

# Over Our Dead Bodies — RBT2 *or* Win-Win-Win: Ecology Win + Climate Win + Prosperity Win

## The *Beyond RBT2* Kit from the Garden City Conservation Society

Two decades ago, the idea of a second container terminal at Deltaport arose at what's become the Vancouver Fraser Port Authority (VFPA). A decade ago, VFPA started making a proposal for Roberts Bank Terminal 2 (RBT2). It has been deficient from the start. The RBT2 design was NOT and is NOT in keeping with Canada's environmental principles.

Potential alternative means for the RBT2 purpose were much smaller (per million TEU, a unit of container capacity). The alternatives would serve future increases in demand for West Coast containerized trade while (a) costing far less, (b) not being destructive of the Fraser Estuary, and (c) not setting back Canada's climate action.

VFPA has used its lobbying power to reach a point where a British Columbia Cabinet stop to RBT2 is (a) the last defence against RBT2 harm and (b) the last hope for a win-win-win. Citizen analysis has provided coherent bodies of insight, but the assessment process wastes them.

Sadly, the BC Premier publicly said RBT2 should be approved. That was *before* the public responded in the BC Environmental Assessment Office process for RBT2. We assume the Premier's remarks were only a first impression. Full use of this kit is the fast way to immerse the win-win-win leading to a multi-billion dollar swing in ecological value, climate value and prosperity.

The last hope for a set of good alternatives to the RBT2 debacle is that enough BC Cabinet Ministers (a) become informed enough to resist VFPA, (b) stop RBT2, and (c) allow better options to succeed. **This kit is here to assist them, if needed.**

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The *Beyond RBT2* Kit features 7 analyses. An inquirer and/or decision maker can conveniently use each analysis for honing insight. The kit fills a gap. It is a *curated form* of a range of the informed public's *bodies of analysis* that essentially appear in the 802 public comments on the [EPIC RBT2 page](#). The kit is online in PDF on the *Natural legacies versus waste* blog, [gardencitylands.wordpress.com](http://gardencitylands.wordpress.com).

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The lead writers are members and friends of the Garden City Conservation Society (GCCS) who have studied and written about the topic and related ones for many years. They are Susan Jones and Mary Taitt of the Boundary Bay Conservation Committee, Roger Emsley of Against Port Expansion in the Fraser Estuary, and Jim Wright of the GCCS, along with Sharon MacGougan and Nica Derakhshannia of the GCCS.

# Preview of the **Keynote Analysis**

**that sets the tone for the mix of seven analyses in *The Beyond RBT Kit***

Since it began in 2003, Roberts Bank Terminal 2 (RBT2) has NOT been the responsible way to meet the forecast container-business demand of Canada's West Coast.

Whatever power the Proponent drew on to get RBT2 federally approved *against* the decision of the Minister of Environment and Climate Change Canada, the people of British Columbia trust their provincial Cabinet to protect BC much better.

## Background notes for the keynote on the next page

*The Beyond RBT2 Keynote* is an op-ed by Jim Wright and Sharon MacGougan of the Garden City Conservation Society (GCCS). It appeared in *Business in Vancouver*, where BIV's Tim Renshaw covers BC port issues well. His Analysis titled "[Federal approval just the latest instalment in long-running Terminal 2 saga](#)" points out the transpacific container business of the continent's West Coast ports *keeps going down*. Besides that, as a West Coast hub for routes like Shanghai–Chicago, Prince Rupert records by far the best trip times. Vancouver is slower and too congested.

From 2003-04 on, Environment Canada repeatedly directed the RBT2 Proponent to redesign its proposed location to resolve its unmitigable species-level risk to Western Sandpipers, which stop at Roberts Bank as they migrate between Alaska and Latin American. Still, an "assessment" sidestep allowed RBT2 to NOT follow updated legislation that would have enforced that vital requirement.

**We're now HERE in *The Beyond RBT2 Kit*:**

**[Preview of the Keynote Analysis](#)**

**[Preview of the Sandpiper Analysis](#)**

**[Preview of the Mary Taitt Analysis](#)**

**[Preview of the Susan Jones Analysis](#)**

**[Preview of the Roger Emsley Analysis](#)**

**[Preview of the PAPA PATH Analysis](#)**

**[Preview of the Jim Wright Analysis](#)**

## **Beyond RBT2 Kit keynote**

The federal approval of Roberts Bank Terminal 2 (RBT2) uselessly threatens the Fraser Estuary. But BC's cabinet can veto RBT2. Their action would champion the environment and the economy, especially of Prince Rupert and Northern BC.

Mainly, RBT2 would be an island of fill dumped on Roberts Bank, Delta. The Vancouver Fraser Port Authority (VFPA) covets it to lease it out for Deltaport container-handling capacity.

Since 2003, Environment Canada scientists have analyzed RBT2 effects. They say RBT2 would degrade an extensive area of biofilm, rich in nutrients, northwest of the Deltaport causeway. The scientists state that poses "an unmitigable species-level risk to Western Sandpipers."

Flocks of those tiny shorebirds stop at Roberts Bank as they migrate between Latin America and Alaska on the Pacific Flyway. In this context, they are a representative species.

The Precautionary Principle of the Environmental Protection Act applies. Environment Canada therefore states that VFPA must redesign DP4. Instead, VFPA devises ways to skirt redesign.

Meanwhile, science has revealed further values of the energizing nutrients in the biofilm. SFU's Patricia Baird, PhD, told the RBT2 assessment how the fatty acids in the biofilm are "for the entire food web," beyond being vital for shorebirds.

For instance, the fatty acid DHA, which humans synthesize via seafood, helps the brain develop at fetal and infant stages. Global warming will lead to steep declines in available DHA, and RBT2 would make that worse.

The federal approval includes "legally binding conditions." At least for the aspects of biofilm and Western Sandpipers, they are flimsy. The Environment Canada directive to redesign RBT2\*—decisive and enforceable—is gone.

But Global Container Terminals (GCT), who operate the Deltaport terminal, heed the Environment Canada science. They redesigned RBT2 as "Deltaport Berth Four," DP4. It's engaged in the reformed federal assessment process that enforces conditions early on.\*

DP4 would add Berth 4 to Berths 1 to 3, all on the side of the Deltaport causeway with not much biofilm. That's crucial, although DP4 has ecological flaws too. For instance, it does displace some biofilm to widen the causeway.

In bulk and in cost, DP4 is only half as big as Roberts Bank Terminal 2. Yet DP4's added capacity exceeds RBT2's if the Deltaport operators, GCT, get credit for what they've added there recently.

The DP4 site is already disturbed, but RBT2 disturbs a fresh site.

By design, DP4 will phase in as needs arise, unlike RBT2. And already there's spare Lower Mainland capacity for many years, thanks to expansion at Burrard Inlet and—by GCT—at Deltaport.

Most Pacific Gateway container business is able to access both VFPA and Prince Rupert Port Authority (PRPA) terminals. "Rupert" has been the growing choice since 2008. Rupert's container capacity is catching up to Deltaport's.

Compared to Vancouver, Rupert is far closer to Asia, and it has reliable rail to much of North America. Its shipping lanes are wide. Its natural harbour is deep, ready to use. PRPA is collegial.

Canada may never need a new container terminal at Deltaport. However, along with Rupert expansion, it may be wise to have DP4 ready to ward off RBT2.

RBT2 squanders the environment and billions of dollars of all Canadians, since VFPA is a crown asset.

Now BC's Cabinet has its say on RBT2—after the federal condoning of RBT2 environmental damage. Is RBT2 a necessary evil because it alone can cope with Pacific Gateway growth in container business?

No! It's clear that other container terminals in the Pacific Gateway have the foresight to meet the demand. BC's cabinet can safely end the RBT2 insanity.

## Preview of the **Sandpiper Analysis**

This illustrated Analysis is an update of a Garden City Conservation Society (GCCS) letter to Honourable Steven Guilbeault, Minister of Environment and Climate Change. After responding to the letter, Mr. Guilbeault rejected the Roberts Bank Terminal 2 proposal, but the federal Cabinet approved it anyway.

Where possible, the letter takes the viewpoint of Western Sandpipers who stop at Roberts Bank for energy from biofilm. Its nutrients are also important for humans at critical early stages of life.

Unfortunately, RBT2 puts them at “unmitigable species-level risk,” and the letter shows there is no offsetting value for that at all. The Precautionary Principle applies but is hardly even needed.

Topic O, “Conditions,” critiques flimsy “conditions” and suggests some genuine ones the BC EAO could add.

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## Garden City Conservation Society

Subject: Stop RBT2 to enable success—**a Sandpiper view in quick topics**

Dear Powers-that-Be and All of Good Will:

We've observed and analyzed Roberts Bank Terminal 2 for years, and we now see it as a train wreck on the verge of happening. Yet RBT2 can still lead to something better.

In the wreck analogy, the RBT2 train engine, pulling freight cars, has kept heading for a washed-out bridge, *heedless* of warnings and *heedless* of guidance to safer, better routes. The train could soon tumble off a bridge-to-nowhere.

There's a smaller, safer, responsive option ready to replace the RBT2 engine. Deltaport Berth 4 (DP4) can likely be refined into the adequate alternative if needed—if ever Prince Rupert and Burrard Inlet expansion cannot meet the West Coast container-terminal needs.

A series of revealing topics fill out this analysis. They address what RBT2 has drawn Canada into and ways to resolve it. The topics are mostly illustrated, and you only need to skim and read enough of each to skip to the next topics. (It all matters, but it won't all be new to you.)

By pulling together, all who lead or help can resolve the threats that RBT2 has brought. Thank you for caring. Enjoy our topics as much as we've enjoyed composing for you!

With best wishes,

Garden City Conservation Society (GCCS)

Richmond, Fraser River Estuary, Salish Sea, BC, Canada

Serving and conserving since 2008

*An SOS from a Western Sandpiper:* You may have noticed one of us Sandpipers at top, flying high in the sunlight, looking and feeling energized. That's thanks to our grazing on wonder-food at Roberts Bank in the estuary, a vital stop on our flyway to Alaska. *But RBT2 puts our species at risk by messing with nature, which creates that food, specific fatty acids in biofilm.* The GCCS is so worried about it they've organized their analysis around us. Luckily, in Topic D, we see they've realized *our wonder-food can be vital for humans too*, and more so as the warming climate makes it scarcer. **Biodiversity matters!** Save Our Species!

# Save Our Species from Roberts Bank Terminal 2, RBT2



[VFPA image](#) of proposed RBT2 that would put [Western Sandpipers](#) at species-level risk as their large numbers fall.

## Topic A: *Precautionary principle re RBT2*

The *Guide to understanding the Canadian Environmental Protection Act* (CEPA) is clear:

**Precautionary principle:** The government's actions to protect the environment and health are guided by the precautionary principle, which states that "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." ([Chapter 3](#))

Environment and Climate Change Canada (ECCC) responsibly administers and enforces RBT2-relevant federal acts, including CEPA and the Migratory Birds Convention Act. As the panel of ECCC scientists for RBT2 have made known for years, the RBT2 proposal does **NOT** satisfy the *precautionary principle* and other requirements. Most prominently, RBT2 still threatens serious irreversible damage to *Western Sandpipers*, Roberts Bank's annual Pacific Flyway guests.

All along, the Vancouver Fraser Port Authority (VFPA) could have known the threats would logically disqualify RBT2 from approval by the ECCC Minister and Cabinet. Responsive project planning would have generated redesign and/or a pilot project to try to foster on-site mitigation—with a working prototype, validated by ECCC's scientific panel **before** any RBT2 approval.

For 20 years, ECCC has kept red-flagging the RBT2 threats, but the RBT2 Proponent has **NOT** implemented or supported a suitable pilot project or redesign. It has even bypassed ECCC input that would help both the species and the RBT2 plan. As well, VFPA has acted with the [RBT2 Review Panel](#) of the Impact Assessment Agency of Canada as though VFPA is superior to the ECCC. The approach has now played out in detailed conditions about how VFPA might take action for the Western Sandpipers **after it's too late** to prevent or reverse the damage.

If that kind of thinking prevails, the Western Sandpiper *will be a tragic instance and symbol of RBT2 degradation*. But Canada can take a firm step to end the threat of irreversible damage and prevent degradation: **stop RBT2**. That's no loss, **except to the RBT2 Proponent**. *The alternatives to RBT2 are friendly to (a) the environment and (b) climate change and (c) prosperity.*



RBT2 Proponent images.

Let's get our bearings. The top image shows the Roberts Bank terminals: the Deltaport container terminal and Westshore coal terminal. It includes an artist's rendition of the proposed RBT2. In the lower image, BC Ferries' Tsawwassen terminal, north of the U.S. border, is also visible. The residential area, which is Tsawwassen, is located on a peninsula that becomes Point Roberts, WA, south of the image area. In the bottom left corner, Deltaport Berth 4 (DP4), an alternative to RBT2, could basically slot in behind the "Deltaport Third Berth" area in green.

## Topic B: Contrasting RBT2 perspectives

Roberts Bank Terminal 2 (RBT2) threatens to irreversibly damage the Fraser Estuary and set back Canada's environmental responsibility, climate action and more. Here's the status quo:

- **Fortunately**, ECCC has responsibly, diplomatically and firmly identified dangers of RBT2, including the species-level threats to the Western Sandpipers.
- **Unfortunately**, RBT2 is proposed by a federal crown entity with little accountability to government.
- **Unfortunately**, Proponent Vancouver Fraser Port Authority (VFPA) historically gets what it wants.
- **Unfortunately**, there are systemic shortcomings that enable the RBT2 Proponent to resist input.
- **Fortunately**, we as a conservation society want to help, sharing sometimes-unique insights.
- **Fortunately**, we're just one of many vigilant groups and individuals contributing help.
- **Fortunately**, if we're heeded, informed federal action can and will conserve the future.

In these comments, we are focused on a key aspect of the Proponent's RBT2 campaign—disregard for the Western Sandpipers. In *our* perspective, they are guests we host, mainly on their northbound Pacific Flyway trip, unsuspecting of the serious RBT2 threats to their species. Many of them need to re-energize with us in order to reach their Arctic breeding grounds.

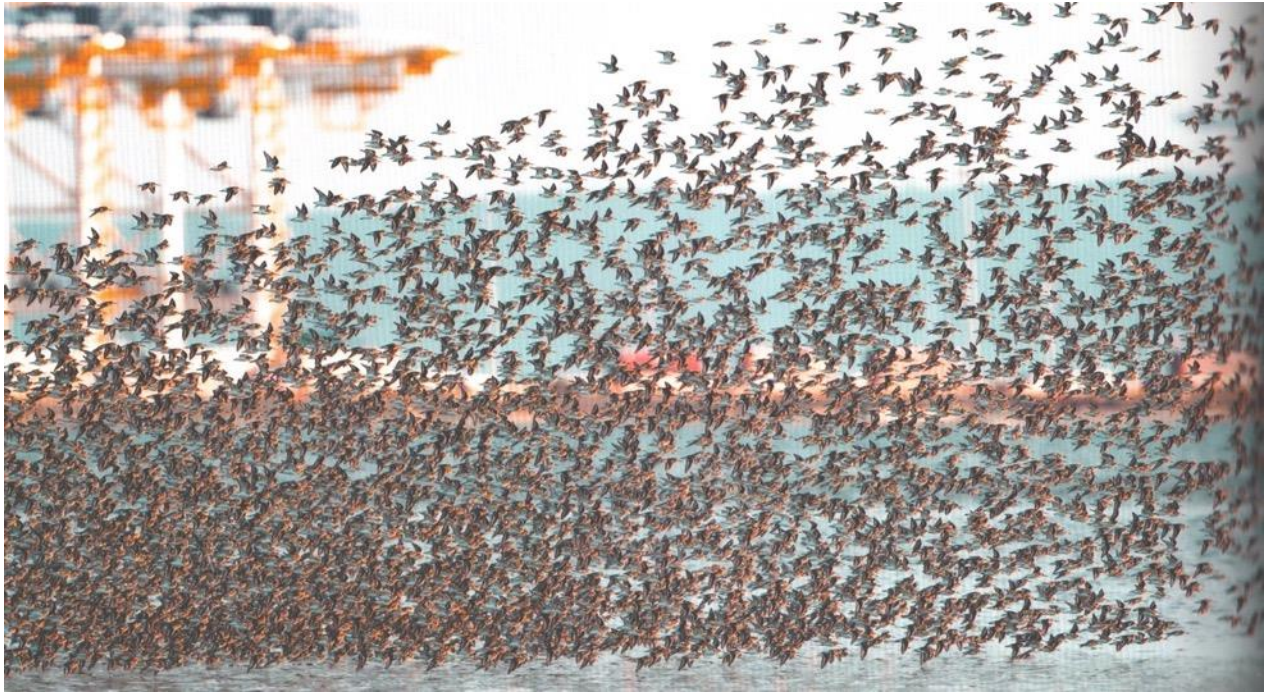


Also, RBT2 would mar Canada's integrity as a partner in the Migratory Birds Convention. RBT2 would weaken it despite the current U.S. Administration's collaborative action to bolster its strength.

For context for the Western Sandpiper issue, our comments include related topics such as the *precautionary principle* (previous page). The ECCC scientists have insisted on respecting that standard, usually by implication. We will describe their steadfast determination.

## The Precautionary Principle





Many constructive comments to the Impact Assessment Agency Canada (IAAC) are hopeful that port ecosystems and economics *can do well together*. Like them, these two Roberts Bank photos — from [The Salish Sea](#)—convey hope. At top, a flock of shorebirds rises near a container-loading platform.

Above, the Fraser River Estuary jets out as a plume of oxygen-rich water, 2–10 m thick. It meets Juan de Fuca Strait seawater to mix into the Salish Sea as a larger estuary, a highly productive ecosystem.

One effect can be just-right conditions for our Sandpipers' grazing area, northwest of the Deltaport causeway in the Salish Sea, visible from space. To catch the spirit of the Sea, join Joseph Gaydos, PhD, co-author of the *Salish Sea* book, as he weaves his [Extraordinary Tales from the Salish Sea](#). The 32-minute video flies by. The plume part, in Dr. Gaydos's entertaining explaining, is at 10:30.

## What is the Salish Sea?



Sheltered from Pacific storms by Vancouver Island and the Olympic Peninsula, the Salish Sea stretches from Campbell River, BC, to Olympia, Washington. It has three great arms—the Strait of Georgia in the north, Puget Sound in the south, and the Strait of Juan de Fuca connecting them to the open Pacific Ocean. The inland sea is a single body of life, full of extraordinary wild neighbours.

Roberts Bank borders the Salish Sea. The map is from the [Our Salish Sea](#) website, courtesy of Bob Turner, video-diarist of the Salish Sea. He is a long-time resident and former mayor of Bowen Island, Howe Sound, Salish Sea, BC.

## Topic C: Persistent ECCC clarity re risk

The ECCC scientists have been consistently clear about the species-level threats of irreversible damage to the Western Sandpipers the RBT2 Proponent could avoid by *adapting* the terminal design. As an example, we refer to [ECCC's response to the RBT2 Review Panel dated February 12, 2018](#):

ECCC maintains that there is insufficient science-based information to support the Proponent's finding that the Project would not adversely impact intertidal biofilm and consequently migratory shorebirds in general and the Western Sandpiper species in particular. ECCC characterizes the Project's residual adverse impacts on biofilm due to predicted changes in salinity as potentially high in magnitude, permanent, irreversible, and continuous. ECCC's confidence in the EIS's predictions is characterized as low. In particular, impacts to biofilm could potentially implicate the long-term viability of Western Sandpipers as a species. ECCC similarly characterizes impacts to Western Sandpipers as potentially high in magnitude, permanent, irreversible, and continuous. (p.14)

That ECCC response goes on to point out that ECCC and the Department of Fisheries had long ago discussed the matter with the RBT2 Proponent, whose Environmental Impact Statement (EIS) mentions it. However, the EIS has continued to *ignore* the ECCC advice that the Proponent should have brought into its plans at an early stage, 2003–04 as we've highlighted in **turquoise**. (We've also emphasized in **yellow**.)

The EIS briefly describes discussions between the Proponent, the Department of Fisheries and Oceans and ECCC, **occurring in 2003 and 2004**, regarding historical options for the Project. At that time, ECCC recommended geomorphological and related studies be completed to inform potential risks associated with each option on intertidal flats supporting lipid-rich biofilm. **While geomorphological studies were undertaken, the Proponent has nonetheless decided upon a Project configuration that would result in permanent changes to key abiotic factors, including salinity.** ECCC continues to recommend that the Proponent choose a terminal configuration that, from a geomorphological perspective, would avoid such changes on Roberts Bank given the risks that would be incurred to biofilm and to the shorebird species, in particular Western Sandpipers. (p.14)

ECCC then *reiterates* that the Proponent needs to adapt the design of the proposed Terminal 2 to reduce or eliminate the threats to the Sandpipers and biodiversity. ECCC, as we've highlighted in yellow, was firm and collaborative. The Proponent's response, glimpsed in this selected example, could even be passive resistance, since *the Proponent has not acted to heed the ECCC advice*.



Tiny **Western Sandpipers** typically weigh less than an ounce. Due to a sharp drop in numbers, they are a **Species of High Concern**.

## Topic D: The lawful and vital ECCC roles

ECCC's clarity about its responsibility, expertise and collegial roles with RBT2 goes back years—including to June 23, 2016, when ECCC wrote to the RBT2 panel to describe its role in a [concise letter with thorough appendixes](#). The effect is to convey that ECCC is ready to share thorough expertise that spans a range of time and fields. The letter brings in the Western Sandpipers, one of ECCC's areas of expertise, in an introductory way, including this:

The Fraser River Estuary/Delta is a critical migratory bird stopover on the Pacific Flyway. It reflects a diversity of habitats including, for example: saline and brackish marshes; inter-tidal mudflat, sandflat, biomat, and biofilm; intertidal and subtidal eelgrass beds; floodplain forests; hedgerows; upland freshwater wetlands; and agricultural crops and old field set-asides. It is an area of international significance due to a combination of interconnected marine, estuarine, freshwater, and agricultural habitats. Unique biological, physical, and chemical processes maintain ecosystem function in and around these habitats. The importance of this estuarine-deltaic complex and the feeding and roosting opportunities it provides is well documented. The nature, extent, and import of some trophic-levels interactions between primary producers and higher taxonomic level species are only now becoming better understood through on-going scientific research.

Reading between the lines, we think ECCC was encouraging the panel to respect its expertise and responsibility so they could succeed together with mutual respect.

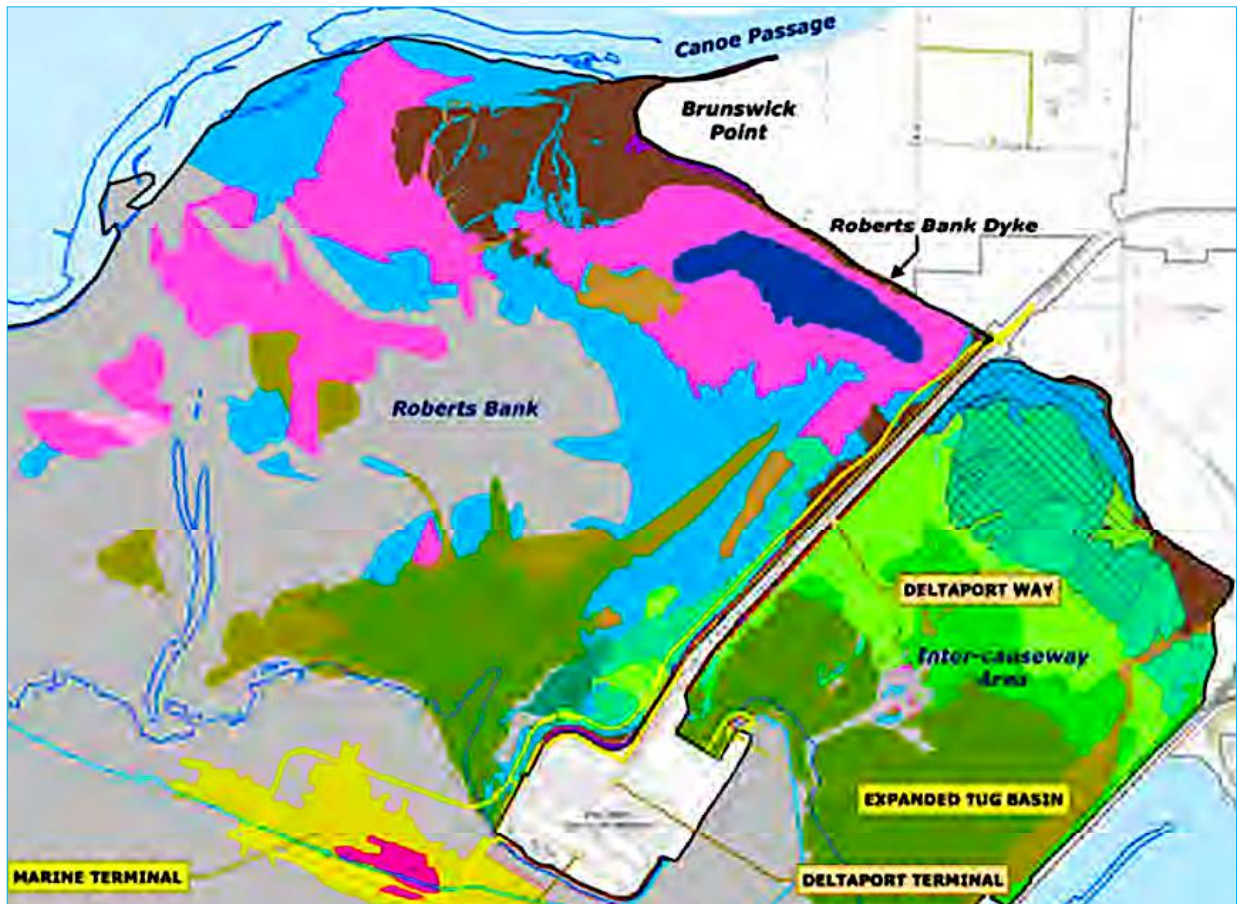
ECCC is more assertive in the "[Environment and Climate Change Canada Written Submission](#)" to the RBT2 Project Public Hearing" (April 15, with May 1, 2019 update). Early on (pages 7 and 8 of 114 pages), ECCC expresses its "Mandate, Roles and Responsibilities." They include administration and enforcement of the Canadian Environmental Protection Act, Migratory Birds Convention Act and Species at Risk Act, which are all relevant to the Western Sandpipers.

