The Western Hemisphere Shorebird Group (WHSG) was formed in 2006 and includes academic and private researchers, federal and state agency staff, conservation organization staff, and shorebird enthusiasts from 22 countries. The goal of the group is to raise the public’s awareness about shorebirds in the Western Hemisphere; to promote research, monitoring, management, conservation, and education/outreach relevant to shorebirds in the Western Hemisphere; to provide a structured forum to facilitate, coordinate, and enhance the exchange of shorebird information among interested parties; and to promote the range-wide management and conservation of shorebirds in the Western Hemisphere. In this letter, we are representing the interests of these groups. The WHSG currently has 294 members; more information can be found at http://westernshorebirdgroup.org/.

We are writing regarding the Draft Potential Conditions and Appendix IR2020-4-A for the Roberts Bank Terminal 2 Project (Project). Our primary concern with the Project hinges on the forecasted hydrological changes and the potential cascading effects (e.g., salinity changes) that could result in the unmitigable damage to critically important mudflat habitat and biofilm food resources. Based on our review of the Environmental Assessment and the above mentioned documents, we have concluded that the environmental risks and likely impacts posed by the project will result in unavoidable and significant impacts to birds and other wildlife, including hemispherically significant aggregations of shorebirds and the food and habitat resources they depend upon.

**ROBERTS BANK IS CRITICALLY IMPORTANT TO WESTERN SANDPIPERS AND INTERNATIONAL CONSERVATION COMMITMENTS**

Invertebrate prey and nutrient-rich biofilm found on the Fraser River Estuary’s extensive mudflats are the primary fuel Western Sandpipers use during spring migration. The intertidal mudflats of Roberts Bank are unique for their specific composition of polyunsaturated fatty acids and consistently hosts large numbers of foraging Western Sandpipers (Jardine et al. 2015). Western Sandpiper are declining at both local and regional scales. Site-specific Western Sandpiper abundance and trends analyses have shown dramatic declines on the Fraser River Delta by ~54% between 1991 and 2019 (Canham et al. 2021) and similar declines (~94%) at Tomales Bay, California between 1989 and 2019 (Warnock et al. 2021). Wintering Western Sandpipers in the Northern Pacific Rainforest region (California-Alaska) have declined by ~2.58% annually from 1970-2019 (Meehan et al. 2020). Loss of key stopover habitat, especially intertidal mudflats, has resulted in the decline of migratory shorebird populations in the East-Asian Australasian Flyway and has rapidly pushed migratory species toward extinction (Piersma et al. 2016, Studds et al. 2017). We must take meaningful steps to reverse this negative trend by protecting the remaining critically important migratory stopover habitat for shorebirds at Roberts Bank.

The Canadian government has a long and distinguished history of cooperative international conservation of migratory bird species through various treaties and conventions (e.g., Migratory Birds Convention Act, Ramsar Convention on Wetlands, Convention on International Trade in Endangered Species, United Nations Convention on Biological Diversity). Being signatory to these agreements is an acknowledgement from Canada that birds require transboundary cooperation to ensure these shared species continue to flourish across their natural range. Canada has both led and supported international conservation strategies, including the Pacific Americas Shorebird Conservation Strategy (Senner et al. 2016) and the binational Pacific Birds Habitat Joint Venture, both of which identify the importance of maintaining the Fraser River Delta Estuary’s rich food sources for birds.
FRASER RIVER ESTUARY IS CRITICALLY IMPORTANT TO CHINOOK SALMON, SOUTHERN RESIDENT KILLER WHALES AND FIRST NATIONS

Additional local impacts to other wildlife populations has also been demonstrated including more than 100 species considered at risk of local extinction rely on habitats within and surrounding the Fraser Estuary (Kehoe et al. 2021). The construction of Terminal 2 will impact ecological conditions that support a saltwater marsh, eelgrass, mudflats, juvenile salmon and other critically important fishes, migratory birds, and other species, placing further stress on an estuary that has already lost more than 85% of its floodplain habitat (Finn et al. 2021). We are especially concerned about the impacts from the expanded terminal footprint on populations of Fraser Chinook salmon, increased noise and potential ship strikes associated with expanded shipping traffic on endangered Southern Resident killer whales. We also recognize and support the Canadian First Nations’ and U.S. Tribal rights to protect subsistence practices, ecosystems and wildlife.

CONCLUSION

Based on our review of the Draft Potential Conditions, we have concluded that the Project proponents have not provided evidence-based methods and practices for biofilm mitigation strategies prior to the development of the terminal. These conditions fail to protect the critically-important biofilm resources that is essential for long distance migratory shorebirds—especially the Western Sandpiper. Given the scale of risk and the level of uncertainty, the Precautionary Approach should be applied. The Precautionary Approach requires the Government of Canada to identify technically and economically feasible mitigation actions. The biofilm monitoring program outlined in the Draft Potential Conditions does not include mitigation strategies.

We urge the Minister of Environment and Climate Change Canada to reject the final approval of the Roberts Bank Terminal 2 Project.

Thank you for taking the time to review our concerns and recommendations. We appreciate the opportunity to provide additional comments on this project.

Sincerely,

<Original signed by>

Dr. Eveling Tavera Fernandez
Chair, Western Hemisphere Shorebird Group

CC:
The Honourable Steven Guilbeault, Minister of Environment and Climate Change Canada
The Honourable Joyce Murray, Minister of Fisheries and Oceans Canada
The Honourable Carla Qualtrough, Minister of Employment, Workforce Development and Disability Inclusion of Canada
The Honourable Omar Alghabra, Minister of Transport
Laurel Collins, Member of Parliament
Taylor Bachrach, Member of Parliament
Dan Albas, Member of Parliament

References
Canham, R. et al. 2021. Sandpiper go with the flow: Correlations between estuarine conditions and shorebird abundance at an important stopover on the Pacific Flyway. Ecology and Evolution. DOI: 10.1002/ece3.7240


