
**IN THE MATTER OF AN ARBITRATION
UNDER CHAPTER ELEVEN OF THE NORTH AMERICAN FREE TRADE
AGREEMENT AND THE UNCITRAL ARBITRATION RULES**

BETWEEN:

**WILLIAM RALPH CLAYTON, WILLIAM RICHARD CLAYTON, DOUGLAS
CLAYTON, DANIEL CLAYTON AND BILCON OF DELAWARE, INC.**

CLAIMANTS

AND:

GOVERNMENT OF CANADA

RESPONDENT

**Rejoinder Expert Report
By
Tony Blouin, Ph.D.**

November 6, 2017

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I. INTRODUCTION

1. My name is Tony Blouin. In my first report,¹ I explained the role and requirements of a review panel under the Nova Scotia environmental assessment (“EA”) regime and identified the Whites Point Joint Review Panel’s (“JRP’s”) actual findings of adverse environmental effects and its broader concerns expressed in the JRP Report. Based on my review of the Whites Point EA public record, including the applicable provincial legislation and regulations, the *Agreement concerning the Establishment of a Joint Review Panel for the Whites Point Quarry and Marine Terminal Project* (the “Joint Panel Agreement”), the JRP’s Terms of Reference, and the JRP Report, I am of the view that these findings were reasonably made in discharging the statutory mandate under Nova Scotia law. Moreover, the JRP’s broader concerns over the adequacy of information provided by the proponent and its public outreach, and its conclusion that the project was unlikely to make a meaningful contribution to sustainable development of the Digby Neck and Islands, were not supportive of a recommendation that the project should be approved. In light of these findings, I expressed the view that had the JRP not adopted the approach that it did in breaching the NAFTA, these findings would have provided a reasonable basis for a recommendation that the Whites Point project should be rejected.

2. For the purposes of this report, I have been asked by the Government of Canada to review and respond to the Reply Expert Report of David Estrin, dated August 23, 2017. In Part II, I explain why I disagree with Mr. Estrin’s assumption that the Whites Point project would have been approved if community core values (“CCV”) were struck from the JRP Report. Simply put, with that omission the JRP Report would have been incomplete in respect of the JRP’s provincial mandate. In Part III, I explain further why Mr. Estrin’s approach of comparing the outcomes of different EAs is inappropriate, given that provincial assessments are conducted on a project-specific basis. In Parts IV and V, I respond directly to Mr. Estrin’s critique of my analysis of the JRP’s findings with respect to adverse environmental effects and explain why these findings provided an adequate basis to reject the project, absent the NAFTA breach. Overall, I am of the view that Mr. Estrin’s critique misunderstands the review panel process and methodology in Nova Scotia, and it does not change any of the conclusions that I made in my first report.

¹ RE-2, Expert Report of Tony Blouin, June 9, 2017 (“Blouin Report I”).

II. STRIKING COMMUNITY CORE VALUES FROM THE WHITES POINT JRP REPORT WOULD RENDER THE REPORT INCOMPLETE

3. In my first report, I concluded that absent the NAFTA breach, the Whites Point JRP could have still reasonably recommended to the Nova Scotia Minister of the Environment that the Whites Point project should be rejected.² In his Reply Report, Mr. Estrin argues that my analysis of the JRP's other findings with respect to the project's environmental effects and its broader concerns are irrelevant since "the JRP report, without the CCV factor is complete".³ As I understand it, Mr. Estrin assumes that if CCV were struck from the JRP Report, the Whites Point project would have been approved.⁴ This assumption is problematic in my view because striking CCV from the JRP Report would result in the panel's recommendation that the project be rejected also being struck from the report. In the absence of a recommendation to the provincial Minister to approve, with or without conditions, or to reject the project, the JRP Report would have been incomplete in respect of the panel's provincial mandate.

4. Similarly, in his Reply Report, Mr. Sossin suggests that absent the NAFTA breach regarding "community core values", the Ministers would have approved the Whites Point project.⁵ This conclusion likewise ignores the incomplete nature of the JRP Report absent a panel recommendation with respect to the project. In my opinion, had the JRP not taken the approach that breached the NAFTA, it would have otherwise been required to make a recommendation based upon their other findings regarding the project, which included findings of other adverse environmental effects. In my opinion, these findings could have provided a basis for a recommendation not to approve the project under the Nova Scotia legislation. Thus, approval was certainly not a guaranteed outcome absent the NAFTA breach.

5. As explained in my first report, under the Nova Scotia EA process, review panels serve in an advisory role to the Minister of the Environment.⁶ Pursuant to the Nova Scotia *Environment Act* ("NSEA"), review panels are required to recommend to the Minister: (1) to approve the

² RE-2, Blouin Report I, ¶ 120.

³ Expert Reply Report of David Estrin, August 20, 2017 ("Estrin Reply Report"), ¶¶ 12-13.

⁴ Expert Report of David Estrin, March 8, 2017 ("Estrin Memorial Report"), ¶¶ 3-4.

⁵ Reply Expert Opinion of Lorne Sossin, August 3, 2017 ("Sossin Reply Report"), ¶ 44.

⁶ RE-2, Blouin Report I, ¶ 16.

undertaking, (2) to reject the undertaking, or (3) to approve the undertaking with conditions.⁷ In my experience, review panels must make one of these three recommendations to the Minister.⁸ The Whites Point JRP was no different. Section 6.3 of the Joint Panel Agreement expressly required the panel to “recommend either the approval, including mitigation measures, or rejection of the Project.”⁹

6. Recommendation 1 in the Whites Point JRP Report provided:

The Panel recommends that the Minister of Environment and Labour (Nova Scotia) reject the proposal made by Bilcon of Nova Scotia to create the Whites Point Quarry and Marine Terminal and recommends to the Government of Canada that the Project is likely to cause significant adverse environmental effects that, in the opinion of the panel, cannot be justified in the circumstances.¹⁰

In the JRP’s reasons for the recommendation, it stated that “[m]any factors influenced the Panel’s decision,” including the inadequacy of information provided by the proponent and the uncertainties with respect to several project effects.¹¹ However, a “primary consideration” influencing the panel’s recommendation was CCV.¹² Consequently, if the approach was to strike CCV from the JRP Report, and a recommendation to reject the project was based on CCV, this would render the JRP Report incomplete, as the JRP was expressly required to recommend “the approval, including mitigation measures, or rejection of the Project”.¹³ Moreover, given that the JRP’s recommendation was based on “many factors,” in my view it would be inappropriate to

⁷ **RE-2**, Blouin Report I, ¶ 33. Also see **R-5**, Nova Scotia *Environment Act*, 1994-95, c. 1 (“*NSEA*”), s. 39(1) and 43(1).

⁸ **RE-2**, Blouin Report I, ¶ 34.

⁹ **C-363** *Agreement concerning the Establishment of a Joint Review Panel for the Whites Point Quarry and Marine Terminal Project between the Minister of the Environment, Canada and the Minister of the Environment and Labour, Nova Scotia* (Nov. 3, 2001) (“Joint Panel Agreement”), s. 6.3.

¹⁰ **R-212**, *Environmental Assessment of the Whites Point Quarry and Marine Terminal Project, Joint Review Panel Report* (Oct. 2007) (“JRP Report”), pp. 101-103.

¹¹ **R-212**, JRP Report, p. 101.

¹² **R-212**, JRP Report, p. 103: (“A primary consideration influencing the Panel’s decision to recommend rejection of this Project is the adverse impact on a Valued Environmental Component: the people, communities and economy of Digby Neck and Islands. This region of Nova Scotia is unique in its history and its community development activities and trajectory. Its core values defined by the people and their governments, support the principles of sustainable development based on the quality of the local environment.”)

¹³ **C-363**, Joint Panel Agreement, s. 6.3.

simply assume that the Whites Point JRP would have recommended approving the project, in the absence of its findings regarding CCV.

7. In fulfilling its provincial mandate to provide a recommendation in respect of the project, the panel would have been entitled to consider all of its findings in respect of the project.¹⁴ In these circumstances, my approach of considering the JRP's other findings in its report relating to the project's environmental effects and its broader concerns, which were made irrespective of its findings on CCV, are therefore relevant to determining what the Whites Point JRP's potential recommendation would have been, had it not committed the NAFTA breach.

III. THE FINDINGS OF THE WHITES POINT JRP CANNOT BE COMPARED TO THE FINDINGS IN OTHER EAS

8. My opinion as to the Whites Point JRP's potential recommendation in discharging its provincial mandate had it not conducted its review in a manner that breached the NAFTA is based on my assessment of the Whites Point EA record as a former provincial review panel chair.¹⁵ Specifically, I considered the actual findings of the Whites Point JRP of adverse environmental effects, and other conclusions that were not supportive of a recommendation to approve the project, in light of the information in the public record and the review panel's provincial mandate.