Relevantly too, ECCC systematically reviews "Biofilm and Shorebirds" (pp. 29–39). ECCC:

1. Begins with extensive context.
2. Explains the high importance in the environmental assessment.
3. Analyzes the RBT2 Proponent's deficient conclusions.
4. Provides ECCC conclusions that often contrast with the Proponent's.
5. Continues to provide expert information that needs to be heeded.
6. Evaluates the Proponent's "mitigation measures," predicting how ineffective they would be.
7. Dismisses the Proponent's "follow-up" programs" (useless for what's *not mitigable*).
8. Advises again that *only a project redesign could avoid unmitigable harm*.
9. Summarizes the criteria in a clear table.
10. Documents its input, including with 37 references.

The ECCC scientists—engaged in their lawful roles—provide a vital service. Besides being fair to the scientists, supporting their science would help rescue the Fraser River Estuary and help save Earth.

As our 2016 ECCC blockquote on the previous page conveys, the **Roberts Bank** area that's of greatest concern for Western Sandpipers includes a diversity of habitats. In the following RBT2 proposal map, the biofilm is in **hot magenta** and the intertidal marsh is in **milk chocolate**.



When Western Sandpipers graze on biofilm, fatty acids known as DHA and EPA are crucial nutrients that improve migration efficiency and reproduction. As climate warms, nature's production of the fatty acids falls. At the current rate of warming, it would be cut in half by the end of the century. It's a sort of hidden factor ECCC guarded against, as a precaution, when advising the RBT2 Panel:

ECCC was of the view that in addition to the direct loss of 2.5 ha of biofilm habitat from the widening of the causeway, indirect effects would affect up to 558 ha of biofilm habitat.

ECCC was of the opinion that offsetting high quality biofilm habitat was not feasible.

ECCC advised that only a project redesign would avoid adverse effects on shorebirds as a result of changes in biofilm fatty acid production. (*RBT2 Panel Report*, p. 148)

The long-chain polyunsaturated fatty acid production at Roberts Bank depends on diatoms in biofilm. Patricia Baird, PhD, of SFU [has brilliantly informed IAAC](#) of the vital effects for the entire food web. Mammals need the fatty acids too but synthesize them indirectly, usually by eating fish. Since it enables mammal brains to develop, **DHA has special value at the human fetal and infant stages.**

Underlying science for our discussion of fatty acids appears in a revealing 2019 research paper, ["Projected declines in global DHA availability for human consumption as a result of global warming."](#) It concludes that solutions are needed **"to slow the rate of DHA loss for future human generations and ecosystems."** One part of the solutions is to stop RBT2.

## Topic E: RBT2 Proponent's play with ECCC science

After the May 1, 2019 closing date for comments, [the RBT2 panel explained](#) it had received a "[Response to Biofilm and Shorebirds](#)" document from the RBT2 Proponent on May 8, and "The Proponent stated that their intent in providing this response is to support further dialogue at the public hearing," After obtaining that special treatment, the Proponent "respectfully" wrote:

As stated in the introduction, the VFPA respectfully disagrees with numerous aspects of ECCC's recent submission and finds their numerous mischaracterisations, errors, selective and mis-citation of relevant literature, as well as inconsistencies, concerning. *[Sic]\**

The VFPA hopes the above clarification provides the Panel with a clear understanding of the current science and potential Project effects on biofilm and shorebirds. ([p.13](#))

In the same document, the Proponent also clarified its confidence in "a negligible non-measurable residual effect to western sandpiper and other shorebird populations with the Project in place." It then referred to two new Proponent-proposed studies in [CEAR Document #1683](#), Appendixes C14 and C15, which we found on PDF pages 64 and 65. The methods feature "before" and "after" samples to determine whether prey distribution (in effect, biofilm nutrition) and salinity would be as good after RBT2 construction as before it. Of course, no one is likely to do the redundant "after" part if RBT2 gets *irreversibly* built. **The findings would just *pointlessly* show who was right.**

**It would be as useful as medieval theologians' debates about how many angels can dance on the head of a pin.** If those debates really happened, common-sense medievals would have felt like screaming "Who the hell cares? It's SOS time, you pedantic pinheads!" (Note: The SOS in the graphic stands for **Save Our Species**, not Souls, but the principle is timelessly relevant.)

**Some "experts" make a living composing evidence for predetermined conclusions.** Whether or not that applies to this situation, the ridiculous aspect of it is **NOT** the ECCC science. *After deriding scientists who had done well, the Proponent demonstrated its own rebuttal's lack of substance.*

\* Re the *[Sic]*: We have **NOT** accidentally left out the end of a sentence. The Proponent's "clarification" about ECCC "errors" *does* awkwardly end with "concerning." The awkward writing could be overlooked if it were not also disparaging and condescending, in contrast to the professional tone of ECCC's scientific panel.



## Topic F: ECCC's professional response

For its [Closing Remarks for Roberts Bank Terminal 2 Project](#) (August 26, 2019, pp. 15–18), ECCC teamed with Transport Canada (TC), Fisheries and Oceans Canada (DFO) and the Canadian Coast Guard (CCG), “collectively the Federal Authorities.” Since they have overlapping and adjoining responsibilities, that appeared to strengthen ECCC’s authority even further. After an introduction, ECCC addressed the RBT2 Proponent’s late input as follows:

### *Absence of mitigation options for Roberts Bank*

Based on ECCC's review of the current scientific literature, including the studies undertaken by the Proponent, ECCC remains concerned that there are no practical mitigation measures available to address the potential large-scale impacts of changes to biofilm at Roberts Bank. There are no alternate sites for the construction of a large mudflat on the Fraser River estuary. All alternate sites of an equivalent size within the Fraser River estuary and delta (Sturgeon Banks and Boundary Bay) have sandier substrates and/or different hydrological regimes, and as such are not likely to be able to provide alternative sources of nutrients that could compensate for the loss or degradation of biofilm at Roberts Bank.

The Proponent's response to ECCC's written submission (CEAR 1705) cited the presence of biofilm at restored sites in Japan and California. However, the examples outlined by the Proponent do not provide evidence of the creation of new mudflats with equivalent functional values to Roberts Bank, particularly with respect to the biofilm community. None of the studies cited by the Proponent in California or Japan assessed the ability of restored habitats to provide the fatty acids (particularly polyunsaturated fatty acids) necessary for the northward migration of the Western Sandpipers and other shorebirds. For example, Kelly and Condeso (2017)<sup>1</sup> explicitly state that they 'did not investigate this possible factor [biofilm] in shorebird responses to tidal restoration', although this study was cited by the Proponent as evidence of biofilm use at restored sites. In addition, Hsu et al. (2011)<sup>2</sup> mapped chlorophyll-a (a surrogate measure of biofilm biomass) following a large-scale restoration of salt ponds in South San Francisco Bay. However, that study found that the high-density biofilm was primarily located in undisturbed sloughs and channels adjacent to the restored ponds, and not in 'restored' habitat.

As previously discussed in ECCC's written submission (CEAR 1637), ECCC is of the view that it is not currently possible to recreate a mudflat with similar sediment characteristics and biofilm fatty acid productivity as the Roberts Bank area.

ECCC continues to conclude that predicted Project-induced changes to Roberts Bank constitute an unmitigable species-level risk to Western Sandpipers, and shorebirds more generally, and that therefore the only way to be confident of avoiding the impacts on biofilm and shorebirds from these predicted geomorphological processes is with a Project redesign.

<sup>1</sup> Kelly, J. P., & Condeso, T. E. (2017). Tidal marsh restoration stimulates the growth of winter shorebird populations in a temperate estuary. *Restoration Ecology*, 25(4), 640-649.

<sup>2</sup> Hsu, W. C., Kuss, A., Ketron, T., Nguyen, A., Remar, A., Newcomer, M., & Angela Detweiler, M. S. (2011). Hyperspectral biofilm classification analysis for carrying capacity of migratory birds in the South Bay salt ponds. <http://www.asprs.org/pecora18/proceedings/Hsu.pdf>

As one can see, ECCC, along with the other Federal Authorities, maintained its professional tone while reiterating what ECCC had explained to VFPA since 2003–04. In the second paragraph above, **ECCC delineated how VFPA had mistakenly based its conclusions on irrelevant evidence.** Especially in view of the **precautionary principle**, the only way for VFPA to continue RBT2 without serious species-level risk to the Western Sandpipers was with project redesign. (Note: The excerpts are from pp. 17–18 of the source, an [access-to-information release](#).)

## Topic G: Feds withheld final comments?

### Environment Canada warned port expansion puts shorebirds at risk, but feds withheld final comments from review panel

By [Natasha Bulowski](#) | [News](#), [Politics](#), [Ottawa Insider](#) | February 1st 2022

A damning document from Environment Canada that warned of disastrous environmental impacts was withheld from a key stage of an environmental assessment for a proposed Metro Vancouver shipping terminal.

Scientists who authored the report say the project threatens local wildlife, particularly the western sandpiper – a species of shorebird unique to the West Coast of North America that feeds in the nutrient-rich Fraser Delta during migration.

During the environmental assessment, Environment Canada scientists [concluded](#): “Project-induced changes to Roberts Bank constitute an unmitigable species-level risk to western sandpipers, and shorebirds more generally,” and the only way to avoid the impacts “is with a project redesign.”

In a signed letter, Wilkinson responded that Environment and Climate Change Canada “explored the option” of submitting closing remarks, but: “Upon review, it was determined that the expert input already tabled with the review panel stood for itself, and that closing remarks would not alter or add value to the Department’s analyses, conclusions and recommendations already on the record.”



A western sandpiper feeds on biofilm at Roberts Bank, B.C.  
Photo by Jason Puddifoot.

Thanks to the *National Observer*, we know that the letter from the ECCC scientists and/or the group of federal authorities did NOT reach the RBT2 Review Panel.

Whoever the “feds” may be, the ECCC final input got diverted on its way to the panel. After years of RBT2 Review in seeming good faith, someone(s) with power had hindered the process. Such a loss in so many ways!

To learn more about it, see the full [National Observer article](#) that is abridged at left. The Wilkinson cited is Jonathan Wilkinson, who was federal Minister of Environment and Climate Change. Since then, he has been replaced as minister for ECCC by the Honourable Steven Guilbeault.

Much credit for the eventual transparency is due to *Roger Emsley*. The article introduces him: “Roger Emsley, executive director of Against Port Expansion, got his hands on Environment Canada’s closing remarks through an access-to-information request that took roughly 18 months to be answered. He has since [posted it](#) to the Impact Assessment Agency’s public comment section.”

We hope the RBT2 Review Panel’s successors will read it and act on it.



## Topic H: Heading the credible scientists

Unfortunately, Minister Jonathan Wilkinson had told the [National Observer](#) this:

“Upon review, it was determined that the expert input already tabled with the review panel stood for itself, and that closing remarks would not alter or add value to the Department’s analyses, conclusions and recommendations already on the record.”

Was he steering the process to favour VFPA? If not, in view of the VFPA challenge to ECCC science, it was crucial that ECCC—*via its Aug. 26<sup>th</sup> 2019 letter*—be allowed to guide the RBT2 panel like this:

1. Firmly NOT seem to tacitly agree with the content of VFPA’s post-deadline onslaught.
2. Restate why the VFPA mitigation ideas are NOT doable.
3. Explain how VFPA’s irrelevant examples MISTOOK what the related studies actually studied.

Unfortunately, too, the RBT2 panel seemed to give little attention to the wealth of insight in the public comments, including from environmental groups. They (a) show less trust in VFPA than in ECCC and (b) show confidence in ECCC science. Also, the independent experts are typically congruent with the ECCC scientists. For example, Professor Peter G. Beninger was clear to the *National Observer*:

- a. That VFPA’s downplaying of biofilm impacts is NOT scientific evidence.
- b. That VFPA has been making basic errors.
- c. That “any truly knowledgeable scientist” would agree.

Unfortunately, as well, the RBT2 panel’s valuing of VFPA’s self-affirming science and devaluing of ECCC’s independent science spread to the [RBT2 Panel Report](#). Its analysis even gives credence like this: “The Proponent predicted that, with mitigation, the Project would result in a negligible adverse effect on Western sandpiper and Pacific dunlin.” But *the Proponent has failed to demonstrate effective mitigation!* And they’ve had *since 2003* to act! The Proponent, VFPA, has given ECCC no reason to update its warning about the risks of RBT2 (our Topic C). Judging from the way the panel’s analysis ends (on page 243), this is their key factor:

There exists considerable uncertainty around the possibility that loss of productive biofilm habitat could be mitigated by the large-scale re-creation of biofilm habitat capable of supporting shorebirds, including appropriate bottom sediment characteristics and salinity conditions. [That factor should trigger the *precautionary principle* (Topic A).]

Fortunately, the RBT2 Review Panel also states that “The protected status of the Western sandpiper under the Migratory Birds Convention Act, 1994, in the context of an apparent steep population decline mandates a highly precautionary approach in relation to the Project” (p. 242). Yes! In that statement, the panel actually mandates that the *precautionary principle* be applied.

The panel doesn’t *explicitly* repeat it, but ECCC has reiterated a specific aspect of its RBT2-related precautionary approach since 2004: that the RBT2 Proponent use a terminal configuration that avoids the causes of risk. It’s feasible to implement very well, even at lower cost, as Global Container Terminals (GCT) has shown in its Deltaport Berth 4 design. We ask the Minister of Environment and Climate Change and/or Cabinet to apply the mandate: stop or suspend obsolete RBT2—in favour of DP4 (if it’s needed), subject to a valid DP4 approval process. *Note: Topics that follow fill this out.*

## Topic I: Are RBT2's severely effects justified?

On the [RBT2 Public Notice webpage](#), IAAC informs the public about a final step: "If the Minister decides the Project is likely to cause significant adverse environmental effects, the decision on whether the effects are justified will be referred to the Governor General in Council."

To reach its decision, we imagine Cabinet might ask questions like these:

1. Would West Coast ports still meet container-shipping demand if RBT2 is not built?
2. Can RBT2 be rethought to pre-empt unmitigable irreversible risk to the Western Sandpipers?
3. Is RBT2 the best option for the Canadian commitment to positive climate action?

We say #1 "Yes," #2 "Yes" and #3 "No way!" Details: #1 below and Topic J; #2 Topic L; #3 Topic N.

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**The status quo:** Ninety percent of the container volume reaching Deltaport is headed beyond the Lower Mainland, as [VFPA's Cliff Stewart conveyed](#) (p. 6). Container business is increasing much more slowly in Vancouver than in *Prince Rupert*, with its location that enables goods to travel efficiently from Asia to most of the USA and Canada. The Boundary Bay Conservation Committee (BBCC) shows in its IAAC RBT2 [letters of September 2018](#) and [January 2022](#) that "Even the lowest-case forecasts of container growth at the Port of Vancouver are not being realized" (2022, p. 51).

Meanwhile, capacity is growing, with many millions of *new or proposed* TEUs (1 container = 2 TEUs):

- At Prince Rupert, the [Fairview Expansion](#) is adding 1.8 million TEUs. As well, DP World has announced a new terminal for another 2 million TEUs or more "to address Canada's trade capacity needs over the next decade while reducing the risk of future supply disruptions."
- At Port Alberni, the collaborative [Port Alberni Transshipment Hub](#) (PATH) envisions a phased-in 5 million TEUs, with feeder barge service to end-users' West Coast locations.
- At Burrard Inlet, the [Centerm Expansion](#) is adding 0.6 million TEUs, while the [Vanterm Expansion](#) will add 0.2 million TEUs of capability by upgrading equipment.
- At Roberts Bank, GCT has similarly [increased its Deltaport capacity](#)—by 0.6 million TEUs. GCT has also applied to add 2 million TEUs there [via DP4](#) (Deltaport Berth 4).
- *The total is at least 12.2 million TEUs as alternatives for the 2.4 million TEUs of RBT2.*

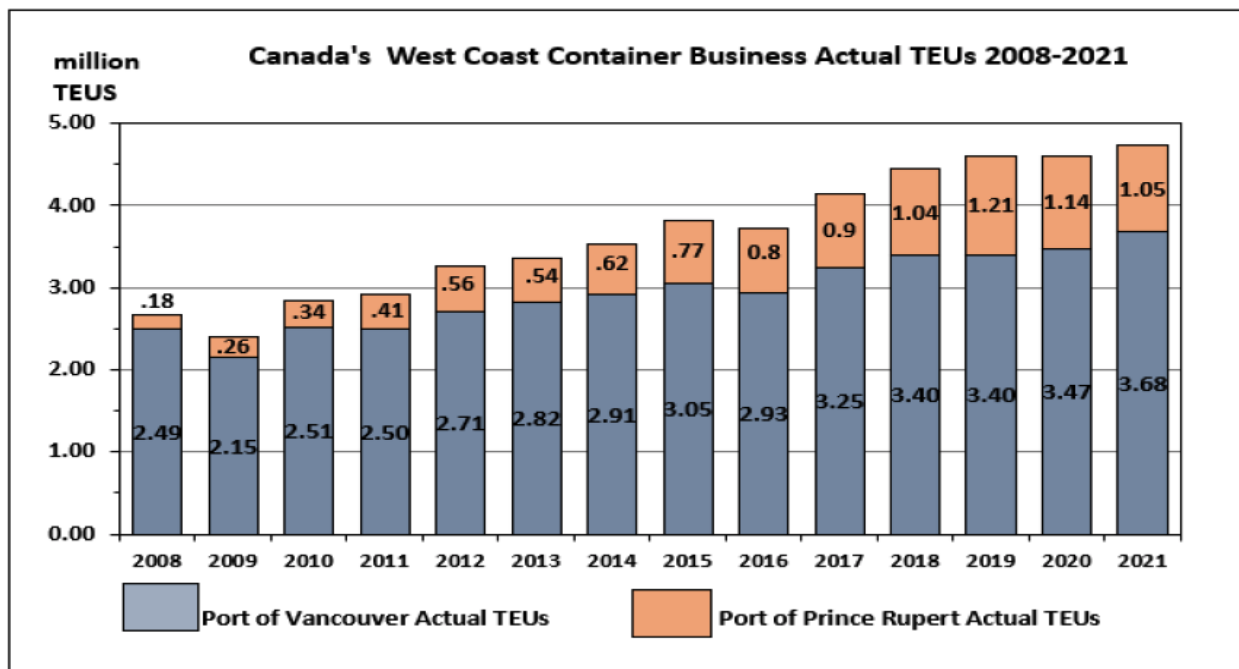
In November 2018, after the Transport Minister sought input to the Ports Modernization Review, [Richmond Council responded: "Create a Western Canada Port Agency](#) to amalgamate the Vancouver Fraser Port Authority and the Prince Rupert Port Authority, to collaborate and develop a Western Canada Strategy that utilizes marine and inland ports" ([Minutes](#), pp. 3–8). [WCPA is like the Pacific Gateway vision](#), from an [expert report](#) to then-Minister David Emerson. It would have evaluated RBT2 in a West Coast context, and it still makes sense.

Later topics will delve into Prince Rupert expansion and Deltaport Berth 4 (DP4). Please see our [April 2019 letter to the RBT2 panel](#) for our analysis of PATH and the Western Canada Port Agency. Coincidentally, we found that the Port Alberni Port Authority (PAPA) had advocated the "Pacific Port Authority" (PPA)—essentially WCPA and David Emerson's [Pacific Gateway and Corridor Initiative](#).

Notes: 1. Ex- MP [Joe Peschisolido](#) (Liberal Ports Caucus Chair) conceived WCPA with Richmond and us. 2. Transport Canada's 2019-on [West Coast Supply Chain Visibility Program](#) is WCPA-like, a start.

## Topic J: Divining the West Coast TEU-capacity needs

From this chart in the Boundary Bay Conservation Committee’s [recent RBT2 comments to IAAC](#) (January 31, 2022, p. 52), we see the average annual growth in container business works out to **Vancouver 2.83% and Prince Rupert 13.425%**. Prince Rupert grew *much* faster than Vancouver!



Roger Emsley, Executive Director of the Against Port Expansion Community Group recently sent out an update linked to a [news release from the Prince Rupert Port Authority](#). Mr. Emsley wrote:

Prince Rupert Port Authority has now formally announced its second container terminal in Prince Rupert. With the Fairview Terminal capacity of 1.8 mill TEUs by 2024 and now a further 2 mill TEU capacity at its second terminal, PR will have a total capacity of 3.8 mill TEU. Add this to the Vancouver area capacity of 5.4 mill TEUs and West Coast Canada will have **9.2 mill total capacity**. That is sufficient for Canada’s trading needs for many decades to come without either RBT2 or DP4.

A recent [Canadian Chamber of Commerce comment](#) to the IAAC’s DP4 panel (January 7, 2022, p. 2) **endorses DP4 and provides the RBT2 Proponent’s current forecast**. It’s copied-and-pasted below:

Container demand on Canada's west coast is expected to grow at a rate of 2.3 per cent per annum until 2035, with continued growth of 1.1 per cent per annum after 2035, based on the latest forecasts commissioned by the port authority. It is critical that Canada take a long-term approach to planning to ensure that our ports are equipped to accommodate future growth.

The 2021 total for the West Coast ports—Vancouver and Prince Rupert—was 4.73 million TEUs (3.68 + 1.05 in the chart’s 2021 column). At the stated average of 2.3% annual growth, the total would reach 6.5 million TEUs in 2035. **At the stated 1.1% annually after that, the total would reach 9.2 million TEUs in 2067.** So the VFPA forecast indicates the current and announced container capacity is enough.

Still, there are stated intentions to add West Coast container capacity (not including RBT2). In topics K–M, we will consider how such expansion can happen relatively well when needed.



The Port of **Prince Rupert** is North America’s **closest port to Asia by up to three days sailing**. It’s 36 hours closer to Shanghai than Vancouver and over 68 hours closer than Los Angeles. So says the [Prince Rupert Port Authority \(PRPA\)](#).

## Topic K: Prince Rupert—*part of a set of solutions*

A tale of three cities:

- In Topic I, we mentioned **Richmond**’s 2018 call for a Western Canada Port Agency, with a reduced role for the Vancouver Fraser Port Authority (VFPA). In Richmond council minutes, the description of [VFPA’s difficult behaviour](#) is extensive (pages 5–8). It includes VFPA buying a sizable fertile Richmond farm to use it as industrial land for port expansion, despite it being in the Agricultural Land Reserve (ALR). That’s not in keeping with Richmond values.
- In **Delta** in February 2022, Delta Council unanimously asked [Mr. Trudeau to deny RBT2 approval](#). Richmond Council had taken similar action ([Minutes Item 11](#)).
- **Prince Rupert** is proud of its port, including the rapid growth in its container business. That’s part of its vision of “Becoming a Global Community.” Since the Prince Rupert Port Authority (PRPA) has foresight, its container capacity keeps growing, with 4 million TEUs in sight and potential for more. And the rail route to Winnipeg (and centres before and beyond) beats Vancouver’s.

We like [the PRPA values](#) too, so we’ll share some here (below and next page, from the PRPA website).

### INNOVATION

Finding new solutions to old problems has always been what sets us apart. We are committed to continuous improvement in the pursuit of excellence through creativity and ingenuity, and effectively manage the risk that may come with innovation.



### TEAMWORK

Our individual talents allow us to reach great heights when we join forces with our coworkers, customers, and community to effectively solve some of the most pressing opportunities and challenges facing international trade together, building a better Canada by growing trade.





PRPA [works with](#) its terminal operator. PRPA states:

[Current expansion and logistics projects](#) are positioning the existing Fairview Terminal as a fully integrated intermodal system that will provide unparalleled speed, efficiency, and competitiveness for Canadian shippers.

Adding significant new capacity through a second terminal will increase industry access to faster service, wider reach, and the consistent reliability of the Port of Prince Rupert.

The projects' development will maximize the value of strategic Prince Rupert attributes such as the shortest marine link to key markets, direct, safe, uncongested marine approaches and harbour, available industrial land with room to expand critical logistics, transloading and warehousing activities, and North American access via CN's Class 1 northern mainline, which has significant capacity to grow.



### Safe Access to Shipping Lanes

Major marine risks are greatly mitigated by the ideal natural features of our harbour. The Port of Prince Rupert has the deepest harbour in North America, is ice-free year round, and is able to accommodate the largest vessels in the shipping trade.

