

RECEIVED

By Nova Scotia Aquaculture Review Board at 4:34 pm, Dec 12, 2025

NSARB-2023-001-AFF-005

NSARB 2023-001

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 expansion for the cultivation of Atlantic salmon (*Salmo salar*) - AQ#1205x in Liverpool Bay, Queens County

REPLY SUBMISSIONS ON BEHALF OF KELLY COVE SALMON LTD.

December 12, 2025

**Robert G. Grant, KC, Sara D. Nicholson,
and David Barry**
Stewart McKelvey
600-1741 Lower Water Street
Box 997 Halifax, NS B3J 0J2
**Counsel on behalf of the Applicant, Kelly
Cove Salmon Ltd.**

Jessica Ginsburg
Kwilmu'kw Maw-klusuaqn
75 Treaty Trail
Truro, NS B6L 1W3
**Counsel on behalf of Kwilmu'kw Maw-
klusuaqn**

Natasha Puka
McInnes Cooper
1969 Upper Water Street, Suite 1300
McInnes Cooper Tower - Purdy's Wharf
Halifax, NS B3J 2V1
**Counsel on behalf of the Region of
Queen's Municipality**

**Caitlin Menczel-O'Neill and Alison
Campbell**
Department of Justice Legal Services
Division
1690 Hollis Street
Joe Howe Building
Halifax, NS B3J 1V7
**Counsel on behalf of the Department of
Fisheries and Aquaculture**

Jamie Simpson
Juniper Law
PO Box 20116, Hlaifax RPO
Spryfield, NS B3R 2K9
Counsel of behalf of 22 Fishermen

**James Gunvaldsen Klaassen, Kacie Oliver
and Ella Johnson (Articled Clerk)**
Ecojustice
520-1801 Hollis St
Halifax, NS B3J 3N4
**Counsel on behalf of Protect Liverpool
Bay Association**

OVERVIEW

1. The Applicant, Kelly Cove Salmon Limited (“**KCS**”), makes the following reply submissions in support of its application seeking a lease boundary amendment to its lease at Coffin Island AQ#1205 in Liverpool Bay, Queens County (the “**Coffin Island Farm**” or “**Farm**”, and the “**Application**”).¹
2. These submissions are made in reply to the following responding submissions filed on November 28, 2025 by the Intervenor, Protect Liverpool Bay Association (“**PLBA**”); Kwilmu'kw Maw-klusuaqn Negotiation Office (“**KMK**”); 23 Fishermen of Liverpool Bay (“**23 Fishermen**”); and Region of Queen’s Municipality (“**RQM**”).
3. For the Intervenor’s evidence to carry relevance and weight, it must be connected with this Application as it relates to factors the Board must consider under section 3 of the [Aquaculture Licence and Lease Regulations](#) (“**Regulations**” and the “**Section 3 Factors**”).
4. In reply to the Intervenor’s submissions, KCS submits that the weight of the evidence before the Board supports that expanding the existing, well-performing Coffin Island Farm will contribute to the community and Provincial economic development.
5. While the opposition to this Application has been vocal, the evidence has not established direct adverse impacts from the addition of six cages. If granted, the only impact is the modest physical displacement of other fisheries from the physical footprint occupied by the additional six cages. However, there is no evidence that the modest physical displacement will adversely affect other fisheries. KCS permits fishers to enter its lease boundaries. Lobster traps are dropped around the current Farm. Mackerel and herring are also fished around the current Farm.
6. The evidence of the existing and anticipated contributions of the Farm to community and Provincial economic development, and the strong historical performance from an environmental and regulatory perspective, strongly support allowing the Application.

¹ We refer to and rely on the define terms in our closing submissions on the merits of the Application, filed on November 14, 2025.

7. Based on the evidence before the Board, it is respectfully submitted that the Board should decide in favour of Kelly Cove's Application for a lease boundary amendment such that the Minister of DFA may amend the aquaculture licence and lease AQ#1205 pursuant to section 52 of the *Fisheries and Coastal Resources Act* (the "**Act**").

INTERVENORS MUST CONNECT THEIR EVIDENCE WITH A FACTOR

8. It is well-established from the Board's previous decisions that its analysis is structured by the Section 3 Factors, which guide the determination of whether an application will be granted.
9. While their submission generally follows this structure, RQM presents a list of issues which it requests the Board to consider in the abstract. Within this list they parenthetically reference a list of factors which it says are affected by the issue. For example, RQM poses the question: "[w]ill the expansion... increase the risk of attraction of shark species to the area? (affecting Factors (b), (c) and (d))."

