economic development; and
- The other users of the public waters surrounding the proposed aquacultural operation.

The approach for this study utilized multiple research modalities – including secondary research, case study analysis, tourism ecosystem mapping and a jurisdictional review - to build a comprehensive understanding of the effect of aquaculture on the tourism industry.

2 Nova Scotia Tourism and Visitor Context

This section provides an overview of provincial tourism activity and trends as well as profiling the Liverpool area's visitor ecosystem including marine tourism and other stakeholders with a connection to the Kelly Cove Salmon operation in Beach Meadows.

2.1 Nova Scotia Visitation and Accommodation Activity

Visitation to Nova Scotia recovered substantially in 2022, with Nova Scotia welcoming 1.9 million overnight visitors, an increase of 1 million visitors compared with 2021. Visitation did not reach pre-pandemic levels, with 2022 representing a decline of 18% (or 415,000 fewer visitors) compared with 2019.¹

In 2022, annual room nights available were 5,036,700 reflecting a 1% decrease compared to 2016. During the past seven years, room night supply peaked in 2016. In contrast, rooms available dipped to their lowest point in 2020 because of COVID-19.²

Annual room nights sold for the province were 2,899,100 in 2022 reflecting an 8% increase compared to 2016. During the past seven years, room nights sold peaked in 2022. In contrast, room nights sold dipped to their lowest point in 2020 during COVID-19.

¹ Tourism Nova Scotia, <u>https://news.novascotia.ca/en/2023/03/06/new-marketing-campaign-aims-build-tourism-recovery#:~:text=Quick%20Facts%3A,compared%20with%20pre%2Dpandemic%202019</u>

² Tourism Nova Scotia, <u>https://tourismns.ca/accommodation-statistics</u>

2.2 South Shore Visitation

According to Tourism Nova Scotia³, in 2019 30% of overnight visitors to the province stopped for at least 30 minutes or stayed overnight in the South Shore tourism region. The South Shore is the third most visited region in the province behind Halifax (73%) and the Annapolis Valley (37%).



% who stopped for at least 30 minutes, or overnight

2.3 South Shore Accommodation Activity

South Shore Accommodation Supply and Demand

In 2022 rooms available in the South Shore accounted for 8% of rooms available in Nova Scotia. In that year, 385,400 rooms were available reflecting a 10% decrease compared to 2016. During the past seven years room supply peaked in 2016. In contrast, rooms available dipped to their lowest point in 2020.

In 2022 rooms sold in the South Shore accounted for 7% of all rooms sold in Nova Scotia. The South Shore's annual room nights sold were 208,600 in 2022 reflecting a 17% increase compared to 2016. During the past seven years room nights sold peaked in 2022. In contrast, room nights sold dipped to their lowest point in 2020.

Monthly trends in the South Shore's accommodation rooms sold generally reflect the provincewide patterns. For example, in 2022, room nights sold in July and August combined accounted for 30% of annual room nights sold compared to 7% for December and January. The very seasonal nature of tourism activity in the South Shore indicates that the year- round Kelly Cove Salmon related contribution to the area's hospitality sector is proportionately more impactful in the period outside July to September.

The proportion of room nights sold for the third quarter decreased by eight percentage points to 42% in 2022 compared to 2016 (50%) reflecting decreased peak season compression. This

³ Tourism Nova Scotia, <u>https://tourismns.ca/sites/default/files/2021-01/2019%20VES%20Community%20Report pdf</u>

suggests that peak season demand has "flattened" and activity has been more widely dispersed across non-peak months.



Room Nights Sold and Available: South Shore, 2016 to 2022

South Shore Occupancy Rate

South Shore's annual average occupancy rate was 54% in 2022. With a 12-percentage point increase relative to 2016 (42%), 2022 reflected a substantial improvement over 2020 (32%). Monthly occupancy rates hit a peak of 80% in August 2022 and conversely a low of 17% in May 2020. In 2022 occupancy dipped to a low of 23% in January.



Occupancy Rate: South Shore, 2016 to 2022

2.4 Overview of the Queens Coast Tourism Destination

Liverpool is a part of the Queens Coast tourism destination that showcases impressive beaches, hiking trails and paddling among other high-quality experiences. Activities include culinary experiences and festivals along with art & culture. According to the Region of Queens Municipality

in a province full of natural beauty, we think Queens Coast stands out as the pinnacle. From our richly diverse Acadian forests surrounding a myriad of glimmering lakes, the waters flow down powerful rivers to an exquisite coastline. Since time immemorial, travellers have journeyed these waterways. Then, as now, our tagline, "seek nature's rewards," invites people to explore, and venture just a little further to discover the unrivalled natural beauty of Queens Coast.⁴

2.5 Liverpool Area Tourism Ecosystem

The Liverpool tourism ecosystem includes traditional tourism accommodations, Airbnb and VRBO short-term rentals, restaurants, natural attractions, shops, and a variety of other businesses that benefit from tourism. The Beach Meadows operation is a point of interest within the local tourism ecosystem. An inventory of the area's tourism ecosystem suggests growth, quality, and positive consumer feedback. Tourism operators are a dynamic mix of established enterprises and attractions such as Lanes Privateer Inn and recent additions including well-appointed accommodations, special events and artisans. The Mighty Atlantic Guest House, a VRBO and Airbnb listed property that has been operating for seven years in Beach Meadows overlooking Coffin Island is a "guest favourite" with a top 5.0 star rating.

Traditional tourism accommodations are comprised of 15 properties ranging from a 2-room bed and breakfast to the 65-room Best Western Plus Liverpool Hotel & Conference Centre and the 131-room White Point Beach Resort. Ten of these properties are open year-round – a higher percentage than many other nonurban communities in the province.

Kelly Cove Salmon also directly benefits the local tourism ecosystem by supporting member businesses through employees, contractors, visiting scientists, vendors, etc. Local Liverpool area tourism businesses that have directly benefited economically through KCS include: Best Western Plus Liverpool Hotel & Conference Centre, White Point Resort, Motel Trans Scotia, Tim Hortons, Dixie Lee, Memories Café, Lanes Privateer Restaurant, Hell Bay Brewing, Irving, Hunts Point Seafood, The Port Grocer, Sobeys, Superstore, McDonald's, Subway, and Emera Center.

⁴ https://www.regionofqueens.com/visit

Traditional Tourism Accommodation in the Liverpool Area					
Traditional Tourism Accommodation	# of Rooms	Operating Season			
Best Western Plus Liverpool Hotel & Conference	65	All-Year			
Centre					
Bougain-Villas Inc / The Senator Guest Suites	5	March - August			
Brooklyn Shores Bed & Breakfast	3	All-Year			
Captain's Quarters Cottages	6	Summer			
Fraser's Ocean View Cottages	3	June - October			
Gallery Guest House B&B / Roger Savage Studio	2	All-Year			
Geranium House Bed and Breakfast	3	May - September			
Hunts Point Beach Cottages	12	May - September			
Lane's Privateer Inn (c 1798)	23	All-Year			
Morton House Inn B&B	7	All-Year			
Motel Transcotia	22	All-Year			
Sidanna Retreat Inc.	4	All-Year			
The Mighty Atlantic Guest House	1	All-Year			
Vacation by the Sea Guest Houses	4	Never Open			
Vladi Private Islands	6	All-Year			
White Point Beach Resort	131	All-Year			

Traditional tourism accommodations in the Liverpool area are inventoried below:

Other short-term tourism accommodation featured on platforms such as Airbnb and Vrbo include:

Short-Term Rental (STR) Accommodation in the Liverpool Area				
Accommodation	Posted Nightly	Quality		
	Rate	Rating		
Airbnb				
The Mighty Atlantic Guest House, Brooklyn	\$380	5.0		
Cozy House on the River, Milton	\$175	4.90		
Tower in Broad Cove	\$650	5.0		
Out of Bounds, Hunts Point	\$170	4.94		
Cozy South Shore Beach Retreat, Port Mouton	\$105	4.92		
The Shore Shack, Western Head	\$316	4.98		
White Point Panoramic Ocean View	\$395	5.0		
Charming Beach Farmhouse! Summerville Centre!	\$180	4.94		
The Old Kettle Cabin with Hot Tub	\$206	4.94		
Grey Stone Oceanfront Villa, Brooklyn	\$219	5.0		
Black Shack, Western Head	\$250	4.97		
Mersey River Loft, Milton	\$115	4.96		
Fisherman's Legacy, Port Mouton	\$175	4.97		

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The Pumpkin Cottage - Peace on the River, Mill Village	\$60	4.98
Atlantic Pearl - Luxurious Ocean Front Experience, Port	\$500	5.0
Medway		
The ISLAND - Charming Island Cottage and Bunkie, Port	\$250	4.95
Medway		
Vrbo		
Surfs Up Eagle Head Bay	\$225	5.0
Nova Scotia Orchard by the Sea, Port Medway	\$240	Newly listed
Ocean Top Tiny Home, Western Head	\$79	Newly listed
Elegant Queen Anne Suite, Liverpool	\$152	4.8

Other tourism operators and experiences include:

Attractions

- Sherman Hines Museum of Photography
- Astor Theatre
- Queens County Museum
- Perkins House Museum
- Year-Round Calendar of Festivals & Special Events
- Several beaches including:
 - Beach Meadows Municipal Beach
 - o Kejimkujik Seaside Adjunct
 - o Summerville Beach Provincial Par
 - Eagle Head Beach
 - Hunts Point Beach
 - Lighthouses
- Nearly two dozen Artisans and Galleries including:
 - Melanie Perron Fibre Artist
 - Eternity Chainsaw Carvings
 - Mj Dominey Artist
 - o Ole Town Mercantile and Minerva Studio and Gallery

Dining

- Lanes Privateer Restaurant
- Hell Bay Brewing
- Tim Hortons
- Dixie Lee
- McDonald's
- Subway
- Memories Café & Eatery
- Paul's German Café & Restaurant
- Golden Pond Restaurant
- Liverpool Pizzeria Restaurant and Lounge
- A1 Pizza
- Route 3 Cellar Taproom & Grill; and
- Hunts Point Seafood

Tourism Related Services

- Irving
- The Port Grocer
- Sobeys
- Superstore; and
- Queens Place Emera Center

Tourism and Recreation Experiences

- Liverpool Adventure Outfitters
- Paddling
- Cycling
- Surfing; and
- April Williams Salon & Spa, Milton

Marine-Related Points of Interest

- Former Bowater Mersey Mill
- Mersey Seafoods
- Liverpool Government Wharf-Brooklyn Marina
- Beach Meadows Park. In 2022 and 2023 upgrades were made at the Park including a drilled well, washrooms, change rooms and related amenities to "enhance the enjoyment and use of Beach Meadows Beach by all".⁵
- Town of Liverpool Waterfront.

The Liverpool area has a robust tourism ecosystem with an opportunity to develop and grow including through more aquaculture involvement.

3 Contemporary Best Practices in Sustainable Tourism

3.1 Introduction

An important shift has occurred in contemporary travel. Visitor demand is moving away from traditional sightseeing of landmarks, museums, monuments, etc. toward a deeper, more immersive form of tourism. Today's travellers prioritize the intangible elements that stitch the fabric of a destination—its culture, ambiance, and way of life—over mere physical attractions.

This transformative approach to travel is largely influenced by Millennials, Generation Y, and other younger cohorts who, are reframing tourism with their quest for authentic experiences. They seek interaction rather than observation, striving to connect with local communities and immerse themselves in the authentic heartbeat of the places they visit. Their values are reshaping the tourism sector, fostering a world where 'experiencing' holds more allure than 'seeing'. Millennials are seeking off-the-beaten-path adventures that are authentic and unforgettable.⁶

⁵ <u>https://www.regionofqueens.com/council-governance/press-releases-for-cg/2139-upgrades-continue-at-beach-meadows-beach-a-well-is-being-drilled-to-support-future-amenities</u>

⁶ <u>https://www.under30experiences.com/blog/why-millenial-travelers-are-seeking-more-authentic-experiences</u>

3.2 Experiential Tourism Considerations

Aquaculture aligns with the contemporary demands of visitors to Nova Scotia by offering an opportunity to learn, taste, experience and connect with local food and dining experiences, while understanding how locals live and make a living. Tourists to NS are very interested in the ocean, marine heritage, beaches, and related features. **Aquaculture has the potential to be an integral component of this value proposition.**

Tourism Nova Scotia (TNS) describes world-class experiences as opportunities to "connect visitors with the province's culture, heritage, terroir, and coastal landscapes in a way that generates buzz and demand for Nova Scotia as a vacation destination. They are uniquely Nova Scotian experiences and offer exciting and new ways to explore our icons and destinations while showcasing opportunities for outdoor adventure, seacoast exploration, and immersion in our cultural and culinary offerings. World-class experiences have an undeniable WOW factor that sets them apart, motivating visitors to choose Nova Scotia". Based on this description, the existing and proposed Liverpool Bay aquaculture operations have the essential ingredients and potential to further enhance visitor experiences in the Liverpool Bay area. For example, Liverpool Adventure Outfitters already offers a full-day paddle and picnic tour that includes Liverpool Harbour and Coffin Island. Case studies of other aquaculture operations show that they can be a popular point of interest in kayak or boat tours of the surrounding area. Tourists are interested in the fish science and economic aspects of the operation, with the opportunity to enhance the experience through onshore dining including farmed salmon – either at a local restaurant or a seashore salmon BBQ.

Tourism Nova Scotia targets three market segments: Authentic Experiencers, Cultural Explorers, and Free Spirits. Nova Scotia has prioritized Free Spirits as this group is currently underrepresented among the province's visitor population. Free Spirits are an important segment for Nova Scotia because they tend to travel more, spend more while on vacation, and love to share, helping raise awareness of Nova Scotia as a destination. According to TNS, "Although our natural assets are a great fit for this segment, more high-end, more gourmet and more active experiences that leverage our competitive strengths are needed. To attract more Free Spirits, we need to up our game and develop experiences that will motivate travel to Nova Scotia. Free Spirits' enthusiasm for life extends to travel; they love to travel, and they love to share their travel experiences. They seek to travel in style and relish being indulged and pampered."

Popular activities for Free Spirit visitors when visiting a destination include:

- **E**njoy dining at restaurants featuring local ingredients.
- Experimental and adventurous, they enjoy authentic local experiences that allow them to learn what life is really like at a destination and interact with locals.
- Have a high appreciation of natural landscapes.
- Love to share (social media).
- Look for the highlights at leading attractions.
- Travel is a time to escape their lives back home, to let loose and enjoy themselves.

- Love trips that offer fun, exciting experiences with some learning on the side and make them feel pampered through luxuries.
- Love luxury and high-end experiences that are shared with others; and
- Drawn to more active physical activities when on vacation (cycling, rock climbing, overnight hiking, kayaking).

The first two highlighted bullets above resonate strongly with aquaculture-related tourism.

3.3 Experiential Tourism

The literature and academic review describe *Experiential Tourism* as an emerging trend deviating from mass tourism, focusing on authentic, participatory experiences that are personal and allow immersion into local nature, culture, and communities. These experiences cater to visitors' desires for connection and learning, offering personal growth and unforgettable memories.

Experiential tourism is defined through various dimensions including customer participation and environmental engagement. It is characterized by active involvement rather than passive observation. Five key principles for designing such experiences are provided: theming the experience, harmonizing impressions with positive cues, eliminating negative ones, mixing in memorabilia, and engaging all five senses.

Local development and application of this new tourism concept underscores experiential tourism's potential not just as a conceptual model but as a practical approach that benefits both the visitor and the local community through educational engagement and economic development, fostering a deeper respect for the environment and cultural heritage.

More specifically, Destination Canada states "Experiential travel engages visitors in a series of memorable travel activities, that are inherently personal. It involves all senses, and makes connections on a physical, emotional, spiritual, social, or intellectual level. It is travel designed to engage visitors with the locals, set the stage for conversations, tap the senses, and celebrate what is unique in Canada".

3.4 Working Waterfront and Tourism Related Considerations

Contemporary waterfront development embraces visitor interest in a working waterfront. Working waterfronts and the industries they support have a fundamental cultural, societal, and economic impact on their local communities. Aquaculture and other marine industries add to the cultural significance and personal interaction that make working waterfronts an appealing place to work and visit. **Aquaculture has the potential to enhance the vitality and tourism value proposition of a working waterfront.**

Group ATN has seen the benefit of the working waterfront concept in other Nova Scotia communities, contributing to waterfront research and planning in communities such as Pictou, Halifax, Pt. Hawkesbury, and Glace Bay.

Contemporary waterfront development embraces visitor interest in a working waterfront. Working waterfronts and the industries they support have a fundamental cultural, societal, and

economic impact on their local communities. Aquaculture and other marine industries add to the cultural significance and personal interaction that make working waterfronts an appealing place to work and visit.

For example, in Group ATN's work to support Glace Bay's 2017 Revitalization Plan⁷, there was a recognition by the municipality, government partners, businesses, community enterprises and residents that the working harbour of Glace Bay is vital to the community's economy. The wharves and piers that line the harbour are home to a fishing fleet with several seafood harvesting companies. The study recognized the opportunity for Glace Bay to celebrate its coastline and working harbour as one of its most marketable assets for attracting tourists.

Nova Scotia case studies (Lunenburg, Pugwash, Baddeck) of successful waterfront revitalization projects were examined to determine the potential impacts of waterfront revitalization.

- Effective plans for waterfront revitalization are cohesive, recognizing the value of strategic investments to attract both industry and tourists while improving quality of life for residents.
- Cohesive plans that affect multiple interests require a strong champion to bring business, government, and citizens to agreement on priorities and investment targets.
- Community and stakeholder engagement are key to identifying development priorities.
- Community engagement should be inclusive.
- Balancing both industry and tourism development on waterfronts is not only possible but mutually beneficial, with industry creating activity for businesses to thrive in waterfront/downtown areas; and industry generating opportunities to view light marine industrial activity as a tourism draw (i.e., working waterfronts, boat building viewing/workshops).
- Improving waterfronts attracts tourism and industry while improving quality of life for residents.
- Community engagement commonly identifies waterfront development as a priority among community members.
- A success factor for revitalizing waterfront areas is considering the historic and unique characteristics of a town; and
- Placemaking has proven to be a successful development approach by drawing on the inspiration of the place (i.e., by the ocean) and capitalizing on local assets.