That fits with [Transport Canada's submission](#) to the RBT2 Panel (February 9, 2022). It states:

To meet expected future demand, the Vancouver Fraser Port Authority has approved several expansions to existing terminals, including additional capacity at the existing Vanterm and Centerm terminals that will be completed in 2022. **However, further expansion is reaching natural limits** due to shortages of industrial land in the **Vancouver region**. (p. 8, highlighting added)

The reality: Delta, Richmond and Transport Canada say VFPA and RBT2 have problems.

The city, port and terminals of Prince Rupert say, "We'd love to be part of the solutions!"

## Topic L: How Deltaport expansion got redesigned with DP4

Since 2003–04, as we’ve shown since Topic C, the scientists of Environment Canada (now ECCC) have repeatedly urged the RBT2 Proponent to redesign RBT2. Their key criterion for the Proponent, the Vancouver Fraser Port Authority (VFPA), was that the design pre-empt the unmitigable, irreversible and unacceptable severe threat that RBT2 posed for the Western Sandpipers.

*There is a design that would do that. The proponent has known about it for years but has kept resisting it.*

To us, it seems natural. It looks as though a slot has been waiting for an addition to be slotted-in, much as a Berth 3 addition was slotted into the original two-berth terminal. At right, the photo looks into the waiting slot.



And here’s how an addition fits there:



Global Container Terminals (GCT), who operate the three-berth Deltaport terminal, came up with the design that enables the expansion/upgrade DP4 Project. It is mostly on the other side of the Deltaport causeway to almost all the biofilm and the Western Sandpipers’ foraging area. Unlike an RBT2-size mass of fill, the compact DP4 can be located as shown with less severe effects. We would like it to be entirely (not just mostly) away from the foraging side of the causeway.

In the image, the berth face is on the upper side of the terminal. In DP4, the face would be extended by 540 m to best serve Ultra Large Container Vessels (ULCVs), which shippers increasingly prefer.

GCT would even build DP4 at their own expense. *By making the whole terminal more efficient* (on top of adding a berth), DP4 would increase capacity by 2 million TEUs. With the 0.6 TEUs from GCT’s recent improvements to the terminal, GCT’s Deltaport expansion would exceed the proposed RBT2’s 2.4 million TEUs. (Like the illustrations, the details are from a [GCT proposal](#).)



## Topic M: More DP4 grounds for guarded promise

**For context:** At its growth rate charted in Topic K, Prince Rupert’s container business could expand from just over a million TEUs in 2021 to well over 4 million TEUs a decade from now. The Prince Rupert team is ready to handle the bulk of West Coast container growth.

Still, a tenth of the containers arriving at Deltaport stay in the Vancouver area (says VFPA). And, no doubt, a far larger portion than that will keep preferring Vancouver terminals if VFPA works with GCT to keep making Deltaport versatile, such as with DP4 and [short sea shipping \(video 1:53\)](#).

In that context, it’s fitting that GCT would add capacity in DP4 phases that match demand—if and when needed. (In comparison, all the fill for RBT2 would get dumped into the estuary at a single early stage. And RBT2’s footprint would be 1.2 km<sup>2</sup> larger than DP4’s.)

Although the DP4 design pre-empts RBT2’s unmitigable and irreversible species-level threat to the Western Sandpipers (among other ecological and climate benefits), DP4 doesn’t yet promise a net-positive effect on the Fraser River Estuary ecosystem. But maybe it could! By displacing RBT2, DP4 would stop \$3.5 billion from being wasted on RBT2. That’s a game changer if the powers-that-be apply the windfall to a new enhanced [Fraser River Estuary Management Program](#) (FREMP).

ECCC could then act on the [Delta Council request](#) for “a regional environmental assessment of Fraser River Estuary and Salish Sea” and “a long-term environmental plan for the region” (p. 2). For an overview of challenges that FREMP participants would be empowered to face, we recommend [Let the Fraser Live](#), which we helped write a few years ago.

With DP4 (a) proving the folly of RBT2 and (b) blending economy and ecology with FREMP, the UN might eventually designate the Fraser River Estuary as a [UNESCO Biosphere Reserve](#). (See Topic N.) **That said, our regard for DP4 potential still depends on the sort of thorough valid environmental assessment that RBT2 should have had.**

## Topic N: The climate emergency factor

We see that awareness of *climate-change effects* on the natural world—life as we know it—is growing. Our grassroots action includes daily awareness-sharing as the [Garden City Conservation Society](#), especially through our Facebook presence. We highlight what Nature bestows, including in the Fraser River Estuary and the river and sea that meet there. *Saving that is a motive for climate action.*

However, educating about biodiversity in peril from climate change becomes less credible if the powers-that-be allow powerful interests like the autocratic RBT2 Proponent to risk species-level damage *instead of* designing projects like Deltaport expansion in ways that preclude the risk.

As well, the Proponent and other RBT2 enablers do *not* demonstrate awareness of the high cost *in greenhouse gas emissions* to build RBT2. For obvious reasons, its construction would far exceed the toll in GHG emissions (per million TEUs) of the DP4 and Prince Rupert alternatives. That alone should rule out RBT2, since Canada is committed to climate action.



“[Spawn](#),” at left, is by [Di](#), Howe Sound artist-environmentalist. Di’s painting reflects [Howe Sound Biosphere Reserve](#) thinking that melds Conservation with Climate Action and Sustainable Development. “Spawn” shows salmon in literally the big picture of spawning. Anyone can look at “Spawn” and intuitively want to conserve the wonder of the nature-designed ecosystem it celebrates.

Although the Fraser River Estuary is more industrialized than Howe Sound, there are ways Howe Sound too was in woeful shape before its shift to recovery.

For the Estuary, a turn-around will take a new FREMP, cooperatively goal-oriented like the original FREMP, plus further heeding of the Richmond and Delta advice we’ve cited. As we’ve suggested before, if there must be Deltaport expansion, DP4 could become a model of best practices.

As our Sandpiper guests show us when they fly back to northern Alaska, a lot can happen with collective action—in tune with nature—for a common goal.

Image courtesy of [Art by Di](#).



## Topic O: “Conditions”

### Potential conditions under the *Canadian Environmental Assessment Act, 2012*

The Impact Assessment Agency of Canada is contemplating the following potential conditions in relation to the Roberts Bank Terminal 2 Project (the Designated Project) located in British Columbia for recommendation to the Minister of Environment and Climate Change (the Minister) for inclusion in a Decision Statement issued under the *Canadian Environmental Assessment Act, 2012*.

- 10.1 The Proponent shall carry out the Designated Project in a manner that protects migratory birds and avoids injuring, killing or disturbing migratory birds, destroying or disturbing their nests or eggs, or taking them. In this regard, the Proponent shall take into account Environment and Climate Change Canada’s *Avoidance Guidelines* to reduce the risk to migratory birds. The Proponent’s actions when carrying out the Designated Project shall be in compliance with the *Migratory Birds Convention Act, 1994*, the *Migratory Birds Regulations* and with the *Species at Risk Act*.
- 10.2 The Proponent shall document, prior to construction and in consultation with internationally recognized and published experts on biofilm ecology, Indigenous groups, and Environment and Climate Change Canada, methods and best practices to create biofilm habitat, including details about the production of lipids, with specific reference to fatty acids in the Fraser river estuary. The Proponent shall publish a document compiling the results of its research on its website and shall provide it to the Agency prior to construction. The Proponent shall incorporate current knowledge peer-reviewed science in the document and shall update the document at years 2, 5, and 10 following the end of construction based on emerging knowledge and science, including science developed as part of condition 10.14.

In the 48 pages of [potential RBT2 conditions](#), only the above two conditions are related to Western Sandpipers and biofilm. The final conditions are similar.

They hardly even hint that “[the unmitigable species-level risk to Western Sandpipers](#)” exists. In brief:

- 10.1 is a condition that the RBT2 Proponent follow Canadian law (as Canadians do anyway).
- 10.2 is a condition to publish, on a VFPA website, current research about biofilm habitat, etc.

**That adds up to *nothing* useful.** In contrast, useful conditions would require measured achievement of a set of standards. In other words, they would require *proven steps and demonstrated results*. Together they would end the serious unmitigable species-level risk to Western Sandpipers. The BC conditions could still require, prior to approval, (a) completion of an ECCC-approved prototype of the set of methods and (b) a bond that’s sufficient to ensure the set of methods get implemented.

Or **someone could redesign so the habitat isn’t lost, as ECCC has pointed out for at 20 years and as GCT has meanwhile *done* (via DP4), though with the Proponent opposing instead of heeding.**

The weak “potential conditions” re Western Sandpipers epitomize the surreal dearth of validity in the RBT2 assessment. **DP4 could offer a new path to validity if DP4 is needed.**

## Topic P: Roberts Bank Science, RIP?

Even after the release of the Review Panel Report of Roberts Bank Terminal 2, the Delta-based scientists of Environment and Climate Change Canada (ECCCC) kept responding to the supposed RBT2 science financed by the Vancouver Fraser Port Authority (VFPA). In an [October 2022 letter](#), the ECCC scientists refer back to their February 2022 advice to VFPA via the federal assessors:

The changes predicted as a result of the Project would likely constitute an unmitigable species-level risk to Western Sandpipers, and shorebirds more generally. The only apparent way to reduce the likelihood of these impacts is for the Proponent to consider further Project redesign options to maintain the current salinity profiles, which would support a comparable quality and quantity of biofilm on Roberts Bank. (p. 1)

The ECCC advice goes on patiently for 22 pages, and it's consistent with their advice for 20 years. Other independent scientists (experts not paid by VFPA) also keep trying to get science heard. One such scientist is Patricia Baird, PhD, the SFU researcher who is the Director of Kahiltna Research Group. In March 2014, she sent a revealing 23-page [letter to Hon. Steven Guilbeault](#), ECCC minister. She included a lot about the biofilm and diatoms we mentioned on page 9 of this analysis.

One can tell that Dr. Baird (shown below with a penguin) was applying scientific skills to the “science” that VFPA buys. It seems that “science” has no value for conservation of the Fraser Estuary.



An example from Dr. Patricia Baird's letter:

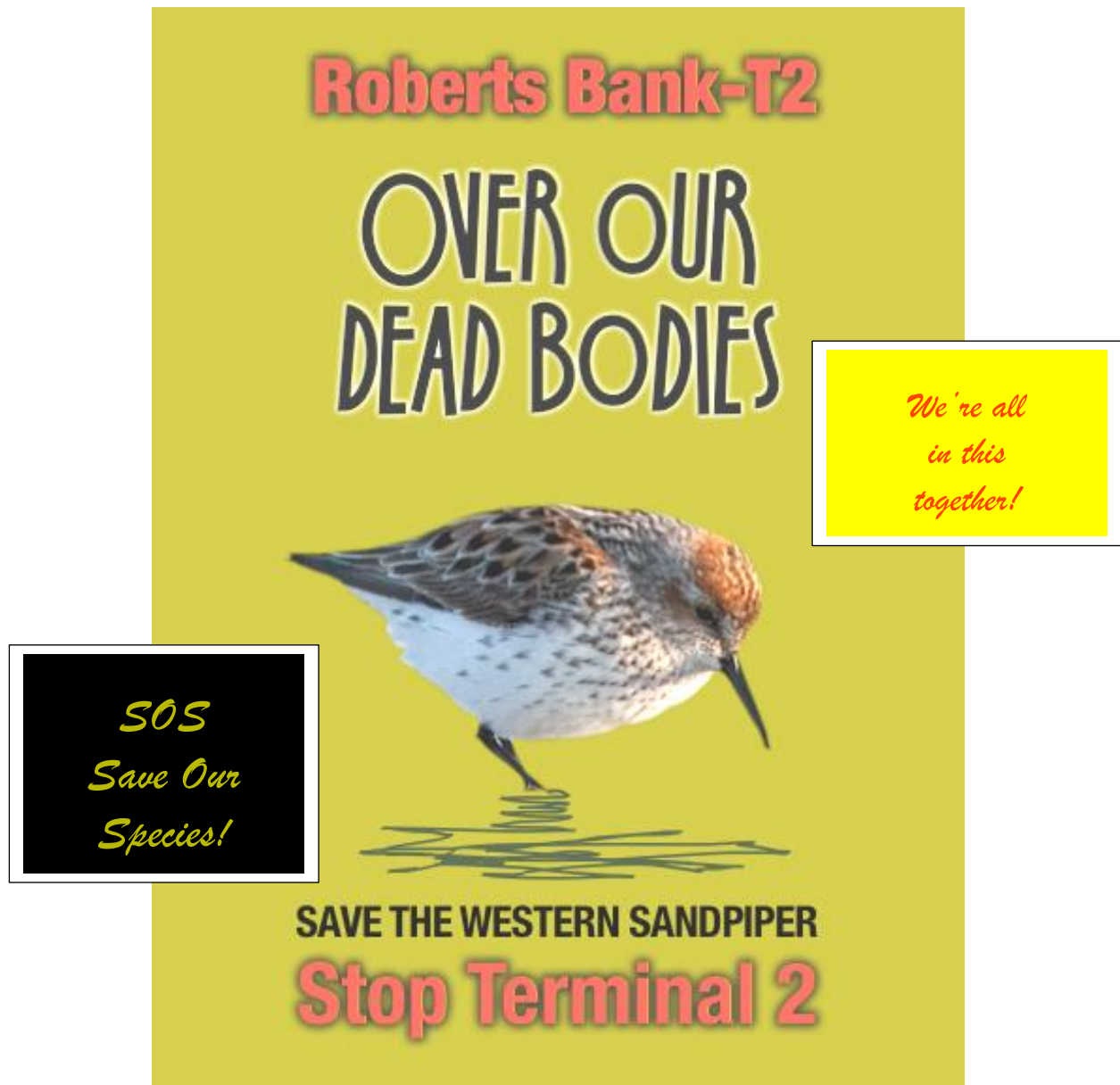
The Proponent's modelled scenarios show that all future conditions that will exist if RBT2 goes forward will have salinities far below what is necessary for high-LCPUFA-producing diatoms in biofilm to be able to live. And this in turn will have severe and un-mitigatable effects on the estuarine ecosystem from zooplankton to fish to shorebirds, as well as to fish, marine mammals, and seabirds in the adjacent Salish Sea.

Therefore, using the Precautionary Principle, the VFPA should not be allowed to go forward with their proposed RBT2 project. . . . (p. 14)

The Precautionary Principle is relevant because some aspects of what happens with the diatoms and fatty acids and migrating shorebirds are hypotheses, but the ECCC scientists, among others, could confidently apply the knowledge twenty years ago and know more now. Furthermore, the unmitigable damage is now known to be even more extensive. And there is no reason to take risks, since there are various ways to meet the future demand for container capacity (the purpose).

Whatever hold the Vancouver Fraser Port Authority has over the Federal Cabinet to get them to approve RBT2, it does not appear rational. VFPA will be aiming to apply the same hold over the BC Cabinet, but **Cabinet has the power to protect the Fraser Estuary in a win-win-win.**

## Topic Q: Final words from our guests



Three last thoughts, with thanks to our scribes, [Birds Canada](#):

- We Western Sandpipers don't all need to stop at Roberts Bank on every trip north, but most of us need to stop here sometime in our lives.
- No one managed to replicate our biofilm grazing area when they had reason to show they could, so we're pretty sure they won't ever do it.
- Please also care about Pacific Dunlins and other birds, fish and mammals in our biofilm-related guild, including you humans. Act on the SOS for *all* of us.

## Preview of the **Mary Taitt Analysis**

Mary Taitt is director of the Boundary Bay Conservation Committee. She knows firsthand the history of Roberts Bank and Fraser Estuary and Lower Fraser habitats. She commends BC's vision in creating the Crown Provincial Reserve and the Wildlife Management Area there. She wonders why BC's cabinet would even consider supporting the federal government's "abdication of environmental responsibilities there" with RBT2.

As Ms. Taitt shows, promised mitigations at and around Roberts Bank don't happen. Also, the federal approval allows damage that the RBT2 Panel Report found not mitigable. Even for what is mitigable, history makes it predictable that the project "conditions" won't help.

Ms. Taitt's list of Prince Rupert advantages over Vancouver and other West Coast ports add up to "the Rupert Advantage."

Ms. Taitt addresses the weakness of the public process, which has given almost no weight to the insights of citizens who have delved deep into RBT2 as a public service.

**We're now HERE in The *Beyond RBT2* Kit:**

Preview of the Keynote Analysis

Preview of the Sandpiper Analysis

**Preview of the Mary Taitt Analysis**

Preview of the Susan Jones Analysis

Preview of the Roger Emsley Analysis

Preview of the PAPA PATH Analysis

Preview of the Jim Wright Analysis

**Beyond RBT2 Kit analysis by Mary Taitt, Boundary Bay Conservation Committee (BBCC)**  
originally for BC Environmental Assessment Office (BCEAO) re Roberts Bank Container Terminal 2

**Historically, BC recognized the value of priceless habitats on/near Roberts Bank:**

1. **52 years ago** (in 1961) by declaring **9,545.6 ha** of "land, foreshore and land covered by water" a Crown Provincial Reserve (No. 0228783 OIC 2374/1961) for game management purposes under Section 11.
2. **46 years ago** (1977) the province declared **24,580 ha** (all of Roberts Bank south to the USA border) by Order-in-Council 908, No. 2405647 Environmental Impact Assessment area.
3. And finally, after a 15-year delay (for the Port?), the province designated **8,704 ha** in **2011** as a Wildlife Management Area (**WMA**) "**To conserve the ecological integrity of Roberts Bank in perpetuity**". There are now large holes in the WMA allowing for all the Port expansions since then. This in a marine tidal environment and allowing port expansion in "holes carved out of the WMA" is ecological nonsense and has destroyed the ecological integrity of Roberts Bank forever.

Since then, BBCC together with other conservation groups pursued international recognition for the Fraser River Estuary habitats, especially Roberts Bank that is the front and centre of the Estuary:

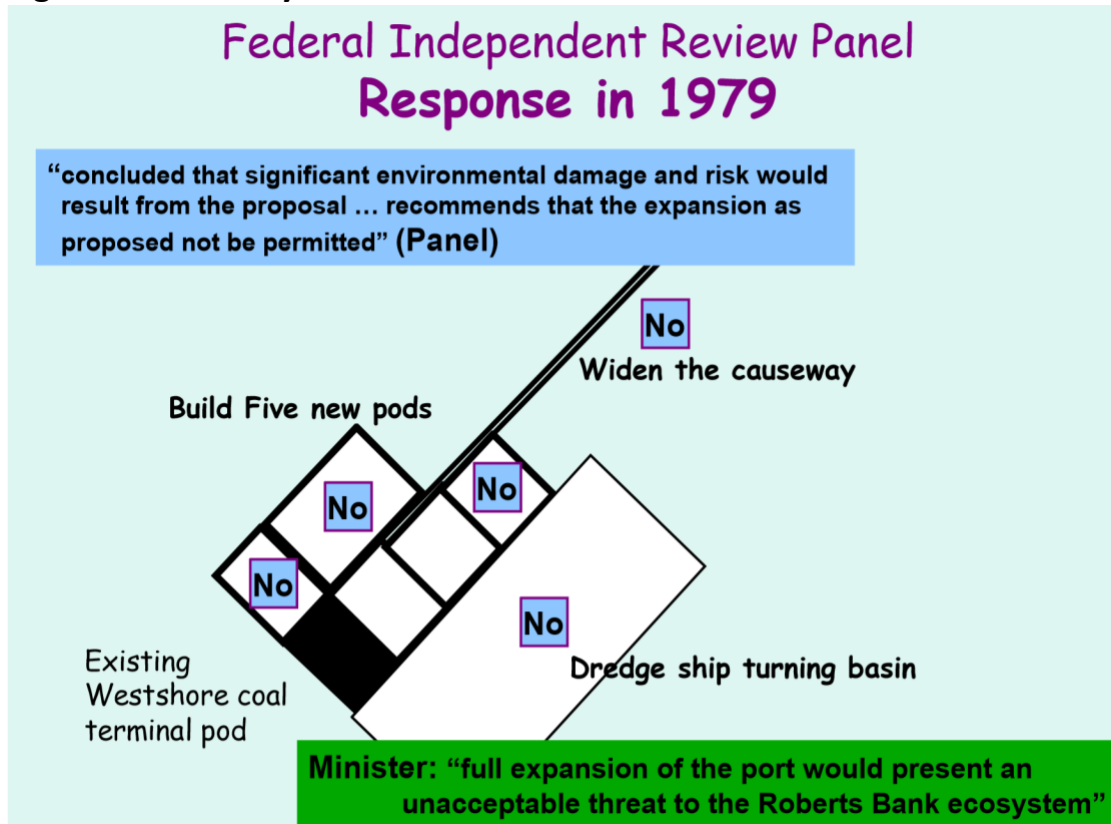
1. In **2001**, Birdlife International declared the Fraser River Estuary: Boundary Bay, Roberts Bank and Sturgeon Bank an Internationally Important Bird Area (IBA). Out of 597 IBAs in Canada the Fraser Estuary is the most significant but for how much longer?
2. In **2004**, the Western Hemisphere Shorebird Reserve Network (WHSRN) gave the Estuary its highest designation as a **Hemispheric WHSRN Site**.
3. In **2012**, the whole lower Fraser River Delta was declared a **Ramsar site** by the International Convention on Wetlands but after 11 years Roberts Bank, the front and center of this estuary ecosystem, is still excluded; this is an **international disgrace**.

Over the last 40+ years, at great cost to Canadians, environmental assessments have been conducted on Roberts Bank for port developments, first by a **Panel of six experts in 1979** and then a **Panel of four experts in 1996**.

The 1979 six-member Federal Environmental Assessment Review (FEAR) Panel 44 years ago:  
***"concluded that the potential impacts on the Fraser River estuary ... are too great to recommend that the port expansion be approved as proposed. The extent and ecological significance of the Fraser River estuary, particularly its use by fish and wildlife, make it Unique in North America."***

That 1979 Review Panel was explicit about what development **must not take place**, see Figure 1. The Minister clearly supported the panel and its recommendations.

Figure 1. Summary of 1979 FEAR Panel's Recommendations.



### Schedule A. Draft certified project description

The project description of BCEAO's *Schedule A. Draft Certified Project Description for the Roberts Bank Terminal 2 Project* contravene the 1979 Federal Review Panel's recommendations. From **page A-3**:

"1.2 The Project includes the Construction and Operation of the following components:

- a) A three berth Marine Container Terminal with a throughput capacity of 2.4 million
- b) twenty-foot equivalent containers annually;
- c) b) A widened Roberts Bank Causeway to accommodate additional road and rail
- d) infrastructure to link existing road and rail networks to the Marine Container Terminal; and
- e) c) An expanded tug basin to accommodate additional tugs."

From Figure 1,

it is clear these Project components contravene the 1979 Federal Panel's recommendations:

Regarding component a) the Panel clearly stated that there should be **no port development on the North side of the causeway**.

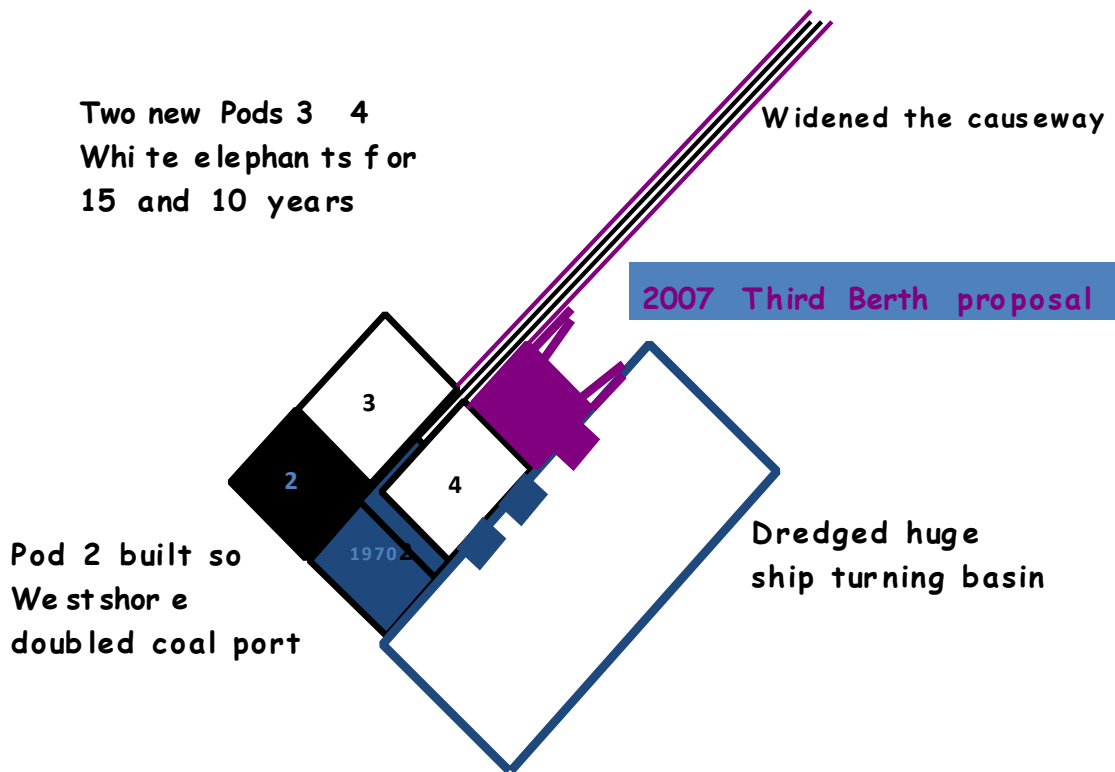
Regarding component b) the Federal Panel said there must be **no widening of the causeway**.