RQM Responding Submission at para 9

10. RQM has neither brought evidence nor made submissions establishing any factual nexus between Dr. Hammerschlag's evidence about Great White Sharks ("**GWS**") and the factors related to economic development (section 3(b)), or other fisheries (section 3(c)).

RQM Responding Submission at para 55.

11. KCS respectfully submits that it is unnecessary, and unhelpful to the Board's task, to answer the questions posed by RQM in the abstract. To do so risks accepting the flawed underlying presumption that the question is relevant to the Section 3 Factors.

SECTION 3(A) – OPTIMUM USE OF MARINE RESOURCES

12. The Board has previously held that Section 3(a) of the Regulations is “not a standard of perfection”² but instead a question of “appropriate compromise or balance between competing interests”.³
13. RQM argues that the Board’s consideration of the Section 3 Factors includes an overarching inquiry into whether KCS has proven that the Application represents an optimum use of marine resources (Section 3(a)). RQM asserts that this principle was “implicitly applied” in previous Board decisions.
14. KCS respectfully disagrees that any such principle was previously applied. Elevating Section 3(a), and KCS’s burden of proof with respect to it, in this manner is inconsistent with the scheme of the Regulations, which lists the optimum use of marine resources as one factor which the Board considers in its overall assessment of the Application. In its previous decisions, the Board has considered the optimum use of marine resources as a last step in its analysis.
15. The Board must make finding of facts under each of the Section 3 Factors based on the evidence tendered by KCS, DFA and the Intervenors and ultimately decide the weight of each of the Section 3 Factors with respect to this Application.
16. In its submission, PLBA suggests that it is inappropriate for the Board to consider the comparative advantages of salmon production compared with land-based agriculture. Respectfully, this Board was not under the impression that beef production was an option in ***Rattling Beach*** when it considered this under section 3(a) in that decision.⁴
17. There is clear social value in permitting the scaled production of healthy, protein-rich food in Liverpool Bay. Evaluation of the public utility of the utilization of marine resources for

² **Town Point**, [NSARB 2022-001-002-003](#), at para 141, KCS’s Book of Authorities (“**BOA**”) filed on November 14, 2025, Tab A.

³ **C&G Aquaculture**, [NSARB 2024-001](#), at para 63, PLBA BOA Tab 6.

⁴ **Rattling Beach** at para 55.

salmon farming is informed by comparison with other forms of food production, including, in light of climate change, comparisons relating to carbon emissions.

SECTION 3(B) - THE FARM AND EXPANSION CONTRIBUTE TO ECONOMIC DEVELOPMENT

18. The Intervenors mischaracterize the evidence before the Board as well as the factor with respect to the contribution of the existing Farm and the proposed expansion to the community and Provincial economic development. Section 3(b) requires the Board to consider the contribution of the “proposed operation.” Here, the proposed operation includes the existing Farm and six additional cages.
19. PLBA incorrectly asserts that “no additional spending” will arise out of the proposed expansion. Its submission asks the Board to ignore considerable evidence presented by KCS on how its business operates, including the services it retains in the local community and the Province to support its operations at Coffin Island. KCS’s use of services and suppliers in the local community is described in Section 2.3 of the Development Plan:

CAI is a vertically integrated company which utilizes local suppliers whenever possible. Types of suppliers used by KCS in Nova Scotia include divers, mechanics, boat repair facilities, hardware providers, welders, heavy equipment operators, crane operators, marine supplies, fuel distribution companies, environmental consultants, electricians, boat brokers, boat builders, engine suppliers, hotels, restaurants, and ferries. In 2017, CAI spent \$231 million on supplies and services with 1269 suppliers from all over Atlantic Canada, 309 of which were Nova Scotia companies. An increase in production from the Liverpool area will proportionally increase this number in time. Figures 5 and 6 illustrate the location of Cooke Aquaculture’s suppliers in Atlantic Canada and Nova Scotia, respectively.

PLBA Responding Submission at para 27

Section 2.3 of the Development Plan, Application Package Vol 1, Exhibit [#005](#) at p 82

20. Further, approving the proposed expansion will mean there are more fish to feed, more equipment to service, additional cages to inspect, etc. It is a common-sense inference, based on KCS’s evidence about its current operations, that its spending will increase if the expansion is approved.

21. Section 2 of the Development Plan explains that Cooke has a marine feed division in Truro (Northeast Nutrition Inc.) and a seafood distribution company based in Dartmouth (AC Covert). The video evidence filed in support of the Application provides further evidence how KCS's Coffin Island Farm is interconnected with its other Nova Scotia businesses, from stocking through harvest and distribution. The addition of production capacity at Coffin Island will directly support these other arms of Cooke's businesses, all of which benefit Provincial economic development and provide high quality jobs.

