

NATIONAL ENERGY BOARD

IN THE MATTER OF the *National Energy Board Act*, R.S.C. 1985, c. N-7, as amended (“NEB Act”) and the Regulations made thereunder;

AND IN THE MATTER OF an application by Trans Mountain Pipeline ULC as General Partner of Trans Mountain Pipeline L.P. (collectively “Trans Mountain”) for a Certificate of Public Convenience and Necessity (“CPCN”) and other related approvals pursuant to Part III of the NEB Act for the Trans Mountain Expansion Project (“Project”);

AND IN THE MATTER OF the National Energy Board’s reconsideration of aspects of its OH-001-2014 Report as directed by the Governor in Council through Order in Council P.C. 2018-1177.

ARGUMENT-IN-CHIEF OF TRANS MOUNTAIN

January 17, 2018

To: The Secretary
National Energy Board
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1 **1. INTRODUCTION**

2 Canada urgently needs new pipeline export capacity, especially to tidewater. The Board
3 acknowledged in its OH-001-2014 Report that increasing pipeline capacity for the purpose of
4 accessing Pacific Basin markets is important to the Canadian economy and that this economic
5 benefit of the Project is significant.¹ The Board is both a court of record and an expert regulator
6 and can take judicial notice² of recent events that support and strengthen this conclusion. Over
7 the last year, lack of pipeline takeaway capacity has resulted in widening price discounts for
8 Canadian crude and such low netbacks for producers (and reduced royalties for the province,
9 who owns the resource) that the Alberta Government has imposed curtailments on production in
10 the province to support prices. This unprecedented intervention in the market by the Alberta
11 Government demonstrates the severity of the problems facing the energy industry and the
12 consequences for Canada's economy if we do not increase pipeline export capacity. The need is
13 real and it is immediate. Canada needs the Project now.

14 **2. CONTEXT FOR THE RECONSIDERATION**

15 The Project underwent an exhaustive hearing process between 2014 and 2016. Approximately
16 400 intervenors and 1,250 commenters participated in the hearing by, among other things, filing
17 extensive evidence and posing more than 15,000 information requests to Trans Mountain. The
18 scope of the hearing included the effects of Project-related marine shipping. The Board expressly
19 directed Trans Mountain to assess the environmental and socio-economic effects of Project-
20 related marine shipping as part of its Project Application.³ Among other things, the Board directed
21 Trans Mountain's assessment to consider:

- 22 • the type, class and specifications of vessels transiting to and from the Westridge Marine
23 Terminal;
- 24 • the frequency, routing, speed, and transit time of vessels;
- 25 • associated activities such as ballasting, anchorage, maneuvering, docking, loading,
26 bunkering and fuel types used, pilotage, and tugboat escort;
- 27 • alternatives considered, such as routing, frequency and vessel types; and,
- 28 • accidents and malfunctions related to the increase in marine shipping activities.

29 Trans Mountain conducted a comprehensive assessment of potential effects resulting from
30 Project-related marine shipping in Volume 8A of the Project Application.⁴ This assessment
31 addressed: (i) marine sediment and water quality; (ii) marine air emissions; (iii) marine

¹ National Energy Board, Report on the Trans Mountain Expansion Project (May 2016) ([A77045-1](#)) [OH-001-2014 Report], p. 309.

² *National Energy Board Act*, RSC 1985, c N-7 [NEB Act], s 11(1); see also Macaulay and Sprague, Practice and Procedure Before Administrative Tribunals, loose-leaf (2018 – Rel. 8) [Macaulay and Sprague] at 12-194.104 to 110; see also National Energy Board, Letter and Solemn Declarations of the Energy East Hearing Panel Members ([A81455](#)).

³ *NEB Filing Requirements Related to the Potential Environmental and Socio-Economic Effects of Increased Marine Shipping Activities* ([A3K9I2](#)).

⁴ Trans Mountain Expansion Project, Volume 8A – Marine Transportation ([A3S4Y3](#)), p 8A-238.

32 greenhouse gas emissions; (iv) the marine acoustic environment; (v) marine fish and fish habitat;
33 (vi) marine mammals; (vii) marine birds; (viii) marine species at risk; (ix) traditional marine
34 resource use; (x) marine commercial, recreational and tourism use; (xi) human health; and (xii)
35 accidents and malfunctions. Trans Mountain also assessed the effects resulting from a credible
36 worst-case spill from the Westridge Marine Terminal, as well as possible marine spills resulting
37 from shipping, in Volumes 7 and 8 of the Application.⁵ Further, Trans Mountain conducted a
38 variety of studies related to marine shipping as part of the Technical Review Process of Marine
39 Terminal Systems and Transshipment Sites (“TERMPOL”),⁶ all of which were included in Volume
40 8C of the Project Application, including a study of the fate and behaviour of (weathered) diluted
41 bitumen in a marine environment,⁷ and an assessment of spill response equipment in its ability to
42 recover spilled diluted bitumen.⁸ Trans Mountain also conducted a Detailed Quantitative
43 Ecological Risk Assessment for Loading Accidents and Marine Spills that was filed as part of the
44 OH-001-2014 proceeding.⁹

45 Although the effects of Project-related marine shipping were thoroughly assessed in the OH-001-
46 2014 proceeding, the Board assessed them under the *National Energy Board Act* (“NEB Act”),
47 not the *Canadian Environmental Assessment Act, 2012* (“CEAA 2012”). It is this one narrow issue
48 that needs to be reconsidered as a result of the Federal Court of Appeal’s (“FCA”) *Tsleil-Waututh*
49 *Nation v Canada (Attorney General)* (“*Tsleil-Waututh*”) decision.¹⁰ In this process (the
50 “Reconsideration”), the Board needs to determine whether any of its conclusions in OH-001-2014
51 would be different if Project-related marine shipping was assessed under CEAA 2012 instead of
52 the NEB Act. In Trans Mountain’s view, the only difference is that under the NEB Act, the Board
53 limited its consideration of mitigation measures for Project-related marine shipping to measures
54 that were within the control of Trans Mountain and the jurisdiction of the Board. Under CEAA 2012
55 and the *Species at Risk Act* (“SARA”), it may need to consider whether there are any additional
56 mitigation measures within the legislative authority of Parliament that are technically and
57 economically feasible to reduce any significant adverse environmental effects of the Project and
58 any adverse effects of the Project on SARA-listed species.

59 This broader consideration of mitigation measures should be the Board’s primary focus in the
60 Reconsideration. Although the Board also invited parties to identify any new or updated
61 information related to the effects of Project-related marine shipping, mitigation and monitoring
62 measures, or alternative means that would change any of the Board’s conclusions in OH-001-
63 2014, the record demonstrates that the only new or updated information since the OH-001-2014
64 proceeding consists of new research findings and additional details on previously assessed
65 issues that support and validate the Board’s conclusions in the OH-001-2014 Report. Trans
66 Mountain also committed to three new measures that it could pursue to potentially reduce the
67 effects of Project-related marine shipping. With the exception of these three new measures, Trans

⁵ Trans Mountain Expansion Project, Volume 7 – Risk Assessment and Management of Pipeline and Facility Spills ([A3S4V6](#)), pp 7-170 – 7-179.

⁶ Application Volume 8C, Technical Report TR 8C 00 TERMPOL ([A3S4R5](#)).

⁷ Trans Mountain, Project Application Vol. 8C, Gainford Report ([A3S5G2](#)).

⁸ Trans Mountain, Project Application Vol. 8C ([A3S5G4](#)), p 6.

⁹ Trans Mountain, Responses to NEB IR No. 1 Part 1 of 2 ([A3W9K1](#), [A3W9K2](#), [A3W9K3](#), [A3W9K4](#), [A3W9K5](#), [A3W9K6](#), [A3W9K7](#), [A3W9K8](#), and [A3W9K9](#)).

¹⁰ 2018 FCA 153 [“*Tsleil-Waututh*”].

68 Mountain submits that there is no reasonable basis for the Board to change any of its findings in
69 the OH-001-2014 Report.

70 With respect to broader mitigation measures within the legislative authority of Parliament, these
71 relate to measures that could mitigate the effects of marine vessel traffic within the established
72 shipping lanes between the Port of Vancouver and international waters. Trans Mountain-related
73 vessels (existing traffic and Project-related) will comprise only about six percent of total large
74 commercial vessel traffic volume in these shipping lanes,¹¹ and these vessels will have
75 comparatively lower effects than other vessels given the nature of the vessels (tankers, which
76 already travel at lower speeds and face higher scrutiny from regulating authorities) and the further
77 requirements imposed on these vessels by Trans Mountain.¹² As a result, it would be ineffective
78 for broader mitigation measures to apply only to Project-related vessels. Instead, if the Board
79 concludes that there are technically and economically feasible measures available to federal
80 authorities to reduce the effects of marine shipping, it should recommend to Cabinet that the
81 federal authorities implement those measures for all vessel traffic in the shipping lanes.

82 **3. LIMITED SCOPE OF THE RECONSIDERATION**

83 The purpose of the Reconsideration process is to address paragraph 770 of *Tsleil-Waututh*, which
84 requires the Board to reconsider on a principled basis (i) whether Project-related shipping is
85 incidental to the Project (and, consequently, part of the “designated project” under CEAA 2012),
86 (ii) the application of section 79 of the SARA to Project-related shipping, and (iii) the Board’s
87 environmental assessment of the Project in the light of the Project’s definition, the Board’s
88 recommendation under subsection 29(1) of the CEAA 2012 and any other matter the Cabinet
89 should consider appropriate. Cabinet did not identify any additional matters for the Board to
90 address in the Reconsideration.

91 The Board has already decided in its letter decision on October 12, 2018 to include Project-related
92 marine shipping between the Westridge Marine Terminal (“WMT”) and the 12-nautical-mile
93 territorial sea limit in the “designated project” to be assessed under the CEAA 2012. As a result,
94 the scope of this Reconsideration hearing is limited to ensuring that the requirements under the
95 CEAA 2012 and SARA are satisfied in respect of Project-related marine shipping out to the 12-
96 nautical-mile territorial sea limit. These requirements are discussed below and focus on ensuring
97 that all technically and economically feasible mitigation measures within the legislative authority
98 of Parliament that would reduce significant adverse environmental effects of the Project and
99 adverse effects of the Project on SARA-listed species are implemented. Neither of these Acts
100 require the Board to re-assess effects that were already considered in the OH-001-2014
101 proceeding.

102 As noted above, the Board assessed the environmental and socio-economic effects of Project-
103 related marine shipping in the OH-001-2014 proceeding. Regardless of the fact that this
104 assessment was done under the NEB Act instead of CEAA 2012, the Board confirmed in its OH-
105 001-2014 Report that it conducted one comprehensive environmental assessment that covered
106 all regulatory requirements.¹³ Trans Mountain’s approach to assessing effects for Project-related
107 marine shipping was also the same as its approach for the pipeline components of the Project.¹⁴

¹¹ OH-001-2014 Report, p. 350.

¹² Trans Mountain, Direct Evidence ([A95280-2](#)), p. 42-43.

¹³ OH-001-2014 Report, p. 6.

¹⁴ Trans Mountain, Letter to NEB re Reconsideration Scope and Process ([A94495-1](#)), pp. 3-6.

108 As a result, there is no merit to the claims by certain Intervenors that the Board's assessment of
109 Project-related marine shipping in OH-001-2014 is not functionally or legally the same as an
110 assessment under CEAA 2012, as it made no difference under which Act the effects were
111 assessed.¹⁵

112 The FCA in *Tsleil-Waututh* did not express any concerns with the OH-001-2014 hearing process
113 or the Board's assessment of effects of Project-related marine shipping. In fact, the FCA expressly
114 stated that "the Board's assessment of Project-related shipping was adequate for the purposes
115 of informing the Governor in Council about the **effects** of such shipping on the Southern resident
116 killer whale" and associated Indigenous traditional uses.¹⁶ Nothing in the FCA's decision requires
117 the Board to re-assess effects of Project-related marine shipping that were already assessed in
118 OH-001-2014.