Regarding component c) **no dredging** must be done in the inter-causeway area.

Since 1979, members of BBCC have observed many years of unregulated port development, cumulative environmental destruction and promised but unfulfilled environmental mitigations on Roberts Bank, the center of the world class ecosystem of the Fraser River Estuary. It seems to us that responsible environment agencies of the Canadian and BC governments appear to acquiesce rather than regulate, enforce or even stop this habitat destruction.

- How was the environmental destruction summarized in Figure 2 allowed to happen?
- How can the BC government now consider further cumulative destruction of the priceless Roberts Bank environment?

**Figure 2. Summary of Cumulative Port Destruction of Habitats on Roberts Bank.**



*Given*

- (a) the BC government's vision and foresight 50+ years ago to protect Roberts Bank by declaring it a Crown Provincial Reserve and
- (b) more recently a provincial Wildlife Management Area (WMA) "**to conserve the ecological integrity of Roberts Bank in perpetuity**",

*how could*

- (c) the current BC Cabinet support the federal government's abdication of its environmental responsibilities by allowing any further Port development on Roberts Bank as per Schedule A?

The public and members of BBCC have observed environmental mitigations that have never been done by the Port over the last 50 years on Roberts Bank:

- e.g., putting **culverts through causeways** that now block vital fish passage along the foreshore,
- e.g., **burying overhead transmission wires** that slaughter birds, especially flocks of internationally migrating shorebirds that cross over the causeway),
- e.g., the long demanded, thorough, independent, scientific **Cumulative Impact Assessment** of the damage done by unresolved environmental issues arising from port developments here over the last sixty years,
- e.g., the **serious increasing erosion of the Inter-causeway Foreshore** which threatens the stability of SW Delta as well as the loss of more vital foreshore habitats, and
- e.g., **re-establish the fine particulate monitoring station on Roberts Bank** to measure cumulative fine particulate air pollution by the VFPA's ships, trains, trucks and coal dust.

It is unconscionable that neither the federal nor provincial governments have demanded that these mitigations be addressed before any new port developments are advanced.

The federal Review Panel for the Roberts Bank Terminal 2 Project concluded on March 27, 2020:

**“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.”**

Given the history above and the current Review Panel's conclusions, no responsible government in the world would even consider any further port development proposals on Roberts Bank.

BBCC members are incredulous that the BCEAO are considering further port development (RBT2) in the internationally acclaimed and designated Roberts Bank ecosystem.

### **Prince Rupert—more sustainable alternative BC port**

Surely, we must first do a comprehensive economic study of West Coast ports to evaluate the “need for the Project”, “alternatives to the Project”, especially those that use of the “best available technologies”, and are “technically and economically feasible” before we build any more port projects in the Lower Mainland, including the VFP's Terminal 2 Project?



For example, BBCC understands that the marine industry refers to “The Rupert Advantage” because of its location and intermodal capabilities. We must not ignore the facts:

1. The fastest transpacific trade route hub is the Port of Prince Rupert. It is the closest North American West Coast port to Asia. Polluting ships can **save up to 60 hours sailing time**.
2. Prince Rupert has **short, deep, protected approaches** from the Pacific in contrast to the long, at times narrow, Salish Sea route through vital, protected fish and wildlife habitats to Roberts Bank.
3. The Port of Prince Rupert has the deepest natural harbour in North America and is able to **accommodate the largest vessels in the shipping trade**.
4. The rail connection to Northern BC, across Canada and to the Midwestern United States **is faster and less congested**, and it goes through relatively easier terrain than the rail route from congested Vancouver eastwards.
5. The Port of Prince Rupert is expanding its Fairview Container Terminal.
6. It has **expanded its shore power capacity** to DP World Prince Rupert’s Fairview Container Terminal. “The ability to plug in large container vessels to shore power while at either terminal berth is forecast to reduce carbon emissions by almost 30,000 tonnes annually, as well as other air emissions related to vessel exhaust such as nitrogen oxides and particulates, from the local airshed.”<sup>1</sup>
7. DP World and the Prince Rupert Port Authority are planning a new container terminal. **“The new terminal** is set to be a low impact, **fully electric facility**. It will combine cutting-edge technologies with a unique intermodal operating model to facilitate an efficient and sustainable transportation network. The second terminal is anticipated to double the Port of Prince Rupert’s overall container capacity, adding at least 2 million TEU annually.”<sup>2</sup> **“This second terminal will also set a new standard for sustainable operations** – with minimal environmental and community impact. We are creating a fully integrated trade ecosystem within port boundaries, which **will become the preferred option for Canadian exporters and importers.**” said Maksim Mihic, CEO & General Manager, DP World (Canada) Inc.

In summary: With the Fairview terminal capacity of 1.8 mill TEUs by 2024, there will be a further 2M in TEU capacity at its second terminal. Total Prince Rupert capacity will be 3.8 M TEU.<sup>3</sup> Add this to the Vancouver area capacity of 5.4 M TEUs and West Coast Canada will have over 9 M TEU total capacity. Surely this will be sufficient for Canada’s trading needs for decades to come without anyone ever building RBT2 in the middle of world class wetland habitats on Roberts Bank.

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<sup>1</sup> Port of Prince Rupert activates shore power to box terminal. Port Technology International. December 21, 2022. By Jack Donnelly

<sup>2</sup> AECOM wins feasibility study for DP World Prince Rupert terminal. Port Technology International. January 17, 2023. By [Margherita Bruno](#)

<sup>3</sup> <https://www.rupertport.com/prince-rupert-port-seeking-to-double-capacity-through-the-addition-of-a-second-container-terminal/>

## International Consultation and Accountability for the Salish Sea

U.S. and Canadian federal governments have stated that they have a unique responsibility to address the trans boundary environmental challenges of our shared Salish Sea ecosystem.

We understand that there are several relevant trans boundary agreements and mechanisms relevant to these responsibilities such as the ***Canada-United States Statement of Cooperation on the Georgia Basin-Puget Sound Ecosystem, the United States-Canada Air Quality Agreement***, and the ***British Columbia-Washington State Environmental Cooperation Council***.

Their **current (2017-2020) Action Plan** focused on:

- a. **Promoting information exchange and coordination**, including the *Health of the Salish Sea Ecosystem Report* and the *Salish Sea Ecosystem Conference*.
- b. **Supporting coordination and information sharing** at the tribal/First Nation, state/provincial, and federal levels.
- c. **Support information sharing activities relating to major federal initiatives and environmental assessments.**

Have these consultations taken place over the joint issues arising from the planned increase in shipping to/from Roberts Bank? Issues such as: **endangered species** which were, as of December 1, 2015, **125 species at risk in the Salish Sea, cumulative air pollution, shipping noise, shipping accidents**, etc. in shared waters. Where are these reported?

### **An example - Threatened Southern Resident Orca Population**

The Salish Sea is home to the endangered population of Southern Resident Orcas that feed off Roberts Bank in the Georgia Strait and which used to spend at least half the year in **Orca Pass** between the Canadian Gulf Islands and the American San Juan Islands. **Orca Pass is in the center of the shipping route** to and from Roberts Bank ports. Increased shipping on the shared waterway will lead to **increased noise, light and air pollution from ships in the Salish Sea/Georgia Basin waterway and air shed.**

The Southern Resident Orca population are one iconic species of international concern in our shared Salish Sea ecosystem. The members are registered as a Species at Risk under Canada's Species at Risk Act (SARA). This population of three Pods (J, K and L) used to feed on Roberts Bank at least twice a week from April to October. All of members of the Southern Resident Orcas used to spend the late spring, summer, fall and early winter in Juan de Fuca Strait, Haro Strait, Boundary Pass and southern Georgia Strait. It has been acknowledged by both the American and Canadian governments as well as many Non-Government Organizations in both countries that this area, often called "Orca Pass", is "critical habitat" for this endangered group of Orcas.

Figure 3. International Shared Stewardship Orca Pass



All the commercial shipping vessels coming to and from Roberts Bank come through “Orca Pass” (Figure 3) emitting sounds in the range of 160 to 210 db. As the National Recovery Strategy for the endangered Southern Resident Orcas says, “sounds in excess of 160 dB have the potential to disrupt marine mammal behaviour, and sounds in excess of 180 dB may cause physical injury”.

Commercial shipping has increased in recent years and can be almost continuous through “Orca Pass”. As well as acoustic pollution these vessels also pollute the air all through “Orca Pass,” so on calm days there is a thick yellow-orange haze that settles through the area. On such occasions, this and other pollutants are added to the sea-surface micro layer that the Orcas have to move through as they breathe.

The Orcas spend much time traveling, feeding and resting along the western shore of San Juan Island. The USA has a sanctuary area there for the Orcas that excludes powered whale-watching vessels. But large commercial ships in Haro Strait can send continuous, loud sounds to the east through the sanctuary to the shoreline of San Juan Island and various other San Juan islands and west to the shores of Vancouver Island and the Gulf Islands of the Canadian National Park. Further, when more than one vessel is in the area, we understand that the sound can be additive.

BBCC members do not see in the ***Draft Summary Assessment Report for Roberts Bank Terminal 2 Project (RBT2)*** any details of engagement with Washington State and the United States Environmental Protection Agency regarding **transboundary issues** associated with RBT2. For example, there is no mention of the *Recovery Strategy for the endangered Southern Resident Orcas*. BBCC cannot understand how the province can assess the effects of RBT2 without an independent, expert, comprehensive environmental impact assessment of the acoustic effects and air pollution of the proposed increases in commercial shipping through the critical “Orca Pass” and Salish Sea habitats. It is not clear or even summarized on page 46 of the **Summary** what international engagements took place and what was concluded.

## Public process – public input

The ***Draft Summary Assessment Report for Roberts Bank Terminal 2 Project (RBT2)*** claims that “**Consultation has been carried out in good faith**”. But members of the BBCC, who have given considerable input over the last 10 years of assessment of the proposed Terminal 2 Project, could not find a list of key issues raised by The public or what provincial initiatives are addressing the public concerns.

“**Good faith**” does not spring to mind when on April 27, 2023 at a news conference, members of BBCC learned that “BC Premier David Eby is in **full support of the approval for the Vancouver Fraser Port Authority’s (VFPA) planned Roberts Bank Terminal 2 (RBT2) project.**”<sup>4</sup> Outrageous might be a more appropriate description of this approval of RBT2 prior to completion of the B.C. assessment **AND** a week before the B.C. EAO had invited public comments from May 9 to June 8, 2023 prior to their completion of the BC Environmental Assessment.

Further, the BC Premier stated that “It will assist British Columbia, ensuring that we continue to have the critical role as the gateway to Asia”. Instead of offering the **vital, world renowned Roberts Bank ecosystem as a doormat to the Pacific Gateway**, the BC Cabinet can veto the federal government’s approval of RBT2. Their action would then uphold BC’s responsibility to International Agreements on the Salish Sea and reinvigorate BC’s own 52-year-old far-sighted first attempts and subsequent protective declarations on the Roberts Bank area.

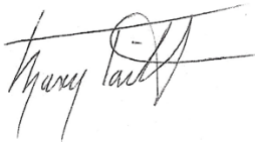
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<sup>4</sup>Delta Optimist, Sandor Gyarmati, May 1, 2023, ‘False choice’ presented on RBT2, says BC premier’.

Perhaps it is time to reject all new port development proposals for Roberts Bank and start protecting its remaining Fraser River Estuary habitats for salmon, national and international migrant birds, endangered Resident Orcas and all the 125 at-risk species in the Salish Sea?

The BC government could start this immediately by completing the long-awaited designation of Roberts Bank as a **Ramsar Site**, i.e., a wetland of international significance. The ridiculous 11-year delay in declaring Roberts Bank a Ramsar site must end because it is front-and-centre of the vital Fraser River Estuary Ramsar Site habitats. Any further delay in this designation is an international disgrace to BC and Canada.

Yours sincerely,



Mary Tait  
Director, BBCC



*J-Pod Orcas - Ruffles and Grannie off Roberts Bank*

**"Let us leave a splendid legacy for our children ... let us turn to them and say, this you inherit; guard it well, for it is far more precious than money, and once destroyed, nature's beauty cannot be repurchased at any price."**

**Ansel Adams**

## Preview of the **Susan Jones Analysis**

Knowledgeable observers of the RBT2 issue know that Susan Jones has written the most informed reports about it for many years. They are in the IAAC and EPIC records, methodically researched, processed and documented. By choosing a few of Ms. Jones' listed issues to explore, one can soon sense that.

An example of Ms. Jones' typical insight is Issue 13, the White Sturgeon. She is astonished the BC EAO is satisfied the Proponent of RBT2 will address its adverse effects on that endangered species. She points out, "There's no science-based evidence that it is possible."

Ms. Jones has used blocks of red type in six of the issues to emphasize some of her deepest concerns.

**We're now HERE in The *Beyond RBT2* Kit:**

Preview of the Keynote Analysis

Preview of the Sandpiper Analysis

Preview of the Mary Taitt Analysis

**Preview of the Susan Jones Analysis**

Preview of the Roger Emsley Analysis

Preview of the PAPA PATH Analysis

Preview of the Jim Wright Analysis

## Roberts Bank Container Terminal 2 Project (RBT2) Environmental Assessment Feedback on the B.C EAO Draft Summary Assessment Reports on RBT2, May 8, 2023

### **RBT2 environmental assessment has *not* met BC environmental accountability.**

#### **Issues this report briefly analyzes:**

- 1.** Environmental Assessment of RBT2 failed to provide a credible Cumulative Effects Assessment
- 2.** Scope of RBT2 failed to incorporate provincial accountability, including to the RBWMA
- 3.** Irreversible Loss of Fraser River Estuary Wetlands
- 4.** Subtidal Wetlands were not assessed
- 5.** BC and Canada Assessment Agencies fail to flag failure of RBT2 Assessment to protect Wetlands
- 6.** RBT2 will cause unmitigable, irreversible, permanent residual effects on wetlands
- 7.** Failure of the EA to provide scientifically-proven, identifiable mitigation measures
- 8.** Failure to assess effects on all shorebirds not reported in the EAO documents
- 9.** Destruction of habitat will exacerbate the decline of Chinook salmon and endangered SRKW
- 10.** Report omits to include importance of biofilm to the health of the Fraser River Estuary
- 11.** RBT2 will alter Roberts Bank Ecosystem resulting in loss of fish, including species at risk
- 12.** Failure of EA to provide credible, identifiable mitigation measures for habitat loss, critical to salmon and SRKW
- 13.** Insufficient Information on ‘threatened’ White Sturgeon
- 14.** Failure to address serious gaps in the environmental assessment of the ‘threatened’ Barn Owl
- 15.** Serious threats to human health from air pollution from RBT2 are not appropriately reported
- 16.** Serious threats to human health from noise pollution cannot be mitigated
- 17.** Serious threats to human health from light pollution cannot be mitigated
- 18.** Failure to address effects of RBT2 light, noise and air pollution on Roberts Bank Ecosystems
- 19.** Significant Adverse Cumulative Effects from Greenhouse Gas Emissions
- 20.** RBT2 will lead to further loss of some of Canada’s best agricultural land
- 21.** Residual, significant, adverse environmental effects on the Estuary and the Salish Sea are ignored
- 22.** Federal and Provincial Conditions are Meaningless in terms of Mitigation
- 23.** Concerns with the process of the B.C. environmental assessment of RBT2
  - Substitution Process is Insufficient
  - B.C. Transferred Roberts Bank wetlands to the Federal Government for RBT2 in 2017
  - Inclusion of Gateway vested business interests in B.C. legal assessment document is inappropriate
  - Premier of B.C. announced approval of RBT2 prior to completion of the BC assessment
- 24.** Draft Summary Assessment Report omits to include level of public concern
  - Contravention of ‘Core Values for the Practice of Public Participation’
- 25.** Claimed Economic Benefits of RBT2 are misleading and the Project will harm existing operations
  - Cost to Taxpayers is \$3.5 billion and counting
- 26.** Conclusions of the Draft Summary Assessment Report gloss over devastating effects of RBT2
  - The EAO Draft Summary Report fails to raise a red flag warning of serious, unmitigable effects
- 27.** Resources and values in the Fraser Estuary and Salish Sea will no longer be available for future generations

## 1. Environmental Assessment of RBT2 failed to provide a credible Cumulative Effects Assessment

Cumulative Effects of the Roberts Bank Container Terminal 2 Project (RBT2) t, required under *Section 11(2)(b)* of the *BC Environmental Assessment Act, 2002*:

*“...the potential effects to be considered in the assessment, including potential cumulative environmental effects;”*

And *Section 19(1)(a)* of the *Canadian Environmental Assessment Act 2012 (CEAA 2012)*:

*“...any cumulative environmental effects that are likely to result from the designated project in combination with other physical activities that have been or will be carried out;*

have not been appropriately incorporated, or addressed, in the environmental assessment reports. The Environmental Assessment (EA) of the Roberts Bank Container Terminal 2 Project (RBT2) fails to meet federal and provincial assessment requirements. Residual significant environmental effects of the Project will negatively impact human health, and will irreparably harm the ecosystems of the lower Fraser River, estuary, and Salish Sea.

RBT2 will cause further degradation of the interactive, interdependent ecosystems that have international, national, and provincial significance. This is recognized with designations, signed agreements, and initiatives that merit acknowledgement and enactment. These include, but are not limited to:

- a. Fraser River Estuary: Canada’s top Important Bird Area (IBA)
- b. Ramsar Wetland of International Significance (RAMSAR)
- c. Western Hemisphere Shorebird Reserve Network (WHSRN) site
- d. Roberts Bank Wildlife Management Area
- e. Burns Bog Ecological Conservancy Area
- f. Pacific Salmon Treaty
- g. Trilateral Committee for Wildlife and Ecosystem Conservation and Management Treaty
- h. Convention of Biological Diversity
- i. The North American Bird Conservation Initiative (NABCI Canada)
- j. U.S.-Canada Cooperation in the Salish Sea
- k. Federal Policy on Wetland Conservation
- l. Conservation Measures for Fraser River Chinook
- m. National Accord for the Protection of Species at Risk
- n. Canada-British Columbia Agreement on Species at Risk
- o. Canada – British Columbia Fish Habitat Management Agreement
- p. Wetland Stewardship Partnership
- q. Fraser River Estuary Management Plan
- r. The Georgia Basin Action Plan
- s. Environmental Cooperation Agreement between B.C. and Washington State
- t. Statement of Cooperation on the Georgia Basin and Puget Sound Ecosystem
- u. Canada-U.S. Cooperation in the Salish Sea
- v. Federal/Provincial White Sturgeon Plan



Unfortunately, these, and other, laws, policies, designations and signed commitments have been effectively ignored in the Environmental Assessment (EA) of the Roberts Bank Container Terminal 2 Project (RBT2). The BC EAO Draft Assessment Report and the Canadian Environmental Assessment Agency documents omit to disclose that legal and signed commitments should have been effectively and legally incorporated into the RBT2 EA.

We have a duty to protect this region that is already experiencing serious, ongoing demise.

Designations and Agreements were not effectively incorporated into the environmental assessment with scattered information and lip-service to cumulative effects.

The Environmental Assessment Office (EAO) Draft Summary Assessment Report should include how we are ethically accountable to these commitments; the *CEAA 2012 Precautionary Principle*; and the need for a credible cumulative effects assessment based on proven science.

## **2. Scope of RBT2 failed to incorporate provincial accountability, including to the RBWMA**

The Draft Summary Assessment Report omits to address the lack of proper scoping for the RBT2 Environmental Assessment. The effects of the Project on British Columbia are far-reaching, from the watershed in the Rockies to the Pacific.

There will be significant, residual adverse environmental effects on endangered Southern Resident Killer Whales; salmon; fish habitat; unique biofilm that supports Western Sandpipers; and millions of migratory waterfowl and shorebirds. Also, there will be far-reaching effects on air and water quality, as well as social and health impacts on immediate communities, and B.C communities along truck and rail routes.

The Review Panel Report mentioned potential adverse effects on wetlands, but failed to acknowledge that the Scope of the assessment did not include an assessment of the critical habitats, and affected species, of the Roberts Bank Wildlife Management Area (RBWMA). Subtidal wetlands and cumulative effects on wetlands were not assessed.

Effects on coastal birds were not assessed. The Review Panel requested that the Proponent, the Port of Vancouver, perform a cumulative effects assessment for coastal bird subcomponents but the Port failed to comply.

Effects on the Western Sandpiper and Pacific Dunlin were assessed but there was no assessment of all shorebirds and their reliance on critical habitats of the estuary, including the RBWMA.

The B.C. EAO Draft Summary Assessment Report fails to flag the importance of the RBWMA and the failure to assess the effects of RBT2.

### Importance:

“The WMA is also a main entry channel into the Fraser River for one of the largest salmon runs in the world, where more than 800 million Sockeye, Chum, Chinook, Pink and other salmon migrate through each year, using the tidal marshes for food, shelter and acclimatization to salt water. Other fish drawn to Roberts Bank include White Sturgeon, Green Sturgeon, Steelhead and anadromous Cutthroat trout. Visiting herring, eulachon, flounders and sculpins are a food source for diving and wading birds. Sea mammals such as endangered Killer Whales, Harbour Seals, California Sea-lions, Muskrat and Beaver, and terrestrial mammals such as Creeping Vole, Townsend's Vole, Eastern Cottontail, Striped Skunk and Coyotes also frequent the WMA.”<sup>1</sup>

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<sup>1</sup> B.C. [Roberts Bank Wildlife Management Area](#).

**Effects of RBT2, submitted by the B.C. Ministry of Forests, Land, Natural Resource Operations and Rural Development (FLNORD):**

“FLNRORD commented that the tidal ecosystems of the estuary were mostly under provincial jurisdiction in provincial wildlife management areas. FLNRORD anticipated both direct and indirect effects from the Project on environmental components within the Roberts Bank Wildlife Management Area. Direct Project effects would include the destruction of ecosystems and indirect effects would affect biofilm, tidal marsh, and sedimentation processes.”<sup>2</sup>

Submissions from the public requested a wider scope of assessment. and more specific information in the Terms of Reference. These were ignored.

Assessment of shipping routes was added to the scope late in the process. However, it was clearly stated that the Proponent had no accountability to environmental effects in the expanded scoping area, namely the Salish Sea.

The Draft Summary Assessment Report should include specific information on all these effects on B.C. and how the province will address these impacts, as well as costs to taxpayers.

### **3. Irreversible Loss of Fraser River Estuary Wetlands**

According to the ‘Federal policy on Wetland Conservation’, 70% of the Pacific estuary marshes are already gone or degraded. The policy commits the Government of Canada to the goal of ‘no net loss of wetland functions’ on federal lands and waters. It also commits to securement of wetlands of significance to Canadians.<sup>3</sup>

Accountability to the ‘*Federal Policy on Wetland Conservation*,’ was mentioned but it was not incorporated into the RBT2 Environmental Impact Statement (EIS); the Review Panel Report; or government environmental agencies’ reports.

Wetlands were not appropriately assessed, thereby omitting Canada’s commitments under the ‘*Federal policy on wetland conservation*’:

“... Wetlands and wetland functions are inextricably linked to their surroundings, particularly aquatic ecosystems, and therefore wetland conservation must be pursued in the context of an integrated systems approach to environmental conservation and sustainable development efforts.

...Wetlands are critical to federal responsibilities for maintaining the quality of the environment, migratory bird populations, inland and ocean fisheries, and international or transboundary resources such as water and wildlife.”<sup>4</sup>

### **4. Subtidal Wetlands were not assessed**

The B.C. Environmental Assessment Office (EAO) Draft Report omits to include the information that subtidal wetlands were not assessed.

The assessment of the Fraser River estuarine wetlands was piecemeal leading to contradictory statements and conclusions. This is the result of an environmental assessment that deliberately partitions the assessment, and then fails to incorporate the fact that all the regions of an estuary function interactively and depend on the continuing health of the entire region. This is the reason for the *CEAA 2012* Precautionary Principle, and the necessity of a credible Cumulative Effects Assessment which is lacking in the RBT2 assessment and government reports.

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<sup>2</sup>[Review Panel Report](#), RBT2, Document #2062, March 27, 2020, Scrolled Page 174/627

<sup>3</sup> [Federal Policy on Wetland Conservation](#), Government of Canada, 1991, Scrolled Pages 6 & 9/15, text pages 4&7.

<sup>4</sup> [Ibid](#); 1991, Scrolled pages 8& 6; text pages 6&4.

The B.C. Environmental Assessment Office (EAO) Report recognizes that there will be significant adverse effects on wetlands and wetland functions, including provincially red-listed communities. However, the Report fails to disclose that the RBT2 Environmental Impact Statement (EIS) did not assess the shallow subtidal areas because the Project Proponent erroneously claimed they were not wetlands.

Without credible scientific evidence, and without an assessment, the RBT2 Environmental Impact Statement (EIS) claimed direct losses of marsh habitat would be counterbalanced by gains that would turn up elsewhere as a result of RBT2. The Proponent, the Port of Vancouver, concluded eight provincially listed estuarine wetland species occurred elsewhere so would not be eliminated.

