



**To:** General Purposes Committee **Date:** September 8, 2020  
**From:** Peter Russell **File:** 10-6125-30-004/Vol 01  
Director, Sustainability and District Energy  
**Re:** **Roberts Bank Terminal 2 Expansion Project Update**

**Staff Recommendation**

That, as described in the staff report titled “Roberts Bank Terminal 2 Expansion Project Update,” dated September 8, 2020 from the Director, Sustainability and District Energy:

1. Letters be sent to the Federal Minister of Environment and Climate Change, Premier of BC, Provincial Minister of Environment and Climate Change Strategy, and the Provincial Minister of Transportation and Infrastructure requesting that the Roberts Bank Terminal 2 Expansion Project not proceed; and
2. That staff be directed to work with the BC Environmental Assessment Office to develop provincial assessment conditions that protect the interests of the community, should the Roberts Bank Terminal 2 Expansion Project be approved.

Peter Russell, MCIP RPP  
Director, Sustainability and District Energy  
604-276-4130

Att. 4

REPORT CONCURRENCE		
<b>ROUTED TO:</b> Transportation	<b>CONCURRENCE</b> <input checked="" type="checkbox"/>	<b>CONCURRENCE OF GENERAL MANAGER</b> 
<b>SENIOR STAFF REPORT REVIEW</b>	<b>INITIALS:</b> 	<b>APPROVED BY CAO</b> 

## Staff Report

### Origin

The Vancouver Fraser Port Authority's proposed Roberts Bank Terminal 2 Expansion Project proposes an expansion of the existing Deltaport Terminal and Westshore Terminals in Delta, BC. The proposed expansion triggered federal and provincial environmental assessment regulations and the project has been undergoing federal and provincial environmental assessment under the *Canadian Environmental Assessment Act, 2012* and the *BC Environmental Assessment Act, 2002* since 2013. The City of Richmond was identified as a regional stakeholder and was first notified of the project by the Vancouver Fraser Port Authority in 2012. The Federal Minister of Environment announced that the Project would undergo a federal assessment by a federal independent review panel in 2016.

The independent review panel published its final report, *Federal Review Panel Report for the Roberts Bank Terminal 2 Project*, on March 30, 2020. The report presents the results of the independent review panel's assessment of the potential environmental and socioeconomic effects of the Project, including the marine shipping activities incidental to the Project. The report also sets out the rationale, conclusions and recommendations of the Panel relating to the environmental assessment of the Project, including proposed mitigation measures and follow-up programs.

Should the project be approved by the federal government, the BC Environmental Assessment Office has reached out to staff for general input on the independent review panel's final report and to work collaboratively on draft environmental assessment materials that would support the provincial ministerial review.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

*Enhance and protect the safety and well-being of Richmond.*

*1.2 Future-proof and maintain city infrastructure to keep the community safe.*

This report supports Council's Strategic Plan 2018-2022 Strategy #2 A Sustainable and Environmentally Conscious City:

*Environmentally conscious decision-making that demonstrates leadership in implementing innovative, sustainable practices and supports the City's unique biodiversity and island ecology.*

*2.1 Continued leadership in addressing climate change and promoting circular economic principles.*

### Analysis

#### Project Description

The Vancouver Fraser Port Authority ("the Port") is proposing to construct a new, three-berth marine container terminal adjacent to its existing location on Robert's Bank (Attachment 1). The

proposed upgrades will allow the Port to increase its transport capacity by an additional 2.4 million containers per year, to meet its projected demand by 2030. The proposed terminal will be located immediately west of the existing terminal and will consist of a new berth pocket, additional marine terminal, tug basin, and causeway expansion (The Project), if approved.

Approximately 117 hectares of the Project is proposed to be constructed on federal land. Approximately 52 hectares of the Project is proposed to be constructed on submerged lands that are currently provincial Crown lands and a portion of land, owned by BC Rail, will be required to widen the causeway and construct an overpass. The total Project area would be 182.5 hectares and would be situated on newly acquired and built federal land managed by the Port. Regional infrastructure supporting the movement of goods to the proposed facility includes numerous transportation corridors, including Highway 17, Highway 17A5, Highway 91, Highway 99 and Deltaport Way, the Roberts Bank Rail Corridor, and two active commercial and recreational airports.