9. Mr. Estrin takes issue with this approach, arguing that because “[o]ther than the WPQ, there has never been a review panel that has ever been convened in Nova Scotia to consider the EA acceptability of a quarry [, t]he correct lens is to consider the WPQ's approvability under the process applied by Nova Scotia to every other quarry in response to an application for EA approval.”¹⁶ Mr. Estrin then proceeds to assess the “approvability” of the Whites Point project by comparing the findings of the Whites Point JRP to the findings in other EAs that have been approved by Canada and Nova Scotia.

10. Mr. Estrin's approach is, in my view, inappropriate for three reasons: (1) the Whites Point project was required by the federal and Nova Scotia Ministers of Environment to undergo a

¹⁴ **C-363**, Joint Panel Agreement, Terms of Reference, Part III - Scope of the Environmental Assessment and Factors to be Considered in the Review.

¹⁵ **RE-2**, Blouin Report I, ¶ 9.

¹⁶ Estrin Reply Report, p. 43.

panel review; (2) the EA process in Nova Scotia is not about the “approvability” of a project; and (3) there is no such thing as an “unequivocal standard EA practice”¹⁷ in Nova Scotia.

A. The Whites Point Project Was Required to Undergo a Panel Review

11. The Whites Point project was referred to the JRP jointly by the Nova Scotia Minister of Environment and the federal Minister of the Environment.¹⁸ The Ministers’ referral of the project to the JRP meant that the project was required to undergo a panel review.¹⁹ Based on my understanding of the Tribunal’s Award, the fact that the project was subject to a panel review was not wrongful.²⁰ Had the JRP not conducted its review in a manner that breached the NAFTA, the project was still required to undergo a panel review. Therefore, the Whites Point EA must be considered from the perspective of a review panel, taking into account the review panel’s potential recommendations.

B. The EA Process in Nova Scotia is Not About “Approvability”

12. In his reports, Mr. Estrin opines on the “approvability” of the Whites Point project.²¹ However, this is not the approach taken to Nova Scotia EAs in practice.

13. As I explained in my first report, the Nova Scotia EA process is about identifying and predicting the impacts of a proposed undertaking, determining the degree of severity of those impacts, considering the availability of feasible mitigation measures and assessing the residual impacts following mitigation.²² This analysis is based upon the information gathered by review panels in order to “predict and evaluate” an undertaking’s environmental effects, which in turn, informs the Minister’s decision on the acceptability of an undertaking in accordance with governing legislation.²³ Therefore, in considering the potential recommendations of the Whites

¹⁷ Estrin Memorial Report, ¶ 11.

¹⁸ **C-363**, Joint Panel Agreement, Preamble, p. 1.

¹⁹ **R-5**, *NSEA*, ss. 38, 47.

²⁰ Award on Jurisdiction and Liability, March 17, 2015 (“Award”), ¶ 490: (“In the Tribunal’s opinion, therefore, there are no issues concerning the scope and level of the assessment that have been brought on a timely basis.”)

²¹ See e.g. Estrin Memorial Report, ¶ 6: (“It is my professional opinion that the WPQ Project was approvable, and would be approved, if the standard federal Canada and Nova Scotia environmental assessment evaluation criteria and practice were fairly and objectively applied to the project.”)

²² **RE-2**, Blouin Report I, ¶¶ 20, 37-40.

²³ **RE-2**, Blouin Report I, ¶ 20.

Point JRP had it not conducted its review in a manner that breached the NAFTA, it is important to consider the information that was before the JRP in the public record. In this regard, the analysis conducted by review panels is context-specific.

14. While, in theory, all projects referred to review panels might be approved (or not approved), this is not the standard upon which a review panel bases its recommendation. Instead, the role of provincial review panels is to evaluate whether the environmental impacts of an undertaking will potentially result in “adverse effects” or “significant environmental effects,”²⁴ and base their recommendations to the Minister on those findings. Accordingly, Mr. Estrin’s assertion that the Whites Point project was “approvable,” based on the fact that other similar projects were approved, does not provide any indication to me as to what the Whites Point JRP’s potential recommendation would have been, absent the NAFTA breach.

C. There is No “Unequivocal Standard EA Practice” in Nova Scotia

15. Mr. Estrin takes issue with my analysis of the environmental effects of the Whites Point project because it does not “consider similar projects, in which similar issues arose, and whether the approval of the projects was given by the Nova Scotia and Federal Environment ministers, either through the use of appropriate mitigation measures or imposition of terms and conditions to address such issues, or by determining in some that these issues were irrelevant to EA approval.”²⁵ However, contrary to Mr. Estrin’s assertion, this is not the “usual approach” that I have taken as a review panel chair. In my experience, panels do not consider whether other similar projects have been approved or not, whether through a panel review or other process. To do so would bias their consideration of the specifics of the project currently under review.

16. According to Mr. Estrin, the standard practice in Nova Scotia, with respect to EA processes for quarries over 4 hectares in size (i.e., class 1 undertakings) is that “every complete EA application has been approved, despite issues similar to those arising in the WPQ application being present in many of these.”²⁶ However, as I previously explained, review panels do not base

²⁴ **R-6**, *Nova Scotia Environmental Assessment Regulations*, O.I.C. 2003-67 (Feb. 28, 2003), s. 19(1).

²⁵ Estrin Reply Report, ¶ 419.

²⁶ Estrin Reply Report, ¶ 259 (original emphasis).

their recommendations on the recommendations and outcomes of other EAs.²⁷ This is because EAs are assessed on the basis of a project's own merits. While provincial EAs may follow similar general steps in the review process, review panels are not bound by any established precedent or practice with respect to past EAs in their evaluation of the environmental effects of the project under review, or their recommendations to the Minister. The fact that a project is approved does not guarantee that future projects will also be approved, or that a previous panel was incorrect to recommend the rejection of a past project. My experience and past practice as a review panel Chair has not included any direct comparisons to the effects, mitigations, or terms and conditions of any previous projects. As such, it would be inappropriate for me to base my conclusion on the potential recommendation of the Whites Point JRP, had it not breached the NAFTA, on the findings or recommendations in other EAs.

17. Mr. Estrin claims to be “especially perplex[ed]” that my assessment of the environmental effects of the Whites Point project did not include a consideration of the projects such as the Black Point Quarry (“BPQ”).²⁸ However, none of the information with respect to the approval of the BPQ or many of the other projects Mr. Estrin refers to, such as the Belleoram Marine Terminal Project (“Belleoram”), Fundy Tidal Energy Demonstration Project (“Fundy Tidal”), Miller’s Creek Fundy Gypsum Project (“Miller’s Creek”), were available for the Whites Point JRP since these projects were only approved after the publication of the JRP Report in October 2007.²⁹

18. Moreover, even if the Whites Point JRP were to consider the findings in other EAs, the comparator projects identified by Mr. Estrin are simply not comparable due to differences in the type of assessment, the degree and severity of project impacts and the ability of the proposed mitigation measures to reduce the impacts to an acceptable level.

19. As Mr. Estrin points out, prior to the Whites Point EA, no other applications for EA approval of a quarry or marine terminal were required to prepare an Environmental Assessment

²⁷ See above, ¶ 14 and **RE-2**, Blouin Report I, ¶ 37.

²⁸ Estrin Reply Report, ¶ 261.

²⁹ Specifically, the decision statement in Belleoram was issued on November 22, 2007 (**C-448**), the Fundy Tidal approval is dated September 15, 2009 (**C-1428**), the decision statement in Miller’s Creek was issued on February 4, 2010 (**R-778**), and the Black Point Quarry decision statement was issued April 26, 2016 (**C-1333**).

Report under the *NSEA*, or undergo a review by a panel. The fact that the Ministers referred the Whites Point project to a review panel is significant, because this differentiates the Whites Point project from other projects. An EA panel review is distinct from other types of EA because a panel considers a broader base of information provided by public hearing participants and interveners, and the panel may ask any question of any participant. There are typically follow-up responses required which provide additional information and detail, and the panel hears from a broader range of participants than would be typical of a government-level review. A panel provides a level of review which is conducted independently of government, and this is the fundamental reason for this method of review. Panel members add their own experience and expertise, which is the basis for their appointment by the Minister. The review panel process, which provides a greater opportunity for public participation as compared to other types of government reviews, also leads to a more in-depth consideration of adverse environmental effects, and mitigation measures and their effectiveness, than would be typical of the measures applied in the course of a regulatory process outside of an EA. As such, panel members have access to a broader range of input than government regulators.

20. Although similar environmental effects, such as the presence of right whales and invasive species, may have been considered in other EAs, the degree of impact of certain environmental effects may vary depending on the specific project.³⁰ For example, I explain below that the BPQ, Belleoram, and Bear Head projects were not situated in the same type of right whale habitat as the Whites Point project.³¹ The degree of vessel traffic for the Fundy Tidal project was not comparable to the Whites Point project and no blasting was involved in this project.³²

21. Contrary to Mr. Estrin's assertion,³³ I have not failed to consider the potential use of terms and conditions and implementation of mitigation measures in evaluating the impacts of the Whites Point project. As explained in my first report, if a review panel recommends rejecting a project, the *NSEA* does not require it to make any recommendation regarding mitigation or conditions. This is because the panel will have already considered that proposed mitigation

³⁰ RE-2, Blouin Report I, ¶ 38.

