To: Rt. Hon. John Horgan, Premier and President of the Executive Council


19 November 2018

Dear Premier Horgan,

Thank you for your commitment to improving British Columbia’s environmental assessment (EA) process. Environmental assessments are one of the few tools that we have to prevent harm to the environment. We, a group of independent academic environmental scientists, agree that there is an urgent need for reform that helps to rebuild public trust and protect the environment. Yet, we are concerned that the proposed process lacks scientific rigour, with significant consequences for the health and environment of all British Columbians.

As scientists based in British Columbia, we know how important it is for environment-related decisions to be made carefully. Rigorous, transparent, and objective science is a critical foundation for effective environmental decision-making. Science that is biased or limited in scope will not adequately reflect the benefits and risks of a project, nor accurately inform decision-making. As exemplified by the Mount Polley tailings pond collapse,1 there are real ecological and economic consequences when industrial-scale projects fail.

After careful review of your government’s recently introduced legislation,2 we conclude that the proposed environmental assessment process will fall short of your stated goal – to protect the environment and restore public confidence. In particular, the proposed legislation retains three deficiencies of current practice that are at odds with the foundations of science-based decisions, namely, a lack of scientific independence, of peer-review, and of transparency.

1. **Lack of scientific independence.** Under the proposed EA process, project proponents would continue to oversee, collect, and present the vast majority of evidence used as the basis for environmental assessment. In other words, the information required to assess environmental risk would continue to be gathered and analysed by those with a vested interest in project approval. This lack of independence can create a culture susceptible to biased data collection or interpretation, and will continue to erode the public’s trust in a process that they expect to be fair and evidence-based.

**Recommendation.** Information used to assess risk must be collected and interpreted independently of project proponents. Assessing the risk or impact that a project may pose to the environment must be rooted in information collected and interpreted by qualified, independent,
professionals who do not stand to gain or lose from the assessment’s conclusions. Concurrent with your government’s ongoing revisions to the use of certified professionals (external to the public service), such professionals must work independently from the project proponent. Furthermore, such a process must seek and act on the best available evidence, including peer-reviewed studies.

2. Lack of peer-review of evidence. Under the proposed EA process, there are no requirements for independent peer-review of the evidence about a project’s environmental risk. Evidence would be evaluated by a Technical Advisory Committee, whose composition would in large part include provincial ministry staff that need not be experts on the proposed work. This status quo approach fails to require those responsible for evaluating a project’s environmental risk to have the necessary expertise to adequately assess the evidence.

**Recommendation 2.** Evaluation of a project’s risk to the environment must be conducted by independent experts in relevant fields, at arm’s length from the government, proponent, and the Environmental Assessment Office. Independent evaluation of evidence is standard scientific best practice.

3. Lack of transparency. Under the proposed EA process, there is no requirement that all data generated by the proponent, or the evaluation of evidence by the Technical Advisory Committee, be made available to the public. This has been identified as a major flaw of the current EA process in BC. Neither is there inclusion of criteria for how Ministers’ final assessment decisions will be made, which will undermine public confidence. Without such transparency, it is impossible to verify conclusions that are drawn regarding the project’s risk to the environment.

**Recommendation 3.** Make all records and information related to an assessment permanently and publicly available, develop explicit decision-making criteria, and require transparent rationale of factors considered in the final decision. All raw data, results, analyses, and rationale of factors considered in the evaluation of environmental risk from a proposed project should be readily available to the public and experts. This is modern scientific best practice. Sharing information means that conclusions can be verified – helping to build public trust – and that means the data can be used as benchmarks for future studies, including assessing cumulative effects. While we acknowledge that some information (e.g., culturally sensitive or private) must be protected, sharing all other relevant information in a free, searchable, provincial registry should become a condition of the new EA process.