Primary land use in the area surrounding the site includes a mixture of urban, residential and agriculture, primarily located within the provincial Agricultural Land Reserve. Wildlife habitat in the region includes farm fields, old-fields, shrub land, hedgerows, and channelized watercourses. The Fraser River Estuary (encompassing Roberts Bank, Sturgeon Bank, and Boundary Bay) supports large numbers of resident, migrating, and/or wintering birds and the Strait of Georgia supports several marine mammal species.

The scope of the environmental assessments covers an area of approximately 55 square kilometres and includes the intertidal and subtidal zones between Canoe Passage and BC Ferries (Tsawwassen) Terminal, from the shoreline to the Canada/USA international border. The environmental assessments did not include the aforementioned transportation corridors accessible via Deltaport Way because the project boundary ended at the start of the causeway leading to the project site. The City argued early in the process that the boundary should be expanded to include transportation systems, noting that Richmond would receive increased truck traffic as a result of the project.

#### Summary of Assessment and City Consultation

The environmental assessment processes involves identifying potential project effects and developing mitigation measures through consultation with First Nations, the public, and stakeholder groups, to avoid and/or minimize potential effects in a timely manner. *Canadian Environmental Assessment Act, 2012* states that projects are to be considered in a careful and precautionary manner to avoid 'significant adverse effects'. The City of Richmond was first notified of the Project by the Port in 2012. Council endorsed comments related to traffic congestion, road infrastructure, and land use in Richmond were sent to the Port and the Canadian Environmental Assessment Agency in 2013. A summary of these final comments are included in Attachment 2.

The federal Minister of Environment announced that the Project would undergo a federal environmental assessment by an independent review panel ("the Panel") in 2016. Compared to an Agency-led federal assessment, an assessment led by an independent review panel is longer in duration (two years instead of one) and includes more comprehensive consultation with the public and stakeholders via public hearing. This type of assessment has a legislated 24-month time limit

from initial referral, to Ministerial decision. The legislated timeline does not include time required for the proponent (the Port) to gather information requested by an independent review panel or the Minister. The *Canadian Environmental Assessment Act, 2012* allows the Minister of Environment to extend this timeline by up to 3 months, and Cabinet to extend the timeline for an unlimited period upon recommendation of the Minister.

The Panel held a project orientation session in 2016, where staff presented an overview of the City's interests and concerns. Staff have since been reviewing technical information and attending the public hearings as part of the federal environmental assessment.

### Summary of the Independent Review Panel's Final Report

The Panel's final report culminates over five years of assessment that included the evaluation of potential effects for approximately 16 assessment criteria such as marine mammals, fish and fish habitat, accidents and malfunctions and avifauna for example. The report also sets out the rationale, conclusions and recommendations of the Panel relating to the environmental assessment of the Project, which is submitted to the federal Minister to support a decision.

A detailed list of potential project benefits and potential project effects is included in Attachment 3. A notable project benefit, should the project be approved, includes the local, regional and national employment, business opportunities and economic development resulting from the Project. Several possible environmental and socioeconomic effects were also determined by the Panel including significant adverse effects on South Resident Killer Whales; residual adverse effect on daytime and nighttime visual resources and on outdoor recreation; effects on the quality of life of local populations. Key concerns regarding the Port's methodology and proposed mitigation measures were also highlighted. The Panel determined that the ecosystem model used by the Port to assess potential effects in the study area likely contained precision and accuracy errors and that, in many cases, the proposed mitigation measures would not be as effective as predicted.

A list of 71 recommendations, developed by the Panel, were also included in the report. The recommendations should be imposed prior to approval and/or construction but are not limited to the only proponent directives. A condensed summary report outlining the projects benefits, effects and recommendations was also issued by the Panel and is included in Attachment 4.