The literature notes that conflicts may arise in waterfront development, however, they can be resolved through dialogue, evidenced-based decision-making, consensus building and a shared vision for a vibrant community. Identified areas of potential tension include:

- Conflicts associated with working areas and residential areas.
- Conflicts between private and public sector interests.

⁷ /https://www.cbrm.ns.ca/images/PDF/CBRM_Final_Presentation_Glace_Bay_2017.pdf

- Land use conflicts.
- Controversy over social benefits (social accessibility, public facilities, etc.); and
- Environmental pressures (human activities vs. coastal ecosystems).⁸

⁸ Papatheochari, 2011.

4 Nova Scotia Perspective

4.1 Overview of Nova Scotia's Aquaculture Industry

The Aquaculture Association of Nova Scotia (AANS) reports a growing aquaculture sector, with industry revenue exceeding \$90 million in 2020. This marks a 10% increase from the \$82.1 million recorded in 2019. Additionally, there was a significant uptick in production, with the volume surging by 24% from 10.2 million kilograms in 2019 to 12.6 million kilograms. Aquaculture has a significant employment impact, with 877 direct jobs part-time and full-time - and an additional 1,550 indirect jobs. The sector supports a diverse array of over 230 businesses, which vary in scale from small enterprises employing less than ten people to large companies with over a hundred employees.⁹

4.2 Attitudes Towards Salmon Farming Among Nova Scotians

Three surveys of Nova Scotia residents help to understand attitudes towards salmon farming among Nova Scotians. While Nova Scotians tend to view aquaculture positively there is a segment that does not support the sector.

For example, a 2023 Atlantic Canada Fish Farmers Association (ACFFA) sponsored survey of Atlantic Canadians conducted by Narrative found that three quarters of Nova Scotians (76%) are in support of the aquaculture industry in Atlantic Canada, while opposition is expressed by just over one in ten (13%). The survey also found that 89% of Nova Scotians completely or mostly agree that local salmon farming provides important employment opportunities.



A 2021 survey¹⁰ revealed that while most Nova Scotia residents are aware of the aquaculture industry and associate it with year-round seafood farming of species like salmon, mussels, oysters, and trout, Nova Scotians seek more information, particularly regarding retail sold farmed seafood. The findings illustrate a desire among Nova Scotians for robust regulation to ensure the

⁹ <u>https://seafarmers.ca/community-hub/education/resources/quick_facts-about_aquaculture/</u>

¹⁰ Narrative Research AANS Survey Findings 2021 <u>https://seafarmers.ca/the-results-are-in-nova_scotians-view-aquaculture_positively/</u>

The Impact of Aquaculture on Tourism

aquaculture industry's safe operation. Economic benefits, increased employment opportunities, and the sustainability of food sources are viewed positively, underpinning substantial support for government aid in industry growth. Despite recognizing aquaculture as a good career option for young people, there is limited awareness of the industry's wide range of available career paths.

A 2019 survey of public attitudes on salmon farming in Nova Scotia – explored factors that drive different perspectives on aquaculture. The research was published in Marine Policy¹¹. Key factors influencing public attitudes towards salmon farming in Nova Scotia included age, environmental values, trust in government, risk perception, and salmon consumption.

While over half of respondents held a negative view of aquaculture (58% urban and 83% rural), the Marine Policy article acknowledged that its social media driven sampling approach introduced bias. For example, the sample disproportionately included members of salmon farming communities. The 2019 survey was a convenience sample generated through social media that would have made quality control checks difficult (participants were self-selected and the survey could have been shared through groups that are not representative of the overall population). The survey could also have been promoted by individuals attempting to advance their position.

The authors acknowledge that the results are not representative of Nova Scotia views. While these findings do not claim to provide a representative understanding of what Nova Scotians think about salmon farming, they do provide insights into what drives differences in opinion to help develop a theoretical understanding of social acceptance of salmon farming.

The difference in attitudes towards aquaculture revealed in the three surveys can be explained in part by methodology. Regardless, there are mixed levels of support for aquaculture among Nova Scotians. Tourism does however provide an opportunity to support resident interest in developing an improved understanding of aquaculture.

¹¹ Weitzman, J., Filgueira, R., & Grant, J. (2022). Identifying key factors driving public opinion of salmon aquaculture. Marine Policy 143, 105175.

4.3 The Blue Economy Includes Aquaculture and Tourism

According to the World Bank, the blue economy is the "sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean ecosystem."¹² Economic activities related to oceans and coasts include the wild fishery, aquaculture, marine transportation, and tourism. A growing recognition of the blue economy is further evidence of the synergistic opportunities between aquaculture and tourism.



The blue economy recognizes the economic and ecological well being through the sustainable use of marine resources. Marine tourism leverages these ecosystems to bolster the blue economy. Tourists are drawn to a wide range of activities like kayaking, beach and coastline enjoyment, diving, and water tours along with the appeal of eating freshly caught local seafood. Aquaculture adds value to the tourism experience, while tourism simultaneously generates demand for aquaculture's bounty.¹³

While aquaculture and tourism might traditionally be viewed as unrelated areas, they are finding synergistic opportunities in particular destinations. Amid a growing emphasis on environmental sustainability and authentic travel experiences, the integration of aquaculture with tourism would be realizing a shared benefit. At the heart of the blue economy dedicated to the economic and ecological well-being through sustainable marine resources is aquaculture. It prospers in the open water, where stable climate conditions and dynamic currents efficiently disperse nutrients, minimizing the environmental impact.

Marine tourism bolsters the blue economy. Tourists are drawn to the aquatic allure of activities like snorkeling and diving as well as the appeal of eating freshly caught local seafood. **In essence**, **aquaculture adds value to the tourism experience**, while tourism simultaneously generates demand for aquaculture's bounty.

¹² <u>https://www.worldbank.org/en/news/infographic/2017/06/06/blue-economy</u>

¹³ https://www.globalseafood.org/advocate/aquaculture-tourism an unexpected-synergy-for-the-blue economy/

4.4 Tourism Recognition

The research examined individual aquaculture operations in Nova Scotia and neighboring maritime provinces to profile operators who have received tourism awards, recognition and/or accolades. For example, Tong & Shuck, Cardigan PEI is featured in Experience PEI's catalogue of tourism experiences. Tong and Shuck typically receive 5 out of 5 on Trip Advisor from tourists. The experience features "a unique, hands-on experience with retired fisherman, Jim Conohan. He will teach you all about how our world-famous oysters are grown and harvested then give you tricks on how to shuck them. Enjoy as many as you like along with some steamed quahogs and salad."

There is also evidence of working relationships between NS and PEI tourism authorities and aquaculture operators/associations. This suggests validation of the case that that there are positive synergies between the two sectors. For example:

- Premium Tourism PEI led a working session at the 2020 PEI Oyster Aquaculture Business Conference on support for developing Experiential Tourism as part of your business (Events Development Officer, Tourism PEI)
- Taste of Nova Scotia membership includes aquaculture enterprises such as Acadian Seaplants and Deon Oyster along with many restaurant members serving farmed salmon.

4.5 Potential Areas of Friction Between Tourism and Aquaculture

There are potential areas of friction between tourism and aquaculture. Tension between aquaculture and tourism can result from shared space and colocation. A gap in perspectives can widen when aquaculture scales up¹⁴.

<u>1- Visual Impact of Aquaculture Infrastructure</u>: Large structures like marine-cage fish farms may disrupt seascapes typically enjoyed from the coastline. Onshore support structures may also reshape the coastal appearance, particularly when they're situated near tourist hotspots or beaches.

<u>2- Area Limitations for Water Recreation</u>: Recreational activities like fishing and boating may face space limitations around aquaculture sites. The presence of aquaculture facilities often requires restrictions to recreational activities taking place within a certain distance from the fish farms or cages.

<u>3- Access to Protected Anchorage Compromised:</u> The overlap between secure anchor points for leisure boating and prime aquaculture locations can lead to reduced availability of these safe havens. Aquaculture facilities are often located in sheltered inshore waters which also, by their nature, represent refuges for recreational craft in poor weather conditions. The boating community fears the loss of these protected areas through aquaculture development.

<u>4- Risk of Damage from Underwater Hazards</u>: Some submerged structures near aquaculture sites pose risks to passing vessels, with the potential for damage to both the boats and the installations.

<u>5- Aquaculture's Effects on Water Quality:</u> Fish rearing requires the introduction of several components within the farm that might be harmful to the environment.

<u>6- Impact of Waste and Human Activity on Aquaculture</u>: Urban development and human pressure in coastal areas resulting from tourism can also affect aquaculture.