119 The Board recognized the narrow scope of the Reconsideration in the Hearing Order and its
120 reasons for decision dated October 29, 2018. While the Board invited parties to submit "new" or
121 "updated" information related to the effects of Project-related marine shipping, mitigation and
122 monitoring measures, and alternative means, the Board stressed that the purpose of the
123 Reconsideration is not to re-litigate matters that were fully addressed in the original proceeding.
124 In its reasons for decision dated October 29, 2018, the Board expressly stated that: "The Board
125 remains of the view that its OH-001-2014 Report extensively canvassed certain issues set out in
126 the List of Issues; for example, the environmental effects of marine shipping" and that "the Board's
127 focus during the Reconsideration hearing will be on gathering information related to the issues in
128 the List of Issues that, in its view, were not fully canvassed in the OH-001-2014 Certificate
129 hearing."¹⁷

130 As a result, Hearing Order MH-052-2018 directed parties to limit their evidence filings to (i) new
131 or updated evidence, and (ii) aspects of the List of Issues that were not fully canvassed in the
132 OH-001-2014 Certificate hearing.

133 Many of the Intervenors and Commenters opposed to the Project have sought to use this
134 Reconsideration hearing as an opportunity to re-argue aspects of the Board's OH-001-2014
135 Report that they disagree with, including by filing "updated" evidence that re-iterates the evidence
136 and submissions they made in the original hearing. Such efforts are contrary to the Board's
137 directions in the Hearing Order and inconsistent with the findings of the FCA. Allowing parties to
138 re-litigate issues that were already adjudicated in the OH-001-2014 hearing would be
139 unnecessary, inefficient and unfair to those parties who participated in and relied on the original
140 process. As a result, and consistent with the Hearing Order, the Board should give little to no
141 weight to Intervenor submissions that (i) do not contain new or updated evidence relative to what
142 was filed in the OH-001-2014 hearing, or (ii) address aspects of the List of Issues that were fully
143 canvassed in the OH-001-2014 hearing. Applying this test, Trans Mountain submits that very little
144 of the evidence filed by Intervenors is relevant to the Board's decision in this Reconsideration.

¹⁵ North Shore NO Pipeline Expansion, Opening Statement ([A96413-1](#)), p.2.

¹⁶ *Tsleil-Waututh*, paras 439, 468 [emphasis added].

¹⁷ National Energy Board, Letter providing Reasons for the Board's Decisions ([A95187](#)).

145 **4. PROCEDURAL FAIRNESS**

146 Certain intervenors have complained that the Reconsideration hearing or the mandated timelines
147 were unfair. For example, among others, the Stó:lō Collective,¹⁸ Whitefish Lake First Nation
148 #459,¹⁹ Snuneymuxw First Nation,²⁰ Shxw'ōwhámel First Nation,²¹ Stz'uminus First Nation,²² and
149 the Squamish Nation²³ raised concerns with the 155-day timeframe established for the
150 Reconsideration hearing by Cabinet and their ability to gather and present evidence.

151 Under the NEB Act, the Board is required to deal with matters before it as expeditiously as the
152 circumstances and considerations of fairness permit and must complete the Reconsideration
153 within the 155-day timeline established by the Governor in Council (i.e., Cabinet).²⁴ The Board is
154 also the master of its own process. As acknowledged by the Board,

155 In the Board's view, the legislation makes it clear that the Board is
156 master of its own procedure and can establish its own procedures
157 for each public hearing with regard to the conduct of hearings. This
158 includes the authority to determine for a particular public hearing
159 the manner in which evidence will be received and tested...²⁵

160 The Board established a process for the Reconsideration that complied with the Cabinet's
161 direction and that was fair to all parties. Although the 155-day time limit did not allow for as much
162 time as some of the Intervenors may have liked, it reflected the narrow scope of the
163 Reconsideration and the FCA's direction for a prompt redetermination.²⁶ It also imposed tight
164 deadlines on all hearing participants.²⁷ For example, Intervenors were initially afforded 20 days
165 to review and respond to Trans Mountain's direct evidence, while Trans Mountain was only
166 afforded six calendar days to review and respond to the evidence from all Intervenors. The Board
167 subsequently granted Squamish Nation's Motion for an additional 15 days for all Intervenors to
168 file their evidence after receiving Trans Mountain's evidence,²⁸ and also allowed certain
169 Intervenors to provide confidential evidence to Trans Mountain after the deadline for Intervenors

¹⁸ Stó:lō Collective, Opening Statement ([A96462](#)).

¹⁹ Whitefish Lake First Nation, Opening Statement ([A96463](#)).

²⁰ Snuneymuxw First Nation, Opening Statement ([A96461](#)).

²¹ Shxw'ōwhámel First Nation, Opening Statement ([A96460](#)).

²² Stz'uminus First Nation, Opening Statement ([A96459](#)).

²³ Squamish Nation, Direct Evidence ([A96457](#)).

²⁴ NEB Act, ss 11(4), 53(5).

²⁵ National Energy Board, Ruling No. 14 for Allan and May Notices of Motion ([A60134](#)).

²⁶ *Tsleil-Waututh*, paras 768, 774.

²⁷ In the Board's letter dated September 26, 2018 issued prior to the Hearing Order, the Board encouraged all parties to start preparing any additional evidence immediately based on the draft List of Issues for the Reconsideration hearing, given the expedited hearing process ([A6H7Q6](#)).

²⁸ National Energy Board, Ruling No. 9 for Squamish Nation and Tsleil-Waututh Nation Notices of Motion ([A95640](#)); see also National Energy Board, Procedural Direction No. 3 Revised Hearing Events and Steps Table ([A95641](#)).

170 Evidence, with only four calendar days for Trans Mountain to respond.²⁹ These modifications to
171 the process demonstrate that the Board reasonably sought to balance the interests of all hearing
172 participants in establishing a process that complied with the Cabinet's direction and that was fair
173 to everyone.

174 The Board has previously noted that "procedural fairness does not mean that every participant in
175 the proceeding must be given the same procedural protection. Procedural fairness varies with the
176 context and the interests at stake."³⁰ As such, the limited scope of the Reconsideration, the extent
177 of the original review, and the urgency of the matter should inform the procedural protections that
178 are afforded to all parties.

179 Trans Mountain submits that procedural fairness has been afforded to all parties, appropriate for
180 their level of participation, such that they have been given a meaningful opportunity to present
181 their cases fully and fairly based on the narrow scope of the Reconsideration.

182 **5. LEGAL FRAMEWORK**

183 As noted above, the scope of this Reconsideration hearing is limited to the narrow issue of
184 ensuring that the requirements under the CEEA 2012 and SARA are satisfied in respect of
185 Project-related marine shipping out to the 12-nautical-mile territorial sea limit.

186 **5.1 CEEA 2012**

187 Section 19 of CEEA 2012 specifies the factors to be taken into account in any environmental
188 assessment of a designated project under the Act. These include: (i) the environmental effects of
189 the designated project, including the environmental effects of malfunctions or accidents that may
190 occur in connection with the designated project and any cumulative environmental effects that are
191 likely to result from the designated project in combination with other physical activities that have
192 been or will be carried out; (ii) the significance of those effects; (iii) comments from the public; (iv)
193 mitigation measures that are technically and economically feasible and that would mitigate any
194 significant adverse environmental effects of the designated project; and, (v) alternative means of
195 carrying out the designated project that are technically and economically feasible and the
196 environmental effects of any such alternative means.

197 As noted above, each of these factors was specifically assessed for Project-related marine
198 shipping in the OH-001-2014 proceeding.

199 Sections 29 and 30 of CEEA 2012 require the Board to decide if, taking into account the
200 implementation of any mitigation measures the Board considers appropriate, the Project is likely
201 to cause significant adverse environmental effects and, if so, whether or not those significant
202 effects are justified in the circumstances. In the OH-001-2014 Report, the Board concluded that
203 Project-related marine shipping would likely result in significant adverse environmental effects on
204 southern resident killer whale ("SRKW"), traditional Indigenous use associated with SRKW and
205 increased greenhouse gas emissions. The Board also found that the potential effects of a large
206 or credible worst-case spill would be significant, but that these effects were unlikely to occur.
207 Because Project-related marine shipping was not included within the scope of the "designated
208 project" in OH-001-2014, the Board did not identify the above effects as significant adverse

²⁹ National Energy Board, Ruling No. 18 for Trans Mountain notice of motion for an extension to reply evidence deadline in relation to specific evidence ([A96529](#)).

³⁰ National Energy Board, Ruling No. 14 to David Slik - Letters of Comment Process ([A96153](#)), p. 2.

209 environmental effects for the purposes of CEAA 2012. The Board similarly did not address
210 whether those effects were justified in the circumstances, or whether any mitigation was
211 technically or economically feasible to mitigate the significant adverse environmental effects.
212 Each of these issues is addressed below.

213 **5.2 SARA**

214 Subsection 79(1) of the SARA requires every authority who is required to conduct an
215 environmental assessment under CEAA 2012 to, without delay, notify the competent minister or
216 ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.
217 Subsection 79(2) of the SARA requires the authority to identify the adverse effects of the project
218 on the listed wildlife species and its critical habitat and, if the project is carried out, ensure that
219 measures are taken to avoid or lessen those effects and to monitor them. The measures must be
220 taken in a way that is consistent with any applicable recovery strategy and action plan.

221 On November 14, 2018, the Board advised the Minister of Environment and Climate Change
222 Canada and the Minister of Fisheries, Oceans and the Canadian Coast Guard that Project-related
223 marine shipping associated with the Project, if approved and constructed, may affect additional
224 species listed on Schedule 1 of the SARA and/or their habitat,³¹ in addition to those identified in
225 the OH-001-2014 proceeding.³² This notification satisfied the requirements of s. 79(1) of SARA.

226 With respect to s. 79(2) of SARA, Trans Mountain assessed effects of Project-related marine
227 shipping on SARA-listed species in the OH-001-2014 proceeding. The SARA does not prescribe
228 any particular methodology for assessing effects, but – consistent with Trans Mountain’s effects
229 assessment for the pipeline components of the Project – the Board required Trans Mountain to
230 conduct species-specific assessments for each SARA-listed marine bird, mammal and fish
231 species (including marine invertebrates) for routine effects of marine shipping.³³ For effects
232 resulting from a credible worst-case oil spill, Trans Mountain’s assessment was based on key
233 indicators and their habitats. This approach recognized that an oil spill, while not likely, would
234 affect many environmental receptors similarly, and one of the key purposes of assessing a
235 credible worst-case oil spill is to develop appropriate oil spill response plans. Trans Mountain’s
236 selection of key indicator species incorporated feedback from Indigenous groups, regulatory
237 authorities and stakeholders and included public issues raised through media, available research
238 literature and the professional judgment of the assessment team.³⁴

239 In its OH-001-2014 Report, the Board expressly accepted Trans Mountain’s approach to
240 assessing effects on SARA-listed species and using key indicators where appropriate.³⁵
241 Specifically, with respect to Project-related marine shipping, the Board described its
242 environmental effects assessment in the context of section 79 of SARA as follows:

³¹ National Energy Board, Letter to Ministers of Environment and DFO regarding potential effects on SARA-listed species ([A95671](#)).

³² National Energy Board, Letter to Fisheries and Oceans and Environment Canada regarding potential effects on SARA-listed species ([A59770](#)).

³³ Trans Mountain, Follow-Up to NEB IR No. 2 Responses (October 17, 2014) ([A4D311](#)); Trans Mountain, Response to NEB IR No. 1 (1 of 2) ([A3W9H8](#)).

³⁴ Trans Mountain Response to NEB IR No. 1.62d Attachment 1 of 9 ([A3W9K1](#)), s 3.3.

³⁵ OH-001-2014 Report, p. 162-163.

243 Further, the Board's assessment of the environmental effects of
244 Project-related marine shipping under the NEB Act considered:

- 245 • adverse impacts of Project-related marine shipping on
246 SARA-listed wildlife species and their critical habitat;
- 247 • all reasonable alternatives to Project-related marine
248 shipping that would reduce impact on SARA-listed species'
249 critical habitat; and
- 250 • measures to avoid or lessen any adverse impacts consistent
251 with applicable recovery strategies or action plans.³⁶

252 In the Reconsideration hearing, the Board held that "in the Board's view, [the] indicator species
253 approach can meet the legal requirements of the SARA and the CEEA 2012, and is therefore
254 consistent with the Court's direction in *Tsleil-Waututh Nation*, Order in Council P.C. 2018-1177,
255 the List of Issues, and the Board's approach to conducting the environmental assessment of
256 Project-related marine shipping in the Reconsideration."³⁷

257 Therefore, Trans Mountain submits that the Board's assessment of Project-related marine
258 shipping in the OH-001-2014 proceeding complied with the requirements of s. 79(2) of SARA.
259 Further, in response to the Board's Filing Requirements to Trans Mountain in this
260 Reconsideration, Trans Mountain assessed effects of Project-related marine shipping on all newly
261 listed species under the SARA since the OH-001-2014 proceeding, and discussed any changes
262 in recovery strategies or action plans since the original proceeding that could affect mitigation
263 measures. This updated assessment ensures that the Board's decision in this Reconsideration
264 complies with s. 79(2).