The cumulative impacts from increased traffic, resulting from increased port-related truck traffic, for transportation corridors that would impact Richmond such as Highway 91 and Highway 99 was not included in the assessment. The Panel acknowledged traffic concerns in the report and determined that collaboration between the Province, the City of Delta and the Tsawwassen First Nation is needed to address local traffic issues should the project proceed. Richmond also noted that growth in demand for port serving industrial land uses could result in new port expansion into the Agricultural Land Reserve in East Richmond adjacent to the Port's site along the South Arm of the Fraser River.

The Panel's report has been forwarded to the federal Minister of Environment for review. Input from stakeholders on the report has not been requested. The BC Environmental Assessment Office is seeking general comments on the Panel's report and has requested to begin working with staff on

preparing draft referral material that would be forwarded to the provincial Minister if the project is approved.

### Staff Recommendation

The Fraser River estuary works as a system of interdependent ecosystems ranging from upland environments, marshes and wetlands, and mudflats. The health of the estuary is important for the City including wave attenuation services provided by Sturgeon Bank. The Panel's findings related to the possible inaccuracies in modelling, the severity of potential effects in numerous areas and the uncertainty related to the effectiveness of future mitigations for these effects may lead to possible impacts in Richmond. For the reasons above, it is staff's assessment that the Robert's Bank Terminal 2 Expansion Project should not be approved based on the Panel's findings. Staff recommend the following course of action in response:

1. That, similar to the City of Delta, letters regarding the Project be sent to the Federal Minister of Environment and Climate Change, the federal Premier of BC, Provincial Minister of Environment and Climate Change Strategy, and the Provincial Minister of Transportation and Infrastructure requesting that the project not proceed based on the Panel's findings; and
2. Notwithstanding the above, that staff be directed to work with the BC Environmental Assessment Office to develop assessment conditions that protect the interests of the City, should the project be approved.

### Next Steps

On August 24, 2020, the Minister of Environment and Climate Change acknowledged the Panel's findings and requested additional information from the Port to support further review. The project is currently paused and will resume when the Port can meet the information requested from the Minister. If endorsed, the letters will be prepared and sent as appropriate to the provincial and federal delegates for consideration on the matter.

### **Financial Impact**

None.

### **Conclusion**

The Vancouver Fraser Port Authority's proposed Roberts Bank Terminal 2 Expansion Project, located in Delta, BC has been undergoing federal and provincial environmental assessment under the *Canadian Environmental Assessment Act*, 2012 and the *BC Environmental Assessment Act*, 2002 since 2013.

The City of Richmond was first notified of the Project by the Vancouver Fraser Port Authority in 2012. The Federal Minister of Environment announced that the Project would undergo a federal assessment by a federal independent review panel in 2016. The independent review panel published its final report, *Federal Review Panel Report for the Roberts Bank Terminal 2 Project*, on March 30, 2020. The report presents the results of the independent review panel's assessment including benefits, effects and recommendations. Staff recommend sending letters to the appropriate federal