Section 2 of the Development Plan, Application Package Vol 1, Exhibit [#005](#) at p 79-85

J Nickerson Affidavit, Exhibit [#044](#), at Exhibit G

22. Contrary to PLBA's submissions, there is the evidence to support a finding that a denial of the boundary amendment would negatively impact the economic contributions of the existing Farm. At Coffin Island, some of the existing moorings and cages have been outside of the lease boundary since before KCS acquired the Farm in 2011. KCS's operations on the existing footprint have been permitted by DFA pending resolution of the amendment application.

J Nickerson Affidavit, Exhibit [#044](#), at paras 12-13

23. As held by the Board in *Rattling Beach*, [NSARB 2021-001](#),⁵ it is "easy to conclude" that the economic contribution would be at best reduced, and at worst unviable, if the application is denied.
24. KCS submits that the evidence before the Board strongly supports this factor.

SECTION 3(c) - THE EVIDENCE DOES NOT SUPPORT SIGNIFICANT ADVERSE IMPACTS ON FISHERIES

25. This Application is not a contest over the importance of the lobster fishery and marine aquaculture fishery. Both are important to the Nova Scotian economy, and more specifically, Liverpool's economy. Under Section 3(c) of the Regulations, the Board must consider the fishery activities in the waters surrounding the proposed operation.
26. For this reason, the expert evidence of Chris Milley is very limited in its probative value. Mr. Milley opines that expanding aquaculture operations in Liverpool Bay "could"

⁵ *Rattling Beach* at para 58.

discourage the intergenerational transfer of lobster fishery licenses. There is no evidence that this happened in the past due to the existing operations. To the contrary, Mr. Stewart recently transferred his license to Mr. Munroe. Mr. Milley's report does not present any empirical basis for his hypotheses about impacts which "may" or "could" happen.

KCS Cross Exam of Lobster Fishermen

27. In contrast, Mr. Norsworthy's evidence focuses on the spatial impact from fisheries displacement, which is the only impact on lobster fishing which does not rely on tenuous sociological arguments like Mr. Milley's or disputed scientific claims like Ms. Milewski's. KCS submits that Mr. Norsworthy, through his extensive experience providing management consulting services to the seafood sector, is well qualified to give opinion evidence on the subject matter of his report.
28. 23 Fishermen assert that Dr. Ramon Filgueira is not qualified to critique Ms. Milewski studies, and attack the independence and impartiality of Dr. Shawn Robinson, a retired DFO scientist. Neither of these submissions hold water.
29. Dr. Filgueira was qualified as an expert in biology capable of giving evidence on salmon marine aquaculture. He is an Associate Professor in the Marine Affairs Program at Dalhousie and holds a PhD in Marine Sciences. On cross-examination, he described himself as an ecologist with a focus on aquaculture-environment actions. This naturally encompasses the opinion evidence on aquaculture-lobster interactions and organic loading which he gave in his reports.
30. To confirm Dr. Filgueira's qualifications, the Board need look no further than Dr. Filgueira's prior academic review of Ms. Milewski's studies which he co-authored in 2016, years before this Application and he was retained as an expert for this hearing.

Grant et al., [Exhibit #105](#)

31. Creatively, 23 Fishermen attempt to spin the fact of this previously published review into an argument *against* the weight of Dr. Filgueira's rebuttal to Ms. Milewski's report.
32. Respectfully, the Board should draw precisely the opposite conclusion.
33. Dr. Filgueira published his scientific review of Ms. Milewski's Port Mouton 2014 study long before being retained by KCS for this Application. His rebuttal report ([Exhibit #062](#)) and

testimony at this hearing confirm that, in his opinion, Ms. Milewski's 2018 study did not address the underlying methodological problems which Dr. Filgueira and his co-authors laid out comprehensively in their 2016 paper (and which Dr. Robinson also highlighted in his rebuttal report and testimony).