265 The *Tsleil-Waututh* decision did not impugn the Board's approach to complying with SARA in OH-
266 001-2014, but it suggested that the Board may have erred in limiting its consideration of mitigation
267 measures to those measures within the Board's jurisdiction.³⁸ As a result, one of the central
268 functions of this Reconsideration hearing is to identify any technically and economically feasible
269 mitigation measures to mitigate effects of Project-related marine shipping on SARA-listed species,
270 or measures to monitor those effects. This issue is discussed further below. The Reconsideration
271 proceeding is not intended for parties to challenge matters previously addressed in the OH-001-
272 2014 hearing, such as the methodology for assessing potential effects of the Project on SARA-
273 listed species.

274 **6. CROWN CONSULTATION**

275 Certain intervenors³⁹ raised concerns with the adequacy of Crown consultation.

³⁶ OH-001-2014 Report, p. 333.

³⁷ National Energy Board, Ruling No. 24 regarding risk assessment of Project-related marine shipping ([A97046-1](#)), p. 8.

³⁸ *Tsleil-Waututh*, paras 454-456.

³⁹ BC Metis Federation, Letter re: Reconsideration Hearing ([A96380](#)); T'Sou-ke Nation, Opening Statement and Direct Evidence ([A96376](#)); Blood Tribe (Kainai First Nation), Opening Statement and Direct Evidence ([A96398](#)); Squamish Nation, Opening Statement and Direct Evidence ([A96457](#)); Tsawout

276 Trans Mountain submits that, as a starting point, the Board's OH-001-2014 Report extensively
277 considered the potential impacts from Project-related shipping on Indigenous interests. The FCA
278 in *Tsleil-Waututh* considered the adequacy of the OH-001-2014 process and stated that it was
279 satisfied that the Board's process was "adequate for fulfilling its consultation obligations."⁴⁰

280 In the Reconsideration hearing, the Board has invited new or updated evidence on, among other
281 things, the potential impacts of Project-related marine shipping on Indigenous interests and
282 mitigation measures to avoid, reduce, or offset potential adverse effects. As discussed below, the
283 information filed in this hearing related to Indigenous interests, including 11 days of oral traditional
284 evidence,⁴¹ was generally consistent with the information filed in the OH-001-2014 proceeding,
285 and no new or updated information has been filed that should cause any of the Board's
286 conclusions in the OH-001-2014 Report to change.

287 The Board has also indicated that its Reconsideration report will consider whether there has been
288 adequate consultation and accommodation for the purposes of this Reconsideration hearing,
289 consistent with the recognition of the rights recognized and affirmed in section 35 of the
290 *Constitution Act, 1982*. Trans Mountain's evidence demonstrates that it has continued to consult
291 with all potentially affected Indigenous groups in relation to Project-related marine shipping since
292 the conclusion of the OH-001-2014 hearing.⁴² This consultation has included hundreds of face-
293 to-face meetings, technical workshops and other engagement opportunities. Additional
294 engagement opportunities have been provided to Indigenous groups through the various regional
295 initiatives that are underway. Further, this Reconsideration hearing provided opportunities for
296 potentially affected Indigenous groups to learn more about Project-related marine shipping, ask
297 information requests of Trans Mountain and federal government agencies, file written evidence
298 and present oral traditional evidence. Taken together, Trans Mountain submits that Indigenous
299 groups have been provided with extensive opportunities to engage on all aspects of Project-
300 related marine shipping.

301 Notwithstanding this, the Board's task is not to assess the adequacy of Crown consultation in its
302 Reconsideration report. The Government of Canada has indicated that it intends to carry out
303 additional consultation beyond and outside the NEB process.⁴³ Trans Mountain submits that the
304 adequacy of Crown consultation can only be assessed once all consultation has been completed
305 and at the time when the Crown (in this case, Cabinet) renders its final decision on the Project.
306 As such, while the Board can assess the adequacy of Trans Mountain's consultation for the
307 purposes of this Reconsideration hearing, the Board need not and cannot at this time assess the
308 adequacy of Crown consultation overall. Such an assessment would be premature and beyond
309 the purview of the Board.

310 **7. ENVIRONMENTAL EFFECTS OF PROJECT-RELATED MARINE SHIPPING**

311 The evidence filed by Intervenors focused on several key environmental effects from Project-
312 related marine shipping, in particular effects on: (1) SRKW; (2) Indigenous traditional marine use

First Nation, Opening Statement and Written Evidence ([A96481](#)); Lyackson First Nation, Opening Statement and Written Evidence ([A96393](#)).

⁴⁰ *Tsleil-Waututh*, para 531.

⁴¹ National Energy Board, Oral Traditional Evidence Schedule ([A95518-3](#)).

⁴² Trans Mountain, Direct Evidence ([A95280-2](#)), pp. 28-30.

⁴³ Department of Justice, Opening Statement and Evidence ([A95292-2](#)), pp. 100-101, 107.

313 and culture; (3) greenhouse gas emissions; (4) Pacific salmon and Steelhead Trout; and, (5) the
314 environmental effects resulting from an oil spill. Each of these issues was fully addressed in the
315 OH-001-2014 proceeding. Trans Mountain submits that no new evidence or information has been
316 filed with respect to these issues that ought to change the Board's findings from the original
317 hearing.

318 **7.1 Southern Resident Killer Whale**

319 Effects of vessel traffic on SRKW was one of the key issues in the OH-001-2014 proceeding and
320 was thoroughly canvassed by the Board. In its OH-001-2014 Report, the Board made the
321 following findings regarding effects on SRKW:

- 322 • The SRKW population has crossed a threshold where any additional adverse
323 environmental effects would be considered significant.⁴⁴
- 324 • The current level of vessel traffic in the [Regional Study Area] and the predicted future
325 increase of vessel traffic in the [Regional Study Area], even excluding the Project related
326 marine vessels, have and would increase the pressure on the SRKW population.⁴⁵
- 327 • While the effects from Project-related marine vessels will be a small fraction of the total
328 cumulative effects, the increase in marine vessels associated with the Project would
329 further contribute to cumulative effects that are already jeopardizing the recovery of the
330 SRKW.⁴⁶
- 331 • The effects associated with Project-related marine vessels will impact numerous
332 individuals of the SRKW population in a habitat identified as critical to the recovery...
333 Consequently, the Board finds that the operation of Project-related marine vessels is likely
334 to result in significant adverse effects to the SRKW.⁴⁷
- 335 • Mortality of individuals of SARA-listed species could result in population level impacts and
336 could jeopardize recovery. For example, the Recovery Strategy of the Northern and
337 Southern Resident Killer Whales (*Orcinus orca*) in Canada states that while the probability
338 of either Northern or Southern resident killer whales being exposed to an oil spill is low,
339 the impact of such an event is potentially catastrophic.⁴⁸

340 The Board's findings regarding the SRKW and Trans Mountain's commitment to developing a
341 Marine Mammal Protection Program ("MMPP")⁴⁹ led the Board to impose Condition 132, which
342 requires Trans Mountain to create an MMPP and file it with the Board three months prior to
343 operations. The MMPP must include goals and objectives and illustrate how these objectives align
344 with the objectives of DFO Recovery Strategies and Action Plans, as well as a summary of issues

⁴⁴ OH-001-2014 Report, p. 350.

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ *Ibid.*

⁴⁸ OH-001-2014 Report, p. 398.

⁴⁹ Trans Mountain, Response to NEB IR No. 1.56 ([A3W9H8](#)), pp. 324-332.

345 and initiatives identified to date.⁵⁰ Trans Mountain is prepared to advance the MMPP in
346 collaboration with other parties and Indigenous groups earlier than required by Condition 132,
347 and plans to commence a process to solicit and obtain feedback and comments from Indigenous
348 groups on a draft version of the MMPP no later than 18 months before the commencement of
349 Project operations.⁵¹

350 The Board acknowledged its extensive consideration of effects on SRKW in the OH-001-2014
351 proceeding in its reasons for decision dated October 29, 2018:

352 In the Board's view, its OH-001-2014 Report extensively
353 considered the potential for effects on SRKW, including physical
354 and acoustic disturbance, vessel strikes, chemical and biological
355 contaminants, and reduction in the availability or quality of prey
356 (primarily chinook and chum salmon). The evidence that the
357 Board's OH-001-2014 Report considered is part of the record for
358 the Reconsideration hearing. The Board has added a note at the
359 bottom of the List of Issues to explain that Parties are expected to
360 limit their evidence filings to new or updated evidence only.⁵²

361 In its Direct Evidence, Trans Mountain acknowledged and summarized various research initiatives
362 that have been taken since the OH-001-2014 proceeding to better understand effects from vessel
363 traffic on SRKW and inform industry-wide changes to reduce cumulative effects.⁵³ This new
364 research validates the Board's findings in OH-001-2014 that any increase in marine vessels
365 associated with the Project would further contribute to cumulative effects that are already
366 jeopardizing the recovery of the SRKW. It also demonstrates that the applicable federal authorities
367 are well aware of this issue and are exploring various strategies to address cumulative effects to
368 allow for future recovery of the SRKW population.

369 Several Intervenors also filed research findings that have been published since 2015 on SRKW,⁵⁴
370 as well as updates to the evidence they filed in the OH-001-2014 proceeding (for example,
371 Raincoast Conservation Foundation filed an updated population viability analysis for the SRKW
372 regarding population viability and acoustic disturbance⁵⁵ that is similar to what Raincoast filed in
373 the OH-001-2014 hearing,⁵⁶ and which contains substantially the same conclusions).

374 Trans Mountain explained in its Reply Evidence that while the various filed or referenced scientific
375 papers themselves are new publications, many of which improve and update the state of

⁵⁰ OH-001-2014 Report, Appendix 3, Conditions Applied to Legal Instruments ([A77045-1](#)), pp. 483.

⁵¹ Trans Mountain, Response to IAMC Reconsideration IR No. 1 ([A97008-18](#)), p. 16.

⁵² National Energy Board, Letter providing Reasons for the Board's Decisions ([A95187-5](#)), p. 6.

⁵³ Trans Mountain, Direct Evidence ([A95280-2](#)), pp. 21-27.

⁵⁴ Province of BC, Impacts of Noise on Southern Resident Killer Whales ([A6L4W6](#)); Province of BC, Southern Resident Killer Whales and Prey Resources ([A6L4W7](#)); US Tribes, Exhibit 8 to US Tribes Opening Statement and Direct Evidence ([A6L6U8](#)); US Tribes, Exhibit 9 to US Tribes Opening Statement and Direct Evidence ([A6L6U9](#)); US Tribes, Exhibit 10 to US Tribes Opening Statement and Direct Evidence ([A6L6V0](#)).

⁵⁵ Raincoast Conservation Foundation, Evidence of Raincoast Conservation Foundation ([A96429-3](#)).

⁵⁶ OH-001-2014 Report, p. 345.

376 knowledge regarding topics such as population status, important habitat, and relative
377 contributions of different threats, they do not introduce any additional threats or mitigation
378 measures beyond those already considered in the OH-001-2014 proceeding or Trans Mountain's
379 Direct Evidence.⁵⁷ The current 2018 status of the SRKW is still endangered, the population trend
380 is still declining, and Project-related vessels and other marine traffic will need to continue to pass
381 through SRKW critical habitat.⁵⁸ In addition, the cumulative levels of marine vessel traffic in the
382 Salish Sea remain consistent with what Trans Mountain assessed in its cumulative effects
383 assessment in the OH-001-2014 proceeding.⁵⁹ As a result, Trans Mountain submits that none of
384 the new and updated evidence on SRKW alters the Board's significance determination for SRKW
385 in the OH-001-2014 Report or its key findings that led to that determination.