Experience in some areas demonstrates that this tension can be bridged including through communication, mitigation and working toward a shared vision for the community.

¹⁴ European Maritime Spatial Planning Platform <u>https://maritime-spatial-planning.ec.europa.eu/aquaculture-toursim</u>

4.6 Liverpool Area Visitor-Generated Online Insights and Social Media Listening

Predominantly positive visitor reviews for accommodations and attractions in Beach Meadows, Brooklyn, Liverpool, and Region of Queens Municipality as a whole, combined with their high ratings that often approach five out of five on platforms like Airbnb and TripAdvisor, are a testament to the region's popularity as a tourism destination. These high marks suggest that the visitor experience has <u>not</u> been compromised by the active aquaculture industry in the area.

Well over a thousand reviews on Airbnb, Vrbo and TripAdvisor for over 40 members of the local tourism ecosystem were assessed for mentions of "aquaculture", "fish farming" and "salmon farming" with no results. The absence of negative feedback related to aquaculture suggests a harmonious coexistence between aquaculture and tourism in the Liverpool Bay area.

A thorough investigation of digital analytics with the aid of Google Think and Google Trends¹⁵, revealed no negative online sentiments involving Liverpool, aquaculture, and tourism. The absence of negative sentiments emerging from this search suggests that tourists to the area are either unaware of the presence of Liverpool Bay aquaculture or have a neutral perception of aquaculture in the area.

Two tangentially related search results related to the Liverpool area's working waterfront – one positive and one negative as presented below:

"... The place lives, it's not just a tourist destination but has a working port and new fish processing plant going up across from the hotel but leaving the lake and town views unspoiled." John S. Oct 2018, from a review of Lane's Privateer Inn – about Mersey Sea Foods

"Too bad they are building a fish plant across street." JOH Sep 2018, from a review of Lane's Privateer Inn – about Mersey Sea Foods

In summary, consumer-generated insights and social media listening revealed no adverse aquaculture impacts on Liverpool's tourism experience.

¹⁵ <u>https://trends.google.com/trends/explore?date=today%205-y&geo=CA-NS&q=%2Fm%2F01I933</u>

5 Jurisdictional Scan

5.1 Introduction

Other destinations provide lessons-learned opportunities to further understand the effect of aquaculture on their tourism industry. The following section summarizes insights from Canada, Greece, Scotland, and Maine.

5.2 Canada

In Canada, the concentration of aquaculture operations is primarily split between both coasts making British Columbia (BC) and Atlantic Canada two of the most heavily analyzed zones for aquaculture development. From researchers to travel bloggers, a series of observations have been made regarding not only the environmental impacts but also the socio-economic impacts of aquaculture in Canada according to residents and visitors.

Aquaculture in Atlantic Canada

A study from Ecology & Society (E&S) in 2022 looked at *Drivers of social acceptability for bivalve aquaculture in Atlantic Canadian communities*, reporting that community perceptions regarding the social, environmental and economic impacts varied by region and highlighted the value of community-based research as well as transparency in priorities and processes on the part of aquaculture operators.¹⁶ Feedback was received through online surveys from members of targeted communities in Nova Scotia and Prince Edward Island (PEI), reporting mixed views of the resulting impacts of bivalve operations in their areas. This lends evidence toward societal perceptions of aquaculture generally and speaks to potential visitor priorities and considerations in their travel planning.

Appearance and Enjoyment of Water Activities

Those who reside in areas with aquaculture operations express concern about the appearance of the farms impacting the local aesthetic and reducing their enjoyment of their locale as well as the overall appeal for visitors or potential new residents. Another concern that was expressed is the constraint imposed upon available marine space and the potential impact on water-tourism activities. An anecdote quoted in the report from a resident of PEI stated:

"Where I live we would... lose the recreational benefits and intangible benefits such as the beautiful view of the water in Rustico Bay. This is very important to tourism as well. People come to PEI to enjoy swimming, kayaking, gorgeous views and ugly black oyster cages would be a detriment to all of these."

¹⁶ Drivers of social acceptability for bivalve aquaculture in Atlantic Canadian communities - Ecology & Society (ecologyandsociety.org)

Need for Evidence-Based Public Education

Importantly, public perception is significantly driven by how individuals learn about aquaculture which is primarily through traditional or social media. The E&S report specifies that media coverage is largely negative, covering topics like conflicting operations and environmental concerns. The nature of social media allows for a small group to have an outsized influence even when they are not based on evidence. With increasing transparency among aquaculture operators and enhanced public education regarding the benefits of fish farming, public perception and curiosity may be shifting more positively.

The results of this E&S report should also be contextualized by the difference in the perception of bivalve versus finfish aquaculture, with the report stating that bivalve is typically thought of as greener than finfish aquaculture. This suggests that public opinions regarding the operation of bivalve farms as discussed in the report may skew more positive than perspectives regarding finfish operations.

A Maritime Studies article on the impact of coastal grabbing (contested appropriation of coastal space and resources) on community conservation discusses aquaculture in Port Mouton Bay, Nova Scotia. The article considers the linkage between the fishing and tourism sectors as the two most prominent sectors in the area, stating that "tourism [in Port Mouton Bay] relies heavily on the touristic attractiveness of the local fishing activities."¹⁷ The study discusses the impact of the introduction of aquaculture to the area in 1997. While the study asserts that resulting dead zones affected the local aesthetic and "degraded the economic value of the seascape for tourism", the reported degraded economic value of the seascape appears to be predicated upon the presence or perception of "dead zones". It is not clear what this refers to and the environmental studies accompanying the KCS applications for Liverpool Bay do not identify any similar phenomena as likely.

Aquaculture in British Columbia, a Comparison

Reports indicate a difference in the perceptions of aquaculture between the east and west coasts. A 2018 Aquaculture International (AI) article reported that although awareness of aquaculture – between finfish, shellfish, and seaweed – is similar between coasts, there were significant differences in opinions of the various farming systems and the information most commonly relied upon.¹⁸

Although groups opposing aquaculture are present on both coasts, this report found greater opposition to finfish aquaculture in BC. It outlines the importance of reliable information sources and public communication, underscoring the impact of social license on the aquaculture industry. For example, negative factors influencing salmon farming impressions such as harmful/disruptive

¹⁷ The impact of coastal grabbing on community conservation – a global reconnaissance | Maritime Studies (springer.com) June 2017

¹⁸ (PDF) Public attitudes towards marine aquaculture in Canada: insights from the Pacific and Atlantic coasts (researchgate.net)

to wild stocks registered 56% on the Pacific coast relative to 11% on the Atlantic coast. The Al report also presents a more nuanced view: detached from the "issue of salmon farming" and regarding the benefits of aquaculture on global food demand and local economic benefits, public opinions are generally positive.

Main Sources of Information

The AI report also discusses where people most commonly obtain their information about aquaculture. Word of mouth was the most popular source (77% and 69% on the Pacific Coast and Atlantic Coast respectively). Online sources/websites (56%) placed second for the Pacific Coast, followed by personal experience (52%). In contrast, in Atlantic Canada, personal experience with aquaculture (31%) was the second most common source, followed closely by newspapers (30%). There was divergence in the use of industry contacts. Three in ten (29%) respondents in the east indicated that they rely on this source of information on aquaculture, as opposed to 10% in BC.

Strategic Crossover between Aquaculture and Tourism

In Canada, many are identifying opportunities for convergence between aquaculture and tourism initiatives, with bloggers like "Seaside with Emily" reviewing several available Canadian experiences. Emily De Sousa, is an award-winning fisheries scientist, content creator, and science communicator who documents her travels and the food she encounters on her adventures.¹⁹ In one <u>post</u>, she talks about seafood tourism or pescatourism²⁰. For this post, she spoke with Fanny Bay Oysters in BC (more information in Section 6.2), Fogo Island Fish in Newfoundland, and Acadian Sturgeon & Caviar in New Brunswick.

According to De Sousa, the intention of pescatourism is to "supplement the incomes of fishermen, while educating the general public about the state and problems of the marine sector." The operators engaged in seafood tourism discuss the benefits of enhanced customer interaction while building customer understanding of their processes, allowing them to form a closer connection to their food, while keeping the producer top of mind for their next seafood experience. Cornel Ceapa from Acadian Sturgeon & Caviar states:

"When you open your business to tourism and you are transparent, the customers get to see firsthand if you are really sustainable and will know which product to choose in the market...

Tourism in general has become more experiential and there is a huge opportunity for the seafood to redeem itself through educational tourism."

¹⁹ HOME - Seaside with Emily

²⁰ Pescatourism is a term related to sustainable tourism initially used in the early 1990s in Italy. It is experiential tourism that originally consisted of a day trip on a fishing boat with local fishermen. Tourists participate in fishing and related tasks, along with sampling local freshly prepared fish and meeting with local community members. <u>https://www.sciencedirect.com/science/article/abs/pii/S0959652616304681</u>

Concluding Thoughts from the Canadian Perspective

The Canadian research suggests that economically, members of local communities view aquaculture as generally positive, with awareness of the employment opportunities created through operations and the positive impact on global food supply. However, opinions are more divided when assessing environmental and social perceptions regarding aquaculture - particularly finfish.