34. Dr. Filgueira's previous review supports his credibility, reliability and independence as an expert in this Application.
35. Dr. Robinson was qualified as an expert in ecology, biology and aquaculture, capable of giving opinion evidence on the subjects of salmon aquaculture interactions with the marine environment including but not limited to American lobster populations. He is retired from DFO, where he had a long career as a research scientist, and is now a senior scientist with Longline Environment.
36. 23 Fishermen seek the Board to exclude Dr. Robinson's opinion on the basis that he has previously collaborated with Cooke and the aquaculture industry on research projects. These projects primarily relate to Dr. Robinson's extensive and recognized work on integrated multi-trophic aquaculture ("**IMTA**"), which is a concept where shellfish and seaweeds were grown in conjunction with other fed species to recycle organic matter and produce a more sustainable and productive system.
37. In cross-examination, Dr. Robinson clarified that his work on IMTA has much broader application than just to salmon farming. It relates generally to enhancing the circular economy with recycling of nutrients.
38. Relying on *White Burgess Langille Inman v Abbott and Haliburton Co.*, [2015 SCC 23 \[Burgess\]](#),⁶ 23 Fishermen submit that Dr. Robinson's previous work with the aquaculture industry and Cooke gives rise to a "realistic concern" that he has an overriding obligation to KCS and is unable to give independent expert evidence and therefore his evidence ought to be excluded.

⁶ 23 Fishermen BOA, Tab A.

39. First, 23 Fishermen have not established any “realistic concern” about Dr. Robinson’s opinion.
40. 23 Fishermen assert that Dr. Robinson selectively disclosed information because he does not reference a 2021 study which he co-authored, and which concludes generally that “with increased aquaculture impact, the benthic ecosystem is increasingly disturbed”. 23 Fishermen did not identify in cross-examination, nor in submissions, how this sentence from Dr. Robinson’s paper contradicts the nuanced opinion in either of his reports before the Board.
41. Dr. Robinson does not deny benthic impacts from aquaculture. Indeed, he concludes in his rebuttal report as follows:

In conclusion, it is a given that there will be an impact from the organic loading from feeding fish directly under the cages and out to approximately 50 m in an exponentially declining fashion. This has clearly been demonstrated both in Canada and internationally in other salmon farming areas. However, the effect on commercial species that are associated within the geographic areas of the farm is not at all clear or necessarily negative.

Robinson Rebuttal, [Exhibit #065](#), Cranford Rebuttal at para 12

42. Second, 23 Fishermen misapplies the test from **Burgess**. Establishing a “realistic concern” is only the first step of the test. The effect of establishing a “realistic concern” only puts it back on the party putting the evidence forward to meet the “admissibility threshold”.⁷ The admissibility threshold is not onerous:

[49] This threshold requirement is not particularly onerous and it will likely be quite rare that a proposed expert’s evidence would be ruled inadmissible for failing to meet it. The trial judge must determine, having regard to both the particular circumstances of the proposed expert and the substance of the proposed evidence, whether the expert is able and willing to carry out his or her primary duty to the court. For example, it is the nature and extent of the interest or connection with the litigation or a party thereto which matters, not the mere fact of the interest or connection; the existence of some interest or a relationship does not automatically render the evidence of the proposed expert inadmissible. In most cases, a mere employment

⁷ *Burgess* at para 48, 23 Fishermen BOA, Tab A.

*relationship with the party calling the evidence will be insufficient to do so. On the other hand, a direct financial interest in the outcome of the litigation will be of more concern. The same can be said in the case of a very close familial relationship with one of the parties or situations in which the proposed expert will probably incur professional liability if his or her opinion is not accepted by the court. Similarly, an expert who, in his or her proposed evidence or otherwise, assumes the role of an advocate for a party is clearly unwilling and/or unable to carry out the primary duty to the court. **! emphasize that exclusion at the threshold stage of the analysis should occur only in very clear cases in which the proposed expert is unable or unwilling to provide the court with fair, objective and non-partisan evidence.** Anything less than clear unwillingness or inability to do so should not lead to exclusion, but be taken into account in the overall weighing of costs and benefits of receiving the evidence.*

(Emphasis added.)

43. In his affidavit, Dr. Robinson affirms that he is providing his independent expert opinion. There is nothing in either of his reports or from his testimony which suggests that he is incapable of giving evidence under the standard articulated above. His evidence is measured and nuanced. For instance, while he points out issues with the catchability studies from Port Mouton, he recognizes the studies as “ambitious and commendable”. He also provides his own independent scientific views (in the context of the original Application with two new farms) on additional monitoring he would like to see in Liverpool Bay in light of anticipated impacts of climate change.

Robinson Affidavit, [Exhibit #043](#) at Affidavit para 5 and Report paras 13, 34-41

44. 23 Fishermen submit that Dr. Robinson’s opinions are “inaccurate” based on Dr. Robinson’s own work on the lobster telemetry study in Liverpool Bay. On cross-examination, Dr. Robinson explained that the study found that there was a minor movement away, just outside of the Farm boundaries. He explained that lobsters are mobile populations and that the data suggested that the lobsters moved in a similar manner in the first and third years of the study. Overall, his conclusion from the tagging studies were that lobsters were not actively repelled by salmon farms.
45. With respect, Dr. Robinson is clearly a qualified person before the Board to offer testimony on the results and interpretation of his lobster tagging study at Coffin Island. There is absolutely no merit to the attacks on his independence or reliability.