386 7.2 Indigenous traditional marine resource use and culture

387 A number of Indigenous groups raised concerns with the potential for Project-related marine
388 shipping to impact their culture and their traditional practices in relation to the marine
389 environment.⁶⁰ This issue was extensively canvassed by the Board in the OH-001-2014
390 proceeding. In the OH-001-2014 Report, the Board made the following findings in respect of
391 traditional marine use and culture:

392 The Board acknowledges that uses, practices and activities such
393 as hunting, fishing, harvesting, plant gathering and the use of
394 cultural sites are very important for Aboriginal groups along the
395 coastal areas of B.C. These uses, practices and activities are
396 undertaken for both subsistence and traditional cultural purposes,
397 and are important for maintaining Aboriginal cultures and
398 transmitting these across generations. The Board also
399 acknowledges the significant and detailed evidence provided by
400 Aboriginal groups about their use of the marine environment where
401 Project-related marine vessel traffic is proposed to take place. The

⁵⁷ Trans Mountain, Reply Evidence ([A96612-2](#)), pp. 12-13.

⁵⁸ Trans Mountain, Direct Evidence ([A95280](#)), pp. 14-15.

⁵⁹ Trans Mountain, Response to District of North Vancouver IR No. 1.1(b) ([A97008-13](#)), p. 2.

⁶⁰ Stk'emlupsemc te Secwepemc, Opening Statement and Evidence ([A96343](#)); Coldwater Indian Band, Written Evidence ([A96411](#)); Kwantlen First Nation, Opening Statement and Evidence ([A96438](#)); Cheam First Nation, Opening Statement and Evidence ([A96439](#)); Chawathil First Nation, Opening Statement and Evidence ([A96440](#)); Snuneymuxw First Nation, Opening Statement and Written Evidence ([A96461](#)); Seabird Island Band, Opening Statement and Evidence ([A96441](#)); Stz'uminus First Nation, Opening Statement ([A96459](#)); Shxw'ōwhámel First Nation, Opening Statement ([A96460](#)); US Tribes (Swinomish, Tulalip, Suquamish and Lummi Indian Nations), Opening Statement and Direct Evidence ([A96464](#)); Tsartlip First Nation, Opening Statement and Submissions ([A96474](#)); Tsawout First Nation, Opening Statement and Written Evidence ([A96481](#)); Malahat First Nation, Opening Statement and Written Evidence ([A96428](#)); Pacheedaht First Nation, Opening Statement and Written Evidence ([A96454](#)); Ditidaht First Nation, Direct Evidence ([A96467](#)); Neskonlith Indian Band, Opening Statement and Direct Evidence ([A96480](#)); Little Shuswap Indian Band, Opening Statement and Filed Materials ([A96476](#) and [A96479](#)); Adams Lake Indian Band, Opening Statement and Direct Evidence ([A96444](#)); Metis Nation of BC, Opening Statement and Evidence ([A96484](#)); Musqueam Indian Band, Opening Statement and Written Evidence ([A96465](#)).

402 Board considered all of the evidence provided by Aboriginal groups,
403 Trans Mountain and other participants on these matters.⁶¹

404 [...]

405 With respect to the effects of Project-related marine vessel traffic
406 on traditional marine resource uses, activities and sites, the Board
407 finds that there will be disruptions to Aboriginal marine vessels and
408 harvesters, and that this may disrupt activities or access to sites.
409 The Board is of the view that these disruptions will be temporary,
410 only occurring during the period of time when Project-related tanker
411 vessels are in transit.⁶²

412 [...]

413 The Board acknowledges the concerns raised by Aboriginal groups
414 about marine safety, increased congestion of marine vessel traffic,
415 and potential disruptions that may occur as a result of vessel
416 collisions. This potentially includes damage to or loss of fishing
417 gear, or vessel damage or loss in the event of a direct collision.
418 While there is concern about interactions between Project-related
419 marine vessels and traditional fishing vessels, the Board is of the
420 view that disruptions that may result from interference or collisions
421 with Project-related vessels are considered to be unlikely due to
422 adherence to regulatory standards and navigational and safety
423 measures by marine vessels.⁶³

424 [...]

425 The Board finds, as described in its views in this chapter on marine
426 mammals, that the increase in marine vessel traffic associated with
427 the Project is likely to result in significant adverse effects on the
428 Southern resident killer whale. The Board finds that Project-related
429 marine vessel traffic would further contribute to total cumulative
430 effects which are determined to be significant, with or without the
431 Project. Given these conclusions and recognizing the stated
432 cultural importance of the killer whale to certain Aboriginal groups,
433 the Board finds that the increase in marine vessel traffic associated
434 with the Project is likely to result in significant adverse effects on
435 the traditional Aboriginal use associated with the Southern resident
436 killer whale.⁶⁴

437 The Board further found that Trans Mountain's approach, including its methodology, for assessing
438 the Project's potential effects on current use of resources for traditional purposes by potentially
439 affected Indigenous groups was appropriate. In the Board's view, Trans Mountain provided

⁶¹ OH-001-2014 Report, p. 361.

⁶² OH-001-2014 Report, p. 362.

⁶³ OH-001-2014 Report, p. 362.

⁶⁴ OH-001-2014 Report, p. 363.

440 comprehensive responses and descriptions of mitigation for each of the specific sites and
441 activities filed in the traditional land resources use and traditional marine resource use reports.⁶⁵
442 The Board imposed Conditions 96, 97, 98, and 146 to address outstanding concerns from
443 Indigenous groups, including ongoing consultation, investigation, and monitoring.⁶⁶

444 In this Reconsideration proceeding, several Indigenous groups reiterated concerns about the
445 potential effects of Project-related marine shipping on their culture and traditional practices, and
446 in some cases filed additional details about specific locations of traditional marine uses that were
447 not filed in the OH-001-2014 proceeding. Specifically, Indigenous groups that referred to the use
448 of marine fish and other resources for food, social/cultural (including trade) and ceremonial
449 purposes included: St'kemplupsemc te Secwepemc, Coldwater Indian Band; Kwantlen First
450 Nation, Cheam First Nation, Chawathil First Nation, Seabird Island First Nation, Stz'uminus First
451 Nation, Shxw'ōwhámel First Nation; Snuneymuxw First Nation; Swinomish, Tulalip, Suquamish
452 and Lummi Indian Nations (US Tribes), Tsartlip First Nation, Malahat First Nation, Tsawout First
453 Nation, Pacheedaht First Nation, Ditidaht First Nation, Neskonlith Indian Band, Little Shuswap
454 Indian Band, Adams Lake Indian Band, Métis Nation of BC and Musqueam Indian Band.⁶⁷

455 Trans Mountain reviewed each of these filings and assessed the new information in accordance
456 with the assessment conducted in the original hearing. Trans Mountain's assessment concluded
457 that all of the new information about traditional marine use activities and locations was consistent
458 with the information and assumptions used to conduct the original assessment.⁶⁸ As a result,
459 none of this new information changed the results of Trans Mountain's assessment. There is
460 similarly no evidentiary basis for the Board to vary any of its findings on Indigenous marine use
461 and culture from the OH-001-2014 Report. While this new and updated information does not alter
462 the conclusions on potential impacts, it will be useful in implementing mitigation plans and
463 monitoring.

464 **7.3 Greenhouse Gas Emissions**

465 Trans Mountain assessed the potential greenhouse gas ("GHG") emissions arising from Project-
466 related marine shipping and presented them to the Board for consideration in the OH-001-2014
467 proceeding.⁶⁹ As Trans Mountain identified in its Direct Evidence, potential sources of GHG
468 emissions related to Project-related marine shipping include the combustion of fuel in the tanker
469 engines and boilers, and evaporative losses of product from tanker holds. Trans Mountain's
470 assessment in the OH-001-2014 proceeding was informed by discussions with federal, provincial
471 and local government agencies, and no specific mitigation measures were considered in the
472 marine GHG assessment.⁷⁰

473 The Board considered Trans Mountain's assessment of potential marine GHG emissions in the
474 OH-001-2014 proceeding and concluded:

⁶⁵ OH-001-2014 Report, pp. 277-278.

⁶⁶ OH-001-2014 Report, pp. 278-279.

⁶⁷ Trans Mountain, Reply Evidence ([A96612-2](#)), pp. 38-39.

⁶⁸ Trans Mountain, Reply Evidence ([A96612-2](#)), p. 39.

⁶⁹ Trans Mountain, Project Application V8A, pp. 33-42.

⁷⁰ Trans Mountain, Direct Evidence ([A95280-2](#)), p. 34.

475 The Board finds that greenhouse gas emissions are a concern
476 because of their long term accumulation in the atmosphere. The
477 Board also finds that any incremental contribution from Project-
478 related marine vessels would increase the burden at a global scale,
479 regardless of how large or small the contribution.

480 Given that there are no regulatory reporting thresholds or
481 specific requirements for marine greenhouse gas emissions in
482 Canada, and that the modelled emissions would result in
483 measurable per cent increases as noted above, the Board finds the
484 magnitude of these emissions to be high. Consequently, the Board
485 finds that greenhouse gas emissions from Project-related marine
486 vessels are likely to be significant.⁷¹

487 Trans Mountain has taken steps to address GHG emissions from Project-related marine shipping
488 since the close of the OH-001-2014 proceeding, such as setting an age limit for tankers that it will
489 accept to call at the WMT, which over time will ensure that newer and more GHG-efficient vessels
490 are used for Project shipping.⁷² Through these measures and other industry-wide initiatives, there
491 is a visible trend towards GHG emission reductions from Project-related marine shipping relative
492 to what was originally assessed in the OH-001-2014 proceeding.⁷³

493 Although several intervenors filed information in this proceeding related to climate change and
494 the importance of global GHG reductions, this information only serves to validate the Board's
495 significance determination in the OH-001-2014 Report. No new or updated evidence was filed
496 that casts doubt on any of the Board's findings regarding GHG emissions.

497 **7.4 Pacific Salmon and Steelhead Trout**

498 A number of intervenors⁷⁴ raised concerns with respect to Pacific salmon and steelhead trout⁷⁵
499 as a food source and species that are important to Indigenous culture as well as to the SRKW as

⁷¹ OH-001-2014 Report, p. 337.

⁷² Trans Mountain, Direct Evidence ([A95280-2](#)), p. 35.

⁷³ Trans Mountain, Direct Evidence ([A95280-2](#)), p. 35.

⁷⁴ Stephen Stewart, Opening Statement and Direct Evidence ([A96394](#)); Province of BC, Opening Statement and Evidence ([A96401](#)); Coldwater Indian Band, Written Evidence ([A96411](#)); Raincoast Conservation Foundation, Opening Statement and Evidence ([A96429](#)); Living Oceans Society, Opening Statement and Written Evidence ([A96430](#)); Stk'emlupsemc te Secwepemc, Oral Traditional Evidence ([A96343](#)); Kwantlen First Nation, Opening Statement and Evidence ([A96438](#)); Seabird Island Band, Opening Statement and Evidence ([A96441](#)); Sto:lo Tribal Council, Opening Statement and Evidence ([A96442](#)); Cheam First Nation, Opening Statement and Evidence ([A96439](#)); Chawathil First Nation, Opening Statement and Evidence ([A96440](#)); Nooaitch Indian Band, Opening Statement ([A96448](#)); Snuneymuxw First Nation, Opening Statement and Written Evidence ([A96461](#)); Musqueam Indian Band, Opening Statement and Written Evidence ([A96465](#)); US Tribes (Swinomish, Tulalip, Suquamish and Lummi Indian Nations), Opening Statement and Direct Evidence ([A96464](#)); Ermineskin Cree Nation, Opening Statement and Direct Evidence ([A96472](#)); Louis Bull Tribe, Opening Statement and Evidence ([A96416](#)); Tsartlip First Nation, Opening Statement and Submissions ([A96474](#)); Whitefish (Goodfish) Lake First Nation #128, Opening Statement and Evidence ([A96473](#)); Adams Lake Indian Band, Opening Statement and Direct Evidence ([A96444](#)).

⁷⁵ Pacific salmon is meant to include five salmon species (i.e., Chinook, Coho, Pink, Sockeye, and Chum).