³¹ See ¶ 31, below.

³² See ¶ 33, below.

³³ Estrin Reply Report, ¶¶ 372, 478.

measures are unable to reduce the project's environmental effects to an acceptable level.³⁴ In my analysis of the Whites Point project in my first report, I expressed the view that the JRP had reasonably assessed the mitigation measures proposed by the proponent to be inadequate to reduce the risk of adverse environmental effects.³⁵ Therefore, in my view, it was also reasonable for the JRP not to propose those measures.

22. Due to differences in the nature and severity of project impacts on the surrounding project area, mitigation measures that may be determined to be adequate in one case may not be adequate in other cases. Moreover, while I have used terms and conditions in recommending projects for approval in the past, this method is not always appropriate. My experience as a panel member and Chair has been that project approvals have always been subject to recommended terms and conditions, but such approval recommendations were only made once the panel members were convinced that the predicted impacts would be adequately managed and reduced to acceptable levels through application of mitigation measures, as conditions of the approval. In this regard, the use of terms and conditions of approval to address inadequate information is only appropriate in a case where a panel is comfortable that the availability of such new information will enable the regulators to ultimately approve a project which will not have unacceptable environmental impacts. If a panel does not have such certainty, then it would not use terms and conditions of an approval to enable a recommendation to approve a project.

23. In his Reply Report,³⁶ Mr. Estrin refers to my “past practise” of using terms and conditions of approval for the Keltic and Highway 104 projects. In the case of those projects, the panels were of the opinion that this was appropriate, and that with appropriate conditions the impacts of those projects could be reduced to acceptable levels. Such measures are only appropriate in cases where the project effects are more minor, their impacts well understood, and mitigation methods with proven track records are readily available. In my opinion this differs from the case of the Whites Point project, in which the JRP appears to have concluded that there was insufficient information about some of the impacts, and in which the predicted degree of severity of adverse effects was such that the use of terms and conditions of an approval would

³⁴ RE-2, Blouin Report I, ¶ 41.

³⁵ See for example, RE-2, Blouin Report I, ¶¶ 57-59, 62-68, 79, 86-87, 102.

³⁶ Estrin Reply Report, ¶¶ 380-416.

have been inappropriate.³⁷ A panel, in recommending project approval to the Minister, must be sure that they are providing the Minister with an adequate basis for an informed decision regarding the impacts. This degree of certainty was not available to the JRP in the case of the Whites Point project.

24. As noted above, a review panel's assessment of a project is context-specific. Accordingly, it is inappropriate for a review panel to base its findings and recommendations on the recommendations and outcome of another EA. To accept Mr. Estrin's proposition that all quarry and marine terminal projects are to be approved on the basis of a "standard practice" that past projects have been approved, and because there are "boilerplate conditions", would otherwise render the panel's assessment of the project meaningless. In fact, it goes counter to the whole purpose of a review panel assessment, which is to conduct an independent assessment of a project based on its own merits.

IV. THE WHITES POINT JRP'S FINDINGS WITH RESPECT TO ADVERSE ENVIRONMENTAL EFFECTS WERE REASONABLE

25. In my first report I considered some of the Whites Point JRP's determinations that the project would result in adverse environmental effects, among other findings, that were in my view reasonably held in light of the public record.³⁸ The purpose of this section is to respond to Mr. Estrin's comments in respect to my analysis and to explain why, in my view, these comments do not alter my conclusion that the JRP's findings were reasonable, and would not have changed if CCV were struck from the Whites Point JRP Report. Further, as described in the following sections, none of the comparator projects cited by Mr. Estrin are particularly similar or relevant to the analysis of the Whites Point project's environmental effects discussed in my first report.

A. Right Whales

26. Contrary to Mr. Estrin's assertion, my analysis of the potential impact of the project on endangered marine mammals, such as the right whale, does not conflict with the submissions of the federal Department of Fisheries and Oceans ("DFO"). Moreover, the fact that other projects

³⁷ See Section IV at ¶¶ 53-55, 68-69, 71 for information on why these effects were not comparable.

³⁸ RE-2, Blouin Report I, Parts IV and V.

elsewhere in Nova Scotia or Atlantic Canada were approved when right whales may have been in the vicinity does not support a conclusion that the Whites Point JRP's finding of adverse environmental effects on right whales was unreasonable.

27. In his Reply Report, Mr. Estrin states that my analysis ignores the DFO's response to Undertaking #31.³⁹ This is not the case. As explained below, the statements cited by Mr. Estrin in his report must read in context.

28. For example, as Mr. Estrin notes,⁴⁰ while DFO stated that "right whales are not commonly found in the immediate vicinity of the quarry,"⁴¹ the department also observed that "[t]he North Atlantic right whale is a large baleen whale that occupies the Bay of Fundy from at least June to October."⁴² With respect to the issue of vessel strikes, DFO stated that "[a]ny increase in vessel traffic in the Bay of Fundy increases the risk of vessel strikes to right whales", and that "a ship strike related to this project is more likely to occur before the vessel leaves the shipping lane, where whale densities are higher".⁴³ In this regard, DFO's statement that "right whales are not found in the immediate vicinity of the quarry" did not apply to the potential effects of the project associated with vessel strikes, as these effects were predicted to occur in shipping lanes, *outside* of the immediate vicinity of the project.

29. In regard to blasting, DFO stated that "[b]ased on the available modeling data, it is believed that physical harm to marine mammals could occur within 500 m of a blast".⁴⁴ As Mr. Estrin notes, the department observed that "[t]he proposed mitigation (monitoring, a safety zone for marine mammals prior to blasting) is expected to substantially reduce the risk of a blast occurring while a whale is within a 500-meter radius during good weather conditions,"⁴⁵ and that

³⁹ Estrin Reply Report, ¶ 167.

⁴⁰ Estrin Reply Report, ¶ 167 (emphasis added).

⁴¹ C-417, Fisheries and Oceans Canada, Response to Undertaking #31 from Joint Review Panel (Jun. 26, 2007) ("DFO Undertaking #31), p. 7.

⁴² C-417, Fisheries and Oceans Canada, Response to Undertaking #31 from Joint Review Panel (Jun. 26, 2007) ("DFO Undertaking #31), pp. 7-8.

⁴³ C-417, DFO Undertaking #31, pp. 7-8.

⁴⁴ C-417, DFO Undertaking #31, p. 8.

⁴⁵ C-417, DFO Undertaking #31, p. 8.

“physical harm to right whales is considered very unlikely if mitigation is applied vigorously.”⁴⁶ However, these comments were predicated on the assumption that the mitigation measures would be applied “vigorously” and in “good weather conditions.” With regards to vessel strikes, DFO also stated that: “[t]he other mitigation measures proposed by the proponent (communicating with whale watch groups regarding presence of whales, patrolling the route to the quarry with a work boat, taking evasive action if whales are sighted) may reduce the likelihood of a vessel strike to some degree, but it is unclear by how much or how effectively these strategies can be implemented.”⁴⁷ Thus, when read in context, DFO’s statements did not provide any degree of assurance that the anticipated impacts on endangered right whales could be reduced to acceptable levels by the proposed mitigation measures.

30. In my opinion, DFO’s uncertainty about the effectiveness of proposed mitigation measures for the Whites Point project would be a valid basis to question whether the impacts on right whales could be reduced to acceptable levels. While the proponent’s proposed mitigation measures might have been effective under ideal conditions, this clearly would not always have been the case. Additionally, in concluding that the JRP’s findings on right whales were reasonable, I found that DFO’s determination there is no acceptable level of mortality for endangered right whales would have also been a relevant consideration in the panel’s assessment of adverse environmental effects.⁴⁸

31. In his criticism of my analysis regarding right whales, Mr. Estrin has noted that other projects, such as BPQ, Belleoram, Bear Head and Fundy Tidal were approved with right whales “in the vicinity”.⁴⁹ However, the presence of right whales and project impacts in each of these cases differed substantially from the presence of right whales and project impacts in the case of the Whites Point project.

32. As explained in the Witness Statement of Mark Mclean, the Whites Point project was proposed to be located beside the Bay of Fundy, one of only two critical habitats identified for

⁴⁶ C-417, DFO Undertaking #31, p. 8.

⁴⁷ C-417, DFO Undertaking #31, p. 8 (emphasis added).

⁴⁸ C-417, DFO Undertaking #31, p. 8.