SECTION 3(D) - THE EXPANSION WILL NOT IMPACT OTHER USERS

No Weight Should be Afforded to Mr. Muldoon's iPhone App Sound Readings

46. Despite the overwhelming evidence that Mr. Muldoon's sound readings are unreliable, PLBA maintains that the Board should (1) afford weight to his iPhone application readings, with a margin of error, and (2) disregard the expert evidence of Mr. Richards - an engineer with professional experience and expertise conducting sound monitoring.

PLBA Responding Submission at para 52

47. Respectfully, the rebuttal evidence of Mr. Richards completely disposes of Mr. Muldoon's sound readings. The iPhone application readings are unreliable. There is no evidence from a qualified witness to support or ascertain a reasonable margin of error.

There is No Evidence of Chronic Pollution

48. With respect to debris, the evidence does not support PLBA's characterization of a "chronic" pollution in Liverpool Bay with loose gear and debris from KCS's operations. Mr. Muldoon's and Mr. Goulden's affidavits, very detailed on a few specific incidents, simply do not support characterizations of "enormous quantities" of Styrofoam or "chronic pollution" on the shoreline.

49. RQM has not offered any evidence or submissions on any pollution at Beach Meadows Beach Park.

50. The Board can and should rely on Ms. Feindel's testimony on cross-examination. She explained that DFA's Performance Review is informed by DFA's previous reviews of the Farm, which includes checking the Farm's condition after storm events. The Performance Review considered this issue and found that the historical performance of the Coffin Island Farm has been satisfactory from a technical and regulatory perspective.

Report on the Outcomes of the Performance Review, [Exhibit #007](#)

Mr. Glebe's Opinion on the Visual Impacts is Relevant and Probative

51. With respect to visual impact, PLBA argues that Mr. Glebe's evidence has no substantive basis. Mr. Glebe was qualified as an expert to support his technical ability and

methodology in preparing his study. He was not challenged on this technical ability or methodology on cross-examination.

52. PLBA now submits that his expert report should be excluded because he opines that the significance of the visual impacts is subjective. Mr. Glebe's evidence is probative and relevant. It provides clear visual representations of the proposed expansion from various viewpoints. The Board is well-situated to review the images, determine the appropriate weight to assign to them, and form its own conclusion.

PLBA Responding Submission at paras 62-63

Mighty Atlantic Guest House Listings are Relevant and Admissible

53. With respect to all of the evidence on sound, smell, debris and visual impact, the Board must determine what weight (if any) to assign to the evidence of individuals who own high-value properties, near the Farm and along the coastline of working waterfront and industrial bay and oppose the Application. These witnesses represent a small, privileged subset of the community in Liverpool Bay.
54. Contrary to PLBA's submissions, the vocal opposition to marine-based salmon farming embodied in PLBA's advocacy, and in many of the public submissions, cannot be found to represent the voice of the majority of people living in Liverpool Bay.
55. To determine the appropriate weight for this evidence, the Board must assess the gravity and seriousness of their concerns. This requires context. KCS submits that Mr. Muldoon's highly successful and perfectly reviewed short-term rental accommodation business, the Mighty Atlantic Guest House, is probative. Based on Mr. Muldoon's description of the Farm's impact on his properties in his affidavit, one would not expect this kind of business to flourish in this location.
56. During the cross-examination of Mr. Muldoon, [Exhibit #098](#) was reviewed which consists of reviews from Google, Vrbo and Airbnb of the Mighty Atlantic Guest House, including ratings and comments, on these platforms. At the hearing, Mr. Muldoon not only identified the document as displaying his listings across each platform - he celebrated it. He happily walked through the perfect ratings and uniformly positive reviews on the listings. He suggested himself during his testimony that we read the comments.

57. In contrast with Mr. Muldoon's evidence, PLBA objects to the Board considering this evidence based on hearsay. Notably, as the owner of the business under review, Mr. Muldoon voiced absolutely no concerns with the reliability of the information and confirmed the truth of its contents.