500 a source of prey. These concerns were consistent with those raised in the OH-001-2014
501 proceeding. In its OH-001-2014 Report, the Board noted that:

502 • The Fraser River and its tributaries are vital habitat for Pacific salmon on the west coast
503 of Canada and account for, on average, approximately 50 per cent of salmon production
504 in B.C.;⁷⁶

505 • Indigenous groups are concerned that existing cumulative effects from industrial and
506 urban development have resulted in decreased fish abundance and health, and that the
507 Project would contribute to these total cumulative effects;⁷⁷ and,

508 • Portions of the marine Regional Study Area (“RSA”) have been classified by DFO as
509 Important Areas for Pacific herring and Pacific salmon.⁷⁸

510 With respect to the effects of Project-related marine shipping, the Board acknowledged the
511 evidence provided by participants about possible effects of shipping on Pacific salmon and agreed
512 that some form of adverse, short-term effect (e.g., small behavioral changes) is likely to occur
513 from underwater noise produced by Project-related marine vessels. However, the Board stated
514 that it was not convinced that these short-term effects would translate into larger, more substantial
515 impacts, and concluded that the adverse effects on marine fish and fish habitat from Project-
516 related marine vessels are not likely to be significant.⁷⁹ The Board also acknowledged Trans
517 Mountain's historical support for wild salmon, as well as support for potential projects such as the
518 Pacific Salmon Foundation – Salish Sea Marine Survival Project, which could contribute to better
519 conservation and increased abundance of Chinook salmon.⁸⁰

520 In its Direct Evidence, Trans Mountain confirmed its commitment to supporting projects such as
521 the Pacific Salmon Foundation – Salish Sea Marine Survival Project and Strategic Salmon Health
522 Initiatives to improve conservation and abundance of Pacific salmon.⁸¹ Trans Mountain also
523 acknowledged the Oceans Protection Plan, which aims to improve the availability of prey by
524 increasing the availability of chinook salmon, among other things.⁸² Trans Mountain explained in
525 its Direct Evidence that while these initiatives are not directly applicable to Project-related vessels,
526 Trans Mountain committed this level of comprehensive investment as a voluntary contribution to
527 support the conservation of Pacific salmon and marine mammal recovery, particularly as salmon
528 are the principal food source for SRKW, and to improve overall ecosystem health in SRKW
529 habitat. This commitment reflects Trans Mountain's commitment to participate in initiatives in
530 relation to marine mammal protection, as formalized and required by Condition 132.

531 Several Intervenors in this proceeding filed evidence with respect to the current status of SRKW
532 prey (Chinook salmon) and associated Project-related or other anthropogenic threats on

⁷⁶ OH-001-2014 Report, p. 182.

⁷⁷ OH-001-2014 Report, p. 184 and 337.

⁷⁸ OH-001-2014 Report, p. 337.

⁷⁹ OH-001-2014 Report, p. 340.

⁸⁰ OH-001-2014 Report, p. 351.

⁸¹ Trans Mountain, Direct Evidence ([A95280-2](#)), pp. 21, 23-24.

⁸² Trans Mountain, Direct Evidence ([A95280-2](#)), p. 22.

533 salmon.⁸³ Similarly, Coldwater Indian Band (“Coldwater”) filed evidence alleging that Trans
534 Mountain failed to assess potential effects of a spill on coho salmon and steelhead trout.⁸⁴

535 Trans Mountain’s Reply Evidence demonstrates that the majority of evidence submitted by
536 Intervenor in respect of Pacific salmon and steelhead trout was neither new nor updated. Rather,
537 it reiterated many of the same concerns and assertions of cultural importance that were previously
538 provided to and considered by the Board. As noted in Trans Mountain’s Reply Evidence, the
539 potential adverse effects to Pacific salmon and steelhead trout, as well as the importance and use
540 of those species, were fully addressed and considered in the OH-001-2014 proceeding.⁸⁵ The
541 report filed by Coldwater (PGL 2018) does not provide any new evidence with respect to potential
542 adverse effects of marine crude oil spills that results in a change to the conclusions in the original
543 hearing. As such, Trans Mountain submits that the Board’s findings and the conditions from the
544 OH-001-2014 proceeding associated with the Pacific salmon and steelhead trout, both as species
545 of cultural importance for Indigenous groups and as prey for SRKW, remain valid.

546 **7.5 Effects of an Oil Spill from Project-related Marine Shipping**

547 Effects of an oil spill from Project-related marine shipping was another issue that was thoroughly
548 canvassed in the OH-001-2014 hearing. In that proceeding, Trans Mountain conducted a
549 quantitative marine risk assessment that showed that the likelihood of a spill of cargo oil from
550 Project-related shipping is low. Nevertheless, Trans Mountain evaluated hypothetical but credible
551 scenarios for both worst-case and smaller spills at six locations under a full range of environmental
552 and seasonal conditions. Trans Mountain conducted Preliminary and Detailed Quantitative
553 Ecological Risk Assessments (“ERAs”) to evaluate the potential environmental effects of each of
554 these hypothetical scenarios, as well as a human health risk assessment. Although several
555 Intervenor in the OH-001-2014 challenged Trans Mountain’s selection of spill scenarios (both
556 the location of hypothetical spills and the magnitude of a credible worst-case spill), as well as the
557 findings of its ERAs, the Board concluded that the methods used by Trans Mountain to assess
558 effects from marine transportation spills were acceptable.⁸⁶ In terms of the effects of an oil spill,
559 the Board concluded:

560 In regard to spills from the Project-related marine shipping, the
561 Board finds that there is a very low probability of a marine spill from

⁸³ Province of BC, Evidence, Southern Resident Killer Whales and Prey Resources ([A6L4W7](#)); Raincoast Conservation Foundation, Raincoast Statement 2018 ([A6L5R1](#)); Living Oceans Society, Statement of Written Evidence of Living Oceans Society 2018 – Final ([A6L5S1](#)); Raincoast Conservation Foundation, Expert Report of MacDuffee et al – 2018 – Final ([A6L5R3](#)); Raincoast Conservation Foundation, Expert Report of Lacy et al – 2018 – Final ([A6L5R2](#)); Lyackson First Nation, Written Evidence ([A6L4U2](#)); Coldwater Indian Band, Written Evidence ([A96411](#)); Stó:lō Collective, Opening Statement and Written Evidence ([A96432](#)); Stephen Stewart, Opening Statement and Direct Evidence ([A6L4U5](#)).

⁸⁴ Coldwater Indian Band, Written Evidence – Appendix A – 2018 PGL Report ([A96411-3](#)).

⁸⁵ Why specific salmon populations were not addressed the ERA was also addressed in responses to Information Requests in the OH-001-2014 proceeding: Response to Matsqui First Nation IR 1.10j ([A3Y3X2](#), PDF pp. 36-38), Response to Province of British Columbia IR 1.1.34b ([A3Y2Z1](#), PDF pp. 93-94) and Response to Upper Nicola Band IR 2.52a ([A4H9I4](#), PDF pp. 237-239).

⁸⁶ OH-001-2014 Report, p. 390.

562 a Project-related tanker that may result in a significant effect (high
563 consequence).⁸⁷

564 [...]

565 The Board is of the view that although impacts from a credible
566 worst-case spill would probably be adverse and significant, natural
567 recovery of the impacted areas and species would likely return most
568 biological conditions to a state generally similar to pre-spill
569 conditions. Such recovery may be as quick as a year or two for
570 some valued components, or may take as long as a decade or more
571 for others. Valuable environmental values and uses could be lost or
572 diminished in the interim. For some valued components, including
573 certain SARA-species, recovery to pre-spill conditions may not
574 occur.⁸⁸

575 Several Intervenors in the OH-001-2014 hearing also expressed concerns about the fate and
576 behaviour of spilled diluted bitumen in the marine environment, and submitted that the bitumen
577 would quickly sink, thereby precluding conventional oil spill recovery measures. The Board
578 considered the available evidence and concluded that:

- 579 • After initial weathering, diluted bitumen behaves similarly to other heavy crude oils and
580 common heavy fuel oils;
- 581 • The weight of the evidence indicates that any sinking would likely be in limited quantities
582 and only after sufficient weathering over a period of days or interaction with sediment and
583 other organic matter under the right environmental conditions; and,
- 584 • Depending on weathering state and environmental conditions, spilled diluted bitumen
585 could be prone to submergence in an aquatic environment and this potential for
586 submergence must be considered in response planning.⁸⁹

587 Based on the Board's findings regarding possible effects of an oil spill, the Board imposed the
588 following Conditions:

589 1) Condition 91 – Plan for implementing, monitoring and complying with marine shipping-
590 related commitments, which requires Trans Mountain to file with the Board a plan
591 describing how it will ensure compliance with its commitments identified in Condition
592 133;⁹⁰

593 2) Condition 126 – Emergency Response Plan for the WMT, which requires Trans
594 Mountain to file an updated ERP that includes all site-specific plans, tactical response

⁸⁷ OH-001-2014 Report, p. 11.

⁸⁸ OH-001-2014 Report, p. 398.

⁸⁹ OH-001-2014 Report, p. 136.

⁹⁰ OH-001-2014 Report, Appendix 3, Conditions Applied to Legal Instruments ([A77045-1](#)), p. 463.

595 plans, and a list of high consequence and environmentally sensitive areas, as well as
596 response times for deployment;⁹¹

597 3) Condition 133 – Marine shipping-related commitments, which requires Trans Mountain
598 to file confirmation of its implementation of enhanced tug escort and an enhanced marine
599 oil spill response regime;⁹² and,

600 4) Condition 134 – Updated Tanker Acceptance Standard, which requires Trans Mountain
601 to file an updated Tanker Acceptance Standard and a summary of any revisions to the
602 Standard.⁹³

603 Like SRKW, considerable research has been conducted since 2015 on the potential effects of an
604 oil spill in the Salish Sea, and Trans Mountain summarized this research in its direct evidence.⁹⁴
605 The research supports the Board's findings in OH-001-2014 that diluted bitumen when spilled in
606 the marine environment behaves similarly to other crude oils and will float on water for at least
607 days to weeks, but that under certain conditions a limited portion of oil may sink. These research
608 findings have been incorporated into Trans Mountain's emergency response plans and those of
609 the Western Canada Marine Response Corporation ("WCMRC") for the future enhanced oil spill
610 response regime.⁹⁵

611 Several Intervenors in this hearing re-iterated key concerns from the OH-001-2014 about the
612 likelihood and magnitude of hypothetical oil spills, the effects of an oil spill on marine receptors,
613 the possibility that spilled diluted bitumen will sink in the marine environment, and the adequacy
614 of Trans Mountain's response plans.⁹⁶ For example, Tsleil-Waututh Nation, Squamish Nation,

⁹¹ OH-001-2014 Report, Appendix 3, Conditions Applied to Legal Instruments ([A77045-1](#)), p. 480.

⁹² OH-001-2014 Report, Appendix 3, Conditions Applied to Legal Instruments ([A77045-1](#)), p. 484.

⁹³ OH-001-2014 Report, Appendix 3, Conditions Applied to Legal Instruments ([A77045-1](#)), p. 484.

⁹⁴ Trans Mountain, Direct Evidence ([A95280-2](#)), pp. 58-62.

⁹⁵ Trans Mountain, Direct Evidence ([A95280-2](#)), pp. 61-62.