There is a correlation between dissatisfaction with aquaculture operations and lack of knowledge of how operations are regulated and run. This suggests that public perception may be influenced by increased transparency into technological enhancements and environmental safety processes, in addition to acknowledging public concern, while offering open communication with the communities in which operations exist or are proposed.

5.3 Greece

According to a 2022 annual report on Greek Aquaculture, the Greek aquaculture sector achieved record sales in 2021, driven by catering and tourism.²¹ The report notes the efforts and prioritization of the industry for increased sustainability while reducing environmental impact. It describes the industry's community collaboration while creating increased value through corporate social responsibility initiatives.

In a 2010 report - *The Social Acceptability of Aquaculture Development in Coastal Areas: The Case of Two Greek Islands,* researchers found variation in attitudes between residents of two areas.²² In one community, acceptance of aquaculture was embedded in the local culture, where the small economy and community livelihoods depended on the farm. Likely due to this reliance and the interconnectedness of the farm with the area, locals were found to have a higher level of acceptance for the farm(s) than tourists.

The Responsible Seafood Advocate²³ reports on an emerging synergy between aquaculture and tourism, contributing to the blue economy in Greece. On the island of Strongyli, Lamar S.A. annually grows 300 tons of fish such as sea bass and gilthead sea bream. By partnering with a local scuba diving center, Lamar S.A. blends education with eco-tourism, hosting talks and diving excursions that showcase the natural ecosystem a thriving aquaculture farm can support.

The venture at Kameiros Skala, Rhodes, is complemented by the collection of water quality data around the farm in collaboration with the Hellenic Centre for Marine Research. These efforts support a robust aquaculture management program, while offering insights that are openly

²¹ Greek Aquaculture: Annual Report 2022 | Fish from Greece

²² Social Acceptability of Aquaculture Development in Coastal Areas: The Case of Two Greek Islands: Coastal Management: Vol 31, No 1 (tandfonline.com)

²³ Responsible Seafood Advocate, July 2023 - https://www.globalseafood.org/advocate/aquaculture-tourism-anunexpected-synergy-for-the-blue-economy)

shared with academic institutions. Parameters monitored hourly include salinity, dissolved oxygen, and temperature.

This integration of aquaculture and tourism has helped reshape public perceptions of fish farming. The collaboration demonstrates sustainability, enhances the local culinary experience, and even supports local livelihoods by using environmentally conscious production as an attraction. Lamar S.A. envisages advancing this concept to declare their farm a Marine Protected Area (MPA), underscoring their commitment to ecological benefits and sustainable industry growth.

Resistance to a Fish Farm Expansion

In 2023, an aquaculture producer in Poros, Greece, with plans to expand operations was met with opposition from the local community.²⁴ The mayor of Poros backed citizens opposing the expansion, stating that it would "endanger the island's existing tourism industry" with Poros depending on tourism for an estimated 95% of its economy. Though evidence of this claim does not appear to be provided, a concern expressed in the article surrounds the fear of the island becoming an industrial zone.

The article claims that the appeal of the island for tourists lies in the clear waters and open coasts – a place they can come to relax. One fisherman interviewed for the article expressed his opinion of aquaculture as being necessary, but a sector that needs to follow protocol and not be developed in tourist areas. An additionally noted concern was regarding safety for swimmers in areas with large concentrations of fish; however, operators dispute the legitimacy of these concerns.

Strategic Connection Between Aquaculture and Tourism

Bonnie Waycott, an aquaculture specialist writing for the Global Seafood Alliance describes the connection between aquaculture and tourism.²⁵ The article connects the touristic attraction of marine experiences and seafood, stating that aquaculture can provide tourism experiences while tourism can help create demand for local products.

Strongyli Island aquaculture operator Lamar S.A. collaborates with local tourism experience providers to offer educational tours and services for visitors. Tour attendees learn about the farm and its practices while having an opportunity to snorkel or dive around the farms, observing wildlife like tuna, dolphins, and seals. The farm is able to showcase its ecosystem while educating visitors about the results. The article discusses other tourism aquaculture experiences and opportunities.

²⁴ Greek islanders dismayed by plan to scale up fish farming (france24.com); Tiny Greek island threatened by fish farm set to dominate 25 per cent of its land and sea | Euronews; Residents protest against proposed fish farm that threatens Poros island – Greek Herald

²⁵ Aquaculture tourism: An unexpected synergy for the blue economy - Responsible Seafood Advocate (globalseafood.org)

Public Engagement in Aquaculture Tourism

Waycott also hosts a blog about sustainability and technological innovation, among other topics.²⁶ In one post - *Aquaculture, Tourism and Enhancing Public Understanding of Fish Farming* - Waycott describes how tourists choose a destination based on scenic areas with beautiful coastal areas, followed by a description of how some operators in Greece are combining tourism initiatives with

their aquaculture operations to transform them into a "touristic asset" rather than a detractor.²⁷

Waycott reported on other Lamar S.A. initiatives including efforts to designate an area of its farm as a Marine Protected Area. The blog post addresses the importance of public education around aquaculture along with the role visitor tours can play in building knowledge around fish farming practices and benefits –at both community and global levels.



practices and benefits -at both From Bonnie Waycott's Blog - Lamar S.A Aquaculture Farm

5.4 Scotland

A study completed under the guidance of the Scottish government, commissioned by Marine Scotland and the Highlands and Islands Enterprise (*The Value of Aquaculture to Scotland*) stated that by 2017, 95% of the country's aquaculture was in finfish production, with almost all of the operations located in the Scottish Highlands and Islands.²⁸ In 2014, the Scottish government assessed aquaculture's benefits for Scotland. Notable benefits discovered and reported were primarily related to the economy – increased employment opportunities, stimulating smaller economies, and contributing to the country's GDP. These benefits were thought to be most impactful in rural communities, where, for example, employment opportunities may otherwise be limited. Tourism was identified as one of the industries benefitting from the growth of aquaculture. Negative opinions related to aquaculture were typically attributed to environmental impacts.²⁹

²⁶ About | (bonniewaycott.com)

²⁷ Aquaculture, Tourism and Enhancing Public Understanding of Fish Farming | (bonniewaycott.com)

²⁸ https://www hie.co uk/media/3035/valueplusofplusscottishplusaquacultureplus2017plus plusreport pdf

²⁹ 00450798.pdf (inclusivebusiness.net)

In December 2023, the Scottish government released an update on the country's marine sector, including aquaculture.³⁰ This report showed that the economic contribution of aquaculture had increased by 154% between 2012 and 2021.³¹

Aquaculture and Tourism

Researchers in Scotland have completed studies regarding the impacts of aquaculture on the tourism industry. In one study from 2011, researchers surveyed tourists and tourism businesses across three locations.³² Of those engaged, most respondents reported that the aquaculture in the region had no bearing on their opinion of the location and willingness to revisit. Most respondents also reported being neutral to more development, except for opinions on impacts on scenery and the environment. The study acknowledged limitations related to its modest sample size (120), potential sampling bias, and limited inclusion of other ocean-based businesses and users such as divers and yachters.

More recently in 2019, the Scottish Salmon Company released a report discussing the social and economic impacts of an aquaculture development in North Arran.³³ This report determined, as a result of discussions throughout the study, that a negative impact on tourism in the area due to the presence of the fish farm was unlikely. Adverse impact on the appearance of the coastline was considered; however, it was thought that these could be addressed by investing in and maintaining the site while considering the possible inclusion of the site in tourism offerings. Additionally, for smaller communities that are reliant on seasonal sectors like tourism, the report notes the potential for aquaculture operations to provide stable, year-round employment opportunities.

Sector Conflicts

In a European Maritime Spatial Planning Platform assessment of tourism and aquaculture connections, areas of potential conflict between the two sectors were:

- "Visual impact of aquaculture sites.
- Spatial restrictions for recreational fishing and boating.
- Decreased access to safe anchorage areas.
- Accidental damage to boats and aquaculture installations.
- Impact of aquaculture on water quality; and
- Impact of waste on aquaculture."³⁴

Possible solutions offered by this report include concepts like zoning and regional planning for aquaculture that would incorporate the priorities of other related and impactful/ed sectors, as well

³⁰ Key Points - Scotland's Marine Economic Statistics 2021 - gov.scot (www.gov.scot)

³¹ Scottish aquaculture's worth triples in a decade (fishfarmingexpert.com)

³² Does fish farming impact on tourism in Scotland? - Nimmo - 2011 - Aquaculture Research - Wiley Online Library

³³ Evaluating the Social and Economic Impacts of the SSC North Arran Aquaculture Development (scottish-salmon.s3eu-west-1.amazonaws.com)

³⁴ https://maritime-spatial-planning.ec.europa.eu/media/document/12452

as community priorities such as sustainability and environmental protection. Regulations around minimum distances from shorelines and other structures may be utilized, considering the sizes of cages and materials used. Other recommendations offered include promoting aquaculture tourism opportunities, making use of technology to improve the view of farms, placing restrictions on development in certain areas or ecosystems, and public education.