September 8, 2020

- 6 -

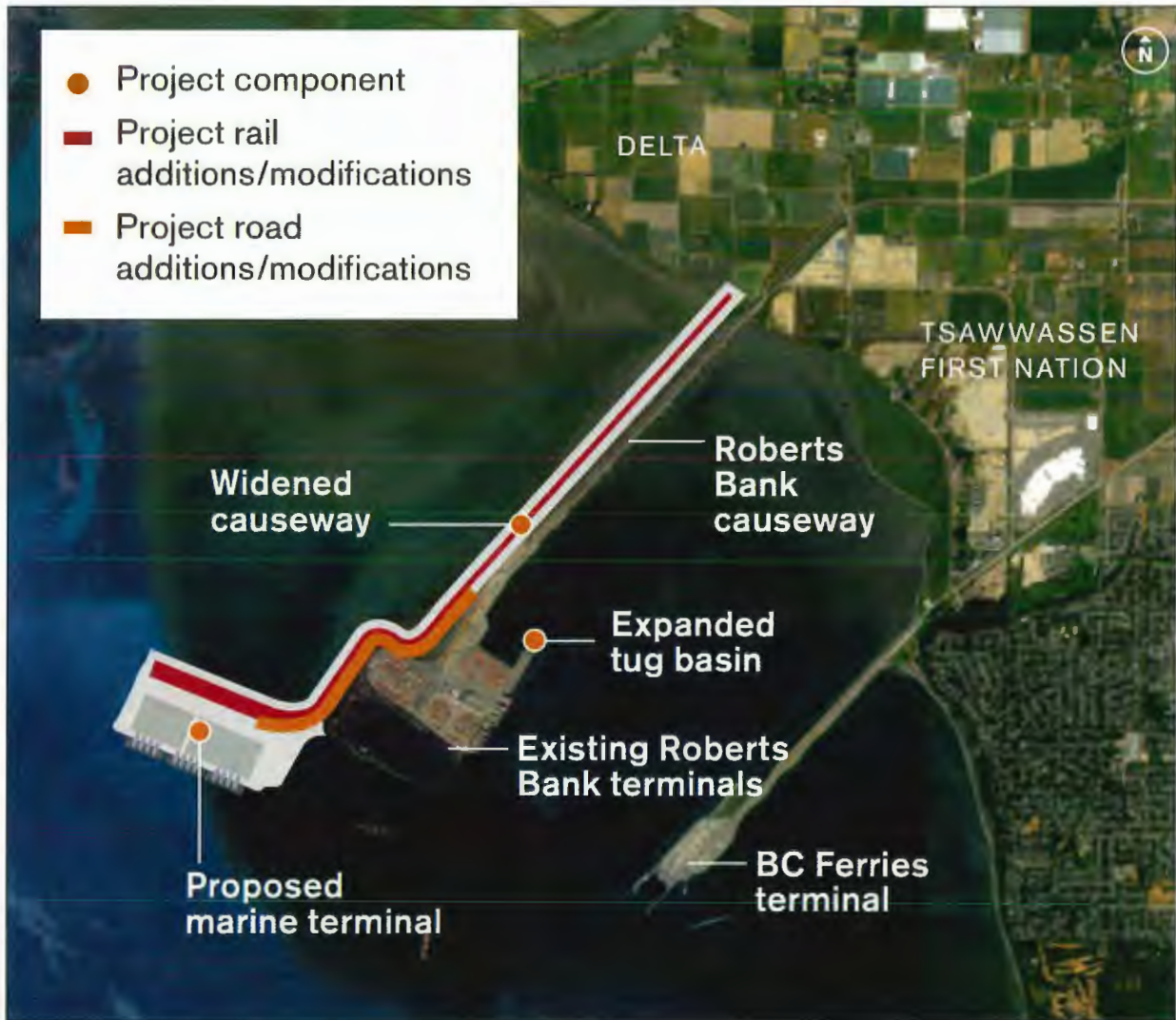
and provincial delegates stating that the project should not be approved based on the Panel's findings. Staff further recommend that they be directed to work with the BC Environmental Assessment Office to prepare assessment material that protect the interest of Richmond, should the project proceed.



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- Att. 1: Project Location and Proposed Project Components
- 2: Summary of the City's Concerns related to the Proposed Project
- 3: Summary of Key Findings from the Independent Review Panel
- 4: Federal Review Panel Report: Summary of Key Findings

### Project Location and Proposed Project Components



### Summary of the City's Concerns Related to the Proposed Project

The following comments were endorsed by Council in 2013 and were forwarded to the Canadian Environmental Assessment Agency and the Vancouver Fraser Port Authority in 2013:

- The impacts of increased port-related truck traffic and passenger vehicles on roads beyond the footprint of the project, especially in Richmond, can be significant and as such, need to be identified in the project scope and included in the effects assessment. Currently, the scope appears to be limited to the project footprint and roads within Port Metro Vancouver's (PMV) jurisdiction. These impacts should be added to Section 5.6 Project Components and/or Section 5.7 Project Activities.
- Section 7.2.1 should identify that the boundary of the study area extends to the Fraserport area in Richmond as well as any other areas that Port trucks will travel to or from in Richmond.
- Measures to mitigate truck traffic impacts and address public concerns (Section 11.3) should include the following items:
  - A Transportation Plan to address road and rail traffic considerations with details such as how municipalities would be involved, what the scope of work is, what input would be sought from municipalities, potential transportation impacts and mitigation strategies, and opportunities to review a draft copy before finalization. Any mitigation strategies should include funding contributions from PMV for infrastructure improvements to local roads, including those north of the tunnel, that connect to the provincial highway system and/or PMV properties that are part of the supply chain system;
  - A "smart" fleet trucking strategy with details regarding how it would tangibly reduce truck traffic, what the impacts would be on the road network and whether there would be any deferral in the need for new road infrastructure due to any reduced truck traffic; and
  - Potential operational improvements such as the extension of hours of terminal operations, including the feasibility of 24/7 operations to enable truck movements during the night and early morning hours, thereby reducing truck traffic congestion during the day. The analysis should indicate the extent that these improvements would help defer or eliminate the need for any new infrastructure due to reduced truck traffic.
- Due to the scope of both the immediate and cumulative environmental impacts of this project, City staff recommend that the Minister of Environment refer this project to an environmental assessment by review panel.
- City staff request that assessment of the cumulative impact of this project and other large industrial and transportation projects (e.g. VAFFC, Fraser Surrey Docks, Trans Mountain



Pipeline Expansion, Massey Tunnel Replacement etc.) in the region be included in any environmental assessments triggered by these projects.

- As outlined in a letter to the CEAA dated October 2<sup>nd</sup>, 2013, we are reiterating concerns regarding the impacts of expanded Port Metro Vancouver activities on agricultural lands, and specifically lands on Lulu Island within the Agricultural Land Reserve.

### Summary of Key Findings from the Independent Review Panel

<b>Potential Project Benefits</b>
1. Construction and operation of the proposed Project do not pose major technical challenges.
2. The Project would result in an increase in container terminal capacity on Canada's west coast. The Project would support competitiveness for Canadian markets linked to a marine shipping supply chain facing important changes.
3. The City of Delta, Metro Vancouver, British Columbia, Canada, and Indigenous groups would benefit from the employment, business opportunities and economic development resulting from the Project.

<b>Potential Project Impacts</b>
1. The proposed offsetting plan for aquatic species, totaling 29 hectares, is insufficient to compensate for the loss of 177 hectares of Roberts Bank.
2. The Panel cannot conclude with certainty about Project effects on polyunsaturated fatty acid production in biofilm, a potentially critical nutritional component for western sandpiper.
3. Barn owl populations would be subject to significant cumulative effects.
4. There would be significant adverse and cumulative effects on Dungeness crab as well as ocean type juvenile Chinook salmon originating from the Lower Fraser and South Thompson Rivers.
5. The Project would cause significant adverse and cumulative effects on South Resident Killer Whales through a small loss of legally-defined critical habitat, reduced adult Chinook salmon prey availability, and a minor increase in underwater noise.
6. A lethal vessel strike on a single individual South Resident Killer Whales could have significant adverse population consequences.
7. The Project would likely result in significant adverse and cumulative effects on the current use of lands and resources for traditional purposes by Tsawwassen First Nation and Musqueam Indian Band in the Project area.
8. Marine shipping associated with the Project would likely result in a significant cumulative effect on the current use of lands and resources for traditional purposes by Pacheedaht First Nation and Ditidaht First Nation.
9. The Project would cause significant adverse effects on cultural heritage for Tsawwassen First Nation and Tsleil-Waututh Nation in the Project area. Each ship travelling through the shipping lanes causes an incremental effect on the ability of Indigenous groups to access sites where they conduct cultural activities. The Panel concludes that there is an existing significant cumulative effect on cultural heritage and that any increase in ship movements would further contribute to this effect.