⁹⁶ For example, Board of Friends of Ecological Reserves, Direct Evidence ([A96487](#)); T'Sou-ke Nation, Opening Statement and Direct Evidence ([A96376](#)); Barkley Sound Stewardship Alliance, Opening Statement and Evidence ([A96362](#)); Georgia Strait Alliance, Opening Statement and Direct Evidence ([A96417](#)); District of West Vancouver, Opening Statement ([A96420](#)); Concerned Professional Engineers Society, Opening Statement and Direct Evidence ([A96425](#)); Malahat First Nation, Opening Statement and Written Evidence ([A96428](#)); Living Oceans Society, Opening Statement and Written Evidence ([A96430](#)); Kwantlen First Nation, Opening Statement and Evidence ([A96438](#)); Seabird Island Band, Opening Statement and Evidence ([A96441](#)); Sto:lo Tribal Council, Opening Statement and Evidence ([A96442](#)); Cheam First Nation, Opening Statement and Evidence ([A96439](#)); Chawathil First Nation, Opening Statement and Evidence ([A96440](#)); Tsleil Waututh Nation, Opening Statement and Evidence ([A96446](#)); Nooaitch Indian Band, Opening Statement ([A96448](#)); Cowichan Tribes, Opening Statement and Report ([A96437](#)); Snuneymuxw First Nation, Opening Statement and Written Evidence ([A96461](#)); Ditidaht First Nation, Direct Evidence ([A96467](#)); Indigenous Caucus for the Trans Mountain Indigenous Advisory and Monitoring Committee, Preliminary Review ([A96468](#)); Ermineskin Cree Nation, Opening Statement and Direct Evidence ([A96472](#)); City of Burnaby, Opening Statement and Direct Evidence ([A96470](#)); Whitefish (Goodfish) Lake First Nation #128, Opening Statement and Evidence ([A96473](#)); Pacheedaht First Nation, Opening Statement and Written Evidence ([A96454](#)); Lyackson First Nation, Opening Statement and Written Evidence ([A96393](#)); Friends of the Earth US, Opening Statement and Direct Evidence ([A96453](#)); Heiltsuk First Nation, Opening Statement and Direct Evidence ([A96478](#) and [A96483](#)); Stephen Stewart, Opening Statement and Direct Evidence ([A96394](#)); North Shore NO Pipeline Expansion, Opening Statement and Direct Evidence ([A96413](#)); Georgia Strait

615 Stz'uminus First Nation, Snuneymuxw First Nation, and the City of Vancouver all filed as evidence
616 a report providing an assessment of oil spill risks.⁹⁷ This report is substantially the same as a
617 report provided by one of the same authors that Trans Mountain previously responded to in its
618 reply evidence in the OH-001-2014 proceeding.⁹⁸ As identified in Trans Mountain's Reply
619 Evidence in this Reconsideration hearing, the information contained in the updated report is
620 generally the same as that presented in the OH-001-2014 proceeding. In addition, as with the
621 previous report, the conclusions are all without foundation or merit and cannot be relied upon by
622 the Board.⁹⁹

623 The Concerned Professional Engineers Society ("CPES") similarly provided evidence respecting
624 the likelihood of a spill from Project-related vessels that reiterates the same concerns it raised in
625 the original hearing in spite of the outcomes of the TERMPOL studies that were filed in that
626 proceeding.¹⁰⁰ Further, while the CPES rely on a recent report prepared for the BC Ministry of
627 Transportation and Infrastructure,¹⁰¹ they misrepresent the findings from that report. In fact, this
628 report supports Trans Mountain's conclusion in the original Application that the scenario of
629 concern for the CPES (a vessel strike at the Second Narrows Bridge) poses a very low risk based
630 on the strong marine safety regime that is already in place for the transit of tankers through the
631 Second Narrows.¹⁰² The marine technical advisor appointed by Cabinet to review the evidence
632 and provide advice to inform the Board's consideration of the issues in the Reconsideration,¹⁰³
633 Mr. John A. Clarkson, agreed with Trans Mountain's conclusion in this regard.¹⁰⁴

634 Overall, none of the information filed by Intervenor in this proceeding is new or updated
635 information that is materially different from the information the Board considered in the OH-001-
636 2014 proceeding. As a result, Trans Mountain submits that the Board's findings in OH-001-2014
637 remain valid and no changes to the Conditions are warranted.

Alliance, Opening Statement and Direct Evidence ([A96417](#)); District of West Vancouver, Opening Statement ([A96420](#)); City of Vancouver, Opening Statement and Direct Evidence ([A96435](#)).

⁹⁷ Trans Mountain, Reply Evidence ([A96612-2](#)), p. 18.

⁹⁸ Trans Mountain, Reply Evidence in OH-001-2014 Proceeding ([A4S7E9](#)).

⁹⁹ Trans Mountain, Reply Evidence in OH-001-2014 Proceeding ([A4S7E9](#)), pp. 27-7, 27-8.

¹⁰⁰ Trans Mountain, Response to NEB IR TERMPOL Report and Outstanding Filings, part c) ([A65273](#)) and PMV IR 1.8.1 ([A60839](#)).

¹⁰¹ Concerned Professional Engineers Society, 01459 Ironworkers Memorial Bridge, Vessel Collision Risk Assessment and Mitigation, March 2018 ([A6L5L6](#)).

¹⁰² Concerned Professional Engineers Society, 01459 Ironworkers Memorial Bridge, Vessel Collision Risk Assessment and Mitigation, March 2018 ([A6L5L6](#)), pp. 54-55.

¹⁰³ National Energy Board, Letter re Appointment of Marine Technical Advisor – Mr. John A. Clarkson ([A96649-1](#)).

¹⁰⁴ Argument-in-Chief of John A. Clarkson ([A6R0E3](#)), p. 6.

638 **8. MITIGATION AND MONITORING MEASURES**

639 **8.1 Measures within Trans Mountain and the Board's control**

640 Mitigation and monitoring measures within Trans Mountain and the Board's control were fully
641 assessed in the OH-001-2014 proceeding and reflected in the Conditions ultimately
642 recommended by the Board in Appendix 3 to the OH-001-2014 Report. Trans Mountain's Direct
643 Evidence in this Reconsideration hearing addressed the new and updated information that has
644 become available since the OH-001-2014 Report, and confirmed that the Board's conclusions in
645 OH-001-2014 remain valid. For example, Trans Mountain's Direct Evidence confirmed that, taking
646 into account information regarding changes to the listed status of species under SARA, no new
647 mitigation measures are required and there are no changes to Project impact assessment
648 conclusions. Similarly, additional information regarding the impact of vessel wakes and the fate
649 and behaviour of spilled oil does not justify any changes to the conclusions drawn by the Board
650 in the original proceeding.

651 Notwithstanding this, Trans Mountain's Direct Evidence included commitments regarding three
652 new potential mitigation measures that are available to Trans Mountain and within the Board's
653 control that may potentially reduce the effects of Project-related marine shipping: (1) instruct
654 Project-related vessels to follow a slight route deviation away from productive foraging areas for
655 SRKW within recently identified critical habitat (if the applicable federal authorities confirm that
656 such a measure would be environmentally beneficial); (2) further evaluate the feasibility of using
657 escort tugs to assist with oil spill response; and (3) work with Project shippers to explore optimizing
658 and reducing the number of Project-related vessel shipments. Subject to support from responsible
659 federal agencies, as applicable, Trans Mountain has committed to each of these measures.¹⁰⁵

660 No hearing participants identified other possible mitigation measures within Trans Mountain or
661 the Board's control, with the exception of certain requests of Trans Mountain that were made in
662 the original hearing, subsequently considered by the Board, and reflected in the original OH-001-
663 2014 Conditions, including Conditions 91, 131 to 134, 144 and 151. For example, BC Nature and
664 Nature Canada requested that Trans Mountain conduct further assessment of marine birds and
665 the peregrine falcon.¹⁰⁶ The Board of Friends of Ecological Reserves requested that Trans
666 Mountain be required to fund and support long-term research and monitoring to improve
667 understanding of diluted bitumen in the marine environment.¹⁰⁷ Environment and Climate Change
668 Canada submitted that, similar to its recommendation 2-17 made in the OH-001-2014 proceeding,
669 Trans Mountain should conduct additional research with respect to biofilm.¹⁰⁸ Each of these
670 parties is seeking to use the Board's Reconsideration process to re-iterate requests that were
671 previously made, and rejected by the Board, in the original hearing. Trans Mountain submits that
672 it would be inappropriate for the Board to reconsider its original findings on these issues and
673 modify the Conditions when no new or updated evidence has been filed to support those changes.

674 The Vancouver Fraser Port Authority ("VFPA") suggested that a new condition be imposed
675 requiring Trans Mountain to explore ways to incentivize vessels calling at the WMT to meet its

¹⁰⁵ Trans Mountain, Direct Evidence ([A95280-2](#)), pp. 50-53.

¹⁰⁶ BC Nature and Nature Canada, Expert Opinion of Anne Harfenist ([A96452-2](#)); BC Nature and Nature Canada, IR No. 1 to Trans Mountain ([A96765](#)).

¹⁰⁷ Friends of Ecological Reserves, Direct Evidence – Report ([A6L7T6](#)).

¹⁰⁸ Department of Justice, ECCC – Part 3 – IR 1.26 to 1.56 – Annex 5.1.1 ([A6L8X5](#)).

676 environmental standards at all times.¹⁰⁹ Trans Mountain explained that this request is infeasible
677 because Trans Mountain does not have any commercial relationship with the vessel operators
678 (and accordingly cannot offer any financial incentives), and is also unreasonable considering that
679 Trans Mountain's Vessel Acceptance Standards ("VAS") already exceed regulatory
680 requirements.¹¹⁰

681 Mr. Clarkson agreed that Trans Mountain's VAS are comprehensive and reflect the industry
682 standard practice in tanker terminal operations.¹¹¹ He did not identify any additional mitigation
683 measures within the control of Trans Mountain or the jurisdiction of the Board that should be
684 addressed through Certificate Conditions.

685 As a result, with the exception of the three new measures committed to in Trans Mountain's Direct
686 Evidence, there are no new mitigation or monitoring measures that should be imposed on Trans
687 Mountain as a result of this Reconsideration. Trans Mountain notes that it will continually review
688 new information as it becomes available and will incorporate it into compliance filings and
689 operational plans, as appropriate. This commitment to adaptive management is reflected in Trans
690 Mountain's condition compliance filings to date,¹¹² which reflect the most current and relevant
691 information to support environmental protection, rigorous planning and implementation during
692 construction through to operations.

693 **8.2 Comments on Draft Conditions**

694 Trans Mountain has reviewed the draft conditions issued by the Board on January 10, 2019,¹¹³
695 and submits that these conditions are generally reasonable and consistent with Trans Mountain's
696 submissions above.

697 With respect to draft Condition 91, the Board proposes to amend Condition 91 from the original
698 Certificate Conditions. Both the original and the new draft Condition 91 require Trans Mountain to
699 prepare a plan demonstrating how it will ensure the requirements of Condition 133 are met,
700 consult with applicable government agencies on the plan, and file it with the Board at least two
701 months prior to commencing construction. Trans Mountain notes that it previously prepared and
702 filed a plan with the Board in accordance with the original Condition 91 (based on the original
703 Condition 133), and the Board determined that this Condition was fulfilled.¹¹⁴ Although Trans
704 Mountain acknowledges that modifications would need to be made to the original Condition 91
705 plan to reflect the Board's proposed amendments to Condition 133, Trans Mountain submits that
706 the timing requirement for this revised Condition 91 plan should be revised to at least 12 months
707 prior to loading the first tanker at the Westridge Marine Terminal with oil transported by the Project.
708 Requiring the revised Condition 91 plan to be filed prior to commencement of construction could
709 result in unnecessarily delays to construction activities if and when a new Certificate is issued for

¹⁰⁹ Vancouver Fraser Port Authority, Opening Statement and Direct Evidence ([A96431-2](#)), p. 5.

¹¹⁰ Trans Mountain, Reply Evidence ([A96612-2](#)), p. 18; Trans Mountain, Response to NEB IR No. 1.22(c) ([A96565-2](#)), pp. 82-83.

¹¹¹ Argument-in-Chief of John A. Clarkson ([A6R0E3](#)), p. 3.

¹¹² Trans Mountain, Condition 6 Commitment Tracking Table V21 January 8, 2019 ([A6Q7R5](#)).

¹¹³ National Energy Board, Procedural Direction No. 4 re Affidavits and Written Argument-in-Chief ([A97236-1](#)).

¹¹⁴ NEB Letter Report No. 1 for Various Conditions - Westridge Marine Terminal, August 3, 2017 ([A5S9C5](#)).

710 the Project. The content of the Condition 91 plan will not affect the design of Project facilities or
711 the safety and environmental protection measures implemented during construction activities. As
712 a result, there is no need for the plan to be filed prior to commencement of construction. In
713 addition, amending the timing of Condition 91 to align with the commencement of Project
714 operations, as opposed to commencement of construction, would ensure consistency between
715 Condition 91 and the other Certificate Conditions related to Project operations (i.e., Conditions
716 117-138).