The Proponent, the Port of Vancouver, also disclosed that cumulative effects were not assessed:

“The Proponent concluded there were no residual effects on intertidal marsh and wetlands, therefore cumulative effects were not assessed. Similarly, cumulative effects were not assessed for red-listed marsh communities.”<sup>5</sup>

Without any assessment, or scientific evidence, the Review Panel Report stated agreement with the Proponent:

“the Panel agrees with the Proponent that the loss in productivity from the causeway widening would be counterbalanced by long-term gains resulting from geomorphic changes caused by the Project placement.”<sup>6</sup>

This is inappropriate considering the omission of subtidal assessment; the flawed conclusions by the Proponent on geomorphic changes; and no scientific evidence. There is the consequence of failing to assess effects on interdependent factors such as coastal birds, vegetation, biofilm, fish, numerous marsh species, and effects up and down the food web.

In contradiction to comments on the subtidal assessment, the Review Panel Report, commenting on the partitioned topic of wetlands and wetland functions, states there will be:

“a residual adverse effect on red-listed wetland communities from the widening of the causeway. Given that these communities are provincially endangered, the Panel concludes the residual effect is significant.”<sup>7</sup>

“The Panel concludes that the Project would result in a significant cumulative effect on wetlands and on wetland functions in the lower Fraser River estuary, including provincially red-listed marsh communities.”<sup>8</sup>

Furthermore, the Review Panel Report states irreversible harm to the Roberts Bank wetlands:

**“The Panel considers that Project effect on wetlands and wetland functions would not be fully mitigated, which constitutes a residual effect on wetlands that is high in magnitude, permanent and irreversible.”<sup>9</sup>**

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<sup>5</sup> [Review Panel Report](#), IACC RBT2 Assessment, Document # 2062, March 27, 2020, Scrolled Page 176/627

<sup>6</sup> [Ibid.](#), Scrolled Page 175/627

<sup>7</sup> [Ibid.](#), Scrolled pages 175 and 176/627

<sup>8</sup> [Ibid.](#), Scrolled Page 176/627

<sup>9</sup> [Ibid.](#), Scrolled Page 176/627

The BC EAO Draft Summary Assessment does not include the severity of the irreversible effects of the RBT2 Project on wetlands and wetland functions. It is unacceptable to omit the dire warnings, by the Review Panel, as well as government and independent scientists, of irreversible damage to the Fraser River estuarine wetlands, especially considering that 70% of the Pacific estuary marshes are already gone, and Canada's commitment of 'no net loss of wetland functions' on federal lands and water.

## 5. BC and Canada Assessment Agencies fail to flag failure of RBT2 Assessment to protect Wetlands

Most of the power to protect and conserve B.C.'s wetlands is held by the Provincial Government. While B.C. legislation for protection of wetlands is weak to almost non-existent, there is protection under the *Water Sustainability Act*, where the definition of streams includes wetlands.

There is also provincial accountability under the *B.C. Wildlife Act* to the *Roberts Bank Wildlife Management Area*. Additionally, there are federal/provincial legal commitments to protect endangered and threatened species

The Governments of Canada and B.C. are committed to protect wetlands as signatories to the *Wetland Stewardship Partnership* which states that wetlands:

"make such a vital contribution to social, economic and ecological well-being that we can ill afford to lose more of them..."

... "Wetlands provide essential habitat for wildlife species."

Goals include:

..." commitment of wetland protection and restoration." ...

..." Enhance legal protection of wetlands through effective and effectively enforced laws and policies."<sup>10</sup>

The BC EAO Draft Summary Assessment omits to include the need for the province to be accountable to legislation and policies.

The EAO Report also omits to disclose that the RBT2 environmental assessment failed to credibly apply federal legislation to Wetlands and Wetland Functions, namely the *Canadian Environmental Assessment Act (CEAA 2012)*, the *Migratory Birds Convention Act, 1994*, and the *Species at Risk Act*.

The BC EAO Draft Assessment Report omits to include the important information that the RBT2 Environmental Assessment:

- failed to assess subtidal wetlands;
- failed provide a cumulative effects assessment on red-listed marsh communities;
- failed to provide a credible cumulative effects assessment of the Roberts Bank wetlands and the estuarine ecosystems;
- failed to sufficiently, and appropriately, identify residual, significant, adverse environmental effects on the Roberts Bank wetlands;
- failed to assess effects on coastal birds
- failed to provide credible, scientifically-proven, identifiable mitigation and compensation measures

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<sup>10</sup> [A Wetland Action Plan for British Columbia](#), March 2010, Pages ii; iii; iv.

## 6. RBT2 will cause unmitigable, irreversible, permanent residual effects on wetlands

Federal and B.C. Government scientists documented concerns of serious, unmitigable effects on wetlands. They advised RBT2 will cause large-scale habitat destruction; death of fish; change in geomorphological processes; ongoing loss of wetlands and wetland functions; degradation and fragmentation of vegetation; alteration of sedimentation; and impacts on listed species. They advised these effects could not be effectively mitigated as it is not technically feasible to recreate the estuarine habitats.

The BC EAO Draft Summary Assessment omits to advise that no evidence-based, identifiable mitigation measures have been included in the assessment. The BC EAO Report states that there will be monitoring and maybe compensation if damage is done. The Report advises other non-scientific, subjective measures. This contravenes the *Canadian Environmental Assessment Act, 2012, (CEAA 2012)* which requires scientifically proven mitigation measures.

Mitigation under CEAA 2012:<sup>11</sup> 19 (1) The environmental assessment of a designated project must take into account the following factors: (d) mitigation measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the designated project.

The BC EAO Draft Summary Assessment fails to advise that there are not sufficient, scientifically-proven, identifiable measures to mitigate damage to the complex interactive, interdependent processes that support the Fraser River Estuary wetlands.

## 7. Failure of the EA to provide scientifically proven, identifiable mitigation measures

Ecojustice:

“Mitigation measures are intended to be actual, identifiable measures which will eliminate, reduce, or control adverse effects of a project. Courts have been clear that “vague hopes for future technology” to address effects do not constitute mitigation measures. Vague assurances of adaptive management, further study, and conceptual and unproven ideas do not constitute mitigation measures.”<sup>12</sup>

The failure of the environmental assessment process to produce scientifically proven, identifiable mitigation measures is confirmed in the Schedule B of the B.C. Draft Summary Assessment. The mitigation measures listed in Schedule B are plans to make plans, as well as plans to develop monitoring plans. These vague, subjective intentions that cannot be accepted as legal mitigation measures.

The Proponent, the Port of Vancouver, has been investing in Habitat Banking and hopes to present these so-called new habitats as compensation for destroying a huge chunk of the Fraser River Estuary. The Port has been covering up existing habitats away from Roberts Bank with new plantings. They have invested in foreshore log removal thereby destroying valuable roosting and hunting areas for birds of prey, as well as small mammals and song birds. This demonstrates lack of knowledge of the complex Roberts Bank food web that relies on interactive, interdependent processes that occur as the fresh water of the Fraser River meets the salt water of the sea.

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<sup>11</sup> [CEAA 2012](#), Section 4 (1) and Section 19 (1) (a) & (d)

<sup>12</sup> Ecojustice on behalf of David Suzuki Foundation, Georgia Strait Alliance, Raincoast Conservation Foundation and Wilderness Committee, [Document # 1605](#), Volume 1, April 15, 2019, Para, 39, Scrolled page 17/72

It is not possible to mitigate or compensate the degradation that RBT2 will cause to the complex ecosystems at Roberts Bank in the Fraser River estuary. Over the past 40 years, compensation and mitigation measures in the Fraser River estuary have not been carried out with credible scientific evidence or transparency. It is senseless that they are after-the-fact measures. Once damage is done, critical habitat for plant and animal species is gone.

A Freedom of Information Request confirmed the Deltaport Third Berth Project was continuing the ongoing pattern of habitat loss at Roberts Bank. A provincial government expert wrote:

“News of the abandonment of efforts to attempt to stabilize the ever-increasing areas of the dendritic channel network the intercauseway is of major concern to us. Notwithstanding the parameters related to mitigating the impacts of the DP3 project, this continuing habitat loss and erosion of mudflat, biofilm and eelgrass features are a defacto port-development artefact...

...with respect to the dendritic channels, we realize it has been agreed that historic port development accountability has been discounted and cumulative effects generally of all port developments apparently seem to be of similar prospect...”

“reporting of fish and wildlife elements in the DP3 Project Reporting Updates from...continues to be grossly incomplete (despite repeated input over the last two years)”<sup>13</sup>

The on-site compensation for the intercauseway was not implemented leading to the continuing loss and erosion of mudflat, biofilm and eelgrass features caused by ongoing port activities.

When it came to implementing the “Plan”, the Agencies concluded that the compensation/mitigation plans for the intercauseway between the Tsawwassen Ferry Terminal and Deltaport might not be successful. As a result, the plan was abandoned. It was replaced with a last-minute scramble for offsite compensation which was a totally different set of interactive environmental processes and habitat.

Some, or all, of the \$1.5 million compensation money for loss of fish habitat at Deltaport was given to Ducks Unlimited to improve habitat that is owned and protected by Nature Trust and the B.C. Government. It appears it was used to dig out channels on islands in the estuary that are used for hunting.

The loss of habitat at Roberts Bank at the mouth of the Fraser River is irreplaceable and it is unconscionable that off-site habitat compensation was not a duplicate of the lost habitat.

Now we are hearing the same unscientific, empty commitments with RBT2, even with evidence that RBT2 can't be built without unmitigable, irreversible harm to the Fraser River estuarine ecosystems.

A 2016 study on mitigation and compensation measures on wetlands and riparian habitats in the Fraser River estuary stated;

“Since the 1980's habitat managers have been trying to establish no-net-loss (NNL) of impacted habitat in the Fraser River Estuary but have been unsuccessful. This study found that 2/3rds of compensation sites did not achieve NNL. Studies in Canada, the United States, and across the world have found similar results, that created wetlands are not functioning as well as natural wetlands.”<sup>14</sup>

This critical issue of the requirement of credible mitigation measures is omitted from the B.C. Draft Summary Assessment Report.

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<sup>13</sup> FOI emails, March 2010.

<sup>14</sup> ‘[Assessing Habitat Compensation](#) and Examining Limitations to Native Plant Establishment’, Megan Lievesley, Daniel Stewart, Rob Knight, & Brad Mason, March, 2016, Scrolled page 56/63

## 8. Failure to assess effects on all shorebirds not reported in the EAO documents

The RBT2 Environmental Impact Statement (EIS) did not assess effects on shorebirds with the exception of the Western Sandpiper and Pacific dunlin. The RBT2 EIS, the Review Panel Report, and the 2021 additional information from the Port of Vancouver fail to identify and incorporate:

- 40% decline of shorebirds in Canada since 1970<sup>15</sup>
- Lack of cumulative effects assessment on all 50 species of shorebirds
- Urgent action is required to address the widespread declines in shorebird populations<sup>16</sup>
- Commitment of Canada to no net loss of wetlands under the 'Federal Policy on Wetland Conservation'
- Legal requirements under CEEA 2012, Migratory Birds Convention Act, and Species at Risk Act.

A Report on the State of Canada's Birds reports many vital areas for shorebirds are being lost to coastal developments. The Report recommends conservation actions:

“Protect and restore migration stopover and wintering sites for shorebirds, such as Important Bird and Biodiversity Areas and Western Hemisphere Shorebird Reserve Network sites.”<sup>17</sup>

BC has accountability to shorebirds as they are dependent on the health of the Roberts Bank Wildlife Management Area, areas that are crown provincial, and the overall health of the estuary. Scientists warn that disruption to the estuary from RBT2 will cause unmitigable harm:

“ECCC maintains that predicted Project-induced changes to Roberts Bank constitute an unmitigable species-level risk to Western Sandpipers, and shorebirds more generally, due to the predicted disruption to the salinity regime that supports fatty acid production from biofilm.”<sup>18</sup>

## 9. Destruction of habitat will exacerbate the decline of Chinook salmon and endangered SRKW

The Draft Summary Assessment Report acknowledges findings of the Review panel that a residual adverse effect on Chinook salmon that would be:

“high in magnitude, local in extent, permanent in duration, and irreversible.”<sup>19</sup>

However, the Report does not appropriately flag the serious omission of a cumulative effects assessment of Marine Fish and Fish Habitat.

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<sup>15</sup> [The State of Canada's Birds](http://nabci.net/resources/state-of-canadas-birds-2019/), 2019, The North American Bird Conservation Initiative, Scrolled page 6/12 NABCI Canada <http://nabci.net/resources/state-of-canadas-birds-2019/>

<sup>16</sup> [Conservation Action](https://whsrn.org/about-shorebirds/conservation-action/), Western Hemisphere Shorebird Reserve Network, <https://whsrn.org/about-shorebirds/conservation-action/>

<sup>17</sup> [The State of Canada's Birds](http://nabci.net/resources/state-of-canadas-birds-2019/), 2019, The North American Bird Conservation Initiative, Scrolled page 6/12 NABCI Canada

<sup>18</sup> ECCC, RBT2 EA, [Document #1775, Shorebirds and Biofilm, May 18, 2019, Slide 19/23](#)

<sup>19</sup> [Review Panel Report](#), RBT2, Document #2062, March 27, 2020, Scrolled Page 201/627

The Fraser River estuary is a crucial rearing ground for over 300 species of invertebrates and over 80 species of fish and shellfish.<sup>20</sup> These in turn nourish fish, birds, and mammals throughout the vast interdependent habitats that stretch thousands of kilometers from high in the Rocky Mountains, through the Fraser River watershed, estuary, and Salish Sea to the Pacific Ocean.

RBT2 will cause a chain of adverse effects on these habitats and the species they support.

12/13 species of Fraser River Chinook salmon have been listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) because they are at risk of extinction.

Hundreds of millions of juvenile Chinook, chum and pink salmon feed and grow in the estuary before migrating to sea. The decline of endangered Chinook salmon directly impacts the remaining 73 endangered Southern Resident Killer Whales (SRKW) that rely on adult Chinook as a primary food source.

The large-scale destruction of fish habitat from the RBT2 Project will have adverse effects on endangered Chinook salmon which will cause loss of prey availability for endangered Southern Resident Killer Whales. This will be in contravention of the Canadian [Species at Risk Act, SARA](#).

By partitioning off comments on salmon as an isolated topic, the EAO Summary Report fails to convey the interactive chain of events affecting the food web and all species that rely on the health of the Fraser River Estuary.

## **10. Report omits to include importance of biofilm to the health of the Fraser River Estuary**

The rich assemblage of marine biofilm at Roberts Bank, formed from diatoms (*a microscopic form of algae*), produces essential fatty acids for not only the highest concentration of migratory birds in Canada, but also for hundreds of millions of migrating juvenile salmon that feed in the estuary before setting out to sea.<sup>21</sup>

"Biofilm are the drivers of the rich marine food web at Roberts Bank. They are the keystone element that allows the food web to exist..

...The diatoms at Roberts Bank produce LCEFA for the entire food Web at Roberts Bank including endangered Fraser River sockeye salmon and migrating shorebirds."<sup>22</sup>  
(LCEFA- long-chained essential fatty acids)

Salmon smolt exit the Fraser River in the spring to spend their time at sea, and here they eat zooplankton which have fed on diatoms. Without fatty acids, salmon are predicted to not develop as well as those that have consumed prey filled with fatty acids."<sup>23</sup>

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<sup>20</sup> [Aquatic Values and Concerns](#) Regarding Habitat in the Fraser River Estuary Associated with Human Activity and Development, Dr. Marvin Rosenau, Presentation for Fall Parkfest, 2012, Slide 6/69

<sup>21</sup> Kahiltna Research Group on behalf of Federation of B.C. Naturalists, [Document #609](#), October 25, 2016, Scrolled Pages 14/113

<sup>22</sup> Ibid; Pages [25](#) & [50](#)/113

<sup>23</sup> [Ibid](#); Page 14/113



## **[11. RBT2 will alter Roberts Bank Ecosystem resulting in loss of fish, including species at risk**

The Draft Summary Assessment Report omits to flag information from scientists warning of threats to the Roberts Bank Ecosystem:

“The proposed Roberts Bank Terminal 2 Project will significantly alter the existing Roberts Bank ecosystem resulting in the loss of a large area of marine fish habitats and changes to water circulation and sediment transport processes.

Destruction or alteration of approximately 176 ha of tidal and sub-tidal habitats is anticipated as a result of construction of the marine terminal, causeway widening, and dredging to expand the tug boat basin and deepen the berth pocket. The types of marine habitat that would be impacted as a result of the Project include tidal and sub-tidal sand, mudflat, eelgrass, and marsh...

..... even with mitigation, unavoidable death of fish is anticipated.

...Based on the Project information to date - including the large-scale destruction of fish habitat, the high degree of uncertainty in predictions of incidental benefits and the small-scale of proposed offset concepts – DFO’s view is that the goal of sustaining the ongoing productivity of fisheries will not be achieved....

...Twelve populations of Fraser River Chinook Salmon has been determined to be at risk by COSEWIC – 7 Endangered, 4 Threatened and 1 Special Concern.”<sup>24</sup>

Not only will there be loss and pollution of habitat, but there will also be loss of juvenile salmon as they migrate to the sea. Having to circumvent the new massive island means they will subject to a much higher level of predation.

## **12. Failure of EA to provide credible, identifiable mitigation measures for habitat loss, critical to salmon and SRKW**

The Draft Summary Assessment Report states the federal government intends to mitigate loss of fish and fish habitat but fails to provide any scientific evidence that this can be achieved.

The failure of all government and proponent submissions to provide evidence that habitat loss can be, and will be, mitigated is totally unacceptable.

Ecojustice provided further evidence of unproven mitigation measures:

“... the Proponent’s experience with habitat compensation projects illustrates many of the concerns and cautions raised by witnesses about the limitations of habitat restoration to offset the loss of fish habitat. As confirmed during the Hearing, while the Proponent has demonstrated its ability to physically grow plants and physically create marsh-like environments, they have not yet studied the biological function of these recreated environments to confirm whether they actually function as fish habitat.”<sup>25</sup>

“There is no evidence on the record that the Proponent can or will avoid or lessen the Project’s adverse effects on the availability Chinook salmon prey in critical habitat for Southern Residents...  
...the Project will result in the direct loss of large-scale destruction of important habitat for Fraser River Chinook populations that are both at risk and in decline...”<sup>26</sup>

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<sup>24</sup> Fisheries and Oceans Canada, [Document #1630](#), April 15, 2019, Scrolled Pages 74 & 75/207

<sup>25</sup> Ecojustice on behalf of David Suzuki Foundation, Georgia Strait Alliance, Raincoast Conservation Foundation and Wilderness Committee, [Document #2036](#), Paragraph 37, August 26, 2019, Scrolled page 14/38

<sup>26</sup> Ecojustice on behalf of David Suzuki Foundation, Georgia Strait Alliance, Raincoast Conservation Foundation and Wilderness Committee, [Document #2036](#), August 26, 2019, Paragraphs 94, Scrolled pages 29/38

### **13. Insufficient Information on ‘threatened’ White Sturgeon**

The Review Panel did not have enough information to conclude that RBT2 is unlikely to cause adverse effects on the Lower Fraser River white sturgeon because there is lack of research on how sturgeon are behaving in the estuary and marine waters. White Sturgeon are found in the fresh waters of the lower Fraser. However, they have been observed in the Fraser River Estuary, the Strait of Georgia and throughout the Strait of Juan de Fuca.

The Draft Summary Assessment Report omits to disclose that the White Sturgeon of the lower Fraser River is a threatened species as assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). From 2004-2011, lower Fraser white sturgeon numbers declined by 20%. Also, there was an alarming decline of 78% of the immature white sturgeon during the same period.

It is astonishing that the B.C. Environmental Assessment Office states it is satisfied that the federal conditions and the commitments by the Port of Vancouver will address potential adverse effects to endangered white sturgeon when there is no science-based evidence that it is possible.

Why does the B.C. EAO Report omit to state B.C.’s commitment to work with federal fisheries and First Nations on the Fraser River White Sturgeon Plan? Approval of RBT2 will not correlate with the Plan.

Where is any scientific information? Where is the application of the Precautionary Principle?  
Where are the “specific measures” mentioned in the Summary Assessment Report?

The commitment by the Port of Vancouver to gift \$500,000 for research on eulachon does not prevent the loss of white sturgeon habitat and food supply. Why is it even mentioned here?

#### **[14. Failure to address serious gaps in the environmental assessment of the ‘threatened’ Barn Owl**

The Draft Summary Assessment Report omits to disclose that the Proponent, the Port of Vancouver, failed to produce a cumulative effects assessment of the Barn Owl as requested by the Review Panel. Government Agencies appear to be ignoring this failure.

“The Panel requested that the Proponent perform a cumulative effects assessment for coastal bird subcomponents, including barn owl. In making this request, the Panel stated that the Proponent had not adequately substantiated the conclusions that the Project would not have residual effects, since the relationship between the effectiveness of the mitigation measures and their capacity to reduce the effects was neither clearly nor systematically described. The Proponent did not perform the requested cumulative effects assessment.”<sup>27</sup>

Environment and Climate Change Canada (ECCC) advised the Environmental Impact Statement (EIS) did not sufficiently address potential adverse effects on the listed Barn owl:

“Although mortality risk is anticipated to increase, the EIS does not provide adequate information regarding the risks of long-term, population level impacts of prolonged high road mortality rates. As such, ECCC is of the opinion that the Proponent has not adequately described, in full, potential adverse effects to Barn Owls.”<sup>28</sup>

Bird Studies Canada (BSC) advised that the scope of the assessment in the Environmental Impact Statement (EIS) was insufficient:

“BSC explained that the restricted geographic boundaries of the assessment undermined the conclusions and did not allow for a proper evaluation of the majority of area where barn owls and the Project would interact, which was outside the LAA. BSC cited the Proponent’s study that reported six dead barn owls along a portion of the Deltaport Way in 2013, and argued that the study was omitted from the EIS because the area was outside the LAA.”<sup>29</sup>

#### **15. Serious threats to human health from air pollution from RBT2 are not appropriately reported**

The Draft Summary Assessment Report notes that the effects of RBT2 on air quality will be high in magnitude.

Both Health Canada and the B.C. Ministry of Health reported that the RBT2 Environmental Impact Statement on Air Quality was insufficient.

There will be air pollution from RBT2 construction and operations; increased rail movements; and probably double the number of trucks carrying containers throughout the lower mainland. There will also be air pollution to the Gulf Islands at anchorage sites, and through the Salish Sea from more, or larger, container vessels.

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<sup>27</sup> [The Review Panel Report](#), RBT2, Document #2062, March 27, 2020, Scrolled Page 255/627

<sup>28</sup> RBT2 Environment Assessment, ECCC, [Document 1146](#), February 12, 2018, Page 5/16

<sup>29</sup> [The Review Panel Report](#), RBT2, Document #2062, March 27, 2020, Scrolled Page 254 & Page 250/627

RBT2 will not meet air quality standards and will cause an increase in toxic nitrogen dioxide (NO<sub>2</sub>); fine particulate matter (PM<sub>2.5</sub>); and ozone, all dangerous to human health as they damage the lungs and respiratory systems. It is disconcerting that the Conclusions of the Review Panel Report referred to toxic contaminants as “respiratory irritants”. They are more than that as they settle in the lungs causing respiratory diseases that kill people:

“The Panel concludes that construction and operations of the Project would result in exceedances of applicable air quality standards and guidelines for NO<sub>2</sub>, PM<sub>2.5</sub>, and contribute to exceedances of ozone.”<sup>30</sup>

It is disconcerting that the B.C. Environmental Assessment Office is not raising a massive red flag on this issue. It will affect the whole airshed of the lower mainland and up the Fraser Valley.

It is also disconcerting that the Draft Summary Assessment Report states that the B.C. Environmental Assessment Office is satisfied that the federal conditions will address potential adverse effects to air quality from RBT2. This is ludicrous as it is not possible to prevent the increase in killer toxins into the lower mainland airshed. The federal conditions are monitoring and collecting data. That will not prevent the pollution of the airshed.

## **16. Serious threats to human health from noise pollution cannot be mitigated**

The Draft Summary Assessment Report notes that the effects of RBT2 on noise and vibration pollution will be high in magnitude.

As with air pollution, noise pollution is highly detrimental to human health.

Mitigation measures of monitoring, measuring, plans and protocols of complaints cannot prevent the inevitable increase in noise pollution.

## **17. Serious threats to human health from light pollution cannot be mitigated**

The Draft Summary Assessment Report addresses light pollution under a strange heading, Visual Resources. The language used in this section appears to obfuscate the fact that there will be significant light pollution from RBT2. This section addresses measures to minimize light pollution but that does not address the fact that it is not possible to build a massive man-made island and double the container business at Robert Bank without a very significant increase in light pollution.

Add to that larger container ships and massive gantry cranes, as well as anchorage sites, the increase in light pollution will be extensive. These effects cannot be mitigated. There will be devastating residual significant adverse environmental effects on human and wildlife health.

## **18. Failure to address effects of RBT2 light, noise and air pollution on Roberts Bank Ecosystems**

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<sup>30</sup> [Review Panel Report](#), Document #2062, March 27, 2020, Scrolled Page 92/627

The increase in light, noise and air pollution will also affect the estuarine processes and there will be adverse effects on wildlife. This is not a topic to be dismissed because Roberts Bank has global significance as noted at the beginning of this document. It also has importance to the health of the Fraser River watershed and the life it supports.