Coffin Island is Not Critical Wildlife Habitat

58. During the Network Consultations, Canadian Wildlife Service ("**CWS**") recommended a 300 m buffer from the lease boundary to Coffin Island due to the Roseate Tern population on the island.
59. In support of implementing the 300 m buffer or denying the Application on the basis of this recommendation, PLBA and KMK distinguish this case from **Town Point**, [NSARB 2022-001-002-003](#).⁸ One factual distinction which the Intervenor was not addressed by either party was that, in **Town Point**, Dunn's Beach is listed as critical habitat for Piping Plover.
60. Here, there is no evidence that Coffin Island is critical habitat for Roseate Tern. Rather, the evidence is that there is no critical habitat for Roseate Tern within 5 km of the proposed aquaculture sites. Bird Monitoring Data Exchange data included in the Development Plan indicates that there were five sightings of Roseate Tern in Liverpool Bay over a 16-year period from 2000-2016.

Section 5.3 of the Development Plan, Application Package Vol 1, [Exhibit #005](#) at p 215

61. The proposed expansion is not in the direction of Coffin Island, and if the Application is approved, KCS will continue to work with DFA to incorporate CWS recommendations to monitor and protect colonial migrating birds and other bird populations into its FMP.
62. KCS's Wildlife Interaction Plan, which was updated further to feedback from CWS, identifies a list of mitigation measures directed specifically at protecting Roseate Tern habitat on Coffin Island.

Wildlife Interaction Plan, Report on Outcomes, Exhibit 4 at p. 632 and 660

⁸ BOA, Tab B at para 72.

63. With respect to GWS, RQM objects to Dr. Swanson's evidence from Dr. Marc Trudel in his report. Dr. Trudel is a research scientist with DFO and was a contributor to the DFO CSAS Report. Dr. Swanson relies on Dr. Trudel for acoustic tagging data which confirms that GWS frequent Liverpool Bay and for observations about the nature of GWS movements and risk of aquaculture interactions. Notably, RQM state that it is uncontested that there are GWS in Liverpool Bay.

Swanson Affidavit, Exhibit #066 at paras 10-19, 22, 24

Report on Outcomes, Exhibit #004 at p 316

64. Dr. Swanson is a peer-reviewed scientist. He explained on cross-examination that he has conducted peer reviews of other scientist's papers. He is qualified and has the expertise to review Dr. Trudel's data and information to inform his opinion.

SECTION 3(E) - DR. CRANFORD'S EVIDENCE DOES NOT SUPPORT IGNORING PAST PERFORMANCE AND SEDIMENT CLASSIFICATIONS

65. In its submission, RQM clarifies that it relies on Dr. Cranford's critiques of the regulator's sulfide testing methods to assert that the Board should not give weight to the past performance of the Coffin Island Farm in assessing the Application.

RQM Responding Submission at para 119

66. Whatever technical disagreements exist with respect to the Ion Selective Electrode ("ISE") method employed by DFA, the evidence does not support RQM's submission that historical sediment conditions are not reliable or should be disregarded.
67. In the Rebuttal Affidavit of Jessica Feindel, the Manager of Aquaculture Operations for DFA, she provides the complete version of a table which was only partially reproduced in Dr. Cranford's report, and which shows that the DFA employs seven indicators for sediment classification:

Table 1. Environmental Quality Definitions

Measurement	Sediment Classification		
	Oxic	Hypoxic	Anoxic
Sediment colour	Tan to depth > 0.5 cm	Tan to < 0.5 cm with some black sediments at surface	Surface sediments black
Microbial presence	No <i>Beggiatoa</i> -like bacteria present	Patchy <i>Beggiatoa</i> -like bacteria	Widespread <i>Beggiatoa</i> -like bacterial mats
Macrofaunal Assemblage	Wide array of infauna and epifauna	Mixed group of mostly small infauna	Small infauna only
Sulfide, µM	≤ 749 (A) 750 to 1499 (B)	1500 to 2999 (A) 3000 to 5999 (B)	≥ 6000
Redox (Eh), mVNHE	>100 (A) 100 to -50 (B)	-50 to -100 (A) -100 to -150 (B)	< -150
Organic matter, %	≤ reference*	1.5 to 2X ref.	> 2X reference
Porosity, %	≤ reference*	1 to 10X ref.	> 10X reference

Modified from the *Design of the Environmental Monitoring Program for the Marine Aquaculture Industry in Nova Scotia* (Smith et al 2002) and *Towards a Classification of Organic Enrichment in Marine Aquaculture* (Hargrave et al. 2008a)

68. Only one of these indicators is total free sulfide. The table demonstrates that DFA “does not rely on the ISE method alone” and instead “relies on a number of other, well-established environmental indicators to assess benthic conditions which contribute to site-specific management responses”.