717 Trans Mountain notes that the draft conditions include some additional changes from the
718 Certificate Conditions that are not shown in blue. Trans Mountain expects that these changes
719 were either inadvertent (meaning that the only changes to the Certificate Conditions being
720 contemplated are those shown in blue), or that the Board has decided to make additional
721 administrative changes to the Certificate Conditions that do not affect their original meaning.
722 Based on this understanding, with the exception of the above modification to draft Condition 91,
723 Trans Mountain has no concerns with the Board's draft conditions.

724 8.3 Proposed mitigation measures outside of Trans Mountain and the Board's control

725 The key issue for this Reconsideration is whether there are mitigation or monitoring measures
726 that are outside Trans Mountain's control and the Board's jurisdiction but within the legislative
727 authority of Parliament that are technically and economically feasible and that would mitigate the
728 significant adverse environmental effects or effects of Project-related marine shipping on SARA-
729 listed species. Many different mitigation and monitoring measures were canvassed in this hearing,
730 most of which are not feasible. These measures, and their feasibility, are summarized in the
731 following Table:

Proposed Mitigation	Feasibility
Speed reduction for Project vessels to reduce GHG emissions and underwater noise impacts on SRKW. ¹¹⁵	Feasible but not justified, given that this measure as applied only to Project vessels would have limited environmental benefits and would create safety and other challenges. ¹¹⁶
Accelerated phase-in of Energy Efficiency Design Index ("EEDI") for Project-related tankers as a potential measure to reduce GHG emissions. ¹¹⁷	Not feasible for practical/logistical considerations. In addition, may produce unintended consequence of increased GHG emissions by technically special vessels having to travel from longer distances. ¹¹⁸

¹¹⁵ Transport Canada, Opening Statement and Evidence ([A95292-2](#)), p. 93.

¹¹⁶ Trans Mountain, Reply Evidence ([A96612-2](#)), pp. 9-10; Trans Mountain Response to NEB Reconsideration IR No. 1, Part 2 ([A96565-2](#)), pp. 31-33.

¹¹⁷ Transport Canada, Opening Statement and Evidence ([A95292-2](#)), p. 96.

¹¹⁸ Trans Mountain, Reply Evidence ([A96612-2](#)), p. 10.

Proposed Mitigation	Feasibility
Creation of year-round or seasonal “no-go” zones in certain critical habitat areas ¹¹⁹	Not feasible due to practical/logistical and safety considerations. ¹²⁰
Lateral displacement of marine vessels, based on work being undertaken by the ECHO Program. ¹²¹	Feasible, so long as the exercise of innocent passage is available in a non-discriminatory manner to all ships and safety issues are addressed. ¹²²
Restriction of commercial vessel traffic at night through sensitive critical habitat zones to assist SRKW forage at night. ¹²³	Not feasible due to practical/logistical, safety and economic considerations. ¹²⁴
Replacement of the top 10 percent of the noisiest vessels of a given class of vessels with ships that are the top 10 percent quietest of that given class of vessel. ¹²⁵	Monitoring and corrective maintenance of the noisiest vessels in a class resulting in quieter vessels is feasible, if implemented across industry through a multi-agency initiative. ¹²⁶
Training vessel operators to avoid rapid acceleration and deceleration. ¹²⁷	Dissemination of information concerning such practices is feasible, although rapid acceleration and deceleration is not an issue for Project-related vessels. ¹²⁸

¹¹⁹ Department of Justice, Annex 07.G.-03 (DFO) ([A6J7A2](#)), pp. 38-39; Argument-in-Chief of John A. Clarkson ([A6R0E3](#)), p. 8.

¹²⁰ Trans Mountain, Reply Evidence ([A96612-2](#)), p. 14.

¹²¹ Department of Justice, Annex 07.G.-03 (DFO) ([A6J7A2](#)), pp. 29-30.

¹²² Trans Mountain, Reply Evidence ([A96612-2](#)), p. 14; Argument-in-Chief of John A. Clarkson ([A6R0E3](#)), p. 9. Note that on p. 8 of his argument-in-chief, Mr. Clarkson refers to Boundary Bay. Trans Mountain understands Mr. Clarkson’s comments to apply to Boundary Pass.

¹²³ Department of Justice, Annex 07.G.-03 (DFO) ([A6J7A2](#)), pp. 37-38.

¹²⁴ Trans Mountain, Reply Evidence ([A96612-2](#)), p 15; Argument-in-Chief of John A. Clarkson ([A6R0E3](#)), p. 8.

¹²⁵ Department of Justice, Annex 07.G.-03 (DFO) ([A6J7A2](#)), p. 38.

¹²⁶ Trans Mountain, Reply Evidence ([A96612-2](#)), p. 15.

¹²⁷ Department of Justice, Annex 07.G.-03 (DFO) ([A6J7A2](#)), p. 38-39.

¹²⁸ Trans Mountain, Reply Evidence ([A96612-2](#)), p. 16; Argument-in-Chief of John A. Clarkson ([A6R0E3](#)), p. 7.

Proposed Mitigation	Feasibility
Use of convoys to increase the duration of “quiet times” for SRKW. ¹²⁹	Not feasible due to practical/logistical and safety considerations. ¹³⁰
Use of fewer but larger vessels to transport the same amount of product. ¹³¹	Not feasible due to technical considerations. ¹³²
Use of Liquefied Natural Gas as a fuel source for Project vessels. ¹³³	Not feasible due to practical/logistical considerations. ¹³⁴

732 The limited number of new regional mitigation measures that would be feasible to implement
733 demonstrates that existing industry and regulatory standards already reasonably address effects
734 of marine shipping on the biophysical and socio-economic environment. These standards
735 continue to evolve as new information and research findings become available. For example, the
736 record demonstrates that industry and government have advanced a number of important regional
737 initiatives since the close of record of the OH-001-2014 proceeding to address the effects of
738 marine shipping in the Salish Sea. These initiatives include:

- 739 • Oceans Protection Plan;
- 740 • Action Plan for the Northern and Southern Resident Killer Whale;
- 741 • Pacific Salmon Foundation – Salish Sea Marine Survival Project; and,
- 742 • ECHO Program.¹³⁵

743 In Trans Mountain’s view, these types of multi-party programs and solutions are the most effective
744 means of mitigating significant adverse environmental effects of marine shipping that will continue
745 to exist with or without the Project. The environmental effects being experienced in the Salish Sea
746 are regional and industry wide issues. The marine routes are aqueous highways used by
747 numerous and varied users. The only effective way to mitigate those impacts are through industry
748 wide initiatives. The existing environmental effects will not be mitigated by Project-specific
749 conditions that exclude approximately 94 percent of the large vessel traffic. Though Trans
750 Mountain has little direct control over the actions of the vessel owners and operators, Trans
751 Mountain sponsored or participated in (or both) each of the above initiatives and has committed

¹²⁹ Department of Justice, Annex 07.G.-03 (DFO) ([A6J7A2](#)), p. 33.

¹³⁰ Trans Mountain, Direct Evidence ([A95280-2](#)), p. 44; Argument-in-Chief of John A. Clarkson ([A6R0E3](#)), p. 10.

¹³¹ Department of Justice, Annex 07.G.-03 (DFO) ([A6J7A2](#)), p. 38-39.

¹³² Trans Mountain, Reply Evidence ([A96612-2](#)), p. 16.

¹³³ National Energy Board, Letter and Information Request No. 1 to Trans Mountain ([A96151-2](#)), pp. 2-3; National Energy Board, Letter and Information Request No. 2 to Trans Mountain ([A96813-3](#)), p. 4.

¹³⁴ Trans Mountain, Response to NEB IR No. 1.03 ([A96565-2](#)), pp. 10-17; Trans Mountain, Response to NEB IR No. 2 ([A97008-2](#)), p. 9-10.

¹³⁵ Trans Mountain, Direct Evidence ([A95280-2](#)), pp. 22-26.

752 to participating in industry and multi-party initiatives to mitigate potential environmental and socio-
753 economic effects of marine shipping.¹³⁶

754 Trans Mountain notes that while commitments to ongoing studies and research may not constitute
755 immediate mitigation measures, they should still be relied upon by the Board. Details of all
756 mitigation measures that will be implemented over the life of a project are often not available
757 during the environmental assessment phase because project planning is an ongoing, dynamic
758 and fluid process.¹³⁷ The Board should take comfort that all technically and economically feasible
759 mitigation currently available is being implemented or explored to reduce the effects of current
760 and future marine shipping, and this mitigation will continue to be adapted and improved as
761 additional information becomes available.

762 Similarly, although many regional initiatives are ongoing and may not be completed prior to
763 commencement of the Project, these initiatives do not need to be completed before the Project
764 can commence. The initiatives are appropriately focused on all marine shipping in the Salish Sea,
765 of which the Project-related shipping will represent a very small portion (approximately six per
766 cent of total large commercial vessel traffic volume). If additional mitigation or monitoring
767 measures are identified in the future through these regional initiatives, the Board can reasonably
768 expect that additional measures will be applied to all marine shipping at that time, including
769 Project-related marine shipping. The courts have held that it is both legally appropriate and
770 efficient from a policy perspective for one regulator to rely on another's ongoing oversight in the
771 assessment of a project.¹³⁸

772 A number of Intervenor¹³⁹ suggested that the precautionary principle demands the Project not
773 be approved until there is a better understanding of the Project's effects. This proposition is
774 incorrect at law. The precautionary principle provides that where there are threats of serious or
775 irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing
776 cost-effective measures to prevent environmental degradation.¹⁴⁰ The courts have expressly
777 stated that the precautionary principle should not be used or interpreted to the point of effectively
778 paralyzing development, and that decision-makers should rely on the principle of adaptive
779 management to address uncertainties in environmental assessment.¹⁴¹ The Board similarly relied
780 on adaptive management to address uncertainties in its OH-001-2014 Report:

¹³⁶ Trans Mountain, Project Application Volume 7, 8A ([A56025](#)), p. 285.

¹³⁷ *Pembina Institute for Appropriate Development v Canada (Attorney General)*, 2008 FC 302, [2008] FCJ No 324 (TD) at paras 24 and 54.

¹³⁸ *Prairie Acid Rain Coalition v Canada (Minister of Fisheries and Oceans)*, 2006 FCA 31, para 47.

¹³⁹ Lyackson First Nation, Written Evidence ([A96393-2](#)); Squamish Nation, Opening Statement of Squamish Nation ([A96457-2](#)); Cowichan Tribes, 2018 Introduction, Preamble and Report ([A96437-2](#)); Tsleil-Waututh Nation, Written Evidence Vol. 1 of 3 ([A96446-1](#)); North Shore NO Pipeline Expansion, NSNOPE Opening Statement ([A96413-1](#)); Sto:lo Tribal Council, Opening Statement and Evidence ([A96442](#)); Cheam First Nation, Opening Statement and Evidence ([A96439](#)); Chawathil First Nation, Opening Statement and Evidence ([A96440](#)); Seabird Island Band, Opening Statement and Evidence ([A96441](#)); Kwantlen First Nation, Opening Statement and Evidence ([A96438](#)).

¹⁴⁰ *Rio Declaration on Environment and Development*, June 1992, principle 15.

¹⁴¹ *Homalco Indian Band v British Columbia (Minister of Agriculture, Food & Fisheries)*, 2005 BCSC 283 at para 45; see also *Davidson v Ontario (Ministry of Environment)*, [2006] OERTD No. 10 at para

781 “[I]n appropriate circumstances, adaptive management can be an
782 important part of the follow-up program for a project to allow for
783 uncertainties. The Board’s conditions also incorporate adaptive
784 management, requiring the implementation of new or modified
785 mitigation measures over the life of the Project in response to
786 mitigation measures that do not achieve full success and to address
787 unanticipated environmental effects... Condition 151 requires
788 Trans Mountain to include goals, monitoring results, corrective
789 actions taken, and the observed success of such actions, in each
790 post-construction monitoring report.”¹⁴²

791 Trans Mountain has provided the Board with sound, reliable science in support of the proposed
792 mitigation measures in both the Project Application and in this Reconsideration hearing. The
793 prospect of further research and refinement of mitigation in the future should provide comfort to
794 the Board that mitigation measures will not be frozen in time at the conclusion of this
795 Reconsideration process; rather, they will appropriately evolve and improve over time with the
796 science to ensure that the best mitigation options continue to be implemented over the life of the
797 Project.