### **19. Significant Adverse Cumulative Effects from Greenhouse Gas Emissions**

The Review Panel Report noted there will be perpetual Greenhouse gas emissions affecting the atmosphere and the Salish Sea.

RBT2 operations can minimize greenhouse gas emissions as much as possible but there will be a significant increase in emissions that cannot be mitigated.

### **20. RBT2 will lead to further loss of some of Canada’s best agricultural land**

The container business at Roberts Bank has already gobbled up large tracts of prime agricultural land in Delta and Richmond. These properties were once protected under the Agricultural Land Reserve designation. They were removed from protection for political reasons.

Political pressure will be even greater to accommodate port needs for container transloading and storage.

The loss of productive agricultural land cannot be mitigated with the proposed measures of monitoring and exploring options.

### **21. Residual, significant, adverse environmental effects on the Estuary and the Salish Sea are ignored**

The Draft Summary Assessment Report notes that RBT2 would further contribute to existing significant adverse cumulative effects that are already occurring in the Fraser River estuary and Salish Sea from past and present activities.

The Review Panel Report recommended management programs and management plans; future environmental assessments of cumulative effects; and mitigation measures.

These recommendation were made back in 1979 when port development began at Roberts Bank. At every development stage, the same recommendations were made and then ignored.

Piecemeal development at Roberts Bank has been going on for 44 years and at every development, the same pleas are made to protect the ecosystem. Legislation and scientific evidence have been ignored. The degradation continues.

## **[22. Federal and Provincial Conditions are Meaningless in terms of Mitigation**

The Draft Summary Assessment Report states the B.C. Environmental Assessment Office is responsible for proposing conditions that would become legally binding.

The B.C. Environmental Assessment Office has outlined Provincial Conditions in Schedule B

The conditions are notifications, consultations, schedules, monitoring and management plans. These are tools that are essential to the work of environmental assessment agents. However, they do not provide any evidence of credible, achievable, identifiable mitigation and compensation measures.

Monitoring is an excellent tool but it does not prevent habitat destruction or loss.

The Draft Summary Assessment Report fails to document the fact that there are no credible, identifiable, mitigation measures with scientific evidence that habitat loss and destruction can, and will be, mitigated. It is not possible to mitigate or compensate destruction in an estuary.

## **23. Concerns with the process of the B.C. environmental assessment of RBT2**

The Draft Summary Assessment Report has not addressed concerns raised during the assessment process.

### Substitution Process is Insufficient

The Substitution process is not working. There have been some good reports by B.C. Government scientists to the environmental assessment. However, the B.C. scientists have not been sufficiently or meaningfully engaged in the process. Reliance on the federal process has created critical gaps in provincial accountability to protect Roberts Bank in the Fraser River Estuary.

The Draft Summary Assessment Report has not addressed some of the process concerns submitted by the public. One concern is the inclusion of vested business interests in the B.C. legal document of the B.C. Environmental Assessment.

### Inclusion of Gateway vested business interests in legal B.C. assessment document is inappropriate

In the legal document, [\*Order Under Section 14, Section 4, 4.1.4\*](#), December 19, 2014, the B.C. Government inappropriately states that information from the Gateway Transportation Collaboration Forum must be considered:

“The Executive Director will consider in the assessment relevant information created by the Gateway Transportation Collaboration Forum to the extent such information is available prior to referral to provincial Ministers for decision as described in section 4.2.”

It appears to be a conflict of interest to make it legally mandatory to include information from vested business interests. The [Gateway Transportation Collaboration Forum](#) consists of government and private business interests that received [\\$200 million from the federal](#) government in May/June, 2018. The Port of Vancouver received \$100 million [funding from the federal government](#) on July 23, 2019, for Projects that were identified by the Forum.

## B.C. Transferred Roberts Bank wetlands to the Federal Government for RBT2 in 2017

Under Order-in-Council 311, August 30, 2017, the B.C. Government transferred public estuarine wetlands to the federal government to facilitate RBT2 even though the environmental assessment was in progress and the Project had not been approved. This sent a message as early as 2017 that the B.C. Government intends to approve the Project.

The understanding in the Environmental Impact Statement (EIS) was that a transfer was not supposed occur until approval of RBT2.

“ Approximately 48 ha of the Project will be constructed on provincial Crown lands. Port Metro Vancouver is currently negotiating with the Province of B.C. to acquire tenure to these lands. Depending on the outcome of these negotiations, the lands will either remain as provincial Crown lands or become federal lands. Finalisation of a tenure agreement is not anticipated prior to completion of the formal EA process. (*RBT2 EIS, section 3.3.3, page 3-8*)”

## Premier of B.C. announced approval of RBT2 prior to completion of the B.C. assessment

“Premier David Eby is in full support of the approval for the Vancouver Fraser Port Authority’s (VFPA) planned Roberts Bank Terminal 2 (RBT2) project.”<sup>31</sup>

The Premier of B.C, David Eby, stated approval of RBT2 at a news conference, Thursday, April 27, 2023. At the same time, the B.C. Environmental Assessment Office is inviting public comment prior to completion of the BC environmental assessment. Consequently, the current process of public input is meaningless, indicating lip service to due process.

## **24. Draft Summary Assessment Report omits to include level of public concern**

There has been considerable public input to the RBT2 environmental assessment. Thousands of submissions have expressed opposition to RBT2 and concern for the health of the Fraser River Estuary and Salish Sea.

Members of the public have not been treated well. No questions in submissions have been answered. No adjustments were made to the scope and terms of reference in response to public input. Reports summarized public comments in vague, unreadable boxes categorizing comments. There was nothing in the reports to indicate follow-up on the comments. The Proponent responded in a column of boxes. This was done by copying information from the Environmental Impact Statement, effectively dismissing the concerns.

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<sup>31</sup> [Delta Optimist](#), Sandor Gyarmati, May 1, 2023, ‘False choice’ presented on RBT2, says BC premier’.

### Contravention of ‘Core Values for the Practice of Public Participation’

There has never been any indication that public comments were incorporated into any of the reports by the Proponent or the Government Assessment Agencies. This contravenes the ‘Core Values for the Practice of Public Participation’:<sup>32</sup>

1. *Public participation is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process.*

All peoples of Canada, and other countries, will be affected by RBT2 with the decline of many species, including migrating salmon; migratory birds of the Pacific Flyway; migrating shorebirds, particularly western sandpipers; and endangered southern resident killer whales. Pollution will affect people in the lower mainland of B.C. and through the Salish Sea.

2. *Public participation includes the promise that the public's contribution will influence the decision.*

This certainly hasn't happened. The only support for RBT2 is vested interests and politicians.

3. *Public participation promotes sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision makers.*

Interests of all participant were not included. Decision makers and civil servants ignored public participation.

4. *Public participation seeks out and facilitates the involvement of those potentially affected by or interested in a decision.*

There was facilitation for public input but submissions were ignored.

5. *Public participation seeks input from participants in designing how they participate.*

The public had no say in the opportunities for public input.

6. *Public participation provides participants with the information they need to participate in a meaningful way.*

Information provided to the public was thousands of pages that lacked credible summaries and critiques. The public was not meaningfully informed.

7. *Public participation communicates to participants how their input affected the decision.*

This certainly hasn't happened with RBT2.

All peoples of Canada will be affected by RBT2 with the decline of many species, including migrating salmon; migratory birds of the Pacific Flyway; migrating shorebirds, particularly western sandpipers; and endangered southern resident killer whales. Pollution will affect people in the lower mainland of B.C. and through the Salish Sea.

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<sup>32</sup> International Association for Public Participation (IAP) Core Values, [Core Values for the Practice of Public Participation](#);



## 25. Claimed Economic Benefits of RBT2 are misleading and the Project will harm existing operations

The Draft Summary Assessment Report states the Review Panel reported that RBT2 will benefit the container business by increasing container terminal capacity; supporting competitiveness; and providing operational and spin-off jobs.

This information is misleading as the west coast of Canada is already increasing container capacity at Vancouver terminals and at the Port of Prince Rupert. There is ample current and planned capacity for decades, without RBT2.

The touted spin-off jobs are already activated with current operations.

The International Longshore & Warehouse Union – Local 502 submitted concerns of job losses resulting in unemployment in the transport sector and revenue losses in local communities:

“...it is our submission that this will result in very significant job losses for longshore workers and hundreds of millions of dollars of lost wages and lost inputs for the community of Delta, in particular. This will be coupled with tens of millions of dollars of lost Federal, Provincial and municipal tax revenues.”

“We take this position RBT2 or any similar project that has the potential to cause serious economic harm to our workforce and to our community.”

The Union further stated insufficient information on the social and economic impacts and a lack of real data:

“Simply put, RBT2 make no sense if on the one hand the construction of the project is found to be environmentally sound while the actual operation of the terminal causes significant job loss and harm to the community and the larger economy”<sup>33</sup>

Their submissions of concern have been ignored.

The current operator at Deltaport, Roberts Bank, Global Containers Inc., is also vehemently opposed to RBT2 and advises that RBT2 will negatively impact their business.

Instead of considering the best options for Canada’s west coast container business, the Port of Vancouver continues to promote RBT2. As a result, the tenants of the Port of Vancouver will become the Port’s competitors. RBT2 will disrupt Vancouver’s existing employment and transportation operations..

Submissions of concern by Global Containers Inc. are being ignored.

The public cannot compete with the strong lobbying in Ottawa by the Port of Vancouver; nor can they compete with the large sums of money spent by the Port of Vancouver on advertising. It should be noted that these large sums of money, spent by the Port of Vancouver, have been earned from Canadian assets, the long shorelines of the B.C. lower mainland, where the Port profits from rentals.

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<sup>33</sup> RBT2, EIS, CEAA 80054, [International Longshore & Warehouse Union](#) – Local 5012, Closing Remarks, page 2, August 28, 2019, Document #2049

The container business forecasts, submitted by the Port of Vancouver, are not being realized. Worldwide container movements are shifting and even the lowest container business forecasts by the Port of Vancouver are not being met.

There are no economic benefits to taxpayers from the increased pollution and congestion RBT2 will cause in the lower mainland: double the number of trucks; taking away train transportation from other business; squeezing out Canada's lucrative bulk shipping; container transloading and storage on valuable agricultural and industrial lands; and loss of globally significant wildlife.

### Cost to Taxpayers is \$3.5 billion and counting

Taxpayers will be expected to pay the \$3.5 billion cost and let the Port of Vancouver utilize public assets. Even if foreign investment is secured, taxpayer dollars will be required to fund millions in related infrastructure and mitigation measures. Tax dollars will be required to fund road and rail upgrades which will cause further congestion and pollution in the lower mainland.

Taxpayers have been funding the Asia-Pacific Gateway and Corridor Initiative (APGCI) for decades. In 2015, the federal government announced \$16.5 million for transportation infrastructure projects in B.C:

"To date, the Government of Canada has invested close to \$1.4 billion in APGCI infrastructure projects.<sup>34</sup>

The Deltaport Terminal Road and Rail Improvement Project and Truck Staging Project cost taxpayers \$18.3 million. Now the Port of Vancouver wants taxpayers to pay \$3.5 billion to destroy Fraser River estuary globally-significant habitat to funnel import containers from Asia, through Canada, to the U.S. About only 10% of containers arriving in Vancouver are for local use.

## **26. Conclusions of the Draft Summary Assessment Report gloss over devastating effects of RBT2**

The B.C. Environmental Assessment Office (EAO) claims satisfaction that adverse effects related to provincial jurisdiction have been adequately assessed. As noted in the information provided above, this statement can be challenged as major factors were not assessed:

- a) subtidal wetlands
- b) cumulative effects on wetlands
- c) cumulative effects on the estuary and Salish Sea
- d) accountability to the B.C. Wildlife Management Area
- e) importance of biofilm to the health of the Fraser River Estuary
- f) 17 bird species listed on the Species at Risk Act or by the Committee of Endangered Wildlife in Canada (COSEWIC)
- g) cumulative effects assessment of all shorebirds (only 2 species of 50 were assessed)
- h) level of public concern
- i) accountability to designations; agreements; policies; and legislation

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<sup>34</sup> Feds invest in Asia-Pacific Gateway infrastructure, July 29, 2015

<https://www.insidelogistics.ca/infrastructure/feds-invest-in-asia-pacific-gateway-infrastructure-141294/>

Other factors were not satisfactorily assessed:

- a) serious threats to human health from pollution affecting the lower mainland and the Salish sea
- b) light and Noise pollution that cannot be mitigated
- c) loss of fish and fish habitat
- d) effects on endangered southern resident killer whales
- e) ‘threatened White Sturgeon’
- f) ‘threatened Barn Owl’
- g) loss of agricultural land

The EAO states practical means have been identified to reduce any potential adverse effects of RBT2 to provincial jurisdiction. What practical means? The only means documented are monitoring, consultation, and planning. How does that reduce the documented, devastating effects on salmon, migratory birds, endangered species and human health?

The EAO acknowledges that not all effects would be fully mitigated:

- effects on wetlands and wetland functions;
- effects on juvenile chum and Chinook salmon;
- effect on human health due to chronic exposure of annual-average NO<sub>2</sub> (during the construction phase of RBT2); and
- contribution to additional greenhouse gas emissions in the Metro Vancouver area;

The EAO Draft Summary Report fails to raise a red flag warning of serious, unmitigable effects.

## **27. Resources and values in the Fraser Estuary and Salish Sea will no longer be available for future generations**

The Draft Summary Assessment Report acknowledges some of the harm RBT2 will cause at Roberts Bank but fails to identify all effects and the implications to the health of the Fraser River Estuary and Salish Sea ecosystems. Under the heading, ‘Resources or Values that may no Longer be Available for Future Generations’:

The EAO acknowledges that there could be potential impacts to resources or values of importance to current and future generations. As described in the Panel Report, RBT2 would require the conversion of approximately 168.1 ha of intertidal and subtidal habitat on Roberts Bank in the Fraser River estuary, an ecologically productive and sensitive area of coastal British Columbia

Surely there will be a loss of Resources AND Values. This section glosses over the seriousness of the degradation that will definitively occur from the RBT2 Project.

The wording, “could be potential impacts” does not being to correlate with the seriousness of concerns raised by government and independent scientists, as well as the Review Panel, that warned effects will be **high in magnitude, permanent and irreversible**:

**“The Panel considers that Project effect on wetlands and wetland functions would not be fully mitigated, which constitutes a residual effect on wetlands that is high in magnitude, permanent and irreversible.”<sup>35</sup>**

**“The Panel concludes that the Project will have an adverse residual effect on juvenile Chinook salmon due to migration disruption, coupled with minor adverse effects in the acoustic and light environments during construction and operations. This effect would be high in magnitude, local in extent, permanent in duration, and irreversible.”<sup>36</sup>**

Environment and Climate Change Canada, Submission 1775

**Effects of RBT2 on biofilm and Western Sandpipers<sup>37</sup>**

Magnitude	<b>High</b>
Extent	<b>Local/National</b>
Duration	<b>Permanent</b>
Reversibility	<b>Irreversible</b>
Frequency	<b>Continuous</b>

Environment and Climate Change Canada, Submission 1146

**“ECCC characterizes the Project’s residual adverse impacts on biofilm due to predicted changes in salinity as potentially high in magnitude, permanent, irreversible, and, continuous”<sup>38</sup>**

Independent Scientist, Dr. Kim Baird, Kahiltna Group:

**“...RBT2 should not be constructed because doing so would probably irreversibly and negatively alter a vital marine area’s ecology”<sup>39</sup>**

Fisheries and Oceans Canada:

**“Based on the Project information to date - including the large-scale destruction of fish habitat, the high degree of uncertainty in predictions of incidental benefits and the small-scale of proposed offset concepts – DFO’s view is that the goal of sustaining the ongoing productivity of fisheries will not be achieved.”<sup>40</sup>**

<sup>35</sup> [Review Panel Report](#), RBT2 EA, Document #2062, March 27, 2020, Scrolled Page 176/627

<sup>36</sup> IACC, RBT2 Environmental Assessment, [Review Panel Report](#), March 27, 2020, Document #2062, scrolled page 201/627

<sup>37</sup> ECCC, [Document # 1775](#), May 18, 2019, Slide 22/23

<sup>38</sup> RBT2 Environment Assessment, ECCC, [Document 1146](#), February 12, 2018, Page 14/16

<sup>39</sup> Kahiltna Group, [Document #1604](#), April 15, 2019, Scrolled Page 8/15

<sup>40</sup> RBT2 EIS, Fisheries and Oceans Canada, [Document # 1630](#), April 15, 2019, Scrolled Pages 74 & 75/207

#### Review Panel Report: Noise Pollution:

“cumulative health effects due to noise from the Project would be **high in magnitude** since the Project would be adding to an already severely degraded environment with exceedances of several different human health thresholds across a large portion of the upland LAA, **irreversible (for operations), long-term** in duration, and **continuous**. Therefore, the cumulative effects on human health would be significant.”<sup>41</sup>

#### Review Panel Report on Air Quality:

The Panel concludes that construction and operations of the Project would result **in exceedances of applicable air quality standards and guidelines for NO<sub>2</sub>, PM<sub>2.5</sub>, and contribute to exceedances of ozone.**<sup>42</sup>

The BC EAO Draft Summary Assessment Report suggestion of monitoring and consultation as a remedy insults intelligence. The suggestions are illogical and evasive.

The B.C. EAO Draft Summary Assessment Report omits to report the documented severity and importance of the effects of RBT2.

RBT2 will alter the interactive, interdependent, complex processes in the Fraser Estuary where the fresh water blends with the tidal salt water creating unique, rich ecosystems. By failing to address the interactive estuarine processes, and by failing to provide a credible, meaningful cumulative effects assessment, the Governments of Canada and B.C. have denied due process. The assessment has failed to meet the legal requirement of identifiable, proven mitigation measures, and has failed to acknowledge that it is not possible to mitigate, or compensate, for deliberate destruction in the Fraser Estuary.

The **Precautionary Principle**, called for in CEAA 2012, has not been applied.

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<sup>41</sup> [The Review Panel Report](#) , RBT2, Document #2062, March 27, 2020, Scrolled Page 415/627

<sup>42</sup> Environmental Assessment of RBT2, [Review Panel Report](#), Document #2062, March 27, 2020, Scrolled Page 92/627

## Preview of the **Roger Emsley Analysis**

Roger Emsley has often chosen different aspects of RBT2 than Susan Jones, and he is the most knowledgeable expert in many of those. In his analysis, he explores what has gone on below the surface to allow the weak proposal, RBT2, to get through. In Topic G of the Sandpiper Analysis in this kit, Mr. Emsley's access-to-information request led to the exposé of the former environment minister blocking the ministry's scientists from making a key final presentation to the RBT2 Review Panel.

An example of the Emsley Analysis is all of page 8, accurately revealing on point after point. The chilling part is "K. The China factor." Remember that the Vancouver Fraser Port Authority, VFPA, can almost never be held accountable. The RBT2 process should be the exception, but VFPA found ways around that, as Mr. Emsley describes. If VFPA gets provincial approval, they can engage a Chinese terminal operator. That could make Canada's largest port part of China's Belt and Road imperialism.

**We're now HERE in The *Beyond RBT2* Kit:**

**Preview of the Beyond RBT2 keynote**

**Preview of the Sandpiper" Analysis**

**Preview of the Mary Taitt Analysis**

**of the Susan Jones Analysis**

**Preview of the Roger Emsley Analysis**

**Preview of the PAPA PATH synopsis**

**Preview of the Jim Wright Analysis**

## **Not Justified In The circumstances, Why the BC Provincial Government Must Deny Roberts Bank Terminal 2 Approval. June 5 2023**

I am totally opposed to the Roberts Bank Terminal 2 project approval. Therefore I am pleased to comment on the draft assessment material that Provincial Ministers will use to decide if the Vancouver Fraser Port Authority's (VFPA) Roberts Bank Terminal 2 (RBT2) project should be approved.

I am however very disappointed and concerned that you are asking for public comment when Premier David Eby already pronounced his support for the project some weeks ago. Your government gives the appearance that this is nothing more than a check the box exercise, because in fact you have already decided you are going to rubber stamp the federal approval. You should not do so.

Neither should you rely on the Federal Government's Decision Statement, which while recognizing RBT2 is likely to cause significant adverse environmental effects yet the Governor in Council determines these effects are justified in the circumstances.

You as the Provincial Government need to ask - What does Justified in the Circumstances mean?

Are you prepared to justify:

- Job losses
- Ecosystem degradation
- Compromising the ecological integrity of the last remaining natural large intertidal bank
- Curtailing fatty acid production from intertidal biofilm on Roberts Bank that will have cascading negative effects up the food web, impacting commercial fisheries, including salmon and crab, and apex predators such as Orca.
- Wildlife population declines with several at risk species potentially facing extinction
- Ignoring three BC cities all of whom oppose the project
- Ignoring major national and international environmental groups as well as thousands of scientists and citizens who all vigorously oppose RBT2

Attached is a full analysis of why the federal government made a bad decision that will end up being an environmental and economic disaster. BC must not make the same mistake.

There are several reasons why the BC Government must not approve the project as follows:

1. Protecting the environment and ecosystems that are under provincial responsibility
2. Protecting the BC economy and jobs and ensuring that BC container trade expansion is carried out in a sustainable manner to the advantage of BC communities and businesses and the BC economy overall
3. Ensuring the quality of life is protected for BC cities, municipalities and their residents in every part of the province.

In each of these areas the RBT2 project disadvantages and damages BC, its environment, businesses, its residents and the cities and municipalities they reside in. The details follow.

## 1. Protecting BC Environment

Environment and Climate Change Canada (ECCC) in its environmental assessment has started repeatedly that the man-made Island for the RBT2 Project will remove the salinity trigger for high fatty acid production by diatoms in biofilm on Roberts Bank in the Fraser River Estuary. Not only does this have species-level consequences for Western Sandpipers it negatively affects the entire intertidal food web. These shorebirds are the window into the ecological functioning of the Fraser River Estuary and reveal that the ecological integrity of the last remaining natural large intertidal bank will be compromised. Curtailing fatty acid production from intertidal biofilm on Roberts Bank will have cascading negative effects up the food web, impacting commercial fisheries, including salmon and crab, and apex predators such as Orca.

Although the federal government approved RBT2, ignoring the ECCC science that does not mean the provincial government should do the same. ECCC demonstrates through their research that these effects will be permanent, irreversible, continuous and unmitigable.

BC cannot ignore this environmental damage. If you ignore the science and were to approve the project you will be signing the death certificate for the Roberts Bank Wildlife Management Area.

## 2. Protecting BC economy and jobs.

If BC approves the semi-automated RBT2 project, it will lead to job losses. If RBT2 were to be approved Vancouver cannot sustain the level of port jobs it has now. There will be job losses at Deltaport and the inner harbour terminals. RBT2 will introduce too much container terminal capacity in Vancouver, significantly more than the market will ever need

GCT, a Canadian company, operates two container terminals in Vancouver. The Port authority has stated it intends to contract another company to run RBT2. It will not be a Canadian company, and GCT's business model will be negatively impacted. Vancouver's trade routes to the east, the destination and origin of the majority of container traffic, are already constrained. The rail route through the Fraser Canton is already at capacity. It is a bottleneck.

North American container traffic routings are changing. Volumes on the West Coast of Canada have plummeted throughout 2023. Vancouver YTD (to April) is down 15.0%, but March 2023 accounted for most of the drop, with volumes down from 331,000 TEU in 2022 to just 227,000 this year, a decline of 31.5%, which is massive. April YTD import volumes are down 18%. This is not a uniquely Canadian problem, but it does signal a permanent shift in the way container traffic is moving.

A lot of this has a lot to do with the lower freight differentials between Western Canada and the East Coast/Gulf routings making it more attractive to bring in containers through the EC/Gulf gateways and then up to Memphis/Chicago rather than going through West Coast ports.

While overall negative economic impacts are driving part of the West Coast Canada declines, a West-to-East shift is responsible for at least 50% of declines seen on West Coast ports. Shipping lines again have profitability challenges and terminal operators will be facing massive pressures as well. These are permanent shifts, not a temporary aberration.



Section 10 of the Draft Summary Assessment Report discusses additional considerations, but fails to review the underlying issues of Vancouver as the only BC Gateway to Asia

Here are the facts:

(a). West Coast container terminals will not reach full capacity in the mid to late 2020s as VFPA claims

- Current BC terminal capacity is 7.0 million TEUs and the 2022 actual West Coast volumes are 4.6 mill TEUs.
- There is current spare capacity as high as 2.0 million TEUs.
- 2022 container volumes through VFPA terminals declined by 3.3%. Full container loads in and out of Vancouver declined by 9% over 2021
- 2022 container trade is about equal to 2019, the last year prior to the pandemic.
- 2023 container trade went into steep decline. Vancouver YTD is down 15%
- The 14-year container compound annual growth rate (CAGR) for Vancouver languishes at 2.57%
- At the current level of growth West Coast actual volumes will approximate 5.8 million TEUs by 2030 versus a capacity of 8 million TEUs
- West Coast will not be capacity constrained until 2033 or later by which time there will be additional expansion, still without the need to build Terminal 2 on Roberts Bank.

(b). Prince Rupert - on the West Coast - is increasing its container terminal capacity and it is time to diversify container trading routes.