While we are encouraged by the stated intent of reform to the EA process, and believe that British Columbians will applaud many of the proposed changes, the continued lack of scientific independence, peer-review, and transparency in the evaluation of a given project’s risk to the environment will serve only to further undermine public confidence. We offer our consensus opinion, representing a diverse range of scientists, as a starting point for further engagement with you or your staff. We are keen to meet with you and your staff, and be a resource for strengthening scientific integrity in British Columbia's environmental assessment process.

Respectfully,
*Co-signatories in alphabetical order. Institution affiliation for identification only

Co-signed,
[List will be updated on Monday, 19 November via https://earthtooceansfu.com/open-letter-on-environmental-assessment/]


1. Peter Abrams, PhD, Professor Emeritus, University of Toronto
2. Megan Adams, BSc, PhD candidate, University of Victoria
3. Luke Andersson, MSc, Bamfield Marine Sciences Centre
4. Peter Arcese, PhD, Professor, University of British Columbia
5. Torrey Archer, BSc, Biologist and Land Manager, The Land Conservancy of BC
6. Kyle Artelle, PhD, Postdoctoral Fellow, University of Victoria
7. William Atlas, MSc, PhD Candidate, Simon Fraser University
8. Katie Baillie-David, BSc, MSc Candidate, University of Victoria
9. Lyn Baldwin, PhD, Associate Professor, Thompson Rivers University
10. Natalie Ban, PhD, Professor, University of Victoria
11. Steven Barrett, BSc, MET Candidate, Simon Fraser University
12. Mirjam Barrueto, MSc, PhD Student, University of Calgary
13. Andrew Bateman, PhD, Research Associate, Pacific Salmon Foundation
14. Julia Baum, PhD, Associate Professor, University of Victoria
15. Amanda Baxter, BSc, MSc Candidate, University of Northern British Columbia
16. Matthew Beedle, PhD, Professor, Coast Mountain College
17. Regina Bestbier, MSc, Research Biologist, University of British Columbia
18. Aita Bezzola, BSc, MSc Candidate, University of Northern British Columbia
19. Sherryl Bisgrove, PhD, Associate Professor, Simon Fraser University
20. Emily Bishop, BA, MA Candidate, University of Victoria
21. Morgan Black, BSc, PhD candidate, University of Victoria
22. Annie Booth, PhD, Professor, University of Northern British Columbia
23. Ella Bowles, PhD, Postdoctoral Fellow, Concordia University
24. David Bradley, PhD, British Columbia Director, Bird Studies Canada
25. Norah Brown, PhD, Postdoctoral Fellow, University of Victoria
26. Heather Bryan, PhD, Postdoctoral Fellow, University of Victoria
27. Joanna Burgar, PhD, Postdoctoral Fellow, University of British Columbia
28. Marie-Helene Burle, BSc, PhD candidate, Simon Fraser University
29. Cole Burton, PhD, Canada Research Chair, University of British Columbia
30. Andrea Byfuglien, BA, MA Candidate, University of British Columbia
31. Lia Chalifour, BSc, PhD Candidate, University of Victoria
32. Louise Chavarie, PhD, Postdoctoral Fellow, University of British Columbia
33. Ranah Chavoshi, BSc, MSc Candidate, Simon Fraser University
34. Libby Chisholm, BA, MA student, University of Victoria
35. Gillian Chow-Fraser, BSc, MSc Candidate, University of Victoria
36. Melanie Clapham, PhD, Postdoctoral Fellow, University of Victoria
37. Alexander Clifford, PhD, Postdoctoral Fellow, University of British Columbia
38. Ilona Clocher, MSc, University of Calgary
39. Angie Coulter, BSc, MSc Candidate, University of British Columbia
40. Laura Cowen, PhD, Associate Professor, University of Victoria
41. Hailey Davies, BSc, Research and Teaching Assistant, University of Victoria