10. The Panel's assessment concludes that there would be effects on the quality of life of local populations, including health and quality of experience during commercial and recreational activities.
11. The Project would result in a residual adverse effect on daytime and nighttime visual resources and on outdoor recreation as well as a significant cumulative effect.
12. Residual adverse effects of the proposed expanded Navigational Closure Area would cause a significant cumulative effect on the commercial crab fishery.
13. During the operational phase, the Project would result in a significant adverse effect and a cumulative effect on human health based on predicted exposures NO <sub>2</sub> and other respiratory irritants.
14. The Project would result in a significant adverse cumulative health effect due to noise.
15. Elements of stress and annoyance already present related to light, noise and dust are expected to be exacerbated by the Project.
16. The Project would likely cause a significant adverse effect and a significant cumulative effect on agricultural land use due to the loss of a small area of land contained within the Agricultural Land Reserve.
17. The Panel concludes that additional measures would be required to adequately address effects from accidents and malfunctions that may occur in connection with land-based events.
18. If a worst-case oil spill were to occur in the marine shipping area, it could result in potentially significant adverse residual effects for vulnerable species such as South Resident Killer Whales and marine birds, marine commercial and recreational activities, and cultural heritage and health of Indigenous groups.

## Summary of Key Findings

On May 30, 2016, the federal Minister of Environment and Climate Change Canada appointed a Review Panel to carry out an environmental assessment of the Roberts Bank Terminal 2 Project proposed by the Vancouver Fraser Port Authority. The following provides a summary of the Panel's key findings.

The Project would require the conversion of 177 ha of intertidal and subtidal habitat on Roberts Bank to construct a new three-berth container terminal, expand an existing causeway and enlarge an existing tug basin. The Project would be situated immediately adjacent to Tsawwassen First Nation Lands, existing port infrastructure and close to the community of Tsawwassen and the City of Delta, British Columbia. The Project is located on Roberts Bank in the Fraser River estuary, an ecologically productive and sensitive area of coastal British Columbia. Roberts Bank is located on the Pacific Flyway for migratory birds and is adjacent to a provincial wildlife management area and an international Ramsar site. Some of the largest salmon runs in the world utilize and migrate through Roberts Bank as juveniles and adults. Roberts Bank also encompasses critical habitat for the Southern Resident Killer Whale (SRKW) listed as endangered under the *Species at Risk Act*.

The Panel is of the view that construction and operation of the proposed Project do not pose major technical challenges. The purpose of the Project is consistent with Canada's role as a trading nation, and the Project would enable an increase in container terminal capacity on Canada's west coast. The Project would also support competitiveness for Canadian markets linked to a marine shipping supply chain facing important changes, such as: mergers of ocean shipping lines; ocean carriers' and terminal operators' economic sustainability; terminal modernization and an increase in container ship size. The City of Delta, Metro Vancouver, British Columbia and Canada would benefit from the employment, business opportunities and economic development resulting from the Project. Indigenous groups living in proximity to the Project, in Metro Vancouver and on Vancouver Island and the Gulf Islands would stand to benefit from training, employment, and contracting opportunities.

The Panel concludes that the Project would result in numerous adverse residual and cumulative effects. The proposed offsetting plan for aquatic species, totaling 29 hectares, would be insufficient to compensate for the reduction in productivity associated with a Project-induced habitat loss of 177 hectares of Roberts Bank. There would be significant adverse and cumulative effects on wetlands and wetland functions at Roberts Bank. One of the ecosystem components that drives the high productivity of Roberts Bank is biofilm, which is consumed by western sandpipers and other shorebirds during their migration stopovers. The Panel concludes that the Project would not have an adverse effect on biofilm productivity and diatom composition. However, the Panel cannot conclude with certainty about Project effects on polyunsaturated fatty acid production in biofilm, a potentially critical nutritional component for western sandpiper. Due to the recent and still-emerging scientific understanding of biofilm, the Panel is unable to conclude with reasonable confidence that the Project would or would not have a residual adverse effect on western sandpiper. Barn owl, a species listed as threatened under the *Species at Risk Act*, would be subject to significant cumulative effects.