J. Feindel Rebuttal Affidavit, [Exhibit #071](#), at paras 14-15

69. There is no evidence which is suggestive of poor site performance or benthic conditions. The evidence strongly supports that the oceanographic and biophysical characteristics at Coffin Island Farm have proven suitable for salmon farming, which KCS has productively undertaken since taking over the Farm in 2011, without unacceptable adverse effects on the benthos or ecology.

SECTION 3(G) - THERE IS NO THREAT TO THE SUSTAINABILITY OF WILD SALMON

70. The Application does not introduce any significant risks to the wild salmon population, if any, in the waters surrounding the Farm.
71. The evidence falls far short of supporting the conclusion that the Coffin Island Farm expansion will *likely* result of the extirpation of wild Atlantic salmon populations, as argued by PLBA and opined by Mr. Carr and his co-authors (with respect to the expansion and the addition of two new sites).

PLBA Responding Submission at para 69, citing J. Carr Affidavit, [Exhibit #031](#) at p 20

72. Mr. Carr's conclusion is based on an inference from what he describes as an "absence of evidence". He does not rely on any direct evidence of impacts from the Coffin Island Farm's operations on the wild salmon population. Instead, he relies on the precautionary principle to support his opinion as follows:

*The scale of this expansion is expected to considerably increase the likelihood and magnitude of negative impacts to wild salmon, given the critically low abundance of the Southern Uplands populations, which include all salmon in mainland Nova Scotia, and are in closest proximity to Liverpool Bay (DFO 2021, Diserud et al. 2022). **None of the materials we reviewed from the applicant or DFA contained any empirical evidence speaking to the impact of aquaculture operations in Liverpool Bay on wild salmon. In the absence of such evidence, the precautionary principle dictates that we must follow the large and increasing volume of science that demonstrates with certainty the negative impacts of salmon aquaculture on wild salmon.***

[emphasis added]

73. First, the precautionary principle, as a matter of law, provides that complete evidence of a potential risk is not required before action is taken to mitigate the effects of the potential risk. It does not provide that there must be zero risk or there can be no environmental impact.
74. As this Board concluded in response to Mr. Carr's evidence in ***Rattling Beach***:

[112] The precautionary principle does not prohibit development; it requires mitigation measures even in an absence of "full scientific certainty" of "serious or irreversible damage".

75. Second, in his conclusion and findings, he subsequently makes the leap from “significant adverse impacts” to the “likely” result of extirpation of local populations in the Medway, Petite *and* Lahave.

76. Mr. Carr concludes as follows:

3. **In the absence of information to demonstrate otherwise**, the applicant’s proposed projects in Liverpool Bay will most likely have significant adverse impacts on the survival and recovery of Atlantic salmon.

[emphasis added]

77. Respectfully, the presentation of these strong conclusions without direct supporting analysis undermines the reliability of Mr. Carr’s report.

78. In reply to Mr. Carr’s opinion, KCS relies on the responding evidence from Dr. Kurt Samways and the unchallenged evidence of Dr. Brian Glebe, both of whom opine that any adverse impacts on the wild salmon population are unlikely, even on the expanded original scope of this Application.

79. PLBA submits that the Farm should be stocked with sterile fish (i.e. triploids). In support of these submissions, PLBA mischaracterize Dr. Glebe’s unchallenged concerns about triploids as concerns about “production” or “profitability”. This is impossible to square with the text of his report. He specifically states that “[t]riploids have been found to be slower growing, less resistant to disease and more susceptible to low oxygen environments”. He goes on to opine that “the greater risk of disease among triploids could potentially be a greater concern for the welfare of wild salmon”. His concerns as stated are about fish health and the welfare of wild salmon.

PLBA Responding Submission at para 78

B Glebe Affidavit, [Exhibit #076](#) at p 6

80. In reply to PLBA, the location of the Farm is a factor which weighs in favour of the Application. It is a considerable distance from any active wild salmon run.

81. Further, there are many mitigation measures in place at the Farm to control for risks like fish escapes, disease and sea lice. The concerns espoused by Mr. Carr are general in nature and reflect general opposition to marine-based salmon farming.

THE BOARD DOES NOT HAVE AUTHORITY TO IMPOSE THE INTERVENOR'S PROPOSED CONDITIONS

82. KCS respectfully submits that the Board does not have the authority to impose conditions on KCS's license and lease for AQ#1205 in this proceeding. This authority is reserved for the issuance of new licenses and leases, not boundary amendments.
83. In its Aquaculture Amendment Application, KCS filed an "amendment request" to "change of site boundaries (for marine applications)." KCS did not apply for a new aquaculture lease and/or license to be issued. It already holds a license and lease to operate a salmon farm at Coffin Island under AQ#1205 until April 1, 2030, and April 1, 2040, respectively.