- Its Fairview terminal is expanding and will increase to 1.8 million TEUs by 2024.
- A second terminal is in the planning phase and by the early 2030s it will deliver another 2.0 million TEUs if the market warrants it, with capability to increase to 5.0 million TEUs
- This will give the West Coast a combined capacity of 9.2 million TEUs - sufficient to handle West Coast Container trade until at least 2040, by which time Prince Rupert will have further expanded.
- Prince Rupert is overall a superior trade route for containers. It is two sailing days closer to Asia, has a less congested and safer route into port, and an easier faster rail route over the Rockies compared to the congested rail route through the Fraser Canyon.
- Prince Rupert is a much better solution for when additional container terminal capacity is needed, with little to no environmental concerns

There are also significant financial aspects that may well sink the RBT2 project. The combination of massively increasing build costs; plunging volumes, and higher interest rates will render this project an economic disaster. VFPA's revenues will be severely impacted by this downturn and their ability to borrow will be impacted and it will only be a matter of time before they are back asking all levels of government to provide more financial support. The current stated cost of RBT2 - at \$3.5 billion - is likely to balloon to \$6 billion plus and BC will have an economic disaster on its hands.

### 3. Quality of life for BC cities and municipalities across the province

Trade expansion must not detrimentally affect the quality of life. Three major lower mainland cities - Delta Richmond and White Rock - are all opposed to this project.

The Roberts Bank Terminal 2 Project negatively impacts residents and business as follows:

- Traffic congestion caused by port traffic on BC highways. RBT2 adds to that congestion. Even with the improvements underway for lower mainland highways port truck and rail traffic will cause major traffic bottlenecks negatively impacting residents and businesses.
- RBT2 delivers a major blow to the Fraser Estuary, which has already lost over 80% of its natural habitat.
- Enjoyment of the Fraser Estuary will be compromised for hundreds of thousands of local residents. As well Brunswick Point is a major destination for the birding community and viewing area. Birding tourism delivers millions of dollars in tourism income. RBT2 extinguishes all those opportunities.
- Residents living in South Delta, including in the Tsawwassen First Nation as well as the Gulf Islands will suffer from increased noise, light and air pollution. I urge you to listen to:
  - ✓ three of BC's major cities
  - ✓ thousands of local residents
  - ✓ scientists
  - ✓ environmental groups
  - ✓ labour unions

And deny project approval for Roberts Bank Terminal 2.

### **The April 20 2023 Federal Government Approval of Roberts Bank Terminal 2 Is an Environmental and Economic Disaster — Jun 5 2023**

“Justified in the Circumstances” is the rationale given for the Federal Government’s April 20 2023 approval for the Vancouver Fraser Port Authority’s (VFPA) Roberts Bank Terminal 2 (RBT2) project. Questions that the Federal Government must now answer are?

- What circumstances justify massive environmental degradation of BC’s most important ecosystem?
- What does justified in the circumstances mean, and Is RBT2 needed and economically viable?
- Why did the Federal Government ignore its own scientists, their concerns and their recommendation’s?
- How and why it got approved?
- What were the main triggers for approval?

Ecojustice on behalf of David Suzuki Foundation, Georgia Strait Alliance, Raincoast Conservation Foundation, and Wilderness Committee are going to federal court to challenge the decision to approve. The Lummi US Indigenous Nation is now also taking court action.

In addition, the BC Environmental Assessment Office (EAO) sought public feedback on draft assessment materials that the BC Government will use to decide if the project should proceed. Unless the BC Government denies project approval it must answer these same questions.

## 1. Summary

The RBT2 project was approved:

- ✓ Over a mountain of opposition
- ✓ With political interference
- ✓ Ignoring Environment Canada scientists' concerns
- ✓ Ignoring significant wide ranging credible research and science, much of it published in peer-reviewed science journals, demonstrating the project's significant adverse environmental effects that cannot be mitigated
- ✓ Ignoring the facts and evidence

Major environmental groups, scientists expert in their field, citizen scientists, the Cities of Delta, Richmond and White Rock, MPs, members of the public rose up and voiced their opposition to RBT2. As the final phase of the environmental assessment concluded that opposition grew and grew. (Attachment A has a partial list of opposing groups).

Prime Minister Justin Trudeau went on record in the documentary "Soul of the Fraser", released in late 2022, stating that the decision on RBT2 would be based on science. But it was not. The federal cabinet did the exact opposite.

The NDP raised concerns during question period in the House in February 2022 regarding the political interference with this project and the science gathered by Environment Canada scientists being hidden from the assessment and the public. Nothing changed – government science continued to be withheld and their scientists muzzled.

When the approval came on April 20 2023 the Minister of Natural Resources made the announcement not the Environment Minister whose responsibility it is. Why? The Natural Resources ministry has nothing to do with this project. Where was the Environment Minister? Where was the MP for Delta Carla Qualtrough, also a cabinet minister, whose riding the project is in? Where was the "justified in the circumstances" explanation, given that Vancouver is seeing its container business decline? It is no coincidence that VFPA released their Q1 2023 container volumes the day after the approval – showing that Q1 2023 is 15.3% lower than the same period in 2022. Adding a second container terminal on Roberts Bank was for VFPA and the federal government the easy solution.

- Road and rail infrastructure already exists.
- Warehouses and logistics centres already built close by – on prime agricultural land - with the expectation by their owners that it would be approved and with space for more.
- \$ Millions already invested by VFPA

Easy, that is, as long as VFPA and government do not care about the Roberts Bank ecosystem, its biodiversity and the millions of migratory and other shorebirds, salmon, Southern Resident Killer Whales, other fishes and wildlife that rely on that ecosystem for their very existence. This decision announcement is not the end of the story. That story will be written when all the facts and misinformation is revealed and project approval is rescinded.

## 2. What led Cabinet to decide to approve?

After almost 13 years that included public consultation, a review by independent panel, public hearings, a panel report and recommendations, requests for further information, the project approval went before the Governor in Council (federal cabinet) in early 2023. The approval announcement came right at the legislated deadline. The Environment Minister's decision statement reads: "I have determined RBT2 is likely to cause significant adverse environmental effects". That is why it went to Cabinet, acting as Governor in Council, who then determined these effects are justified in the circumstances.

Assuming the federal cabinet recognized it was not OK to denigrate the ecosystem pushing species to extinction - they had to believe that:

- a). The mitigation proposed in the draft conditions and others that were added were sufficient to defray/mitigate the negative effects.
- b). The environmental risks were justified because the additional terminal capacity is essential for Canada's trading needs.
- c). The project is economically viable.

None of those are valid. That means they:

- (i). Ignored the ECCC science and their scientists' level of concern;
- (ii). Bought into the VFPA contention that Vancouver was running out of terminal capacity and the best way to address that was RBT2.
- (iii). Ignored the precautionary principle (if there is a significant risk of dire and irreparable consequences, don't do it!).

## 3. What ECCC Science Was Ignored?

Environment and Climate Change Canada (ECCC) in its environmental assessment has started repeatedly that the man-made Island for RBT2 Project will remove the salinity trigger for high fatty acid production by diatoms in biofilm on Roberts Bank in the Fraser River Estuary, resulting in species-level consequences for Western Sandpipers. Despite ECCC scientists demonstrating with their research that these effects will be permanent, irreversible, continuous and immitigable the Federal Government approved the Project.

The man-made island for RBT2 will restrain outflow from the Fraser River and reduce the salinity of water over the intertidal mudflats of Roberts Bank during the spring migration period. These salinity changes will impact both the quantity and quality (especially fatty acid production) of biofilm that will, in turn, negatively affect the migration success, reproduction and survival of Western Sandpipers.

More important is that the effects from RBT2 are not just about Western Sandpipers

– these shorebirds are the window into the ecological functioning of the Fraser River Estuary and reveal that the ecological integrity of the last remaining natural large intertidal bank will be compromised. Curtailing fatty acid production from intertidal biofilm on Roberts Bank will have cascading negative effects up the food web, impacting commercial fisheries, including salmon and crab, and apex predators such as Orca.

Furthermore ECCC scientists disproved the Vancouver Fraser Port Authority's contention

that it will recreate biofilm that is lost, as well as the mitigation measures in the Decision Statement that allow for biofilm habitat creation or enhancement. categorically that:

- 1) There is not an equivalent muddy intertidal area available in the Fraser River estuary and delta that could compensate for the loss of the biofilm on Roberts Bank (i.e.Quantity)- plus,
- 2) Any area( for consideration would need to be subject to a similar salinity "trigger" occurring on Roberts Bank during the April/May period such that fatty acid production would peak during the breeding migration of sandpipers (i.e. Quality and Availability).

#### 4. Why it got approved:

a). Ottawa allowed the project proponent, VFPA, to dictate the Panel's terms of reference. This meant the Panel did not include several key issues in its assessment.

b). The Panel did a woefully inadequate job. They:

- ✓ Expressed doubt surrounding the salinity trigger and the impact on biofilm.
- ✓ Claimed some of the ECCC concerns were inconclusive
- ✓ Accepted the VFPA science rather than that from ECCC.
- ✓ Accepted the VFPA story that biofilm could be recreated on the scale needed to replace what will be lost.
- ✓ Refused any discussion on alternative locations i.e. Prince Rupert.
- ✓ Refused to consider the idea that assessment contractors were paid by the VFPA and could therefore be biased by a conflict of interest.
- ✓ Allowed VFPA a closing statement each day of the hearings with no rebuttal.

VFPA used that to trash any evidence they didn't like, especially on the ECCC science on biofilm and of the independent expert witnesses that testified at the hearings.

c). Environment and Climate Change Canada (ECCC) scientists failed to present the severity of their concerns strongly enough before, during and after the hearings. They were weak in the way they identified the key environmental issues. They never stood up to the VFPA, nor did they challenge the Panel on its conclusions. ECCC never came out and stated the project must not be built in any shape or form.

d). The Ottawa bureaucracy suppressed some of the science. Firm evidence, obtained through Access to Information, shows this clearly. For example Ottawa management buried the ECCC scientists closing submission to the Panel. Had the Panel got that submission some of their conclusions and recommendations would have been different. By the time that submission was obtained and published it was too late - the Panel report was already submitted to government.

e). A significant factor in the decision to approve was the support from the 26 First Nations that signed beneficial participation agreements with VFPA. Denying approval would not have gone down well since there were indeed "benefits" to be had by First Nations from these agreements. These relationships were developed by VFPA in private closed workshops over a period of 18 months at which ECCC scientists were excluded. VFPA sold their so-called biofilm science including large-scale biofilm restoration, as well as the biofilm guidance manual. First Nations never got an opportunity to have the ECCC science explained. VFPA used those workshops to denigrate the ECCC science.

VFPA has never accepted the science surrounding the salinity trigger, which is central to understanding why the man-made island will degrade the diatoms that create fatty acids.

f). IAAC bias in favour of the VFPA. As soon as the IAAC published their draft conditions it was evident RBT2 was likely to get approval. The IAAC staff bought into the VFPA science hook, line and sinker. Is there a linkage with the Ottawa bureaucrats who were constantly trying to water down the ECCC science? Were these some of the IAAC staff that wrote the draft conditions?

g). The VFPA lobbying in Ottawa paid off. They had a senior person in Ottawa and being a crown agency they were able to work the system,

h). Cabinet and support staff did a terrible job of verifying the VFPA claim that more terminal capacity is needed and the only place to add it is in Vancouver. Did they check?

✓ What DP World is planning for its Prince Rupert expansions?

✓ The veracity of VFPA's comparisons of actuals versus forecasts?

✓ Whether container traffic is expanding at the rate VFPA says – 5%? It is not. The Compound Annual Growth Rate for the last ten years is less than 3%. Full container loads in 2022 were lower than every prior year as far back as 2013. VFPA container traffic for Q1 2023 is 15.3% lower than the same period in 2022.

✓ The volumes of US traffic going through VFPA. More container traffic – most if not all US – is now moving through the Panama Canal direct to US East Coast and Gulf ports. All North American Pacific coast ports are seeing shifts in container traffic patterns.

✓ The ability of road and rail infrastructure to support the expansion?

The rail route through the Fraser Canyon is already heavily congested. It was closed for 8 days in 2021 because of the BC flooding.

✓ Highways, especially in Delta, already heavily congested.

i). The GCT aggressive stance in battling VFPA appeared to annoy Ottawa. The Federal government vigorously defended GCT's court action brought against the VFPA.

j). Is this government serious about protecting vulnerable ecosystems and the wildlife that relies on it? They make all the right gestures - UN Biodiversity Conference, endorsing the newly established Fraser Estuary KBA etc., but then ignore them and do the exact opposite.

k). The China factor. This Liberal government has demonstrated it is weak on China.

Take a look at the Canada/China Business Council. Many of the key players, who are still doing a lot of business and making large profits in China, are big Liberal party backers. Note VFPA does not have an operator for RBT2. Three times it has tried. It would not be a surprise if VFPA awarded the contract to one of three or four Chinese companies - China Merchants, Shanghai International, Cosco and CK Hutchinson Holdings. All of these now operate ports outside of China under the Chinese Belt and Road Initiative. CMA CGM, another big port operator, also has a joint venture with China through Terminal Link Joint Venture. CMA CGM was one of those bidding to operate RBT2 previously.

l). Industrial land in the Lower Mainland is scarce. But investors already built warehouses on prime farmland in Tsawwassen First Nation territory close to 10 Roberts Bank, with more land available. Did they do so in the expectation that RBT2 would be approved?

m). Cumulative Effects were not properly considered by the Panel and have been ignored by the federal government. RBT2 is not the only port/industrial project in the Estuary. There is Fortis LNG at Tilbury; the Airport Fuel Depot; possibility of a second cruise ship terminal in the river; GCT Berth 4. Add all of this vessel traffic and then include Trans Mountain as well as vessel traffic from expansions at Seattle and Tacoma ports and the vessel transits through sensitive habitat in the Salish Sea and Juan de Fuca will see huge increases.

n). Mitigation. Will those 373 conditions be enforced? Not likely. Many years ago VFPA was asked and agreed to bury the power lines because they were killing wildlife - in particular barn owls. The power lines are still there. Anything VFPA finds inconvenient they either ignore or say it is not feasible/too expensive.

## 5. Is RBT2 Justified and Economically Viable

At some point in the 2030s West Coast Canada is likely to require additional container terminal capacity. VFPA says the west coast marine container terminals in Canada will reach full capacity by the mid- to late-2020s. The actual traffic volumes do not support that statement. BC container terminals currently have in excess of 1.3 million TEU (containers) spare capacity. With new capacity being added it will be well into the 2030s before more capacity is needed. Questions not answered:

a). Is RBT2 the best place to provide that additional capacity? No, because:

(i). The Fraser Estuary has already lost over 80 percent of its natural habitat.

(ii). RBT2 will add to that environmental deficit.

(iii). How many more vessel transits can the Salish Sea and Juan de Fuca Strait safely handle?

(iv). Road and rail corridors; both in the lower mainland and to points East are already heavily congested. The Fraser Canyon cannot handle more container transits by rail without delaying other bulk commodities such as grain.

(iv). There is a shortage of industrial land for increases in logistics infrastructure and empty container storage.

b). Is RBT2 economically viable? No. At today's estimated cost of \$3.5 billion it will already be the most expensive greenfield port development in the world. By the time of construction start that cost will likely balloon to over \$4 billion.

c). The inner harbour Centerm terminal expansion project is set to increase the terminal's container handling capacity by two-thirds by increasing the terminal footprint by 15 per cent, from 900,000 to 1.5 million TEU. Vanterm has plans to expand.

d). Are there other BC ports better able to add the additional capacity when needed. Yes. Prince Rupert is expanding its Fairview Terminal and plans to add a second terminal capable of adding as much capacity as RBT2, but at much less cost. Prince Rupert has few if any environmental constraints, is two sailing days closer to Asia and has better, uncongested rail access to the East.

e). Is there a possibility of too much container terminal capacity being added such that all terminals lose money? Likely.

## 6. Next Steps

There is time to develop a strategy to get the approval decision reversed, or at least reconsidered. However this needs to be done while the Liberals are still in power. The chances of getting this project stopped under a conservative government are slim to none.

Possible actions:

- ✓ Get the media more involved. Have them do an in-depth investigation.
- ✓ International embarrassment (one UK newspaper already slammed RBT2).
- ✓ Go public with the flaws in the decision.
- ✓ Make potential bidders for RBT2 construction and operation aware of the environmental consequences.
- ✓ Engage with and try to involve international environmental groups.
- ✓ Advise the major banks of the environmental consequences. Canada is a designated country under the Equator Principles. Most banks will try to avoid project financing where there are negative impacts on project-affected ecosystems, communities, and the climate.
- ✓ Court Injunction?

Potential areas for possible court action include:

- ✓ Unlawful under the Species at Risk Act (Action already taken by Ecojustice).
- ✓ Failure to properly consider the ECCC science.
- ✓ Migratory Birds Convention Act.
- ✓ No justification to add capacity when the container market is changing, and Prince Rupert provides a more environmentally friendly and overall superior alternative and the Panel refused to consider it.

## 7. Conclusion

The Fraser Estuary and in particular Roberts Bank are internationally recognized as one of the most important ecosystems on the west coast of North America. It is a major stop on the Pacific flyway and provides critical wintering grounds for the highest number of waterfowl and shorebirds found anywhere in Canada. The area is critical for the already endangered South Resident Killer Whales, Fraser River Salmon stocks and other wildlife.

Roberts Bank Terminal 2 is an environmental disaster waiting to happen. The Fraser Estuary, having already lost of 80 percent of its natural habitat. is at a tipping point.

The Fraser Estuary and Roberts Bank must be protected and preserved. RBT2 cannot be allowed to go ahead.

June 5, 2023.



## **Groups opposed to Roberts Bank Terminal 2**

### **Internationally recognized scientists**

[Letter from scientists regarding Roberts Bank Terminal 2](#)

### **Salish Sea Institute, Western Washington University**

<https://iaac-aeic.gc.ca/050/evaluations/proj/80054/contributions/id/57756>

### **Lummi Nation**

[Can This Tribe of 'Salmon People' Pull Off One More Win?](#)

### **S'ólh Téméxw Stewardship Alliance (STSA)**

[RBT2 Conditions Feedback](#)

### **Tsleil-Waututh Nation**

[Tsleil-Waututh Nation \(TWN\) comments on RBT2](#)

### **International Longshore Workers Union Canada (ILWUC)**

[Open Letter to Government Regarding Roberts Bank Terminal 2](#)

### **Sacred Lands Conservancy**

[RBT2 threatens salmon, our orca relations, and Indigenous life ways and livelihoods](#)

### **Swinomish Indian Tribal Community, Suquamish Tribe, and Tulalip Tribes**

[Comments on Roberts Bank Terminal 2 Potential Environmental Assessment](#)

### **Unitarian Church of Vancouver**

[UCV Opposes the Roberts Bank Terminal 2 Project](#)

### **BCIT Rivers Institute**

[Letter from scientists regarding Roberts Bank Terminal 2](#)

### **City of Delta**

[City of Delta, Council Report Jan 4, 2022](#)

### **City of Richmond**

[Richmond joins Delta in opposing T2](#)

### **Birds Canada and Nature Canada**

[Roberts Bank: Ottawa should reject a terminal expansion that puts human and environmental health at risk](#)

### **Raincoast Conservation Foundation, Georgia Strait Alliance, David Suzuki Foundation, and Wilderness Committee**

[Terminal 2 expansion threatens orcas, salmon and climate action – Ecojustice](#)

**Friends of the Earth US**

[Friends of the Earth US activist comments on Roberts Bank T2 proposed project](#)

**Rivershed Society of BC**

[Comments on Terminal 2](#)

**The Waterbird Society**

[Comments on RBT2](#)

**OrcaLab**

[Please reject Roberts Bank terminal expansion proposal](#)

**Against Port Expansion in the Fraser Estuary (APE)**

[Against Port Expansion in Delta](#)

**Garden City Conservation Society**

[Garden City Conservation Society](#)

**White Rock and Surrey Naturalists Society**

[Roberts Bank Terminal 2 Project](#)

**Western Hemisphere Shorebird Reserve Network**

[Comment Letter on the Fraser River Delta Port Development](#)

**PenderPod**

[PenderPod is a community organization on Pender Island dedicated to honouring, protecting and defending the Natural Environment of the Salish Sea](#)

**BC Nature**

<https://bcnature.org/take-action/>

**Boundary Bay Conservation Committee**

[http://actionintime.ca/wp-content/uploads/2022/02/irreversible\\_harm\\_to\\_fraser\\_estuary.pdf](http://actionintime.ca/wp-content/uploads/2022/02/irreversible_harm_to_fraser_estuary.pdf)

**Fraser Voices**

<https://iaac-aeic.gc.ca/050/evaluations/document/132516>

**Wild Bird Trust of BC**

<https://mailchi.mp/wildbirdtrust/spring-opening-coastsalishplantnursery-20194592?e=bc5da82e9a>

# Preview of the **PAPA PATH Analysis**

Mr. Knezevic [told \*Business in Vancouver\*](#), “No matter how much money you put into the transportation network in the Lower Mainland, you cannot make it that much more efficient by building a Terminal 2 or six more terminals like that.”

He explained, “You still have an issue of moving that cargo across the land by road to reach the distribution centre and end-user.” From the beginning, he has been willing to wait for the right timing and financing, confident the time will come.

PATH is one more reminder there are various alternatives to RBT2. In contrast to the opportunities, the Metro Vancouver road and rail challenges are givens, and RBT2 would make the effects worse.

**We’re now HERE in *The Beyond RBT2 Kit*:**

Preview of the Keynote Analysis

Preview of the Sandpiper Analysis

Preview of the Mary Taitt Analysis

Preview of the Susan Jones Analysis

Preview of the Roger Emsley Analysis

**Preview of the PAPA PATH Analysis**

Preview of the Jim Wright Analysis

## Port Alberni Transshipment Hub (PATH): Business Plan Synopsis

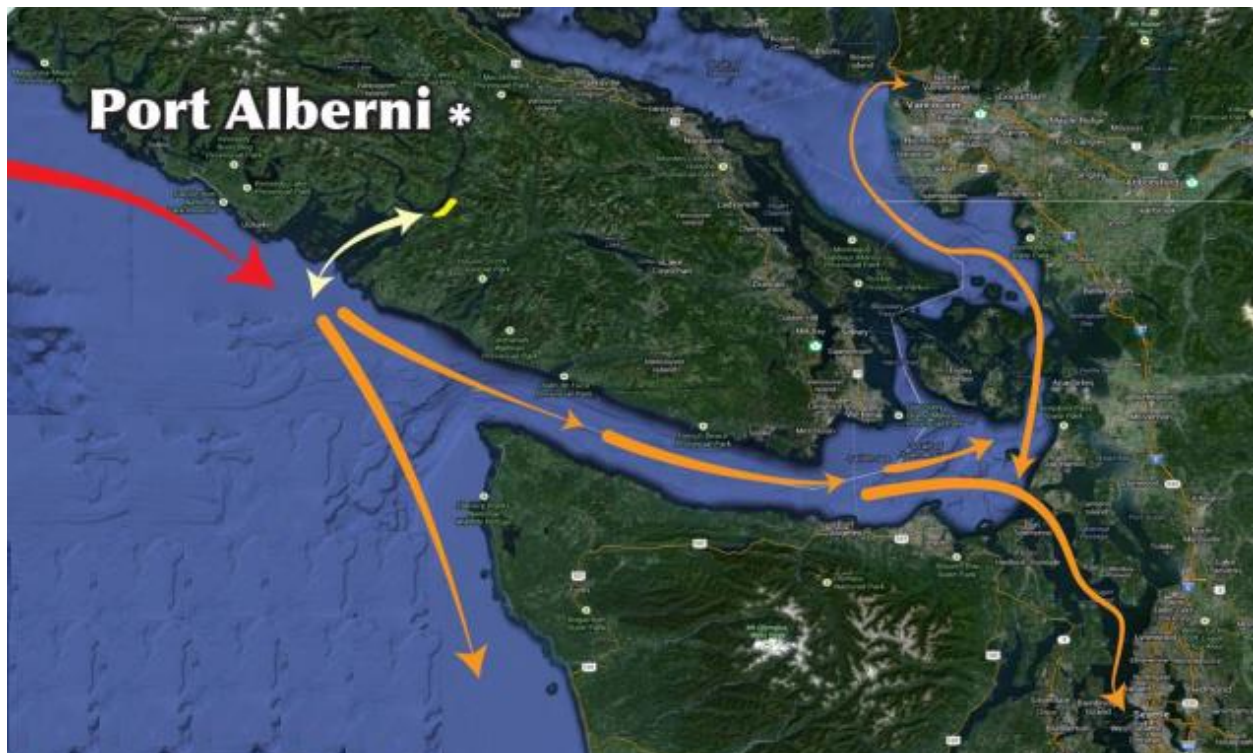
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### I. EXECUTIVE SUMMARY

#### A. Project Overview

The Port Alberni Transshipment Hub (PATH) is a proposed new automated container terminal to be constructed in the Alberni Inlet, approximately 20 kilometers from the open waters of the Pacific Ocean. As envisioned, the project would become the largest Container terminal in Canada. The project is premised on a hub- and-spoke container trans-shipment operation concept. The PATH concept envisages a terminal of 250 acres with an annual capacity of up to 5 million TEUs (hub). From PATH, coastal ports and terminals would primarily be served by feeder barge service (spokes).