5.5 Maine

Aquaculture in the United States (US) has been expanding in recent years, with the government announcing the introduction of permits for open-sea aquaculture in 2020.³⁵ For farm sites closer to shore, the US is examining opportunities to govern across jurisdictions and sectors to manage broader conflicts, particularly within the marine systems space.³⁶ In *Addressing Marine and Coastal Governance Conflicts at the Interface of Multiple Sectors and Jurisdictions*, eight cases of broad management plans are reviewed and evaluated which cover strategies for balancing interests between economic advancement, environmental protection and strong support for other sectors like tourism.

A Range of Public Opinion on Aquaculture

A Maine Policy Review article discusses the anticipated conflict between aquaculture and other "traditional" industries, while describing opposition from regional landowners as "NIMBY" (not in my backyard).³⁷ However, the article also acknowledges the importance of the regulatory structure in maintaining a positive public perception of the industry. Having a transparent and reliable regulatory structure in place can encourage the public to trust that proper policy will mitigate environmental harm while advancing economic interests.

In an opinion piece published in June of 2023 regarding opposition to fish farming, activists express concern that industrial aquaculture will be damaging to tourism and other sectors, though no evidence is presented within the article to back the claim.³⁸

A study out of the University of Maine explores four perspectives that people hold about aquaculture and the main points of contention between them.³⁹ The four perspectives include *agnostics* (who do not feel that economic benefit outweighs environmental impacts), *historians* (who are cautiously optimistic about the future of aquaculture, having followed the industry through both successful and failed advancements), *anchors* (who value community and planning, and wish for aquaculture to be incorporated slowly "the right" way), and finally *optimists* (who believe in the benefits of aquaculture and think it can be seamlessly integrated into communities for their betterment).

³⁵ Federal Register: Promoting American Seafood Competitiveness and Economic Growth

³⁶ Frontiers | Addressing Marine and Coastal Governance Conflicts at the Interface of Multiple Sectors and Jurisdictions (frontiersin.org)

³⁷ Reflecting on Maine's Changing Productive Coastal Region (umaine.edu)

³⁸ At sea as on land? Activists oppose industrial farming in U.S. waters (mongabay.com)

³⁹ Diverse perspectives on aquaculture development in Maine (sciencedirectassets.com)
Between these four views, the group was split on opinions regarding adequate regulation – some felt that more regulation would hinder growth, while others believed in slow growth and regulation that prevents long-term damage. Those in the *optimist* group were found to hold concerns about climate change and saw aquaculture as a way to adapt to changing conditions. The groups largely agreed that the topic of aquaculture is contentious, and disagreed on whether aquaculture complements or degrades.

Connecting Aquaculture and Tourism

The connection between aquaculture and tourism in Maine is well established, with the Maine Sea Grant (described in the adjacent textbox) releasing a "fact sheet" on fisheries and tourism as early as 2013.⁴⁰ This fact sheet was based on a 2011 study examining legal barriers for fishers and fish farmers considering expanding into tourism. Although over a decade old, the fact sheet provides insight into benefits such as the joint promotion of experiences by both aquaculture and tourism operators as well as the convenience of having activities like farm tours included as a one-stop-shop travel package.

In 2022, the Maine Sea Grant, in collaboration with the <u>Maine Aquaculture Association</u>, released a 10-year roadmap for Maine's aquaculture industry.⁴¹ Goals of the roadmap include:

1. Streamlining the process for licensing and permits, balancing rights of applicant and public.

Maine Sea Grant

The Maine Sea Grant at the University of Maine is part of a national program that provides funding for initiatives in fisheries including aquaculture, agricultural engineering, animal and food science, and resource economics among other areas. The purpose of the grant is to develop and advance methods for raising marine life and organisms while working with underutilized marine resources.

- 2. Further integrating aquaculture into coastal communities.
- 3. Promoting Maine seafood; and
- 4. Creating an environment for Maine to be a leader in sustainable aquaculture, including social economic and environmental considerations.

Under Goal #3, an action item has been dedicated to tourism: "Harness marketing opportunities for tasting tourism: engage Maine visitors and locals, cultivate a sense of pride in communities for aquaculture and local seafood." Initiatives outlined under this action item include the development of displays for the airport as well as rest areas, newspaper ads, an educational website and TV advertising. The measures of success that have been indicated as part of this action centre around the number of partnerships formed between tourism and aquaculture

⁴⁰ Fisheries & Tourism Fact Sheet—Complete series (umaine.edu)

⁴¹ New Ten-year Roadmap Released as Guide to Future of Maine's Aquaculture Sector - Maine Sea Grant - University of Maine (umaine.edu); Maine Aquaculture Roadmap 2022–2032 (umaine.edu)

organizations, dollars spent on advertising (in addition to the number of advertising items created), and the number of tourism events held where aquaculture companies are included.

Summary

The jurisdictional review revealed destinations that are showcasing the synergies between tourism and aquaculture to demonstrate the positive impact of aquaculture on tourism.

6 Case Study Profile

6.1 Introduction

The case studies in the following section profile aquaculture operators that have successfully diversified into tourism.

6.2 Fanny Bay Oysters



Fanny Bay Oysters was founded in the 1980s by three farmers, growing into a full shellfish aquaculture operation with multiple sites in BC along with a Michelin-recommended oyster bar and shellfish market in Vancouver.⁴² They offer their classic Fanny Bay Oysters as well as SunSeeker Oysters, manila clams and salish mussels.

Now owned by the Taylor family of farms, the chain includes a hatchery, nursery, grow-out, processing, and direct distribution to three market locations in BC. On their website, they describe the life of their shellfish through their "full cycle of sustainable farming", starting as larvae in the hatchery and finding their way to the floating surface

bag system. Once grown, the shellfish are processed on-site. Fanny Bay boasts of being the largest shellfish aquaculture producer in Canada.

Tourism Approach and Appeal

According to Malindi Taylor from Fanny Bay Oysters, before the onset of COVID-19, the farm offered tours twice a week to take visitors through their processing plant. During the annual BC Seafood Festival, they increased their offerings to enable more visitors to experience their operations and products. Additionally, Fanny Bay hosts private tours for local cuisine and conservation groups to showcase their sustainable shellfish aquaculture operation.⁴³

⁴² Fanny Bay Oysters | Fanny Bay Oysters, British Columbia | Fanny Bay Oysters, British Columbia

⁴³ A Spotlight on Seafood Tourism in Canada - Seaside with Emily (ibid Emily)

Additionally, Fanny Bay Oysters offers a mobile oyster bar that caters festivals and events.⁴⁴ The company's website states that not only are the oyster shuckers ready to cater, but they come armed with extensive knowledge of the sector and history of the region to answer guest questions and share information about the industry.

Benefits of Strategic Overlap

According to Taylor, Fanny Bay Oysters takes pride in displaying their processes to visitors. The blog Seaside with Emily⁴⁵ discusses the care that goes into the production of each oyster, while mentioning the satisfaction her team derives from promoting sustainable aquaculture practices. The face-to-face time with customers and tourists also provides an opportunity to leave their clientele with some



Fanny Bay Oysters' Oyster Bar

"food for thought," encouraging a return visit during the guests' next trip to the area.

Taylor highlights that aquaculture is complicated and often misunderstood, with many myths regarding environmental and social impact. She emphasizes the benefits of sharing information



The Taylor Shellfish Family of Farms

and knowledge with visitors and correcting some of the public misconceptions while enhancing overall public knowledge of the industry.

Taylor believes there will be new opportunities for future virtual tours over social media, which address the desire of many clients who wish to initially explore experiences online. She also envisions more interactive involvement, highlighting the importance of including sensory experiences and enabling visitors to taste the results at the end of a tour.

⁴⁴ Catering | Fanny Bay Oysters, British Columbia | Fanny Bay Oysters, British Columbia

⁴⁵ <u>https://seasidewithemily.com/</u>

Key Insights

Pescatourism embodies the synergies between aquaculture and tourism. Activities such as farm tours enable communities to offer their visitors more options for tourism experiences. Through these tours, visitors are able to take part in local culture and related practices, while sampling farmed shellfish and finfish. Conversely, industry operators may utilize such tours to share relevant and accurate information about industry practices and the global benefits of aquaculture to increase public understanding.

6.3 Aquaculture Tours in Norway

Norway offers examples of aquaculture-based tours for visitors and locals alike. These tours create opportunities for visitors to learn about aquaculture while connecting with nature as well as access an immersive experience. A compelling example is the Salmon⁴⁶ in Oslo where visitors are offered an immersive experience to understand the country's vibrant salmon fishing culture. The Salmon is a restaurant and educational institution devoted to sharing knowledge about Norwegian salmon farming and cuisine. The Salmon is popular with cruise visitors – serving 200,000 farmed salmon dinners annually.

The **Storebla Aquaculture Visitor Centre** is one of 20 visitor centres around Norway that offer an educational experience, providing a chance to learn about the industry through digital

activities as well as tours to farm sites.⁴⁷ These centres and farm tours are made possible through a partnership between Leroy, the seafood producer sponsoring the project, as well as the Norwegian Fisheries Museum. Another tour-related component is the "viewing license" issued by the government, which allows the breeding of finfish for viewing purposes.