42. Devin de Zwaan, BSc, PhD Candidate, University of British Columbia
43. Christoph Deeg, PhD, Postdoctoral Fellow, University of British Columbia
44. Cora denHartigh, BA, Environmental Anthropologist, University of British Columbia
45. Allison Dennert, MSc, PhD Student, Simon Fraser University
46. Bryant DeRoy, BSc, MSc Candidate, University of Victoria
47. Danielle Derrick, BSc, MSc Candidate, Simon Fraser University
48. Lawrence Dill, PhD, Professor Emeritus, Simon Fraser University
49. Anna Drake, PhD, Postdoctoral Fellow, University of British Columbia
50. Jillian Dunic, MSc, PhD Candidate, Simon Fraser University
51. Lauren Eckert, MSc, PhD Student, University of Victoria
52. Jessica Edwards, BSc, MSc Candidate, Simon Fraser University
53. Rebecca Edwards, MSc, Remote Sensing Analyst, Not-For-Profit NGO
54. Mehrbod Esfati, MSc, PhD Candidate, University of British Columbia
55. Audrey Faber, BSc, MSc Candidate, University of Northern BC
56. Alicia Fernando, MSc, Biologist, Gitksan Watershed Authorities
57. Alina Fisher, MA, Research Manager, University of Victoria
58. Justin Fleming, BSc, Environmental Technician, University of British Columbia
59. Fiona Francis, BSc, PhD Candidate, Simon Fraser University
60. Cameron Freshwater, PhD, Postdoctoral Fellow, Fisheries and Oceans Canada
61. Kelly Fretwell, MMM, Research Assistant, University of Victoria
62. Sarah Friesen, BSc, MSc Candidate, University of Victoria
63. Patricia Gallaugher, PhD, Adjunct Professor, Simon Fraser University
64. Julie Galloway, BES, MSc Candidate, University of Victoria
65. Barb Gass, MSc, Science and Technical Officer, University of British Columbia
66. Danielle Gauthier, BSc, MSc Candidate, University of British Columbia Okanagan
67. Pascale Gibeau, MSc, PhD Candidate, Simon Fraser University
68. Michael Gillingham, PhD, Professor, University of Northern British Columbia
69. Haley Glass, BSc, PhD Candidate, University of Calgary
70. Sean Godwin, PhD, Postdoctoral Fellow, Simon Fraser University
71. Louis Gosselin, PhD, Professor, Thompson Rivers University
72. Jennifer Greenwood, MSc, PhD Candidate, University of British Columbia
73. Jared Grummer, PhD, Postdoctoral Fellow, University of British Columbia
74. William Halliday, PhD, Conservation Scientist, Wildlife Conservation Society Canada
75. Tracey Hammer, MSc, PhD Candidate, University of Calgary
76. Gil Henriques, MSc, PhD Candidate, University of British Columbia
77. Margot Hessing-Lewis, PhD, Research Science, Hakai Institute
78. Robert Higgins, PhD, Associate Professor, Thompson Rivers University
79. David Hik, PhD, Professor, Simon Fraser University
80. Aaron Hill, MSc, Executive Director, Watershed Watch Salmon Society
81. Emma Hodgson, PhD, Postdoctoral Fellow, Simon Fraser University
82. Jane Hurlburt, MSc, Clinical Instructor, University of British Columbia
83. Tara Ivanovich, PhD, Director of Environmental Science, University of British Columbia
84. Karen Kalyrna, MA, University of Victoria
85. John Karakatsoulis, PhD, Department Chair, Thompson Rivers University
86. Laura Kehoe, PhD, Postdoctoral Fellow, University of British Columbia
87. Susanna Klassen, MSc, PhD Student, University of British Columbia
88. Christopher Kopp, PhD, Science Education Specialist, University of British Columbia
89. Donald Kramer, PhD, Professor Emeritus, McGill University
90. Charles Krieger, PhD, Professor, Simon Fraser University
91. Karine Lacroix, MA, PhD Candidate, University of Victoria
92. Karl Larsen, PhD, Professor, Thompson Rivers University
93. Christian Levers, PhD, Postdoctoral Fellow, University of British Columbia