⁴⁹ Estrin Reply Report, ¶¶ 184-227.

this species in Canada, used by right whales for feeding, birthing and as a nursery area.⁵⁰ In contrast, the BPQ and Bear Head projects are located in the Strait of Canso area, which is not considered to be a critical habitat for right whales. This is demonstrated in DFO's map of right whale sightings, which shows that right whale sightings are much more abundant in the Bay of Fundy than in the Strait of Canso area.⁵¹ Unlike the Whites Point project, the Belleoram project is located in Fortune Bay, Newfoundland,⁵² which, according to DFO's map, is also not a critical habitat for right whales.⁵³ In my view, based on the differences with respect to right whale habitats, the BPQ, and Bear Head projects (located in the Strait of Canso) and the Belleoram project (located in Fortune Bay), are not appropriate comparators to the Whites Point project in respect to right whale impacts or appropriate mitigation. This is confirmed by DFO's analysis of the BPQ case.⁵⁴

33. While the Fundy Tidal project was located in the Bay of Fundy, the project was not a quarry or marine terminal project. Unlike the Whites Point Project, the Fundy Tidal project did not involve any regular shipping or blasting operations. The only identified possible source of impacts on whales involved vessel traffic relating to the installation of a sea-floor tidal generator unit and connection to a sub-sea cable to shore, with no regular ship traffic.⁵⁵ Thus, the Fundy Tidal project is an unsuitable comparator to the Whites Point project because the predicted impacts of the Fundy Tidal project on right whales differed substantially from the predicted impacts of Whites Point project.

34. In my view, given that none of the comparator projects that Mr. Estrin refers to in his report involved risk to an endangered species through regular ship traffic in right whale habitats,

⁵⁰ **RW-1**, Witness Statement of Mark McLean, November 6, 2017 ("McLean Statement"), ¶ 6.

⁵¹ **RW-1**, McLean Statement, ¶ 5; **R-769**, Whalesitings Database, Population Ecology Division, Fisheries and Oceans Canada, Dartmouth, NS, [2017/10/11].

⁵² **R-357**, Belleoram Marine Terminal Project Comprehensive Study Report (August 23, 2007) at p. 1.

⁵³ **R-769**, Whalesitings Database, Population Ecology Division, Fisheries and Oceans Canada, Dartmouth, NS, [2017/10/11].

⁵⁴ **RW-1**, McLean Statement, ¶ 26.

⁵⁵ **C-1427**, Environmental Assessment Registration Document – Fundy Tidal Energy Demonstration Project, Volume I: Environmental Assessment (Jun. 2009), Section 6.5.4.1, p. 149: ("Large vessels required during installation and decommissioning will be limited in number and duration of use. Support vessels used during construction and decommissioning and vessel requirements during operation will generally be small in size and limited in numbers.")

it would have still been reasonable for the Whites Point JRP to conclude that the mitigation measures for marine mammals in these other projects, were inadequate in the Whites Point case, warranting a finding of adverse environmental effects on right whales.

35. As explained above, there were concerns with respect to the effectiveness of Bilcon's proposed use of observers to address issues relating to vessel strikes and blasting.⁵⁶ Furthermore, as noted in my first report, DFO had questioned how Bilcon's proposed mitigation of reducing shipping would be controlled by the proponent.⁵⁷

36. Moreover, I disagree with Mr. Estrin's reference to the Laist et al. (2001) study, *Collisions Between Ships and Whales*, which was referred to in the assessment of the Belleoram project, as support for slow ship speeds in the immediate vicinity of the quarry as being an effective mitigation measure in all cases. He notes that the same study was "relied upon by Bilcon in WPQ."⁵⁸ With regards to Bilcon's proposal to reduce shipping speeds, the proponent had stated that "[e]xpected speed upon *exiting* the inbound shipping lane would be less than 10 knots and 2 and 5 knots while beginning manoeuvring (sic) to the marine terminal, depending on sea conditions."⁵⁹ However, as explained above, DFO had predicted that vessel strikes were likely to occur outside the immediate vicinity of the project, in the shipping lanes where right whales were present.⁶⁰ In this regard, Bilcon had stated that vessel speeds in the shipping lanes were expected to be approximately 14 to 15 knots.⁶¹ These are the vessels speeds in which the Laist study confirmed that most lethal or severe injuries resulting from ship strikes would occur.⁶² Contrary to Mr. Estrin's suggestion, the Laist study does not support the proposition

⁵⁶ See ¶¶ 28-30, above; **RE-2**, Blouin Report I, ¶¶ 56-59.

⁵⁷ **RE-2**, Blouin Report I, ¶ 58.

⁵⁸ Estrin Reply Report, ¶ 209.

⁵⁹ Estrin Reply Report, ¶ 201; see also **C-636**, Bilcon's Responses to Comments on the EIS (Feb. 12, 2007), Volume VI, Chapter 9.2.3 Aquatic Ecology – Marine, p. 52 (emphasis added).

⁶⁰ See ¶ 28, above.

⁶¹ **C-636**, Bilcon's Responses to Comments on the EIS (Feb. 12, 2007), Volume VI, Chapter 9.2.3 Aquatic Ecology – Marine, p. 52.

⁶² **R-779**, Laist et al., *Collisions Between Ships and Whales*, in *Marine Mammal Science*, 17(1):35-75 (January 2001), p. 49: ("Vessel speed at the time of impact was reported in 41 accounts and ranged from 6 to 51 kn. Information on both vessel speed and condition of the whale after being hit was available in 33 cases (Fig. 2). Among collisions causing lethal or severe injuries, 89% (25 of 28) involved vessels moving at 14 kn or faster and the remaining 11% (3 of 28) involved vessels moving at 10–14 kn; none occurred at speeds below 10 kn. The three fatal or severe injuries caused by vessels moving slower than 14 kn involved a southern right whale killed by a ferry

that Bilcon's proposed mitigation measure to reduce ship speeds would have been adequate to reduce the risk of ship strikes to right whales in the shipping lanes in the Bay of Fundy.

37. Based on the foregoing, due to the differences in right whale habitat and project effects, I am of the opinion that the comparator projects identified by Mr. Estrin are not relevant. The recommended mitigation measures and approval of these projects do not provide a reasonable basis to conclude that the Whites Point JRP finding of adverse environmental effects on right whales was unreasonable.

B. Lobsters/Invasive Species

38. Mr. Estrin argues that my analysis on lobsters and invasive species is unreliable because it fails to consider: (1) that the government "rejected" the Whites Point JRP's recommendation to revise the *Ballast Water Control and Management Regulations* ("*Ballast Water Regulations*"); and (2) that the *Ballast Water Regulations* were considered appropriate in the approval of the BPQ and Belleoram projects.⁶³ However, as explained below, the Government of Canada did not reject the Whites Point JRP's recommendation, and the invasive species/disease risks identified in the Whites Point EA also differed from those of the comparator projects referred to by Mr. Estrin.

39. Regarding the Whites Point JRP's recommendation that the *Ballast Water Regulations* be revised, Mr. Estrin appears to have omitted the first line of the Government of Canada's response, which expressly stated that it accepted the JRP's recommendation:

Recommendation 7

The Panel recommends that Transport Canada revise its ballast water regulations to ensure that ships transporting goods from waters with known risks take appropriate measures to significantly reduce the risk of transmission of unwanted species. (Section 4.2);

Response:

The Government of Canada accepts this recommendation.

moving at 12–13 kn and two severely injured whales hit by small private vessels reportedly traveling at 10 kn. Of five collisions classified as causing no or minor injuries, three were traveling at less than 10 kn. In all cases where fate of a whale was unknown but vessel speed was reported (n = 8), vessels were moving 14 kn or faster.”)

⁶³ Estrin Reply Report, ¶ 229.

Transport Canada recognizes the importance of applying the appropriate ballast water management measures in order to avoid and/or minimize the introduction of invasive species into waters under Canadian jurisdiction, from foreign waters.

After extensive consultations with the industry, environmental groups, stakeholders and other federal agencies, Transport Canada, in June 2006, implemented the Ballast Water Control and Management Regulations under the Canada Shipping Act. These regulations are intended as an important first step in minimizing the risk of introducing harmful aquatic species into Canadian waters. Transport Canada will continue to consult with the appropriate federal authorities and work with the industry, scientific community and environmental groups, and will consider any recommendations made with respect to improving the Ballast Water Control and Management Regulations.⁶⁴

40. While the federal government's response recognised the importance of the regulations as "an important first step" in controlling invasive species, it did not in any way reject the Whites Point JRP's recommendation that the regulations be revised "to ensure that ships transporting goods from waters with known risks take appropriate measures to significantly reduce the risk of transmission of unwanted species." Rather, the response states that Transport Canada would continue to consult and that it would consider further recommendations to improve the regulations.