798 Based on the FCA’s guidance, the NEB should review and make conclusions regarding the
799 appropriateness and feasibility of regional mitigation measures to address impacts from Project-
800 related marine shipping (as well as impacts from other marine shipping), even though these
801 initiatives are beyond the Board’s ability to impose and enforce. If the Board concludes that certain
802 measures should be taken by federal authorities, it should make that recommendation in its
803 Reconsideration report for the Cabinet to consider. Trans Mountain has reviewed the draft
804 recommendations issued by the Board on January 10, 2019,¹⁴³ and it supports these
805 recommendations. It also agrees with the Board that these recommendations should not be
806 addressed to Trans Mountain through Certificate Conditions because the measures are beyond
807 the control of both Trans Mountain and the NEB. In addition, Trans Mountain agrees with the
808 scope of the draft recommendations as applying to all vessels that have the potential to impact
809 marine life, Indigenous peoples and stakeholders, not only Project-related vessels. In Trans
810 Mountain’s view, this approach maximizes the effectiveness of mitigation and monitoring
811 measures and appropriately ensures that all marine traffic is governed in a consistent manner.

812 **9. ALTERNATIVE MEANS**

813 CEAA 2012 requires the Board to consider alternative means of carrying out the designated
814 project, which now includes Project-related marine shipping. Although Project-related marine
815 shipping was excluded from the scope of the designated project in the OH-001-2014 proceeding,
816 the Board assessed various alternatives means of carrying out marine shipping, including
817 alternate locations for the marine terminal such as Howe Sound, Vancouver Harbour, Sturgeon
818 Bank, Washington State, Boundary Bay and Roberts Bank.¹⁴⁴ The Board found that Trans
819 Mountain's level of detail for its alternative means assessment to be appropriate and, specifically,

87 (Ont Environmental Review Tribunal); and *Spellman v Ontario (Director, Ministry of the Environment)*, 2007 CarswellOnt 7915 at para 73 (Ont Environmental Review Tribunal).

¹⁴² OH-001-2014 Report, p. 166.

¹⁴³ National Energy Board, Procedural Direction No. 4 re Affidavits and Written Argument-in-Chief ([A97236-1](#)).

¹⁴⁴ OH-001-2014 Report, p. 241.

820 found that Trans Mountain provided an adequate assessment, including consideration of
821 technical, socio-economic and environment effects, of technically and economically feasible
822 alternative marine terminal locations.¹⁴⁵ In addition, Trans Mountain assessed alternative means
823 of carrying out Project-related marine shipping in its Direct Evidence in this proceeding, including
824 alternate shipping routes, and demonstrated that its proposal for marine shipping is reasonable
825 and preferable relative to the alternatives considered.¹⁴⁶ Trans Mountain's evidence in this regard
826 was not challenged by any party, and Mr. Clarkson reached similar conclusions in his argument-
827 in-chief.¹⁴⁷

828 No parties in this proceeding identified new alternative means of carrying out Project-related
829 marine shipping that were not already assessed in the OH-001-2014 hearing.

830 **10. SIGNIFICANT ENVIRONMENTAL EFFECTS ARE JUSTIFIED IN THE**
831 **CIRCUMSTANCES**

832 As noted above, in its OH-001-2014 Report, the Board found three significant adverse
833 environmental effects that were likely to result from Project-related marine shipping. Trans
834 Mountain submits that these significant effects are justified in the circumstances given the critical
835 need for the Project and its important benefits for Canada, as found by the Board in the original
836 proceeding, as well as the record of this Reconsideration hearing which demonstrates that all
837 technically and economically feasible mitigation measures to reduce effects on SRKW,
838 Indigenous use related to SRKW, and greenhouse gas emissions from Project-related marine
839 shipping have been, or will be, taken.

840 Although the Board in OH-001-2014 did not expressly consider whether the significant adverse
841 environmental effects that are likely to result from Project-related marine shipping are justified in
842 the circumstances, as required under CEAA 2012, the Board did consider these significant
843 adverse effects as part of its overall public interest determination. In Trans Mountain's view, these
844 two analyses are essentially the same. The justification analysis under CEAA 2012 ensures that
845 before a decision-maker allows a project to proceed that will result in significant adverse
846 environmental effects, the decision-maker must make itself aware of those effects and specifically
847 consider whether the project should be allowed to proceed notwithstanding them. Similarly, in the
848 OH-001-2014 Report, the Board considered the significant adverse environmental effects that are
849 likely to result from Project-related marine shipping and weighed these "burdens" against the
850 various "benefits" to determine whether the Project is in the overall public interest.¹⁴⁸ The Board
851 determined that the benefits of the Project were so important for Canada that they outweighed
852 the burdens, including the significant effects of marine shipping. As a result, the Board concluded
853 that the Project is in the Canadian public interest.¹⁴⁹ For these same reasons, as well as the fact
854 that all technically and economically feasible mitigation has been, or will be, implemented for the
855 significant effects of Project-related marine shipping, Trans Mountain submits that the Board
856 should conclude in its Reconsideration report that the significant adverse environmental effects
857 of Project-related marine shipping are justified in the circumstances.

¹⁴⁵ OH-001-2014 Report, p. 244.

¹⁴⁶ Trans Mountain, Direct Evidence ([A95280-2](#)), pp. 38-42.

¹⁴⁷ Argument-in-Chief of John A. Clarkson ([A6R0E3](#)), p. 8.

¹⁴⁸ OH-001-2014 Report, p. 18.

¹⁴⁹ *Ibid.*

858 Trans Mountain's interpretation of the justification analysis under CEEA 2012 is consistent with
859 several past decisions of Joint Review Panels ("JRPs") under CEEA 2012 and its predecessor
860 legislation (which included identical wording around justification). For example, the JRP for the
861 Cheviot Coal Project concluded that the significant adverse environmental effects of that project
862 were justified in the context of the project as a whole.¹⁵⁰ In balancing the benefits and burdens of
863 the project, the JRP noted that the project would provide significant economic and social benefits
864 to both the region and to the province. The JRP further noted that certain environmental effects
865 could be adequately mitigated and would likely be further reduced as project planning
866 progressed.¹⁵¹ The Government of Canada adopted a similar analysis when it considered the
867 Lower Churchill Project and concluded that the significant adverse environmental effects of that
868 project were justified in the circumstances because the significant energy, economic, socio-
869 economic and environmental benefits of the project outweighed its significant adverse
870 environmental effects.¹⁵²

871 Trans Mountain submits that the benefits associated with the Project, taken as a whole, are so
872 important that the significant adverse effects of Project-related marine shipping are justified in the
873 circumstances. The Board previously concluded that the Project's "considerable" benefits
874 included (i) market diversification, (ii) job creation, (iii) domestic competition among pipelines, (iv)
875 local and regional economic growth resulting from pipeline materials procurement, and (v)
876 revenues to various levels of government. In addition, the Board identified several other benefits,
877 including (i) community funding for management capacity, parks, infrastructure, events,
878 educational programs and environmental stewardship, (ii) marine spill response, (iii) and local
879 economic and educational capacity development for local and Aboriginal communities and
880 businesses.¹⁵³ The Board should continue to rely on these previous findings, which were not
881 affected by the *Tsleil-Waututh* decision.

882 In addition, as noted above, all technically and economically feasible mitigation has been, or will
883 be, implemented for the effects of Project-related marine shipping on SRKW, Indigenous use
884 related to SRKW and greenhouse gas emissions. Additional research is ongoing and will be used
885 to modify and enhance regional mitigation options in the future.

886 Finally, in conducting its justification analysis, the Board must consider that the significant adverse
887 environmental effects that are likely to result from Project-related marine shipping already exist
888 as a result of existing commercial vessel traffic off Canada's west coast. These effects will
889 continue with or without the Project. This Project, however, will support and enhance regional
890 initiatives that will mitigate the cumulative effects of marine shipping. The Project has been, and
891 will continue to be, the catalyst for enhanced environmental protection in the Salish Sea.

892 For all of these reasons, the Board should confidently conclude that the significant adverse
893 environmental effects of Project-related marine shipping are justified in the circumstances.

¹⁵⁰ EUB-CEEA Joint Review Panel, Report of the EUB-CEEA Joint Review Panel: Cheviot Coal Project, Mountain Park Area, Alberta (2000) [Cheviot JRP Report], p. 4.

¹⁵¹ Cheviot JRP Report, p. 3.

¹⁵² Government of Canada Response to the Report of the Joint Federal-Provincial Review Panel for Nalcor's Lower Churchill Generation Project in Newfoundland and Labrador, online: <<http://www.ceea.gc.ca/050/documents/54772/54772E.pdf>>, p. 6.

¹⁵³ OH-001-2014 Report, p. xiii.

894 **11. CONCLUSION**

895 The Canadian energy industry is in the midst of a crisis. Now more than ever market diversification
896 is critically needed to ensure Canadians receive full value for their resources. While the Project
897 will not solve this problem on its own, it will certainly help. Moreover, timely execution of the
898 Project will improve Canada's energy and economic security, it will demonstrate our country's
899 commitment to the rule of law and certainty of investment, and it will produce significant economic
900 benefits in the form of jobs and government revenues that will assist Canada in transitioning to a
901 lower carbon economy.

902 After an extensive public hearing process in OH-001-2014, the Board and federal Cabinet both
903 concluded that the Project is in the national public interest. In the face of a crisis in the Canadian
904 energy industry, and with no new facts that would undermine the Board's original findings, the
905 fact that the Project remains in the public interest is incontrovertible.

906 This Reconsideration hearing is required to confirm that the requirements of CEEA 2012 and
907 SARA are met in respect of Project-related marine shipping. The evidence demonstrates that
908 these requirements have been met. In particular:

909 1. Environmental and socio-economic effects of Project-related marine shipping, including
910 the effects of accidents and malfunctions and cumulative effects, were thoroughly
911 considered in OH-001-2014, and no new or updated evidence has been filed to cast doubt
912 on the conclusions or adequacy of that assessment.

913 2. Mitigation and monitoring measures within Trans Mountain's control and the Board's
914 jurisdiction were fully assessed in the original hearing and, with the exception of three new
915 measures that Trans Mountain has committed to in its Direct Evidence, no evidence was
916 filed in this hearing demonstrating that additional feasible mitigation or monitoring
917 measures exist for Project-related marine shipping (including in relation to SARA-listed
918 species) that were not already considered in OH-001-2014. As a result, except for the
919 modifications contained in the draft Conditions, Trans Mountain submits that no changes
920 to the Conditions in the NEB Report are warranted.

921 3. Additional mitigation and monitoring measures beyond Trans Mountain's control and the
922 Board's jurisdiction were identified in this Reconsideration proceeding. Although many of
923 these measures are not feasible, if the Board concludes that certain regional initiatives are
924 feasible and should be pursued, it should make those recommendations to Cabinet as
925 part of its Recommendation report. Trans Mountain is willing to participate in such multi-
926 stakeholder initiatives, but in Trans Mountain's view, those initiatives should not form
927 conditions on Trans Mountain on any Certificate of Public Convenience and Necessity for
928 the Project because implementation of the initiatives is beyond the control of both Trans
929 Mountain and the Board.

930 4. Alternative means of carrying out Project-related marine shipping were considered in OH-
931 001-2014 and were further explored in this Reconsideration process, and no new
932 alternative means were identified in this hearing that were not already considered, or that
933 would be preferable to the proposed means of carrying out Project-related marine
934 shipping.

935 5. The Board has sufficient evidence to confidently conclude that the significant adverse
936 environmental effects of Project-related marine shipping that were identified in the OH-
937 001-2014 Report are justified in the circumstances. This determination should be based
938 on the Board's previous analysis of benefits and burdens of the Project, as well as the fact

939 that all technically and economically feasible mitigation for the significant effects have
940 been, or will be, implemented.

941 With these legal requirements met, a positive recommendation from the Board is critical to the
942 long-term success of the Canadian energy industry and Canada itself. Trans Mountain
943 respectfully requests that the Board promptly issue a Reconsideration report that satisfies the
944 above requirements under CEEA 2012 and SARA and that recommends that a Certificate of
945 Public Convenience and Necessity be issued for the Project.

946 All of which is respectfully submitted,

947 January 17, 2019
948 Calgary, Alberta

949 *“Original signed by”*

950 _____

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954 cc: MH-052-2018 Intervenors