94. Alan Lewis, PhD, Emeritus Professor, University of British Columbia
95. Patrick Lilley, MSc, RPBio, Senior Biologist, Consultant
96. Leithen M’Gonigle, PhD, Assistant Professor, Simon Fraser University
97. Jeffrey MacAdams, MSc, University of Victoria
98. Misty MacDuffee, BSc, Biologist, Raincoast Conservation Foundation
99. Ailene MacPherson, MSc, PhD Candidate, University of British Columbia
100. Jennifer Magel, BSc, MSc Candidate, University of Victoria
101. Sultana Majid, BSc, MSc Candidate, University of British Columbia Okanagan
102. Justin Meeds, BSc, MSc Candidate, University of British Columbia Okanagan
103. Michael Merchant, MSc, Remote Sensing Specialist, Not-For-Profit NGO
104. Becky Miller, BSc, MSc Candidate, University of Victoria
105. Matthew Miller, BSc, MSc Candidate, University of Victoria
106. Matthew Mitchell, PhD, Postdoctoral Fellow, University of British Columbia
107. Margo Moore, PhD, Professor, Simon Fraser University
108. Evan Morien, MSc, Research Technician, University of British Columbia
109. Rachel Munger, BSc, MSc Candidate, Simon Fraser University
110. Nicolas Muñoz, MSc, PhD Candidate, Simon Fraser University
111. Rylee Murray, BSc, PhD Candidate, Simon Fraser University
112. Sean Naman, PhD, Postdoctoral Fellow, University of British Columbia
113. Maxwell Nichols, MPP, Simon Fraser University
114. Nadia Nowak, BPL, MNRES Candidate, University of Northern British Columbia
115. Mary O’Connor, PhD, Associate Professor, University of British Columbia
116. Debora Obrist, BSc, PhD Student, Simon Fraser University
117. Melissa Orobko, MSc, PhD Student, Simon Fraser University
118. Craig Orr, PhD, Conservation Advisor, Watershed Watch Salmon Society
119. Sarah Otto, PhD, Professor, University of British Columbia
120. Candace Picco, MSc, Fisheries Biologist, T’aaq-wiihak Fisheries
121. Richard Pickard, PhD, Professor, University of Victoria
122. Tony Pitcher, PhD, Professor, University of British Columbia
123. Riley Pollom, MSc, Research Assistant and Red List Officer, Simon Fraser University
124. Beatrice Proudfoot, BA, MSc Candidate, Memorial University
125. Lynne Quarmby, PhD, Professor, Simon Fraser University
126. Samir Qureshi, MSc, Research Associate, University of Calgary
127. William Ramey, PhD, Professor Emeritus, University of British Columbia
128. Erin Rechsteiner, MSc, PhD Candidate, University of Victoria
129. Luba Reshitnyk, MSc, Research Scientist, Hakai Institute
130. Marvin Rosenau, PhD, Fisheries Instructor, British Columbia Institute of Technology
131. Andrew Rosenberger, BSc, Research Biologist, Lake Babine Nation Fisheries
132. Melody Salehzadeh, BSc, MSc Candidate, University of British Columbia
133. Valentin Schaefer, PhD, Assistant Professor, University of Victoria
134. Braedon Schiltroth, BSc, MSc Candidate, Simon Fraser University
135. Richard Schuster, PhD, Adjunct Professor, University of Northern British Columbia
136. David Scott, MRM, PhD Student, University of British Columbia
137. Jordan Seider, BSc, MSc Candidate, University of Victoria
138. Karl Seitz, BSc, MSc Candidate, Simon Fraser University
139. David Shiftman, PhD, Postdoctoral Fellow, Simon Fraser University
140. Ciara Sharpe, MSc, Research Scientist, Simon Fraser University
141. Cora Skaien, MSc, PhD Candidate, University of British Columbia
142. Connie Smith, MSc, Research Technician, Simon Fraser University
143. Nicola Smith, MSc, PhD Candidate, Simon Fraser University
144. Jenny Smith, BSc, MSc Candidate, University of Victoria
145. Cara Snell, BSc, MSc Candidate, University of Northern British Columbia
7