The location and logistics methodology of PATH creates a vast catchment area of more than 8 million people stretching from Squamish to Tacoma and any point in between by bringing containers to end users' desired closest points. This transshipment model utilizes the most efficient, cost-effective and environmentally-friendly transportation infrastructure: the marine highways of Georgia Strait, Strait of Juan de Fuca, Puget Sound, Howe Sound and Fraser River.



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# Port Alberni Transshipment Hub (PATH): Business Plan Synopsis

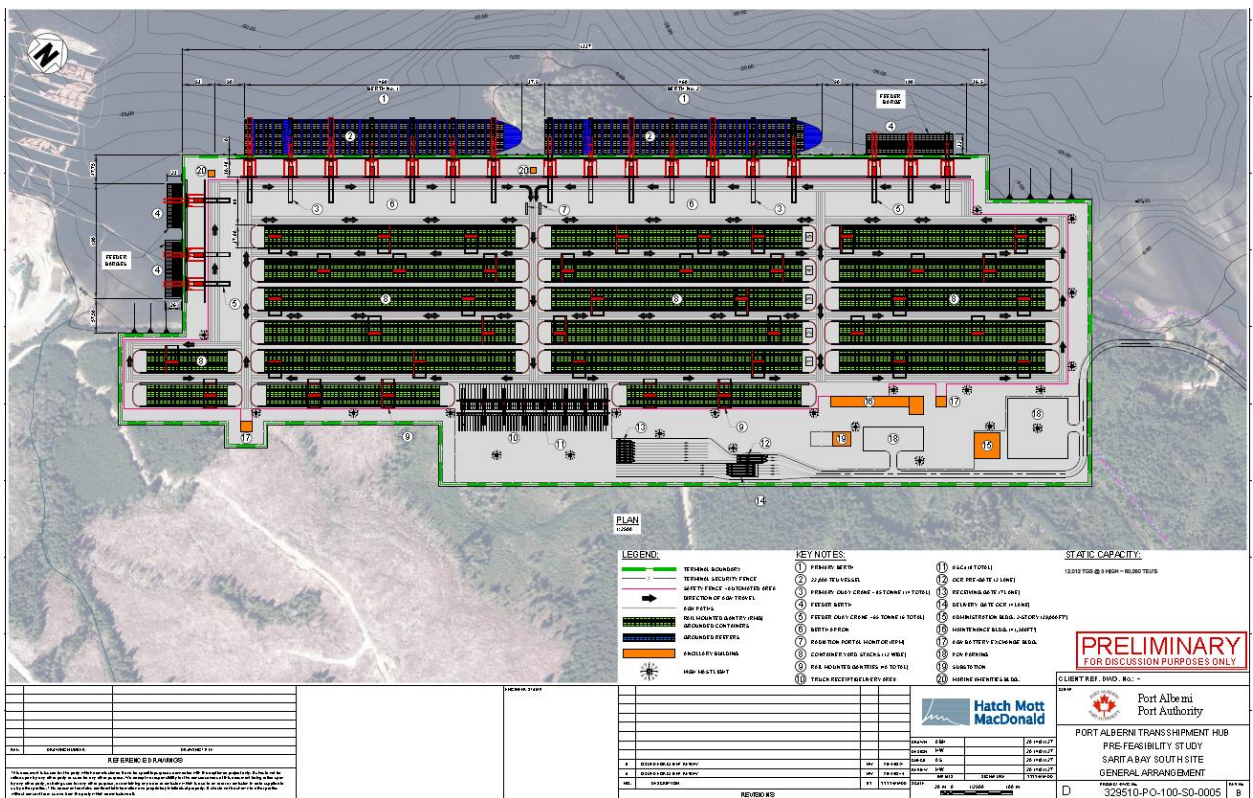
The new terminal would service vessels from the smallest barge up to the 22,000 twenty-foot equivalent unit (TEU) container ships. Estimated cost for PATH is 1.78 Billion CAD including contingency of more than 12%.

The proposed Berth Length of 1800 meters will be able to accommodate 2 x 22,000 TEU's ships at the same time plus 3 barge berths.

PATH will be equipped with state of the art fully automated Container Yard with 43 ASC – Automated Stacking Cranes, 8 Automated Gate Cranes all serviced by battery operated 135 AGV – Automated Guided Vehicles.

PATH berth side operation will be equipped with manned 20 STS – Ship to Shore Cranes - with expected productivity of 6000 containers per 24 hours.

At 50 % capacity PATH is expected to employ in excess of 500 direct FTE.



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# Port Alberni Transshipment Hub (PATH): Business Plan Synopsis

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## B. Projected Project Return on Investment

PATH would consolidate multiple calls at Pacific North West (PNW) region into a single call and significantly reduce vessel transit and port times. These time savings would additionally enable ocean carriers to offer combined PNW (PATH) and Pacific South West (PSW) (specifically Los Angeles / Long Beach, California) services in order to achieve additional efficiencies.

An estimated 5% of PATH cargo will be local Vancouver Island cargo. The remaining 95% of cargo would be barged to and from container terminals and handling facilities in the Vancouver/Lower Mainland, and Seattle/Tacoma, and other Puget Sound locations. Each barge unit would consist of a tug boat and two barges capable of carrying up to 580 containers each.

Intermodal cargo represents 51% of overall container volumes. Barge schedules would be aligned to ensure that rail import containers arrive just in time for rail loading, thereby eliminating the grounding of containers. Export containers would also be directly loaded onto barges destined for PATH.

PNW cargo represents the remaining 46% of the overall container volume. The majority of this cargo would go to and from container handling facilities that are closest to the end receiver of the cargo.

The business case analyzed four main scenarios:

1. One weekly 14,000 TEU vessel calling at PATH with complete discharge and load-back
2. Two weekly 14,000 TEU vessels calling at PATH with complete discharge and load-back
3. One weekly 14,000 TEU vessel with a combined PNW and PSW service
4. A fourth scenario that combines scenarios 1 and 3 above

The table below shows the results of this analysis:

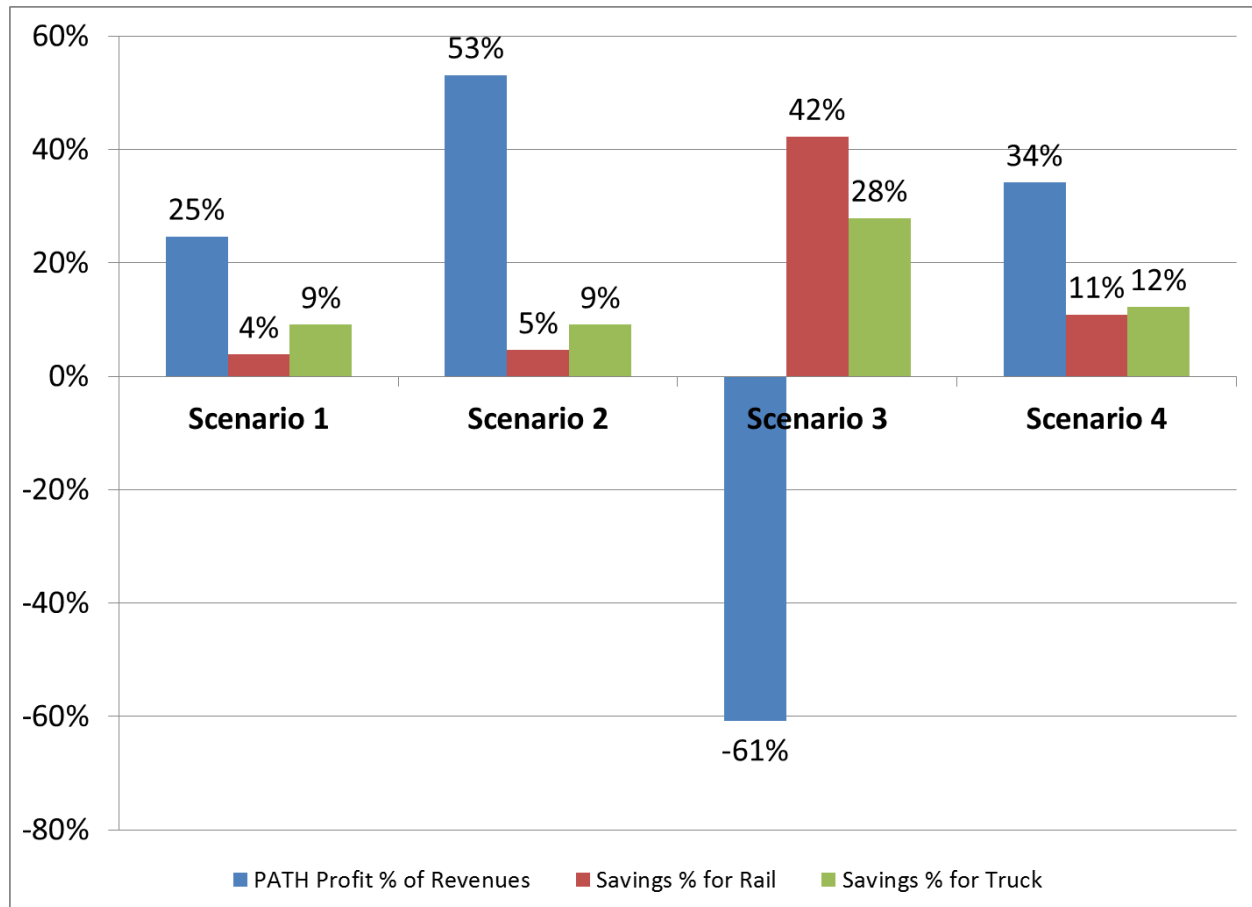
Scenario Comparison	Scenario 1	Scenario 2	Scenario 3	Scenario 4
EBITDA	\$214 million	\$440 million	\$79 million	\$518 million
Profit / Loss	\$68 million	\$294 million	-\$67 million	\$227 million
% savings for Rail/Local	4% / 9 %	5% / 9%	42% / 28%	11% / 12%
% Berth Utilization	21 %	43%	11%	32 %

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## Port Alberni Transshipment Hub (PATH): Business Plan Synopsis

The graph below depicts an overview of scenarios analysis:



\*Other scenarios yet to be analyzed that will achieve additional project payback include:

- Additional benefits from larger 20,000+ TEU vessels expected to be in operation when PATH opens
- Phased build-out of PATH facility
- Impacts of low-sulphur fuel regulations coming into effect in 2015
- Distribution centres on Vancouver Island
- Direct loading at CNR / CPR intermodal yards
- Full-cycle benefits for transloading facilities (including empty container delivery/pick-up via barge)

## II. ADDITIONAL PROJECTED PROJECT BENEFITS

PATH offers a number of economic, environmental and social benefits which both directly and indirectly achieve benefits beyond those currently being constrained under the current shipping model on Canada's west coast. The projected project benefits extend beyond the direct business and investor metrics to throughout the entire project region, province and country of Canada as a whole. It is such benefits that are attractive to both private and government sectors which are critical to develop the project.

Such direct industry projected benefits include:

- Reduce ocean-going vessels' Asia - Pacific Northwest turnaround sailing time + 3 days
- Cost savings of \$30 per TEU in PNW service
- Cost Savings of \$ 143 per TEU for PNW combined
- Cost Savings of \$96 per TEU for PNW & PSW combined
- Cost Savings for Vancouver Island Cargo of more than \$500 per TEU
- 15 million fewer truck kilometers in lower Mainland
- Enabling the broader and more direct distribution of containers to coastal and inland terminals
- Unlocking container handling capacity in restricted areas due to low draft, lack of infrastructure or equipment and significantly increasing overall container handling capacity for the region

Such other benefits over the life of the project that are important to the public interests of the project's region, province and country of Canada include:

Increase to Canada's GDP by \$21.3 Billion (\$2.3B outside of BC)

- Increased tax revenue of \$1.6 Billion (\$200M outside of BC)
- Creation of 288,079 FTE new jobs across Canada (28,000+ outside of BC)
- Reduction of 22,000 Tons of Carbon Dioxide per annum
- Reduction of 470 tons of Nitrogen Oxides per year
- 16 tons of sulfur emissions less per year
- Sample projected savings to congestion, traffic patterns and emissions in the Greater Vancouver / Lower Mainland area of British Columbia are expected to be \$74.6 Million per year.



# Port Alberni Transshipment Hub (PATH): Business Plan Synopsis

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## **III. COMPANY BACKGROUND**

The Port Alberni Port Authority (PAPA) is the primary proponent of this project. It is located in the City of Port Alberni, British Columbia, Canada at the head of the Alberni Inlet.

PAPA is one of 18 Canadian Port Authorities, incorporated as such, by an Act of Canadian Parliament under its Letters Patent in 1999.

Prior to becoming a Canadian Port Authority the organization operated as a Harbour Commission for over 5 decades where it primarily served the local area's forest industry and related products, such as lumber, logs, paper, and pulp for export markets in Asia. Historically and currently, as both a Harbour Commission and Canadian Port Authority, PAPA has operated a commercial fishing marina; three recreational marinas and a campground.

PAPA continues to serve the region's lumber and log export industry while working to strengthen and expand its relationships both within the forest industry and beyond to attract various commodities, value-added fish processing and tourism-related businesses. However, our primary goal is to see the achievement of PATH.

## **IV. MANAGEMENT AND PERSONNEL**

PAPA is managed by small, but effective, team of professionals with a vast amount of expertise in their respective fields. The organization is governed by a seven-member board of directors who are appointed by user groups as well from the local, provincial and national government.

The ultimate oversight of PATH will be determined by the preferences of the various parties that will invest in the project. PAPA will expect to have direct involvement as it has both created the vision and is responsible for the shipping waters of the Alberni Inlet. However, the form and function of the management team and the governance of the PATH terminals is open to negotiation.

# Preview of the **Jim Wright Analysis**

This *Beyond RBT2* analysis shows:

- How the Environment Minister who rejected RBT2 distanced himself from the Cabinet that voted him down.
- How West Coast ports can achieve the RBT2 stated purpose without RBT2.
- How the RBT2 Review Panel Chair prevented citizen participants from stating how Port of Prince Rupert capacity would serve the RBT2 purpose.
- How the relevant legislation requires proponents to take alternative means into account, as the public have frequently requested.
- How taking the RBT2 purpose further with alternative means would be a win for climate action, not just for ecology and prosperity.
- What the *Beyond RBT2* road to a win-win-win might look like.

**We're now HERE in The *Beyond RBT2 Kit*:**

**Preview of the Keynote Analysis**

**Preview of the Sandpiper Analysis**

**Preview of the Mary Taitt Analysis**

**Preview of the Susan Jones Analysis**

**Preview of the Roger Emsley Analysis**

**Preview of the PAPA PATH Analysis**

**Preview of the **Jim Wright Analysis****

## Roberts Bank Terminal 2 (RBT2) should NOT receive BC approval.

Even [the federal decision statement](#) to approve RBT2 is reason to NOT approve. The statement says the Minister of Environment and Climate Change determined the project “is likely to cause significant adverse environmental effects.” That means he rejected RBT2. But Cabinet then voted him down to approve RBT2 because those effects “were justified in the circumstances.” The minister did NOT appear at the media event to present his statement. Its 25,000 words include ZERO justifying circumstances. His implicit message: *RBT2 is really NOT justified.*

The [Roberts Bank Terminal 2 Project Federal Review Panel Report](#) (page 447) states this:

- RBT2 purpose: “to meet the forecast increase in demand for containerized trade on the West Coast of Canada.”
- RBT2 means: “The Proponent asserted that building a new terminal at Roberts Bank was the most desirable option to provide much needed container capacity on Canada’s west coast.”
- RBT2 rationale: “The Proponent stated that recent improvements had been made to West Coast container terminals, including at the Port of Vancouver’s Deltaport [GCT] and Centerm Terminals and Prince Rupert’s Fairview Terminal. When the Proponent’s terminals and the Fairview Terminal in Prince Rupert reach capacity, shippers would likely be forced to use ports on the west coast of the United States of America and pay increased transportation costs.”

**Re the RBT2 rationale:** The Deltaport capacity can increase by 2 million TEU if the Proponent cooperates with its terminal operator. as the Port of Prince Rupert does. PRPA and its terminal operator are progressing toward [an additional 2 million TEU terminal](#) that the RBT2 Proponent hasn’t factored in yet. That adds up to increased capacity of 4 million TEU, *with no need for RBT2.*

The *Draft Summary Assessment Report* states: “The EAO acknowledges views from EA participants on **whether any further container terminal expansion is needed, particularly in the context of existing cumulative effects**” [in the Fraser Estuary]. That is the central RBT2 issue, which the RBT2 Review Panel process stopped the public participants from addressing.

Apart from wasting \$3.5 billion on construction (a figure likely to soar) and causing a similarly high level of damage to the Fraser Estuary and wider environment, VFPA acts **entitled to capture the entire increased West Coast demand for itself.** But Prince Rupert’s container business grows faster, and they merit a “level playing field.” **The RBT2 Proponent’s attempt to claim the new West Coast container business is no reason for BC’s Cabinet to condone it.**

The [2007 Pacific Gateway vision of Minister David Emerson and his team of transport experts](#) stated: “1.7 We recommend that policy makers develop container capacity in Prince Rupert before making investments in Vancouver, beyond what have been announced to date. We believe that **capacity can be expanded in Prince Rupert relatively quickly, and such a strategy will allow time for Vancouver to develop solutions to its congestion.**” That may be even wiser now, since container expansion in the Vancouver area has added to the problem. Most of the goods coming in get transported out of the Lower Mainland after adding to the congestion.

Naturally, a key context for assessing RBT2 is the [Canadian Environmental Assessment Act \(2012\)](#). It applies to the RBT2 project, especially with its “Factors To Be Considered” (highlighting added):

**19 (1) The environmental assessment of a designated project must take into account the following factors:**

- |  |  |
|--|--|
| <p>(a) the environmental effects of the designated project, including the environmental effects of malfunctions or accidents that may occur in connection with the designated project and any cumulative environmental effects that are likely to result from the designated project in combination with other physical activities that have been or will be carried out;</p> <p>(b) the significance of the effects referred to in paragraph (a);</p> <p>(c) comments from the public — or, with respect to a designated project that requires that a certificate be issued in accordance with an order made under <a href="#">section 54 of the National Energy Board Act</a>, any interested party — that are received in accordance with this Act;</p> | <p>(d) mitigation measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the designated project;</p> <p><b>g) alternative means of carrying out the designated project that are technically and economically feasible and the environmental effects of any such alternative means;</b></p> <p>(h) any change to the designated project that may be caused by the environment;</p> <p>(i) the results of any relevant study conducted by a committee established under <a href="#">section 73 or 74</a>; and</p> <p>(j) any other matter relevant to the environmental assessment that the responsible authority, or — if the environmental assessment is referred to a review panel — the Minister, requires to be taken into account.</p> |
|--|--|

Two factors are in maroon to show they are significant problems in this assessment.

One factor is in highlighted red to show it is a vital problem, making the assessment NOT valid.

Re factor b, we perceive that *cumulative effects* in the Fraser Estuary have been undervalued.

Re factor c, there has been great public interest and extensive skilled analysis. We perceive from the lack of useful resulting action that the comments from the public have been largely ignored. Even the analyses by expert ECCC scientists based in Delta are not given their due.

Re factor g, the Proponent focuses only on its “most desirable” means to its stated purpose, “to meet the forecast increase in demand for containerized trade on the West Coast of Canada.” The chair prevented public at the Jan. 30, 2019 RBT2 Panel session from mentioning Prince Rupert, with its expansion of container capacity, as an alternative to meet demand. (The Prince Rupert means would still be “linked to the same federal authority,” as in the Act, 2 (1)[c]). [The chair stated:](#)

According to CEEA 2012 [the relevant act] the Panel is required to look at the purpose of the project but not the need for the project. Its mandate is to examine a specific container terminal proposed by a proponent and evaluate its environmental effects and not where the B.C. West Coast requires the development of a container terminal.” (PDF p. 7, numbered p. 4).

The stated purpose of the project is to meet the West Coast “demand” (need). Prince Rupert is one of the alternative means to meet that need. The chair’s imaginary distinction negated high-value community input. **The banning of alternative means made the assessment NOT valid.**

## Clarification re what we ARE saying and NOT saying

We are NOT saying that the Proponent, the Vancouver Fraser Port Authority (VFPA), should necessarily have been more cooperative. It would have been nice, but it's naturally up to them to run "their" business, even though all Canadians ultimately own it. In that spirit:

- We are NOT saying that VFPA should necessarily have co-operated with other West Coast federal port authorities in the original spirit of the Pacific Gateway.
- We are NOT saying, for example, that VFPA necessarily should be co-operating with the Prince Rupert Port Authority (PRPA) and its container terminal operator to efficiently accomplish the Proponent's clearly stated project purpose of meeting demand.
- We are NOT saying VFPA should necessarily have co-operated with their GCT terminal operator to incorporate its "DP4" design, expanding the existing terminal. (That may simply resolve RBT2's species-level risk affecting the Western Sandpipers and related biofilm.)
- We are NOT saying VFPA should have asked GCT why they are confident DP4 is okay for fisheries when VFPA keeps saying it's not. (Surely GCT has checked)
- We are NOT even asking VFPA to consider keeping a lot of deep-sea container traffic out of the Salish Sea by cooperating with the Prince Rupert Port Authority (PAPA) and its PATH concept, [Port Alberni Transshipment Hub](#), ultimately 5 million TEU, twice the RBT2 projection.

We ARE saying that it would be wrong for RBT2 to be approved on behalf of the environment-respecting people of BC when it is certain to have devastating effects on the Fraser Estuary and beyond. And that's even though the Proponent could have avoided it by being co-operative with other port authorities and terminal operators in the original spirit of the Pacific Gateway.

VFPA has had twenty years to get it right. British Columbia has been patient to an extreme. **It's time for the project—or a new one with the same purpose—to be done right by a non-VFPA.**

### Filling out the story

- We earlier mentioned the importance of RBT2's cumulative effects for the Fraser Estuary. [Let the Fraser Live](#) is a quick read for that. It's five years old but still a revelation.
- We suggest some Prince Rupert insights: [Intercontinental & North American hub](#), [Priority Train from Port of Prince Rupert](#), [Becoming a global community](#), and the proposed [Western Canada Port Agency \(WCPA\)](#) concept.
- In contrast to VFPA, *Business in Vancouver* is a source of balanced information about West Coast container business. For example, BIV's recent "[Vancouver container port places second-last on global efficiency ranking](#)" addresses many Vancouver port inefficiencies. They do NOT include any basic shortage of container-ship berths. *They DO include bottleneck factors that apply less or not at all to Prince Rupert.*
- *Better Deltaport* is GCT's publication that shares its views on RBT2. [For example](#), it rebuts "What the VFPA believes has been a thorough engagement and amelioration of concerns from local opposition groups." As an informed local group, GCCS agrees with GCT's stated facts.

## Climate action—the final win in the *Beyond RBT2* win-win-win

Acting collegially, the RBT2 Proponent can ensure RBT2's stated purpose is met by going beyond the initial means—to alternative means the “project must take into account.” They also have the right to end the project, clearing the way for other parties to achieve the purpose. Either way, going “Beyond RBT2” by enabling superior means for the purpose would lead to a win-win-win:

1. Saving billions of Canadians' dollars while serving West Coast container business is a **prosperity win**.
2. Saving the Fraser Estuary —and the sea and river it joins—from RBT2 harm is an **ecological win**.
3. Saving the world from RBT2 would be a **climate action** win for reasons like these:
  - Saving our natural world is the existential purpose of climate action. If a Minister of Environment and Climate Change uses subterfuge to undermine his ministry scientists' action to protect species at risk, as the previous one did, he makes avoidable future harm become harmful now. He aggravates the climate problem. Rejecting RBT2 would help climate action overcome that.
  - The dredging and filling for RBT2 would enable a height/depth that allows the ultra-large new container ships to berth. Alternatives to RBT2 would produce far less GHG than that process.
  - As Topic D of the Sandpiper Analysis reveals, the fatty acids that fuel shorebirds near the RBT2 site have vital effects for the entire food web. Synthesized indirectly, they enable the human brain to develop, especially at the fetal and infant stages. But climate change will halve the world's supply of those nutrients. Saving them from RBT2 helps cope with climate change.

## A suggested route to the win-win-win

We respectfully offer a sequence of suggestions:

- First, **approving RBT2 has NO upside**. Of course, a deadline to hasten a signed bad deal is a tactic that works—but not for those left with a white elephant and destruction forever.
- Second, the [Canadian Environmental Assessment Act](#) (2012) is clear the “**project must take into account . . . alternative means** of carrying out the designated project that are technically and economically feasible and the environmental effects of any such alternative means.”
- Third, since the Proponent has struggled at that, **the project needs a restart**, with a new name but the same purpose: “to meet the forecast increase in demand for containerized trade on the West Coast of Canada.”
- Fourth, since the RBT2 Proponent has been allowed to hold a favoured position for 20 years, it's time for a skilled weaver of concepts to **give alternatives an opportunity** to work together.
- Fifth, it could require a new mechanism, perhaps a [Western Canada Port Agency](#) that learns from the [West Coast Supply Chain Visibility Program](#)—or **from the original concept**, including **consensus-building** among the Western Canada ports about when to bring TEU capacity online and how to liaise.

*BC's Cabinet: Please start with a NO to RBT2. British Columbia depends on you.*