There would be significant adverse and cumulative effects on Dungeness crab as well as ocean-type juvenile Chinook salmon originating from the Lower Fraser and South Thompson Rivers. These juvenile Chinook reside temporarily in the vicinity of the Project and would be subject to migration disruption by the terminal footprint and Project-related effects on the underwater acoustic and light environments. The Project would cause significant adverse and cumulative effects on SRKW through a small loss of legally-defined critical habitat, reduced adult Chinook salmon prey availability and a minor increase in underwater noise. In the absence of mandatory mitigation measures to reduce underwater noise from marine shipping associated with the Project, there would be further degradation of SRKW critical habitat. Although unlikely, a lethal vessel strike on a single individual SRKW could have significant adverse population consequences.

Several Indigenous groups have traditional territories that overlap the Project area and the marine shipping area. The Project and the marine shipping associated with the Project have the potential to change various aspects of Indigenous current use and cultural heritage resources. The Panel concludes that the Project would likely result in significant adverse and cumulative effects on the current use of lands and resources for traditional purposes by Tsawwassen First Nation and Musqueam Indian Band in the Project area. The Panel also concludes that marine shipping associated with the Project would likely result in a significant cumulative effect on the current use of lands and resources for traditional purposes by Pacheedaht First Nation and Ditidaht First Nation.

In addition, the Project would cause significant adverse effects on cultural heritage for Tsawwassen First Nation and Tsleil-Waututh Nation in the Project area. While the Panel understands there would be relatively few ship movements associated with the Project, each ship travelling through the shipping lanes causes an incremental effect on the ability of Indigenous groups to access sites where they conduct cultural activities. The Panel concludes that there is an existing significant cumulative effect on cultural heritage and that any increase in ship movements would further contribute to this effect.

The Panel's assessment concludes that there would be effects on the quality of life of local populations, including health and quality of experience during commercial and recreational activities. The Project would result in a residual adverse effect on daytime and nighttime visual resources and on outdoor recreation as well as a significant cumulative effect. Residual adverse effects of the proposed expanded Navigational Closure Area during both construction and operations would combine with the adverse effects of the existing Navigation Closure Area and cause a significant cumulative effect on the Area I commercial crab fishery.

During the operational phase, the Project would result in a significant adverse effect and a cumulative effect on human health based on predicted exposures to 1-hour average NO<sub>2</sub> and other respiratory irritants. The Project would result in a significant adverse cumulative health effect due to noise. Elements of stress and annoyance related to light, noise and dust are already present in the Local Assessment Area and the Project has the potential to exacerbate these conditions. The Panel further concludes that the Project would likely cause a significant adverse

effect and a significant cumulative effect on agricultural land use due to the loss of a small area of land contained within the Agricultural Land Reserve.

Several types of accidents and malfunctions that could result from the Project were examined, both for land- and marine-based activities. The Panel concludes that additional measures would be required to adequately address effects from accidents and malfunctions that may occur in connection with land-based events. If a worst-case oil spill were to occur in the marine shipping area, it could result in potentially significant adverse residual effects for vulnerable species such as SRKW and marine birds, marine commercial and recreational activities, current use, cultural heritage and health of Indigenous groups.

A listing of the Panel's Conclusions and Recommendations is provided in Appendix H and further details are described in the main body of the report.

The Panel members are grateful for the support we received from the Secretariat during the four years of the Panel's work. We appreciate the professional and respectful participation offered by the Proponent and its team. We would like to acknowledge the involvement of the local citizens of Delta, the collaboration of all levels of government, the insights offered by non-governmental organizations and the constructive interactions and information provided by Indigenous groups.