Aquaculture Amendment Application, Application Package Vol 1, [Exhibit #004](#) at p 6

Report on the Outcomes of the Performance Review, [Exhibit #007](#) at p 2

84. The Board is a creature of statute. Its authority and jurisdiction are set out in the Act and its regulations. In this matter, under section 49(c) of the Act, the Board must decide whether to amend the license and lease as requested:

Review Board's duties with respect to undesignated marine areas

49 The Review Board shall, with respect to marine areas not designated as aquaculture development areas, make decisions with respect to

(a) an application for an aquaculture licence or aquaculture lease;

(b) where an existing aquaculture licence or aquaculture lease authorizes the production of shellfish or aquatic plants but not finfish species, an application to amend the aquaculture licence or aquaculture lease to authorize the production of a finfish species; and

(c) an application to amend an aquaculture licence or aquaculture lease to change the boundaries of an existing aquaculture site if the change results in an increase in the area of the aquaculture site.

[emphasis added]

85. The Act goes on to specifically set out the Minister's powers upon receipt of the Board's decision:

Review Board decision

52 (1) Upon receiving a decision of the Review Board made pursuant to Section 49, the Minister shall, in accordance with the decision,

(a) issue the aquaculture licence or aquaculture lease;

(b) issue the aquaculture licence or aquaculture lease, subject to any conditions the Review Board considered appropriate;

(c) reject the application for the aquaculture licence or aquaculture lease; or

(d) amend the aquaculture licence or aquaculture lease.

(2) The Minister shall make publicly available a decision of the Review Board upon implementation pursuant to subsection (1).

[emphasis added]

86. Section 52(1)(b) of the Act applies when the Board decides to issue to new aquaculture lease and/or license. It expressly provides that the Minister will, in accordance with the Board's decision, issue the aquaculture lease and/or license "subject to any conditions the Review Board considered appropriate." It does not apply to amendment applications.
87. Section 52(1)(d) of the Act applies to amendment applications. Unlike section 52(1)(d), it does not provide the Minister or the Board authority to impose conditions on an amendment application. The lease and license have already been issued.
88. It is respectfully submitted that the Board does not have authority or jurisdiction to impose the conditions on this amendment application.

In the alternative, the proposed conditions are not supported by the evidence

89. In the alternative, if the Board has authority to impose conditions (which is denied), none of PLBA's proposed conditions are supported by the evidence, and many of them lack particulars or have unexplored implementation issues:

- (a) **Proposed Condition #1 (Triploid salmon):** There is unchallenged evidence before the Board that there are fish health problems associated with triploid stock which may also pose a risk to wild salmon, if any. There is no precedent for a condition of this nature, which is far more onerous than the DFA's robust containment program.
- (b) **Proposed Conditions #2, #3 and #4 (Monitoring and Containment):** The evidence supports that KCS complies with the mitigation and monitoring requirements implemented by DFA. This includes detailed requirements for sea lice monitoring. DFA has implemented an existing program for genetic tracing. There is no basis to impose a parallel regime on KCS.
- (c) **Proposed Condition #5 (Inflatable Buoys):** Alternative buoy types were not explored in any detail on the evidence before the Board. DFA has already stated that if the Application is approved it will work with KCS to assess the implementation of alternative buoy types, and ensure that qualified personnel are installing buoys.

Report on the Outcomes of Consultation, [Exhibit #004](#) at p 12.
- (d) **Proposed Condition #6 - #7 (Identifying Marks on Equipment and Weekly Beach Inspections):** The evidence does not establish a chronic pollution problem. RQM led no evidence about pollution issues on Beach Meadows. KCS cannot of its own accord conduct inspections on private property. The weekly intervals are arbitrary and were not recommended by any expert witness.
- (e) **Proposed Condition #8 - #9 (Shore-Based Power and Repositioning Feed Barge):** There is evidence that KCS has explored the feasibility of shore-based power, but no evidence about the feasibility of repositioning the feed barge. There is no evidence on what approvals respect to shore-based power, or on what implementation issues may exist for either of these conditions.

CONCLUSION

90. Based on the foregoing, as well as the closing submissions filed on November 14, 2025, it is respectfully submitted that the Board should decide in favour of KCS's Application for a lease boundary amendment such that the Minister of DFA may amend the aquaculture licence and aquaculture lease AQ#1205 pursuant to section 52(d) of the Act.

ALL WHICH IS RESPECTFULLY SUBMITTED.



For Robert G. Grant