41. Furthermore, as explained in my first report, the key issue with respect to invasive species in the Whites Point EA, concerned a "known risk" of disease organisms in the waters off of New Jersey and New York. In particular, the specific disease identified for lobster could be transported in bilge water by ships originating from the New Jersey area.⁶⁵ Based on my review of the record, it was not clear that the risk would be adequately managed by the regulations or proposed mitigation. As such, I determined that it was reasonable for the JRP to conclude that the risk of parasitic lobster disease was a potential adverse environmental effect, even if government officials determined that the regulations were suitable in the context of other projects.⁶⁶

⁶⁴ **R-383**, The Government of Canada's Response to the Environmental Assessment Report of the Joint Review Panel on the Whites Point Quarry and Marine Terminal Project (Dec. 17, 2007), p. 3 (emphasis added).

⁶⁵ **RE-2**, Blouin Report I, ¶ 61.

⁶⁶ **RE-2**, Blouin Report I, ¶ 61.

42. In contrast, the BPQ Environmental Impact Statement only generally identified markets in the eastern and Gulf coast of the U.S as shipping destinations, and the Belleoram Environmental Impact Statement only identified southern Florida as a shipping destination.⁶⁷ The issue with respect to the invasive species identified in the Whites Point EA does not appear to have been raised in the assessments of these projects. The intended shipping destinations did not involve the waters off New York and New Jersey which were identified in the Whites Point case as a source of parasitic lobster disease. Thus, the fact that the *Ballast Water Regulations* were considered appropriate in the approval of these other projects does not suggest that the regulations would have been adequate in the case of the Whites Point project, given that the other EAs did not contemplate the “known risk” of parasitic lobster disease that was identified in the Whites Point EA.

C. Surface Water, Coastal Wetland, and Groundwater

43. On the issue of groundwater, Mr. Estrin states that “[t]o a large extent the language used in terms and conditions for such Nova Scotia EA quarry approvals can be largely similar with respect to the issue of groundwater monitoring, noise and other issues.”⁶⁸ In particular, he refers to the terms and conditions that were used to address the lack of or inadequacy of information available in the BPQ EA.⁶⁹ According to Mr. Estrin, the Whites Point JRP’s concerns with respect to groundwater were unfounded, since these issues are “regularly addressed through Part V Environment Act Industrial Approvals that must be obtained to construct and operate the project, and other licensing processes.”⁷⁰

44. In my view, the groundwater and coastal wetland issues in the BPQ project were not comparable to those in the Whites Point project. For example, unlike the Whites Point project, the BPQ project was not located on a fractured aquifer, and the use of groundwater for local drilled wells was not predicted to be at risk.⁷¹ In the case of the BPQ project, local wells were

⁶⁷ **C-1092**, Black Point Quarry Project, Environmental Impact Statement, Table of Concordance and Summary Report (Feb. 2015), pp. 4-5; **C-190**, Belleoram Marine Terminal Project, Comprehensive Study Report (Aug. 23, 2007), p. 47.

⁶⁸ Estrin Reply Report, ¶ 431.

⁶⁹ Estrin Reply Report, ¶ 451.

⁷⁰ Estrin Reply Report, ¶ 436.

⁷¹ **C-1092**, Black Point Quarry Project, Environmental Impact Statement, Table of Concordance and Summary Report (Feb. 2015), pp. 41-42.

within a different bedrock structure than the granite bedrock which is to be quarried. In particular, drinking water wells were located at least 1km distance from the quarry site. The separation in distance and location in different bedrock structures of the quarry and the wells significantly reduced the possibility of any well water impacts.⁷² This differs from the Whites Point project, which involved a single fractured basalt bedrock structure. As the JRP noted, “NRCan’s hydrogeologist emphasized that in a fractured medium, horizontal to sub-horizontal fractures define multiple localized water levels, rather than one all-encompassing water table”, and that “[c]ontaminants resulting from quarry operations, such as ANFO residues or fuel spills, could reach the water table.”⁷³

45. Both the Whites Point and BPQ projects would have disturbed coastal wetlands. In the case of the BPQ project, the wetland was predicted to be destroyed. As such, the Nova Scotia Department of Environment and Labour (“NSDEL”) required wetland replacement as a mitigation measure.⁷⁴ In contrast, the proponent in the Whites Point project proposed to use a constructed wetland as part of its surface runoff management system.⁷⁵ In this regard, the Whites Point JRP considered the wetland on the Whites Point project site to be at risk due to uncertainties regarding the likelihood of high-volume, high flow-rate emergency water releases during storm events.⁷⁶ The differences in the impacts on wetlands between the Black Point and Whites Point projects make direct comparison of impacts and mitigations difficult.

46. The use of a Part V Industrial Approval under the *NSEA*, as suggested by some presenters to the JRP and cited by Mr. Estrin,⁷⁷ may in some cases be an appropriate mechanism to impose terms and conditions on a project which will reduce impacts to an acceptable level. However, as explained in my first report, the mandate of a review panel is to gather information in order to “predict and evaluate” an undertaking’s environmental impacts.⁷⁸ Again, while the use of terms

⁷² **C-1092**, Black Point Quarry Project, Environmental Impact Statement, Table of Concordance and Summary Report (Feb. 2015), pp. 41-42.

⁷³ **R-212**, JRP Report, p. 38.

⁷⁴ **C-1331**, Black Point Quarry Project Environmental Assessment Report (Apr. 2016), p. 46.

⁷⁵ **R-212**, JRP Report, p. 7.

⁷⁶ **R-212**, JRP Report, p. 7.

⁷⁷ Estrin Reply Report, ¶¶ 431, 437-443.

⁷⁸ **RE-2**, Blouin Report I, ¶ 20.

and conditions may sometimes be used to address a lack of information or uncertainties, in my opinion, this approach is only appropriate where the panel is sufficiently satisfied that the project is not likely to result in adverse or significant environmental effects.

47. In the case of the Whites Point project, the issue with respect to groundwater was particularly complex given that the project was located in a fractured aquifer and there was “no one water level”.⁷⁹ Furthermore, Natural Resources Canada and NSDEL predicted that the quarry operations would impact various groundwater aspects, including groundwater recharge, groundwater levels, well yields, discharge, groundwater discharge, and groundwater quality.⁸⁰

48. In my view, the absence of any reliable information likely would have precluded the panel from determining that the project would *not* result in adverse or significant environmental effects. Moreover, given the level of uncertainty,⁸¹ it also would have been difficult for the panel to evaluate whether the “standard” terms and conditions applied with respect to groundwater effects in other cases would have been adequate to address the groundwater concerns in this case.

49. As noted by Mr. Estrin, the Whites Point project was the first quarry and marine terminal project required to undergo a panel review and therefore, it was distinct from other types of EA reviews. While there were presentations at the Whites Point hearing from government officials describing the “standard” Part V Approval process under the *NSEA*,⁸² these presentations were general in nature and did not address the specific potential effects of the project.

50. An important distinction between a review conducted by regulatory authorities and a review conducted by panel is that, a review panel’s mandate ends once it has provided its recommendation to the Minister. As such, the panel would not have any authority to “review and approve” any groundwater monitoring program established after the panel review process, or to recommend more specific terms and conditions. Thus, in the context of a panel review, I am of the opinion that it would not be appropriate for a panel to recommend the approval of a project

⁷⁹ **C-159**, Whites Point Quarry and Marine Terminal Public Hearing Transcript, Day 6, Volume 6 (Jun. 22, 2007), pp. 1216:19-1224:19.

⁸⁰ **RE-2**, Blouin Report I, ¶¶ 75-78.

⁸¹ **R-212**, JRP Report, p. 39: (“Uncertainties exist regarding possible impacts of quarry activities on the local groundwater.”)

⁸² See for example, **C-158**, Whites Point Quarry and Marine Terminal Public Hearing Transcript, Day 5, Volume 5 (Jun. 21, 2007), p. 988:1-p. 996:16.

by simply deferring any serious issues to later regulatory processes, without any guarantee that the adverse environmental impacts of the project could be reduced to an acceptable level.

D. Fisheries

51. With regards to the Whites Point project's impact on fisheries, Mr. Estrin disagrees with my conclusion that the Whites Point JRP's concerns regarding the effectiveness of a call-in line were reasonable.⁸³ In particular, he relies on the fact that communications measures were considered appropriate mitigation in the Keltic Petroleum LNG Terminal ("Keltic"), BPQ and Fundy Tidal EAs.

52. As explained in my first report, the inshore fishers in the Whites Point project identified economic concerns with respect to the risk of invasive species, and having to move their traps once every two weeks before Bilcon set off their blasts and then having to move the traps back onto the fishing grounds, which would have resulted in the loss of valuable fishing days and additional cost of fuel and labour.⁸⁴ In turn, the lower incomes and higher costs could displace fishers from their traditional fishing ground.⁸⁵ As such, the JRP concluded that a call-in line "may not be technically feasible, given the nature of fishing activities", and due to the nature of the shipping schedules.⁸⁶

53. In contrast, the issues addressed by the communications measures in the Keltic, BPQ and Fundy Tidal projects were significantly different than the economic issues before the Whites Point JRP. Moreover, the communications measures for these projects did not involve a call-in line, which fishers were supposed to use to obtain information in the Whites Point case, and are not directly comparable.