School activities are also offered through the centre, providing full-day educational experiences at farm facilities, as well as in Storeblå's educational lab.



Exhibit from an Aquaculture Visitor Centre

Tourism Synergies

These visitor centres share information about aquaculture production with the public. Ticket for the experience includes both entry to the Fisheries Museum as well as a trip on an RIB (rigid inflatable boat) to a Leroy fish farm. Guides from the Museum are available to answer questions

⁴⁶ <u>https://www.thesalmon.no/en/</u>

⁴⁷ Storeblå Storeblå (storebla no); Storeblå Aquaculture Visitor Centre - visitBergen com

The Impact of Aquaculture on Tourism



Storeblå from visitBergen.com

schools or other educational institutions.

Key Insights

regarding the exhibits and installations; tour guides drive the boat to the fish farm and have the expertise to answer additional questions about farm practices and culture.⁴⁸

The focus of visits to the Storeblå and other centres is experiential tourism. The tour offering also provides valuable education opportunities for local children and families through

Aquaculture naturally allows outdoor, ocean based excursions and educational opportunities related to the industry. Visitor participation in aquaculture tourism experiences demonstrates robust demand among tourists. Knowledgeable and animated hosts enable guests to enjoy their experience while enhancing interest and awareness of the industry. The visitor experience can be combined with on land learning activities to expand the offering, broaden the sensory aspect, and provide more context to visitor learnings.

6.4 Maine Oyster Trail

The Maine Oyster Trail, running from Jonesport to Portsmouth, is a network of local oyster farms, raw shellfish bars and tour operators that have come together to advance public knowledge of the industry and enhance tourism experiences. The Trail is comprised of a network of at least 89 businesses which can be found on their interactive website map.⁴⁹



The initiative officially began in 2017 and was intended to provide public education about Maine's oyster farming industry. Since its induction, new farms and tourism experiences have been added and the Trail is continuously being enhanced in partnership with its existing farmers.

Providing Visitor Convenience

The Trail has greatly leveraged the strategic overlap between aquaculture education and experiential tourism experiences. This is demonstrated through the convenience provided by the Maine Oyster Trail's website which gives visitors the ability to book several types of marine related experiences at once.

⁴⁸ RIB boat excursion Storeblå (storebla no)

⁴⁹ Oyster Farms Near Me | Business Directory | Maine Oyster Trail

The website for the Trail initiative offers a trip planner that allows for the filtering of experiences along the Trail.⁵⁰ To begin the process of tailoring the trip, a potential visitor selects from a list of potential activities in which to participate:

- Farm tours
- Raw bars
- Shuck trucks
- Boat & kayak tours
- Year-round experiences; and
- Opportunities to purchase oysters.

Visitors are also able to filter by region or hot spot, and then add the relevant experiences to their itinerary. Once finalized, the itinerary appears on the map (adjacent).

The Oyster Passport

Part of the Maine Oyster Trail experience is through the Maine Oyster Passport, which earns visitors "check ins" at each establishment they visit



Sample Itinerary for a Maine Oyster Trail Experience

along the Trail. Each participating business is given a unique code that they display for visitors. This works two fold – it allows visitors to earn points toward Maine Oyster Trail swag that they can take away from the experience and also provides important visitation data for the industries.⁵¹

A Variety of Experiences

The initiative's website offers a description of each of the above-mentioned experiences offered as part of the Maine Oyster Trail package.

⁵⁰ Plan Your Experience | Oyster Farms Maine | Maine Oyster Trail

⁵¹ Your Passport to Oysters in Maine | Maine Oyster Trail

The Impact of Aquaculture on Tourism



A Maine Oyster Trail Tourism Experience

The operators who provide the guided farm tours have an oyster farmer describe operations, answer questions, and provide an oyster tasting. Local farms are also advertised on the website for visitors to buy directly. Raw Bars and Shuck Trucks provide dining experiences along the Maine Oyster Trail, with some having set schedules and locations while others have varying locations. Finally, boating, and kayaking tour providers in the area offer oyster dedicated tours for those looking for more active participation.⁵²

Key Insights

Synergies between aquaculture and tourism can go a step further than one-to-one partnerships between aquaculture and tourism operators, leveraging a wide network of organizations that, together, can create significant convenience for visitors while spreading a collective message about marine farming. In the case of the Maine Oyster Trail, the collaboration of a variety of operators across multiple regions has resulted in the creation

of a unique coastal oyster tour which may now independently draw additional visitors to the area.

6.5 Bluetopia + LAMAR S.A.

LAMAR S.A., an aquaculture producer, has teamed up with Bluetopia, an ecotourism company, to present the Marine Life Experience tour. LAMAR is located on an island in Greece and produces four types of fish – pagrus, sea bass, sea bream, and meagre. In total, it can produce 300 tons of fish for sale in local restaurants.⁵³

Bluetopia offers tours focused on marine ecotourism including diving and boating tours. They employ highly educated guides and instructors to ensure high-quality service, with a mission of "raising awareness for the importance of safeguarding the integrity of the environment by

showcasing both aquaculture and the natural beauty of the Mediterranean Sea."⁵⁴ Bluetopia also operates diving classes from beginner to advanced, using their dives to further their values around marine education.



Bluetopia's Vision

⁵² Maine Oyster Trail Experiences & Adventures | Maine Oyster Trail

⁵³ Why LAMAR fish? - LAMAR

⁵⁴ About – Blutopia

The Tourism Experience



View of the Sea Cage from the Marine Life Experience Tour

The Marine Life Experience (MLE) tour lasts for about three hours and provides time to swim and snorkel with marine wildlife.⁵⁵ On the journey, visitors learn about aquaculture, conservation, and other topics regarding marine life relevant to the area.

Travel blogger Bonnie Waycott attended the Bluetopia Diving Center on her travels, describing her experience swimming in a sea cage with sea bream.⁵⁶ She discusses how beneficial the experience is in helping the public to better understand the industry and its impacts. She specifies that the tour

she attended allowed her to see the technology behind the feeding systems and also provided the opportunity to taste the fish.

Key Insights

Another example of leveraging synergies with tourism to further advance education around aquaculture, the MLE demonstrates how rich of a visitor experience can be created through partnering with aquaculture operators. These tours provide access to local seafood, experiences with wildlife like seals and dolphins, as well as the opportunity to learn about sustainable farming practices from industry experts.

6.6 New Brunswick

There are several examples in New Brunswick where the tourism sector has embraced aquaculture. For example:

- Boat tours in St. Andrews feature salmon farms in their itineraries as points of interest including explaining aquaculture practices and salmon science.
- The New Brunswick Fisheries and Aquaculture Festival in the Shippagan area highlights the importance of both the wild and farmed fisheries to the local economy and way of life.
- Explore New Brunswick (Explore NB) promotes local seafood including cultivated oysters on its website; and
- Explore NB highlights that the "peaceful and cultural village" Neguac was proclaimed "Atlantic Canada's Oyster Hub" in 2007.

⁵⁵ Bloowatch

⁵⁶ Aquaculture, Tourism and Enhancing Public Understanding of Fish Farming | (bonniewaycott.com)

KCS' Application re AQ#1205X, AQ#1432, AQ#1433 in Liverpool Bay, Queens County

This is Exhibit B referred to in the Affidavit of Stephen Coyle, affirmed before me on January 22, 2024.



A Barrister of the Supreme Court of Nova Scotia

DAVID A. BARRY A Barrister of the Supreme Court of Nova Scotia

4140-3517-1406

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STEPHEN COYLE

Vice President of Research and Strategy

EDUCATION

Master of Business Administration Dalhousie University

Bachelor of Science Dalhousie University

PRACTICE AREAS

Policy Analysis Regulatory Reviews Strategic Planning Business Planning Program Review Research & Analysis Outreach & Engagement Jurisdictional Scanning Operational Planning Organizational Excellence



Current Role: GATN, VP Research & Strategy

Stephen Coyle is GATN's Vice President of Research and Strategy is a seasoned project manager, strategic planner, business analyst and researcher. Stephen is driven to generate insights through strategic thinking to reveal opportunities for growth and positive change.

He draws on a broad range of experience in management consulting including many strategic planning assignments coupled with a deep experience in tourism. This includes his previous membership on the senior leadership team with Tourism Nova Scotia. Stephen's areas of expertise include strategic planning, market research, industry analysis and community economic development.

Stephen has completed dozens of tourism studies – including in product and destination development; strategic planning; and market assessment.

Stephen is focused on providing practical decision support through factbased decision support and strategic analysis. Leveraging a wide range of research and planning tools, Stephen is committed to delivering the highest value and most cost-effective decision support to clients using multiple lines of enquiry. Stephen is adept at professionally managing complex projects.

Work History

Bluteau DeVenny: VP, Research & Development

Worked with entrepreneurial organizations – including in tourism - to support growth. Used contemporary best business thinking and tools to enable clients to gain insight on their business. Provided a solid foundation to facilitate clarity and focus energy, while discovering a renewed purpose to grow.