54. In the case of the Keltic project, the panel, which I chaired, recommended that "the Proponent develop a detailed communications plan for fishers, and all other boaters and recreational users in relation to shipping traffic, and consideration be given to consulting with

⁸³ **RE-2**, Blouin Report I, ¶¶ 87-89.

⁸⁴ **RE-2**, Blouin Report I, ¶ 87; **R-275**, LFA 34 Management Board, Presentation to the Joint Review Panel, Whites Point Quarry and Marine Terminal Project (Jun. 27, 2007), p. 6.

⁸⁵ **RE-2**, Blouin Report I, ¶ 87; **R-275**, LFA 34 Management Board, Presentation to the Joint Review Panel, Whites Point Quarry and Marine Terminal Project (Jun. 27, 2007), p. 6.

⁸⁶ **R-212**, JRP Report, p. 76.

Transport Canada to establish a Harbour Master office to ensure safe and timely passage.”⁸⁷ This recommendation was made in the context of the panel’s finding that the additional shipping traffic could potentially result in a significant impact on the Atlantic salmon fish population, which used the Meadow Lake system (the proposed water supply for the Keltic project) as a migratory corridor.⁸⁸

55. In the Keltic case, there were no serious concerns over the economic effects of the project on fisheries as the project location was not used extensively for commercial fishing. While there were concerns relating to aquaculture, the nearest operation was not close in proximity to the Keltic project site.⁸⁹ Additionally, concerns over invasive species and disease-causing organisms were not raised in the review of the project. Thus, the communications plan recommended by the Keltic panel and the issues it would address were not comparable to the Whites Point case as suggested by Mr. Estrin,⁹⁰ as the issues were not the same.

56. In the case of the BPQ, the consultation on an offsetting plan was recommended to address issues with respect to the loss of fish habitat.⁹¹ As noted by Mr. Estrin, to prevent the loss of fish habitat, the Agency also recommended that the proponent consult with DFO, local commercial fishers and indigenous groups to develop an offsetting plan prior to the construction of its project and that the proponent design marine vessel transportation routes to avoid vessel traffic within shrimp traffic areas.⁹² Notably, the Guysborough Inshore Fisherman’s Association

⁸⁷ **C-570**, *Report and Recommendations to the Nova Scotia Minister of Environment and Labour from the Nova Scotia Environmental Assessment Board for the Review of Keltic Petrochemicals Inc. Proposed LNG and Petrochemical Plant Facilities* (Feb. 21, 2007), p. 9.

⁸⁸ **C-570**, *Report and Recommendations to the Nova Scotia Minister of Environment and Labour from the Nova Scotia Environmental Assessment Board for the Review of Keltic Petrochemicals Inc. Proposed LNG and Petrochemical Plant Facilities* (Feb. 21, 2007), pp. 89-90.

⁸⁹ **C-570**, *Report and Recommendations to the Nova Scotia Minister of Environment and Labour from the Nova Scotia Environmental Assessment Board for the Review of Keltic Petrochemicals Inc. Proposed LNG and Petrochemical Plant Facilities* (Feb. 21, 2007), p. 90: (“The mussel farm is excluded from compensation considerations as being too far away.”)

⁹⁰ Estrin Reply Report, ¶ 489.

⁹¹ **C-1333**, Canadian Environmental Assessment Agency, Decision Statement Issued under Section 54 of the *Canadian Environmental Assessment Act, 2012*, to Black Point Aggregates Incorporated for the Black Point Quarry Project (Apr. 26, 2016), p. 5, s. 3.3.

⁹² **C-1331**, Black Point Quarry Project Environmental Assessment Report (Apr. 2016), p. 121; **C-1333**, Canadian Environmental Assessment Agency, Decision Statement Issued under Section 54 of the *Canadian Environmental Assessment Act, 2012*, to Black Point Aggregates Incorporated for the Black Point Quarry Project (Apr. 26, 2016), p. 7, s. 5.2.

is on record in the BPQ public record as supporting the project⁹³, and did not raise any significant level of concern over the economic impacts of the project on the local fishery or the adequacy of the communications plan.

57. Despite the similarities in location, the impacts of the Fundy Tidal project on local fishermen were not the same as in the Whites Point project. As such, the concerns raised by the Local Fishing Area 34 Management Board in the Whites Point project did not appear in the Fundy Tidal EA. As noted, the Fundy Tidal project was not a marine terminal or quarry project and the only issue with respect to marine species concerned the installation of a sea-floor tidal generator unit and connection to a sub-sea cable to shore.⁹⁴ There would be limited ship traffic to the project site, consisting of a barge to install the generator unit on the sea floor and to install the cable to carry generated electricity to shore, possible ship visits for maintenance, and for decommissioning the project.⁹⁵ As such, the project was not predicted to have significant residual impacts on marine fish or mammals.⁹⁶ To address potential interference of project vessels with the lobster fishing vessels, the proponent proposed to inform fishers of the vessel movements, timing and locations.⁹⁷ However, unlike the Whites Point project, there was no ongoing marine vessel traffic involved in the Fundy Tidal project. In this regard, the proposed mitigation measure was limited to during construction, maintenance and decommissioning activities.⁹⁸

58. In sum, I am of the opinion that the Keltic, BPQ, and Fundy Tidal projects are irrelevant to the EA of the Whites Point project due to differences in the projects' impacts on local fishermen. Whereas the other EAs suggest that communication measures may be appropriate

⁹³ **R-780**, Vulcan Materials Company news release, "Black Point Quarry Project Receives Major Endorsement from Fishermen" (Jan. 13, 2015).

⁹⁴ **C-1427**, Environmental Assessment Registration Document – Fundy Tidal Energy Demonstration Project, Volume I: Environmental Assessment (Jun. 2009), Section 2.1, p. 9 and Section 6.3.4, p. 159.

⁹⁵ **C-1427**, Environmental Assessment Registration Document – Fundy Tidal Energy Demonstration Project, Volume I: Environmental Assessment (Jun. 2009), Section 2.4, pp. 18, 24, 25.

⁹⁶ **C-1427**, Environmental Assessment Registration Document – Fundy Tidal Energy Demonstration Project, Volume I: Environmental Assessment (Jun. 2009), Section 6.9.4, pp. 190-191. In particular, the Environmental Assessment Registration Document stated that the fishery/safety exclusion zone of 300 meters around each turbine would result in the loss of less than 1km² of potential fishing area.

⁹⁷ **C-1427**, Environmental Assessment Registration Document – Fundy Tidal Energy Demonstration Project, Volume I: Environmental Assessment (Jun. 2009), Section 6.9.4, p. 191.

⁹⁸ **C-1427**, Environmental Assessment Registration Document – Fundy Tidal Energy Demonstration Project, Volume I: Environmental Assessment (Jun. 2009), Section 6.9.4, p. 191.

mitigation to address issues such as safe and timely passage, the loss of fishing and vessel interference during limited time periods in the other projects, they do not demonstrate that it was unreasonable for the Whites Point JRP to conclude that the use of a call-in line would not have addressed the economic impacts on fishermen.

E. Tourism

59. With regards to impacts of the Whites Point project on tourism, Mr. Estrin relies on Bilcon's Environmental Impact Statement to state that the key concern regarding tourism was aesthetics.⁹⁹ However, as explained in my first report, the impacts of the Whites Point project on tourism that I identified in the EA record were not solely aesthetic, and in fact had two components: (1) the direct bio-physical impacts on whales (a source of tourism income for whale-watching operators); and (2) the socio-economic impacts of reduced tourism in the area due to a changed perception of the area as an undeveloped destination (which only in part relates to aesthetics).¹⁰⁰ Thus, tourism impacts were directly linked to the bio-physical impacts on an endangered species, as well as to socio-economic impacts on the local economy.

60. While the Whites Point JRP did not expressly make a finding of a significant or adverse environmental effect on tourism due to uncertainty, it noted that the Nova Scotia Department of Tourism, Culture and Heritage had stated in its presentation that "this development is not consistent with our international tourism promotion and positioning as Canada's Seacoast."¹⁰¹ The JRP also stated that "[t]he potential effects of the Project on the tourism industry are difficult to predict with any certainty, given the many factors involved, but the Panel acknowledges that those involved in the tourism industry believe that the Project is not consistent with articulated provincial and local policy."¹⁰² In my opinion, the noted impacts on tourism by the Whites Point JRP were not contingent on any one effect or finding, and would not be supportive of any recommendation for project approval.

⁹⁹ Estrin Reply Report, ¶ 500.

¹⁰⁰ RE-2, Blouin Report I, ¶¶ 90-96.

¹⁰¹ R-212, JRP Report, p. 78.

¹⁰² R-212, JRP Report, p. 11.