NS Tourism Agency: Director Research

Served internal and external clients by delivering timely strategic insights to support evidence-based decision making. Managed a team of research professionals and external consultants for special projects. Supported long range and annual planning. Ensured effective use of resources through ongoing measurement and evaluation. Provided analysis, business planning and methodological guidance to clients.

NS Tourism Agency: Senior Research Analyst

Planned, implemented and maintained surveys and tracking systems to support the research requirements of the provinces tourism industry. This included decision support, statistical analysis, evaluation, forecasting, research methodological development, and questionnaire design. Represented the province in federal-provincial collaboration.

MSVU: Tourism Research Lecturer

University lecturer on tourism research methods and planning.

Parks Canada: Socio-Economic Research

Managed research projects for National Parks and Historic Sites to support planning and development.

STEPHEN COYLE Vice President of Research and Strategy



PROJECT EXPERIENCE

Tourism

- Short Term Rental Accommodation Regulatory Implementation (2024)
- Indigenous Tourism Jurisdictional Scan (2024)
- Eel River Bar First Nation Heritage Garden Feasibility Study (2023-2024)
- Nova Scotia Tourist Accommodation Needs Assessment (2023-2024)
- New Brunswick Tourist Accommodation Needs Assessment (2023-2024)
- Sheet Harbour Marina Feasibility Study and Business Plan (2023)
- (2023)
- McNabs Island Provincial Park Stakeholder Consultation (2023)
- Destination Antigonish Tourism Strategy (2022-2023)
- Tourism Strategy for the New Mi'kmaw Native Friendship Centre (2023)
- Atlantic Canada Tourism Travel Trade Market Readiness Program Assessment and Forward Strategy (2022 - 2023)
- Mi'kmaw Cultural Tourism Authenticity Certification Tool Kit (2022)
- Bras D'or Yacht Club Sustainability Plan (2021)
- Pictou County Revitalization Plan (2021)
- Halifax Tourism Master Plan (2020)
- Mi'kmaw Cultural Tourism Authenticity Guidelines (2020)
- Tourism Gateway Strategy for Village of Caledonia (2020)
- Hospitality Newfoundland Review of Tourism Quality Assurance (2019)
- Business Case for a Marina in Sheshatshiu Innu First Nation (2019)
- Hants County Exhibition Park Business Plan (2019)
- Port Hawkesbury Marine Innovation Centre Feasibility Study (2018-2019)

Tourism (cont'd)

- Feasibility Analysis and Planning Services for the North Atlantic Oceanarium (2018)
- Cultural Tourism Strategy for Mi'kmaw of NS (2018)
- Feasibility Analysis and Planning Services for the North Atlantic Oceanarium (2018)
- Nova Scotia Indigenous Tourism Enterprise Network Business Plan (2018)
- Glooscap First Nation Market Feasibility Assessment (2017)
- Glace Bay Revitalization Plan (2017)
- Victoria County Tourism Strategy (2016)
- Short Term Rental Accommodation Regulatory Review Nova Scotia Tourist Accommodation Needs Assessment (2016)

Business Plans and Feasibility Studies

- Business Plan for the New Mi'kmaw Native Friendship Centre (2020)
- Feasibility Study for Port Hawkesbury Marine Innovation Centre (2020)
- Feasibility Study of a Local Immigration Partnership for Western Regional Enterprise Network (2020)
- Business Case for a Marina in Sheshatshiu Innu First Nation (2019)
- FDI Market Research and Competitive Modelling for the City of Summerside (2019)
- Feasibility Study and Operation Plan for a Proposed Sport Infrastructure Facility in East Hants (2019)
- Hants County Exhibition Park Business Plan (2019)
- Feasibility Analysis and Planning Services for the North Atlantic Oceanarium (2018)
- Nova Scotia Indigenous Tourism Enterprise Network Business Plan (2018)
- Pictou Landing First Nation Boat Harbour Remediation Project (2018)
- Aerospace and Defence Sector Indigenous Supply Chain Study (2016)
- FDI Supply Chain Analysis for WREN (2016)



STEPHEN COYLE Vice President of Research and Strategy



EXPERIENCE

Strategic Planning

- Confederacy of Mainland Mi'kmaw (CMM) Strategy (2023)
- PEI Population Strategy (2022-2023)
- Atlantic First Nation Technical Service Strategy (2022-2023)
- Destination Antigonish Tourism Strategy (2022-2023)
- Charlottetown Strategic Plan (2022)
- Treaty Education Nova Scotia Strategic Plan (2022)
- Mi'kmaw Kina'matnewey Strategic and Operational Plans (2021)
- Halifax Tourism Master Plan (2020)
- Strait of Canso Foreign Direct Investment Strategy (2020)
- Tourism Gateway Strategy for Village of Caledonia (2020)
- Cape Breton-Unama'ki Economic and Population Growth Strategy (2019)
- Lennox Island First Nation Five-Year Community Strategic Plan (2019)
- Strategic Plan for the Yarmouth Airport (2019)
- Cultural Tourism Strategy for the Nova Scotia Mi'kmaw (2018)
- Victoria County Tourism Strategy (2016)

Evaluation

- MiHR Gearing Up! Program Evaluation (2022)
- Hospitality Newfoundland Review of Tourism Quality Assurance (2019)
- Atlantic Aboriginal Economic Development Integrated Research Program Evaluation (2017)
- Creative Industries Fund Program Evaluation (2018)

- Nova Scotia Procurement Shared Services Evaluation (2017)
- Hospitality Newfoundland Travel Trade Market Readiness Program Assessment and Forward Strategy (2022)
- Off Highway Vehicle Road Use Pilot Evaluation Study (2018-2021)

Immigration

- Labour Market Analysis for Opportunities New Brunswick Immigration Strategy (2022)
- NS Immigration and Migration Attraction and Retention Study (2023)
- International Student Experience Study (2022-2023)
- Study on the Impact of Provincially and Territorially Administered Economic Immigration Programs for Forum of Ministers Responsible for Immigration (2021)
- Western Regional Enterprise Network Local Immigration Partnership Feasibility Study (2020)

Mental Health and Addictions

- MHA Community Based Organization (CBO) Evaluation (2022)
- MHA Engagement & Sensemaking (2022)
- MHA CBO Wellness Framework Development (2022)
- MHA Patient Journey Mapping (2022-2023)
- Anticipating Universal Mental Health & Addictions Access Impacts on First Nation Communities (2023)
- Universal MHA Access Future State Analysis (2023)
- Evaluation of Universal MHA Framework (2023)



STEPHEN COYLE Vice President of Research and Strategy



EXPERIENCE

Economic and Social Impact

- Valley Regional Enterprise Network Regional Economic Profile and Sector Profiles (2020)
- Economic Impact of Golf in Canada (2019)
- Economic Impact Assessment of the Antigonish 2018 Special Olympics (2018)
- Economic Impact of the Nova Scotia International Airshow (2017)
- Miramichi Multiplex Economic Impact Assessment (2017)

Policy Analysis

- Policy Review and Development for Nunatsiavut Government's Inuit Business Registry (2020-2021)
- Nova Scotia Office of Aboriginal Affairs Treaty Education Program and Governance Review (2018)
- Prince Edward Island Entrepreneurial Ecosystem Inventory, Gap Analysis and Baseline Data Collection (2018)

Labour Market Analysis

- Atlantic Indigenous Labour Market Forecast (2018)
- Pan-Atlantic Strategy to Address Labour Shortages for the Atlantic Colleges Atlantique (2018)

Project Management

- Charlottetown Strategic Plan (2022)
- Hospitality Newfoundland Travel Trade Market Readiness Program Assessment and Forward Strategy (2022)
- MiHR Gearing Up! Program Evaluation (2022)
- Treaty Education Nova Scotia Strategic Plan (2022)
- Mi'kmaw Kina'matnewey Strategic and Operational Plans (2021)
- NS Immigration and Migration Attraction and Retention Study (2022-2023)
- International Student Experience Study (2023)
- Study on the Impact of Provincially and Territorially Administered Economic Immigration Programs for Forum of Ministers Responsible for Immigration (2021)
- Feasibility Study for Port Hawkesbury Marine Innovation Centre (2020)
- Feasibility Study of a Local Immigration Partnership for Western Regional Enterprise Network (2020)
- Halifax Tourism Master Plan (2020)
- Valley Regional Enterprise Network Regional Economic Profile and Sector Profiles (2020)
- Hants County Exhibition Park Business Plan (2019)
- Feasibility Study and Operation Plan for a Proposed Sport Infrastructure Facility in East Hants (2019)
- Creative Industries Fund Program Evaluation (2018)
- Cultural Tourism Strategy for the Nova Scotia Mi'kmaw (2018)
- Nova Scotia Indigenous Tourism Enterprise Network Business Plan (2018)
- Off Highway Vehicle Road Use Pilot Evaluation Study (2018-2021)
- Economic Impact of the Nova Scotia International Airshow (2017)
- Delmore "Buddy" Daye Learning Institute (2016)