61. In contrast, the tourism impacts identified by Mr. Estrin¹⁰³ in the Sovereign Resources Quarry Expansion (“Sovereign”) and BPQ projects were not as significant as those identified in the Whites Point project. In particular, the Sovereign project was not predicted to have any adverse impact on tourism.¹⁰⁴ The Sovereign project was for the expansion of an existing quarry located inland in Bedford, Nova Scotia (part of Halifax Regional Municipality) in close proximity to urban areas, and thus, did not have the same marine resources or undisturbed area issues as was the case for the Whites Point project. As such, the visual environment impacts identified by Mr. Estrin, solely had to do with the issue of aesthetics, and not tourism impacts.¹⁰⁵

62. Similarly, in the case of the BPQ, the predicted effects on tourism referred to by Mr. Estrin were restricted to local site disturbance of campgrounds and cottages.¹⁰⁶ In my view, these concerns are, at the very least, different from the concerns over the impact of the Whites Point project on eco-tourism or whale-watching activities, which were important to the local economy.¹⁰⁷ As explained in my first report, the adverse bio-physical impacts of the Whites Point project on right whales could also have resulted in long-term negative impacts on the local tourism industry due to reliance on right whales for whale-watching operations.¹⁰⁸ Thus, while the JRP did not expressly find these impacts to be adverse environmental effects, its observations with respect to tourism were not supportive of a recommendation for project approval.

F. Reasonable Enjoyment of Life and Property

63. Mr. Estrin alleges that many of the environmental impacts of the Whites Point project with respect to reasonable enjoyment of life and property that I identified in my first report fall within the scope of “community core values”.¹⁰⁹ This is not correct.

¹⁰³ Estrin Reply Report, ¶¶ 502-509.

¹⁰⁴ **R-781**, Sovereign Resources Quarry Modification Project, Environmental Assessment Registration (Jul. 2005), p. 92.

¹⁰⁵ **R-781**, Sovereign Resources Quarry Modification Project, Environmental Assessment Registration (Jul. 2005), p. 92.

¹⁰⁶ Estrin Reply Report, ¶¶ 505-508.

¹⁰⁷ **C-1331**, Black Point Quarry Project Environmental Assessment Report (Apr. 2016), p. 72.

¹⁰⁸ **RE-2**, Blouin Report I, ¶ 96.

¹⁰⁹ Estrin Reply Report, ¶ 515.

64. The version of the *NSEA* that applied to the Whites Point EA clearly states that “‘adverse effect’ means an effect that impairs or damages the environment, including an adverse effect respecting the health of humans or the reasonable enjoyment of life or property”.¹¹⁰ Thus, it was clearly open to the Whites Point JRP to assess the impacts of the project on the reasonable enjoyment of life and property for local residents.

65. In my view, the phrase “reasonable enjoyment of life and property” is not the same as “community core values”, and does not “relate to value judgments and beliefs about a particular way of life” as stated by Mr. Estrin. The environmental impacts identified by the JRP that I referred to in my report concerned issues relating to noise, dust emissions, water quality and groundwater effects, blasting, increased traffic, and impacts on the local economy.¹¹¹ These issues are clearly bio-physical and socio-economic environmental effects and are standard elements which commonly appear in environmental assessments, including the comparator assessments which Mr. Estrin has cited.¹¹²

66. Mr. Estrin has also stated that the adverse environmental effects which I identified in my first report are only matters of “risk”, and therefore not “actual environmental effects”.¹¹³ However, determination of risk is an integral part of all environmental assessments. Assessment of impact cannot be done for an impact which has not yet occurred without analyzing the risk that it may occur. Mr. Estrin’s suggestion that the adverse effects in the context of a provincial EA “must be one that is happening”¹¹⁴ implies that the project under assessment already exists and is causing such effects. This is clearly wrong, since EA processes occur prior to any of the activities associated with the proposed project. The whole purpose of an EA review is to predict future impacts and assess their risk and scope. Consideration of risk cannot be avoided, and is in fact an essential component of EA methodology. To suggest otherwise is to misunderstand the purpose and methods of environmental assessment.

¹¹⁰ **R-5**, *NSEA*, s. 3 (c) (emphasis added).

¹¹¹ **RE-2**, Blouin Report I, ¶¶ 97-104.

¹¹² For example, see the Black Point Quarry EIS: **R-782**, Black Point Quarry Project, Environmental Impact Statement, Part 1 - Sections 1-5 (Feb. 2015), Table 5.2, p. 131.

¹¹³ Estrin Reply Report, ¶ 517.

¹¹⁴ Estrin Reply Report, ¶ 523.

67. According to Mr. Estrin, my “use of the word ‘threat’ of such impacts appears to be consistent with the ‘fears’ and ‘speculations’ of the JRP”.¹¹⁵ However, the word “threat” was only referred to twice in my first report, and in both cases to reflected concerns as expressed by participants in the Whites Point hearings.¹¹⁶ The use of that word is neither fearful nor speculative. It simply and accurately reflects the concerns expressed by the participants about the risks of impacts. For example, the Tourism Industry Association of Nova Scotia expressed concern about the impacts of blasting not only on whales, but also to the tourism industry more generally.¹¹⁷ Similarly, local residents expressed concern over the impact of a quarry and marine terminal on the local quality of life,¹¹⁸ which is a factor clearly included within the scope of an EA by the Nova Scotia legislation.

68. With regards to comparator projects, Mr. Estrin refers to the mitigation measures used to address public concerns in the Keltic, Elmsdale Quarry, White Rock Quartz Mine, Highway 104, Sydney Tar Ponds, Sovereign Resources Quarry, Miller’s Greek and BPQ projects.¹¹⁹ However, as explained below, the issues with respect to public concern in these projects are not comparable, as they differed in nature and scope.

69. In particular, Mr. Estrin states that in the panel review of the Keltic project, I had used terms and conditions to “dismiss or address” concerns regarding enjoyment of life and property.¹²⁰ This is untrue. The opposition of local residents in the Keltic EA involved far fewer predicted impacts relating to enjoyment of life and property than in the Whites Point EA. As I have indicated, the Keltic project was to be located in an industrial park that was zoned and developed by the local municipality for heavy industrial activity, and was already being used as

¹¹⁵ Estrin Reply Report, ¶ 518.

¹¹⁶ **RE-2**, Blouin Report I, ¶¶ 95 and 100.

¹¹⁷ **R-608**, Tourism Industry Association of Nova Scotia (TIANS), Submission to the Review Panel on EIS (Aug. 10, 2006), p. 2 (“TIANS – Written Submission”).

¹¹⁸ **R-614**, Harold Theriault Jr., Written Submission to the JRP (Jun. 26, 2007); **R-615**, Submission of the Green Party of Canada to the White Point Quarry and Marine Terminal Project Joint Review Panel (Jun. 29, 2007), p. 11: (“In other words, the “do nothing” alternative is more likely an attractive option in preserving a growing number of tourism jobs, maintaining a lucrative fishery and protecting a way of life.”)

¹¹⁹ Estrin Reply Report, ¶¶ 526-554.

¹²⁰ Estrin Reply Report, ¶¶ 510-513.

the land terminus of the Sable offshore gas pipeline.¹²¹ As reflected in panel's recommendations cited by Mr. Estrin, the community concerns in this case centered on opportunities for use of amenities created by the project, and training opportunities for local residents to assist in obtaining employment from the project.¹²² This issue did not arise in the Whites Point project.

70. Similarly, the issues with respect to public concern relating to the BPQ that Mr. Estrin identifies¹²³ did not arise in the Whites Point project. In the case of the BPQ, the public controversy was in respect of an individual landowner, over expropriation of two land parcels by the local municipality.¹²⁴ In my view, the fact that government reviewers did not address the issue of expropriation in their approval of the project does not provide any basis for dismissing the concerns identified by the Whites Point JRP in respect noise, dust emissions, water quality and groundwater effects, blasting, increased traffic, and impacts on the local economy.

71. The Highway 104 project proposed to twin a section of the Trans-Canada highway system which passed through the town of Antigonish, and in the process route the highway around parts of the town. This review panel, which I also chaired, acknowledged the project would have economic impacts on some businesses, but concluded that potential socio-economic impacts could be addressed through "reasonable measures to mitigate impacts on affected land" or compensation.¹²⁵ However, unlike the Whites Point JRP, the economic impacts were limited to specific properties. There were no broader issues relating to major industries in the town such as for fisheries and tourism in the case of the Whites Point project, nor were there broader community issues such as groundwater impacts, noise, dust, and surface water impacts on an ongoing basis.

¹²¹ **R-513**, *Report and Recommendations to the Nova Scotia Minister of Environment and Labour from the Nova Scotia Environmental Assessment Board for the Review of Keltic Petrochemicals Inc.* (Feb. 21, 2007), p. 23.

¹²² **R-513**, *Report and Recommendations to the Nova Scotia Minister of Environment and Labour from the Nova Scotia Environmental Assessment Board for the Review of Keltic Petrochemicals Inc.* (Feb. 21, 2007), p. 5.

¹²³ Estrin Reply Report, ¶¶ 551-554.

¹²⁴ **R-782**, Black Point Quarry Project, Environmental Impact Statement, Part 1 - Sections 1-5 (Feb. 2015), p. 9: ("The municipal land designated for the Project consists of properties assembled through a land exchange with the Province and through expropriation of private lands.")

¹²⁵ **C-1432**, *Report and Recommendations to the Minister of Environment and Labour for the Environmental Assessment Highway 104 at Antigonish* (Aug. 6, 2005), p. 35.

72. As noted by Mr. Estrin, potential community impacts were addressed through a community liaison committee (“CLC”) or complaint resolution program in the Elmsdale, Sovereign Resources Quarry Expansion, White Rock Quartz Mine and Sydney Tar Ponds projects.¹²⁶ However, as noted by the Whites Point JRP, there was evidence in the public record that the CLC created by the proponent had “failed to engage key segments of the population, most significantly the local fishers, who could have provided valuable information on the local marine ecology and coastal conditions.”¹²⁷

73. In the case of the Sydney Tar Ponds project, the review panel addressed the criticisms of the CLC by requiring the committee to be more open. However, in the case of the Whites Point project, it appears that the JRP concluded this was not possible. For example, it was noted that Bilcon’s defamation suit against community members had undermined the willingness of local residents to enter into meaningful discussions with the proponent.¹²⁸

74. As explained above, the issues identified in my first report with respect to the reasonable enjoyment of life and property were not solely in respect of public concerns, but were linked to bio-physical and socio-economic effects. In my view, while the use of a complaint resolution program could potentially help to identify issues and facilitate communication with the local community, it would not be adequate to actually address the specific issues relating to air quality noise, vibration, drinking water and land use that had already been identified in the Whites Point EA. As such, in my view, it would have been reasonable for the Whites Point JRP to conclude that the use of a complaint resolution program would not address the adverse environmental effects of the project on the reasonable enjoyment of life and property.

V. THE WHITES POINT JRP’S FINDINGS WITH RESPECT TO ADVERSE ENVIRONMENTAL EFFECTS PROVIDED AN ADEQUATE BASIS TO REJECT THE PROJECT

75. Under the *NSEA*, a review panel has an adequate basis to recommend the rejection of a project if it determines that a project is likely to result in adverse environmental effects or

¹²⁶ Estrin Reply Report, ¶¶ 526-528, 540-544.

¹²⁷ R-212, JRP Report, p. 12.

¹²⁸ R-212, JRP Report, p. 71.

significant environmental effects that cannot be mitigated.¹²⁹ The determination of “significance” is not a precondition for a recommendation to the Nova Scotia Minister of Environment that a project should not proceed.

76. I have identified several instances in which the Whites Point JRP concluded that the project would result in adverse environmental effects that could not be mitigated and other findings that were not supportive of a recommendation to approve the project. Specifically, the JRP found that the project would have an adverse environmental impact, or likely or potential adverse effects on endangered marine mammals, lobsters, the coastal wetland, groundwater, fisheries and the reasonable enjoyment of life and property. The JRP also expressed concerns regarding the project’s impact on surface water and tourism. Additionally, the JRP expressed broader concerns relating to the adequacy of information provided by the proponent and its public outreach, and concluded that the project was unlikely to make a meaningful contribution to the sustainable development of the Digby Neck and Islands. Importantly, these findings were made irrespective of the NAFTA breach.

77. Mr. Estrin states that the JRP found no “significant adverse effects that could not be mitigated” and there was therefore no legal discretion but to approve the project.¹³⁰ The JRP may not have used the term “significant adverse environmental effect” to characterize other effects, but they did note adverse effects that could not be adequately mitigated and would therefore be unacceptable. This is an entirely adequate basis under the Nova Scotia EA legislation for a panel to recommend rejection, and a test of “significance” is not a requirement in the *NSEA*.

78. As explained in my first report, the absence of government submissions to a review panel that the project would result in significant adverse environmental effects or adverse environmental effect does not preclude the panel from recommending the rejection of a project.¹³¹ In the context of a panel review, government officials may participate in the panel review process and may provide their opinions. These opinions may be in support of a project, or against a project, based upon the mandate of the government department or agency they represent, or their own expertise. Governmental officials’ statements and opinions are evaluated

¹²⁹ **R-5**, *NSEA*, s. 34(f) provides this as a basis for the Minister’s decision.

¹³⁰ Estrin Reply Report, ¶ 129.

¹³¹ **RE-2**, Blouin Report I, ¶ 45.

and considered by the panel, along with all other evidence, and may contribute to the panel's findings.

79. However, government officials' submissions are not determinative of a panel's findings with respect to project effects or the recommendation it must make to approve, with or without conditions, or to reject the project. Government submissions are only one source of information. In advising the Minister with respect to the potential effects of a project, a panel is required to consider all of the information in the EA record, including the submissions from the proponent, government officials and the public. Consequently, a panel's determination that a project is likely to result in adverse environmental effects and that mitigation measures are inadequate, need not be based on the information from government representatives.

80. As an example, in the case of the Keltic review which I chaired, the proponent proposed using a lake (Meadow Lake) close to the project site as a water supply. The NSDEL made a presentation to the panel in which they recommended that the water supply "can be managed by selecting the least impacting source options, provisions for protecting downstream water use, and following appropriate Dam Safety Guidelines."¹³² Nevertheless, the panel decided to impose additional conditions: that the proponent should undertake "an assessment of the impacts of potential dam failure at Meadow Lake", and "a phosphorus modeling exercise for Meadow Lake, to assess the present and predict future trophic states of the lake."¹³³ These recommendations for terms and conditions of approval went well beyond what the provincial regulator would have required, but which the panel felt were necessary to reduce impacts to acceptable levels.

81. As explained in my first report and the sections above, I am of the opinion that the Whites Point JRP findings of adverse environmental effects, and its other findings that were not supportive of a recommendation to approve the project, were reasonably made in discharging its provincial mandate. These findings, alone or in combination with one another, provided a reasonable basis for a recommendation that the project should not proceed.

¹³² **R-783**, Keltic Petrochemical and Liquefied Natural Gas Facility, Hearing Transcript of November 22, 2006 (Excerpt), Nova Scotia Department of Environment & Labour, Presentation to NSEAB, p. 80.

¹³³ **C-570**, *Report and Recommendations to the Nova Scotia Minister of Environment and Labour from the Nova Scotia Environmental Assessment Board for the Review of Keltic Petrochemicals Inc. Proposed LNG and Petrochemical Plant Facilities* (Feb. 21, 2007), p. 8.

VI. CONCLUSION

82. I remain of the opinion that it was certainly not a foregone conclusion that the Whites Point project would have been approved absent the NAFTA breach. A panel is required under Nova Scotia EA legislation to recommend to the Minister that a project be approved, approved with conditions, or rejected. This was a mandated requirement of the Whites Point JRP. Absent the CCV-based recommendation, the JRP Report would have provided no such recommendation and would have been incomplete.

83. It is therefore necessary to consider the other adverse environmental effects identified by the JRP, and assess whether the JRP may or may not have recommended project approval, with or without conditions, based upon those other findings. I conclude that the JRP had adequate justification, in the analysis and findings in their report, to recommend against project approval due to the other adverse environmental effects identified, and its assessment that the proposed mitigations would be inadequate to render those impacts acceptable.

84. The fact that other quarry and marine terminal applications have been approved in Nova Scotia is not relevant to my consideration of what the JRP might reasonably have recommended absent the NAFTA breach. Under the *NSEA*, a panel must consider all of the evidence presented to it in the course of its review, analyse the adequacy of that information, reach conclusions on the degree and likelihood of adverse impacts, assess the adequacy of proposed mitigation measures to reduce impacts to acceptable levels, and make recommendations to the Minister. These factors will be unique in each case, and there is no required “standard practice” in the EA process for a review panel to base its findings on the findings of other comparator projects.

85. The fact that the Whites Point project was referred to a panel review differentiates it from other projects. Importantly, review panel assessments involve the broadest scope of inquiry and public participation as compared to other forms of review. Moreover, review panels are required to carry out their reviews independently. This means that panels are not bound by any recommendations of government agencies, and must only give those due consideration as part of the evidence base before them.

86. In my opinion, the Whites Point JRP would have been acting entirely within its provincial mandate if it had recommended rejection of the Whites Point project based upon the record of

information and evidence before it, and it was in no way constrained by consideration of the outcome of other EA processes for different projects in arriving at its recommendation.

A handwritten signature in blue ink, appearing to read "T Blouin".

Dated: November 6, 2017

Tony Blouin, Ph. D.
Halifax
Nova Scotia